

**SUMMARY OF  
NATIONAL  
TRANSPORTATION  
STATISTICS**



**JUNE 1976  
ANNUAL REPORT**

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<p>16. Abstract</p> <p>This report is a compendium of selected national-level transportation statistics. Included are cost, inventory, and performance data describing the passenger and cargo operations of the following modes: air carrier, general aviation, automobile, bus, truck, local transit, rail, water, oil pipeline, and gas pipeline. The report includes basic descriptors of U.S. transportation, such as operating revenues and expenses, number of vehicles and employees, vehicle-miles and passenger miles, etc.</p> <p>As its name implies, the report is a summary of a larger data base, consisting of time-series collected from a variety of government and private statistical handbooks. In this edition, the selected data cover the period 1964 through 1974.</p>			
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## INTRODUCTION

The 1976 edition of the *Summary of National Transportation Statistics* is the 6th annual report containing cost, inventory and performance data. It is essentially an updated version of the 1975 edition, although some new tables and graphs have been added to the section called "Transportation, Energy, and the Environment."

Because the demand for information on energy continues, we have published the 4th compendium of energy supply and demand data in a separate report entitled: *Energy Statistics—A Supplement to the Summary of National Transportation Statistics*.

The statistical summaries in this document are of three types: (1) tree displays, (2) modal profiles, and (3) transportation trends. The data base from which the summaries have been drawn consists of time series covering the years 1964 - 1974.

Data summarization involves the selection of certain statistics from the data base and displaying them in such a fashion that comparisons of transportation measures and trends can be made with ease. The first step in this process is to place the selected data in a logical framework.

In general, the data can be divided into three main categories: cost, inventory, and performance. The following list indicates the type of data included in each group:

- I. Cost
  - A. Expenditures (private modes)
  - B. Revenue (for-hire modes)
  - C. Operating expenses
  - D. Federal expenditures
  - E. State and local expenditures

- II. Inventory
  - A. Number of companies
  - B. Number of vehicles
  - C. Number of employees
  - D. Mileage

- III. Performance
  - A. Vehicle-miles
  - B. Passenger-miles
  - C. Number of passengers carried
  - D. Ton-miles
  - E. Tons of freight hauled
  - F. Average passenger trip length
  - G. Average length of freight haul
  - H. Average speed
  - I. Number of fatalities
  - J. Number of fatal accidents
  - K. Total number of accidents

As illustrated in figure 1, the data set can be described as cost, inventory, and performance statistics for each of the following major modal categories; highway, rail, air, water, pipeline, international air, and international water.

Figure 2 illustrates the detailed modal breakdown used in this report. The dotted lines indicate alternative groupings; e.g., "heavy and light rail" can be considered a subset of both "local transit" and "rail."

The framework presented in figure 2 is flexible, for it reflects the structures of the various sources of transportation data. One should notice, for example, that the breakdown of the general aviation category comes from the Federal Aviation Administration *Statistical Handbook of Aviation*.



**Tree Displays.** Figure 2 also provides the format for the tree displays. By placing numbers in the appropriate cells of the tree, it is possible to present one year's data for a given generalized measure for all modes of transportation. The following data are presented in tree format:

- A. Expenditures and revenues (1974)
- B. Vehicle-miles (1974)
- C. Passenger-miles (1974)
- D. Ton-miles (1974)
- E. Number of vehicles (1974)
- F. Fatalities (1974)

Some precision in definition is lost with this display technique, but the source information in the appendix attempts to qualify the statistics requiring further explanation. The figure in each block is obtained as indicated in the source information, Appendix A; it is not necessarily the sum of figures in blocks to its right.

**Modal Profiles.** A modal profile lists the most recent cost, inventory, and performance data available in the data base for a given mode. It is important to note that not all of the measures listed on page 1 are available for each mode, nor are they always applicable. This is clearly illustrated by the difference in the type and amount of data recorded for air carrier and oil pipeline.

Our intent was to provide 1964 and 1974 values for each measure. In some instances the 1974 value is not available, and either the 1973 or most recent value is listed instead.

**Transportation Trends.** Included in these tables are annual data from 1964 to 1974. A variety of cost, inventory, and performance items are represented in this section.

**Supplementary Data.** There has been a growing demand for data that relate transportation to the environment. This report touches on some of the major topics, such as air and water pollution from transportation sources.

**Source Information and Glossary of Terms.** Appendix A is a detailed listing of the sources of data contained in this document. A special footnote system has been devised for the tree displays (fig. 3-8). In figure 3, for example, the "local transit" cell contains the standard reference number (19) in the upper right-hand corner. In appendix A under figure 3 we find the number (19), after which the source of the local transit datum is given.

Feeling that the usefulness of transportation data depends greatly on clarity of definition, we have included in appendix B a glossary of terms. This section is organized by mode and has been assembled from existing glossaries, such as that in the Civil Aeronautics Board *Handbook of Airline Statistics*. The lack of comparable glossaries in other statistical handbooks makes it difficult to prepare a complete dictionary.

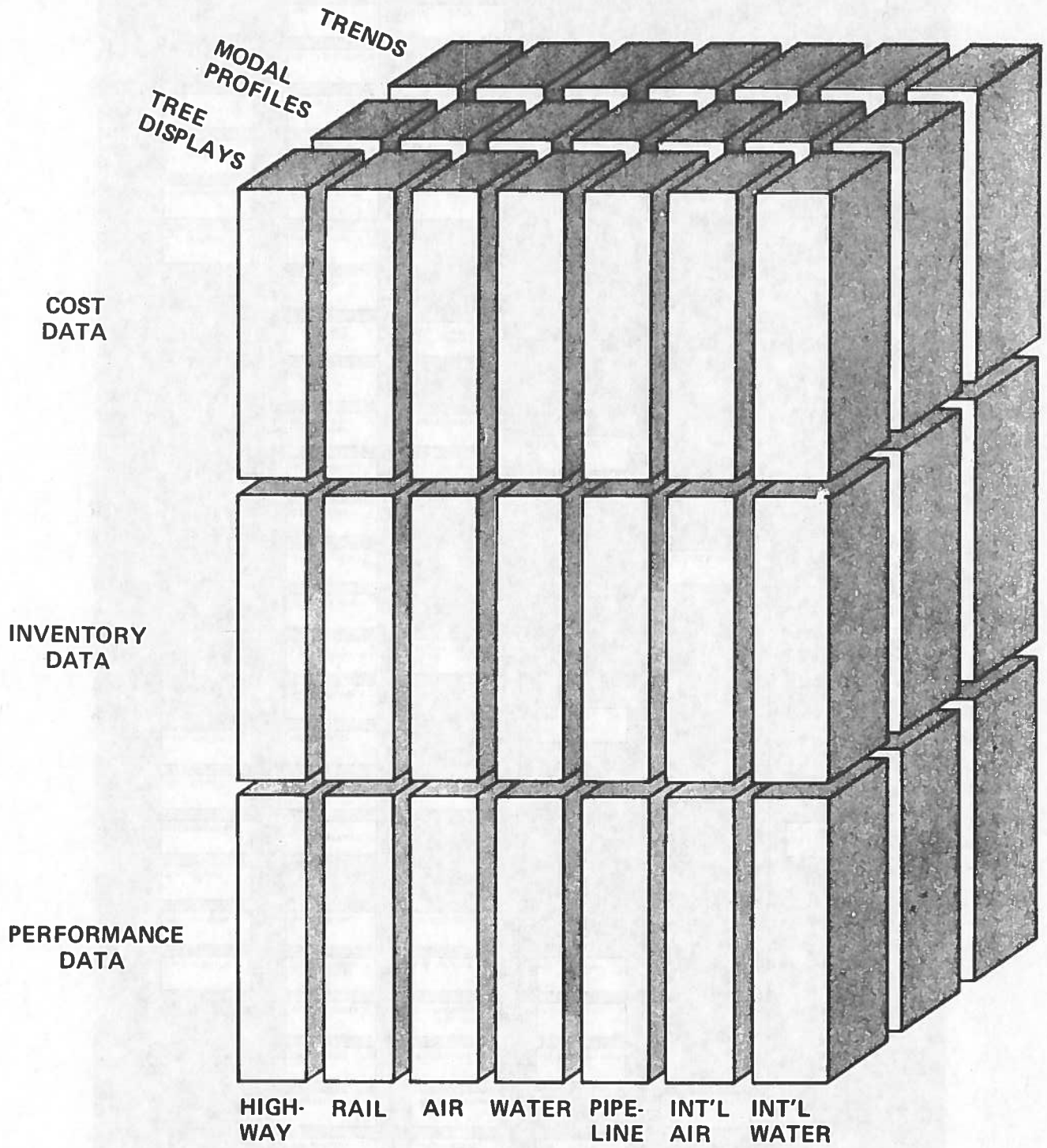


Figure 1. Organization of the Data



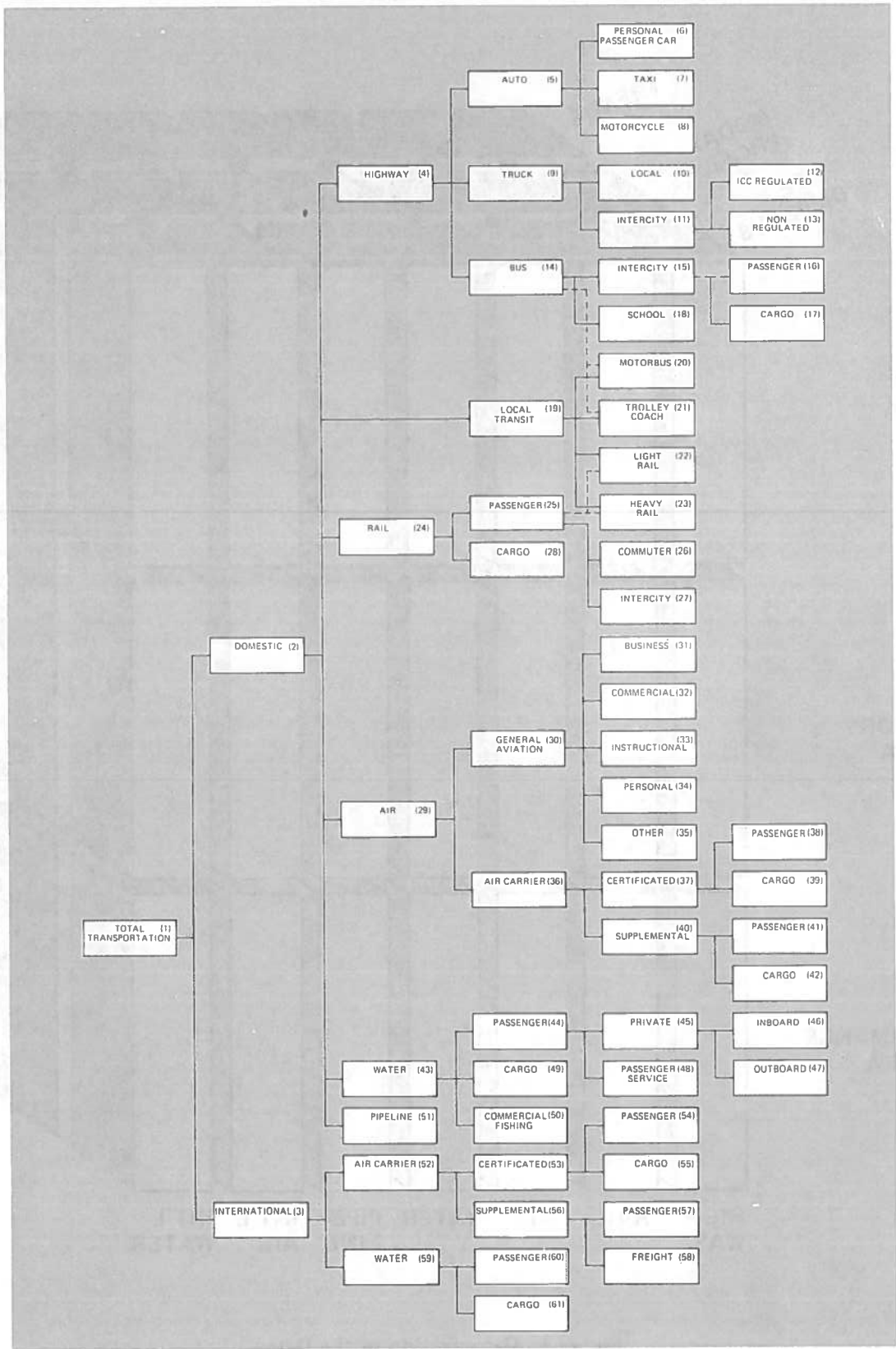


Figure 2. Modal Structure

# TREE DISPLAYS

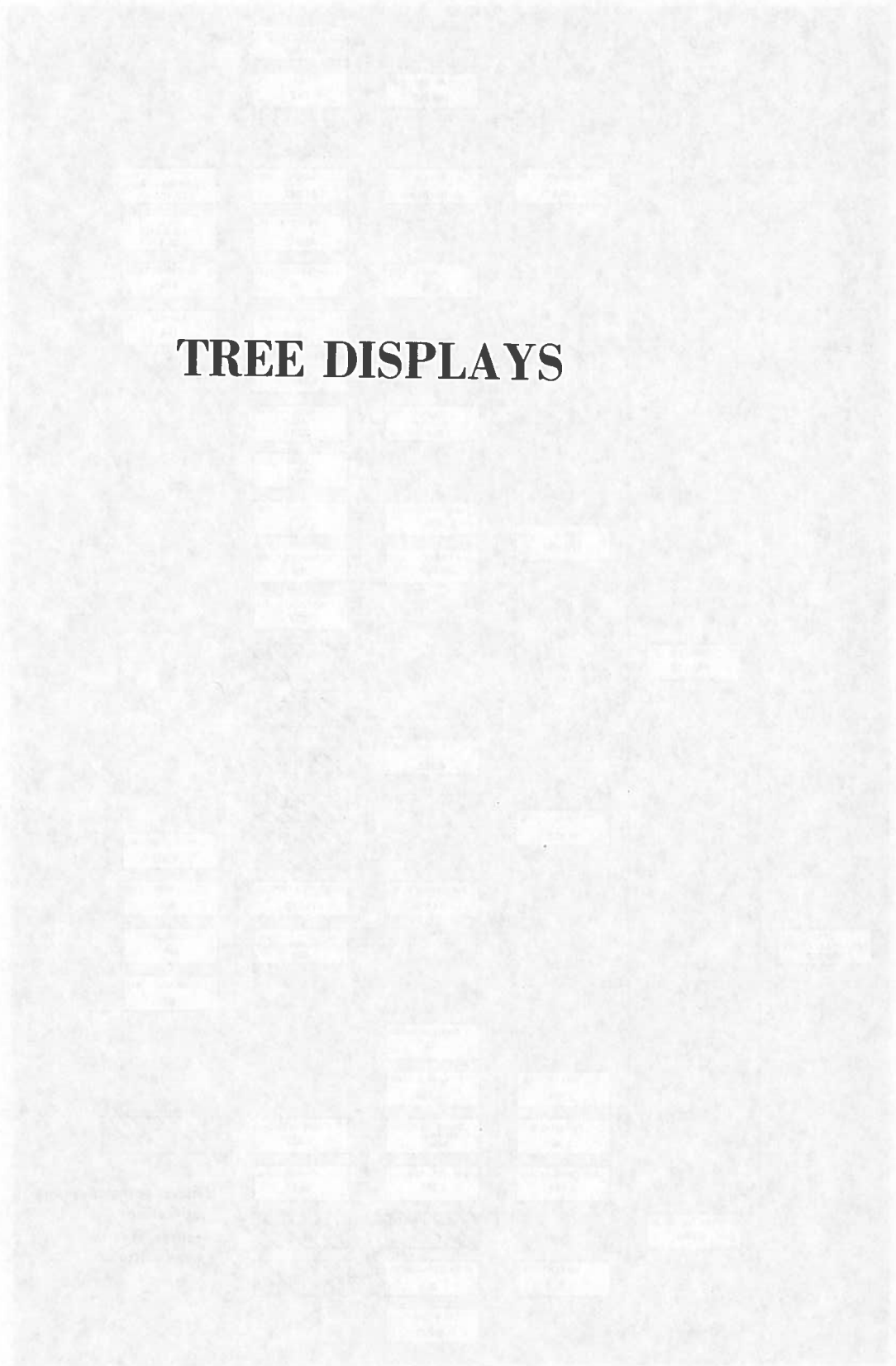
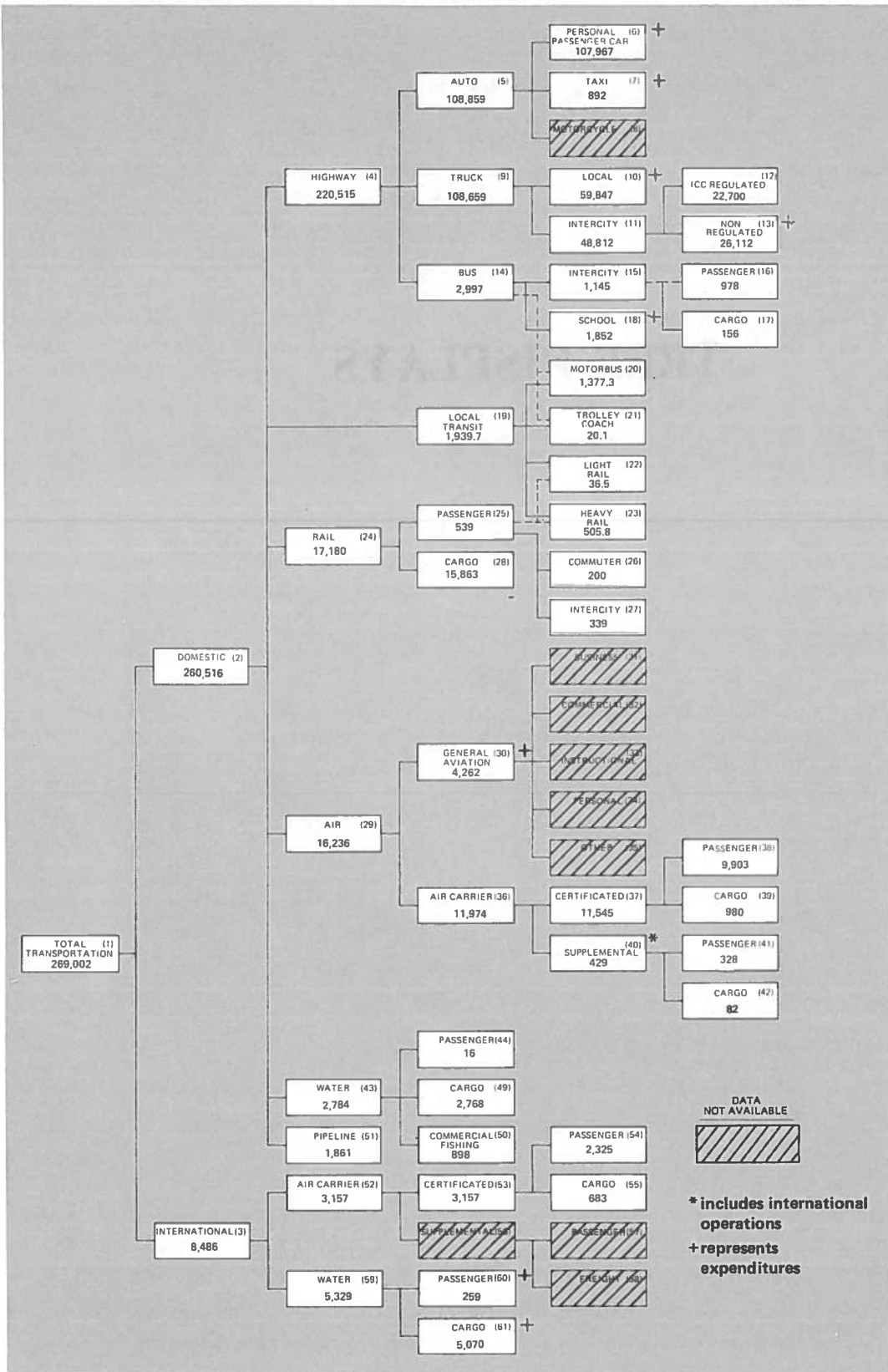
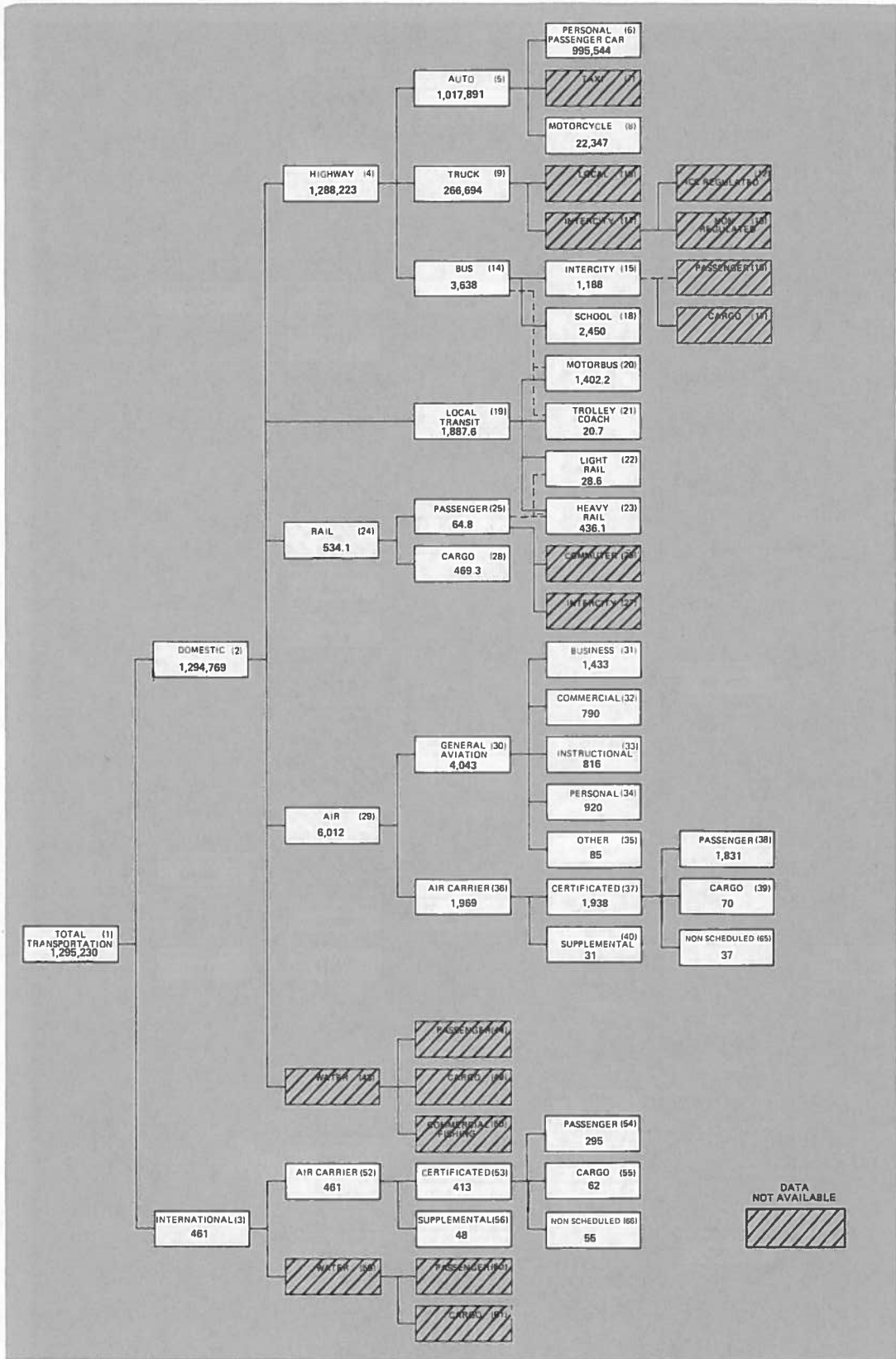


Figure 3. Dependence and Revenue (2 Millions) 1974



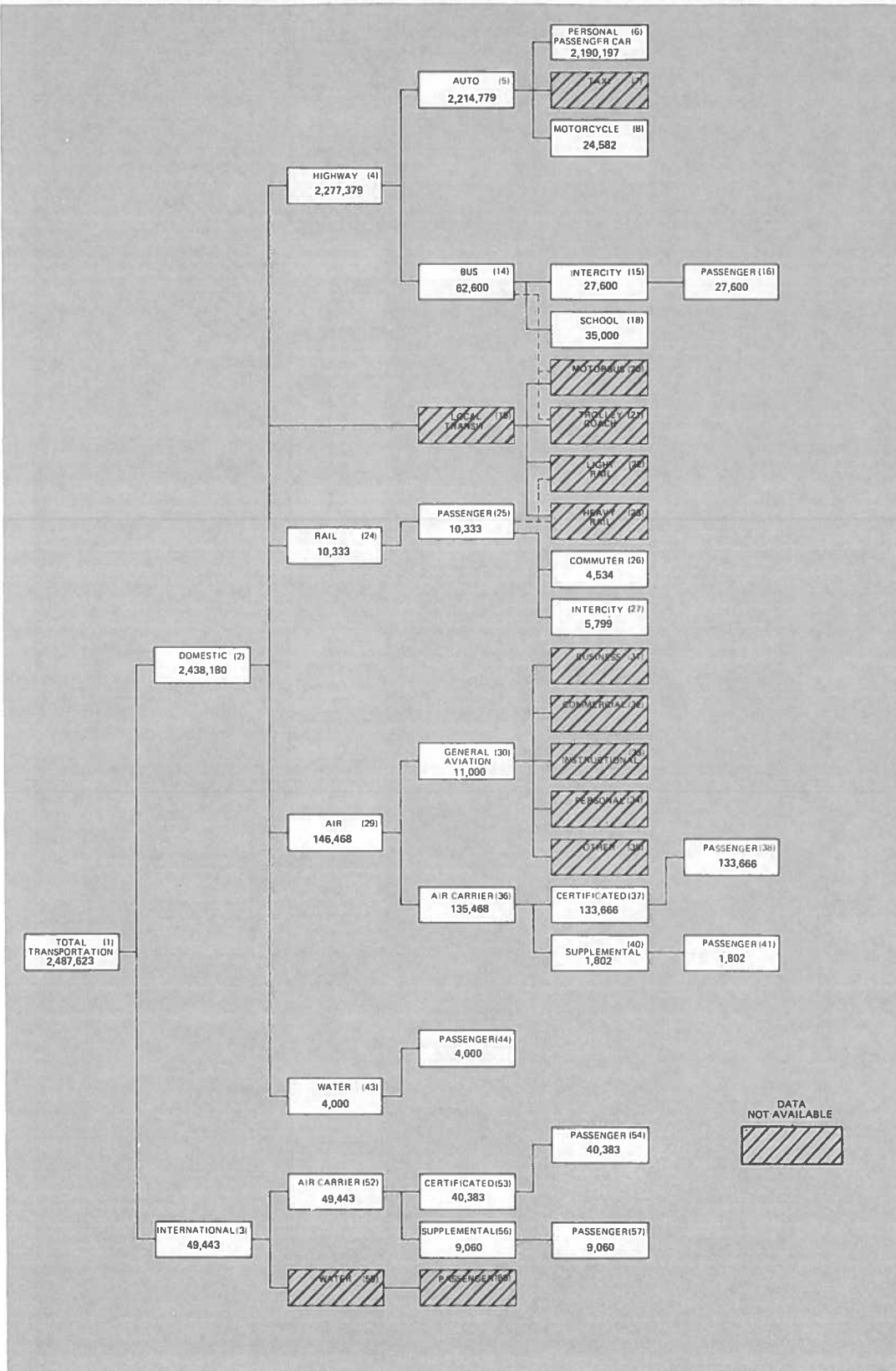
Sources: See pages 76-78.

Figure 3. Expenditures and Revenues (\$ Millions) - 1974



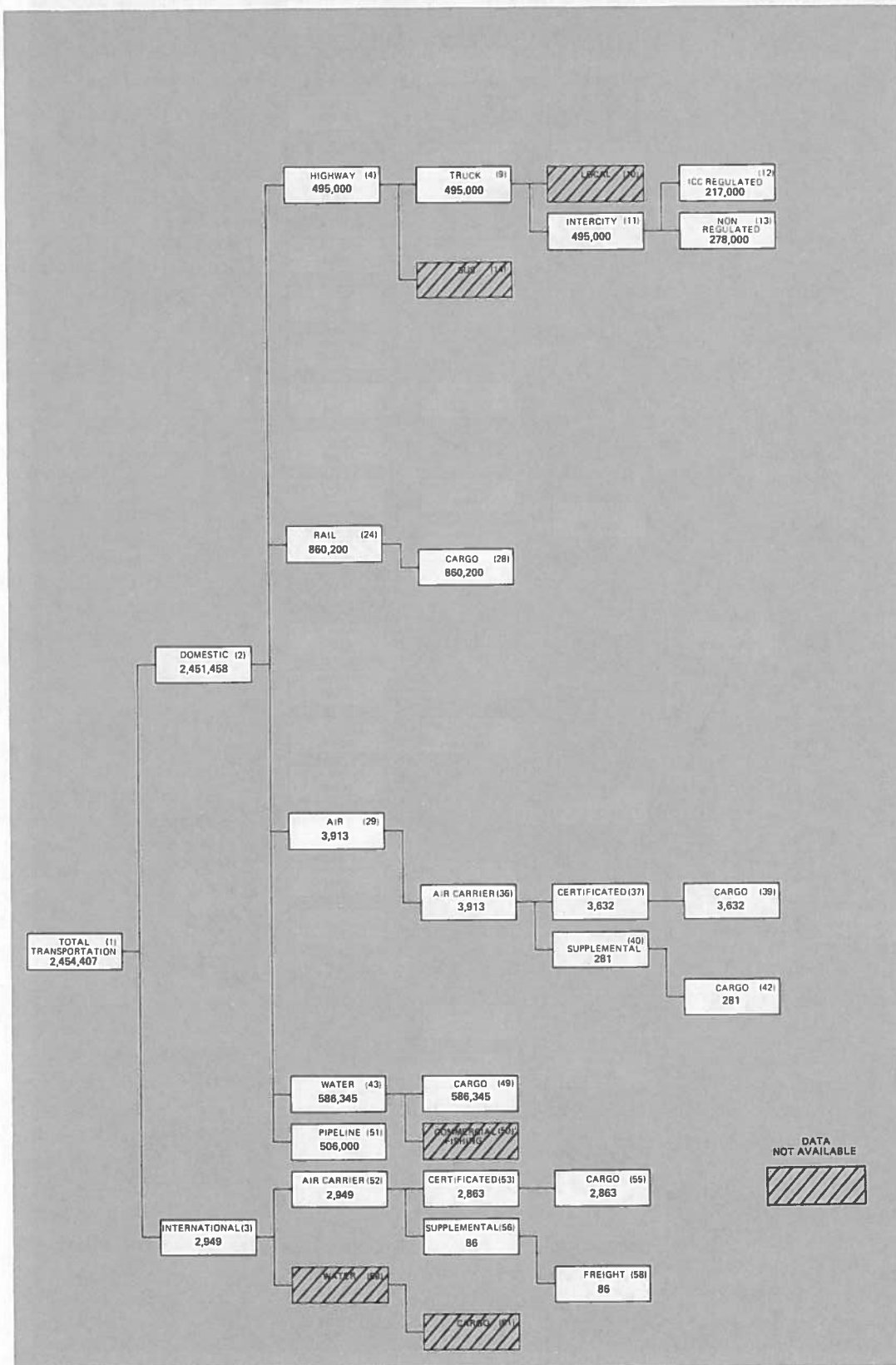
Sources: See pages 78-80.

Figure 4. Vehicle-Miles (Millions) - 1974



Sources: See pages 80-81.

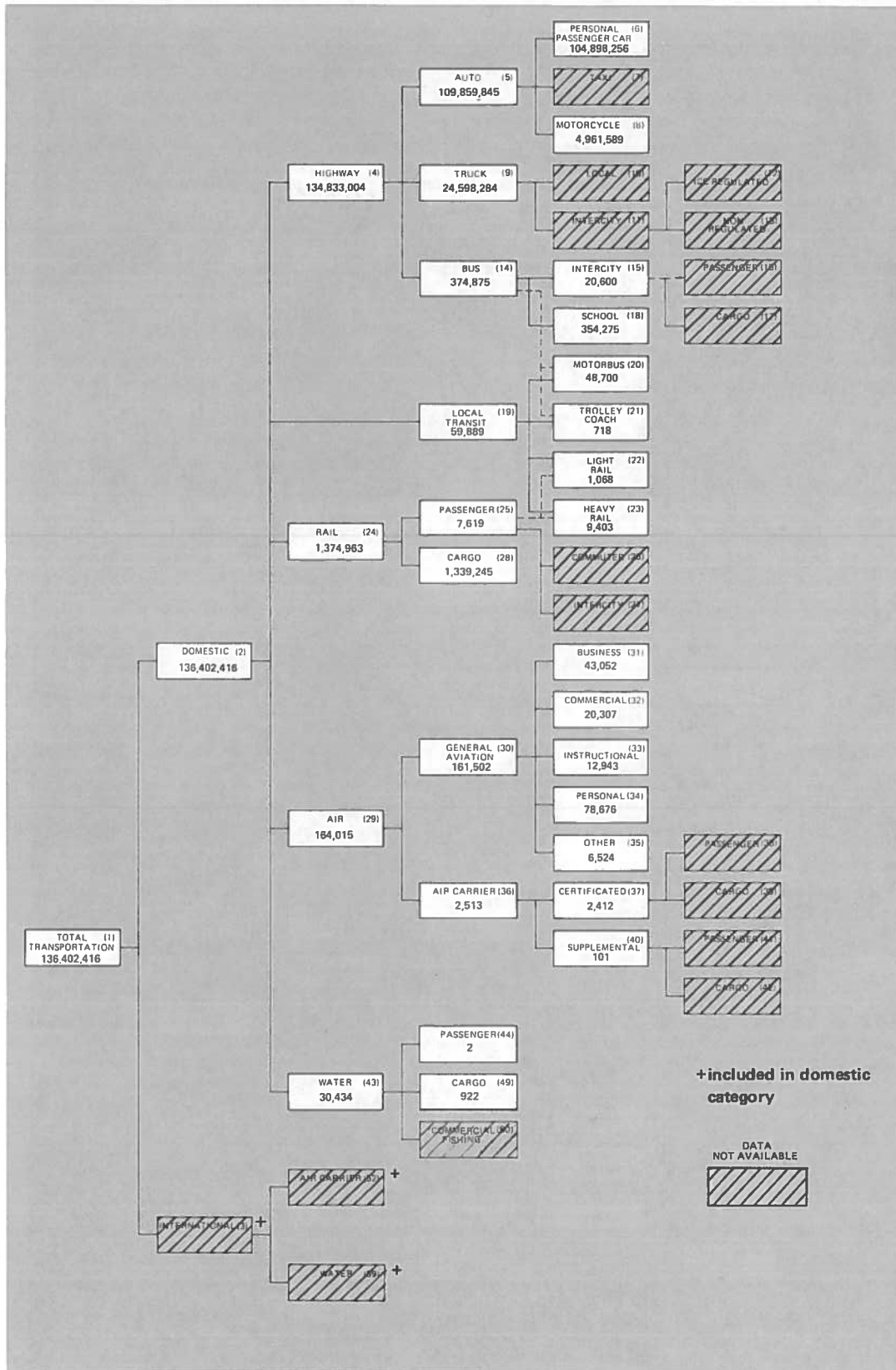
Figure 5. Passenger-Miles (Millions) - 1974



Sources: See pages 82-84.

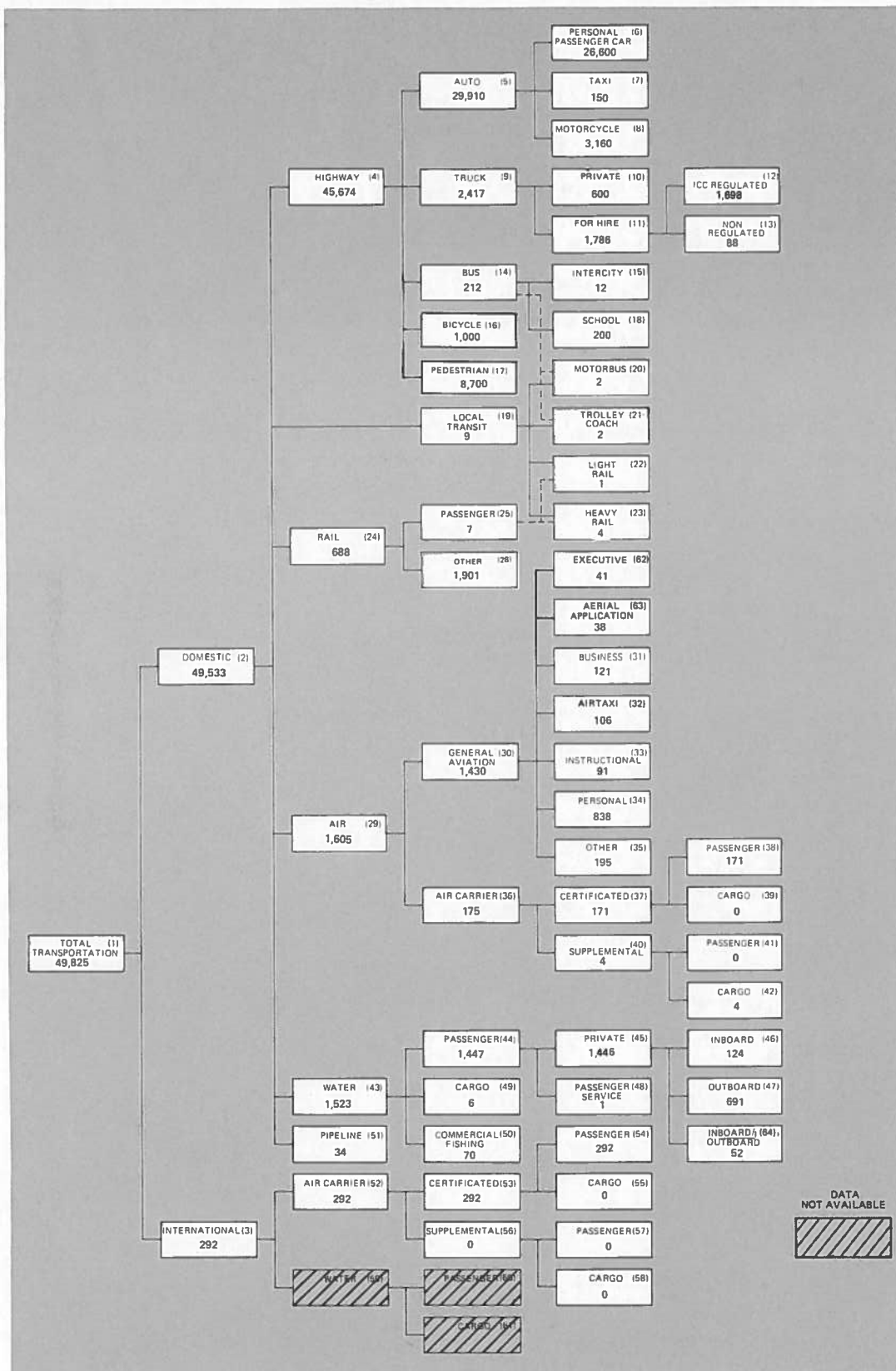
Figure 6. Cargo Ton-Miles (Millions) - 1974





Sources: See page 84.

Figure 7. Number of Vehicles - 1974



Sources: See pages 84-87.

Figure 8. Number of Fatalities - 1974



The 1975 Modal Profiles have been suggested to provide specific guidance for each profile requirement and to permit comparison of the most recent data (1975) with the 1954 and 1970 data.

Specific data references are listed as follows: The first determination of the data in each profile data reference followed in its order by an indicated page reference. This reference is for the first column in the table. The column in the next row is the data reference for the second column. The data reference in the third row is the data reference for the third column. The data reference in the fourth row is the data reference for the fourth column. The data reference in the fifth row is the data reference for the fifth column. The data reference in the sixth row is the data reference for the sixth column. The data reference in the seventh row is the data reference for the seventh column. The data reference in the eighth row is the data reference for the eighth column. The data reference in the ninth row is the data reference for the ninth column. The data reference in the tenth row is the data reference for the tenth column.

## MODAL PROFILES

The 1975 Modal Profiles column refers to the modal profile of interest between 1975 and 1978. The 1954 Modal Profiles column refers to the modal profile of interest between 1954 and 1970. The 1970 Modal Profiles column refers to the modal profile of interest between 1970 and 1975. The data reference in the first column is the data reference for the first column. The data reference in the second column is the data reference for the second column. The data reference in the third column is the data reference for the third column. The data reference in the fourth column is the data reference for the fourth column. The data reference in the fifth column is the data reference for the fifth column. The data reference in the sixth column is the data reference for the sixth column. The data reference in the seventh column is the data reference for the seventh column. The data reference in the eighth column is the data reference for the eighth column. The data reference in the ninth column is the data reference for the ninth column. The data reference in the tenth column is the data reference for the tenth column.

## Modal Profile Source References and Percentage Change Calculations

The 1976 Modal Profiles have been augmented to provide specific page references for each Profile data element and to permit comparison of the most recent data entries (1974) with the 1964 and 1973 data entries.

Specific page references are obtained as follows: The first data element at the top of each Profile data column is directly followed to its right by an italicized page reference letter. This reference letter then applies to all subsequent data elements in that Profile column until the next page reference letter occurs. The next reference letter then applies to the Profile data element on its left and to all subsequent data in that Profile column until the next page reference occurs. The specific source and page reference may then be found in the list of sources at the end of that particular Profile.

The % Change 1973-1974 column refers to the usual percent difference between 1974 data and 1973 data. Annual % Change 1964-1974 is equal to  $C \times 100\%$ , where C is obtained from the following relationship:  $D_{74} = D_{64} (1 + C)^{10}$ . (Note:  $D_{64}$  and  $D_{74}$  refer to 1964 and 1974 data, respectively.)

## AIR CARRIER PROFILE

I. FINANCIAL	1964	1973	1974	1964-1974 Average Annual % Change	1973-1974 % Change
<b>Operating Revenues (\$ millions)</b>					
Certificated carriers, total domestic operations					
Transport revenues . . . . .	3,071.1 <i>a</i>	9,529.6 <i>k</i>	11,041.0 <i>k</i>	13.7	15.9
Nontransport revenues . . . . .	97.7	164.4	504.1	17.8	206.6
Total operating revenues . . . . .	3,168.8	9,694.0	11,545.1	13.8	19.1
Certificated carriers, total international operations					
Transport revenues . . . . .	1,066.9 <i>b</i>	2,680.4 <i>l</i>	3,056.6 <i>l</i>	11.1	14.0
Nontransport revenues . . . . .	15.2	44.3	100.8	20.8	127.5
Total operating revenues . . . . .	1,082.0	2,724.8	3,157.4	11.3	15.9
Supplemental carriers, domestic plus international operations					
Transport revenues . . . . .	n/a	372.1 <i>m</i>	411.8 <i>m</i>	n/a	10.7
Nontransport revenues . . . . .	n/a	2.1	17.1	n/a	714.3
Total operating revenues . . . . .	n/a	374.2	428.9	n/a	14.6
<b>Operating Expenses (\$ millions)</b>					
Certificated carriers, domestic operations . . . . .					
Certificated carriers, domestic operations . . . . .	2,848.8 <i>a</i>	9,200.2 <i>r</i> <i>k</i>	10,760.1 <i>k</i>	14.2	17.0
Certificated carriers, international operations . . . . .	932.0 <i>b</i>	2,633.3 <i>r</i> <i>l</i>	3,217.8 <i>l</i>	13.2	22.2
Supplemental carriers, domestic plus international operations . . . . .					
Supplemental carriers, domestic plus international operations . . . . .	n/a	380.9 <i>m</i>	431.9 <i>m</i>	n/a	13.4
<b>II. INVENTORY</b>					
<b>Number of carriers</b>					
Domestic and international					
Certificated . . . . .	49 <i>d</i>	34 <i>c</i>	34 <i>c</i>	-3.6	0.0
Supplemental . . . . .	n/a	14 <i>cc</i>	9 <i>cc</i>	n/a	-35.7
<b>Number of Aircraft Available for Service</b>					
Domestic and international					
Certificated, all services . . . . .	1,894 <i>dd</i>	2,467 <i>dd</i>	2,412 <i>n</i>	2.4	-2.2
Supplemental . . . . .	210	133	101	-7.1	-24.1
<b>Number of Employees</b>					
Domestic					
Certificated, all services . . . . .	154,773 <i>e</i>	265,231 <i>r</i> <i>ee</i>	264,033 <i>ee</i>	5.5	-0.5
Supplemental . . . . .	2,236	5,403	4,251	6.6	-21.3
International					
Certificated, all services . . . . .	36,820	46,588 <i>r</i>	43,404	1.7	-6.8



**AIR CARRIER PROFILE (cont.)**

III. PERFORMANCE	1964	1973	1974	1964-1974 Average Annual % Change	1973-1974 % Change
<b>Aircraft Revenue-Miles (millions)</b>					
<b>Domestic</b>					
Certificated, all services .....	998.2 <i>f</i>	2,097.8 <i>x</i>	1,937.9 <i>x</i>	6.9	-7.6
Scheduled service .....	968.2	2,057.7	1,900.5	7.0	-7.6
Nonscheduled service .....	30.0	40.1	37.4	2.2	-6.7
Supplemental .....	n/a	35.0 <i>y</i>	31.5 <i>y</i>	n/a	-10.0
<b>International</b>					
Certificated, all services .....	240.9 <i>g</i>	457.9 <i>z</i>	412.8 <i>z</i>	5.5	-9.8
Scheduled service .....	220.9	390.4	357.6	4.9	-8.4
Nonscheduled service .....	20.0	67.5	55.2	10.7	-18.2
Supplemental .....	n/a	56.8 <i>y</i>	47.9 <i>y</i>	n/a	-15.7
Total .....	n/a	2,647.5	2,430.1	n/a	-8.2
<b>Revenue Passenger-Miles (millions)</b>					
<b>Domestic</b>					
Certificated, all services .....	45,046.1 <i>f</i>	130,450.1 <i>x</i>	133,666.2 <i>x</i>	11.5	2.5
Scheduled service .....	44,141.3	126,317.3	129,731.0	11.4	2.7
Nonscheduled service .....	904.8	4,132.8	3,935.2	15.8	-4.8
Supplemental .....	n/a	2,005.9 <i>y</i>	1,802.5 <i>y</i>	n/a	-10.1
<b>International</b>					
Certificated, all services .....	16,752.5 <i>g</i>	43,902.2 <i>z</i>	40,383.5 <i>z</i>	9.2	-8.0
Scheduled service .....	14,352.4	35,640.0	33,186.2	8.7	-6.9
Nonscheduled service .....	2,400.1	8,262.2	7,197.3	11.6	-12.9
Supplemental .....	n/a	9,783.7 <i>y</i>	9,060.0 <i>y</i>	n/a	-7.4
Total .....	n/a	186,142.8	184,912.2	n/a	-0.7
<b>Revenue Passenger Load Factor (%)</b>					
<b>Domestic and international</b>					
Certificated scheduled service .....	55.0 <i>h</i>	52.1 <i>v</i>	54.9 <i>v</i>	0.0	5.4
<b>Domestic</b>					
Certificated scheduled service .....	54.8 <i>f</i>	51.6 <i>x</i>	55.5 <i>x</i>	0.1	7.6
<b>Revenue Ton-Miles of Freight<sup>1</sup> (millions)</b>					
<b>Domestic</b>					
Certificated all services .....	1,025.2	2,875.7	2,860.4	10.8	-0.5
Scheduled service .....	816.3	2,821.9	2,808.4	13.2	-0.5
Nonscheduled service .....	208.9	53.8	52.0	-13.0	-3.3
Supplemental .....	n/a	291.6 <i>y</i>	281.1 <i>y</i>	n/a	-3.6
<b>International</b>					
Certificated, all services .....	530.2 <i>g</i>	2,307.0 <i>z</i>	2,391.0 <i>z</i>	16.3	3.6
Scheduled service .....	485.2	1,914.8	2,081.6	15.7	8.7
Nonscheduled service .....	45.0	392.2	309.4	21.3	-21.1
Supplemental .....	n/a	111.9 <i>y</i>	85.8 <i>y</i>	n/a	-23.3

### AIR CARRIER PROFILE (cont.)

	<u>1964</u>	<u>1973</u>	<u>1974</u>	1964-1974 Average Annual <u>% Change</u>	1973-1974 <u>% Change</u>
<b>Average Overall Airborne Speed (mph)</b>					
Domestic					
Certificated, scheduled service . . . . .	296 <i>i</i>	405 <i>j</i>	402 <i>j</i>	3.1	-0.7
International					
Certificated, scheduled service . . . . .	435	481	481	1.0	0.0
<b>Total Number of U.S. Air Carrier Accidents (injury &amp; no-injury)<sup>2</sup></b>					
Certificated Air Carriers . . . . .					
Scheduled service . . . . .	79 <i>q</i>	43 <i>q</i>	47 <i>q</i>	-5.1	9.3
Domestic . . . . .	70	41	45	-4.3	9.8
International . . . . .	59	37	44	-2.9	18.9
Nonscheduled operations . . . . .	50	29	32	-4.4	10.3
Domestic . . . . .	9	8	12	2.9	50.0
International . . . . .	11	4	1	-21.3	-75.0
Supplemental Air Carriers . . . . .	11	4	1	-21.3	-75.0
Domestic . . . . .	0	0	0	0.0	0.0
International . . . . .	9	2	2	-14.0	0.0
Domestic . . . . .	9	0	1	-19.7	100.0
International . . . . .	0	2	1	0.0	-50.0
<b>Total Number of Fatalities<sup>2</sup> — U.S. Air Carriers</b>					
Certificated Air Carriers . . . . .					
Scheduled service . . . . .	242	227	467	6.8	105.7
Domestic . . . . .	238	221	463	6.9	109.5
International . . . . .	237	217	460	6.9	112.0
Nonscheduled operations . . . . .	130	138	168	2.6	21.7
Domestic . . . . .	107	79	292	10.6	269.6
International . . . . .	1	4	3	11.6	-25.0
Supplemental Air Carriers . . . . .	1	4	3	11.6	-25.0
Domestic . . . . .	0	0	0	0.0	0.0
International . . . . .	4	6	4	0.0	-33.3
Domestic . . . . .	4	0	0	-100.0	0.0
International . . . . .	0	6	4	14.9	-33.3

n/a = not available

r = revised

<sup>1</sup> Excludes ton-miles of express mail, and excess baggage.

<sup>2</sup> Includes crew in passenger, cargo and nonrevenue flights.

Sources: Civil Aeronautics Board, *Handbook of Airline Statistics*, 1973: a-216, b-227, f-106, g-117, h-105, i-62 d-9, e-63.  
 Civil Aeronautics Board, *1973-1974 Supplement to Handbook of Airline Statistics*, n-126, ee-153, j-5.  
 Civil Aeronautics Board, *Air Carrier Traffic Statistics*, Dec. 1973, 1974, c-Back of Frontispiece, cc-Inside of Back Cover.  
 Civil Aeronautics Board, *Air Carrier Traffic Statistics*, Dec. 1974, v-1, x-4, y-93, z-13.  
 Civil Aeronautics Board, *Air Carrier Financial Statistics*, Dec. 1974; k-2, l-7, m-99.  
 Civil Aeronautics Board, Statistical Data Division, dd-Personal Communication.  
 National Transportation Safety Board, Bureau of Aviation Safety (BAS-22), q-Personal Communication.

## GENERAL AVIATION PROFILE

	<u>1964</u>	<u>1973</u>	<u>1974</u>	1964-1974 Average Annual <u>% Change</u>	1973-1974 <u>% Change</u>
<b>I. FINANCIAL</b>					
Expenditures (\$ millions)					
Total	1,171 <i>a</i>	4,237 <i>a</i>	4,262 <i>Ph</i>	13.8	0.6
Aircraft	206	797	726 <i>P</i>	13.4	-8.9
Operating costs	965	3,440	3,536 <i>P</i>	13.9	2.8
<b>II. INVENTORY</b>					
Number of Active Aircraft					
Total, all aircraft	88,742 <i>b</i>	153,540 <i>c</i>	161,502 <i>c</i>	6.2	5.2
<b>III. PERFORMANCE</b>					
Number of Miles Flown (millions)					
Business	1,046.8 <i>d</i>	1,343.7 <i>d</i>	1,433.2 <i>d</i>	3.2	6.7
Commercial	392.5	688.4	789.7	7.2	14.7
Instructional	283.5	778.9	815.5	11.1	4.7
Personal	436.1	825.1	919.6	7.7	11.5
Other	21.8	93.4	84.6	14.5	-9.4
Total	2,180.8	3,728.5	4,042.7	6.4	8.4
Number of Hours Flown (millions)					
Business	5.8 <i>e</i>	8.6 <i>f</i>	9.1 <i>f</i>	4.6	5.8
Commercial	3.3	5.6	6.3	6.7	12.5
Instructional	2.7	7.6	8.0	11.5	5.3
Personal	3.8	7.5	8.4	8.3	12.0
Other	.2	.7	.7	13.3	0.0
Total	15.7	30.0	32.5	7.5	8.3
Number of Fatalities					
Instructional	30 <i>g</i>	76 <i>g</i>	91 <i>g</i>	11.7	19.7
Personal	491	839	838	5.5	-0.1
Business	177	124	121	-3.7	-2.4
Executive	49	62	41	-1.8	-33.9
Aerial Application	50	49	38	-2.7	-22.4
Air Taxi	62	105	106	5.5	1.0
Other	223	148	195	-1.3	31.8
Total	1,082	1,403	1,430	2.8	1.9
Number of Accidents (Fatal, Injury, and No Injury)					
Instructional	567	587	641	1.2	9.2
Personal	2,193	2,206	2,213	0.1	0.3
Business	878	305	320	-9.6	4.9
Executive	84	94	78	-0.7	-17.0
Aerial Application	402	415	481	1.8	15.9
Air Taxi	167	163	191	1.4	17.2
Other	808	531	561	-3.6	5.6
Total	5,099	4,301	4,485	-1.3	4.3

*p* = preliminary

Sources: Federal Aviation Administration, *Statistical Handbook of Aviation*, 1970, 1973, 1974.  
*b*-Table 8.2, *c*-Table 8.6, *d*-Table 8.5, *e*-Table 9.9, *f*-Table 8.3.

Transportation Association of America, *Transportation Facts & Trends*, July 1975, Quarterly Supplement to the 11th edition, Dec. 1974 *a*-5

National Transportation Safety Board, Bureau of Aviation Safety, (BAS 22), *g*-Personal Communication.

Transportation Association of America, *Transportation Facts & Trends*, 1976, *h*-preliminary estimate.

## HIGHWAY PROFILE

	1964	1973	1974	1964-1974	
				Average Annual % Change	1973-1974 % Change
<b>I. FINANCIAL</b>					
Government Expenditures (\$ millions)					
Federal .....	245 <i>c</i>	516 <i>a</i>	535 <i>a</i>	8.1	3.7
State and local .....	12,740	22,035	23,971	6.5	8.8
Total .....	12,985	22,551	24,506	6.6	8.7
<b>II. INVENTORY</b>					
Rural Mileage					
Under State control					
State primary system .....	411,076 <i>b</i>	409,834 <i>b</i>	410,450 <i>b</i>	0.0	0.2
State secondary roads .....	248,181	272,707	266,977	0.7	-2.1
Other State roads .....	22,117	27,920	28,868	2.7	3.4
Total .....	681,374	710,461	706,295	0.4	-0.6
Under local control					
County roads .....	1,740,596	1,727,834	1,731,188	-0.1	0.2
Town and township roads .....	536,085	489,164	483,953	-1.0	-1.1
Other local roads .....	67,442	32,448	32,568	-7.0	0.4
Total .....	2,344,123	2,249,446	2,247,709	-0.4	-0.1
Under Federal control .....	127,080	215,747	224,148	5.8	3.9
Municipal Mileage					
Under State control					
Extensions of State primary system .....	49,087	64,343	66,532	3.1	3.4
Extensions of State secondary roads .....	13,038	17,349	17,559	3.0	1.2
Total .....	62,125	81,692	84,091	3.1	2.9
Under local control					
Local city street .....	429,367	549,537	553,564	2.6	0.7
Total municipal mileage .....	491,492	631,229	637,655	2.6	1.0
Total Rural and Municipal Mileage .....	3,644,069	3,806,883	3,815,807	0.5	0.2

Sources: Federal Highway Administration, *Highway Statistics*, 1973, 1974, a-Table HF-10.

Federal Highway Administration, *Highway Statistics*, 1964, 1973, 1974, b-Table M-1.

Federal Highway Administration, *Highway Statistics*, Summary to 1965, March 1967, c-Table HF-201 sheet 2.

Bureau of Public Roads, *News Release BPR 67-1*, Jan. 3, 1967, c-Table HF-2.

## AUTOMOBILE PROFILE

	<u>1964</u>	<u>1973</u>	<u>1974</u>	<u>1964-1974 Average Annual % Change</u>	<u>1973-1974 % Change</u>
<b>I. FINANCIAL</b>					
Expenditures (\$ millions)					
New and used cars .....	22,833 <i>a</i>	47,958 <i>a</i>	41,030 <i>a</i>	6.0	-14.4
Tires, tubes, accessories .....	3,118	6,424	6,942	8.3	8.1
Gasoline and oil .....	13,530	28,295	36,447	10.4	28.8
Tolls .....	421	786	748	5.9	-4.8
Insurance .....	2,116	5,116	5,065	9.1	-1.0
Auto registration fees .....	1,068 <i>n</i>	1,958 <i>n</i>	2,015 <i>n</i>	6.6	2.9
Operator's permit fees .....	135	249	263	6.9	5.6
Repair, greasing, washing, parking, storage, rental .....	6,492 <i>a</i>	15,380 <i>a</i>	17,735 <i>a</i>	10.6	15.3
Total .....	49,713	106,116	110,246	8.3	3.9
Revenues (\$ millions)					
Taxi .....	595	835	892	4.1	6.8
<b>II. INVENTORY</b>					
Number of Vehicle Registrations					
Passenger cars and taxis .....	71,669,852 <i>b</i>	101,188,735 <i>b</i>	104,269,754 <i>b</i>	3.8	3.0
Motorcycles .....	970,533	4,332,580	4,936,805	17.7	13.9
Number of Employees					
Taxis .....	109,500 <i>dd</i>	97,200 <i>d</i>	93,300 <i>d</i>	-1.6	-4.0
<b>III. PERFORMANCE</b>					
Vehicle-Miles (millions) <sup>1</sup>					
Urban streets .....	345,432 <i>f</i>	592,191 <i>f</i>	589,757 <i>f</i>	5.5	-0.4
Main rural roads .....	246,850	341,633	314,782	2.5	-7.9
Local rural roads .....	94,853	102,631	113,352	1.8	10.4
Total travel .....	687,135	1,036,455	1,017,891	4.0	-1.8
Vehicle-Miles (millions)					
Motorcycles .....	2,748*	19,594	22,347	23.3	14.1
Passenger car and taxis .....	684,387	1,016,861	995,544	3.8	-2.1
Total .....	687,135	1,036,455	1,017,891	4.0	-1.8
Passenger-Miles (millions)					
Total travel, passenger cars & taxis <sup>2</sup> .....	1,505,651	2,237,094	2,190,197	3.8	-2.1
Total travel, motorcycles <sup>3</sup> .....	3,022	21,553	24,582	23.3	14.1
Average Speed (mph), Main Rural Highway					
Passenger cars .....	57 <i>l</i>	62 <i>g</i>	56 <i>g</i>	-0.2	-9.7
Number of Vehicles in All Accidents					
Motorcycles .....	150,000 <i>h</i>	360,000 <i>h</i>	360,000 <i>h</i>	9.1	0.0
Passenger cars .....	18,500,000	23,300,000	20,600,000	1.1	-11.6
Taxis .....	150,000	170,000	150,000	0.0	-11.8

**AUTOMOBILE PROFILE (cont.)**

	<u>1964</u>	<u>1973</u>	<u>1974</u>	1964-1974 Average Annual % Change	1973-1974 % Change
<b>Number of Vehicles in Fatal Accidents</b>					
Motorcycles . . . . .	1,100 <i>h</i>	2,900 <i>h</i>	3,000 <i>h</i>	10.6	3.4
Passenger cars . . . . .	45,500	49,000	40,700	-1.1	-16.9
Taxis . . . . .	170	260	240	3.5	-7.7
<b>Number of Fatalities</b>					
Passenger cars & taxis . . . . .	31,500 <i>z</i>	33,700 <i>k</i>	26,800 <i>k</i>	-1.6	-20.5
Passenger cars . . . . .	n/a	33,500 <i>h</i>	26,600 <i>h</i>	n/a	-20.6
Taxis . . . . .	n/a	700	150	n/a	-11.8
Motorcycles <sup>5</sup> . . . . .	n/a	3,130	3,160	n/a	1.0
Bicycles . . . . .	680 <i>j</i>	1,000 <i>j</i>	1,000 <i>j</i>	3.9	0.0
Pedestrians . . . . .	9,000 <i>i</i>	10,200 <i>i</i>	8,700 <i>i</i>	-0.3	-14.7

n/a - not available

r = revised

\*Based on footnote 2, Table VM-1 of Bureau of Public Roads, *Highway Statistics*, 1964.

<sup>1</sup>Includes passenger cars, taxis and motorcycles.

<sup>2</sup>Based on vehicle-mile data from the Federal Highway Administration, Dept. of Transportation, and an average occupancy of 2.2.

<sup>3</sup>Based on vehicle-mile data from the Federal Highway Administration, Dept. of Transportation, and an average occupancy of 1.1.

<sup>4</sup>Speed of free-flowing traffic along level sections of highway.

<sup>5</sup>Includes passengers on motor scooters, motorized bicycles, and motorized triycles.

Sources: Federal Highway Administration, *Highway Statistics*, 1964, 1973, 1974. *b*-Table MV-1, *f*-Table VM-1, *g*-Table VS-1, *n*-Table MV-2.  
 Bureau of Public Roads, *Traffic Speed Trends*, March 1965, *l*-4.  
 Transportation Association of America, *Transportation Facts and Trends*, July 1975, Quarterly Supplement, Dec. 1974. *s*-5  
 Department of Labor, *Personal Communication*.  
 Department of Labor, *Employment and Earnings, US 1909 - 1972*, *dd*-528.  
 Department of Commerce, Bureau of Economic Analysis, *Benchmark Revision of National Income and Product Accounts*, *a*-Table 2.6,  
 National Safety Council, *Accident Facts*, 1965, 1974, 1975, *h*-56, *i*-58, *k*-75, *j*-47, *z*-79.



## BUS PROFILE

	<u>1964</u>	<u>1973</u>	<u>1974</u>	1964-1974 Average Annual % Change	1973-1974 % Change
<b>I. FINANCIAL</b>					
Expenditures (\$ millions)					
School bus .....	674 <i>a</i>	1,626 <i>a</i>	1,852 <i>s</i>	10.6	13.9
Operating Revenues (\$ millions)					
Intercity bus, total .....	686.7 <i>c</i>	1,022.7 <i>r<sub>c</sub></i>	1,144.6 <i>p<sub>c</sub></i>	5.2	11.9
Intercity bus, Class I .....	595.4 <i>d</i>	814.6 <i>r<sub>d</sub></i>	925.3 <i>p<sub>d</sub></i>	4.5	13.6
Operating Expenses (\$ millions)					
Intercity bus, total .....	594.9 <i>c</i>	937.9 <i>r<sub>c</sub></i>	1,062.0 <i>p<sub>c</sub></i>	6.0	13.2
Intercity bus, Class I .....	510.2 <i>d</i>	738.0 <i>r<sub>d</sub></i>	850.7 <i>p<sub>d</sub></i>	5.2	15.3
Taxes Assignable to Operations (\$ millions) <sup>1</sup>					
Intercity bus, total .....	63.5 <i>c</i>	89.6 <i>r<sub>c</sub></i>	94.9 <i>p<sub>c</sub></i>	4.1	5.9
Intercity bus, Class I .....	42.7 <i>d</i>	58.9 <i>r<sub>d</sub></i>	63.1 <i>r<sub>d</sub></i>	4.0	7.1
<b>II. INVENTORY</b>					
Number of Operating Companies					
Intercity bus, total .....	1,100 <i>c</i>	1,000 <i>c</i>	950 <i>p<sub>c</sub></i>	-1.5	-5.0
Intercity bus, Class I .....	160	75	80 <i>p</i>	-6.7	6.7
Number of Vehicles					
Intercity bus, total .....	20,500	20,800 <i>r</i>	20,600 <i>p</i>	0.0	-1.0
School bus .....	222,098 <i>m</i>	333,892 <i>m</i>	354,275 <i>m</i>	4.8	6.1
Intercity bus, Class I .....	11,758 <i>c</i>	9,300 <i>c</i>	9,700 <i>p<sub>c</sub></i>	-1.9	4.3
Number of Employees of Operating Companies					
Intercity bus, total .....	46,800	48,400 <i>p</i>	49,000 <i>p</i>	0.5	1.2
Miles of Highway Served					
Intercity, total .....	260,000	270,000	270,000	0.4	0.0
<b>III. PERFORMANCE</b>					
Vehicle-Miles (millions)					
Commercial bus <sup>2</sup>					
Urban streets .....	1,803 <i>e</i>	1,545 <i>e</i>	1,555 <i>e</i>	-1.5	0.6
Main rural roads .....	908	890	965	0.6	8.4
Local roads .....	181	113	90	-6.7	-20.4
Total travel .....	2,892	2,548	2,610	-1.0	2.4
School and nonrevenue bus					
Urban streets .....	307	497	520	5.4	4.6
Main rural roads .....	674	920	920	3.2	0.0
Local rural roads .....	743	995	1,010	3.1	1.5
Total travel .....	1,724	2,412	2,450	3.6	1.6
All buses					
Urban streets .....	2,110	2,042	2,075	-0.2	1.6
Main rural roads .....	1,582	1,810	1,885	1.8	4.1
Local rural roads .....	924	1,108	1,100	1.8	-0.7
Total travel .....	4,616	4,960	5,060	0.9	2.0

**BUS PROFILE (cont.)**

	<u>1964</u>	<u>1973</u>	<u>1974</u>	1964-1974 Average Annual % Change	1973-1974 % Change
<b>Revenue Passenger-Miles (millions)</b>					
Intercity bus, total .....	23,300 <i>c</i>	26,400 <i>c</i>	27,600 <i>Pc</i>	1.7	4.5
Intercity bus, Class I <sup>3</sup> .....	15,805 <i>f</i>	13,898 <i>f</i>	14,600 <i>f</i>	-0.8	5.1
<b>Number of Revenue Passengers (millions)</b>					
Intercity bus, total .....	360 <i>c</i>	381 <i>r<sub>c</sub></i>	379 <i>Pc</i>	0.5	-0.5
Intercity bus, Class I .....	279 <i>f</i>	155 <i>r<sub>f</sub></i>	155 <i>Pf</i>	-5.7	0.0
<b>Average Speed (mph)<sup>4</sup></b>					
Commercial bus, main rural roads .....	57 <i>l</i>	60 <i>k</i>	56 <i>k</i>	-0.4	-6.7
<b>Number of Fatalities</b>					
All buses .....	80 <i>g</i>	170 <i>g</i>	150 <i>g</i>	6.5	-11.8
Intercity buses, Class I <sup>5</sup> .....	19	29	12	-4.5	-58.6
School bus total .....	90 <i>i</i>	210 <i>h</i>	200 <i>h</i>	8.3	-4.8
Pupils .....	50	125	90	6.1	-28.0
Bus drivers .....	5	15	10	7.2	-33.3
Other persons .....	35	70	100	11.1	42.9

P = preliminary  
r = revised

<sup>1</sup> Excludes income taxes.

<sup>2</sup> Includes local transit buses. See "Local Transit Profile" for more detailed information on urban bus transportation.

<sup>3</sup> Regular-route intercity service. Excludes local, suburban, charter, and special service.

<sup>4</sup> Speed of free-flowing traffic along level sections of highway.

<sup>5</sup> Class I only, representing about 70% of total intercity bus passenger mileage.

Sources: National Association of Motorbus Owners, *Bus Facts*, 1974 Statistical Supplement, c-1, d-2, f-3.  
Federal Highway Administration, *Highway Statistics*, 1964, 1973, 1974, e-Table VM-1, k-Table VS-1, m-MV-10.  
Bureau of Public Roads, *Traffic Speed Trends*, March 1965, i-4.  
Transportation Association of America, *Transportation Facts and Trends*, July 1975, Quarterly Supplement, Dec. 1974, a-5.  
Transportation Association of America, *Transportation Facts and Trends*, 1976, s-preliminary estimate.  
National Safety Council, *Accident Facts*, 1965, 1974, 1975, g-75, h-92, i-93.

## TRUCK PROFILE

	<u>1964</u>	<u>1973</u>	<u>1974</u>	1964-1974 Average Annual % Change	1973-1974 % Change
<b>I. FINANCIAL</b>					
Revenues (\$ millions)					
Local .....	20,289 <i>a</i>	57,303 <i>r<sub>a</sub></i>	59,847 <i>p<sub>aa</sub></i>	11.4	4.4
Intercity					
ICC-regulated .....	9,155	21,000	22,700 <i>p</i>	9.5	8.1
Non-ICC-regulated .....	14,412	25,515	26,112 <i>p</i>	6.1	2.3
Operating Revenues of Class I Intercity					
Motor Carriers (\$ millions)					
Freight, intercity, common .....	5,835.2 <i>b</i>	15,144.0 <i>r<sub>c</sub></i>	14,584.3 <i>p<sub>c</sub></i>	9.6	-3.7
Freight, intercity, contract .....	200.6	533.7	392.3	6.9	-26.5
Freight, local	72.3	629.8	561.0	22.7	-10.9
Trans. for other Classes I and II carriers .....	43.5	154.8	302.8	21.4	95.6
Other .....	47.9	137.8	111.4	8.8	-19.2
Total .....	6,199.5	16,600.1	15,951.8	9.9	-3.9
Operating Expenses of Class I Intercity					
Motor Carriers (\$ millions) .....	5,917.9 <i>m</i>	15,787.5	15,242.5	9.9	-3.5
<b>II. INVENTORY</b>					
Number of Truck Registrations					
Private and commercial .....	13,296,898 <i>d</i>	22,175,645 <i>d</i>	23,480,577 <i>d</i>	5.9	5.9
Federal .....	102,304 <i>e</i>	171,006 <i>e</i>	177,941 <i>e</i>	5.7	4.1
State, county, municipal .....	620,141	886,221	939,766	4.2	6.0
Total .....	14,019,343	23,232,872	24,598,284	5.8	5.9
Total Number of Employees					
Trucking and Trucking Terminals .....	837,000 <i>s</i>	1,096,200 <i>h</i>	1,087,000 <i>h</i>	2.6	-0.8
Number of Companies, Class I Intercity					
Carriers of Property .....	1,025 <i>b</i>	1,442 <i>r<sub>c</sub></i>	794 <i>p<sub>c</sub></i>	-2.5	-44.9
Number of Employees, Class I Intercity					
Carriers of Property .....	364,930 <i>m</i>	580,220 <i>r</i>	492,376 <i>p</i>	3.0	-15.1
<b>III. PERFORMANCE</b>					
Vehicle-Miles (millions)					
Urban streets .....	56,562 <i>g</i>	113,154 <i>g</i>	114,339 <i>g</i>	7.3	1.0
Main rural roads .....	68,180	119,536	129,545	6.6	8.4
Local rural roads .....	25,416	34,457	22,810	-1.1	-33.8
Total travel .....	150,158	267,147	266,694	5.9	-0.2
Ton-Miles (millions)					
Intercity .....	347,470 <i>n</i>	505,000 <i>i</i>	495,000 <i>p<sub>i</sub></i>	3.6	-2.0
Average Speed, Main Rural Highways (mph) <sup>1</sup>					
All trucks .....	55 <i>l</i>	57 <i>j</i>	54 <i>j</i>	-0.2	-5.3
Taxes Assignable to Operations (\$ millions)					
State highway-user taxes .....	2,150 <i>f</i>	4,570 <i>f</i>	4,632 <i>f</i>	8.0	1.4
Federal highway-user taxes .....	1,385	2,533	2,518	6.2	-0.6
Total highway-user taxes .....	3,534	7,104	7,150	7.3	0.6

TRUCK PROFILE (cont.)

	1964	1973	1974	1964-1974 Average Annual % Change	1973-1974 % Change
Average Length of Haul (miles)					
Class I intercity motor carriers					
Common .....	256 <i>h</i>	276 <i>h</i>	280 <sup><i>P</i>t</sup>	0.9	1.4
Contract .....	136	198	200 <sup><i>P</i></sup>	3.9	1.0
Total Fatalities .....	n/a	3,058 <i>w</i>	2,417 <sup><i>P</i>y</sup>	n/a	-21.0
Private .....	n/a	709	600 <sup><i>P</i></sup>	n/a	-15.4
Authorized .....	n/a	1,938	1,698 <sup><i>P</i></sup>	n/a	-12.4
Exempt .....	n/a	99	88 <sup><i>P</i></sup>	n/a	-11.1
Others .....	n/a	312	31 <sup><i>P</i></sup>	n/a	-90.1
Total Accidents .....	n/a	30,911 <i>x</i>	25,264 <sup><i>P</i></sup>	n/a	-18.3
Private .....	n/a	5,233	4,421 <sup><i>P</i></sup>	n/a	-15.5
Authorized .....	n/a	22,825	20,156 <sup><i>P</i></sup>	n/a	-11.7
Exempt .....	n/a	618	404 <sup><i>P</i></sup>	n/a	-34.6
Others .....	n/a	2,235	283 <sup><i>P</i></sup>	n/a	-87.3

*p* = preliminary  
*r* = revised  
n/a = not available

<sup>1</sup> Speed of free-flowing traffic along level sections of highway.

Sources: Federal Highway Administration, *Highway Statistics*, 1964, 1973, 1974, *d*-MV-1, *e*-MV-7, *g*-VM-1, *j*-Table VS-1, *t*-81.  
American Trucking Associations, *The Truck Beat*, Dec. 1975, *f*-7.  
Interstate Commerce Commission, *89th Annual Report to Congress*, 1975, *c*-125, *i*-121.  
Interstate Commerce Commission, *84th Annual Report to Congress*, 1970, *b*-141, *m*-142.  
Interstate Commerce Commission, *79th Annual Report to Congress*, 1965, *n*-59.  
Transportation Association of America, *Transportation Facts and Trends*, July 1975, Quarterly Supplement, Dec. 1974, *a*-4.  
Transportation Association of America, *Transportation Facts and Trends*, 1976, *aa*-4, preliminary estimate.  
Interstate Commerce Commission, *Transport Economics*, Vol. II, No. 2, 1975, *k*-15.  
Interstate Commerce Commission, *t*-Personal Communication.  
U.S. Department of Labor, *h*-Personal Communication, *s*-Bulletin 1312-9, p. 530.  
U.S. Department of Transportation, FHWA, Bureau of Motor Carrier Safety, *1973 Accidents of Motor Carriers of Property*, *w*-2, *x*-1.  
U.S. Department of Transportation, FHWA, Bureau of Motor Carrier Safety, *y*-Personal Communication.

## LOCAL TRANSIT PROFILE

	1964	1973	1974	1964-1974	
				Average Annual % Change	1973-1974 % Change
<b>I. FINANCIAL</b>					
Passenger Revenue (\$ millions)					
Motorbus	950.4 <i>a</i>	1,183.8 <i>a</i>	1,269.6 <i>a</i>	2.9	7.2
Subway and elevated - heavy rail	282.3	437.6	486.7	5.6	11.2
Surface rail - light rail	48.3	38.7	31.7	-4.1	-18.1
Trolley coach	45.0	23.6	17.2	-9.2	-27.1
Total	1,326.0	1,683.7	1,805.2	3.1	7.2
Operating Revenue (\$ millions)					
Motorbus	1,010.3 <i>b</i>	1,262.9 <i>b</i>	1,377.3 <i>b</i>	3.1	9.1
Subway and elevated - heavy rail	295.8	461.0	505.8	5.5	9.7
Surface rail - light rail	55.6	48.5	36.5	-4.1	-24.7
Trolley coach	46.4	25.2	20.1	-8.0	-20.2
Total	1,408.1	1,797.6	1,939.7	3.3	7.9
<b>II. INVENTORY</b>					
Number of Companies					
Electric railways <sup>1</sup>	14 <i>k</i>	15 <i>h</i>	14 <i>g</i>	0.0	-6.7
Motorbus	1,149	1,006	930	-2.1	-7.6
Trolley coach and motorbus	9	2	2	-14.0	0.0
Number of Vehicles					
Motorbus	49,200 <i>c</i>	48,286 <i>c</i>	48,700 <i>c</i>	-0.1	0.9
Subway and elevated - heavy rail	9,061	9,387	9,403	0.4	0.2
Surface rail - light rail	1,553	1,123	1,068	-3.7	-4.9
Trolley coach	1,865	794	718	-9.1	-9.6
Total	61,679	59,590	59,889	-0.3	0.5
Number of Employees					
Motorbus, surface rail, trolley coach, subway and elevated	144,800 <i>d</i>	140,700 <i>d</i>	153,100 <i>d</i>	0.6	8.8
<b>III. PERFORMANCE</b>					
Revenue Vehicle-Miles (millions)					
Motorbus	1,527.9 <i>e</i>	1,370.4 <i>e</i>	1,431.0 <i>e</i>	-0.7	4.4
Subway and elevated - heavy rail	395.8	407.3	431.9	0.9	6.0
Surface rail - light rail	42.9	31.2	26.9	-4.6	-13.8
Trolley coach	49.2	25.7	17.6	-9.8	-31.5
Total	2,015.8	1,834.6	1,907.4	-0.6	4.0
Revenue Passengers Carried (millions)					
Motorbus	4,729.0 <i>f</i>	3,652.8 <i>f</i>	3,997.6 <i>f</i>	-1.7	9.4
Subway and elevated - heavy rail	1,698.0	1,423.7	1,435.1	-1.7	0.8
Surface rail - light rail	213.0	143.5	113.7	-6.1	-20.8
Trolley coach	214.0	73.6	59.5	-12.0	-19.2
Total	6,854.0	5,293.9	5,605.9	-2.0	5.9
Number of Fatalities in Local Transit <sup>2</sup>					
Total	n/a	12 <i>m</i>	9 <i>m</i>	n/a	-25.0
Motorbus	n/a	1	2	n/a	100.0
Trolley coach	n/a	3	2	n/a	-33.3
Light rail	n/a	2	1	n/a	-50.0
Heavy rail	n/a	6	4	n/a	-33.3

r = revised

<sup>1</sup> Includes surface rail and subway and elevated.

<sup>2</sup> Reported number of passenger fatalities collected by APTA resulting from vehicle accidents; they are not necessarily the national total.

Sources: American Public Transit Association, *Transit Fact Book*, 1975-1976, a-Table 9, b-Table 8, c-Table 12, d-Table 11, e-Table 10, f-Table 7.

American Public Transit Association, *Transit Fact Book*, 1974-1975, g-9.

American Public Transit Association, *Transit Fact Book*, 1973-1974, h-pg. 3.

American Public Transit Association, *Transit Fact Book*, 1965, k-pg. 1.

American Public Transit Association, *m*-Personal Communication, Statistical Department.

## WATER TRANSPORT PROFILE

FINANCIAL	1964	1973	1974	1964-1974	
				Average Annual % Change	1973-1974 % Change
<b>Revenues (\$ millions)</b>					
Domestic freight	1,601 <i>a</i>	2,267 <i>r a</i>	2,768 <i>ww</i>	5.6	22.1
Coastal waterways	711	890 <i>r</i>	1,004 <i>p</i>	3.5	12.8
Inland waterways	353	655 <i>r</i>	899 <i>p</i>	9.8	37.3
Great Lakes	204	286	340 <i>p</i>	5.2	18.9
Locks, channels, etc.	333	436 <i>r</i>	525 <i>p</i>	4.7	20.4
International freight	1,838	4,329 <i>r</i>	5,070 <i>p</i>	10.7	17.1
Domestic passengers, intercity	13	19	16.0	2.1	-15.8
International passenger <sup>1</sup>	389	284	259 <i>p</i>	-4.0	-8.8
<b>Revenue of Class A &amp; B Carriers by Inland and Coastal Waterways (\$ millions)</b>					
Line service operating revenues					
Freight	185.6 <i>b</i>	358.9 <i>r c</i>	510.6 <i>p c</i>	10.6	42.3
Passenger	7.7	18.4 <i>r</i>	10.6 <i>p</i>	3.2	-42.4
Other	17.8	16.0 <i>r</i>	24.5 <i>p</i>	3.2	53.1
Other operating revenue	3.0	4.2 <i>r</i>	3.2 <i>p</i>	0.6	-23.8
Revenue from terminal operations	21.5	47.2 <i>r</i>	36.0 <i>p</i>	5.3	-23.7
Rent and motor carrier revenue	22.2	29.0 <i>r</i>	37.0 <i>p</i>	5.2	27.6
Total waterline operating revenues	257.8	473.7 <i>r</i>	621.9 <i>p</i>	9.2	31.3
<b>Revenues of U.S. Commercial Fishing Fleet</b>					
U.S. Commercial Landings (\$ millions)	389 <i>aa</i>	907 <i>aa</i>	898 <i>aa</i>	8.7	-1.0
<b>Revenues of Maritime Carriers (\$ millions)</b>					
Coastwise and intercoastal service	106 <i>e</i>	152 <i>d</i>	252 <i>p d</i>	9.0	65.8
Charter	18	57	63 <i>p</i>	13.3	10.5
Total vessel operating revenues	595	1,008	1,386 <i>p</i>	8.8	37.5
Total waterline operating revenues	705	1,087	1,477 <i>p</i>	7.7	35.9
<b>Operating Expenses of Classes A and B Carriers by Inland and Intracoastal Waterways (\$ millions)</b>					
Inland and Intracoastal Waterways (\$ millions)	222.8 <i>f</i>	423.5 <i>r c</i>	529.4 <i>p c</i>	9.0	25.0
<b>Operating Expenses of Maritime Carriers (\$ millions)</b>					
Maritime Carriers (\$ millions)	667.2 <i>e</i>	1,084.0 <i>d</i>	1,318.5 <i>p d</i>	7.0	21.6
<b>Government Expenditures (\$ millions)</b>					
Federal expenditures					
Coast Guard	350 <i>h</i>	783 <i>h</i>	851 <i>h</i>	9.3	8.7
Merchant Marine	307 <i>i</i>	457 <i>i</i>	503 <i>i</i>	5.1	10.1
Total waterways	333 <i>j</i>	482 <i>j</i>	516 <i>j</i>	4.5	7.1
Inland and intracoastal waterways <sup>2</sup>	178 <i>k</i>	258 <i>k</i>	276 <i>k</i>	4.5	7.0
State and local expenditures					
Coast Guard	0 <i>h</i>	0 <i>h</i>	0 <i>h</i>	0.0	0.0
Merchant Marine	0 <i>i</i>	0 <i>i</i>	0 <i>i</i>	0.0	0.0
Total waterways	291 <i>j</i>	601 <i>r j</i>	625 <i>j</i>	7.9	4.0



WATER TRANSPORT PROFILE (cont.)

	1964	1973	1974	1964-1974 Average Annual % Change	1973-1974 % Change
<b>II. INVENTORY</b>					
Number of Companies, Class A and B Carriers by Inland and Coastal Waterways . . . . .	89 <i>b</i>	81 <i>r<sub>c</sub></i>	70 <i>p<sub>c</sub></i>	-2.4	-13.6
Number of Companies, Maritime Carriers . . . . .	21 <i>e</i>	16 <i>d</i>	8 <i>p<sub>d</sub></i>	-9.2	-50.0
Number of Employees					
Ships, boat building, and repairs . . . . .	145,100 <i>n</i>	196,500 <i>r<sub>n</sub></i>	200,900 <i>n</i>	3.3	1.8
Transportation services . . . . .	230,000 <i>q</i>	201,100 <i>r<sub>q</sub></i>	203,600 <i>q</i>	-1.2	1.2
Number of Employees					
Maritime carriers . . . . .	15,561 <i>g</i>	8,835 <i>d</i>	10,162 <i>p<sub>d</sub></i>	-4.2	15.0
Class A and B carriers by inland and coastal waterways . . . . .	10,222 <i>f</i>	9,270 <i>r<sub>c</sub></i>	8,075 <i>p<sub>c</sub></i>	-2.3	-12.9
Mileage of Commercially Navigable Inland and Coastal Channels . . . . .	25,380 <i>s</i>	25,543 <i>s</i>	25,543 <i>s</i>	0.1	0.0
Number of Vessels					
Total non-self-propelled . . . . .	17,081 <i>t</i>	23,147 <i>r<sub>t</sub></i>	25,410 <i>t</i>	4.1	9.8
Dry cargo barges and scows . . . . .	14,432	19,772 <i>r</i>	21,876	4.2	10.6
Tank barges . . . . .	2,649	3,375 <i>r</i>	3,534	2.9	4.7
Self-propelled towboats and tugs . . . . .	3,994	4,035 <i>r</i>	4,100	0.3	1.6
U.S. Commercial Fishing Fleet	11,808 <i>bb</i>	15,396 <i>bb</i>	n/a	n/a	n/a
U.S. Passenger Liners <sup>4</sup>	12 <i>cc</i>	5 <i>cc</i>	2 <i>cc</i>	-16.4	-60.0
U.S. Merchant Marine (over 1,000 gross tons)					
Total U.S. Flag	2,505 <i>dd</i>	1,016 <i>dd</i>	922 <i>dd</i>	-9.5	-9.3
Privately Owned	963	596	583	-4.9	-2.2
Government Owned	1,542	420	339	-14.1	-19.3
Number of Recreational Boats (millions)	6.2 <i>gg</i>	8.3 <i>gg</i>	8.5 <i>gg</i>	3.2	2.4
<b>III. PERFORMANCE</b>					
Passenger-Miles, Intercity (millions) . . . . .	2,800 <i>u</i>	4,000 <i>u</i>	4,000 <i>u</i>	3.6	0.0
Ton-Miles (millions)					
Domestic waterfreight					
Coastwise . . . . .	311,874 <i>v</i>	327,649 <i>v</i>	322,802 <i>v</i>	0.3	-1.5
Internal . . . . .	101,924	171,891	183,202	6.0	6.6
Lakewise . . . . .	73,237	83,765	78,880	0.7	-5.8
Local . . . . .	1,794	1,386	1,460	-2.0	5.3
Total . . . . .	488,828	584,691	586,345	1.8	0.3
Ton-Miles, Domestic Deep Sea (billions) . . . . .	237 <i>w</i>	226 <i>w</i>	230 <i>ww</i>	-0.3	1.8
Tons of Freight Hauled (millions)					
Domestic water					
Coastwise . . . . .	206 <i>v</i>	237 <i>v</i>	233 <i>v</i>	1.2	-1.7
Internal . . . . .	358	503	511	3.6	1.6
Lakewise . . . . .	151	157	146	-0.3	-7.0
Local . . . . .	100	93	88	-1.3	-5.4
Total . . . . .	814	990	979	1.9	-1.1
Exports					
Great Lakes ports . . . . .	30 <i>x</i>	38 <i>x</i>	28 <i>x</i>	-0.7	-26.3
Coastal ports . . . . .	143	239	239	5.3	0.0
Total . . . . .	173	277	267	4.4	-3.6
Imports					
Great Lakes . . . . .	24	28	23	-0.4	-17.9
Coastal ports . . . . .	224	462	474	7.8	2.6
Total . . . . .	248	490	497	7.2	1.4
Tons of Freight, Intraterritorial (millions) . . . . .	1.6 <i>m</i>	4.3 <i>m</i>	4.0 <i>m</i>	9.6	-7.0

**WATER TRANSPORT PROFILE (cont.)**

	<u>1964</u>	<u>1973</u>	<u>1974</u>	1964-1974 Average Annual % Change	1973-1974 % Change
<b>Average Haul, Domestic System (miles-per-ton)</b>					
Coastwise .....	1,516.2 <i>v</i>	1,383.7 <i>v</i>	1,383.3 <i>v</i>	-0.9	0.0
Internal .....	284.8	341.6	358.5	2.3	4.9
Lakewise .....	483.7	534.8	540.0	1.1	1.0
Local .....	18.0	14.9	16.6	-0.8	11.4
Total .....	600.1	590.7	599.1	0.0	1.4
<b>Cargo Capacity (net tons)</b>					
Total non-self-propelled vessels .....	19,172,729 <i>t</i>	30,270,574 <i>t</i>	33,727,557 <i>t</i>	5.8	11.4
Dry cargo barges and scows .....	14,009,423	22,647,076	25,525,996	6.2	12.7
Tank barges .....	5,163,306	7,623,498	8,201,561	4.7	7.6
<b>Total Number of Fatalities in Waterborne Transport<sup>3</sup></b>					
Inspected, total .....	191 <i>hh</i>	199 <i>z</i>	190 <i>z</i>	-0.1	-4.5
Passenger & ferry, large & small .....	n/a	56	8	n/a	-85.7
Freight .....	n/a	2	1	n/a	-50.0
Cargo, barge .....	n/a	16	2	n/a	-87.5
Tank ships & tank barges .....	n/a	0	1	n/a	100.0
Public .....	n/a	5	3	n/a	-40.0
Misc. ....	n/a	2	0	n/a	-100.0
Uninspected, total .....	n/a	31	1	n/a	-96.8
Commercial fishing .....	n/a	143	182	n/a	27.3
Tugs .....	n/a	74	70	n/a	-5.4
Foreign .....	n/a	24	14	n/a	-41.7
Misc. ....	n/a	17	53	n/a	211.8
		28	45	n/a	60.7
<b>Number of Fatalities in Recreational Boating</b>					
Inboard .....	138 <i>ee</i>	113 <i>ee</i>	124 <i>ff</i>	-1.1	9.7
Outboard .....	728	795	691	-0.5	-13.1
Inboard/Outboard <sup>5</sup> .....	n/a	37	52	n/a	40.5
Other .....	298	371	272	-0.9	-26.7
Propulsion Unknown .....	28	438	307	27.1	-29.9
Total .....	1,192	1,754	1,446	2.0	-17.6

<sup>1</sup> Revenues paid by American travelers to U.S. and foreign flag carriers.

<sup>2</sup> Does not include Great Lakes and coastal harbors.

<sup>3</sup> Fatalities on a fiscal year basis due to vessel casualties.

<sup>4</sup> Passenger capacity greater than 125.

<sup>5</sup> The 1963 figure is included under inboard fatalities.

*p* = preliminary

*r* = revised

n/a = not available.

Sources: American Waterways Operators, *Inland Waterborne Commerce Statistics*, 1969, 1974, s-1, t-2 & 3.

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**RAIL PROFILE**  
**A. CLASS I RAILROADS**

	<u>1964</u>	<u>1973</u>	<u>1974</u>	1964-1974 Average Annual % Change	1973-1974 % Change
<b>I. FINANCIAL</b>					
Revenues, Class I Line-Haul Railroads (\$ millions)					
Passenger .....	577.9 <i>a</i>	258.5 † <i>a</i>	289.1 † <i>a</i>	-6.7*	11.8
Commutation .....	134.2	174.2 †	194.2 †	3.8	11.5
Other than commutation .....	349.0	84.4 †	96.0 †	-12.1*	13.7
Freight .....	8,455.5 <i>b</i>	13,770.7 <i>r</i> <i>b</i>	15,766.7 <i>b</i>	6.4	14.5
Mail .....	329.2	81.8	91.9	-12.0*	12.3
Express .....	80.2	3.6	4.4	-25.2*	22.2
Other .....	413.8	655.3	769.7	6.4	17.5
Total operating revenues .....	9,856.5	14,770.1	16,922.8	5.6	14.6
Operating Expenses, Class I Line-Haul Railroads (\$ millions) .....					
	7,737.8	11,558.6 <i>r</i>	13,107.9	5.4	13.4
<b>II. INVENTORY</b>					
Number of Vehicles, Class I Railroads					
Freight-carrying cars .....	1,488,385 <i>f</i>	1,356,944 <i>f</i>	1,339,223 <i>f</i>	-1.1	-1.3
Passenger train cars .....	23,057 <i>g</i>	5,360 † <i>g</i>	5,704 † <i>g</i>	-13.0*	6.4
Locomotives .....	28,300 <i>h</i>	27,382 <i>r</i> <i>h</i>	27,627 <i>h</i>	-0.2	0.9
Number of Companies, Class I Railroads .....	98 <i>i</i>	68 <i>i</i>	72 <i>i</i>	-3.0	5.9
Number of Employees, Class I Railroads .....	665,034 <i>j</i>	516,171 † <i>j</i>	516,460 † <i>j</i>	-2.5	1.0
Line Mileage, All Line-Haul Railroads .....	212,603 <i>k</i>	201,585 <i>r</i> <i>k</i>	200,000 <i>p</i> <i>k</i>	-0.6	-0.8
<b>III. PERFORMANCE</b>					
Car Mileage, Class I Railroads (millions)					
Freight .....	29,334 <i>l</i>	31,716 <i>l</i>	31,187 <i>l</i>	0.6	-1.7
Passenger .....	1,806	103	100	-25.1*	-2.9
Total .....	31,232	31,911	31,387	0.0	-1.6
Train Mileage, Class I Railroads (millions)					
Freight .....	414.5	469.0 <i>r</i>	469.3	1.2	0.1
Passenger .....	183.6	32.9	34.4	-15.4*	4.6
Total .....	598.0	508.8 <i>r</i>	503.6	-1.7	-1.0
Locomotive Mileage, Class I Railroads (millions)					
Freight .....	1,324.3	1,371.9	1,374.4	0.4	0.2
Passenger .....	378.8	19.3	20.2	-25.4*	4.7
Total .....	1,703.1	1,391.2	1,394.6	-2.0	0.2
Revenue Passengers Carried, Class I Railroads (millions)					
Commutation .....	198 <i>a</i>	183 † <i>a</i>	194 † <i>a</i>	-0.2	6.0
Other passenger .....	115	53	62	-6.0*	17.0

**RAIL PROFILE**  
**A. CLASS I RAILROADS (cont.)**

	<u>1964</u>	<u>1973</u>	<u>1974</u>	<u>1964-1974 Average Annual % Change</u>	<u>1973-1974 % Change</u>
<b>Revenue Passenger Miles, Class I</b>					
Railroads (millions)					
Commutation .....	4,199 <i>a</i>	4,377 <sup>†</sup> <i>a</i>	4,064 <sup>†</sup> <i>a</i>	0.4	7.7
Other passenger .....	14,048	1,238	1,423	-20.5*	14.9
<b>Average Passenger Trip Length, Class I</b>					
Railroads (miles)					
Commutation .....	21	23 <sup>†</sup>	23 <sup>†</sup>	0.5	0.0
Other passenger <sup>3</sup> .....	122	74	76	-4.6	2.7
<b>Revenue Ton-Miles, Class I Railroads (millions)</b>					
Freight .....	658,639 <i>s</i>	851,809 <sup>r</sup> <i>s</i>	850,961 <i>s</i>	2.6	-0.1
<b>Average Haul, Class I Railroads (miles)</b>					
Freight .....	263.2	315.3 <i>r</i>	313.5	1.8	-0.6
<b>Number of Fatalities, All Railroads<sup>2</sup></b>					
Passengers on trains .....	8 <i>y</i>	6 <i>w</i>	7 <i>w</i>	-1.3	16.7
Employees on duty .....	136	158	140	0.3	-11.4
Employees not on duty .....	4	3	4	0.0	33.3
Other non-trespassers .....	1,598	1,171	1,192	-2.9	1.8
Trespassers .....	598	578	565	-0.6	-2.2
Total .....	2,844	1,916	1,908	-2.0	-0.4
Rail/Highway Grade Crossing Fatalities .....	1,543	1,885 <i>x</i>	1,220 <i>x</i>	-2.3	-35.3

<sup>†</sup> = AMTRAK figures (p. 16) subtracted from data given in source reference.

*p* = preliminary

*r* = revised

\*NOTE: % decrease largely due to separation of AMTRAK operations data, May 1971.

<sup>1</sup> Includes loaded and empty freight cars, not cabooses.

<sup>2</sup> Includes AMTRAK operations and fatalities at rail-highway grade crossings.

<sup>3</sup> Includes AMTRAK and Auto-Train.

Sources: Association of American Railroads, *Yearbook of Railroad Facts*, 1975, k-48.  
 Association of American Railroads, *Statistics of Railroads of Class I, Years 1964 to 1971*, July 1975, a-7, 16, b-1, f-9, g-10, 16, h-8, j-1, 16, l-11, 16, s-5, i-Table of Contents.  
 Federal Railroad Administration, *Summary & Analysis of Accidents on Railroads in U.S. No. 143*, Table 6, 1974, w-5.  
 Federal Railroad Administration, *Rail-Highway Grade Crossing Accidents*, Table B, Dec. 31, 1974, x-1.  
 Federal Railroad Administration, y-Personal Communication.  
 Interstate Commerce Commission, *Transport Statistics in U.S.*, 1964, 1973, l-Table 1.

**RAIL PROFILE**  
**B. AMTRAK**

	<u>1964*</u>	<u>1973</u>	<u>1974</u>	<u>1964-1974*</u> Average Annual % Change	<u>1973-1974</u> % Change
<b>I. FINANCIAL</b>					
Revenues (\$ thousands)					
Passenger .....		167,314 <i>a</i>	222,593 <i>a</i>		33.0
Commutation .....		6,285	5,500		-12.5
Other than commutation .....		161,209	217,093		34.7
Mail .....		5,047	6,086		20.6
Express .....		59	679		1,050.8
Other .....		29,673	27,552		-7.1
Total operating revenues .....		202,093	256,910		27.1
Operating Expenses .....		327,091	462,932		41.5
<b>II. INVENTORY</b>					
Number of Vehicles					
Passenger train cars .....		1,777	1,848		4.0
Locomotives .....		352	457		29.8
Number of Companies .....		1	1		0.0
Number of Employees .....		3,501 <i>a</i>	8,089 <i>a</i>		131.0
Line Mileage .....		22,319 <i>d</i>	23,941 <i>d</i>		7.3
<b>III. PERFORMANCE</b>					
Car Mileage (millions)					
Passenger .....		226.0 <i>a</i>	245.9 <i>a</i>		8.8
Train Mileage (millions)					
Passenger .....		27.2	29.5		8.5
Locomotive Mileage (millions)					
Passenger .....		54.2	50.8		-6.3
Revenue Passengers Carried (millions)					
Commutation .....		3.2	3.3		3.1
Other passenger .....		13.7	14.9		8.8
Revenue Passenger Miles (millions)					
Commutation .....		181.6	156.4		-13.9
Other passenger .....		3,624.9	4,102.4		13.2

**RAIL PROFILE**  
**B. AMTRAK (cont.)**

	<u>1964*</u>	<u>1973</u>	<u>1974</u>	<u>1964-1974*</u> Average Annual % Change	<u>1973-1974</u> % Change
Average Passenger Trip Length (miles)					
Commutation .....		56	47		-16.1
Other passenger .....		264	275		4.2

\*AMTRAK came into operation in May 1971, thus no 1964 figures are available.

Sources: Association of American Railroads, *Statistics of Railroads of Class I*, July 1975, a-16.  
 Interstate Commerce Commission, *Class I Railroads, Financial and Operating Statistics, Statement #100*, Dec. 31, 1973, 1974, d-17.



## OIL PIPELINE PROFILE

	<u>1964</u>	<u>1973</u>	<u>1974</u>	1964-1974 Average Annual % Change	1973-1974 % Change
<b>I. FINANCIAL</b>					
Operating Revenues (\$ millions)					
ICC-regulated .....	865 <i>a</i>	1,446 <i>a</i>	1,582 <i>P<sub>s</sub></i>	6.2	9.4
Non-regulated .....	148	265 <i>r</i>	279 <i>P</i>	6.5	5.3
Total .....	1,013	1,701	1,861 <i>P</i>	6.3	9.4
Operating Expenses (\$ millions)					
ICC-regulated .....	485.4 <i>b</i>	843.8 <i>c</i>	944.2 <i>P<sub>c</sub></i>	6.9	11.8
Taxes, ICC-regulated Companies (\$ millions)					
Federal .....	115.4	141.2 <i>r</i>	147.6 <i>P<sub>d</sub></i>	2.5	4.5
Other .....	46.1	99.7 <i>x</i>	90.9	7.0	-8.8
<b>II. INVENTORY</b>					
Number of ICC-regulated Companies .....	85	100 <i>c</i>	104 <i>P<sub>c</sub></i>	2.0	4.0
Number of Employees, ICC-regulated Companies .....	17,676	14,745	15,222 <i>P</i>	-1.5	3.2
Mileage <sup>1</sup> .....	210,867 <i>e</i>	222,355 <i>e</i>	223,353 <i>s</i>	0.6	0.4
<b>III. PERFORMANCE</b>					
Intercity Ton-Miles (millions)					
ICC-regulated .....	229,500 <i>f</i>	428,400 <i>g</i>	427,100 <i>h</i>	6.4	-0.3
Non-regulated .....	39,200	78,600	78,900	7.2	0.4
Total .....	268,700	507,000	506,000 <i>d</i>	6.5	-0.2
Tons Transported (millions)					
Crude petroleum .....	362 <i>i</i>	492 <i>m</i>	484 <i>m</i>	2.9	-1.6
Petroleum products .....	776 <i>k</i>	420 <i>n</i>	420 <i>n</i>	-6.0	0.0
Total .....	559 <i>l</i>	912	904	4.9	-0.9

<sup>1</sup> Regulated plus unregulated mileage of crude oil trunk and gathering lines, plus refined oil trunk lines.

*P* = preliminary  
*r* = revised

Sources: Association of Oil Pipelines, *Shifts in Petroleum Transportation*, April 30, 1973, June 2, 1975, *i*-Table 2, *k*-Table 3, *l*-Table 1.  
Interstate Commerce Commission, *89th Annual Report to Congress*, 1975, *c*-130, *g*-122, *d*-121.  
Interstate Commerce Commission, *88th Annual Report to Congress*, 1974, *x*-120.  
Interstate Commerce Commission, *84th Annual Report to Congress*, 1970, *b*-153.  
Interstate Commerce Commission, *80th Annual Report to Congress*, 1965, *f*-54.  
Interstate Commerce Commission, *h*-Personal Communication.  
Transportation Association of America, *Transportation Facts and Trends*, Dec. 1974, *a*-4, *e*-31, *s*-Personal Communication.  
U.S. Department of Interior, Bureau of Mines, *Mineral Industry Surveys, Petroleum Statement, Monthly*, *m*-January 1974, Table 24, January 1975, Table 25; *n*-December 1974, Table 11, and p. 558, American Petroleum Institute, *Facts and Figures*, 1971 Edition.

## NATURAL GAS PIPELINE PROFILE

	<u>1964</u>	<u>1973</u>	<u>1974</u>	<u>1964-1974 Average Annual % Change</u>	<u>1973-1974 % Change</u>
<b>I. FINANCIAL<sup>1</sup></b>					
<b>Operating Revenues (\$ millions)</b>					
Total Operating Revenues .....	4,060 <i>a</i>	7,712 <i>b</i>	9,085 <i>b</i>	8.4	17.8
<b>Operating Expenses (\$ millions)</b>					
Operating Expenses .....	2,735	5,147	6,078	8.3	18.1
Maintenance Expenses .....	76	141	164	8.0	16.3
Total Operating and Maintenance Expenses ..	2,811	5,288	6,242	8.3	18.0
<b>Taxes</b>					
Federal Taxes .....	284	460	579	7.4	25.9
State and Local Taxes .....	117	214	234	7.2	9.3
Total Taxes .....	365	673	813	8.3	20.8
<b>II. INVENTORY</b>					
<b>Number of Interstate Natural Gas Pipeline</b>					
Companies .....	116 <i>x</i>	121 <i>y</i>	120 <i>z</i>	0.3	-0.8
Number of Employees <sup>1</sup> .....	29,900 <i>d</i>	36,200 <i>e</i>	36,200 <i>e</i>	1.9	0.0
Mileage .....	736,200 <i>f</i>	964,400 <i>f</i>	976,700 <i>f</i>	2.9	1.3
<b>III. PERFORMANCE</b>					
<b>Natural Gas Liquids Turned Into Lines</b>					
(million gal.) .....	5,557 <i>h</i>	18,396 <i>g</i>	19,626 <i>g</i>	13.4	6.7
<b>Total Fatalities .....</b>					
Gas Distribution .....	n/a	42 <i>j</i>	34 <i>j</i>	n/a	-19.0
Gas Transmission .....	n/a	33	20	n/a	-39.4
Liquid Transmission .....	n/a	2	4	n/a	100.0
	n/a	7	10	n/a	42.9

<sup>1</sup> Data for years following 1970 not directly comparable to previous years due to reclassification of several companies.

Sources: American Gas Association, *Gas Facts*, 1965, *a*-Table 172, *d*-Table 195.  
 American Gas Association, *Gas Facts*, 1974, *b*-Table 129, *e*-Table 157, *f*-Table 42.  
 Federal Power Commission, News Release, *x*-No. 13736, Mar. 30, 1965, *y*-No. 20000, Jan. 24, 1974, *z*-No. 20508, July 1974.  
 Department of Interior, Bureau of Mines, *Petroleum Statement Monthly*, Dec. 1974, *g*-Table 11.  
 Department of Interior, Bureau of Mines, *Minerals Yearbook*, 1964, *h*-Table 42, p. 450.  
 Department of Transportation, Materials Transportation Bureau, Office of Pipeline Safety Operations (MTP-40), *j*-Personal Communication.



SELECTED PASSENGER AND CARGO PERFORMANCE INDICATORS  
 BY MODE OF TRANSPORTATION, 1964, 1973 AND 1974

	1964	1973	1974
AIR CARRIER			
Passenger performance ratios and ratios			
Domestic operations			
Continental U.S. services	100.0	100.0	100.0
International services	100.0	100.0	100.0
All services	100.0	100.0	100.0
Foreign operations			
Continental U.S. services	100.0	100.0	100.0
International services	100.0	100.0	100.0
All services	100.0	100.0	100.0
Domestic and foreign operations			
Continental U.S. services	100.0	100.0	100.0
International services	100.0	100.0	100.0
All services	100.0	100.0	100.0
Water operations			
Continental U.S. services	100.0	100.0	100.0
International services	100.0	100.0	100.0
All services	100.0	100.0	100.0
Land operations			
Continental U.S. services	100.0	100.0	100.0
International services	100.0	100.0	100.0
All services	100.0	100.0	100.0
Domestic and foreign operations			
Continental U.S. services	100.0	100.0	100.0
International services	100.0	100.0	100.0
All services	100.0	100.0	100.0
Water and land operations			
Continental U.S. services	100.0	100.0	100.0
International services	100.0	100.0	100.0
All services	100.0	100.0	100.0

# SELECTED PASSENGER AND CARGO PERFORMANCE INDICATORS BY MODE OF TRANSPORTATION, 1964, 1973 AND 1974

Statistics for domestic mail, express, freight services and international  
 water and land operations are based on 1964, 1973 and 1974 calendar year statistics of 1974, 1973 and 1974  
 and 1974, 1973 and 1974 calendar year statistics of 1974, 1973 and 1974 calendar year statistics of 1974,  
 1973 and 1974.

**SELECTED PASSENGER AND CARGO PERFORMANCE INDICATORS  
BY MODE OF TRANSPORTATION, 1964, 1973 AND 1974**

<b>AIR CARRIER</b>	<u>1964</u>	<u>1973</u>	<u>1974</u>
Revenue passenger-miles per capita			
Domestic operations			
Certificated, all services	235.7	621.7	632.3
Scheduled service	230.9	602.0	613.7
Non-scheduled service	4.7	19.7	18.6
International operations			
Certificated, all services	87.6	209.2	191.0
Scheduled service	75.1	169.8	157.0
Non-scheduled service	12.6	39.4	34.0
Revenue passenger-miles per aircraft (millions)			
Domestic and international operations, certificated route air carriers, all services	32.6	70.7	72.2
Available seat-miles per capita			
Domestic operations			
Certificated, all services	427.3	1,191.5	1,130.7
Scheduled service	421.3	1,166.1	1,106.4
Non-scheduled service	6.0	25.4	24.3
International operations			
Certificated, all services	148.5	353.4	336.4
Scheduled service	134.9	314.0	298.6
Non-scheduled service	13.6	39.4	37.8
Revenue ton-miles of freight <sup>1</sup> per capita			
Domestic operations			
Certificated, all services	5.4	13.7	13.5
Scheduled service	4.3	13.4	13.3
Non-scheduled service	1.1	0.3	0.3
International operations			
Certificated, all services	2.8	11.0	11.3
Scheduled service	2.5	9.1	9.8
Non-scheduled service	0.2	1.9	1.5

<sup>1</sup> Excludes ton-miles of mail, express, excess baggage and passengers.

Note: Per capita figures are based on 1964, 1973 and 1974 total resident populations of 191,141,000, 209,844,000 and 211,389,000 respectively. (Excludes armed forces abroad.) Source: Statistical Abstract of the U.S., 1975, p.5.

**SELECTED PASSENGER AND CARGO PERFORMANCE INDICATORS  
BY MODE OF TRANSPORTATION, 1964, 1973 AND 1974 (cont.)**

<b>GENERAL AVIATION</b>	<u>1964</u>	<u>1973</u>	<u>1974</u>
Average number of persons per one eligible aircraft	2,154	1,367	1,309
Total number of miles flown per capita	11.4	17.8	19.1
Total number of miles flown per aircraft	24,575	24,284	25,032
Total flight time per capita (minutes)	4.9	8.6	9.2
Total number of hours flown per aircraft	176.9	195.4	201.2
<b>HIGHWAY</b>			
Average number of persons per one mile of rural highway			
Under state control	280.5	295.4	299.3
Under local control	81.5	93.3	94.0
Under Federal control	1,504.1	972.6	943.1
Total rural roads	60.6	65.1	66.5
Average number of persons per one mile of municipal highway			
Under state control	3,076.7	2,568.7	2,513.8
Under local control	445.2	381.8	381.9
Total municipal mileage	388.9	332.4	331.5
Average number of persons per one mile of rural and municipal highway			
	52.5	55.1	55.4
Average number of autos per one mile of rural highway			
Under state control	105.2	142.4	147.6
Under local control	30.6	45.0	46.4
Under Federal control	564.0	469.0	465.2
Total rural roads	22.7	31.9	32.8
Average number of autos per one mile of municipal highway			
Under state control	1,153.6	1,238.7	1,240.0
Under local control	166.9	184.1	188.4
Total municipal mileage	145.8	160.3	163.5
Average number of autos per one mile of rural and municipal highway			
	19.7	26.6	27.3

**SELECTED PASSENGER AND CARGO PERFORMANCE INDICATORS  
BY MODE OF TRANSPORTATION, 1964, 1973 AND 1974 (cont.)**

<b>AUTOMOBILE</b>	<u>1964</u>	<u>1973</u>	<u>1974</u>
Average number of persons per registered vehicle			
Passenger cars and taxis	2.7	2.1	2.0
Motorcycles	196.9	48.4	42.8
Vehicle-miles of travel per capita, passenger cars, taxis, motorcycles			
Urban streets	1,807.2	2,822.1	2,789.9
Main rural roads	1,291.5	1,628.0	1,489.1
Local rural roads	496.2	489.1	536.2
Total travel	3,594.9	4,939.2	4,815.2
Passenger-miles per capita, passenger cars and taxis, total travel	7,877.2	10,660.7	10,361.0
Vehicle-miles of travel per vehicle, passenger cars and taxis			
Urban streets	4,819.8	5,852.3	5,656.1
Main rural roads	3,444.3	3,376.2	3,018.9
Local rural roads	1,323.5	1,014.3	1,087.1
Total travel	9,587.6	10,242.8	9,762.1
Passenger-miles per vehicle, passenger cars and taxis	21,008.1	22,108.1	21,005.1
 <b>BUS</b>			
Average number of persons per intercity bus	9,323	10,089	10,262
Vehicle-miles per capita			
Commercial buses	15.1	12.1	12.3
School and non-revenue buses	9.0	11.5	11.6
All buses	24.1	23.6	23.9
Vehicle-miles per capita, all buses			
Urban streets	11.0	9.7	9.8
Main rural roads	8.3	8.6	8.9
Local rural roads	4.8	5.3	5.2
Total travel	24.1	23.6	23.9
Revenue passenger-miles per capita			
Total intercity bus	121.9	125.8	130.6
Revenue passenger-miles per vehicle			
Total intercity bus (millions)	1.1	1.3	1.3



**SELECTED PASSENGER AND CARGO PERFORMANCE INDICATORS  
BY MODE OF TRANSPORTATION, 1964, 1973 AND 1974 (cont.)**

<b>TRUCK</b>	<u>1964</u>	<u>1973</u>	<u>1974</u>
<b>Average number of persons per registered truck</b>			
Private and commercial	14.4	9.5	9.0
Federal	1,868.4	1,227.2	1,188.0
State, county, municipal	308.2	236.8	224.9
Total	13.6	9.0	8.6
<b>Vehicle-miles per capita, all trucks</b>			
Urban streets	295.9	539.2	540.9
Main rural roads	356.7	569.6	612.8
Local rural roads	133.0	164.2	107.9
Total travel	785.6	1,273.1	1,261.6
<b>Vehicle-miles per truck registration</b>			
Urban streets	4,034.6	4,870.4	4,648.3
Main rural roads	4,863.4	5,145.1	5,266.4
Local rural roads	1,812.9	1,483.1	927.3
Total travel	10,710.9	11,498.7	10,842.0
Intercity ton-miles per capita	1,817.9	2,406.5	2,341.7
 <b>LOCAL TRANSIT</b>			
<b>Revenue vehicle-miles per vehicle</b>			
Motor bus	31,055	28,381	29,384
Subway and elevated	43,682	43,390	45,932
Surface rail	27,624	27,780	25,187
Trolley coach	26,381	32,368	24,513
Total transit	32,682	30,787	31,849
<b>Revenue vehicle-miles per capita</b>			
Motor bus	8.0	6.5	6.8
Subway and elevated	2.1	1.9	2.0
Surface rail	0.2	0.1	0.1
Trolley coach	0.3	0.1	0.1
Total transit	10.6	8.7	9.0
<b>Average number of persons per vehicle</b>			
Motor bus	3,885	4,345.9	4,340.6
Subway and elevated	21,095	22,354.7	22,481.0
Surface rail	123,079	186,860.2	197,930.0
Trolley coach	102,489	264,287.2	294,413.6
Total transit	3,099	3,521.5	3,529.7

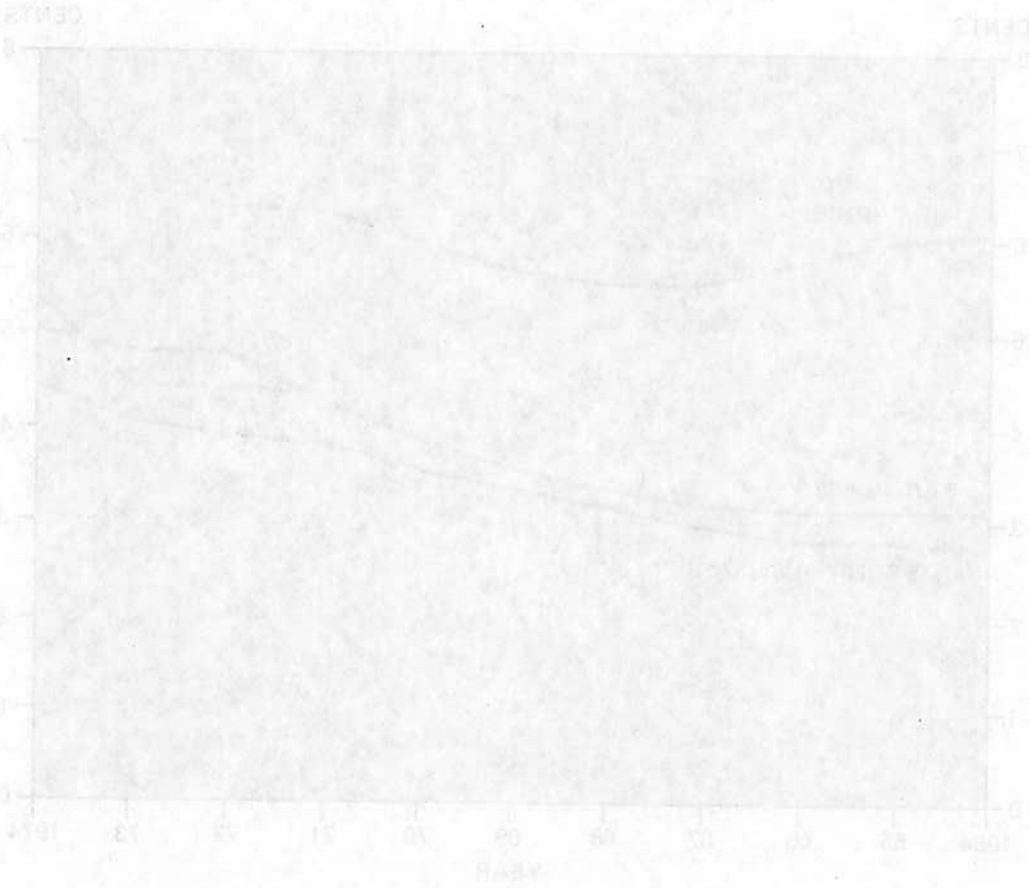
**SELECTED PASSENGER AND CARGO PERFORMANCE INDICATORS  
BY MODE OF TRANSPORTATION, 1964, 1973 AND 1974 (cont.)**

<b>WATER TRANSPORT</b>	<u>1964</u>	<u>1973</u>	<u>1974</u>
Ton-miles per capita, domestic water			
Coastwise	1,631.6	1,561.4	1,527.1
Internal	533.2	819.1	866.7
Lakewise	383.2	399.2	373.2
Local	9.4	6.6	6.9
Total	2,557.4	2,786.3	2,773.8
Domestic deep sea ton-miles per capita	1,240.0	1,077.0	1,088.0
Tons of freight hauled per capita, domestic water			
Coastwise	1.1	1.1	1.1
Internal	1.9	2.4	2.4
Lakewise	0.8	0.7	0.7
Local	0.5	0.4	0.4
Total	4.3	4.7	4.6
 <b>CLASS I RAILROADS</b>			
Revenue passenger-miles per capita			
Commutation	22.0	19.4	20.7
Other	73.5	5.9	6.7
Total	95.5	25.3	27.4
Revenue passenger-miles per passenger car (millions)	0.8	1.0	1.0
Revenue ton-miles per capita	3,445.8	4,058.4	4,025.6
Revenue ton-miles per freight car (millions)	0.4	0.6	0.6
Average number of persons per vehicle			
Freight cars	128.4	150.4	157.8
Passenger cars	8,289.9	39,150.0	37,060.0
Locomotives	6,754.1	7,663.6	7,651.5
Total	124.1	151.0	266.2
 <b>OIL PIPELINE</b>			
Intercity ton-miles per capita, regulated plus non-regulated pipelines	1,405.8	2,416.1	2,393.7
Intercity ton-miles per mile of line, regulated plus non-regulated lines (millions)	1.3	2.3	2.3
Tons of petroleum transported per capita	2.9	4.3	4.3
Tons of petroleum transported per mile of line	2,651.0	4,101.5	4,050.0

Table 1. Average Passenger Revenue Per Passenger-Mile, 1964-1974  
(Cents)

Year	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
Inter-city	4.10	4.15	4.20	4.25	4.30	4.35	4.40	4.45	4.50	4.55	4.60
Local	3.80	3.85	3.90	3.95	4.00	4.05	4.10	4.15	4.20	4.25	4.30
Commuter	3.50	3.55	3.60	3.65	3.70	3.75	3.80	3.85	3.90	3.95	4.00
Suburban	3.20	3.25	3.30	3.35	3.40	3.45	3.50	3.55	3.60	3.65	3.70
Urban	2.90	2.95	3.00	3.05	3.10	3.15	3.20	3.25	3.30	3.35	3.40
Other	2.60	2.65	2.70	2.75	2.80	2.85	2.90	2.95	3.00	3.05	3.10
All	3.40	3.45	3.50	3.55	3.60	3.65	3.70	3.75	3.80	3.85	3.90

# TRANSPORTATION TRENDS



**Table 1. Average Passenger Revenue Per Passenger-Mile, 1964-1974  
(Cents)**

	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
<b>Certificated air carrier domestic operations<sup>1</sup></b>											
Total	6.12	6.06	5.83	5.64	5.61	5.79	6.00	6.32	6.40	6.63	7.52
First class	7.26	7.33	7.24	7.24	7.33	7.78	8.30	8.58	8.70	8.93	9.89
Coach plus economy	5.58	5.52	5.28	5.13	5.11	5.27	5.45	5.82	5.88	6.11	6.94
<b>Class I rail<sup>2</sup></b>											
Total	3.17	3.18	3.18	3.20	3.39	3.61	3.91	4.24	4.79	4.88	4.98
Commutation	3.20	3.30	3.33	3.36	3.49	3.55	3.75	3.92	4.22	4.29	4.44
Other than commutation	3.16	3.14	3.13	3.13	3.33	3.63	4.02	4.85	6.66	6.81	6.75
<b>AMTRAK<sup>*</sup></b>											
Total	—	—	—	—	—	—	—	4.32	4.37	4.40	5.23
Commutation	—	—	—	—	—	—	—	2.89	2.97	3.46	3.52
Other than commutation	—	—	—	—	—	—	—	4.38	4.42	4.44	5.29
<b>Class I intercity bus<sup>3</sup></b>	2.80	2.88	2.89	2.98	3.18	3.39	3.60	3.83	3.98	4.05	4.41 <sup>P</sup>

<sup>P</sup> preliminary.

<sup>1</sup> Scheduled service.

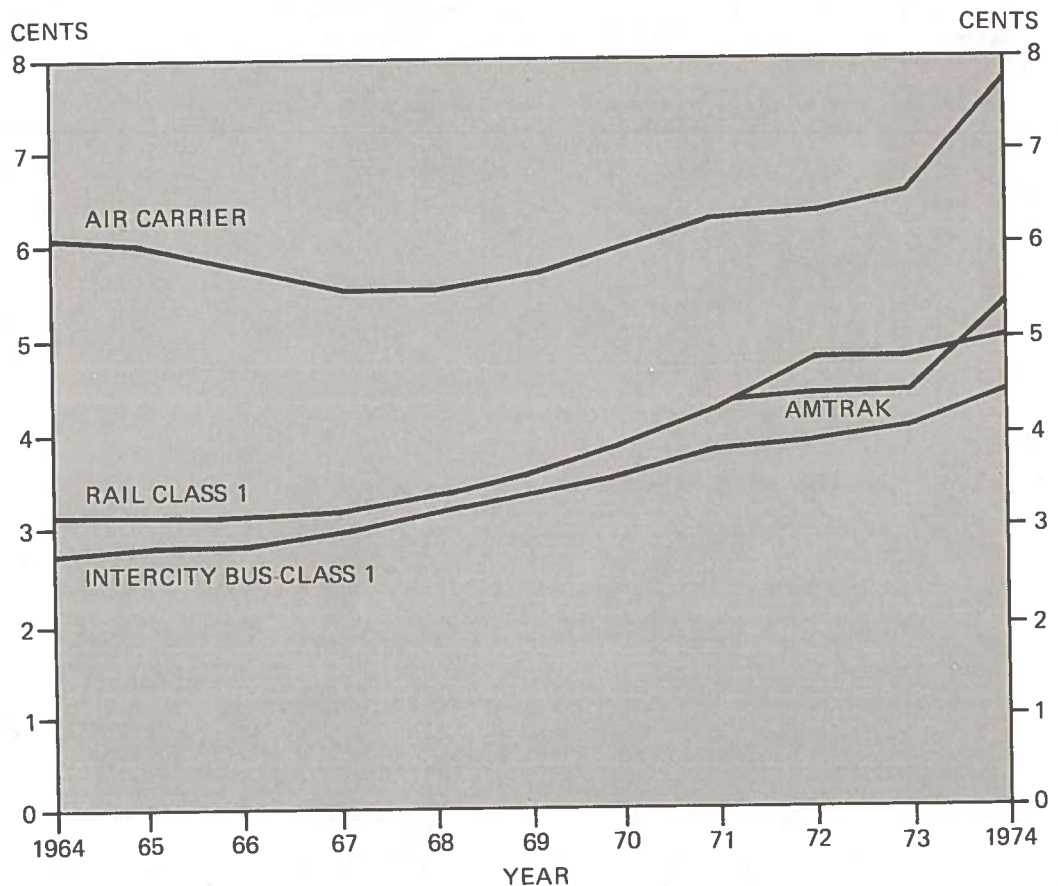
<sup>2</sup> Excludes AMTRAK service; 1974 figures calculated at DOT/TSC.

<sup>3</sup> Regular route intercity service.

\*AMTRAK established May 1, 1971.

Sources: See page 88.

**Average Passenger Revenue Per Passenger-mile  
1964 - 1974**



**Table 2. Average Freight Revenue Per Ton-Mile, 1964-1974  
(Cents)**

	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
Air carrier certificated, domestic operations, scheduled service	20.97	20.46	20.21	19.90	19.97	21.03	21.91	22.61	22.75	23.30	25.92
Class I rail	1.28	1.27	1.26	1.27	1.31	1.35	1.43	1.59	1.62	1.62	1.85
Class I intercity motor carriers of property <sup>1</sup>											
Common	6.66	6.46	6.34	6.65	6.93	7.21	7.46	7.85	8.00	8.34	9.00 <sup>P</sup>
Contract	7.85	7.66	7.31	7.36	7.23	7.35	6.85	7.20	7.02	6.68	7.00 <sup>P</sup>
Oil pipelines	0.30	0.28	0.27	0.26	0.26	0.27	0.27	0.29	0.29	0.29	0.32
Class A and B water carriers	0.45	0.44	0.43	0.38	0.40	0.41	0.43	0.47	0.47	0.55	0.67

<sup>P</sup>Preliminary

<sup>1</sup>Intercity service.

Sources: See page 88.

**Average Freight Revenue Per Ton-Mile  
1964 - 1974**

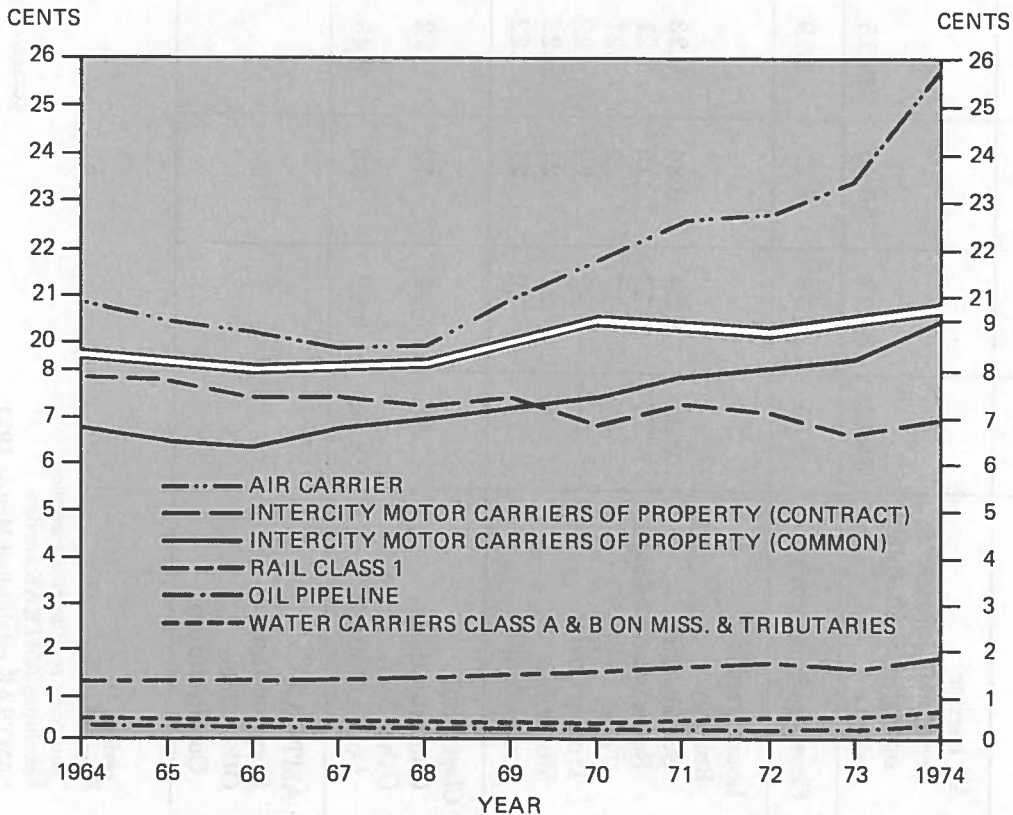


Table 3. Average Passenger Fare, 1964 - 1974  
(Dollars)

	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
Air carrier Certificated domestic operations scheduled service	34.13	34.12	33.40	33.15	33.70	37.52	40.71	43.08	43.87	45.72	51.43
Class I bus, intercity <sup>1</sup>	2.55	2.73	2.71	2.79	2.91	3.55	3.81	4.19	4.25 <sup>r</sup>	4.73 <sup>r</sup>	5.32 <sup>p</sup>
Local transit											
Railway											
Surface rail	0.23	0.24	0.24	0.23	0.24	0.25	0.27	0.26	0.27	0.27	.28
Subway and elevated	.17	.17	.19	.21	.21	.22	.23	.24	.25	.26	.34
Total	.17	.17	.19	.21	.21	.22	.24	.24	.25	.26	.34
Trolley coach	.21	.22	.22	.22	.23	.23	.24	.28	.28	.32	.29
Motor bus	.20	.21	.21	.22	.23	.26	.29	.32	.34	.34	.32
Grand total	.19	.20	.21	.22	.23	.25	.28	.30	.31	.32	.32
Class I rail Commutation	.68	.71	.72	.72	.75	.78	.84	.87 <sup>2</sup>	.93 <sup>2</sup>	.95 <sup>2</sup>	1.00 <sup>2</sup>
Other than Commutation	3.86	3.92	3.83	3.48	3.16	3.15	3.19	1.92 <sup>2</sup>	1.47 <sup>2</sup>	1.54 <sup>2</sup>	1.56 <sup>2</sup>
AMTRAK <sup>*</sup> Commutation								1.14	1.18	1.94	1.65
Other than Commutation								9.58	9.31	11.72	14.54

<sup>r</sup>revised

<sup>p</sup>preliminary

<sup>1</sup>Intercity regular route service

<sup>2</sup>excludes AMTRAK service

\*AMTRAK established May 1, 1971.

Sources: See page 89.

### Average Passenger Fare, 1964 - 1974

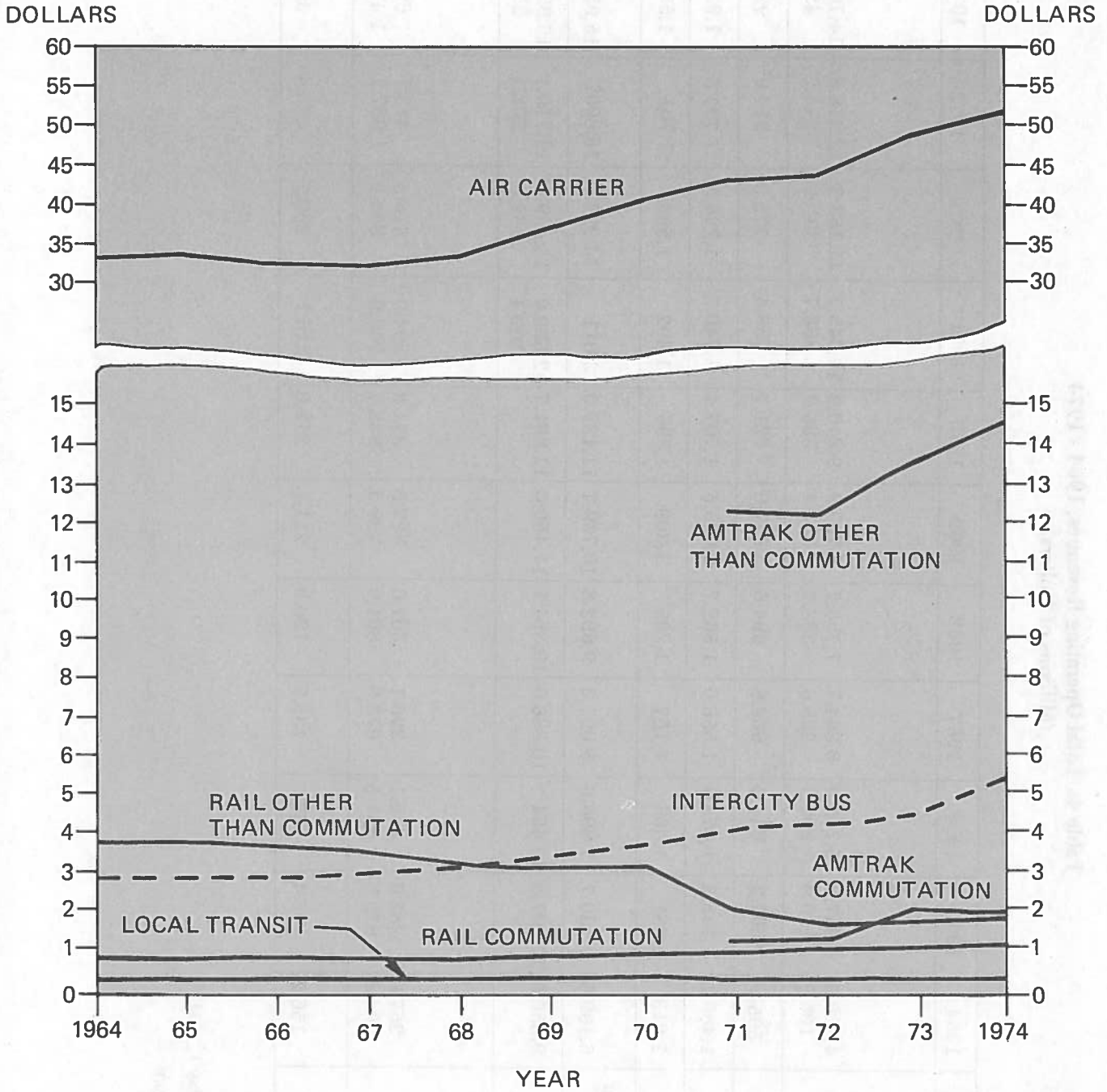




Table 4. Total Operating Revenues, 1964 - 1974  
(Millions of Dollars)

	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
Air carrier, domestic and international											
Certificated, all services	4,250.9	4,957.9	5,745.0	6,864.7	7,753.2	8,790.9	9,240.2	10,045.7	11,163.3	12,418.8	14,702.6
Supplemental	105.8	140.9	209.2	258.6	328.2	361.4	336.9	363.7	331.1	374.2	428.9
Class I bus, intercity	595.4 <sup>r</sup>	607.3	644.3	669.6	694.6	677.0	721.7	758.4	775.3	814.6 <sup>r</sup>	925.3 <sup>p</sup>
Local transit	1,480.1	1,143.8	1,478.5	1,556.0	1,562.7	1,625.6	1,707.4	1,740.7	1,728.5	1,797.6	1,939.7
Oil pipeline	1,013	1,051	1,096	1,157	1,205	1,309	1,396	1,492	1,593	1,701	1,582 <sup>p</sup>
Class I intercity motor carriers of property	6,199.5	7,130.7	7,896.6	8,091.3	9,592.8	10,769.7	11,137.0	13,011	14,994	16,600 <sup>r</sup>	15,952 <sup>p</sup>
Class I rail AMTRAK *	9,856.5	10,207.8	10,654.7	10,366.0	10,854.7	11,450.3	11,991.7	12,689.0	13,409.8 <sup>r</sup>	14,770.1 <sup>r</sup>	16,922.8
Water transport											
Classes A and B carriers, inland and coastal	257.9	282.6	298.1	296.1	307.6	327.5	371.8	394.0	416.5	473.7 <sup>r</sup>	621.9 <sup>p</sup>
Maritime carriers	704.8	678.9	654.5	673.9	801.9	739.3	832.7	749.0	884.9	1,087.2	1,477.2 <sup>p</sup>
Class A freight forwarders	156.2	155.4	180.0	185.7	196.9	211.1	211.0	216.1	252.7	326.4 <sup>r</sup>	357.3 <sup>p</sup>

<sup>p</sup> Preliminary estimate

<sup>r</sup> Revised

\* AMTRAK established May 1, 1971

Sources: See pages 89-90.

### Total Operating Revenues, 1964 - 1974

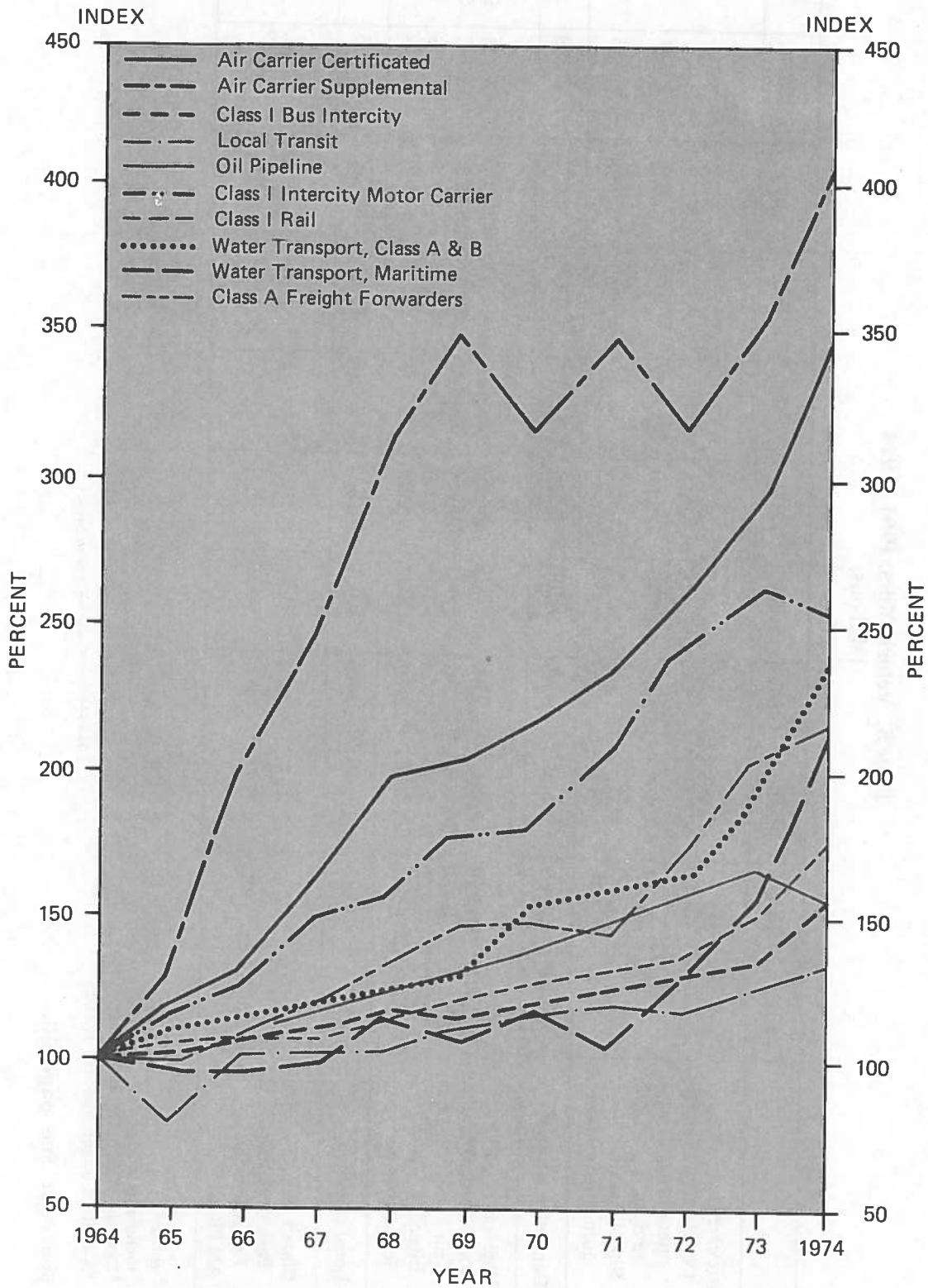


Table 5. Vehicle-Miles, 1964 - 1974  
(Millions)

	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
Air carrier Certificated domestic operations, all services	998	1,134	1,237	1,538	1,779	2,080	2,065	2,045	2,042	2,097	1,938
Supplemental domestic operations	n/a	n/a	n/a	42	50	43	34	36	33	35	31
General aviation	2,181	2,562	3,336	3,440	3,700	3,926	3,207	3,143	3,571	3,729	4,043
Highway											
Passenger car and taxi	677,613 <sup>1</sup>	706,386	744,844	766,466	805,693	849,633	890,844	939,102	986,407	1,016,861	995,544
Truck	164,271	171,436	173,905	182,456	196,651	206,680	214,670	227,037	259,735	267,147	266,694
Intercity bus	1,183	1,157	1,200	1,205	1,190	1,195	1,209	1,202	1,182	1,178 <sup>r</sup>	1,188
School bus	1,724	1,763	1,884	1,870	1,937	2,030	2,100	2,212	2,359	2,412	2,450
Local transit	2,016	2,008	1,984	1,997	1,989	1,967	1,883	1,846	1,756	1,835	1,907
Class I rail	184	172	164	150	123	107	93	53 <sup>2</sup>	33 <sup>2</sup>	33 <sup>2</sup>	34 <sup>2</sup>
Passenger train	414	421	437	420	429	433	427	430 <sup>2</sup>	451 <sup>2</sup>	469 <sup>2r</sup>	469 <sup>2</sup>
Freight train								16	26	27	30
AMTRAK*											

<sup>r</sup> revised

<sup>1</sup> Includes motorcycles.

<sup>2</sup> Excludes AMTRAK operations.

\*AMTRAK established May 1, 1971.

Sources: See page 90.

### Vehicle-Miles, 1964 - 1974

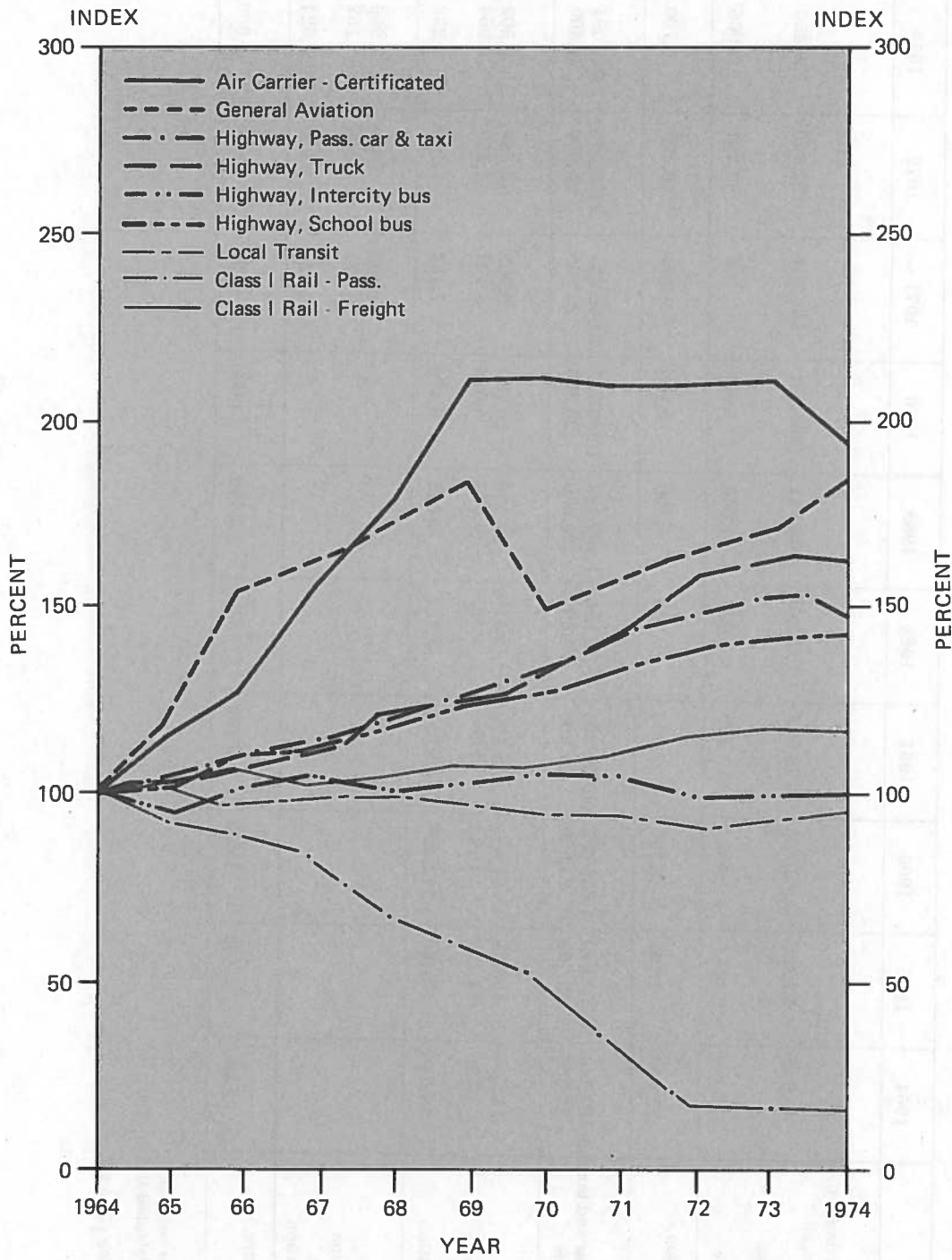


Table 6. Passenger-Miles, 1964 - 1974  
(Millions)

Item	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
Air carrier Certificated domestic operations, all services	45,046	53,226	63,085	79,522	92,112	109,541	108,451	109,804	121,820	130,450	133,666
Supplemental domestic operations	n/a	n/a	n/a	709	1,620	1,560	1,057	914	1,281	2,006 <sup>f</sup>	1,802
General aviation, intercity	3,700	4,400	5,700	7,000	8,200	8,800	9,100	9,300	10,000	10,700	11,000
Highway Passenger car and taxi	1,490,749	1,554,049	1,638,657	1,686,225	1,772,525	1,869,193	1,959,857	2,066,024	2,170,095	2,237,094	2,190,197
Intercity bus	23,300	23,800	24,600	24,900	24,500	24,900	25,300	25,500	25,600	26,400	27,600
Class I Rail <sup>1</sup>											
Total	18,244	17,378	17,085	15,192	13,110	12,159	10,739	6,908	5,354	5,302	5,800
Commutation	4,199	4,128	4,193	4,281	4,383	4,546	4,592	4,427	4,120	4,064	4,377
Other than commutation	14,048	13,260	12,903	10,920	8,737	7,623	6,179	2,481	1,249 <sup>f</sup>	1,238	1,423
AMTRAK*											
Total								1,993	3,039	3,806	4,258
Commutation								71	108	182	156
Other than Commutation								1,922	2,930	3,624	4,102
Domestic water, intercity	2,800	3,100	3,400	3,400	3,500	3,800	4,000	4,100	4,000	4,000	4,100

<sup>f</sup> Revised

<sup>1</sup> AMTRAK not included.

\* AMTRAK established May 1, 1971.

Sources: See page 91.



### Passenger Miles, 1964 - 1974

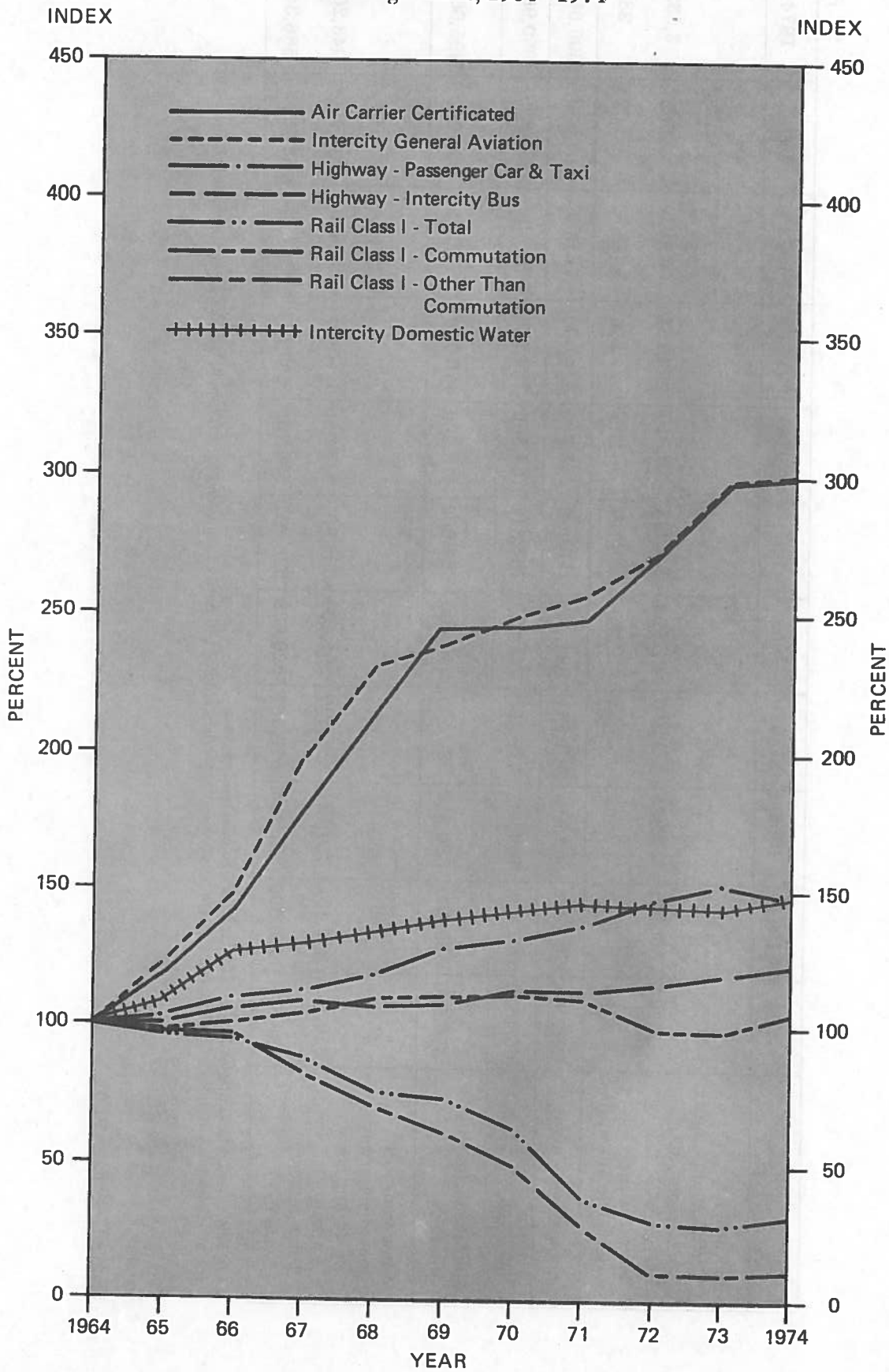


Table 7. Cargo-Ton-Miles, 1964-1974  
(Millions)

	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
Air carrier Certificated domestic operations, all services <sup>1</sup>	1,294	1,670	1,985	2,310	2,590	3,295	3,010	3,151	3,403	3,662	3,632
Supplemental domestic operations <sup>2</sup>	185	220	254	264	298	279	285	306	259	292	281
Oil pipeline	268,655	306,393	332,916	361,041	391,300	411,000	431,000	444,000	475,800	507,000	506,000 <sup>P</sup>
Class I rail	658,639	697,878	738,395	719,498	744,023	767,841	764,809	739,743	776,746	851,809	850,961
Motor vehicles, intercity	356,000	359,000	380,917	388,500	396,300	404,000	412,000	445,000	470,000	505,000	495,000 <sup>P</sup>
Water transport Inland waterways, including Great Lakes	250,165	262,421	280,527	281,400	291,409	302,901	318,560	315,030	338,693	358,222 <sup>r</sup>	348,200 <sup>P</sup>
Total domestic system	488,829	489,803	507,084	515,387	520,633	528,897	596,195	593,164	603,542	584,691	586,345

<sup>1</sup> Includes revenue ton-miles of freight, U.S. and foreign mail, and express

<sup>2</sup> Includes revenue ton-miles of freight and express. Supplemental carriers are not ordinarily authorized to carry mail. Alaska air routes included since 1969.

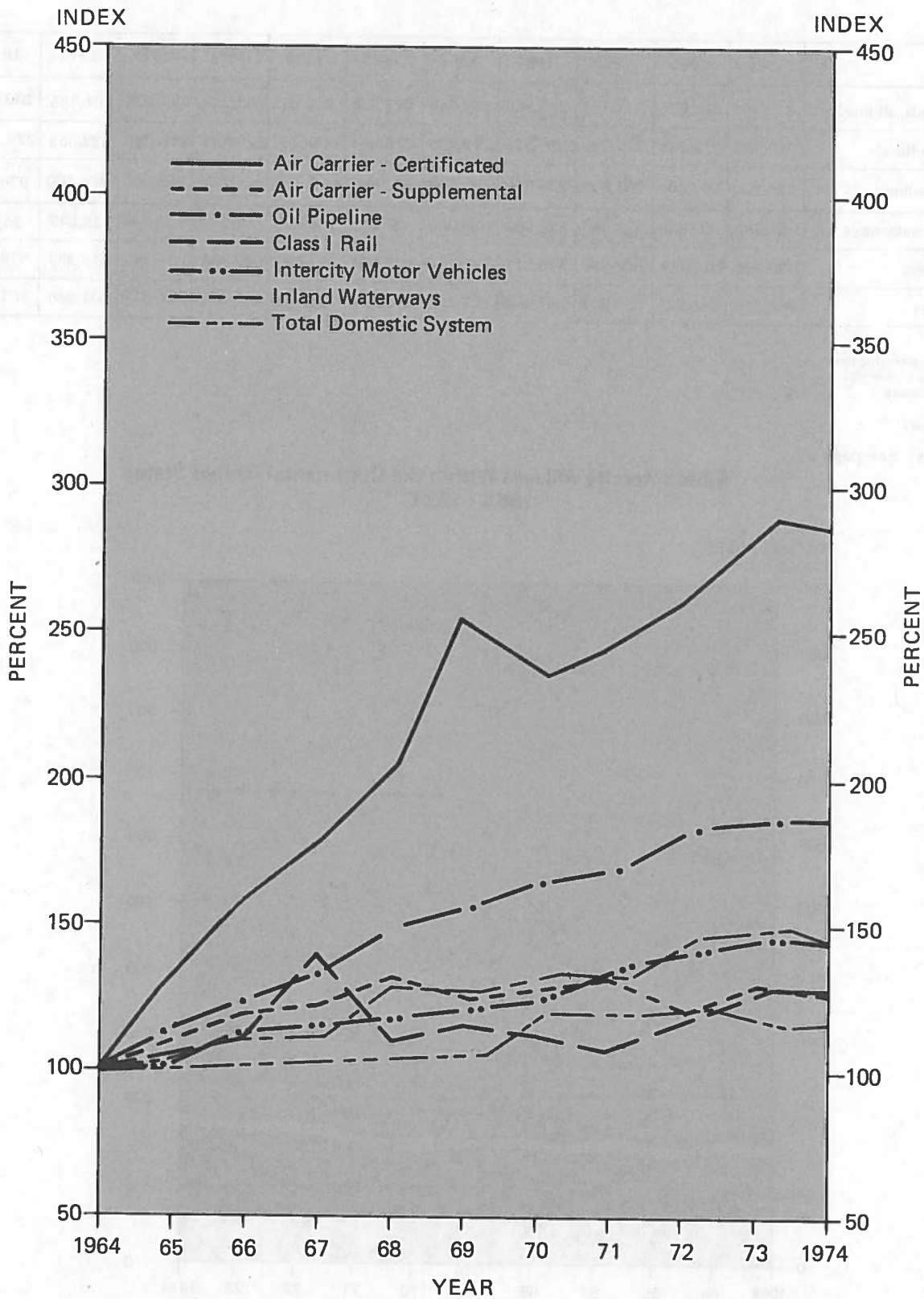
<sup>P</sup> Preliminary

<sup>r</sup> Revised

Sources: See pages 91-92.



### Cargo Ton-Miles 1964 - 1974



**Table 8. Basic Intercity Mileage Within the Continental United States, 1964 - 1974**  
(Statute Mileage)

	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
Railroads, all line haul	212,603	211,925	211,107	209,826	208,648	207,526	206,265	205,220	203,299	201,585 <sup>r</sup>	200,000 <sup>P</sup>
Oil pipelines <sup>1</sup>	210,807	213,764	216,745	209,478	213,555	216,453	218,617	219,899	221,127	222,355	223,353*
Gas pipelines <sup>2</sup>	736,200	767,500	799,600	828,300	861,600	891,600	914,800	932,000	950,200	964,400	976,700
Inland waterways	25,380	25,380	25,380	25,380	25,380	25,543	25,543	25,543	25,543	25,543	25,543
Highways	606,154	617,114	628,600	640,313	648,768	657,601	665,903	672,838	678,485	679,387	679,934
Airways	263,348	288,275	259,083	264,165	277,554	283,861	291,231	295,301	300,126	304,260	307,783

<sup>1</sup> Includes gathering lines.  
<sup>2</sup> Excludes service pipe  
\* TAA Estimate  
<sup>r</sup> revised  
<sup>P</sup> preliminary

Sources: See page 92.

**Basic Intercity Mileage Within the Continental United States**  
1964 - 1974

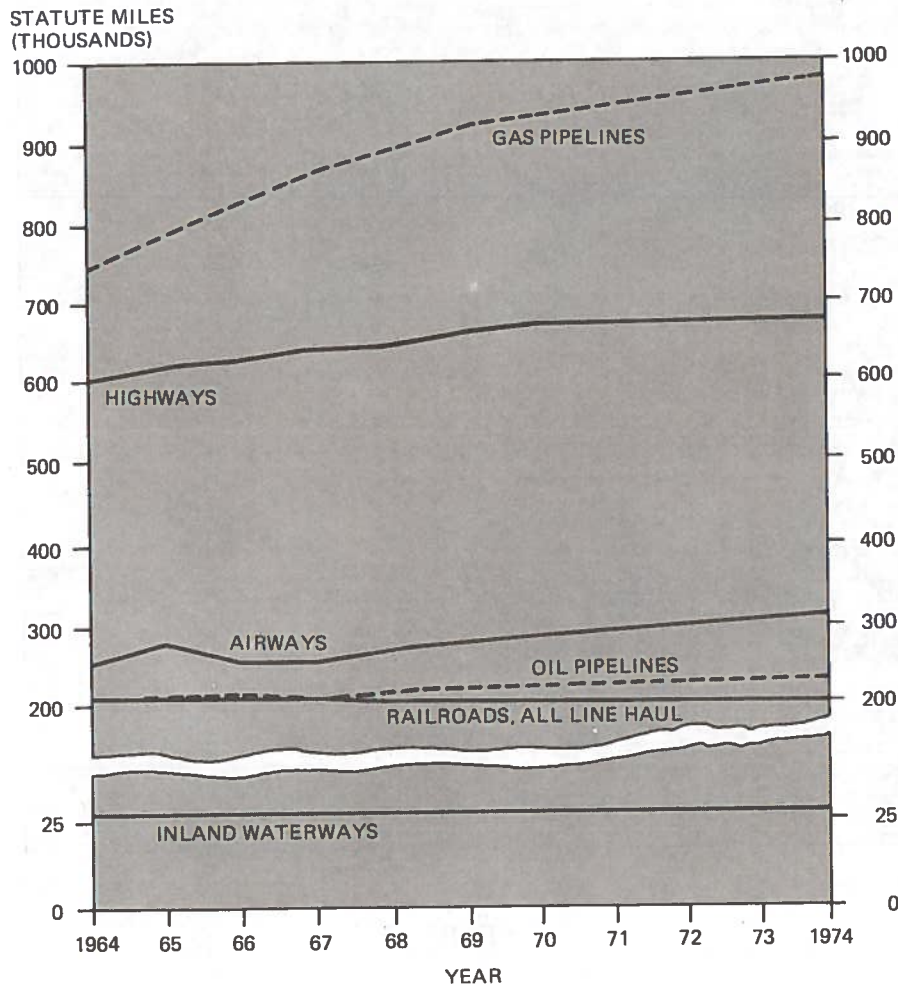


Table 9. Number of Vehicles, 1964 - 1974

	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
<b>Air Carrier</b>											
Domestic and International certificated all services	1,894	n/a	2,082	n/a	2,406	n/a	2,569	2,536	2,518	2,467	2,412
Domestic and International supplemental	210	n/a	237	n/a	232	n/a	195	184	156	133	101
<b>Total</b>	2,124	n/a	2,319	n/a	2,638	n/a	2,690	2,720	2,674	2,600	2,513
<b>General Aviation</b>	88,742	95,442	104,706	114,186	124,237	130,806	131,743	131,148	145,010	153,540	161,502
<b>Motorcycle</b>	984,763	1,381,956	1,752,801	1,953,022	2,100,547	2,315,916	2,814,730	3,345,179	3,774,996	4,332,580	4,936,805
<b>Passenger Car &amp; Taxi</b>	71,982,740	75,251,386	78,122,965	80,414,180	83,692,699	86,861,334	89,279,864	92,799,052	96,859,746	101,762,477	104,898,256
<b>Intercity Bus<sup>1</sup></b>	20,500	19,800	20,400	20,800	21,000	21,600	22,000	21,900	21,400	20,800	20,600 <sup>P</sup>
<b>Local Transit</b>											
Motorbus	49,200	49,600	50,130	50,180	50,000	49,600	49,700	49,150	49,075	48,286	48,700
Subway & Elevated	9,061	9,115	9,273	9,257	9,390	9,343	9,338	9,325	9,423	9,387 <sup>r</sup>	9,403
Surface Rail	1,553	1,549	1,407	1,388	1,355	1,322	1,262	1,225	1,176	1,123 <sup>r</sup>	1,088
Trolley Coach	1,865	1,453	1,326	1,244	1,185	1,082	1,050	1,037	1,030	794 <sup>r</sup>	718
<b>Total</b>	61,679	61,717	62,136	62,069	61,930	61,347	61,350	60,737	60,074	59,590 <sup>r</sup>	59,889
<b>Class I Rail</b>											
Freight Cars	1,488,385	1,478,005	1,488,115	1,477,166	1,453,883	1,434,824	1,423,921	1,410,160	1,381,038	1,356,944 <sup>r</sup>	1,339,223
Locomotives	28,300	27,816	27,886	27,687	27,376	27,033	27,086	27,189 <sup>r</sup>	27,073	27,382 <sup>r</sup>	27,627
Passenger Cars & Pullman	23,057	21,327	20,016	18,610	15,384	12,426	11,177	7,548	5,974	5,360 <sup>r</sup>	5,704
<b>Total</b>	1,539,742	1,527,148	1,536,017	1,523,463	1,496,643	1,474,283	1,462,184	1,444,897	1,414,085	1,389,686 <sup>r</sup>	1,372,554
<b>Amtrak*</b>											
Passenger Cars & Pullman	--	--	--	--	--	--	--	1,165	1,571	1,777	1,848
Locomotives	--	--	--	--	--	--	--	--	285	352	457
<b>Truck</b>											
Combinations	738,000	787,000	823,000	830,000	871,000	929,000	960,000	974,000	990,000	1,028,000	1,065,000
Single Unit	13,275,000	14,008,000	14,694,000	15,363,000	16,124,000	16,942,000	17,778,000	18,828,000	20,249,000	22,205,000	23,524,000
<b>Total</b>	14,013,000	14,795,000	15,517,000	16,193,000	16,995,000	17,871,000	18,748,000	19,802,000	21,239,000	23,233,000	24,589,000
<b>Non-self-propelled vessels<sup>1</sup></b>											
Dry Cargo Barges & Scows	14,241	14,241	15,830	15,379	15,379	15,890	16,439	17,527	18,804	19,772	21,876
Tank Barges	2,548	2,548	2,781	3,001	3,001	3,281	3,185	3,420	3,313	3,375	3,534
<b>Total</b>	16,789	16,789	18,611	18,380	18,380	19,171	19,624	20,947	22,117	23,147	26,410
<b>Towboats &amp; Tug<sup>1</sup></b>	4,054	4,054	4,395	4,284	4,284	4,248	4,230	4,278	4,064 <sup>s</sup>	4,035	4,100
<b>Total Vessels<sup>1</sup></b>	20,843	20,843	23,006	22,664	22,664	23,419	23,854	25,225	26,181	27,182	29,510

<sup>1</sup> Revised

<sup>s</sup> As of December 31 of year indicated

\*AMTRAK established May 1, 1971

Sources: See pages 92-93.

Year	Month	Day	Time	Location	Activity	Remarks
1950	Jan	1	10:00	...	...	...
1950	Jan	2	10:00	...	...	...
1950	Jan	3	10:00	...	...	...
1950	Jan	4	10:00	...	...	...
1950	Jan	5	10:00	...	...	...
1950	Jan	6	10:00	...	...	...
1950	Jan	7	10:00	...	...	...
1950	Jan	8	10:00	...	...	...
1950	Jan	9	10:00	...	...	...
1950	Jan	10	10:00	...	...	...
1950	Jan	11	10:00	...	...	...
1950	Jan	12	10:00	...	...	...
1950	Jan	13	10:00	...	...	...
1950	Jan	14	10:00	...	...	...
1950	Jan	15	10:00	...	...	...
1950	Jan	16	10:00	...	...	...
1950	Jan	17	10:00	...	...	...
1950	Jan	18	10:00	...	...	...
1950	Jan	19	10:00	...	...	...
1950	Jan	20	10:00	...	...	...
1950	Jan	21	10:00	...	...	...
1950	Jan	22	10:00	...	...	...
1950	Jan	23	10:00	...	...	...
1950	Jan	24	10:00	...	...	...
1950	Jan	25	10:00	...	...	...
1950	Jan	26	10:00	...	...	...
1950	Jan	27	10:00	...	...	...
1950	Jan	28	10:00	...	...	...
1950	Jan	29	10:00	...	...	...
1950	Jan	30	10:00	...	...	...
1950	Jan	31	10:00	...	...	...

Year	Month	Day	Time	Location	Activity	Remarks
1950	Jan	1	10:00	...	...	...
1950	Jan	2	10:00	...	...	...
1950	Jan	3	10:00	...	...	...
1950	Jan	4	10:00	...	...	...
1950	Jan	5	10:00	...	...	...
1950	Jan	6	10:00	...	...	...
1950	Jan	7	10:00	...	...	...
1950	Jan	8	10:00	...	...	...
1950	Jan	9	10:00	...	...	...
1950	Jan	10	10:00	...	...	...
1950	Jan	11	10:00	...	...	...
1950	Jan	12	10:00	...	...	...
1950	Jan	13	10:00	...	...	...
1950	Jan	14	10:00	...	...	...
1950	Jan	15	10:00	...	...	...
1950	Jan	16	10:00	...	...	...
1950	Jan	17	10:00	...	...	...
1950	Jan	18	10:00	...	...	...
1950	Jan	19	10:00	...	...	...
1950	Jan	20	10:00	...	...	...
1950	Jan	21	10:00	...	...	...
1950	Jan	22	10:00	...	...	...
1950	Jan	23	10:00	...	...	...
1950	Jan	24	10:00	...	...	...
1950	Jan	25	10:00	...	...	...
1950	Jan	26	10:00	...	...	...
1950	Jan	27	10:00	...	...	...
1950	Jan	28	10:00	...	...	...
1950	Jan	29	10:00	...	...	...
1950	Jan	30	10:00	...	...	...
1950	Jan	31	10:00	...	...	...

# SUPPLEMENTARY DATA

## Part 1: Transportation and the Economy

Category	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	
Private Vehicle	1,200	1,250	1,300	1,350	1,400	1,450	1,500	1,550	1,600	1,650	1,700	1,750	1,800	1,850	1,900	1,950	2,000	2,050	2,100	2,150	2,200	2,250	2,300	2,350	2,400	2,450	2,500
Public Transit	500	520	540	560	580	600	620	640	660	680	700	720	740	760	780	800	820	840	860	880	900	920	940	960	980	1,000	1,020
Freight	1,500	1,550	1,600	1,650	1,700	1,750	1,800	1,850	1,900	1,950	2,000	2,050	2,100	2,150	2,200	2,250	2,300	2,350	2,400	2,450	2,500	2,550	2,600	2,650	2,700	2,750	2,800
Other	300	310	320	330	340	350	360	370	380	390	400	410	420	430	440	450	460	470	480	490	500	510	520	530	540	550	560
<b>Total</b>	<b>3,500</b>	<b>3,630</b>	<b>3,760</b>	<b>3,890</b>	<b>4,020</b>	<b>4,150</b>	<b>4,280</b>	<b>4,410</b>	<b>4,540</b>	<b>4,670</b>	<b>4,800</b>	<b>4,930</b>	<b>5,060</b>	<b>5,190</b>	<b>5,320</b>	<b>5,450</b>	<b>5,580</b>	<b>5,710</b>	<b>5,840</b>	<b>5,970</b>	<b>6,100</b>	<b>6,230</b>	<b>6,360</b>	<b>6,490</b>	<b>6,620</b>	<b>6,750</b>	<b>6,880</b>

Table 10. Selected economic indicators for the United States, 2000-2025

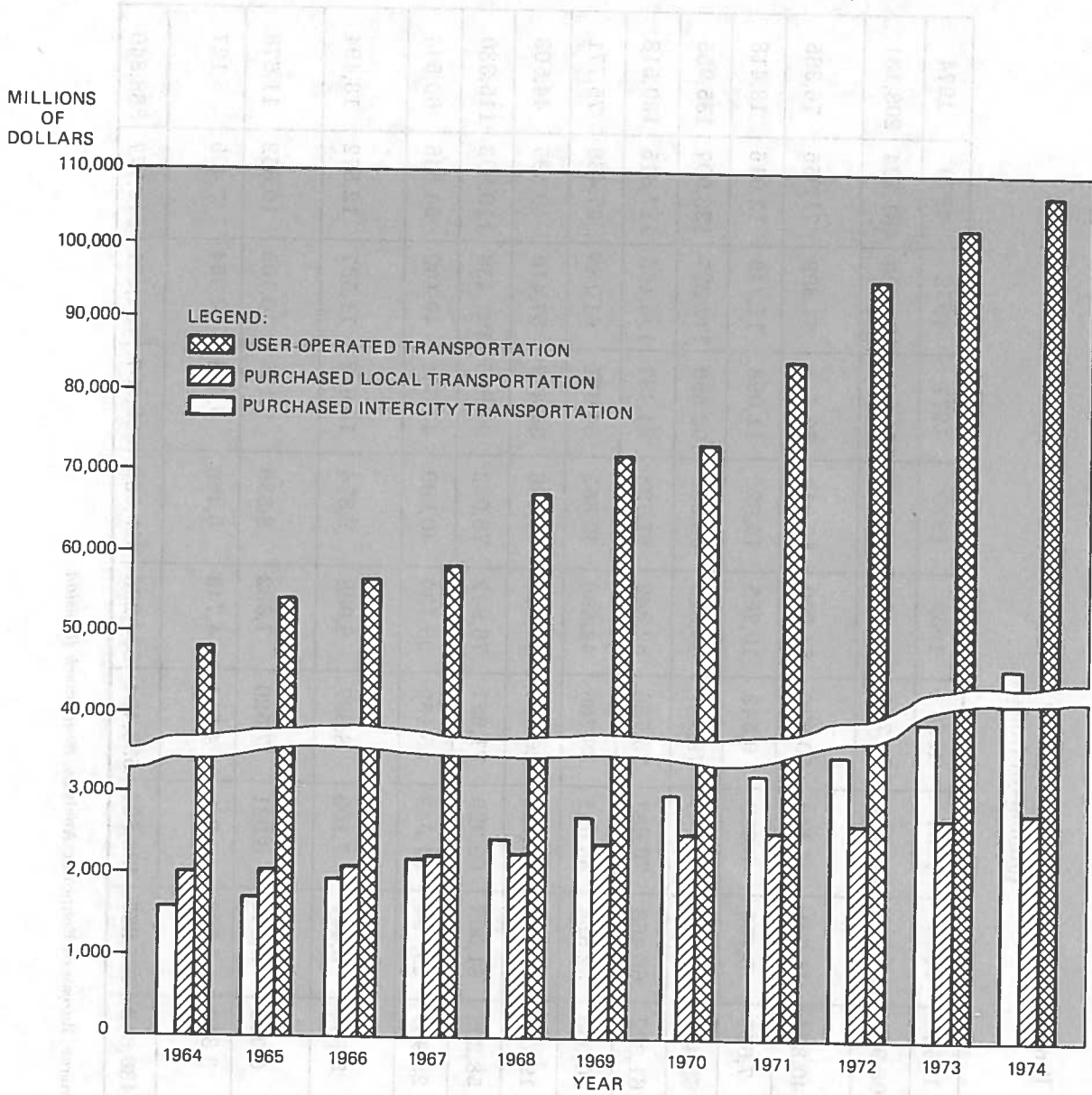
Table 10.<sup>r</sup> Personal Consumption Expenditures by Transportation Sector, 1964 - 1974  
(Millions of Dollars)

Item	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
Transportation Total	52,259	58,205	61,008	62,920	71,627	76,942	78,032	90,915	101,438	110,503	115,330
User-Operated Transportation Total	48,510	54,240	56,759	58,259	66,671	71,628	72,503	85,116	95,345	103,959	107,967
New Cars and Net Purchases of Used Cars	22,833	26,578	26,636	26,128	31,861	33,403	30,343	38,631	44,860	47,958	41,030
Tires, Tubes, Accessories and Parts	3,118	3,223	3,434	3,568	3,944	4,304	4,587	5,119	5,691	6,424	6,942
Maintenance	6,492	6,901	7,393	8,004	8,864	9,945	11,248	12,532	13,922	15,380	17,735
Gasoline & Oil	13,530	14,696	15,962	17,014	18,422	20,371	21,997	23,396	24,879	28,295	36,447
Tolls	421	463	495	517	563	603	643	689	745	786	748
Insurance	2,116	2,379	2,839	3,028	3,017	3,002	3,685	4,749	5,248	5,116	5,065
Purchased Local Transportation Total	2,042	2,061	2,121	2,236	2,293	2,407	2,521	2,600	2,604	2,632	2,812
Street, Electric, Railway and Local Bus	1,313	1,313	1,343	1,399	1,411	1,493	1,573	1,596	1,585	1,617	1,720
Taxicab	595	612	638	692	729	752	776	828	842	835	892
Railway (commutation)	134	136	140	145	153	162	172	176	177	180	200
Purchased Intercity Transportation Total	1,707	1,904	2,128	2,425	2,663	2,907	3,008	3,199	3,489	3,912	4,551
Railway (non-commutation)	280	284	297	270	227	206	185	155	176	204	259
Intercity Bus	335	375	429	466	475	470	496	525	523	545	616
Airline	1,044	1,191	1,329	1,582	1,838	2,086	2,166	2,347	2,637	2,988	3,484
Other	48	54	73	107	123	145	161	172	153	175	192

<sup>r</sup>Revised by U.S. Department of Commerce, Bureau of Economic Analysis, Benchmark Revision.

Sources: See page 93.

### Personal Consumption Expenditures by Transportation Sector<sup>r</sup>, 1964 - 1974



<sup>r</sup> revised



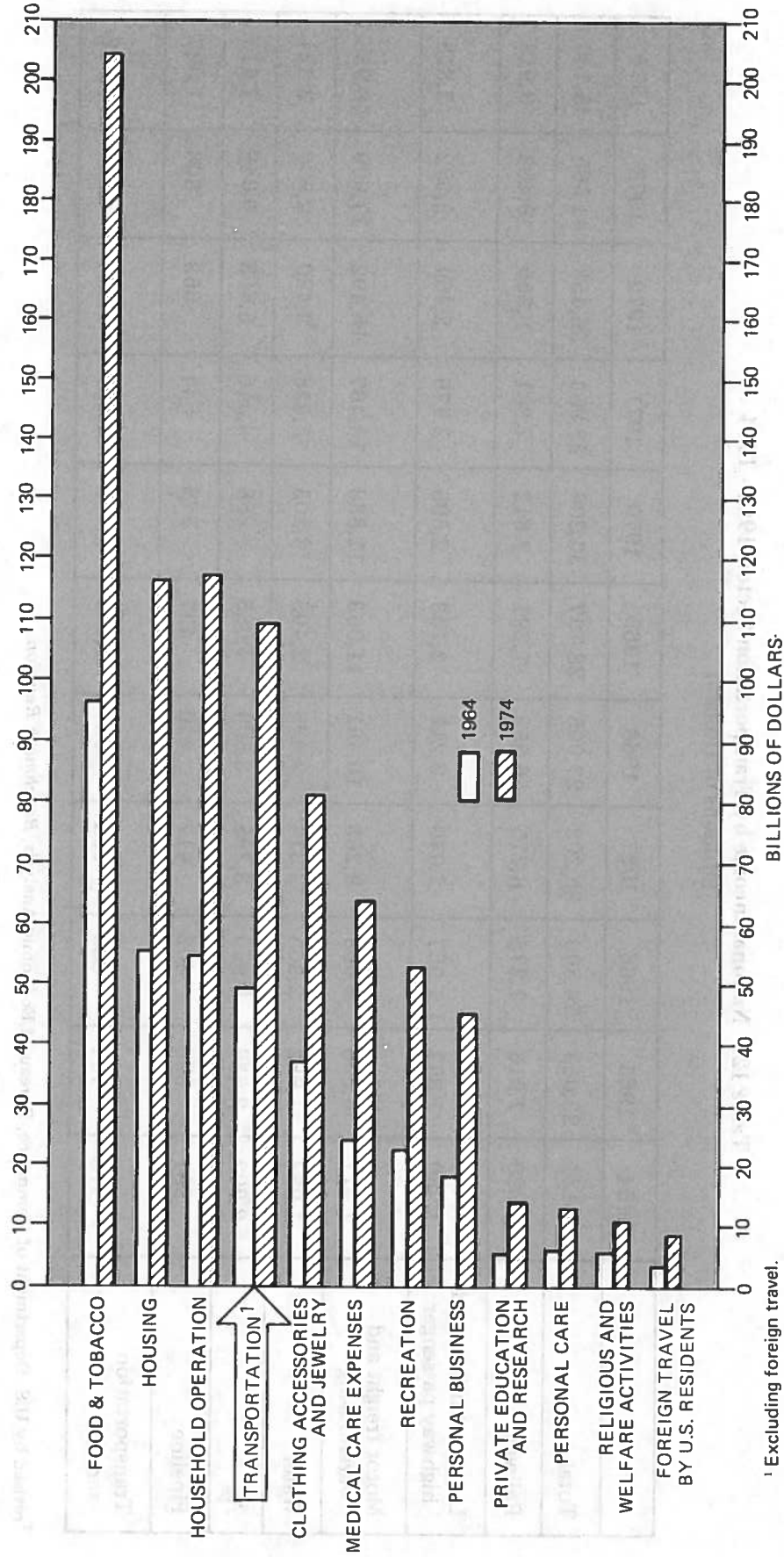
Table 11.1 Personal Consumption Expenditures by Type of Product, 1964 - 1974  
(Millions of Dollars)

	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
Food and tobacco	100,272	106,966	115,108	118,530	127,704	135,813	147,140	151,933	162,620	181,104	203,131
Clothing accessories and jewelry	38,277	40,304	44,091	46,149	50,276	54,009	55,619	59,618	64,809	71,955	76,365
Personal care	7,106	7,617	8,455	9,082	9,545	10,265	10,920	11,096	11,749	12,616	13,418
Housing	61,394	65,469	69,522	74,144	79,927	86,816	93,986	102,690	112,277	123,097	135,955
Household operation	57,677	61,322	66,468	70,683	76,736	82,842	87,793	94,437	105,155	117,815	130,518
Medical care expenses	28,183	30,053	32,554	35,091	38,766	44,596	49,853	54,671	61,188	67,468	75,771
Personal business	18,049	19,714	21,870	23,999	26,835	29,318	31,336	34,309	37,419	40,595	44,509
Transportation	52,259	58,205	61,008	62,920	71,627	76,942	78,032	90,915	101,438	110,503	115,330
Recreation	23,698	25,907	29,794	31,942	35,159	38,130	40,999	43,664	49,100	54,945	60,544
Private education and research	5,073	5,684	6,447	7,109	8,097	8,988	9,874	10,632	11,587	12,572	13,494
Religious and welfare activities	5,825	6,055	6,344	6,921	7,520	7,832	8,539	9,136	10,105	10,652	11,678
Foreign travel by U.S. residents	2,988	3,346	3,606	4,249	4,214	4,749	5,469	5,586	6,954	7,455	8,127
Total	400,801	430,642	465,267	490,821	536,404	580,298	619,560	668,987	734,401	810,777	888,840

Revised by U.S. Department of Commerce, Bureau of Economic Analysis, Benchmark Revision.

Sources: See page 93.

Personal Consumption Expenditures by Type of Product<sup>1</sup>, 1964 - 1974



<sup>1</sup> Excluding foreign travel.

<sup>r</sup> revised

Table 12.<sup>r</sup> National Income by Transportation Sector, 1964 - 1974  
(Millions of Dollars)

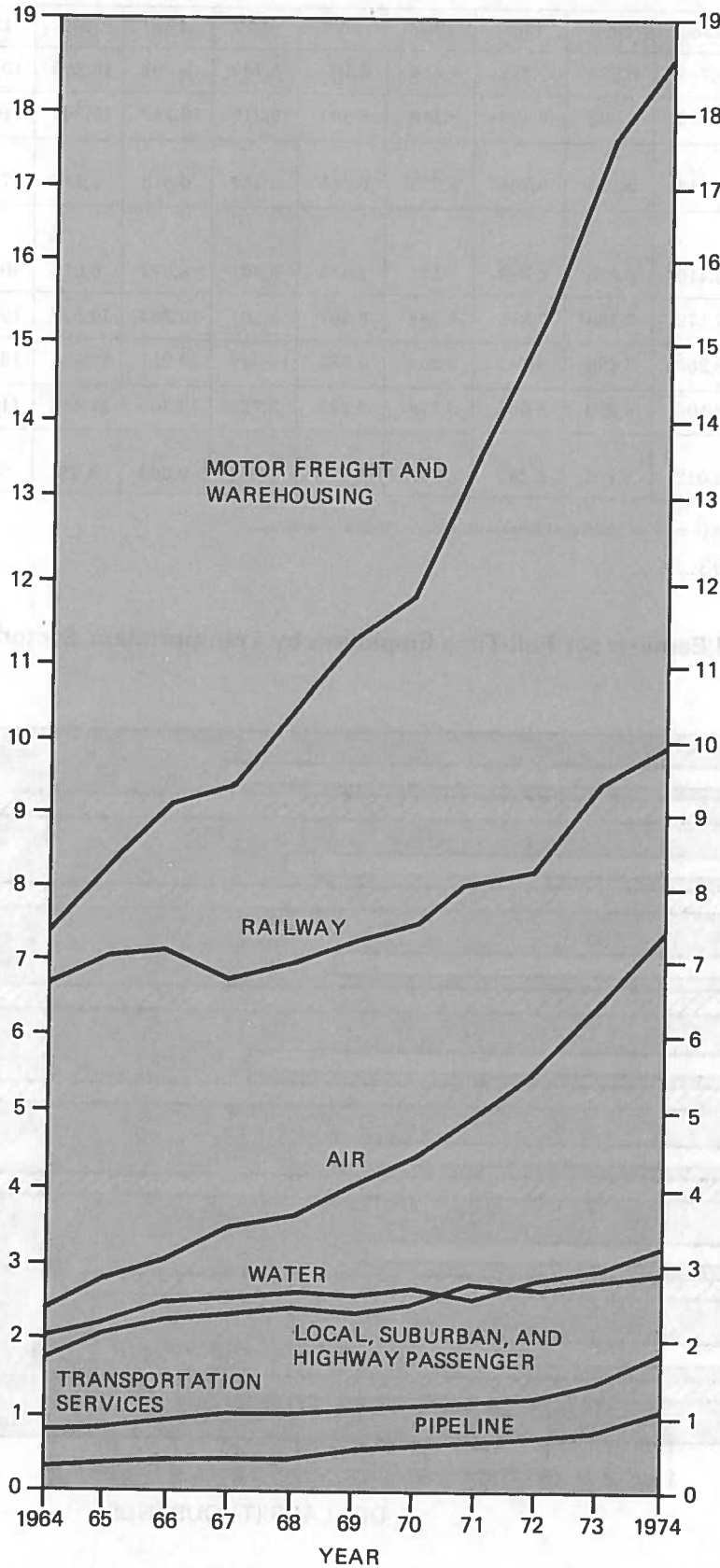
	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
Total	21,131	23,069	24,800	25,203	27,005	28,797	30,308	32,964	36,453	41,565	45,140
Railway	6,690	7,016	7,275	6,775	6,953	7,291	7,612	7,981	8,355	9,453	9,913
Local, suburban, and highway passenger	1,750	1,897	1,957	2,040	2,216	2,153	2,308	2,476	2,464	2,582	2,818
Motor freight and warehousing	7,477	8,396	9,068	9,265	10,461	11,363	11,830	13,467	15,492	17,609	18,936
Water	1,953	1,982	2,265	2,314	2,499	2,405	2,503	2,358	2,480	2,900	3,224
Air	2,202	2,636	2,970	3,398	3,509	4,085	4,358	4,916	5,665	6,646	7,410
Pipeline	381	390	402	417	410	457	528	544	653	808	1,027
Transportation services	678	752	863	994	957	1,041	1,169	1,222	1,344	1,567	1,812

<sup>r</sup>Revised by U.S. Department of Commerce, Bureau of Economic Analysis, *Benchmark Revision*.  
Sources: See page 93.

### National Income by Transportation Sector<sup>r</sup> 1964 - 1974

BILLIONS OF DOLLARS

BILLIONS OF DOLLARS



r - revised



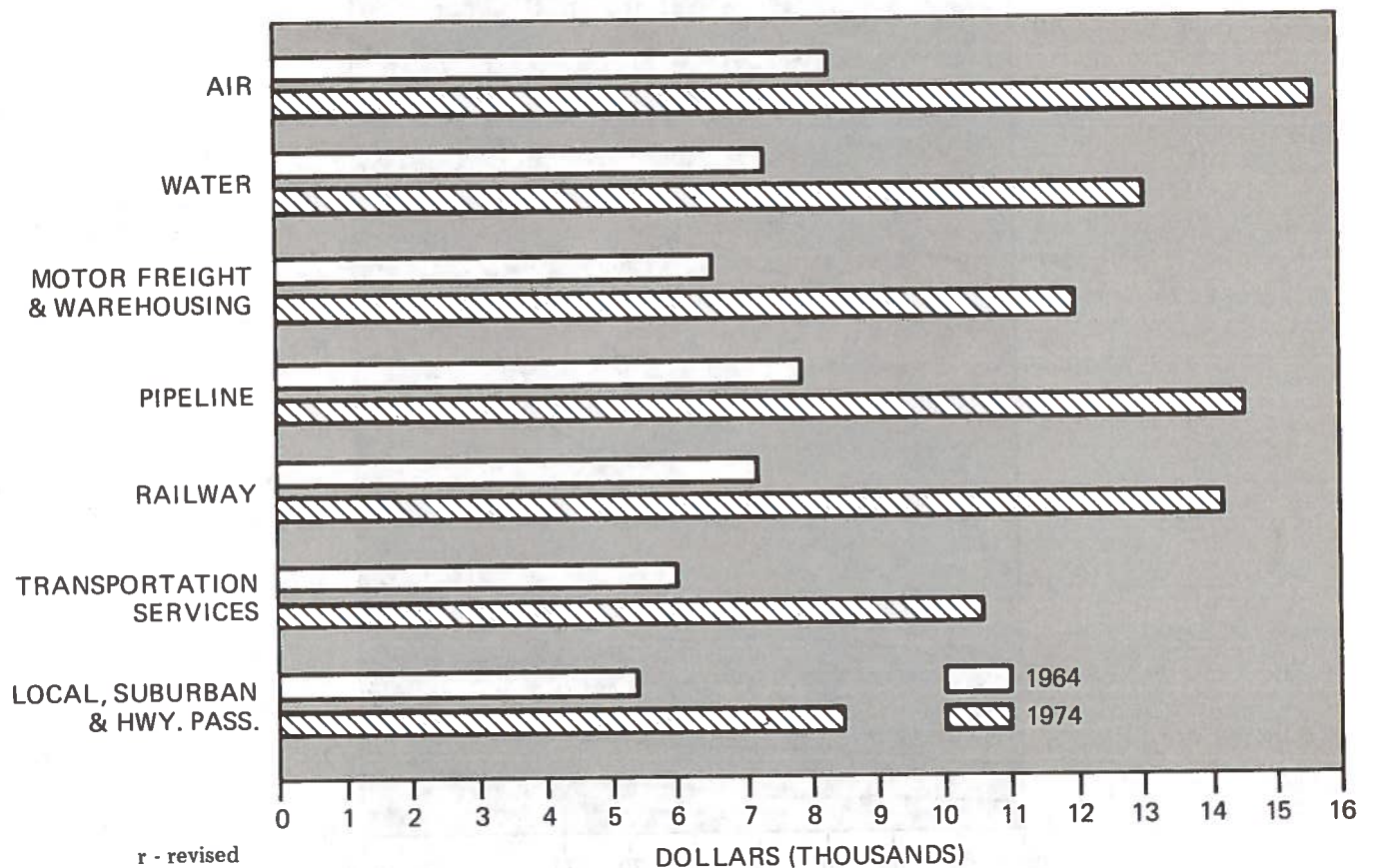
**Table 13.<sup>r</sup> Average Annual Earnings per Full-Time Employees by Transportation Sector, 1964 - 1974 (Dollars)**

	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
Total	6,745	6,994	7,272	7,610	8,107	8,743	9,391	10,232	10,953	11,967	12,616
Railway	7,106	7,462	7,708	8,118	8,665	9,319	10,112	11,360	11,992	13,774	14,244
Local, suburban, and highway passenger	5,412	5,550	5,745	5,921	6,218	6,537	6,875	7,196	7,451	7,880	8,552
Motor freight transportation and warehousing	6,410	6,625	6,899	7,171	7,670	8,207	8,672	9,614	10,489	11,343	11,944
Water	7,172	7,388	7,895	8,188	8,667	9,597	10,283	10,522	10,995	12,006	12,865
Air	8,263	8,496	8,742	9,253	9,782	10,817	12,027	12,948	13,946	14,738	15,660
Pipeline	8,106	8,053	8,667	8,778	9,223	9,723	10,765	11,412	11,883	13,125	14,563
Transportation services	6,012	6,276	6,453	6,723	7,187	7,667	8,262	8,634	9,141	9,730	10,462

<sup>r</sup>revised by U.S. Department of Commerce, Bureau of Economic Analysis, *Benchmark Revision*.

Sources: See page 93.

**Average Annual Earnings per Full-Time Employees by Transportation Sector<sup>r</sup>, 1964 - 1974**



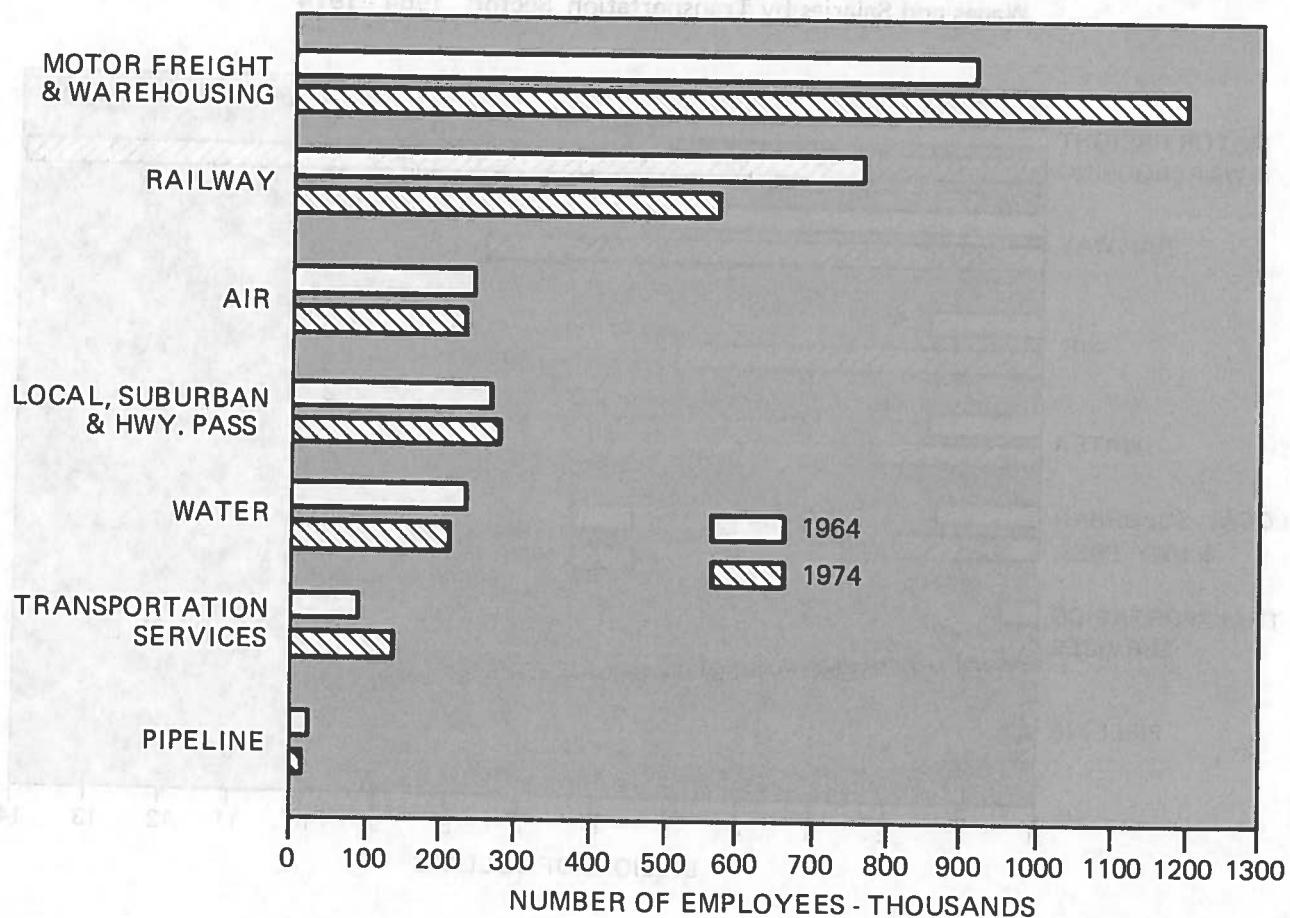
**Table 14.<sup>r</sup> Average Number of Full-Time and Part-Time Employees by Transportation Sector, 1964 - 1974 (Thousands)**

	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
Total	2,492	2,530	2,617	2,661	2,700	2,731	2,696	2,645	2,658	2,750	2,782
Railway	756	735	724	696	667	643	626	597	575	572	577
Local and interurban passenger transit	268	270	275	283	285	284	285	283	274	271	275
Trucking and warehousing	919	962	1,007	1,020	1,054	1,094	1,080	1,090	1,126	1,194	1,204
Water	229	225	239	241	240	225	218	199	201	202	204
Air	212	228	255	298	330	354	353	342	346	367	369
Pipeline	19	19	18	18	18	18	17	17	17	16	16
Transportation Services	89	91	99	105	106	113	117	117	119	128	137

<sup>r</sup>revised by U.S. Department of Commerce, Bureau of Economic Analysis, *Benchmark Revision*.

Sources: See page 94.

**Average Number of Full-Time and Part-Time Employees by Transportation Sector<sup>r</sup>, 1964 - 1974**



r - revised

**Table 15.<sup>r</sup> Wages and Salaries by Transportation Sector, 1964 - 1974**  
(Millions of Dollars)

	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
Total	16,235	17,190	18,485	19,617	21,214	23,029	24,350	26,049	28,027	31,568	33,695
Railway	5,301	5,447	5,542	5,593	5,727	5,936	6,269	6,691	6,799	7,782	8,147
Local and interurban passenger transit	1,353	1,404	1,482	1,569	1,660	1,719	1,808	1,878	1,885	1,962	2,138
Trucking and warehousing	5,698	6,207	6,767	7,106	7,861	8,682	9,036	10,133	11,422	13,032	13,866
Water	1,549	1,581	1,792	1,875	1,976	2,044	2,108	1,978	2,089	2,281	2,470
Air	1,669	1,852	2,133	2,637	3,091	3,645	4,029	4,208	4,588	5,114	5,481
Pipe	154	153	156	158	166	175	183	194	202	210	233
Transportation services	511	546	613	679	733	828	917	967	1,042	1,187	1,360

<sup>r</sup> revised by U. S. Department of Commerce, Bureau of Economic Analysis, *Benchmark Revision*.

Sources: See page 94.

**Wages and Salaries by Transportation Sector<sup>r</sup>, 1964 - 1974**

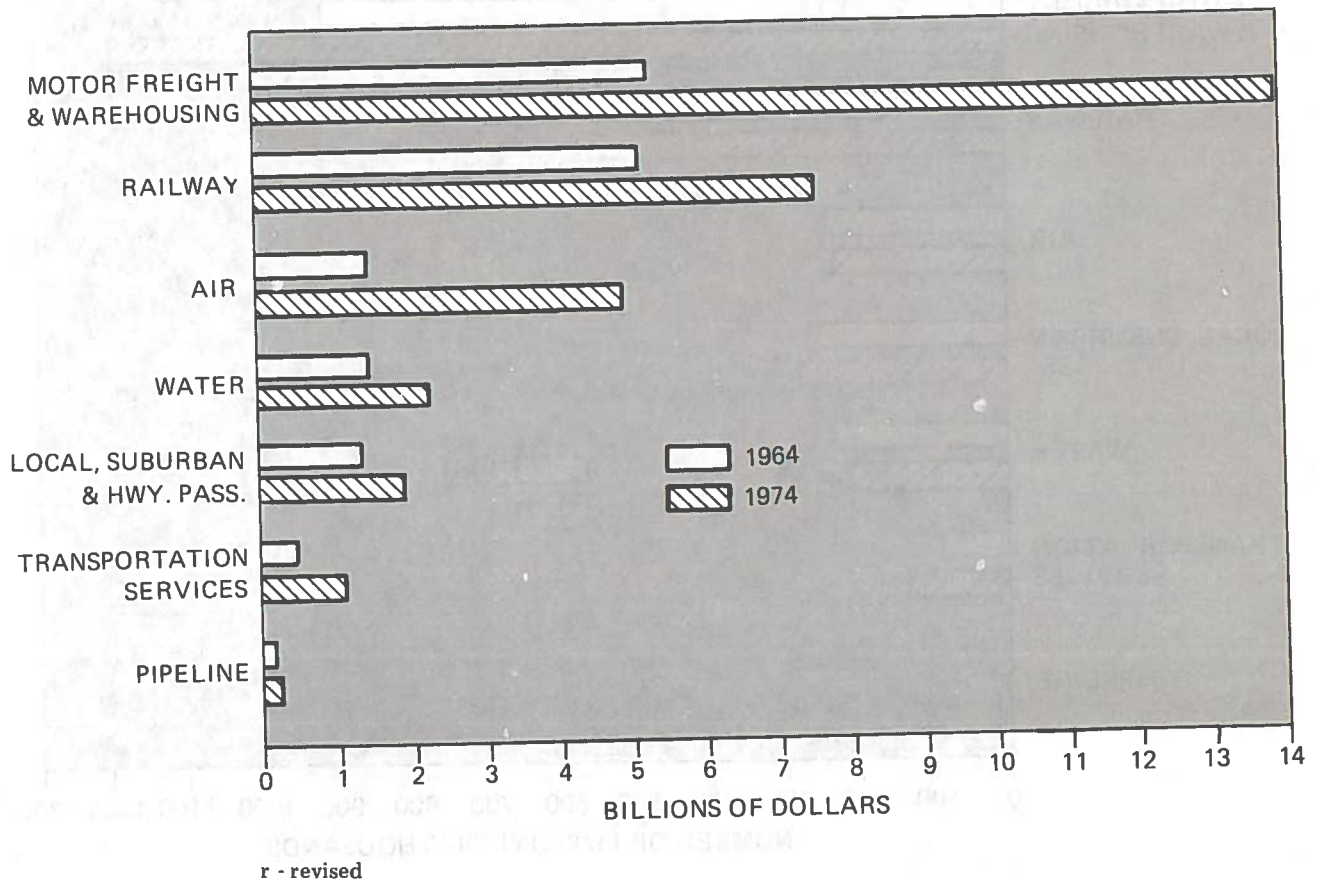


Table 10. Fuel Consumption by Mode of Transport, 1994-1974

Mode	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
Commercial Airplane	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
General Aviation	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Commercial Ship	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Commercial Truck	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Commercial Bus	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Motor Vehicle	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Other	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
<b>Total</b>	<b>1,000</b>	<b>1,000</b>	<b>1,000</b>	<b>1,000</b>	<b>1,000</b>	<b>1,000</b>	<b>1,000</b>	<b>1,000</b>	<b>1,000</b>	<b>1,000</b>	<b>1,000</b>

# SUPPLEMENTARY DATA

## Part 2: Transportation, Energy and the Environment



Table 16. Fuel Consumption by Mode of Transport, 1964-1974

	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
<b>Class I Railroads</b>											
Locomotives											
Diesel Oil, gals × 10 <sup>6</sup>	3,624	3,736	3,920	3,883	3,917	3,919	3,804	3,819	3,999	4,141	4,112
Fuel Oil, gals × 10 <sup>6</sup>	85	77	65	47	42	33	—	—	—	—	—
Electricity, KWH × 10 <sup>6</sup>	931	933	922	832	750	610	578	534	608	346	467
Coal, tons	6,831	3,695	3,235	2,310	1,669	1,137	1,238	1,191	1,400	1,202	1,160
Motor Cars											
Diesel Oil, gals × 10 <sup>6</sup>	7	6	6	6	5	5	8	4	3	3	4
Electricity, KWH × 10 <sup>6</sup>	583	576	576	580	567	538	763	756	715	901	847
Gasoline, gals	4,585	—	—	—	—	—	—	—	—	—	—
<b>Air</b>											
Certificated Carriers											
Aviation Gasoline, gals × 10 <sup>6</sup>	589	519	398	268	128	33	15	12	13	11	n/a
Jet Fuel, gals × 10 <sup>6</sup>	3,830	4,650	5,670	7,523	8,891	10,113	10,085	10,140	10,302	10,671	9,554**
General Aviation											
Aviation Gasoline, gals × 10 <sup>6</sup>	262	292	375	396	495	522	551	508	584	n/a	n/a
Jet Fuel, gals × 10 <sup>6</sup>	41	81	106	138	n/a	168	208	226	245	n/a	n/a
<b>Highway</b>											
Gasoline, gals × 10 <sup>6</sup>	47,567*	50,206	53,220	55,007	58,413	62,325	65,649	69,213	73,121	77,619	73,797
Pass. Cars + Taxis	—	69	92	103	111	123	135	301	342	392	447
Motorcycles	—	—	—	—	—	—	—	—	—	—	—
Diesel + Gasoline, gals × 10 <sup>6</sup>	622	645	637	646	655	657	644	631	561	520	525
Commercial Buses	242	249	259	264	277	290	300	316	320	327	333
School Buses	13,199	13,504	13,636	14,470	15,674	16,528	17,237	18,221	22,118	22,755	21,116
Single-unit Trucks <sup>1</sup>	6,271	6,431	6,779	7,203	7,808	8,199	8,363	8,865	8,600	8,860	10,083
Combination Trucks	—	—	—	—	—	—	—	—	—	—	—
<b>Water</b>											
Vessels <sup>2</sup>											
Residual Fuel Oil, gals × 10 <sup>6</sup>	3,487	3,093	3,093	3,389	3,678	3,506	3,774	3,307	3,273	3,881 <sup>r</sup>	3,827
Distillate Fuel Oil, gals × 10 <sup>6</sup>	672	652	699	734	766	793	819	880	929	1,125	1,019
Gasoline, gals × 10 <sup>6</sup>	n/a	n/a	485	501	533	569	598	645	687	717	697
<b>Transit</b>											
Electricity, KWH × 10 <sup>6</sup>											
Rapid Transit	2,171	2,185	2,075	2,194	2,250	2,291	2,261	2,262	2,149	2,098	n/a
Surface Rail	222	218	226	180	179	173	157	153	146	140	n/a
Trolley	204	181	166	157	157	154	143	141	133	93	n/a
<b>Gallons of Motor Fuel, gals. × 10<sup>6</sup></b>											
Gasoline	96	92	76	58	46	40	37	29	20 <sup>r</sup>	12 <sup>r</sup>	7
Diesel Oil	242	248	256	270	274	274	271	257	253 <sup>r</sup>	283 <sup>r</sup>	316
Propane	33	33	34	33	32	32	31	27	24	15	3
<b>Pipelines (Gas &amp; Oil)</b>											
Natural Gas Cu. Ft. × 10 <sup>6</sup>	433,204	500,024	535,353	575,752	590,965	630,962	722,166	742,592	766,156	728,177	668,792

<sup>r</sup>revised

n/a = not available

\*Includes motorcycles

\*\*Includes Aviation Gasoline.

<sup>1</sup> Includes non-freight truck movements.

<sup>2</sup> Vessel bunkering (including tankers). Includes purchases of fuel by all commercial vessels in U.S. ports.

<sup>3</sup> Includes Intercity and Urban buses.

Sources: See page 94.

**Table 17. National Emissions Data**

**NATIONWIDE EMISSIONS REPORT  
UNITED STATES**

**EMISSIONS AS OF: MARCH 28, 1976**

Transportation (Area)	Particulates Tons/Yr	SO <sub>x</sub> Tons/Yr	NO <sub>x</sub> Tons/Yr	HC Tons/Yr	CO Tons/Yr
<b>Land Vehicles</b>					
<b>Gasoline</b>					
Light Vehicles	662,555	171,774	5,637,465	8,787,467	52,517,587
Heavy Vehicles	67,870	25,719	730,528	1,896,629	10,648,591
Off Highway	20,020	10,478	228,262	643,624	7,296,900
<b>Total (Gasoline)</b>	<b>750,445</b>	<b>207,970</b>	<b>6,596,255</b>	<b>1,327,719</b>	<b>70,463,078</b>
<b>Diesel</b>					
Heavy Vehicles	83,745	117,243	1,061,808	133,005	601,746
Off Highway	49,899	44,654	552,935	60,538	155,841
Rail	57,163	130,332	846,016	214,934	297,249
<b>Total (Diesel)</b>	<b>190,807</b>	<b>292,229</b>	<b>2,460,759</b>	<b>408,477</b>	<b>1,054,836</b>
<b>Aircraft</b>					
Military	145,872	27,855	70,077	339,391	364,313
Civil	10,507	2,087	9,492	46,535	265,913
Commercial	5,416	7,823	75,821	99,590	205,499
<b>Total (Aircraft)</b>	<b>161,795</b>	<b>37,764</b>	<b>155,390</b>	<b>485,516</b>	<b>835,726</b>
<b>Vessels</b>					
Bituminous Coal	1,273	3,183	191	1,273	5,729
Diesel Fuel	18,573	23,217	173,352	45,505	60,673
Residual Oil	40,947	73,313	10,715	743	359
Gasoline	0	2,165	9,416	319,934	1,017,192
<b>Total (Vessels)</b>	<b>24,794</b>	<b>101,878</b>	<b>193,674</b>	<b>367,456</b>	<b>1,083,953</b>
<b>Gas Handling, Evap. Loss</b>	0	0	0	1,193,872	0
<b>Total (Transportation)</b>	<b>1,127,841</b>	<b>639,842</b>	<b>9,406,079</b>	<b>13,783,040</b>	<b>73,437,594</b>

Source: Environmental Protection Agency, National Air Quality Branch

Table 18. Air Pollutant Emissions: 1970 and 1974  
(Quantity in millions of tons per year, Estimates)

Item	Total quantity	CONTROLLABLE						Miscellaneous, uncontrollable
		Transportation		Fuel combustion <sup>1</sup>		Industrial processes	Solid waste disposal	
		Total	Road vehicles	Total	Electric utilities			
<b>1970</b>								
Carbon monoxide .....	107.3	82.3	71.6	1.1	0.2	11.8	5.5	6.6
Sulfur oxides .....	34.3	.7	0.3	27.0	20.0	6.4	.1	.1
Hydrocarbons .....	32.1	14.7	12.9	1.6	0.1	2.9	1.4	11.5
Particulates <sup>2</sup> .....	27.5	1.2	0.8	8.3	4.7	15.7	1.1	1.2
Nitrogen oxides .....	20.4	9.3	6.9	10.1	5.5	.6	.3	.1
<b>Percent of total, by source:</b>								
Carbon monoxide .....	100.0	76.7	87.0	1.0	18.2	11.0	5.1	6.2
Sulfur oxides .....	100.0	2.0	42.9	78.7	74.1	18.7	0.3	0.3
Hydrocarbons .....	100.0	45.8	87.8	5.0	6.3	9.0	4.4	35.8
Particulates <sup>2</sup> .....	100.0	4.4	66.7	30.2	56.6	57.1	4.0	4.4
Nitrogen oxides .....	100.0	45.6	74.2	49.5	54.5	2.9	1.5	.5
<b>1974</b>								
Carbon monoxide .....	94.0	73.5	63.6	.9	0.3	12.7	2.4	5.1
Sulfur oxides .....	31.4	.8	0.4	24.3	18.7	6.2	—	.1
Hydrocarbons .....	30.4	12.8	11.0	1.7	0.1	3.1	.6	12.2
Particulates <sup>2</sup> .....	10.5	1.3	0.9	5.9	3.3	11.0	.5	.8
Nitrogen oxides .....	22.5	10.7	8.1	11.0	7.0	.6	.1	.1
<b>Percent of total, by source:</b>								
Carbon monoxide .....	100.0	77.7	86.5	1.0	33.3	13.4	2.5	5.4
Sulfur oxides .....	100.0	2.5	50.0	77.4	77.0	19.7	—	0.3
Hydrocarbons .....	100.0	42.1	85.9	5.6	5.9	10.2	2.0	40.1
Particulates <sup>2</sup> .....	100.0	6.7	69.2	30.3	55.9	56.4	2.6	4.1
Nitrogen oxides .....	100.0	47.6	75.7	48.9	63.6	2.7	0.4	0.4

—Represents zero.

<sup>1</sup> Stationary.

<sup>2</sup> Data not comparable with prior years due to changes in calculating procedures.

Source: U.S. Department of Commerce, Bureau of Census, *Statistical Abstract of the United States*, 1975, 96th Annual Edition, Table 316.

**Table 19. Polluting Spills Reported in U.S. Waters, 1971-1974**

Spills, by Category <sup>1</sup>	Number of Incidents				Total Volumes in Gallons			
	1971	1972	1973	1974	1971	1972	1973	1974
<b>Type of location</b>								
Inland waters . . . . .	631	682	1,722	2,815	1,409,867	2,270,771	7,117,239	9,585,437
Coastal waters . . . . .	7,201	7,442	9,871	9,503	6,720,259	14,277,675	15,490,447	8,361,932
Open waters (Great Lakes or territorial seas) . . . . .	315	423	571	251	37,736	24,681	419,428	108,216
Contiguous zone (from 3 to 12 miles from coastline) . . . . .	396	801	483	164	651,177	34,793	1,218,860	24,706
High seas . . . . .	193	583	681	1,233	20,484	2,197,812	68,944	52,347
<b>Type of pollutant</b>								
Light oil <sup>2</sup> . . . . .	4,320	4,290	4,104	2,657	2,822,463	6,578,653	6,415,242	3,181,561
Heavy oil <sup>3</sup> . . . . .	1,603	2,049	2,851	5,084	2,934,181	1,761,301	4,538,127	12,754,816
Solvent . . . . .	( <sup>4</sup> )	( <sup>4</sup> )	49	44	( <sup>4</sup> )	( <sup>4</sup> )	32,469	13,114
Waste oil . . . . .	930	890	1,003	1,094	164,352	8,067,043	1,211,131	111,900
Other oil . . . . .	669	1,151	2,996	2,774	2,714,399	357,724	2,650,169	820,694
Other materials (including sewage, refuse, etc.) . . . . .	269	428	774	470	115,042	2,025,897	8,339,714	1,193,737
Unknown . . . . .	945	1,123	1,551	1,843	89,085	15,114	1,128,066	56,816
<b>Source</b>								
<b>Vessels</b>								
Dry cargo vessels . . . . .	271	402	353	377	418,206	42,771	650,409	90,987
Tank ships . . . . .	386	453	825	973	1,665,264	2,583,952	4,494,524	1,434,168
Tank barges . . . . .	828	830	718	833	1,197,819	3,739,144	1,572,059	2,468,724
Combatant vessels . . . . .	261	294	246	278	440,849	40,923	17,963	39,552
Other vessels . . . . .	388	494	1,408	1,265	180,127	96,508	1,184,754	253,007
Land vehicles . . . . .	77	145	305	373	101,225	172,519	741,588	785,548
<b>Nontransportation-related facilities,</b>								
refineries . . . . .	188	185	214	155	2,206,781	42,027	166,403	772,634
Pipelines . . . . .	( <sup>5</sup> )	216	559	557	( <sup>5</sup> )	1,237,227	1,847,498	6,205,372
Other land transportation facilities . . . . .	22	68	162	3,489	159,961	13,331	151,285	2,695,472
All other onshore and offshore facilities <sup>6</sup> . . . . .	3,723	3,804	3,904	799	2,158,718	10,483,247	6,479,453	1,567,551
Miscellaneous and unknown . . . . .	2,592	3,040	4,634	4,867	310,573	354,083	7,009,252 <sup>7</sup>	1,819,623
<b>Cause</b>								
Casualty (includes collision, grounding, and blowouts) . . . . .	214	360	2,793 <sup>8</sup>	952	3,045,719	4,082,094	16,068,447 <sup>8</sup>	4,861,431
Rupture, leak, or structural failure . . . . .	2,757	2,201	2,352	2,352	3,715,067	4,823,322	7,234,937	7,234,937
Equipment failure (valves, pumps) . . . . .	947	1,542	1,872	2,103	274,049	293,755	800,540	1,100,005
Personnel failure . . . . .	829	1,287	2,204	2,707	1,035,950	940,316	1,127,851	3,544,576
Deliberate discharges . . . . .	359	457	599	316	50,652	68,515	2,176,509	292,193
Natural phenomenon . . . . .	94	257	354	380	5,805	8,045,972	2,051,364	241,410
Unknown . . . . .	3,536	3,827	5,506	5,156	712,281	551,758	2,090,207	858,086
<b>Total spills reported</b>	<b>8,736</b>	<b>9,931</b>	<b>13,328</b>	<b>13,966</b>	<b>8,839,523</b>	<b>18,805,732</b>	<b>24,314,918</b>	<b>18,132,638</b>

<sup>1</sup> The U.S. Coast Guard has no reason to believe that the number of discharges in 1973 was any greater than in 1971 or 1972. The increase in the number reported probably reflected public awareness of the legal requirement to report discharges.

<sup>2</sup> Data for 1971 and 1972 include gasoline, light fuel oil, kerosene, and light crude; 1973 data include crude oil, gasoline, and other distillate fuel oil.

<sup>3</sup> Data for 1971 and 1972 include diesel oil, heating oil, heavy fuel oil, heavy crude, and asphalt; 1973 data include diesel oil, asphalt, and residual fuel oil.

<sup>4</sup> Data for 1973 added the category of solvents, previously included under several other categories.

<sup>5</sup> Pipeline data for 1971 are included under other categories.

<sup>6</sup> Changes in 1973 "sources" categories make it necessary to combine some onshore and offshore production, storage, and transfer facilities in order to compare data to those for 1971 and 1972.

<sup>7</sup> Includes one 6-million-gallon sewage spill.

<sup>8</sup> Changes in 1973 "cause" categories make it necessary to combine the categories of "casualty" and "rupture, leak, or structural failure."

Source: U.S. Department of Transportation, U.S. Coast Guard, "Polluting Incidents in and Around U.S. Waters," annual (Washington, 1971, 1972, 1973), U.S. Coast Guard, unpublished data.

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Figure 3. Expenditures and Revenues, 1974

- (1) Total Transportation: Sum of Domestic and International.
- (2) Domestic: Sum of Highway, Local Transit, Rail, Air, Water, and Pipeline.
- (3) International: Sum of Air Carrier and Water.
- (4) Highway: Sum of Auto, Truck, and Bus.
- (5) Auto: Sum of Personal Passenger Car and Taxi.
- (6) Personal Passenger Car: DOT BTA, Baccant's Revision of National Income and Product Accounts, Table 2.8, line 6.
- (7) Taxi: BTA, line 15.
- (8) Truck: Sum of Local and Interstate.
- (9) Local Truck: TAA, Transportation Facts and Trends, 1978, p. 4, preliminary estimate.
- (10) Interstate Truck: Sum of ICC-Reported Truck and Nonregulated Truck.
- (11) Regulated Truck: TAA, Transportation Facts and Trends, 1978, p. 4, preliminary estimate. Revenue of the Class I, II, III motor carriers of property. Revenue includes local cargo under the assumption that the majority of such revenue consists pickup and delivery of intercity freight.
- (12) Nonregulated Truck: 1974.
- (13) Bus: Sum of intercity Bus and School Bus.
- (14) Intercity Bus: NAITBO, Bus Facts, 1974, statistical supplement, p. 1. Operating revenue of Class I, II, III carriers reporting to the ICC. This total revenue includes passenger, express, mail, station, and other revenue.
- (15) Passenger Intercity Bus: Table 4. Total passenger revenue of Class I and II and intercity carrier. Of this amount an estimated passenger revenue for Class II and III and intercity carrier.
- (16) Intercity Bus: Table 4. Total package express and mail revenue of Class I and II and intercity carrier. Of this amount an estimated cargo revenue for Class I and II and intercity carrier.
- (17) School Bus: TAA, Transportation Facts and Trends, 1978, p. 5, preliminary estimate.
- (18) Local Transit: AFTA, Transit Facts Book, 1975-76, Table 8. Total operating revenue of light rail, heavy rail, trolley coach, and Metrobus.
- (19) Motorist: 1974, Operating Revenue.

## APPENDIX A

### Source Information

### Figure 3. Expenditures and Revenues, 1974

- (1) Total Transportation: Sum of Domestic and International.
- (2) Domestic: Sum of Highway, Local Transit, Rail, Air, Water, and Pipeline.
- (3) International: Sum of Air Carrier and Water.
- (4) Highway: Sum of Auto, Truck, and Bus.
- (5) Auto: Sum of Personal Passenger Car and Taxi.
- (6) Personal Passenger Car: DOC-BEA, *Benchmark Revision of National Income and Product Accounts*, Table 2.6, line 64.
- (7) Taxi: *Ibid.*, line 15.
- (9) Truck: Sum of Local Truck and Intercity Truck.
- (10) Local Truck: TAA, *Transportation Facts and Trends*, 1976, p.4, preliminary estimate.
- (11) Intercity Truck: Sum of ICC-Regulated Truck and Nonregulated Truck.
- (12) ICC-Regulated Truck: TAA, *Transportation Facts and Trends*, 1976, p.4, preliminary estimate. Revenues of the Class I, II, III motor carriers of property. Revenues include local cartage under the assumption that the majority of such revenues constitute pickup and delivery of intercity freight.
- (13) Nonregulated Truck: *Ibid.*
- (14) Bus: Sum of Intercity Bus and School Bus.
- (15) Intercity Bus: NAMBO, *Bus Facts*, 1974, *Statistical Supplement*, p. 1. Operating revenues of Class I, II, III carriers reporting to the ICC, plus intrastate carriers. Includes passenger, express, mail, station, and other revenues.
- (16) Passenger, Intercity Bus: *Ibid.*, p. 2. Total passenger revenues of Class I carriers plus 25 percent of this amount as estimated passenger revenues for Class II and III and intrastate carriers.
- (17) Cargo, Intercity Bus: *Ibid.* Total package express and mail revenues of Class I carriers plus 25 percent of this amount as estimated cargo revenues for Class II and III and intrastate carriers.
- (18) School Bus: TAA, *Transportation Facts and Trends*, 1976, p.5, preliminary estimate.
- (19) Local Transit: APTA, *Transit Fact Book*, 1975-76, Table 8. Total operating revenues of Light Rail, Heavy Rail, Trolley Coach, and Motorbus.
- (20) Motorbus: *Ibid.* Operating revenues.



Figure 3. Expenditures and Revenues, 1974 (cont.)

- (21) Trolley Coach: *Ibid.* Operating revenues.
- (22) Light Rail: *Ibid.* Operating revenues.
- (23) Heavy Rail: *Ibid.* Operating revenues.
- (24) Rail: A.A.R., *Statistics of Railroads of Class I*, July 1975, pp. 3, 16. Sum of the total operating revenues of Class I railroads and AMTRAK.
- (25) Rail, Passenger: Sum of Commuter and Intercity.
- (26) Rail, Commuter: I.C.C., *Class I Railroads, Financial and Operating Statistics*, Dec. 31, 1974, p. 19. Commutation passenger revenues of the Class I railroads and AMTRAK.
- (27) Rail, Intercity: *Ibid.* p. 19. Sum of Class I and AMTRAK passenger revenues from parlor and sleeping cars and other coaches.
- (28) Rail, Cargo: A.A.R., *Statistics of Railroads of Class I*, 1975, p. 3. Sum of Class I freight revenues and express and mail revenues.
- (29) Air: Sum of General Aviation and Air Carrier.
- (30) General Aviation: TAA, *Transportation Facts and Trends*, 1976, p.5, preliminary estimate. Figure represents the sum of operating costs and total retail value of new general aviation aircraft.
- (36) Air Carrier: Sum of Certificated and Supplemental.
- (37) Certificated: CAB, *Air Carrier Financial Statistics*, Dec. 1974, p. 2, column 7, line 17. Total operating revenues, domestic operations.
- (38) Passenger, Certificated: *Ibid.*, column 7, sum of lines 3 and 10. Total passenger revenues in scheduled and charter service.
- (39) Cargo, Certificated: *Ibid.*, column 7, sum of lines 4, 5, 6, 7, 8, 9, and 11. Includes revenues from scheduled domestic service of freight, express, priority U.S. mail, nonpriority U.S. mail, foreign mail, excess baggage, and charter freight.
- (40) Supplemental: *Ibid.*, p. 99. Overall operating revenues of supplemental air carriers, total domestic and international operations. No separation of international and domestic revenues is available.
- (41) Passenger, Supplemental: *Ibid.* Sum of civilian (line 1) and military (line 2) passenger revenues. Total domestic and international operations.
- (42) Cargo, Supplemental: *Ibid.* Sum of civilian (line 3) and military (line 4) property revenues.
- (43) Water: Sum of Passenger, Cargo, and Commercial Fishing.

### Figure 3. Expenditures and Revenues, 1974 (cont.)

- (44) Passenger, Water: *ICC Transport Statistics*, Part 5, p. 1, Quarterly Supplement, Dec. 1974, p. 5. Figure represents revenues of ICC-regulated carriers. Expenditures for private boating not available.
- (49) Cargo, Water: TAA, *Transportation Facts and Trends*, 1976, p.4, preliminary estimate.
- (50) Commercial Fishing: U.S. Dept. of Commerce, National Oceanic and Atmospheric Administration, *Fisheries of the U.S.*, 1974, March 1975, p. 19. This figure is the total dollar value of the U.S. Commercial Fisheries landings.
- (51) Pipeline: TAA, *Transportation Facts and Trends*, 1976, p.4, preliminary estimate. Includes revenues of regulated and unregulated oil pipelines.
- (52) Air Carrier: Figure represents overall operating revenues of the certificated carriers, total international operations. Revenues of the supplemental carriers international operations are included in the domestic statistic.
- (53) Certificated: CAB, *Air Carrier Financial Statistics*, Dec. 1974, p. 7, column 3, line 17. Total international operations.
- (54) Passenger, Certificated: *Ibid.*, Dec. 1974, p. 7, column 3. Sum of total passenger revenues in scheduled service (line 3) and charter passenger revenues (line 10), total international operations.
- (55) Cargo, Certificated: *Ibid.*, Dec. 1974, p. 7, column 3. Sum of lines 4, 5, 6, 7, 8, 9, and 11. Includes revenues from scheduled service of freight, express, priority U.S. mail, non-priority U.S. mail, foreign mail, excess baggage, and charter freight. Total international operations.
- (59) Water: Sum of Passenger and Cargo.
- (60) Passenger, Water: TAA, *Transportation Facts and Trends*, 1976, p.5, preliminary estimate.
- (61) Cargo, Water: *Ibid.*

### Figure 4. Vehicle-Miles, 1974

- (1) Total Transportation: Sum of Domestic and International.
- (2) Domestic: Sum of Highway, Local Transit, Rail, Air, and Water.
- (3) International: Sum of Air Carrier and Water.
- (4) Highway: Sum of Auto, Truck, and Bus.

Figure 4. Vehicle-Miles, 1974 (cont.)

- (5) Auto: Sum of Personal Passenger Car, Motorcycle, and Taxi.
- (6) Personal Passenger Car: Federal Highway Administration, *Highway Statistics*, 1974, table VM-1. Includes vehicle travel on main rural roads, local rural roads, and urban streets.
- (7) Taxi: Data for taxi are included in the Personal Passenger Car category.
- (8) Motorcycle: Federal Highway Administration, *Highway Statistics* 1974, table VM-1. Includes vehicle travel on main rural roads, local rural roads, and urban streets.
- (9) Truck: *Ibid.* Includes vehicle travel on main rural roads, local rural roads, and urban streets.
- (14) Bus: Sum of Intercity Bus and School Bus.
- (15) Intercity Bus: NAMBO, *Bus Facts*, 1974 Statistical Supplement, p. 1. Includes operations of Class I, II, and III carriers reporting to the ICC and interstate carriers.
- (18) School Bus: Federal Highway Administration, *Highway Statistics*, 1974, table VM-1. Includes vehicle travel on main rural roads, local rural roads, and urban streets.
- (19) Local Transit: Sum of Motorbus, Trolley Coach, Light Rail, and Heavy Rail.
- (20) Motorbus: APTA, *Transit Fact Book*, 1975-76, Table 10.
- (21) Trolley Coach: *Ibid.*
- (22) Light Rail: *Ibid.*
- (23) Heavy Rail: *Ibid.*
- (24) Rail: Sum of Passenger and Cargo.
- (25) Passenger Rail: AAR, *Statistics of Class I Railroads*, July 1975. This figure is the sum of the passenger train-miles of Class I railroads (p.11, line 15) and AMTRAK and Auto-Train (p.16).
- (28) Rail, Cargo: *Ibid.*, p.11, line 12. This figure is freight train-miles of the Class I railroads.
- (29) Air: Sum of General Aviation and Air Carrier.
- (30) General Aviation: FAA, *Statistical Handbook*, 1973, Table 8.5. Includes business, commercial instructional, personal, and other flying.
- (31) Business: *Ibid.*
- (32) Commercial: *Ibid.*
- (33) Instructional: *Ibid.*
- (34) Personal: *Ibid.*

Figure 4. Vehicle-Miles, 1974 (cont.)

- (35) Other: *Ibid.*
- (36) Domestic Air Carrier: Sum of Certificated and Supplemental.
- (37) Certificated: CAB, *Air Carrier Traffic Statistics*, Dec. 1974, p. 4. Sum of overall aircraft revenue-miles in scheduled service (line 31) and nonscheduled service (line 50), col. 4, total domestic operations.
- (38) Passenger, Certificated Scheduled: *Ibid.*, Sum of first class, coach and economy and mixed class services (lines 27, 28, 29) col. 4.
- (39) Cargo, Certificated Scheduled: *Ibid.*, line 30, col. 4.
- (40) Supplemental: CAB, *Air Carrier Traffic Statistics*, Dec. 1974, p. 93, line 21, col. 1.
- (52) International Air Carrier: Sum of Certificated and Supplemental.
- (53) Certificated: CAB, *Air Carrier Traffic Statistics*, 1974, p. 13, col. 4. Sum of overall aircraft revenue-miles in scheduled service (line 31) and nonscheduled service (line 50), total international and territorial operations.
- (54) Passenger, Certificated, Scheduled: *Ibid.* Sum of coach and economy and mixed class services (lines 28, 29), col. 4.
- (55) Cargo, Certificated Scheduled: *Ibid.*, (line 30), col. 4.
- (56) Supplemental: CAB, *Air Carrier Traffic Statistics*, 1974, p. 93, line 21, col. 5.
- (65) Non-Scheduled: *Ibid.*, p. 4 (line 50) col. 4.
- (66) Non-Scheduled, International: *Ibid.*, p. 13 (line 50) col. 4.

Figure 5. Passenger-Miles, 1974

- (1) Total Transportation: Sum of Domestic and International.
- (2) Domestic: Sum of Highway, Local Transit, Rail, Air, and Water.
- (3) International: Air Carrier only. Passenger-miles in international water transport are not available.
- (4) Highway: Sum of Auto and Bus.
- (5) Auto: Sum of Personal Passenger Car, Taxi, and Motorcycle.
- (6) Personal Passenger Car: Passenger-miles of Personal Passenger Car and Taxi. Figure represents vehicle-miles of travel from FHWA, *Highway Statistics*, 1974, table VM-1, multiplied by an average occupancy of 2.2

Figure 5. Passenger-Miles, 1974 (cont.)

- (7) Taxi: Included in Personal Passenger Car category.
- (8) Motorcycle: Passenger-miles derived by multiplying vehicle-miles of travel from FHWA, *Highway Statistics*, 1974, Table VM-1, by an average occupancy of 1.1.
- (14) Bus: Sum of Intercity Bus and School Bus passenger-miles.
- (15) Intercity Bus: NAMBO, *Bus Facts, 1974 Statistical Supplement*, p. 1. Includes Classes I, II, III
- (16) carriers reporting to ICC plus intrastate carriers.
- (18) School Bus: Best Estimate by the Driver Education and Licensing Division NHTSA.
- (24) Rail: Same as passenger (25) in same ref.
- (25) Passenger Rail: Sum of Commuter and Intercity.
- (26) Commuter Rail: A.A.R., *Statistics of Railroads of Class I*, July 1975 (p.7, line 13). Sum of the commutation passenger miles of the Class I Railroads and AMTRAK.
- (27) Intercity Rail: *Ibid.*, line 14. Sum of Class I Railroads, AMTRAK and Auto-Train passenger miles.
- (29) Air: Sum of General Aviation and Air Carrier.
- (30) General Aviation: TAA, *Transportation Facts and Trends*, p. 18. Intercity passenger-miles.
- (36) Air Carrier: Sum of Certificated and Supplemental.
- (37) Certificated: CAB, *Air Carrier Traffic Statistics*, Dec. 1974, p. 4, col. 5. Sum of revenue
- (38) passenger-miles in scheduled service (line 9) and nonscheduled service (line 43), total domestic operations.
- (40) Supplemental: *Ibid.*, p. 93, line 4, col. 1. Total revenue passenger-miles in domestic operations.
- (41)
- (43) Water: TAA, *Transportation Facts and Trends*, Oct., 1973, p. 18. Intercity passenger-miles.
- (44)
- (52) Air Carrier: Sum of Certificated and Supplemental.
- (53) Certificated: CAB, *Air Carrier Traffic Statistics*, Dec. 1974, p. 13, col. 4. Sum of revenue
- (54) passenger-miles in scheduled service (line 9, col. 4) and nonscheduled service (line 43). Total international operations.
- (56) Supplemental: *Ibid.*, p. 93, line 4, col. 2. Total revenue passenger-miles in international
- (57) operations.

Figure 6. Cargo Ton-Miles, 1974

- (1) Total Transportation: Sum of Domestic and International.
- (2) Domestic: Sum of Highway, Rail, Air, Water, and Pipeline.
- (3) International: Sum of Air Carrier and Water.
- (4) Highway: Figure represents total ton-miles of intercity truck transport plus ton-miles of intercity bus. Local truck ton-miles are not available.
- (9) Truck: Includes intercity truck only.
- (11) Intercity Truck: ICC, *89th Annual Report*, 1975, p. 121, Table 3. Figure includes the intercity common and contract motor carriers of property operating under ICC authority, plus the intercity ton-miles of all private trucks and for-hire trucks not subject to economic regulation by the ICC, plus intercity ton-miles of local ICC carriers.
- (12) ICC-Regulated Intercity Truck: ICC, *89th Annual Report*, 1975, p. 122. The 1974 federally regulated percentage of total intercity ton-miles assumed equal to the 1973 percentage (43.8 percent).
- (13) Nonregulated Intercity Truck: *Ibid.* 1974 nonregulated percentage of total intercity ton-miles assumed equal to the 1973 percentage (56.2 percent).
- (24) Rail: ICC, *Ibid.*, p. 121, Table 3. Intercity ton-miles of all railroads and electric railways, excluding express and mail.
- (28)
- (29) Air: Air Carrier only.
- (36) Air Carrier: Sum of Certificated and Supplemental.
- (37) Certificated: CAB, *Air Carrier Traffic Statistics*, Dec. 1974, p. 4, lines 2,3,4, col. 4. Revenue ton-miles of freight, express, U.S. and foreign mail in domestic operations, all services.
- (39)
- (40) Supplemental: *Ibid.*, p. 93, line 13, col. 1. Revenue ton-miles of freight and express in total domestic operations of the supplemental carriers. Supplemental carriers are ordinarily not authorized to carry mail.
- (42)
- (43) Water: Department of the Army, Corps of Engineers, *Waterborne Commerce of the United States*, 1974, Part 5, p. 91. Total domestic ton-miles.
- (49)
- (51) Pipeline: ICC, *89th Annual Report*, 1975, p. 121. Intercity ton-miles of oil pipelines.
- (52) Air Carrier: Sum of Supplemental and Certificated.
- (53) Certificated: CAB, *Air Carrier Traffic Statistics*, Dec. 1974, p. 13, lines 2, 3, 4, col. 4. Revenue ton-miles of freight, express, U.S. and foreign mail in total international and territorial operations, all services of the certificated carriers.
- (55)
- (56) Supplemental: *Ibid.*, p. 93, line 13, col. 2. Revenue ton-miles of freight and express in total international operations. Supplemental carriers are ordinarily not authorized to carry mail.
- (58)



### Figure 7. Number of Vehicles, 1974

- (1) Total Transportation: Sum of Domestic and International.
- (2) Domestic: Sum of Highway, Local Transit, Rail, Air, Water, and Pipeline.
- (3) International: Sum of Air Carrier and Water.
- (4) Highway: Sum of Auto, Truck, and Bus.
- (5) Auto: Sum of Personal Passenger Car and Motorcycle.
- (6) Personal Passenger Car: FHWA, *Highway Statistics*, 1974, table MV-1. This figure includes private and commercial vehicles (including taxicabs) as well as publicly owned vehicles for the 50 States and the District of Columbia.
- (7) Taxi: Data for Taxi are included in the Personal Passenger Car category.
- (8) Motorcycle: FHWA, *Highway Statistics*, 1974, table MV-1. This figure is the sum of the private and commercial vehicles plus the publicly owned vehicles.
- (9) Truck: *Ibid.*
- (14) Bus: Sum of Intercity Bus and School Bus.
- (15) Intercity Bus: NAMBO, *Bus Facts, 1974 Statistical Supplement*, p. 1. This figure includes operations of Class I, II, and III carriers reporting to the ICC and intrastate carriers.
- (18) School: FHWA, *Highway Statistics*, 1974, table MV-10. For some States, church, industrial, and other private buses are included; in other States, privately owned school buses could not be segregated from commercial buses and are included with the latter.
- (19) Local Transit: Sum of Motorbus, Trolley Coach, Light Rail, and Heavy Rail.
- (20) Motorbus: APTA, *Transit Fact Book*, 1975-76, Table 12. This figure does not include sight-seeing buses or school buses.
- (21) Trolley Coach: *Ibid.*
- (22) Light Rail: *Ibid.* This figure does not include commuter or suburban railroads.
- (23) Heavy Rail: *Ibid.*
- (24) Rail: A.A.R., *Statistics of Railroads of Class I*, July 1975. This figure is the sum of Class I passenger train cars (p. 10, line 13) freight cars (p. 9, line 14) locomotives (p. 8, line 6) and similar AMTRAK and Auto-Train vehicles (p. 16).
- (25) Rail, Passenger: *Ibid.*, Sum of passenger train cars owned by the Class I railroads (p. 10, line 13) and AMTRAK and Auto-Train passenger cars (p. 16).
- (28) Rail, Cargo: *Ibid.*, Freight cars, Class I railroads (p. 9, line 14) plus AMTRAK and Auto-Train freight cars (p. 16).



Figure 7. Number of Vehicles, 1974 (cont.)

- (29) Air: Sum of General Aviation and Air Carrier.
- (30) General Aviation: FAA, *Statistical Handbook of Aviation*, 1975, Table 8.1.
- (31) Business: *Ibid.* This category includes business (34,399) and executive transportation (8,653).
- (32) Commercial: *Ibid.* This category includes air taxi (6,227), aerial application (6,496), and rental (7,584).
- (33) Instructional: *Ibid.*
- (34) Personal: *Ibid.*
- (35) Other: *Ibid.* This category includes other (3,992) and industrial/special (2,250).
- (36) Air Carrier: Sum of Certificated and Supplemental.
- (37) Certificated: CAB, *1973-1974 Supplement to Handbook of Airline Statistics*.
- (40) Supplemental: *Ibid.*
- (43) Water: American Waterways Operators, *Inland Waterborne Commerce Statistics*, 1974, p. 2. This figure represents the sum of self-propelled and non-self-propelled towing vessels and barges, plus cargo vessels (49) and passenger liners (44), in the U.S.
- (44) Passenger: Personal Communication, Maritime Administration. This figure is the number of U.S. passenger liners.
- (49) Cargo: U.S. Department of Commerce, Maritime Administration, *Merchant Fleets of the World*. This figure represents the sum of U.S. oceangoing steam and motor ships of 1,000 gross tons and over as of December 31, 1974.
- (52) International Air Carrier: This figure is included in the respective categories of the domestic operations.
- (59) International Water: This figure is included in the respective categories of the domestic operations.

Figure 8. Number of Fatalities, 1974

- (1) Total Transportation: Sum of Domestic and International.
- (2) Domestic: Sum of Highway, Local Transit, Rail, Air, Water, and Pipeline.
- (3) International: U.S. Air Carriers only. Fatalities in international water transport not available.

Figure 8. Number of Fatalities, 1974 (cont.)

- (4) Highway: National Highway Traffic Safety Administration-Office of Statistics & Analysis (N43-30), Personal Communication. This figure is the total highway traffic fatalities for 50 states and the District of Columbia.
- (5) Auto: Sum of Personal Passenger Car, Taxi, and Motorcycle.
- (6) Personal Passenger Car: National Safety Council, *Accident Facts 1975*, p. 56. Number of occupant fatalities.
- (7) Taxi: *Ibid.* Number of occupant fatalities.
- (8) Motorcycle: *Ibid.* Fatalities of motorcycles, motor scooters, and motor bikes.
- (9) Truck: U.S. Department of Transportation, FHWA, Bureau of Motor Carrier Safety, Personal Communication. Sum of for hire, private plus others.
- (10) Private: *Ibid.*
- (11) For Hire: *Ibid.* Sum of ICC Regulated and Non-Regulated.
- (12) ICC Regulated: *Ibid.* This category is called authorized by the source.
- (13) Non-Regulated: *Ibid.* This category is called exempt by the source.
- (14) Bus: *Ibid.* Sum of intercity and school bus fatalities.
- (15) Intercity Bus: *Ibid.*, p. 75. Passenger fatalities on Class I buses.
- (16) Bicycle: National Safety Council, *Accident Facts*, 1975, p.47, number of bicycle deaths.
- (17) Pedestrian: *Ibid.*, p.58, total number of pedestrian deaths.
- (18) School Bus: *Ibid.*, p. 92. Includes pupils, bus drivers, and others.
- (19) Local Transit: Personal Communication, American Public Transit Association (APTA), Statistical Dept. This figure includes passengers killed on heavy rail and light rail (operating exclusively as rapid transit), trolley coach, and motorbus. These are reported fatalities collected by APTA resulting from vehicle accidents; they are not necessarily the national total.
- (20) Motorbus: *Ibid.* Reported passenger fatalities in vehicle accidents.
- (21) Trolley Coach: *Ibid.* Reported passenger fatalities in vehicle accidents.
- (22) Light Rail: *Ibid.* Reported passenger fatalities in vehicle accidents.
- (23) Heavy Rail: *Ibid.* Reported passenger fatalities in vehicle accidents.
- (24) Rail: U.S. DOT/Federal Railroad Administration, Office of Safety, *Summary and Analysis of Accidents in U.S.*, Report No. 143, 1974, p. 5, Table 6. This figure is computed by taking the total killed and subtracting the number of rail-highway grade crossing fatalities in 1974 (1,220).

Figure 8. Number of Fatalities, 1974 (cont.)

- (25) Passenger: *Ibid.* This figure includes passengers on or getting on or off Class I railroads and AMTRAK passenger-carrying trains, and those passengers killed in rail-highway grade-crossing accidents.
- (26) Other: *Ibid.* Includes employees on and not on duty, and trespassers and non-trespassers killed in rail and rail-highway grade-crossing accidents.
- (29) Air: Sum of General Aviation and Air Carrier. Includes fatalities of passengers, crew, and others.
- (30) General Aviation: Sum of Business, Air Taxi, Other, Aerial Application, Instructional, Personal, and Executive.
- (31) Business: Personal Communication, National Transportation Board, Bureau of Aviation Safety (BAS-22).
- (32) Air Taxi: *Ibid.*
- (33) Instructional: *Ibid.*
- (34) Personal: *Ibid.*
- (35) Other: *Ibid.* Sum of NTSB categories Commercial Other, Non-Commercial Other, and Miscellaneous.
- (36) Air Carrier: Sum of Certificated and Supplemental. Includes passengers, crew, and others on U.S. air carriers in domestic operations.
- (37) Certificated: Personal Communication, National Transportation Safety Board, Bureau of Aviation Safety (BAS-22). This figure pertains to scheduled and nonscheduled passenger and cargo domestic operations.
- (38) Passenger: *Ibid.* Scheduled and nonscheduled certificated air carrier domestic passenger service.
- (39) Cargo: *Ibid.* Scheduled and nonscheduled certificated air carrier domestic cargo service.
- (40) Supplemental: *Ibid.* Domestic passenger and cargo service.
- (41) Passenger: *Ibid.* Domestic passenger service.
- (42) Cargo: *Ibid.* Domestic cargo service.
- (43) Water: U.S. Coast Guard, *Proceedings in Marine Safety Council Report*, Jan. 1976, p. 10. This figure is the sum of passenger, cargo, and commercial fishing fatalities due to vessel casualties in fiscal year 1975.
- (44) Passenger: Sum of Private and Passenger Service.

Figure 8. Number of Fatalities, 1974 (cont.)

- (45) Private: U.S. Coast Guard, *Boating Statistics* (CG-357), 1974, p. 17. This figure represents total fatalities in recreational boating.
- (46) Inboard: *Ibid.*
- (47) Outboard: *Ibid.*
- (48) Passenger Service: U.S. Coast Guard, *Proceedings in Marine Safety Council Report*, Jan. 1976, p. 10. This figure includes vessel casualties on both large and small passenger vessels and ferries for fiscal year 1975.
- (49) Cargo: *Ibid.* This figure includes vessel casualties on cargo barges, freight, tank ships, and tank barges for fiscal year 1975.
- (50) Commercial Fishing: *Ibid.* This figure includes vessel casualties on commercial fishing vessels for fiscal year 1975.
- (51) Pipeline: Personal Communication, U.S. Department of Transportation, Materials Transportation Bureau, Office of Pipeline Safety Operations (MTP-40). This figure includes gas distribution and transmission lines (including gathering lines), and liquid transmission lines.
- (52) Air-Carrier: Sum of Certificated and Supplemental. Includes passengers, crew, and others on U.S. Air Carrier International operations.
- (53) Certificated: Personal Communication, National Transportation Safety Board, Bureau of Aviation Safety (BAS-22). This figure pertains to U.S. Certificated Route Air Carriers, scheduled and nonscheduled International passenger and cargo service.
- (54) Passenger: *Ibid.* Scheduled and nonscheduled Certificated Air Carrier International service.
- (55) Cargo: *Ibid.* Scheduled and nonscheduled Certificated Air Carrier International service.
- (56) Supplemental: *Ibid.* Scheduled and nonscheduled International passenger and cargo service.
- (57) Passenger: *Ibid.* Scheduled and nonscheduled International Passenger service.
- (58) Cargo: *Ibid.* Scheduled and nonscheduled International cargo service.
- (62) Executive: Personal Communication, National Transportation Board, Bureau of Aviation Safety (BAS-22).
- (63) Aerial Application: *Ibid.*
- (64) Inboard/Outboard: U.S. Coast Guard, *Boating Statistics* (CG-357), 1974, p. 17.

### Table 1. Average Passenger Revenue Per Passenger-Mile, 1964-1974

#### Certificated Air Carrier, Domestic Operations, Scheduled Service:

CAB, *Air Carrier Traffic Statistics*, Dec. 1974, p. 4, and previous years; *Air Carrier Financial Statistics*, Dec. 1974, p. 2 and previous years; passenger revenues (lines 1-3) divided by revenue passenger-miles (lines 7-9).

#### Class I Rail:

1964-1973: AAR, *Statistics of Railroads of Class I*, Aug. 1974, p. 7, lines 18, 19, 20.

1974: AAR, *Statistics of Railroads of Class I*, July, 1975. Data for Class I, p. 7—passenger revenues and passenger-miles are then adjusted to exclude AMTRAK. In all cases, average passenger revenue per passenger-mile equals the corresponding revenue figure divided by the corresponding passenger-miles.

#### AMTRAK:

1971-1974: AAR, *Statistics of Railroads of Class I*, 1972, 1973, 1974, 1975, p. 16.

#### Class I Intercity Bus:

ICC, *Transport Economics*, Vol. II, No. 4, 1975, p. 8.

### Table 2. Average Freight Revenue Per Ton-Mile, 1964-1974

#### Certificated Air Carrier Domestic Operations, Scheduled Service:

1964-72: CAB, *Handbook of Airline Statistics*, 1973, p. 93.

1973-74: CAB, *Air Carrier Financial Statistics*, Dec. 1974, p. 2; *Air Carrier Traffic Statistics*, Dec. 1974, p. 4. Freight revenues (line 4) divided by revenue ton-miles of freight (line 19).

#### Class I Rail:

AAR, *Statistics of Railroads of Class I*, July, 1975, p. 5, line 55.

#### Class I Intercity Motor Carriers of Property, Common and Contract:

1964-1973: ICC, *Transport Economics*, Vol. II, No. 2, 1975, p. 3.

1974: Personal Communication, I.C.C.

#### Oil Pipelines:

1964-1973: ICC, *Transport Economics*, Vol. II, No. 2, 1975, p. 13.

1974: Personal Communication, I.C.C.

#### Classes A and B Water Carriers, Barge Lines Operating on Mississippi River and Tributaries:

1964-1973: ICC, *Transport Economics*, Vol. II, No. 2, 1975, p. 13.

1974: Personal Communication, I.C.C.

### Table 3. Average Passenger Fare, 1964-1974

#### Certificated Air Carrier Domestic Operations, Scheduled Service:

1964-72: CAB, *Handbook of Airline Statistics*, 1973. Total passenger revenues (p. 216, line 3) divided by revenue passenger enplanements (p. 106, line 20).

1973-74: Total passenger revenues (CAB, *Air Carrier Financial Statistics*, Dec. 1974, p. 2, line 3) divided by revenue passenger enplanements (CAB, *Air Carrier Traffic Statistics*, Dec. 1974, p. 4, line 17).

#### Class I Bus, Intercity:

NAMBO, *Bus Facts, 1974 Statistical Supplement*, June 1975, p. 4.

#### Local Transit:

APTA, *Transit Fact Book*, 1975-76, Table 13.

#### Class I Rail:

1964-1973: AAR, *Statistics of Railroads of Class I*, Aug. 1974, p. 7. Commutation, line 19; other than commutation, line 20.

1974: AAR, *Statistics of Railroads of Class I*, July 1975, p. 7 (passenger revenues and revenue passengers carried are adjusted to exclude AMTRAK figures on p. 16). In all cases Average Passenger Fare equals the corresponding revenue figure divided by the corresponding number of passengers carried.

#### AMTRAK:

1971-1974: AAR, *Statistics of Railroads of Class I*, 1972, 1973, 1974, 1975, p. 16.

### Table 4. Total Operating Revenues, 1964-1974

#### Certificated Air Carriers:

1964-72: CAB, *Handbook of Airline Statistics*, 1973. Sum of overall operating revenues in total domestic operations (p. 216) and total international and territorial operations (p. 227).

1973-74: CAB, *Air Carrier Financial Statistics*, Dec. 1974, p. 1, line 17.

#### Supplemental Air Carriers:

1964-72: CAB, *Handbook of Airline Statistics*, 1973, p. 69.

1973-74: CAB, *Air Carrier Financial Statistics*, Dec. 1974, p. 99, line 9.

#### Intercity Bus, Class I:

1960-68: ICC, *84th ICC Annual Report*, 1970, p. 143.

1969-70: ICC, *85th ICC Annual Report*, 1971, p. 127.

1971, 1972, 1973: NAMBO, *Bus Facts, 1974 Statistical Supplement*, June 1975, p. 2.

#### Local Transit:

APTA, *Transit Fact Book*, 1975-76, Table 8. Includes motorbus, subway and elevated, surface rail, and trolley coach.

#### Oil Pipeline:

TAA, *Transportation Facts and Trends*, April 1975, Quarterly Supplement, Dec. 1974, p. 4. Personal Communication for 1974.



#### Table 4. Total Operating Revenues, 1964-1974 (cont)

Class I Rail:

AAR, *Statistics of Railroads of Class I*, July 1975, p. 1.

AMTRAK:

AAR, *Statistics of Railroads of Class I*, 1972, 1973, 1974, 1975, p. 16

Class I Intercity Motor Carriers of Property:

ICC, *89th Annual Report*, 1975, p. 125.

Water:

Classes A and B carriers, inland and coastal waterways: ICC, *87th Annual Report*, 1973, p. 137, and equivalent tables in earlier editions, ICC, *89th Annual Report*, 1975, p. 127.

Maritime Carriers:

ICC, *89th Annual Report*, 1975, p. 128, and equivalent tables in earlier editions.

Class A Freight Forwarders:

1960-67: ICC, *84th Annual Report*, 1970, p. 151.

1968-1974: ICC, *87th ICC Annual Report*, 1973, p. 139; *89th ICC Annual Report*, 1975, p. 129.

#### Table 5. Vehicle-Miles, 1964-1974

Air Carriers:

Certificated Domestic Operations, All Services:

1964-1972: CAB, *Handbook of Airline Statistics*, 1973, p. 106. Aircraft revenue miles in scheduled service (line 35) plus nonscheduled service (line 56).

1973-1974: CAB, *Air Carrier Traffic Statistics*, Dec. 1974, p. 4. Aircraft revenue miles in scheduled service (line 50).

Supplemental:

1967-1972: CAB, *Handbook of Airline Statistics*, 1973, p. 197.

1973-1974: CAB, *Air Carrier Traffic Statistics*, Dec. 1974, p. 93 (line 21).

General Aviation:

FAA, *Statistical Handbook of Aviation*, Table 8.5, 1974 edition.

Highway:

Passenger car and taxi: FHWA, *Highway Statistics*, annual editions, table VM-1.

Truck: *Ibid.*

School bus: *Ibid.*

Intercity bus: NAMBO, *Bus Facts*, 1974 Statistical Supplement, June 1975, p. 1.

Local Transit:

APTA, *Transit Fact Book*, 1975-76, Table 10.

Class I Rail:

AAR, *Statistics of Railroads of Class I*, July 1975, p. 11, lines 15, 12.

AMTRAK:

AAR, *Statistics of Railroads of Class I*, 1972, 1973, 1974, 1975, p. 16.



**Table 6. Passenger-Miles, 1964-1974**

**Air Carrier:**

**Certificated:**

1964-72: CAB, *Handbook of Airline Statistics*, 1973, p. 106. Sum of total domestic passenger-miles in scheduled service (line 11) and nonscheduled service (line 47);

1973-1974: CAB, *Air Carrier Traffic Statistics*, Dec. 1974, p. 4. Sum of lines 9 and 43.

**Supplemental:**

1967-72: CAB, *Handbook of Airline Statistics*, 1973, p. 197, (line 4);

1973-74: CAB, *Air Carrier Traffic Statistics*, Dec. 1974, p. 93 (line 4).

**General Aviation:**

1964-73: TAA, *Transportation Facts and Trends*, Dec. 1974, p. 18.

1974: Quarterly supplement, Oct. 1975, p. 18.

**Highway:**

Passenger Car and Taxi: FHWA vehicle-miles multiplied by a constant average occupancy of 2.2.

Intercity Bus: NAMBO, *Bus Facts, 1974 Statistical Supplement*, June 1975, p. 1.

**Class I Rail:**

1964-1973: AAR, *Statistics of Railroads of Class I*, August 1974, p. 7. Total (line 12); Commutation (line 13) and Other than Commutation (line 14).

1974: AAR, *Statistics of Railroads of Class I*, July 1975, p. 7, same lines as in preceding reference, minus AMTRAK and Auto-Train figures, p. 16.

**AMTRAK:**

AAR, *Statistics of Railroads of Class I*, 1972, 1973, 1974, 1975, p. 16.

**Domestic Water:**

1964-73: TAA, *Transportation Facts and Trends*, Dec. 1974, p. 18.

1974: Oral communication from I.C.C.

**Table 7. Cargo Ton-Miles, 1964-1974**

**Air Carrier:**

**Certificated:**

1964-72: CAB, *Handbook of Airline Statistics*, 1973, p. 106. Sum of revenue ton-miles of freight, express, U.S. and foreign mail (lines 2, 3 and 4).

1973-74: CAB, *Air Carrier Traffic Statistics*, Dec. 1974, p. 4. Sum of lines 2, 3, and 4.

**Supplemental:**

1964-72: CAB, *Handbook of Airline Statistics*, 1973, p. 35, domestic operations.

1973-1974: CAB, *Air Carrier Traffic Statistics*, Dec. 1974, p. 93.

**Oil Pipeline:**

ICC, *89th Annual Report*, 1975, p. 121, and equivalent tables in earlier editions.

**Class I Rail:**

AAR, *Statistics of Railroads of Class I*, July 1975, p. 5, line 49.

**Motor Vehicles:**

ICC, *89th Annual Report*, 1975, p. 121, and equivalent tables in earlier editions.

**Inland Waterways Including Great Lakes:**

ICC, *89th Annual Report*, 1975, p. 121, and equivalent tables in earlier editions.

### Table 7. Cargo Ton-Miles, 1964-1974 (cont.)

#### Total Domestic Waterways:

U.S. Army Corps of Engineers, *Waterborne Commerce of the U.S.*, Part 5, 1974, p. 95.

### Table 8. Basic Intercity Mileage Within the Continental United States, 1964-1974

#### Railroads, All Line Haul:

AAR, *Yearbook of Railroad Facts*, 1975, p. 48. Data represent aggregate length of roadway of all line-haul railroads, excluding mileage of yard tracks or sidings. Jointly used track is counted only once.

#### Oil Pipelines:

TAA, *Transportation Facts and Trends*, Dec. 1974, p. 31.

#### Gas Pipelines:

AGA, *Gas Facts*, 1974, Table 42.

#### Inland Waterways:

American Waterways Operators, *Inland Waterborne Commerce Statistics*, 1974, p. 1, and previous years.

#### Highways:

FHWA, *Highway Statistics*, 1974, table SM-2. Total surfaced mileage of State primary and secondary roads, less col. D-E mileage, plus total toll facility mileage, with Alaska and Hawaii mileage deleted. Earlier years from earlier editions of *Highway Statistics*.

#### Airways:

FAA, *Statistical Handbook of Aviation*, 1974, Table 2.1. Mileage equals sum of low frequency, VHF low altitude direct, and VHF jet route mileages multiplied by 1.151 to convert from nautical miles.

### Table 9. Number of Vehicles, 1964-1974

#### Air Carrier:

1964-1972: CAB, *Handbook of Airline Statistics*, 1973 Part VII, Table 7a and similar tables in earlier editions or by Special Communication from CAB.

1973: CAB, Statistical Data Division, Special Communication.

1974: CAB, 1973-1974 Supplement to *Handbook of Airline Statistics*, p. 126.

#### General Aviation:

FAA, *Statistical Handbook of Aviation*, 1973, 1974, Table 8.6.

#### Passenger Car, and Taxi:

FHWA, *Highway Statistics*, 1974, table MV-1, and same table in earlier editions.

#### Intercity Bus:

NAMBO, *Bus Facts*, 1974 Supplement, June 1975, p. 1.

**Table 9. Number of Vehicles, 1964-1974 (cont.)**

**Local Transit:**

APTA, *Transit Fact Book*, 1975-76, Table 12.

**Class I Rail:**

AAR, *Statistics of Railroads of Class I*, July 1975; freight cars, p. 9, line 14; locomotives, p. 8 line 6; passenger cars and pullman, p. 10, line 13.

**AMTRAK:**

AAR, *Statistics of Railroads of Class I*, 1972, 1973, 1974, 1975, p. 16.

**Truck:**

FHWA, *Highway Statistics*, 1974, table VM-1, and same table in earlier editions.

**Water Vessels:**

American Waterways Operators, *Inland Waterborne Commerce Statistics*, 1974, p. 2, and previous years.

**Table 10. Personal Consumption Expenditures by Transportation Sector, 1964-1974**

U.S. Department of Commerce, Bureau of Economic Analysis, *Benchmark Revision of National Income and Product Accounts*, Advance Tables, February 1976, Table 2.6, lines 63-81.

**Table 11. Personal Consumption Expenditures by Type of Product, 1964-1974**

U.S. Department of Commerce, Bureau of Economic Analysis, *Benchmark Revision of National Income and Product Accounts*, Advance Tables, February 1976, Table 2.6.

**Table 12. National Income by Transportation Sector, 1964-1974**

U.S. Department of Commerce, Bureau of Economic Analysis, *Benchmark Revision of National Income and Product Accounts*, Advance Tables, February 1976, Table 6.3, lines 36-43.

**Table 13. Average Annual Earnings Per Full-Time Employees by Transportation Sector, 1964-1974**

U.S. Department of Commerce, Bureau of Economic Analysis, *Benchmark Revision of National Income and Product Accounts*, Advance Tables, February 1976, Table 6.7.

**Table 14. Average Annual Number of Full-Time and Part-Time Employees by  
Transportation Sector, 1964-1974**

U.S. Department of Commerce, Bureau of Economic Analysis, *Benchmark Revision of National Income and Product Accounts*, Advance Tables, February 1976, Table 6.8, lines 36-43.

**Table 15. Wages and Salaries by Transportation Sector, 1964-1974**

U.S. Department of Commerce, Bureau of Economic Analysis, *Benchmark Revision of National Income and Product Accounts*, Advance Tables, February 1976, Table 6.6, lines 36-43.

**Table 16. Fuel Consumption by Mode of Transport, 1964-1974**

**Class I Rail:**

AAR, *Statistics of Railroads of Class I*, 1964-1974, July 1975, p. 15.

**Air Carriers:**

CAB, 1973-1974 Supplement to *Handbook of Airline Statistics*.

**General Aviation:**

FAA, *Statistical Handbook of Aviation*, 1972, table 9.12, and Personal Communication, Information and Statistics Division, FAA, for 1973 and 1974 information.

**Highway:**

FHWA, *Highway Statistics*, 1974, table VM-1, and same table in earlier editions.

**Vessels:**

Residual: Bureau of Mines, *Sales of Fuel Oil and Kerosene*, 1974, p. 2.

Distillate: *Ibid.*

Gasoline: FHWA, *Highway Statistics*, 1974, table MF-24, and same table in earlier editions.

**Transit:**

APTA, *Transit Fact Book*, 1973-74, Table 16.

**Pipelines:**

American Gas Association, *Gas Facts*, 1974, Table 53, p. 61.

Altitude Technology

AIRBORNE SPEED

Often called "wind-tunnel speed," the average speed of an aircraft while in flight, computed using the airspeed indicator.

AIRRAIL THEVENOT MILLS

The index (based on aircraft speed) for each aircraft, normally computed in terms of airspeed, which is not pertinent in accordance with the speed of sound. The ground speed is a high speed, as in the case of a jet, is not normally used. In cases where the aircraft is in a climb, the index will be determined by multiplying the ground speed by the cosine of the climb angle.

# APPENDIX B Glossary

CERTIFICATED AIRLINE

One of a class of air carriers, the certificate of which is issued by the FAA, authorizing the certificate holder to conduct air transportation over specified routes and limited segments of scheduled operations. The certificate holder must comply with the applicable Federal Aviation Regulations and other requirements. The certificate holder is also required to maintain a certain level of safety.

DOMESTIC OPERATIONS

Operations within and between the 50 States and the District of Columbia, between domestic operations of the certificate holder and the 50 States and the District of Columbia, and other operations, including operations between the 50 States and the District of Columbia, and other operations, including operations between the 50 States and the District of Columbia.

INTERNATIONAL OPERATIONS

Operations outside the territory of the United States, including operations between the United States and foreign countries and between the United States and possessions. Includes both the certificate holder's operations and the operations of other certificate holders, national and territorial operators.

NONREVENUE INCOME AND EXPENSES

Income and loss of a certificate holder, other than that derived from the sale of services of the certificate holder, other revenue and expenses attributable to financing or other activities, and any expenses to and from a certificate holder for the operation of its individual services.

NONREVENUE INCOME

Income and loss of a certificate holder, other than that derived from the sale of services of the certificate holder, other revenue and expenses attributable to financing or other activities, and any expenses to and from a certificate holder for the operation of its individual services.

NONREVENUE EXPENSES

Expenses and loss of a certificate holder, other than that derived from the sale of services of the certificate holder, other revenue and expenses attributable to financing or other activities, and any expenses to and from a certificate holder for the operation of its individual services.

NONREVENUE INCOME

Income and loss of a certificate holder, other than that derived from the sale of services of the certificate holder, other revenue and expenses attributable to financing or other activities, and any expenses to and from a certificate holder for the operation of its individual services.

## Air Carrier Terminology

### AIRBORNE SPEED:

Often called "wheels-off wheels-on speed." The average speed of an aircraft while airborne, computed using great-circle airport-to-airport distance.

### AIRCRAFT REVENUE MILES:

The miles (based on airport-to-airport distances) for each interairport hop actually completed in revenue service, whether or not performed in accordance with the scheduled pattern. For this purpose, operation to a flag stop is a hop completed even though a landing is not actually made. In cases where the interairport distances are inapplicable, aircraft miles flown are determined by multiplying the normal cruising speed for the aircraft type by the airborne hours.

### CERTIFICATED CARRIER:

One of a class of air carriers holding certificates of public convenience and necessity issued by the CAB, authorizing the performance of scheduled air transportation over specified routes and a limited amount of nonscheduled operations. This general carrier grouping includes the all-purpose carriers (i.e., the so-called passenger/cargo carriers) and the all-cargo carriers, and comprises all of the airlines certificated by the Board, except the supplemental air carriers. Certificated route air carriers are often referred to as "scheduled airlines," although they also perform nonscheduled service.

### DOMESTIC OPERATIONS:

Operations within and between the 50 States and the District of Columbia. Includes domestic operations of the certificated trunk carriers and Pan American and the local service, helicopter, intra-Alaska, intra-Hawaii, domestic all-cargo and other carriers; also includes transborder operations conducted on the domestic route segments of U.S. air carriers.

### INTERNATIONAL OPERATIONS:

Operations outside the territory of the United States, including operations between the United States and foreign countries and between the United States and its territories and possessions. Includes both the combination passenger/cargo carriers and the all-cargo carriers engaged in international and territorial operations.

### NONOPERATING INCOME AND EXPENSES:

Income and loss of commercial ventures not part of the common carrier air transport services of the accounting entity; other revenues and expenses attributable to financing or other activities that are extraneous to and not an integral part of air transportation or its incidental services.

### NONREVENUE FLIGHTS:

Flights and flight stages involving training, test, technical, positioning for scheduled flights, ferry, company business, publicity and forced returns for which no remuneration is received.

### NONSCHEDULED FREIGHT:

Property carried in charter operations.

### NONSCHEDULED SERVICE:

Revenue flights not operated in regular scheduled service principally contract and charter operations.



**OPERATING EXPENSES:**

Expenses incurred in the performance of air transportation. Includes direct aircraft operating expenses and ground and indirect operating expenses.

**OPERATING REVENUES:**

Includes revenues from the performance of air transportation and transport related activities. See "Transport Related Revenues."

**OTHER TRANSPORT REVENUES:**

Miscellaneous revenues associated with the air transportation performed by the air carrier, such as airline employees, officers and directors, or other persons, except ministers of religion who travel under reduced rate transportation; reservation cancellation fees; and other items not specified in other transport revenue accounts.

**OVER-ALL OPERATING EXPENSES:**

See "Operating Expenses."

**OVER-ALL OPERATING REVENUES:**

See "Operating Revenues."

**OVER-ALL REVENUE LOAD FACTOR:**

The percent that total revenue ton-miles (passenger plus nonpassenger) are of available ton-miles in revenue services, representing the proportion of the over-all capacity that is actually sold and utilized.

**OVER-ALL REVENUE LOAD PER AIRCRAFT:**

The average over-all tonnage carried per aircraft in revenue services derived by dividing the over-all revenue ton-miles by the over-all aircraft miles flown in revenue services.

**OVER-ALL TRANSPORT REVENUES:**

See "Transport Revenues."

**PASSENGER-MILE:**

One passenger transported one mile. Passenger-miles are computed by summation of the products of the aircraft miles flown on each inter-airport flight stage multiplied by the number of passengers carried on that flight stage.

**PASSENGER ENPLANEMENTS:**

The total number of revenue passengers boarding aircraft, including originating and stop-over or on line transfer passengers.

**PASSENGER REVENUES:**

Revenues from the transportation of passengers by air.

**PASSENGER SERVICE EXPENSES:**

Costs of activities contributing to the comfort, safety, and convenience of passengers while in flight and when flights are interrupted. Includes salaries and expenses of cabin attendants and passenger food expense.

**PASSENGER REVENUE TON-MILE:**

One ton of revenue passenger weight (including all baggage) transported one mile. The passenger weight standard for both "Domestic" and "International" operation is 200 pounds.



#### REVENUE PASSENGER LOAD FACTOR:

The percent that revenue passenger-miles are of available seat-miles in revenue passenger services, presenting the proportion of aircraft seating capacity that is actually sold and utilized.

#### REVENUE PASSENGER-MILE:

One revenue passenger transported 1 mile in revenue service. Revenue passenger-miles are computed by summation of the products of the revenue aircraft-miles flown on each interairport flight stage multiplied by the number of passengers carried on that flight stage.

#### REVENUE TON-MILE OF FREIGHT:

One short ton of freight transported 1 statute mile. Ton-miles are computed by summation of the products of the aircraft-miles flown on each interairport flight stage multiplied by the number of tons carried on that flight stage.

#### SCHEDULED SERVICE:

Transport service operated over an air carrier's certificated routes, based on published flight schedules, including extra sections and related nonrevenue flights.

#### SUPPLEMENTAL AIR CARRIER:

One of a class of air carriers now holding certificates, issued by the CAB, authorizing them to perform passenger and cargo charter services supplementing the scheduled service of the certificated route air carriers. Supplemental air carriers are often referred to as "nonskeds," i.e., non-scheduled carriers.

#### TRANSPORT RELATED EXPENSES:

Expenses from services related to air transportation such as in-flight sales of liquor, food and other items: ground, restaurant and food services, rental expense as lessor, interchange sales, general service sales, mutual aid, substitute service and air cargo service (other than actual air movement).

#### TRANSPORT RELATED REVENUES:

Revenues from services related to air transportation such as enumerated above "Transportation Related Expenses."

#### TRANSPORT REVENUES:

Revenues from transportation by air of all classes of traffic in scheduled and nonscheduled service, including the performance of charters.

#### Highway Terminology

#### FEDERAL EXPENDITURES:

Intergovernmental payments to the States, District of Columbia, and local governments plus direct expenditures for capital outlay, maintenance, administration, and research.

#### MUNICIPAL MILEAGE:

Roads inside city, municipal district, or urban boundaries: includes extensions of the state primary system, and state secondary roads within delimited incorporated and unincorporated places, and mileage under local control; e.g., local city streets, roads, and public ways not under State control within such places.

#### RURAL MILEAGE:

Roads outside city, municipal district, or urban boundaries.

## STATE AND LOCAL EXPENDITURES:

Disbursements for capital outlay, maintenance and traffic surfaces, administration, and research, highway law enforcement and safety, and interest on debt.

## STATE PRIMARY SYSTEM:

This refers to highways that have been so officially designated by States. They encompass the principal intercounty, intercity and interstate roads of all States.

## STATE SECONDARY ROADS:

This mileage is reported in the tables for the States (taken from the Highway Statistics 1970 Bulletin) that have designated both a primary and a secondary system.

## Automobile Terminology

### LOCAL RURAL ROADS:

Streets outside urban boundaries other than principal arteries of travel.

### MAIN RURAL ROADS:

Streets outside urban boundaries that are generally recognized as principal arteries of travel.

### PASSENGER-MILES:

This figure represents the total distance traveled by all passengers in passenger cars and taxis. One passenger traveling 1 mile generates 1 passenger-mile.

### REVENUES - TAXI:

Fares paid by passengers riding in taxis.

### VEHICLE-MILES:

Automobile vehicle-miles are estimated by calculating the number of gallons of gas sold from gasoline tax receipts and multiplying by the average number of miles per gallon.

### VEHICLE-MILES (BY TYPE OF STREET):

These figures represent the total number of miles traveled by passenger cars, taxis, and motorcycles on the different types of streets. One vehicle traveling 1 mile generates 1 vehicle-mile.

### URBAN STREETS:

Streets within urban boundaries.

## Bus Terminology

### COMMERCIAL BUS:

Any bus used to carry passengers at rates specified in tariffs; charges may be computed per passenger (as in regular route service) or per vehicle (as in charter service).

### EXPENDITURES – SCHOOL BUS:

This is the total expenditure for operation, maintenance, insurance, depreciation, operating taxes, licenses, and operating rents for vehicles used as school buses.

### INTERCITY BUS – CLASS I:

An interstate motor carrier of passengers with an average annual gross revenue of at least \$1,000,000 is defined by the ICC as a Class I carrier.

**INTERCITY BUS – TOTAL:**

This figure includes Class I, II, and III interstate carriers, all of which report to the Interstate Commerce Commission, and intrastate carriers.

**REVENUE PASSENGERS:**

Passengers on a commercial bus by or for whom a fare is paid.

**REVENUE PASSENGER-MILES:**

One revenue passenger carried 1 mile generates 1 passenger-mile. The revenue passenger miles reported thus represent the total distance traveled by all bus passengers.

**SCHOOL AND NONREVENUE BUS:**

Passengers using these are not directly charged for transportation, either on a “per passenger” or on a “per vehicle” basis.

**TAXES ASSIGNABLE TO OPERATIONS:**

Includes the amount of federal, state, county, municipal, and other taxing district taxes which relate to motor carrier operations and property use therein (except income taxes on ordinary income).

**VEHICLE-MILE:**

One vehicle traveling 1 mile generates 1 vehicle-mile. Total vehicle-miles, thus, gives the total mileage traveled by all vehicles.

**Truck Terminology****AVERAGE LENGTH OF HAUL (MILES):**

The total number of ton-miles divided by the total number of tons carried.

**ICC-REGULATED CARRIER:**

A motor common carrier operating in interstate commerce under a grant of authority from the Interstate Commerce Commission and subject to its economic regulation.

**NON-ICC-REGULATED CARRIER:**

A motor carrier not subject to the economic regulation of the ICC. The category includes intrastate carriers, private carriers hauling only the goods of their owners, and carriers of commodities, the transportation of which is exempt from ICC economic regulation.

**OPERATING EXPENSES:**

This includes expenditures for equipment maintenance, supervision, wages, fuel, equipment rental, terminal operations, insurance, safety, and administrative and general functions.

**OPERATING REVENUES OF CLASS I INTERCITY MOTOR CARRIERS:**

This term is defined by the ICC to include the five categories of revenue listed in the text.

**REVENUE:**

The total amounts received by carriers for transportation and other services.

**TON-MILES:**

The transportation of 1 short ton (2,000 lbs) of freight a distance of 1 mile generates a 1 ton-mile.

**VEHICLE-MILES:**

This term includes miles operated by power units upon urban streets, main rural roads, and local rural roads.

**Local Transit Terminology****HEAVY RAIL:**

Rail rapid transit services.

**LIGHT RAIL:**

Streetcar, trolley car, or light surface rail operations, including private right-of-way operations, typified by low platform stations, one-man operation at all times, capability for on-board fare collection, and actual on-board fare collection most of the time.

**MOTORBUS:**

Rubber tired, self-propelled transit vehicle with fuel supply carried on board the vehicle.

**OPERATING EXPENSES:**

These expenditures include outlays for maintenance, wages, fuel, licensing, insurance, rent, safety, operating taxes, and station operations.

**OPERATING REVENUE:**

Includes passenger revenue and revenue from charter and contract services.

**PASSENGER REVENUE:**

The total of all moneys paid by passengers to ride on scheduled trips. This includes single trip fares, and charges for transfers, weekly, monthly, and other unlimited-usage tickets.

**REVENUE PASSENGERS CARRIED:**

The total number of transit rides from origin to destination taken by passengers. Thus, a multi-vehicle ride would be counted only once. A ride by a nonrevenue passenger would not be counted.

**REVENUE VEHICLE-MILES:**

One vehicle (bus, trolley car, subway car, etc.) traveling 1 mile while revenue passengers are on board generates 1 revenue vehicle-mile. The revenue vehicle-miles reported thus represent the total mileage traveled by vehicles in scheduled or unscheduled revenue-producing services.

**TROLLEY COACH:**

A vehicle with the steering capability of a motor coach, running on rubber tires, but drawing power from electric overhead wires.

## Water Transport Terminology

### CLASS A CARRIERS BY INLAND AND COASTAL WATERWAYS:

A class A carrier by water is one with an average annual operation revenue that exceeds \$500,000.

### CLASS B CARRIERS BY INLAND AND COASTAL WATERWAYS:

A class B carrier by water is one with an average annual operating revenue greater than \$100,000 but less than \$500,000.

### COASTWISE TRAFFIC:

Domestic traffic is coastwise when it moves over the ocean, or the Gulf of Mexico; e.g., between New Orleans and Baltimore, New York and Puerto Rico, San Francisco and Hawaii, Puerto Rico and Hawaii. Traffic between Great Lakes ports and seacoast ports, when having a carriage over the ocean, is also deemed to be coastwise. The Chesapeake Bay and Puget Sound are considered internal bodies of water rather than arms of the ocean; traffic confined to these areas is deemed to be "internal" rather than coastwise.

### DOMESTIC FREIGHT:

All waterborne commercial movements between points in the United States, Puerto Rico and the Virgin Islands, excluding traffic with the Panama Canal Zone. Cargo moved for the military in commercial vessels is reported as ordinary commercial cargo; military cargo moved in military vessels is omitted.

### DOMESTIC PASSENGER:

Any person traveling on a public conveyance by water between points in the United States, Puerto Rico, and the Virgin Islands.

### DRY CARGO BARGES:

Large flat-bottomed, non-self-propelled vessels used to transport dry bulk materials such as coal and ore.

### EXPORTS:

Outbound international freight including re-export of foreign merchandise.

### IMPORTS:

Inbound international freight.

### INLAND AND COASTAL WATERWAYS INLAND AND COASTAL CHANNELS:

These terms include the Atlantic Coast Waterways, the Atlantic Intracoastal Waterway, the New York State Barge Canal System, the Gulf Coast Waterways, the Gulf Intracoastal Waterway, the Mississippi River System (including the Illinois Waterway), Pacific Coast Waterways, the Great Lakes, and all other channels (waterways) of the United States, exclusive of Alaska, that are usable for commercial navigation.

### INTERNAL TRAFFIC:

Traffic is internal when the entire movement between ports or landings takes place on inland waterways. The following types of movements are also termed internal: movements involving carriage on both inland waterways and waters of the Great Lakes, inland movements that cross short stretches of open waters that link inland systems; marine products, sand and gravel taken directly from beds of the oceans, the Gulf of Mexico and important arms thereof; and movements between offshore installations and inland waterways.



#### **INTERNATIONAL (FOREIGN) FREIGHT:**

Movements between the United States and foreign countries and between Puerto Rico, the Virgin Islands and foreign countries. Trade between U.S. territories and possessions (i.e., Guam, Wake, American Samoa, etc.) and foreign countries is excluded. Traffic to or from the Panama Canal Zone is included.

#### **INTERNATIONAL PASSENGER:**

Any person traveling on a waterborne public conveyance between the United States and foreign countries and between Puerto Rico and the Virgin Islands and foreign countries.

#### **INTRATERRITORIAL TRAFFIC:**

Traffic between ports in Puerto Rico and the Virgin Islands, which are considered as a single unit.

#### **LAKELIKE OR GREAT LAKES:**

These terms apply to traffic between U.S. ports on the Great Lakes system. The Great Lakes system is treated as a separate system rather than as a part of the inland system.

#### **LOCAL:**

Movements of freight within the confines of a port, whether the port has only one or several arms or channels, except car-ferry and general ferry, are termed "local." The term is also applied to marine products, sand, and gravel taken directly from the Great Lakes.

#### **MARITIME CARRIERS:**

Maritime carriers operate on the open sea; i.e., their operations must include a foreign or international component, and may include a domestic component.

#### **MARITIME REVENUE:**

Revenue received for operations in international or foreign shipping.

#### **NON-SELF-PROPELLED:**

Vessels not containing within themselves the means for their own propulsion.

#### **PASSENGER-MILE, INTERCITY:**

Moving one passenger one mile on a trip between two cities generates one intercity passenger mile.

#### **SELF-PROPELLED TOWBOAT:**

A compact, shallow-draft boat with a squared bow and towing "knees" for pushing tows of barges on inland waterways.

#### **SCOWS:**

Large, flat-bottomed non-self-propelled vessels used to transport sand, gravel, or refuse.

#### **TANK BARGES:**

Large, flat-bottomed non-self-propelled vessels used to transport fluids such as oils.

#### **TON-MILE:**

Moving one tone one mile generates one ton-mile.

**TON-MILE, DOMESTIC DEEP SEA:**

Moving one ton one mile by a domestic water carrier over open ocean generates one domestic deep-sea ton-mile.

**TONS OF FREIGHT HAULED:**

The figures for tons of freight hauled on domestic waterways include exports and imports.

**TUG:**

A strongly built boat used for towing and pushing, self-propelled.

**Railroad Terminology**

**AVERAGE HAUL:**

The average distance in miles that 1 ton was carried. It is computed by dividing the number of ton-miles generated by the number of tons carried to generate that number of ton-miles.

**AVERAGE PASSENGER TRIP LENGTH:**

Calculated by dividing the number of revenue passenger miles by the number of revenue passengers carried.

**CAR MILEAGE:**

Movement of a car 1 mile is a car-mile.

**CLASS I RAILROAD:**

A railroad with an annual operating revenue of greater than \$5,000,000. Effective January 1, 1976, the minimum annual operating revenue requirement was raised to \$10,000,000.

**COMMUTATION TICKET**

A ticket intended for use by a person traveling on a daily basis, i.e., to and from work; such a ticket is typically valid for an extended time period (i.e., a week or a month); the charge for such a ticket reflects a discount from the sum of the one-way fares that would be paid by the ticket-holder for the period of validity in the absence of such a reduced-rate ticket.

**EXPRESS REVENUE:**

Revenue from transportation of express shipments and from the use of facilities on trains and at stations incidental to such transportation.

**FREIGHT REVENUE:**

Revenue from the transportation of freight and from the exercise of transit, stop-off, diversion, and reconsignment privileges, as provided for in tariffs.

**LINE MILEAGE:**

The aggregate length of roadway of all line-haul railroads. It does not include the mileage of yard tracks or sidings, nor does it reflect the fact that a mile of railroad may include two or more parallel tracks. Jointly-used track is counted only once.

**LOCOMOTIVE MILEAGE:**

Movement of a locomotive unit 1 mile is a locomotive-mile.

**LOCOMOTIVES:**

Self-propelled units of equipment designed solely for moving other equipment.



#### MAIL REVENUE:

Revenue from the transportation of mail at established rates, and for services and facilities provided in connection with the handling of U.S. mail.

#### OPERATING EXPENSES:

Expenses of furnishing transportation service, including maintenance and depreciation.

#### OTHER REVENUE:

This is a general heading that includes revenues from miscellaneous operations (i.e., dining and bar car services), income from lease of road and equipment, miscellaneous rent income, income from non-operating property, profit from separately operated properties, dividend income, interest income, income from sinking and other reserve funds, release or premium on funded debt, contributions from other companies, and other miscellaneous income.

#### PASSENGER REVENUE – COMMUTATION:

Revenue from the sale of commutation tickets.

#### PASSENGER REVENUE – OTHER THAN COMMUTATION:

Revenue from the transportation of paying passengers not holding commutation tickets; this classification includes basic one-way and round trip fares, discounted fares offered for the clergy and military, special excursion fares offered to travelers meeting the requirements for eligibility for those fares, (i.e., origin/destination, time of travel, length of stay at destination), revenue from the extra charges made for occupancy of space in parlor and sleeping cars, and revenue from the transportation of corpses.

#### PASSENGER TRAIN CARS:

Cars typically found in passenger trains include coaches, sleeping cars (formerly called Pullman cars), parlor cars, dining cars, lounge cars, baggage cars, crew-dormitory cars, and observation cars.

#### REVENUE PASSENGERS CARRIED – COMMUTATION:

Number of one-way trips made by persons holding commutation tickets.

#### REVENUE PASSENGERS CARRIED – OTHER THAN COMMUTATION:

Number of one-way trips by passengers paying their fares at other than commutation ticket rates; this excludes passengers lawfully traveling without paying.

#### REVENUE PASSENGER-MILE:

One revenue passenger traveling 1 mile generates 1 revenue passenger-mile. The revenue passenger-miles reported thus represent the total distance traveled by all railroad passengers.

#### REVENUE TON-MILES:

The product of weight of the contents of a freight car in tons and the distance transported in miles; i.e.,  $n$  tons moving  $m$  miles generate  $n \times m$  ton-miles.

#### TOTAL OPERATING REVENUES:

The amount of money that carriers become entitled to receive from transportation and from operations incident thereto.

## Oil Pipeline Terminology

### **ICC-REGULATED PIPELINE:**

A pipeline company operating in interstate commerce under a grant of authorization from the Interstate Commerce Commission, and subject to economic regulation by the Commission. Such a pipeline company is required to report relevant statistics to the ICC.

### **NON-REGULATED PIPELINE:**

A pipeline company not operating as a common carrier in interstate commerce, hence neither required to secure a grant of operating authority from the Commission nor to report to it.

### **OPERATING EXPENSES:**

Expenditures necessarily made while providing services by which operating revenue is earned.

### **OPERATING REVENUE:**

Revenue from the transportation of oil and from services incidental to such transportation.

INCREASING TRENDS IN BICYCLE USAGE

The bicycle has long served as a form of recreation for children and adults and, to some extent, as a means of transportation. In these limited categories, bicycle use has increased steadily in recent years. This increase has been due to a number of factors, including the increasing cost of energy, the increasing cost of motor vehicles, the increasing cost of parking, and the increasing cost of public transportation. With the increasing cost of energy, the increasing cost of motor vehicles, the increasing cost of parking, and the increasing cost of public transportation, the bicycle has become a more attractive mode of transportation. The bicycle is also becoming a more popular mode of recreation. The number of bicycles in use has increased steadily in recent years. The number of bicycles in use in the United States is estimated to be 100 million. The number of bicycles in use in the United States is estimated to be 100 million. The number of bicycles in use in the United States is estimated to be 100 million.

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APPENDIX C

Bicycling: Its Role in Transportation and Traffic Safety Systems

Year	Domestic	Foreign	Total
1970	10.1	1.1	11.2
1971	10.2	1.2	11.4
1972	10.3	1.3	11.6
1973	10.4	1.4	11.8
1974	10.5	1.5	12.0
1975	10.6	1.6	12.2
1976	10.7	1.7	12.4
1977	10.8	1.8	12.6
1978	10.9	1.9	12.8
1979	11.0	2.0	13.0
1980	11.1	2.1	13.2
1981	11.2	2.2	13.4
1982	11.3	2.3	13.6
1983	11.4	2.4	13.8
1984	11.5	2.5	14.0
1985	11.6	2.6	14.2
1986	11.7	2.7	14.4
1987	11.8	2.8	14.6
1988	11.9	2.9	14.8
1989	12.0	3.0	15.0
1990	12.1	3.1	15.2

Source: Bicycle Manufacturers Association of America, Inc., 1100 Wisconsin Street, N.W., Suite 200, Washington, D.C. 20004.

Table 2 - USA Bicycle Market - Domestic and Imports by Category

Year	Lightweight	Hi-Wire	All Other	Total
1970	1.1	1.1	1.1	3.3
1971	1.2	1.2	1.2	3.6
1972	1.3	1.3	1.3	3.9
1973	1.4	1.4	1.4	4.2
1974	1.5	1.5	1.5	4.5
1975	1.6	1.6	1.6	4.8
1976	1.7	1.7	1.7	5.1
1977	1.8	1.8	1.8	5.4
1978	1.9	1.9	1.9	5.7
1979	2.0	2.0	2.0	6.0
1980	2.1	2.1	2.1	6.3
1981	2.2	2.2	2.2	6.6
1982	2.3	2.3	2.3	6.9
1983	2.4	2.4	2.4	7.2
1984	2.5	2.5	2.5	7.5
1985	2.6	2.6	2.6	7.8
1986	2.7	2.7	2.7	8.1
1987	2.8	2.8	2.8	8.4
1988	2.9	2.9	2.9	8.7
1989	3.0	3.0	3.0	9.0
1990	3.1	3.1	3.1	9.3

Source: Bicycle Manufacturers Association of America, Inc., 1100 Wisconsin Street, N.W., Suite 200, Washington, D.C. 20004.

## INCREASING TRENDS IN BICYCLE USAGE

The bicycle for many years served as a form of recreation for children and adults, and, to some extent, as a means of transportation for adults. In these limited activities, bicycling posed few problems beyond the bicyclist's consumption of his own physical energy. This situation has changed dramatically in recent years, especially during the period of fuel energy shortages and the attendant heavy increases in the cost of energy. With fuel energy shortages threatening the level of motor vehicle transportation, bicycling, while retaining its recreational utility, has assumed a new and significant role as a mode of highway transportation.

The number of bicycles in use and the estimated number of users for the past fifteen years are indicated in Tables 1 and 2. The increase in bicycles entering the U.S. marketplace is also shown in these tables. Specifically, the total nearly doubled from 1960 to 1968 [3.8 million to 7.5 million (Table 1)], and by 1973 reached an output of 15.3 million bicycles. Although the trend was reversed slightly in 1974, and significantly in 1975, due mainly to inventory reductions among wholesalers and retailers, the bicycles in use and the number of users have not decreased. In fact, the bicycle manufacturing industry anticipates an increase in production to nine million bicycles in 1976, and, with a steady annual increase in production, an estimated increase to about 110 million users by 1980. All of this points to the need for consideration of the vast presence of bicycles and bicyclists as factors in the problem areas relating to transportation, highway utilization, and traffic safety.

Table 1. U.S.-Manufactured and Imported Bicycles (millions per year)

Year	Domestic Shipments	Imports	Total U.S. & Imp.	Bikes in Use*	Est. Users*
1960	2.6	1.1	3.8	23.5	35.2
1965	4.6	1.0	5.7	32.9	49.3
1968	6.0	1.5	7.5	42.3	63.4
1969	5.1	2.0	7.1	47.7	71.5
1970	5.0	1.9	6.9	50.0	75.3
1971	6.6	2.3	8.9	53.1	79.6
1972	8.8	5.1	13.9	61.2	91.9
1973	10.1	5.2	15.3	70.0+	100.0+
1974	10.1	4.0	14.1	75.0+	100.0+
1975	5.6	1.7	7.3	75.0+	100.0+

\*Bikes-in-use estimate is based on an estimated bike "life" multiplied by a unit sales factor. Rentals and other multiple-use situations are calculated into the Estimated Users estimates. (Results of studies on estimated bike life are not yet available.)

Source: Bicycle Manufacturers Association of America, Inc., 1101 Fifteenth Street, N.W.—Suite 304, Washington, D.C. 20005

Table 2. USA Bicycle Market — Domestic and Imports by Category

Year	Million Units			Total
	Lightweights	Hi-Rise	All Other	
1960	.8	—	3.0	3.8
1965	1.3	1.3	3.1	5.7
1970	1.4	4.4	1.1	6.9
1971	3.8	4.1	1.0	8.9
1972	9.4	3.5	1.0	13.9
1973	10.6	3.8	.8	15.2
1974	10.3	3.1	.7	14.1
1975	4.4	2.5	.4	7.3

Source: Bicycle Manufacturers Association of America, Inc., 1101 Fifteenth Street, N.W.—Suite 304, Washington, D.C. 20005.

## RELATIONSHIP BETWEEN INCREASED USE OF BICYCLES BY ADULTS AND BICYCLIST FATALITIES

The sharp increase in bicycling has been accompanied by a shift in emphasis from recreational activity by children in their immediate neighborhoods to utility by adults, not only for recreational purposes, but also for transportation on highways and urban thoroughfares. This increased adult participation has correspondingly added to travel hazards for bicyclists, pedestrians, and motor vehicle drivers, and has been a direct influence in the increased number of fatalities to adults as compared to fatalities to very young people. Although the number of bicycle-related fatalities is far below the number related to motor vehicle accidents, there is reason for concern that, in the face of steadily increasing numbers of bicyclists, failure to regulate and standardize bicycling within the framework of highway and transportation regulations may perpetuate confusion and danger among bicyclists and motor vehicle operators.

The above facts are indicated statistically by the data of Table 3, which includes bicycles in use for a given year, total bicycle-related deaths for that year, and bicycle-related deaths by age for certain years between 1935 and 1974. In summary, the following items reflect concurrence between the general statements and the tabular data:

- The number of fatalities has more than doubled since 1935.
- The number of bicycles on the road has increased much faster than the occurrences of fatalities for the same period, so that the rate of deaths has in effect been reduced. The decreasing rate was rapid from 1935 to 1955, but then leveled off to a relatively stable rate in 1972, 1973, and 1974, coincident with the period of greatest bicycle production. Although the rate of fatalities is low with respect to the number of bicycles in use, it is quite high considering the ratio of actual deaths, say in 1972, to a previous year as close as 1970 (e.g., an increase of almost 39 percent).
- The percentage of deaths occurring to young people and adults has risen appreciably since 1960, at the same time that the rate of deaths occurring to very young people (below fifteen years of age) has notably diminished. This fact is consistent with the shift in the relative amount of bicycling carried on by the respective age groups.

Table 3. Bicycle Rates and Death by Age, 1935-1974

Year	Bicycles* (millions)	Deaths**	Death Rate***	Percent of Deaths by Age			
				All Ages	0-14	15-24	25 & Over
1935	3.5	450	12.80	100%	57	29	14
1940	7.8	750	9.59	100%	48	39	13
1945	9.0	500	5.55	100%	56	22	22
1950	13.8	440	3.18	100%	82	9	9
1955	23.1	410	1.78	100%	71	12	17
1960	28.2	460	1.63	100%	78	9	13
1965	38.8	680	1.75	100%	64	18	18
1970	56.5	800	1.42	100%	66	15	19
1971	n/a	820	n/a	100%	62	24	14
1972	71.4	1,110	1.55	100%	50	27	23
1973	80.0	1,017	1.27	100%	49	30	21
1974	90.0	987	1.10	100%	47	31	22

n/a — Data not available from National Safety Council

\*Bicycles in use for a given year is the ten-year total (that year and the previous nine years) of domestic production plus imports less exports.

\*\*Data on Deaths are from HEW National Center for Health Statistics.

\*\*\*Deaths per 100,000 bicycles in use.

Source: National Safety Council, *ACCIDENT FACTS* — 1975



## **LEGISLATION FOR INCREASING HIGHWAY SAFETY.**

### **Highway Safety Act of 1966**

When the Department of Transportation was established in 1966, it recognized and gave serious consideration to the upsurge in the use of bicycles, the shift in the nature and location of their use, and the relationship of bicyclists and pedestrians to the then restricted definition of highway and transportation programs. Concern for the pedestrian was first evident in legislation proposed in 1966 by the Department. The Highway Safety Act of 1966 considered means for assuring greater safety to pedestrians as part of the highway safety program.

### **Safety Program Initiatives in Federal Aid Highway Acts of 1973 and 1976**

New legislation in 1973 provided further relevance to the need for including bicycling and walking as integral parts of the highway safety problem by designating bicycle facilities (bikeways) and sidewalks as highway projects. In addition, the legislation required investigation of bicycle and pedestrian safety, and provided funds, through the National Highway Traffic Safety Administration and the Federal Highway Administration, for construction facilities, and for research, training, education, and creation of countermeasures in safety programs for bicyclists, pedestrians, and motor vehicle operators. These projects, which fitted within the expanded definition of highway programs, made funds available to the States to institute the federally motivated laws at the State and local levels. But the response by the States was disappointingly slight, and only a small amount of the available Federal funds was actually used. Conclusive reasons for this disappointing circumstance are not available, but the Federal agencies are attempting to learn the basis for this apparent lack of enthusiasm of the States and local governments for these funds.

The inadequacy of State and local government program activities, as noted in a 1974 report to Congress, and the disappointing response to the Federal Aid Highway Act of 1973, can conceivably be related to the nature of the funding allotted in that act. According to that legislation, modified by the recent Federal Aid Highway Act of 1976, facilities for bicycling and walking can be developed in two ways: (1) as incidental costs of highway projects, and (2) as projects undertaken independently of highway construction projects. The independent projects are now limited nationwide to \$45 million, with no State receiving more than \$2.5 million for bikeways and walkways. These funds are not additional funds provided for bikeways and walkways, but are limitations on the use of funds that are authorized and apportioned to the States for highway development. The amount of the funds that are used for bikeways, walkways, highways, and other authorized purposes are determined by State and local officials. The Federal Highway Administration will monitor the funding closely each year to ensure that the limitations have not been exceeded. It is hoped that the increase provided by the Federal Aid Highway Act of 1976 will encourage the States and local officials to develop and improve their bicycle facilities.

### **Modification of the Uniform Vehicle Code**

The great increase in adult use of bicycles has influenced a number of agencies whose objectives coincide with the need to assure safety on the highway to moving vehicles and pedestrians. Since adults using bicycles for transportation are compelled to use the same roads and highways as the motor vehicle drivers, it has become necessary to evaluate and legislate highway programs and laws to include the bicycle and other human-powered devices included in the definition of vehicle. The National Committee on Uniform Traffic Laws and Ordinances has accordingly modified and modernized the Uniform Vehicle Code. The bicyclist benefits from the laws by attaining eligibility status on the highway, but also assumes responsibility for observing the requirements set by the laws, and faces penalties for violating them just as originally prescribed for the motor vehicle driver.

## NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION (NHTSA) SAFETY PROGRAMS

The National Highway Traffic Safety Administration, in its continuing efforts to provide laws and guidelines for increasing safety for bicyclists and pedestrians and motor vehicle operators, has undertaken a number of safety research programs. Primary topics related to these programs are considered in the following subsections:

### A. In-Depth Accident Investigations

A current project by NHTSA is attempting to accomplish certain objectives related to accidents between bicyclist and driver.

- Identify behavioral errors by bicyclist and/or driver associated with the accident.
- Study relationship between severity of the accident and the configuration of the vehicle to determine the feasibility of potential vehicle design changes.
- Identify factors which lead to bicyclist injuries.

A very significant part of the study will require data collection on the causal factors leading to accidents. The data collected will be based on in-depth investigation of at least 700 bicycle accidents, and will involve the following considerations:

- Reconstruction of the accident
- Human factors analysis based on interviews either at the scene of the accident, or in person during follow-up procedures
- Evaluation of the injury information and coordination of medical reports with hospitals.

### B. Bicycle/Motor Vehicle Accident Types

A research project on bicycle/motor vehicle accidents was developed by NHTSA to fulfill the requirements in the Statement of Work for Solicitation Number NHTSA-4-A605, issued May 19, 1974. The report was intended to collect and analyze data about bicycle/motor vehicle accidents, and on the basis of information collected and data analyzed, to identify and evaluate countermeasures, and thus reduce the incidence of such accidents, or, if they occur, to minimize the consequences of the accidents. The final report will contain:

- A compilation of detailed data from a representative data base of 1100 cases. Data to be obtained by inspection of traffic accident report forms, on-site inspection, and interviews with victims and witnesses.
- Classification of accidents by combining events and factors causally related to the accident. Analysis of collected data to determine frequency and consequences of accident so classified.
- Statistical analyses to compare urban and rural accidents. This procedure will determine whether frequency, severity, and type of accidents have any relationship to the areas in which they occurred.
- Analysis of descriptive data to identify specific countermeasure targets. Targets are intended to include these possibilities:
  1. Homogeneous class of operators excessively involved in accidents.
  2. Locations where excessive numbers of accidents occur.
  3. Vehicle types which are too frequently involved in accidents relative to their number on the road.
  4. Conditions, such as operator, vehicle, roadway, and weather, under which accidents are more likely to occur.
- Use of the composite data to identify and evaluate potential accident countermeasures
- List of additional data requirements to identify accident types and specify research and development activities to develop and evaluate accident countermeasures.



### C. Data Sampling (PADSAP) Program

The National Highway Traffic Safety Administration has adopted a data sampling plan which is intended to provide regular inputs to traffic records systems. The data sampling is one phase of a plan known as the Pedestrian/Bicycle Accident Data Sampling Plan (PADSAP). Within three to four year (1979-1980) PADSAP will, on a regular basis, provide a national profile of bicycle/motor vehicle crashes based on in-depth investigation reports received from 350 jurisdictions. This data sampling will conform to the emphasis on research by NHTSA to identify causal/severity factors in bicycle/motor vehicle accidents, and to develop specific countermeasures.

### D. Pedalcyclist Safety Standard

The National Highway Traffic Safety Administration proposed, in early 1976, a new highway safety program standard to increase the safety of pedalcyclists. The standard is basically directed toward the pedalcyclist, whereas additional safety measures related to the bicycle itself and to bikeways, lanes, and paths are provided by the Consumer Product Safety Commission and the Federal Highway Administration. An important aspect of the NHTSA proposal is the stipulation that there be close cooperation between the Federal Government and the States in implementation of the proposed requirements, specifically:

- Each State would include human-powered devices in its definition of vehicle.
- Traffic laws which conform to the Rules of the Road and equipment requirements in the revised Uniform Vehicle Code.
- Accident reports are to be upgraded by each State to conform to the Accidents and Accident Reporting information contained in the revised Uniform Vehicle Code.
- Each State will evaluate its pedalcyclist safety program annually according to a cooperatively established methodology.

In addition, the proposed standard contains certain supplementary requirements which include:

- Designation of an agency or department as having primary responsibility for coordinating pedalcyclist safety programs.
- Assurance that bicycling offenses will be handled as part of the total traffic law enforcement function.
- Provision of information systems programs based on the highway safety program standards.
- Provision of education and training programs for in-school and community-wide pedalcyclists and those persons interacting with them.
- Adoption of laws and ordinances which will provide alternatives to monetary penalties.

## URBAN TRANSPORTATION PLANNING

Urban transportation planning is carried out at the local level under joint program regulation of the Federal Highway Administration and the Urban Mass Transportation Administration. Federal funds are made available to State and local governments for mass transit and highway planning for urban areas. In the latter category, a portion of the program referred to as the Transportation Systems Management element provides consideration of action to be taken to ensure the efficient use of road space. Among these actions are those for pedestrians and bicyclists, including:

- Bicycle paths and exclusive lanes
- Pedestrian malls
- Other means of separating pedestrians and vehicular traffic
- Secure and convenient storage areas for bicycles
- Bicycle facilities other than the above.

Acceptance of the bicycle as part of the overall transportation system of the Federal Highway Administration and the Urban Mass Transportation Administration (as well as the other Department of Transportation agencies) is evidenced by continuing efforts to include it in their overall transportation legislation and funding as well as in projects individually applicable to bicyclists and pedestrians.

THE UNITED STATES OF AMERICA

IN SENATE  
January 10, 1911.

REPORT  
OF THE  
COMMISSIONER OF THE GENERAL LAND OFFICE

IN RESPONSE TO A RESOLUTION PASSED BY THE SENATE  
MAY 15, 1908, CONCERNING THE  
LANDS BELONGING TO THE UNITED STATES

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