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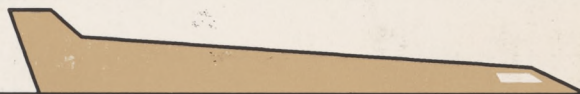
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National Transportation Statistics

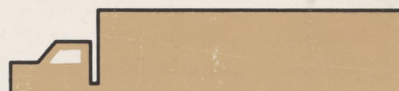
Annual Report

August 1984

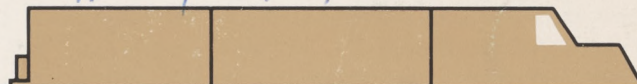
- ★ Air Carrier
- ★ General Aviation
- ★ Modal Profiles
- ★ Passenger Miles



- ★ Truck ★ Highway
- ★ Bus ★ Transportation Energy
- ★ Cargo Operation
- ★ Vehicle Miles



- ★ Railroads
- ★ Cost Data ★ Amtrak
- ★ Operating Expenses / Revenue
- ★ Local Transit



- ★ Automobile
- ★ Performance Indicators
- ★ Economic Data
- ★ Inventory



- ★ Water Transit
- ★ Recreational Boating
- ★ Transportation Trends
- ★ Safety Statistics



- ★ Oil pipeline
- ★ Natural Gas Pipeline
- ★ Energy Cost and Consumption
- ★ Pipeline Milage



Transportation Systems Center

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16. Abstract This report is a summary of selected national transportation statistics from a wide variety of government and private sources. 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. A supplementary section includes Transportation and the Economy and Energy in Transportation. Energy in Transportation is divided into four parts: Energy Consumption, Energy Transport, Energy Intensiveness, and Energy Supply and Demand. Also included are the operating costs of automobiles of different sizes. In this edition, the selected data cover the period 1971 through 1981/1982.					
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CONVERSION FACTORS

Heat Content for Various Fuels

Fuel Oils		Natural Gasoline	4,620,000 Btu/bbl
Crude	5,800,000 Btu/bbl	Petroleum Coke	6,024,000 Btu/bbl
Residual	6,287,000 Btu/bbl	Asphalt	6,636,000 Btu/bbl
Motor Gasoline	5,253,000 Btu/bbl	Wax	5,537,000 Btu/bbl
Aviation Gasoline	5,048,000 Btu/bbl	Road Oil	6,636,000 Btu/bbl
Jetfuel (Kerosene)	5,670,000 Btu/bbl	Natural Gas	
Jetfuel (Naphtha)	5,355,000 Btu/bbl	Liquid	3,925,000 Btu/bbl
Distillate (Diesel Oil)	5,825,000 Btu/bbl	Dry (Non-utility)	1,016 Btu/ft
Crude Petroleum	5,800,000 Btu/bbl	Coal	
Ethane	3,082,000 Btu/bbl	Anthracite	25,170,000 Btu/Short Ton
Still Gas	6,000,000 Btu/bbl	Bituminous and Lignite	25,070,000 Btu/Short Ton
Lubricants	6,065,000 Btu/bbl	Coke	26,000,000 Btu/Short Ton
		Electricity Consumption	3,412 Btu/kWh

Volume Conversions

From	To	in. ³	ft ³	U.S. gal	Imp. gal	liter	bbl
in. ³	1	1	5.787 x 10 ⁻⁴	4.329 x 10 ⁻³	3.605 x 10 ⁻³	0.01639	1.031 x 10 ⁻⁴
ft ³	1728	1	1	7.481	6.2292	28.32	0.1781
U.S. gal	231	0.1337	0.1337	1	0.8327	3.785	2.381 x 10 ⁻²
Imp. gal	277.4	0.1606	0.1606	1.201	1	4.545	2.859 x 10 ⁻²
liter	61.02	3.531 x 10 ⁻²	3.531 x 10 ⁻²	0.2642	0.2200	1	6.29 x 10 ⁻³
bbl	9702	5.615	5.615	42	34.972	158.97	1

Mass Conversions

From	To	lb (avoirdupois)	kg	Short ton	Long ton	Metric ton
lb (avoirdupois)	1	1	0.4536	5.0 x 10 ⁻⁴	4.4643 x 10 ⁻⁴	4.5362 x 10 ⁻⁴
kg	2.205	1	1	1.1023 x 10 ⁻³	9.8425 x 10 ⁻⁴	1.0 x 10 ⁻³
Short ton	2000	907.2	1	1	0.8929	0.9072
Long ton	2240	1016	1.12	1	1	1.016
Metric ton	2205	1000	1.102	0.9842	1	1

Length Conversions

From	To	cm	in.	ft	yd	m	mile	km
cm	1	1	0.3937	3.281 x 10 ⁻²	1.0936 x 10 ⁻²	1.0 x 10 ⁻²	6.214 x 10 ⁻⁶	1.0 x 10 ⁻⁵
in.	2.54	1	1	8.333 x 10 ⁻²	2.778 x 10 ⁻²	2.54 x 10 ⁻²	1.578 x 10 ⁻⁵	2.54 x 10 ⁻⁵
ft	30.48	12	1	1	0.333	0.3048	1.894 x 10 ⁻⁴	3.048 x 10 ⁻⁴
yd	91.44	36	3	1	1	0.9144	5.682 x 10 ⁻⁴	9.144 x 10 ⁻⁴
m	100	39.37	3.281	1.0936	1	1	6.214 x 10 ⁻⁴	1.0 x 10 ⁻³
mile	160,934	63,360	5280	1760	1609	1	1	1.609
km	100,000	39,370	3281	1093.6	1000	0.6214	1	1

Energy Conversions

From	To	ft-lb	kg-m	hp-hr	Metric hp-hr	Btu	kWhr	Joule
ft-lb	1	1	0.1383	5.0505 x 10 ⁻⁷	5.12 x 10 ⁻⁷	1.285 x 10 ⁻³	3.766 x 10 ⁻⁷	1.356
kg-m	7.233	1	1	3.653 x 10 ⁻⁶	3.704 x 10 ⁻⁶	9.295 x 10 ⁻³	2.724 x 10 ⁻⁶	9.80665
hp-hr	1.98 x 10 ⁶	2.7375 x 10 ⁵	1	1	1.0139	2544	0.7457	2.6845 x 10 ⁶
Metric hp-hr	1.953 x 10 ⁶	270,000	0.9863	1	1	2510	0.7355	2.648 x 10 ⁶
Btu	778.2	107.6	3.93 x 10 ⁻⁴	3.985 x 10 ⁻⁴	1	1	2.931 x 10 ⁻⁴	1055
kWhr	2.655 x 10 ⁶	3.671 x 10 ⁵	1.341	1.3596	3412	1	1	3.6 x 10 ⁶
Joule	0.7376	0.10197	0.3725 x 10 ⁻⁶	0.3777 x 10 ⁻⁶	0.9478 x 10 ⁻³	0.2778 x 10 ⁻⁶	1	1

1 quad Btu = .4724 million bbl crude per day = .1724 billion barrels crude per year

INTRODUCTION

Developing and maintaining vital transportation statistics is one of the missions of the U.S. Department of Transportation's Transportation Systems Center (TSC). This publication is produced to support this mission and is intended to disseminate national transportation and energy statistics to the transportation and energy communities.

While most of these statistics are available from various sources such as government agencies and trade associations, they are presented here in one convenient and comprehensive report. Particular attention has been taken in documenting the sources of all data. These sources are noted either on the same page as the data or in Appendix A -- Source Information.

The reader is urged to utilize the Source Information, and to go directly to the given source for any additional information or explanation regarding the data in this Publication.

Four different formats are used -- 1) Tree Displays, 2) Modal Profiles, 3) Performance Indicators, and 4) Transportation Trends -- to spotlight various aspects of the major transportation modes. In addition, two supplemental data sections detail the role of transportation in the economy and the relation of energy to transportation. Time series transportation statistics are presented for the period 1972-1982/1983. Energy consumption and supply-and-demand data cover the same period and extend back to 1955.

TREE DISPLAYS

Figure 2 illustrates the interrelations of the various modes via a tree display. This format presents the relationship between and within each transportation mode for the following areas:

- Expenditures and Revenues
- Vehicle-Miles
- Passenger-Miles
- Cargo Ton-Miles
- Number of Vehicles
- Number of Fatalities
- Energy Consumed

Because of the variety of data sources, the totals may not always equal the sums of the subordinate data. Sources for each statistic may be found by tracing its parenthetical reference number to Appendix A. Where data are not available or not applicable, the block contains the letters "n/a".

MODAL PROFILES

The Modal Profiles present cost, inventory, and performance data comparisons for 1972, 1981, and 1982. Not all of the types of data in these profiles are available for every mode, nor are they always applicable.

The following list indicates the type of data usually included to each group:

I. Cost

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

II. Inventory

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

III. Performance

- | | |
|----------------------------------|-----------------------------------|
| A. Vehicle-Miles | G. Average length of freight haul |
| B. Passenger-miles | H. Average speed |
| C. Number of passengers carried | I. Number of fatalities |
| D. Ton-miles | J. Number of fatal accidents |
| E. Tons of freight hauled | K. Total number of accidents |
| F. Average passenger trip length | L. Fatality and accident rates |

SELECTED PASSENGER AND CARGO PERFORMANCE INDICATORS

Selected modal statistics that are calculated on a per capita, per vehicle, or per mile basis are presented here for 1972, 1981, and 1982.

TRANSPORTATION TRENDS

This section includes transportation statistics from 1972 through 1982, using tables and graphs to indicate shifts in cost, inventory, and performance data.

SUPPLEMENTARY DATA

The first of the two supplementary sections "Transportation and the Economy," uses tabular and graphic statistics for the years 1972-1982 from the U.S. Department of Commerce report "Survey of Current Business" to show transportation's function in the economy and vice versa. The second section, "Energy in Transportation," deals with Energy Consumption, Energy Intensiveness, Energy Transport, and Energy Supply and Demand for the years 1972-1982 and 1983 when available.

APPENDIX A - SOURCE INFORMATION

Appendix A is a detailed list of data sources used by this publication. For the tree displays, parenthetical numbers in the figures indicate the data source in the appendix.

APPENDIX B - GLOSSARY

In order to clarify definitions, a glossary has been assembled and divided according to transportation modes. Existing glossaries such as in the Civil Aeronautics Board "Handbook of Airline Statistics" were used in assembling this glossary. The lack of comparable glossaries in other statistical handbooks, however, makes it difficult to prepare a complete dictionary.

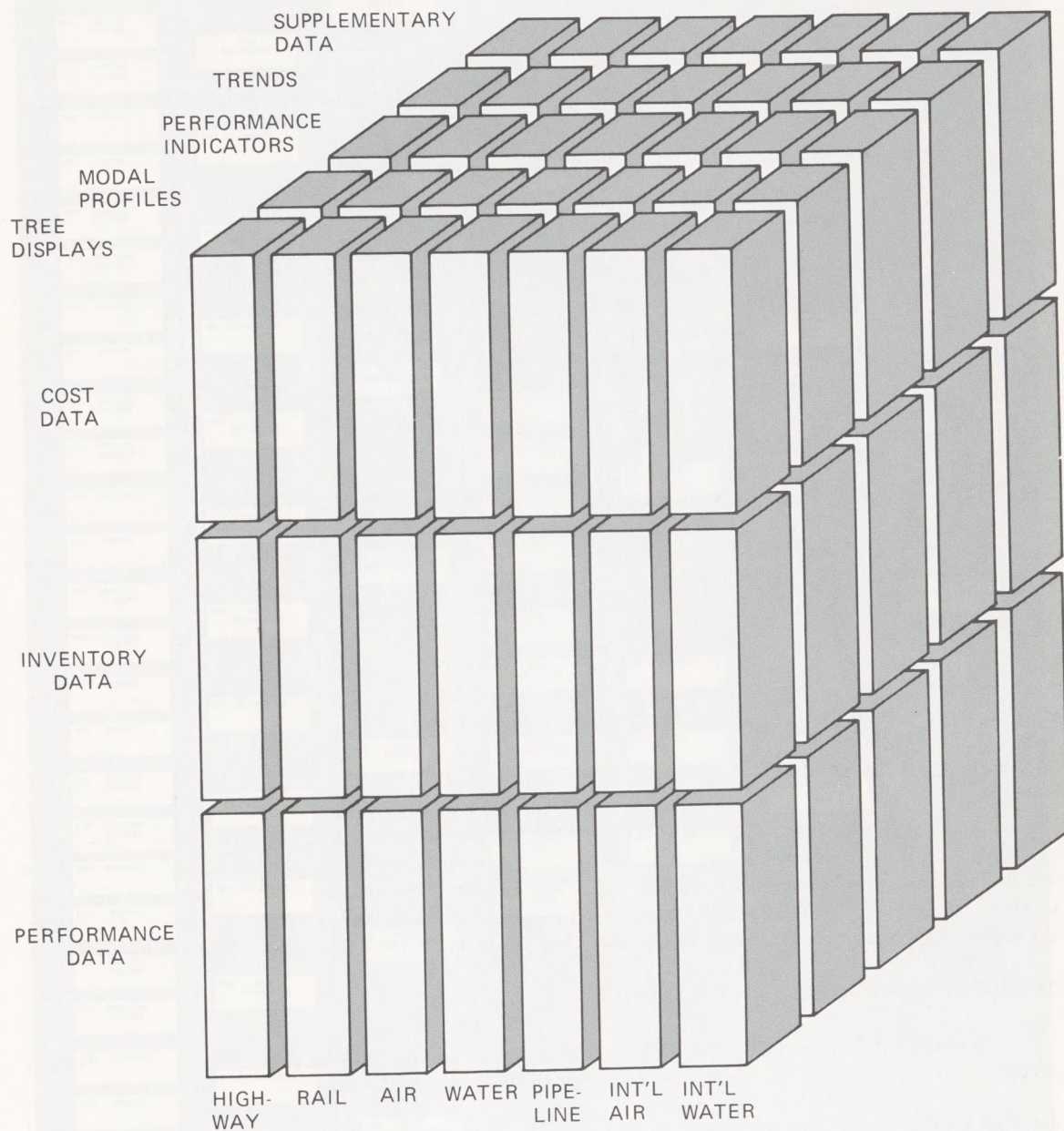
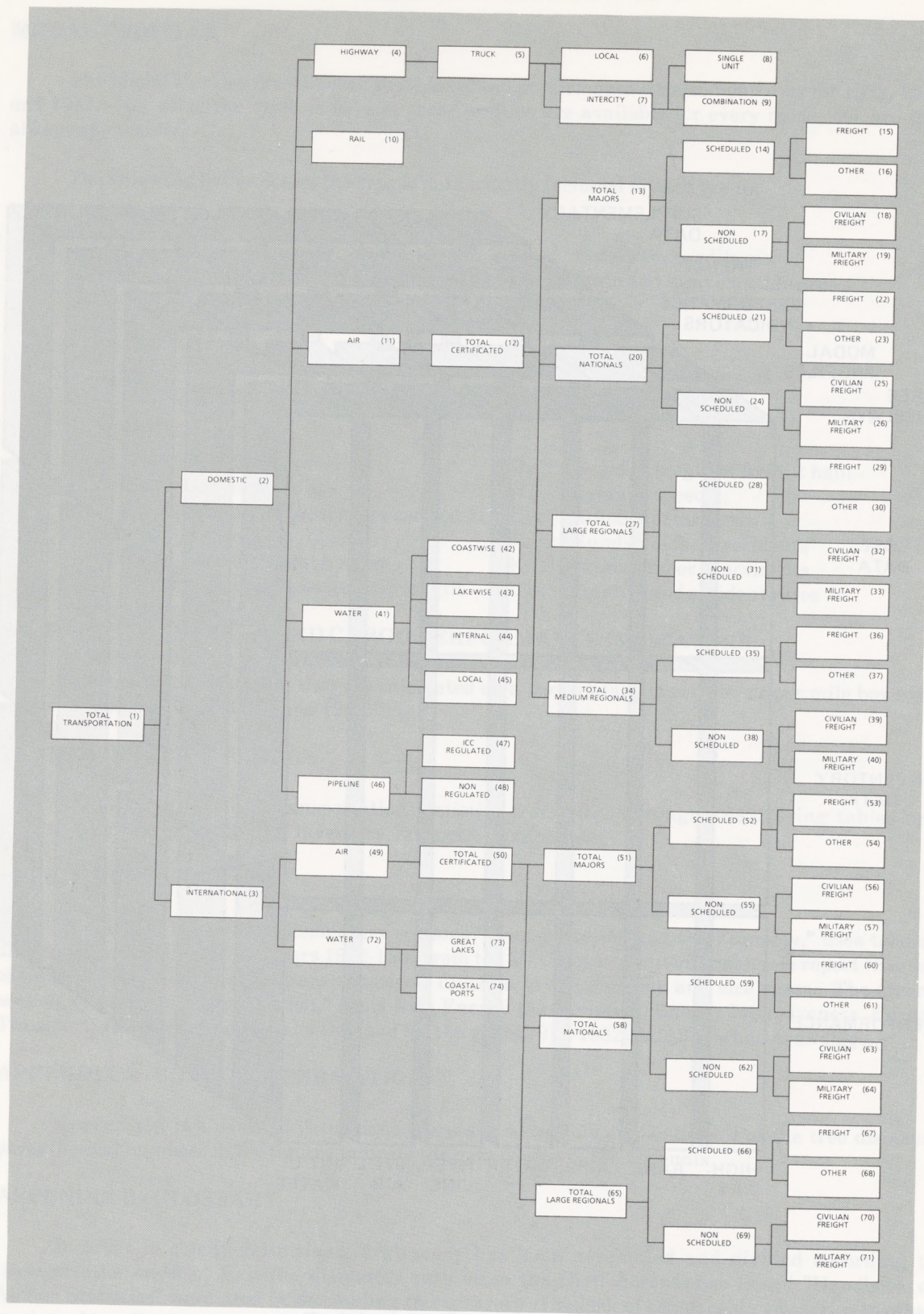


Figure 1. Organization of the Data

Figure 2. Modal Structure



TREE DISPLAYS 1982

Figure 3. Expenditures and Revenues (\$ Millions) - 1982

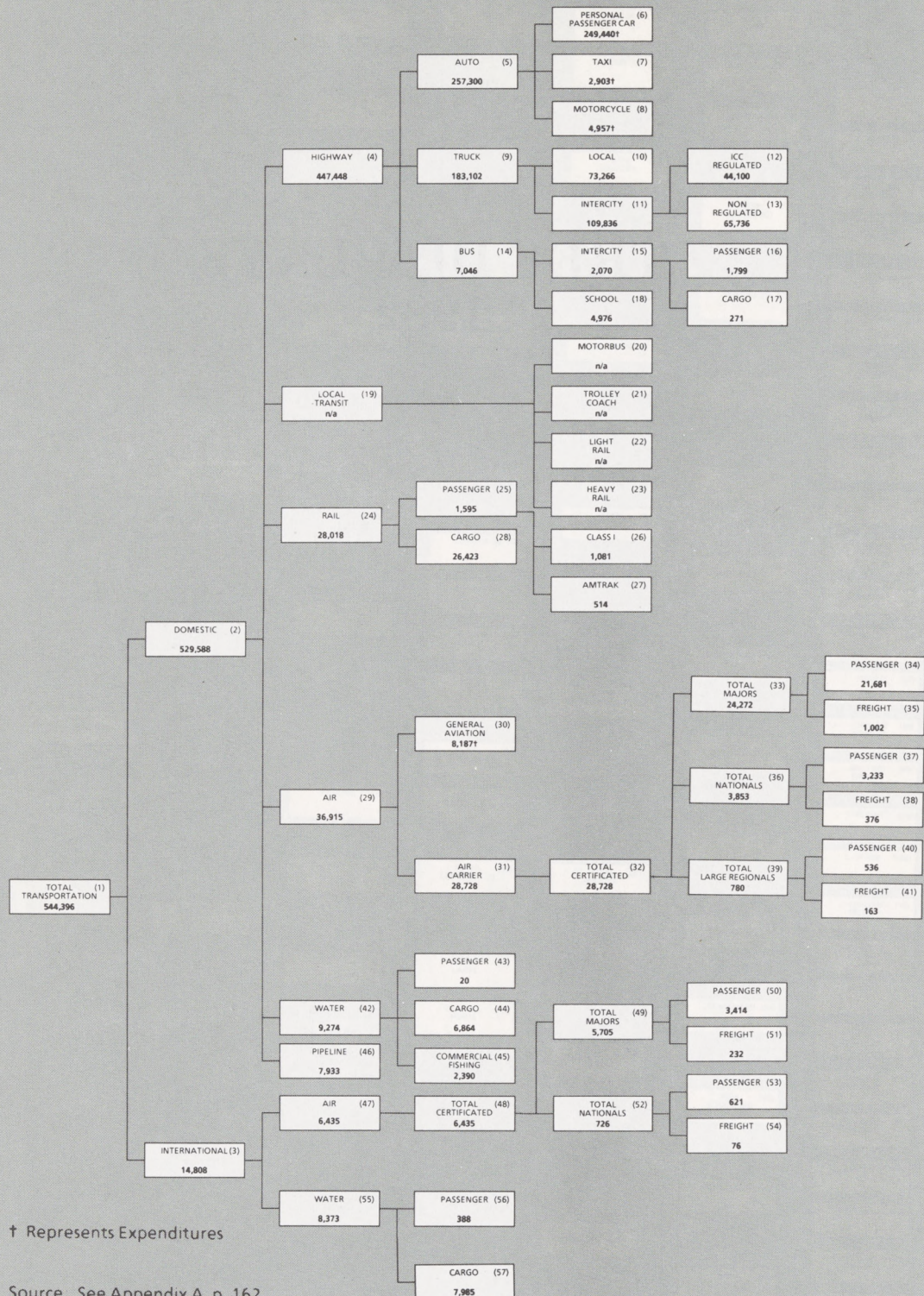
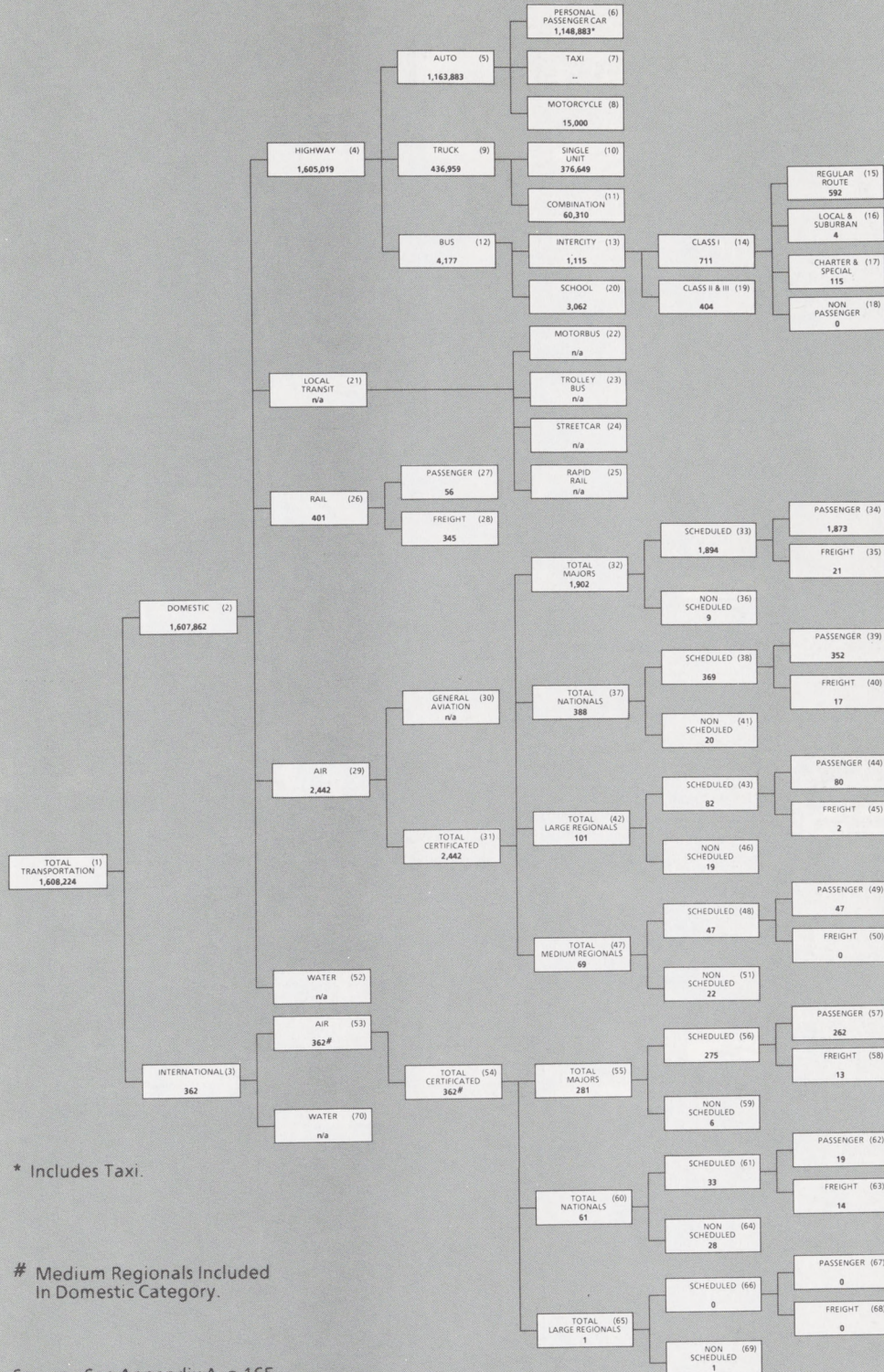


Figure 4. Vehicle-Miles (Millions) - 1982

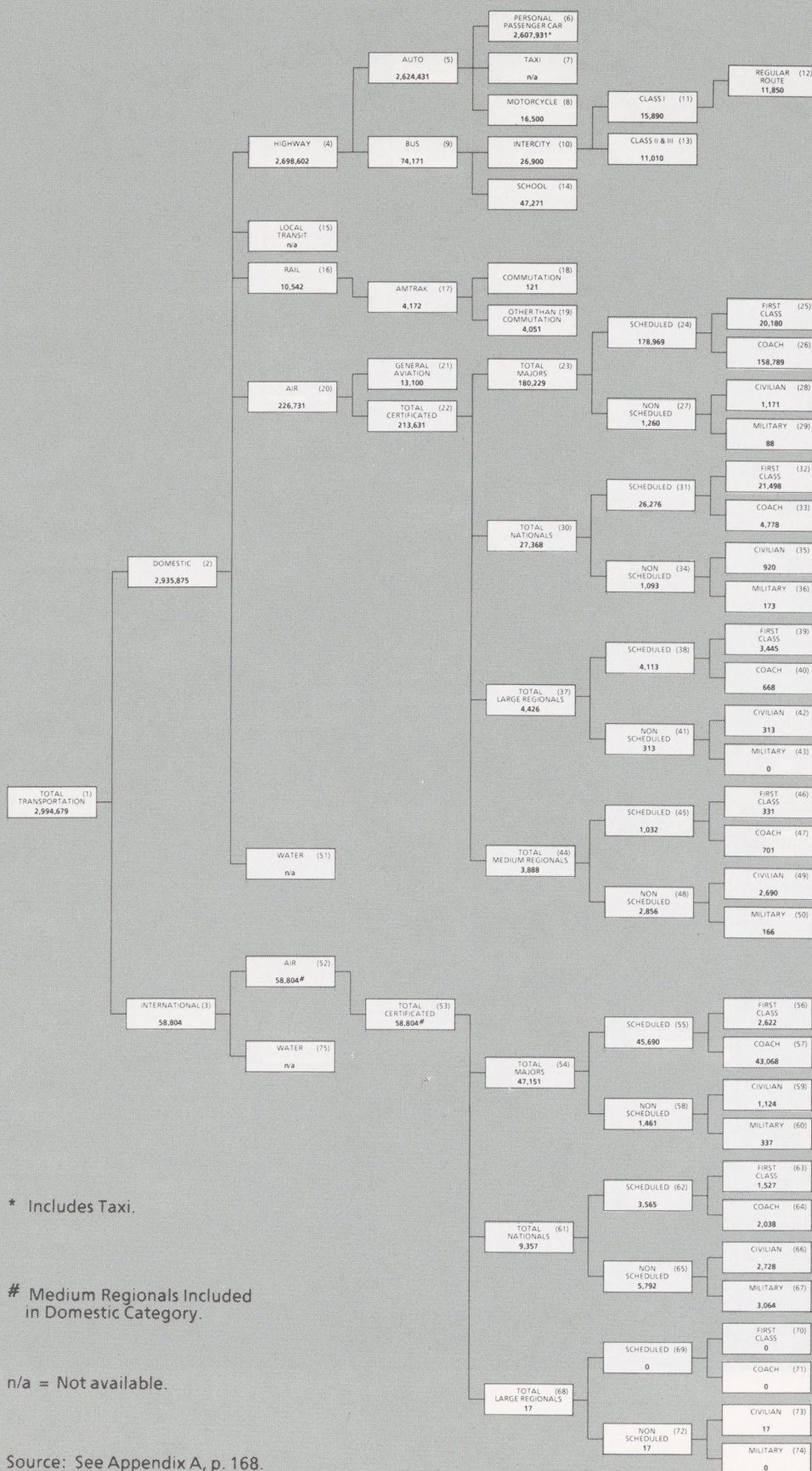


* Includes Taxi.

Medium Regionals Included In Domestic Category.

Source: See Appendix A, p.165.

Figure 5. Passenger-Miles (Millions) - 1982



* Includes Taxi.

Medium Regionals Included in Domestic Category.

n/a = Not available.

Source: See Appendix A, p. 168.

Figure 6. Cargo Ton-Miles (Millions) - 1982

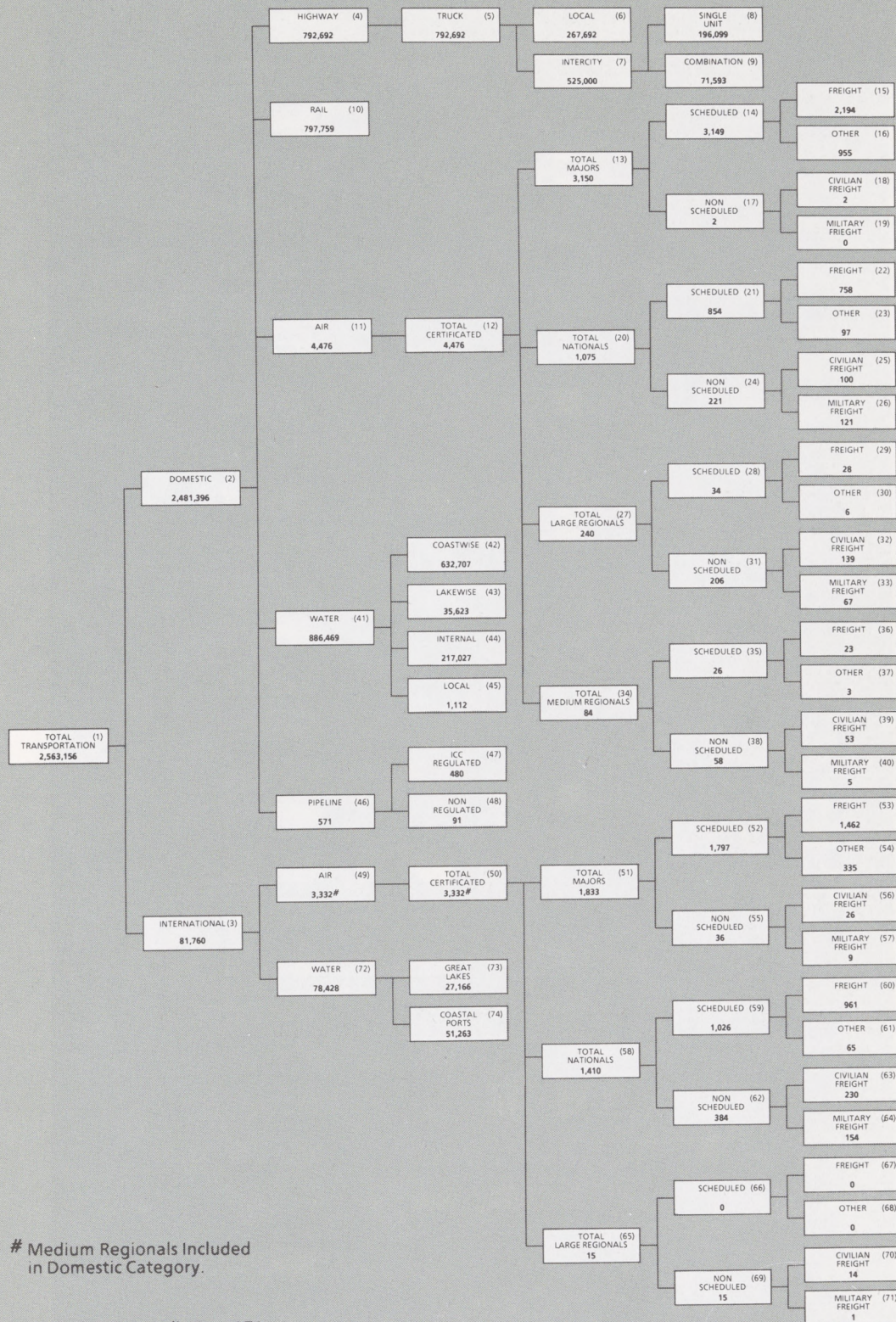


Figure 7. Number of Vehicles - 1982

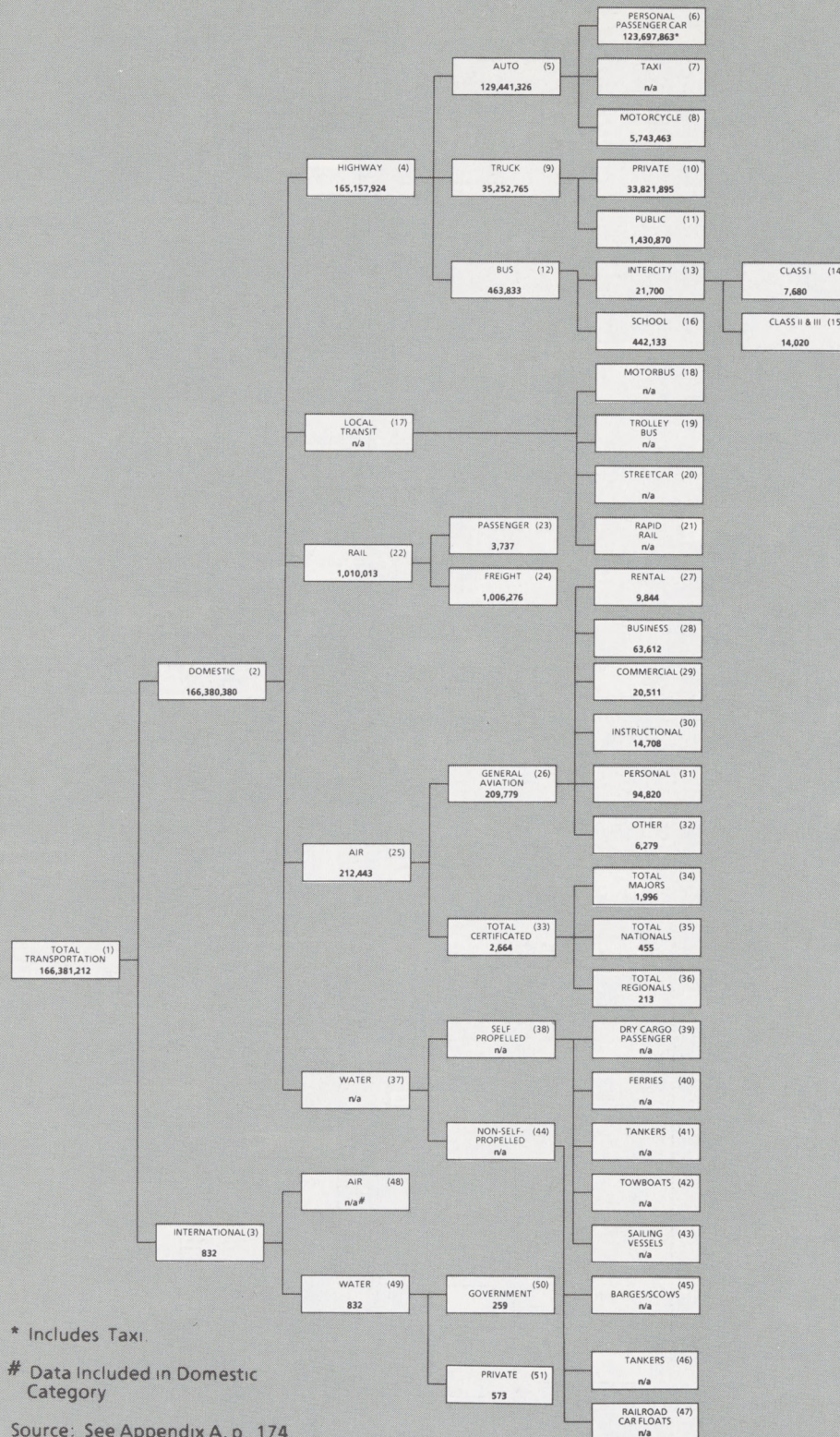
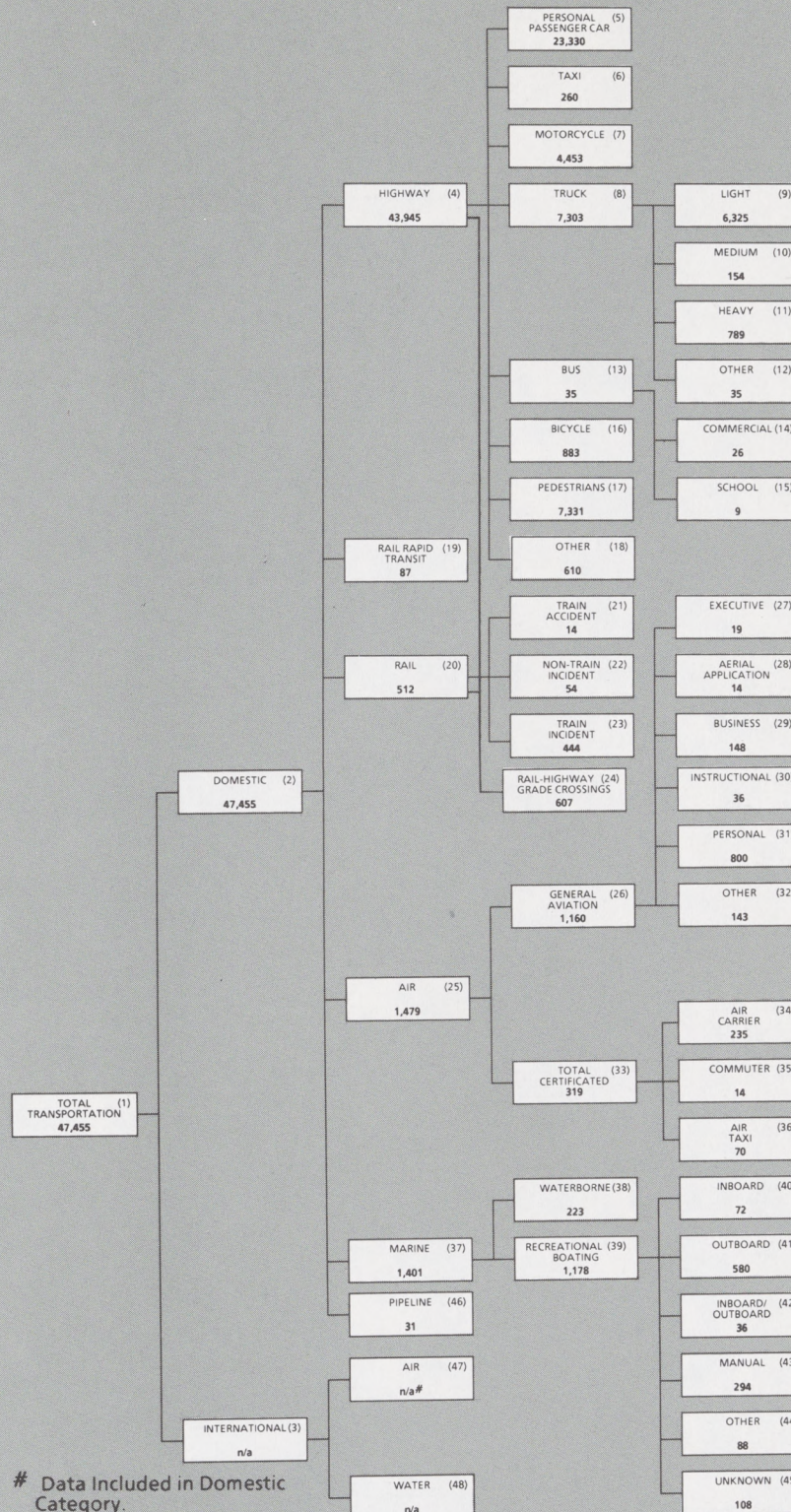


Figure 8. Number of Fatalities - 1982

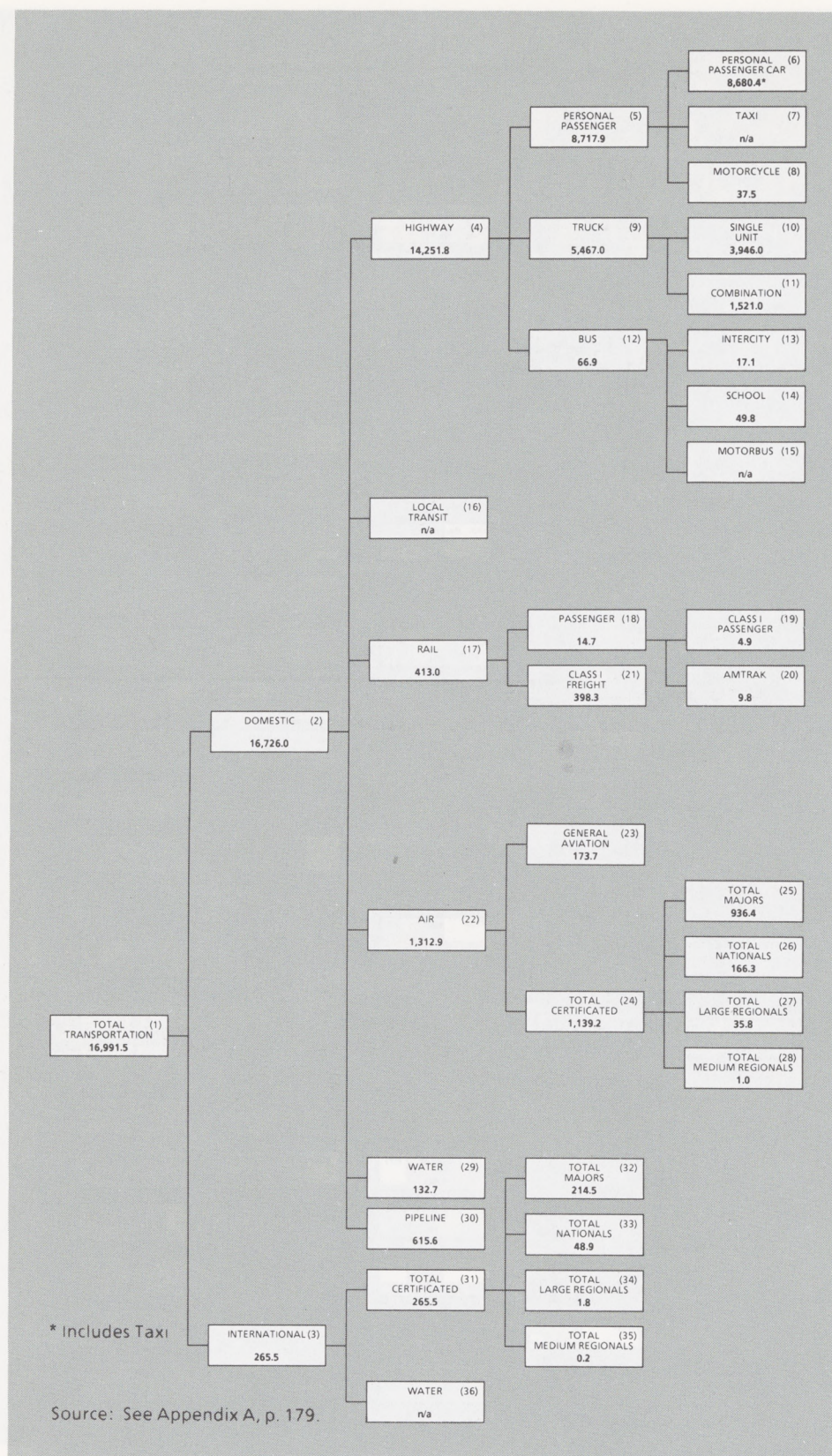


Data Included in Domestic Category.

n/a Data not available.

Source: See Appendix A, p. 176.

Figure 9. Energy Consumed in Transportation (figures in 10¹² BTU) - 1982



MODAL PROFILES 1972, 1981 and 1982

MODAL PROFILE SOURCE REFERENCES AND PERCENT CHANGE CALCULATION

Specific source references are obtained as follows: the letter directly to the right of the data element applies to all subsequent data elements in that column until the next letter appears. In some cases, data are shown which may not appear directly in the sources listed. These were obtained by addition/subtraction of referenced data or of other data in its column, and are marked with an asterisk.

Air Carrier Profile

For example:

1982

330.6 q

306.6

24.0

57.0 s

reference letter q

also applies to the two
subsequent data elements

reference letter s refers to
a different data source

The specific source number and page or table reference may then be found at the end of each modal profile. All sources are listed in Appendix A--Source Information.

The Percent Change 1981-1982 column refers to the usual percent difference between 1981 data and 1982 data. The average annual percent change 1972-1982 is equal to $C \times 100$, where C is obtained from the following relationship: $D^{82} = D^{72} (1 + C)^{10}$. (Note D^{72} and D^{82} refer to 1972 and 1982 data, respectively; C is the change; and the relationship is derived from the compound interest formula.)

AIR CARRIER PROFILE

				1972-1982 Average Annual % Change	1981-1982 % Change	
I.	FINANCIAL	1972	1981 ¹	1982 ¹		
	Operating Revenues (\$ millions)					
	Domestic					
	Majors, all services	n/a	24,713.6 ^a	24,272.1 ^a	-	-1.8
	Scheduled services	n/a	23,792.1	23,228.5	-	-2.4
	Nonscheduled services	n/a	111.6	106.0	-	-5.0
	Transport related	n/a	809.9	937.6	-	15.8
	Nationals, all services	n/a	3,718.1 ^b	3,853.1 ^b	-	3.6
	Scheduled services	n/a	3,516.0	3,660.5	-	4.1
	Nonscheduled services	n/a	81.8	72.3	-	-11.6
	Transport related	n/a	120.3	120.2	-	-0.1
	Large Regionals, all services	n/a	355.9 ^d	780.0 ^d	-	119.2
	Scheduled Services	n/a	305.1	632.6	-	107.3
	Nonscheduled Services	n/a	43.0	128.0	-	197.7
	Transport related	n/a	7.8	19.3	-	147.4
	International					
	Majors, all services	n/a	5,743.6 ^e	5,705.0 ^e	-	-0.7
	Scheduled services	n/a	5,480.0	5,362.0	-	-2.2
	Nonscheduled services	n/a	47.8	108.8	-	127.6
	Transport related	n/a	215.8	233.8	-	8.3
	Nationals, all services	n/a	646.6 ^f	730.0 ^f	-	12.9
	Scheduled services	n/a	398.1	480.2	-	20.6
	Nonscheduled Services	n/a	246.4	242.0	-	-1.8
	Transport related	n/a	2.1	8.0	-	281.0
	Total Certificated	n/a	36,211.0 ^s	36,065.5 ^s	-	-0.4
	Operating Expenses (\$ millions)					
	Domestic					
	Majors, all services	n/a	25,156.0 ^a	25,019.0 ^a	-	-0.5
	Nationals, all services	n/a	3,554.8 ^b	3,850.0 ^b	-	8.3
	Large Regionals, all services	n/a	340.4 ^d	768.7 ^d	-	125.8
	International					
	Majors, all services	n/a	5,898.0 ^e	5,674.2 ^e	-	-3.8
	Nationals, all services	n/a	677.0 ^f	777.6 ^f	-	14.9
	Total Certificated	n/a	36,611.8 ^s	36,804.3 ^s	-	0.5
II.	INVENTORY ²					
	Number of Carriers					
	Total Domestic and					
	International	39.0 ^j	86.0 ^j	84.0 ^j	8.0	-2.3
	Majors	n/a	12.0	11.0	-	-8.3
	Nationals	n/a	17.0	15.0	-	-11.7
	Regionals #	n/a	57.0	58.0	-	1.8

AIR CARRIER PROFILE (Cont.)

	<u>1972</u>	<u>1981¹</u>	<u>1982¹</u>	<u>1972-1982</u> <u>Average</u> <u>Annual</u> <u>% Change</u>	<u>1981-1982</u> <u>% Change</u>
Number of Aircraft Available for Service					
Total Domestic and International					
Majors	2,518.0	2,763.0 ²	2,664.0 ²	0.6	-3.6
Nationals	n/a	2,092.0	1,996.0	-	-4.6
Regionals #	n/a	406.0	455.0	-	12.1
Number of Employees					
Total Domestic and International					
Majors	301,593.0	343,367.0 ²	331,989.0 ²	1.0	-3.3
Nationals	n/a	291,375.0	276,871.0	-	-5.0
Regionals #	n/a	45,428.0	44,384.0	-	-2.3
	n/a	6,564.0	10,734	-	63.5

III. PERFORMANCE

Aircraft Revenue-Miles (millions)

Domestic					
Certificated, all services	2,074.3 ^k	2,442.4 ^m	2,442.3 ^m	1.7	0.0
Scheduled services	1,999.5	2,396.0	2,387.2	1.8	-0.4
Nonscheduled services	42.2	46.4	55.1	2.7	18.8
Majors, all services	n/a	1,953.4 ^o	1,902.2 ^o	-	-2.6
Scheduled services	n/a	1,943.8	1,893.7	-	-2.6
Nonscheduled services	n/a	9.6	8.5	-	-11.5
Nationals, all services	n/a	366.7 ^q	388.4 ^q	-	5.9
Scheduled services	n/a	346.9	368.7	-	6.3
Nonscheduled services	n/a	19.8	19.7	-	-0.5
Large Regionals, all services	n/a	55.8 ^t	101.4 ^t	-	81.7
Scheduled services	n/a	42.2	82.0	-	94.3
Nonscheduled services	n/a	13.6	19.4	-	42.7
International					
Certificated, all services	n/a	356.3 ^u	362.2 ^u	-	1.7
Scheduled services	n/a	307.3	311.7	-	1.4
Nonscheduled services	n/a	49.0	50.5	-	3.0
Majors, all services	n/a	280.9 ^v	281.0 ^v	-	0.0
Scheduled services	n/a	278.3	275.1	-	1.2
Nonscheduled services	n/a	2.6	5.9	-	127.0
Nationals, all services	n/a	67.5 ^w	60.7 ^w	-	-10.1
Scheduled services	n/a	27.7	32.5	-	17.3
Nonscheduled services	n/a	39.8	28.2	-	-29.2
Large Regionals, all services	n/a	4.0 ^y	1.4 ^y	-	-65.0
Scheduled services	n/a	1.0	0.0	-	100.0
Nonscheduled services	n/a	3.0	1.4	-	-53.3
Medium Regionals, all services					
Domestic and International	n/a	70.5 ^{aa}	69.3 ^{aa}	-	-1.7
Total Certificated*	n/a	2,869.2	2,873.8	-	0.2

AIR CARRIER PROFILE (Cont.)

	1972	1981 ¹	1982 ¹	1972-1982 Average Annual % Change	1981-1982 % Change
Aircraft Revenue-Hours (thousands)					
Domestic					
Certificated, all services	5,135.8 ^k	6,080.4 ^m	5,962.5 ^m	1.5	-1.9
Scheduled services	4,944.9	5,949.4	5,807.9	1.6	-2.4
Nonscheduled services	100.0	131.0	154.6	4.5	18.0
Majors, all services	n/a	4,546.8 ^o	4,406.0 ^o	-	-3.1
Scheduled services	n/a	4,526.1	4,387.4	-	-3.1
Nonscheduled services	n/a	20.7	18.6	-	-10.1
Nationals, all services	n/a	976.2 ^q	1,013.9 ^q	-	3.9
Scheduled services	n/a	919.2	958.1	-	4.2
Nonscheduled services	n/a	57.0	55.8	-	-2.1
Large Regionals, all services	n/a	207.4 ^t	313.7 ^t	-	51.3
Scheduled services	n/a	164.8	257.1	-	56.0
Nonscheduled services	n/a	42.6	56.6	-	32.9
International					
Certificated, all services	n/a	729.9 ^u	739.8 ^u	-	1.4
Scheduled services	n/a	621.9	632.3	-	1.7
Nonscheduled services	n/a	108.0	107.5	-	-0.5
Majors, all services	n/a	568.3 ^v	566.8 ^v	-	-0.3
Scheduled services	n/a	563.0	554.7	-	-1.5
Nonscheduled services	n/a	5.3	12.1	-	128.3
Nationals, all services	n/a	139.1 ^w	123.3 ^w	-	-11.4
Scheduled services	n/a	54.3	64.7	-	19.2
Nonscheduled services	n/a	84.8	58.6	-	-30.9
Large Regionals, all services	n/a	12.3 ^y	4.2 ^y	-	-65.9
Scheduled services	n/a	4.0	0.0	-	-100.0
Nonscheduled services	n/a	8.3	4.2	-	-49.4
Medium Regionals, all services					
Domestic and International	n/a	360.3 ^{aa}	274.4 ^{aa}	-	-23.8
Total Certificated*	n/a	7,170.6	6,976.7	-	-2.7
Revenue Passenger-Miles (millions)					
Domestic					
Certificated, all services	123,101.2 ^k	201,434.8 ^m	213,631.2 ^m	5.7	6.1
Scheduled services	118,137.9	198,715.0	210,149.3	5.9	5.8
Nonscheduled services	3,682.0	2,719.8	3,481.9	-0.6	28.0
Majors, all services	n/a	173,560.2 ^o	180,228.6 ^o	-	3.8
Scheduled services	n/a	172,164.7	178,968.9	-	4.0
Nonscheduled services	n/a	1,395.5	1,259.6	-	-9.7
Nationals, all services	n/a	25,149.1 ^q	27,368.2 ^q	-	8.8
Scheduled services	n/a	24,216.0	26,275.6	-	8.5
Nonscheduled services	n/a	933.1	1,092.6	-	17.1
Large Regionals, all services	n/a	1,647.6 ^t	4,426.4 ^t	-	168.7
Scheduled services	n/a	1,598.8	4,113.1	-	157.3
Nonscheduled services	n/a	48.8	313.3	-	542.0
International					
Certificated, all services	n/a	58,628.5 ^u	58,803.6 ^u	-	0.3
Scheduled services	n/a	50,173.0	49,494.6	-	-1.4
Nonscheduled services	n/a	8,455.5	9,309.0	-	10.1
Majors, all services	n/a	47,876.1 ^v	47,150.6 ^v	-	-1.5
Scheduled services	n/a	47,442.4	45,689.5	-	-3.7
Nonscheduled services	n/a	433.7	1,460.8	-	236.8

AIR CARRIER PROFILE (Cont.)

		1972	1981 ¹	1982 ¹	1972-1982 Average Annual % Change	1981-1982 % Change
Nationals, all services	n/a		10,227.9 ^w	9,356.7 ^w	-	-8.5
Scheduled services	n/a		2,648.0	3,564.8	-	34.6
Nonscheduled services	n/a		7,579.9	5,791.8	-	-23.6
Large Regionals, all services	n/a		250.8 ^y	16.7 ^y	-	-93.3
Scheduled services	n/a		54.3	0.0	-	-100.0
Nonscheduled services	n/a		196.5	16.7 ^y	-	-91.5
Medium Regionals, all services						
Domestic and International	n/a		1,351.9 ^{aa}	3,887.5 ^{aa}	-	187.6
Total Certificated*	n/a		261,415.2	276,322.3		5.7
Revenue Passenger Enplanements (millions)						
Domestic						
Certificated, all services	n/a		267.3 ^m	276.8 ^m		3.6
Scheduled services	n/a		265.3	274.3	-	3.4
Nonscheduled services	n/a		2.0	2.5	-	25.0
Majors, all services	n/a		206.3 ^o	209.2 ^o	-	1.4
Scheduled services	n/a		205.4	208.4	-	1.5
Nonscheduled services	n/a		0.9	0.8	-	-11.0
Nationals, all services	n/a		51.4 ^q	54.5 ^q	-	6.0
Scheduled services	n/a		50.6	53.8	-	6.3
Nonscheduled services	n/a		0.8	0.7	-	-12.5
Large Regionals, all services	n/a		4.9 ^t	94.9 ^t	-	93.9
Scheduled services	n/a		4.9	4.9	-	85.7
Nonscheduled services	n/a		0.0	0.0	-	+
International						
Certificated, all services	n/a		23.2 ^u	22.7 ^u	-	-2.2
Scheduled services	n/a		20.7	19.8	-	-4.4
Nonscheduled services	n/a		2.5	2.9	-	16.0
Majors, all services	n/a		19.5 ^v	18.7 ^v	-	-4.1
Scheduled services	n/a		19.4	18.2	-	-6.2
Nonscheduled services	n/a		0.1	0.5	-	400.0
Nationals, all services	n/a		3.3 ^w	2.9 ^w	-	-12.1
Scheduled services	n/a		1.2	1.4	-	16.7
Nonscheduled	n/a		2.1	1.5	-	-28.6
Large Regionals, all services	n/a		0.2 ^y	0.02 ^y	-	-90.0
Scheduled services	n/a		0.1	0.0	-	-100.0
Nonscheduled services	n/a		0.1	0.02	-	-80.0
Medium Regionals, all services						
Domestic and International	n/a		4.9 ^{aa}	4.7 ^{aa}	-	-4.1
Total Certificated*	n/a		295.4	304.2	-	3.0
Revenue Passenger Load Factor (%)						
Domestic						
Certificated, scheduled services	n/a		57.4 ^m	58.5 ^m	-	1.9
Majors, scheduled services	n/a		57.0 ^o	58.6 ^o	-	2.8
Nationals, scheduled services	n/a		61.3 ^q	58.7 ^q	-	-4.2
Large Regionals, scheduled services	n/a		57.1 ^t	54.9 ^t	-	-3.9
International						
Certificated, scheduled services	n/a		67.7 ^u	61.4 ^u	-	-3.6
Majors, scheduled services	n/a		63.4 ^v	60.7 ^v	-	-4.3
Nationals, scheduled services	n/a		71.2 ^w	72.9 ^w	-	2.4
Medium Regionals, all Services						
Domestic and International	n/a		45.3 ^{aa}	48.2 ^{aa}	-	6.4

AIR CARRIER PROFILE (Cont.)

		<u>1972</u>	<u>1981¹</u>	<u>1982¹</u>	<u>1972-1982 Average Annual % Change</u>	<u>1981-1982 % Change</u>
U.S. International Passenger Travel						
Total Passenger-Arrivals (thousands)	n/a		20,881.0 ^{bb}	20,216.0 ^{bb}	-	-3.2
Flag of Carrier:						
United States	n/a		10,265.0	10,163.0	-	-1.0
Foreign	n/a		10,615.0	10,054.0	-	-5.3
Total Passenger-Departures	n/a		19,911.0	19,332.0	-	-3.0
Flag of Carrier:						
United States	n/a		9,581.0	9,485.0	-	-1.0
Foreign	n/a		10,330.0	9,837.0	-	-4.8
Revenue Ton-Miles (\$millions)						
Domestic						
Certificated, all services	n/a		24,801.1 ^m	25,838.7 ^m	-	4.2
Scheduled services	n/a		24,219.2	25,057.5	-	3.5
Nonscheduled services	n/a		582.0	781.2	-	34.2
Majors, all services	n/a		20,678.7 ^o	21,173.2 ^o	-	2.4
Scheduled services	n/a		20,537.1	21,045.6	-	2.5
Nonscheduled services	n/a		141.6	127.6	-	-9.9
Nationals, all services	n/a		3,695.8 ^q	3,811.6 ^q	-	3.1
Scheduled services	n/a		3,425.1	3,481.9	-	1.7
Nonscheduled services	n/a		270.7	329.8	-	21.8
Large Regionals, all services	n/a		315.6 ^t	682.4 ^t	-	116.2
Scheduled services	n/a		180.5	445.3	-	146.7
Nonscheduled services	n/a		135.2	237.2	-	75.4
International						
Certificated, all services	n/a		9,122.1 ^u	9,212.2 ^u	-	1.0
Scheduled services	n/a		7,729.6	7,792.8	-	0.8
Nonscheduled services	n/a		1,392.5	1,419.4	-	1.9
Majors, all services	n/a		6,645.6 ^v	6,547.8 ^v	-	-1.5
Scheduled services	n/a		6,579.7	6,366.2	-	-3.2
Nonscheduled services	n/a		65.9	181.6	-	175.6
Nationals, all services	n/a		2,364.5 ^w	2,346.0 ^w	-	-0.8
Scheduled services	n/a		1,139.8	1,382.7	-	21.3
Nonscheduled services	n/a		1,224.7	963.3	-	-21.3
Large Regionals, all services	n/a		44.5 ^y	17.0 ^y	-	-61.8
Scheduled services	n/a		7.1	0.0	-	-100.0
Nonscheduled services	n/a		37.4	17.0	-	-54.6
Medium Regionals, all services						
Domestic and International	n/a		178.8 ^{aa}	472.8 ^{aa}	-	164.4
Total Certificated*	n/a		34,101.9	35,524.0	-	4.2
Revenue Ton-Miles of Freight (millions) ³						
Domestic						
Certificated, all services	n/a		4,657.8 ^m	4,475.6 ^m	-	-3.9
Scheduled services	n/a		4,347.8	4,042.6	-	-7.0
Nonscheduled services	n/a		310.0	432.9	-	39.6
Majors, all services	n/a		3,322.8 ^o	3,150.2 ^o	-	-5.2
Scheduled services	n/a		3,320.7	3,148.6	-	-5.2
Nonscheduled services	n/a		2.1	1.6	-	-23.8
National, all services	n/a		1,181.0 ^q	1,074.8 ^q	-	-9.0
Scheduled services	n/a		1,003.6	854.3	-	-14.9
Nonscheduled services	n/a		177.4	220.5	-	24.3
Large Regionals, all services	n/a		150.9 ^t	242.7 ^t	-	60.8
Scheduled Services	n/a		20.6	36.9	-	79.1
Nonscheduled services	n/a		130.3	205.8	-	57.9

AIR CARRIER PROFILE (Cont.)

	1972	1981 ¹	1982 ¹	1972-1982 Average Annual % Change	1981-1982 % Change
International					
Certificated, all services	n/a	3,259.2 ^u	3,331.9 ^u		2.2
Scheduled services	n/a	2,712.3	2,843.4	-	4.8
Nonscheduled services	n/a	546.9	488.5	-	-10.7
Majors, all services	n/a	1,857.9 ^v	1,832.8 ^v	-	-1.4
Scheduled services	n/a	1,835.4	1,797.2	-	-2.1
Nonscheduled services	n/a	22.5	35.5	-	57.8
Nationals, all services	n/a	1,341.7 ^w	1,410.2 ^w	-	5.1
Scheduled services	n/a	875.0	1,026.2	-	17.3
Nonscheduled services	n/a	466.7	384.0	-	-17.7
Large Regionals, all services	n/a	19.4 ^y	15.3 ^y	-	-21.0
Scheduled services	n/a	1.7	0.0	-	-100.0
Nonscheduled services	n/a	17.7	15.3	-	-13.6
Medium Regionals, all services					
Domestic and International	n/a	43.6 ^{aa}	84.1 ^{aa}	-	92.9
Total Certificated*	n/a	7,960.6	7,891.5	-	-0.9
Air Carrier Accidents					
Operating under 14 CFR 121					
All scheduled services	46.0 ^{cc}	25.0 ^{cc}	16.0 ^{cc}	-10.0	-36.0
Nonscheduled services	1.0	1.0	2.0	7.2	100.0
Operating under 14 CFR 135					
All scheduled services	n/a	31.0	27.0	-	-12.9
Nonscheduled (On-demand					
Air Taxis)	n/a	157.0	133.0	-	-15.3
Total	46.0	214.0	178.0	14.5	-16.8
Fatal Air Carrier Accidents					
Operating under 14 CFR 121					
All scheduled services	7.0	4.0	5.0	-3.3	25.0
Nonscheduled services	0.0	0.0	0.0	0.0	0.0
Operating under 14 CFR 135					
All scheduled services	n/a	9.0	5.0	-	-44.4
Nonscheduled (On-demand					
Air Taxis)	n/a	40.0	30.0	-	-25.0
Total	7.0	53.0	40.0	19.0	-24.5
Air Carrier Fatalities					
Operating under 14 CFR 121					
All scheduled services	186.0	4.0	235.0	2.4	5,775.0
Nonscheduled services	0.0	0.0	0.0	0.0	0.0
Operating under 14 CFR 135					
All scheduled services	n/a	34.0	14.0	-	-58.8
Nonscheduled (On-demand					
Air Taxis)	n/a	94.0	70.0	-	-25.5
Total	186.0	132.0	319.0	5.5	141.7

n/a = not available.

+ not calculable.

* Data derived by addition/subtraction and may not appear directly in the data source.

Regionals includes both large and medium regionals.

1 Domestic encompasses operations within and between the 50 states of the United States, the District of Columbia, Puerto Rico and the Virgin Islands. It also encompasses Canadian and Mexican transborder operations. All other operations are considered International. Beginning in 1981, referred to as Form 41.

2 Includes scheduled and nonscheduled (charter) operators. By Sec. 2 of the Airline Deregulation Act of 1978 Act "charter air carrier" and "charter air transportation" replaced supplemental air carriers and supplemental air transportation which were formerly sec. 101(36) and (37) of the Act. The 24 pre-deregulation supplemental carriers all now have scheduled service authority.

3 Scheduled includes total of freight, air express, U.S. mail and foreign mail. Nonscheduled includes total of civilian freight and other revenue; also military freight and other revenue.

AIR CARRIER PROFILE (Cont.)

The following data references are listed in Appendix A, p.182.

Source	Reference Number/Location
a	13)p. 3
b	13)p. 27
c	13)p. 43
d	13)p. 45
e	13)p. 4
f	13)p. 28
g	13)p. 56
h	13)p. 44
j	12) CAB, Financial and Cost Analysis Division
k	15)p. 106
m	14)p. 2
n	15)p. 197
o	14)p. 5
q	14)p. 46, 47
s	13)p. 1
t	14)p. 83, 85
u	14)p. 3
v	14)p. 6
w	14)p. 47, 48
y	14)p. 84, 86
aa	14)p. 112, 113
bb	55) Tables IIa and IIb
cc	56) Annual issues

GENERAL AVIATION PROFILE

				1972-1982		
				Average		
				Annual		
				% Change	1981-1982	
					% Change	
I.	FINANCIAL	1972	1981	1982		
	Expenditures (\$ millions)					
	Aircraft	559.0 ^a	3,753.0 ^b	2,814.0 ^b	17.5	-25.0
	Operating Costs	2,975.0	5,638.0	5,373.0	6.1	-4.7
	Total	3,204.0	9,391.0	8,187.0	9.8	12.8
II.	INVENTORY					
	Number of Active Aircraft					
	Executive	n/a	18,582.0 ^d	15,739.0 ^d	-	-15.3
	Business	n/a	47,716.0	47,873.0	-	0.3
	Commuter Carrier	n/a	1,023.0	1,070.0	-	4.2
	Instructional	n/a	14,993.0	14,708.0	-	-1.9
	Personal	n/a	95,510.0	94,820.0	-	-0.7
	Aerial Application	n/a	11,360.0	11,319.0	-	-0.4
	Air Taxi	n/a	7,226.0	8,122.0	-	12.4
	Rental	n/a	10,585.0	9,844.0	-	-7.0
	Other Work*	n/a	1,491.0	1,733.0	-	16.2
	Other	n/a	4,741.0	4,546.0	-	-4.1
	Total	145,010.0 ^c	213,227.0	209,779.0	3.8	-1.6
III.	PERFORMANCE					
	Number of Hours Flown (millions) ¹					
	Personal	7.6 ^c	8.2	8.2	0.8	0.0
	Business	7.2	8.1	6.9	-0.4	-14.8
	Commuter Carrier	n/a	1.0	1.1	-	10.0
	Air Taxi	n/a	2.8	3.2	-	14.3
	Instructional	6.8	5.6	4.9	-3.2	-12.5
	Executive	n/a	6.2	5.0	-	-19.4
	Rental	n/a	3.8	2.9	-	-23.7
	Other Work*	n/a	0.4	0.5	-	25.0
	Aerial Application	n/a	3.8	3.3	-	-13.2
	Other	0.5	0.8	0.6	1.8	-25.0
	Total	27.0	40.7	36.5	3.1	-10.3
	Number of Fatalities					
	Instructional	80.0 ^e	63.0 ^e	36.0 ^e	-7.7	-42.9
	Personal	794.0	738.0	800.0	0.1	8.4
	Business	173.0	145.0	148.0	-1.6	2.1
	Executive	46.0	99.0	19.0	-8.5	-80.8
	Aerial Application	46.0	34.0	14.0	-11.2	-58.8
	Other	93.0	182.0	143.0	-4.4	-21.4
	Total	1,232.0	1,261.0 ^g	1,160.0	-0.6	-8.0
	Accidents					
	Fatal	653.0 ^f	654.0 ^f	578.0 ^f	-1.2	-11.6
	Total	4,109.0	3,502.0	3,216.0	-2.4	-8.2
	Accident Rate per 100,000 Aircraft					
	Hours Flown					
	Fatal	2.7	1.8	1.8	-4.0	0.0
	Total	16.8	9.5	10.0	-5.1	5.3

GENERAL AVIATION PROFILE (Cont.)

n/a = not available

* Classified as Industrial Special in 1972.

1 Note: For 1972 only, Business includes business & executive, Instructional includes training and rental. The following data references are listed in Appendix A, p. 182.

Source	Reference Number/Location	Source	Reference Number/Location
a	25) p. 5	d	44) Table 2-4, 2-9
b	27) p. 5	e	22) personal communication
c	43) Tables 8.3, 8.6	f	53) Charts 25, 26, 28, 29

HIGHWAY PROFILE

				1972-1982	
				Average	
				Annual	1981-1982
				% Change	% Change
I.	FINANCIAL	1972	1981	1982	
Government Expenditures (\$ millions)					
Federal					
	Highway Trust Fund	176.0 ^a	340.0 ^a	272.0 ^a	4.5
	Other	355.0*	587.0*	948.0*	10.3
	Total Federal	531.0	927.0	1,220.0	8.7
State and local					
	State and D.C.	15,499.0	25,413.0	25,062.0	5.0
	Local	7,150.0*	14,820.0	16,730.0	8.9
	Total State and local	22,649.0	40,233.0*	41,792.0*	6.3
	Total	23,180.0	41,160.0	43,012.0	6.4
II.	INVENTORY**				
Rural Mileage					
	Under State Control	712,093.0 ^b	725,850.0 ^c	825,385.0 ^c	1.5
	Under local control				
	County roads	1,736,385.0	1,587,256.0	1,509,453.0	-1.4
	Town and township roads	483,174.0	491,220.0	440,831.0	-0.9
	Other local roads	32,464.0	157,868.0	189,506.0	19.3
	Total	2,252,023.0	2,236,344.0	2,139,790.0	-0.5
	Under Federal Control	209,171.0	256,257.0	260,565.0	2.2
Urban Mileage					
	Under State Control	79,966.0	90,349.0	102,671.0	2.5
	Under local control				
	County roads	n/a	60,571.0	68,339.0	-
	Town and township roads	n/a	56,432.0	46,334.0	-
	Other local roads	n/a	423,125.0	421,699.0	-
	Total	533,460.0	540,128.0	536,372.0	0.1
	Under Federal Control†	n/a	1,536.0	1,513.0	-
	Total Urban Mileage	613,426.0	632,013.0	640,556.0	0.4
	Total Rural and Urban Mileage	3,786,713.0	3,852,697.0	3,866,296.0	0.2

* Figure obtained by addition/subtraction and may not appear directly in data source.

** 1981 and 1982 now based on merged Highway Performance Monitoring System (HPMS) data & may vary from previous years.

n/a = not available

Source: The following data references are listed in Appendix A, p. 182.

Source	Reference
	Number/Location
a	45) Table HF-10
b	45) Table M-1
c	45) Table HM-10

AUTOMOBILE PROFILE

				1972-1982 Average Annual % Change	1981-1982 % Change
	1972	1981	1982		
I. FINANCIAL					
Auto Expenditures (\$ millions)					
New and used cars	38,239.0a*	69,320.0b*	73,868.0b*	6.8	6.6
Tires, tubes, accessories and parts	7,970.0	20,916.0	21,645.0	10.5	3.5
Gasoline and oil	25,432.0	94,642.0	91,495.0	13.7	-3.3
Tolls	763.0	1,041.0	1,100.0	3.7	5.7
Insurance premiums less claims paid	5,407.0	9,201.0	9,430.0	5.7	2.5
Repair, greasing, washing, parking, storage, rental	13,779.0	35,280.0	37,542.0	10.5	6.4
Auto registration fees	1,817.0c	3,074.0c	3,332.0c	6.3	8.4
Driver's license fees	247.0	395.0	434.0	5.8	9.9
Total	93,654.0	233,869.0*	238,846.0*	9.8	2.1
Taxi Expenditures (\$ millions)	1,573.0	2,936.0b	2,903.0b	6.3	-1.1
II. INVENTORY					
Number of Vehicle Registrations					
Passenger cars and taxis	96,330,603.0j	123,291,411.0j	123,697,863.0j	2.5	0.3
Motorcycles	3,774,996.0	5,831,132.0	5,743,463.0	4.3	-1.5
Motor vehicle licensed Drivers (thousands)	118,414.0t	147,075.0t	150,310.0t	2.4	2.2
Number of Employees					
Taxis	96,200.0	46,300.0i	42,200.0i	-7.9	-8.9
III. PERFORMANCE					
Vehicle Miles (millions) ¹					
Rural					
Interstate rural	n/a	91,077.0j	92,577.0j	-	1.7
Other arterial rural	n/a	183,598.0	184,473.0	-	0.5
Other rural	n/a	185,282.0	186,317.0	-	0.6
All rural	435,957.0j	459,957.0	463,367.0	0.6	0.7
Urban					
Interstate urban	n/a	126,816.0	133,490.0	-	5.3
Other urban ²	n/a	538,070.0	552,026.0	-	2.6
All urban	567,541.0	664,886.0	685,516.0	1.9	3.1
Total Rural and Urban	1,003,498.0	1,124,843.0	1,148,883.0	1.4	2.1
Vehicle- Miles (millions)					
Motorcycles	17,091.0	15,000.0	15,000.0	-1.3	0.0
Passenger cars and taxis	986,407.0	1,109,843.0	1,133,883.0	1.4	2.2
Total	1,003,498.0	1,124,843.0	1,148,883.0	1.4	2.1
Passenger-Miles (millions)					
Total travel, passenger cars and taxis ³	2,170,095.0	2,441,655.0	2,494,543.0	1.4	2.2
Total Travel, Motorcycles ⁴	18,800.0	16,500.0	16,500.0	-1.3	0.0
Average Miles Travelled per Vehicle					
Motorcycles	4,500.0	2,573.0	2,612.0	-5.3	1.5
Passenger cars and taxis	10,184.0	9,002.0	9,167.0	-1.1	1.8
Total	9,969.0	8,711.0	8,876.0	-1.2	1.9

AUTOMOBILE PROFILE (Cont.)

	<u>1972</u>	<u>1981</u>	<u>1982</u>	<u>1972-1982 Average Annual % Change</u>	<u>1981-1982 % Change</u>
Number of Vehicles in All Accidents					
Motorcycles	320,000.0 ⁿ	490,000.0 ⁿ	490,000.0 ⁿ	4.4	0.0
Passenger cars	24,500,000.0	22,900,000.0	23,200,000.0	-0.5	1.3
Taxis	180,000.0	250,000.0	220,000.0	2.0	-12.0
Number of Vehicles in Fatal Accidents					
Motorcycles	2,600.0	4,700.0	4,500.0	5.6	-4.3
Passenger cars	53,400.0 ⁿ	41,600.0 ⁿ	37,700.0 ⁿ	-3.4	-9.4
Taxis	200.0	500.0	400.0	7.2	-20.0
Number of Occupant & Non Occupant Fatalities					
Motor Vehicles	54,589.0 ^h	49,301.0 ^h	43,945.0 ^h	-2.1	-10.9
Passenger cars	34,830.0	26,645.0	23,330.0	-3.9	-12.4
Taxis	120.0 ⁿ	330.0 ⁿ	260.0 ⁿ	8.0	-21.2
Motorcycles, Total	3,030.0 ^h	4,906.0 ^h	4,453.0 ^h	3.9	-9.2
Motorcycles	n/a	4,746.0	4,270.0	-	-10.0
Mopeds	n/a	108.0	111.0	-	2.8
Other	n/a	40.0	44.0	-	10.0
Unknown	n/a	12.0	28.0	-	133.3
Bicycles ⁵	990.0	936.0	883.0	-1.1	-5.7
Pedestrians ⁵	9,200.0	7,837.0	7,331.0	-2.2	-6.5
Fatalities in Vehicular Accidents ⁶					
Passenger cars	n/a	35,225.0	31,590.0	-	-10.3
Motorcycles	n/a	5,075.0	4,609.0	-	-9.2
Occupant Fatality Rate					
Per 100 million vehicle-miles					
Passenger cars	3.53	2.40	2.06	-5.2	-14.2
Motorcycles	17.73	32.71	29.69	5.3	-9.2
Per 10,000 registered vehicles					
Passenger cars	3.59	2.16	1.89	-6.2	-12.5
Motorcycles	8.06	8.41	7.75	-0.4	-7.8
Vehicle Involvement Rate					
Per 100 million vehicle-miles					
Passenger cars	5.11	3.50	3.03	-5.1	-13.4
Motorcycles	18.02	33.09	29.97	5.2	-9.4
Per 10,000 registered vehicles					
Passenger cars	5.19	3.15	2.78	-6.1	-11.7
Motorcycles	8.19	8.51	7.83	-0.4	-8.0

n/a = not available

* Figure obtained by addition/subtraction and may not appear directly in data source.

1 Includes passenger cars, taxis, and motorcycles. In addition, 1981 and 1982 reflect changes in FHWA reporting methods and may not be comparable to previous years.

2 Urban consists of travel on all roads and streets in Urban places of 5,000 or greater population.

3 Derived by multiplying passenger car and taxi vehicle-miles by an average occupancy rate of 2.2.

4 Derived by multiplying motorcycle vehicle-miles by an average occupancy rate of 1.1.

5 Involvement only with motor vehicle.

6 Includes all fatalities in the accident in which the vehicle types were listed.

Source: The following data references are listed in Appendix A, p. 182.

<u>Source</u>	<u>Reference Number/Location</u>	<u>Source</u>	<u>Reference Number/Location</u>	<u>Source</u>	<u>Reference Number/Location</u>
a	33) Table 2.4	g	41) SIC 412, p. 711	j	45) Table VM-1
b	34) Table 2.4, p. 37	h	52) personnel communication (NRD-30)	n	21) p. 56
c	45) Table MV-2	i	42) SIC 412, p.218	t	45) Table DL-1
f	45) Table MV-1				

BUS PROFILE

				1972-1982 Average Annual % Change	1981-1982 % Change
	1972	1981	1982		
I. FINANCIAL					
Expenditures (\$ millions)					
School bus	1,510.0 ^f	4,694.0 ⁱ	4,976.0 ⁱ	12.7	6.0
Operating Revenues (\$ millions)					
Intercity bus, total	974.4 ^b	2,068.7 ^j	2,070.3 ^j	7.8	0.1
Intercity bus, Class I*	775.3	1,465.8	1,439.0	6.4	-1.8
Operating Expenses (\$ millions)					
Intercity bus, total	882.1	1,956.1	2,013.2	8.6	2.9
Intercity bus, Class I*	689.6	1,392.8	1,409.8	7.4	1.2
Taxes Assignable to Operations (\$ millions) ¹					
Intercity bus, total	84.1	122.1	127.3	4.2	4.3
Intercity bus, Class I*	65.2	88.6	91.3	3.4	3.1
II. INVENTORY					
Number of Operating Companies					
Intercity bus, total	1,000.0	1,420.0	1,520.0	4.3	7.0
Intercity bus, Class I*	74.0	46.0	49.0	-4.0	6.5
Number of Vehicles					
Intercity bus, total	21,400.0	21,500.0	21,700.0	0.1	0.9
School bus	316,421.0 ^d	432,813.0 ^d	442,133.0 ^d	3.4	2.2
Intercity bus, Class I*	9,711.0 ^b	7,819.0 ^j	7,680.0 ^j	-2.3	-1.8
Number of Employees of Operating Companies					
Intercity bus, total	49,100.0	49,500.0	47,800.0	-0.3	-3.4
Intercity bus, Class I*	34,147.0	31,170.0	30,280.0	-1.2	-2.9
Miles of Highway Served					
Intercity bus, total	270,000.0	273,000.0	270,000.0	0.0	-1.1
Intercity bus, Class I*	198,000.0	189,000.0	187,000.0	-0.6	-1.1
III. PERFORMANCE					
Vehicle Miles (millions)**					
Commercial bus					
Rural					
Interstate rural	n/a	317.0 ^g	319.0 ^g	-	0.6
Other arterial rural	n/a	470.0	468.0	-	-0.4
Other rural	n/a	453.0	461.0	-	1.8
All rural	1,103.0 ^g	1,240.0	1,248.0	1.2	0.7
Urban					
Interstate urban	n/a	337.0	341.0	-	1.2
Other urban	n/a	1,964.0	1,988.0	-	1.2
All urban ²	1,647.0	2,301.0	2,329.0	3.5	1.2
Total Rural and Urban	2,750.0	3,541.0	3,577.0	2.7	1.0
School bus and nonrevenue bus					
Rural					
Interstate rural	n/a	184.0	181.0	-	-1.6
Other arterial rural	n/a	635.0	617.0	-	-2.8
Other rural	n/a	965.0	1,021.0	-	5.8
All rural	1,884.0	1,784.0	1,819.0	-0.4	2.0
Urban					
Interstate urban	n/a	186.0	179.0	-	-3.8
Other urban	n/a	990.0	1,064.0	-	7.5
All urban ²	475.0	1,176.0	1,243.0	10.1	5.7
Total Rural and Urban	2,359.0	2,960.0	3,062.0	2.6	3.5

BUS PROFILE (Cont.)

	1972	1981	1982	1972-1982 Average Annual % Change	1981-1982 % Change
All buses					
Rural					
Interstate rural	n/a	501.0	500.0	-	-0.2
Other arterial rural	n/a	1,105.0	1,085.0	-	-1.8
Other rural	n/a	1,418.0	1,482.0	-	4.5
All rural	2987.0	3,024.0	3,067.0	0.3	1.4
Urban					
Interstate urban	n/a	523.0	520.0	-	-0.6
Other urban	n/a	2,954.0	3,052.0	-	3.3
All urban ²	2,122.0	3,477.0	3,572.0	5.4	2.7
Total Rural and Urban	5,109.0	6,501.0	6,639.0	2.7	2.1
Revenue Passenger-Miles (millions)					
Intercity bus, total	25,600.0 ^b	26,800.0 ^j	29,600.0 ^j	1.5	10.5
Intercity bus, Class I*	17,790.0	15,730.0	15,890.0	-1.1	1.0
Number of Revenue Passengers (millions)					
Intercity bus, total	393.0	375.0	370.0	-0.6	-1.3
Intercity bus, Class I*	164.0	123.3	111.3	-3.8	-9.7
Average Passenger Trip Length (Miles) ³					
Intercity bus, total	65.1	71.4	72.7	1.1	1.8
Intercity bus, Class I*	114.9	127.6	142.8	2.2	11.9
Average Miles Travelled per Vehicle					
Commercial	30,968.0 ^g	32,996.0 ^g	31,524.0 ^g	0.2	-4.5
School and Nonrevenue Bus	7,414.0	6,780.0	6,870.0	-0.8	1.3
All buses	12,553.0	11,953.0	11,872.0	-0.6	-0.7
Average Passenger Load Factor (%)					
Intercity bus, Class I*	47.0 ^b	45.0 ^j	43.0 ^j	-0.9	-4.4
Number of Fatalities					
School bus related - total	n/a	144.0 ^h	137.0 ^h	-	-4.9
School bus occupants	n/a	12.0	9.0	-	-25.0
Other vehicle occupants	n/a	78.0	66.0	-	-15.4
Non-occupants	n/a	51.0	50.0	-	-2.0
Occupant Fatalities					
All buses, Total	n/a	56.0	35.0	-	-37.5
School buses	n/a	12.0	9.0	-	-25.0
Cross Country	n/a	6.0	5.0	-	-16.7
Transit buses	n/a	23.0	11.0	-	-52.2
Other and Unknown	n/a	15.0	10.0	-	-33.3
Fatalities in Vehicular Accidents ⁴					
All buses	n/a	393.0	323.0	-	-17.8
Occupant Fatality Rate					
Per 100 million vehicle-miles					
All buses	n/a	0.86	0.53	-	-38.4
Per 10,000 registered vehicles					
All buses	n/a	1.03	0.63	-	-38.8
Vehicle Involvement Rate					
Per 100 million vehicle-miles					
All buses	n/a	5.26	4.35	-	-17.3
Per 10,000 registered vehicles					
All buses	n/a	6.29	5.17	-	-17.8

BUS PROFILE (Cont.)

n/a = not available

* Effective January 1, 1977, the average annual gross revenue for Class I carriers was increased to \$4 million.

** Beginning in 1980 vehicle data based on Highway Performance Monitoring System, thus no comparable 1972 data available.

¹Excludes income taxes.

²Urban consists of travel on all roads and streets in urban places of 5,000 or greater population.

³Calculated by dividing revenue passenger-miles by revenue passengers carried.

⁴Includes all fatalities in the accident in which the vehicle types listed were involved.

Source: The following data references are listed in Appendix A, p. 182.

	Reference	
	Source	Number/Location
a	26) p. 5	
b	1) p. 2, 5	
d	45) Table MV-10	
f	25) p. 5	
g	45) Table VM-1	
h	52) personal communication	
i	27) p. 5	
j	1) personal communication	
III. PERFORMANCE		
3.1	Interstate bus, total	127.0 ^b
3.2	Interstate bus, Class I ^a	8.0
3.3	Interstate bus, Class II ^a	119.0
3.4	Interstate bus, Class III ^a	0.0
3.5	Interstate bus, Class IV ^a	0.0
3.6	Interstate bus, Class V ^a	0.0
3.7	Interstate bus, Class VI ^a	0.0
3.8	Interstate bus, Class VII ^a	0.0
3.9	Interstate bus, Class VIII ^a	0.0
3.10	Interstate bus, Class IX ^a	0.0
3.11	Interstate bus, Class X ^a	0.0
3.12	Interstate bus, Class XI ^a	0.0
3.13	Interstate bus, Class XII ^a	0.0
3.14	Interstate bus, Class XIII ^a	0.0
3.15	Interstate bus, Class XIV ^a	0.0
3.16	Interstate bus, Class XV ^a	0.0
3.17	Interstate bus, Class XVI ^a	0.0
3.18	Interstate bus, Class XVII ^a	0.0
3.19	Interstate bus, Class XVIII ^a	0.0
3.20	Interstate bus, Class XIX ^a	0.0
3.21	Interstate bus, Class XX ^a	0.0
3.22	Interstate bus, Class XXI ^a	0.0
3.23	Interstate bus, Class XXII ^a	0.0
3.24	Interstate bus, Class XXIII ^a	0.0
3.25	Interstate bus, Class XXIV ^a	0.0
3.26	Interstate bus, Class XXV ^a	0.0
3.27	Interstate bus, Class XXVI ^a	0.0
3.28	Interstate bus, Class XXVII ^a	0.0
3.29	Interstate bus, Class XXVIII ^a	0.0
3.30	Interstate bus, Class XXIX ^a	0.0
3.31	Interstate bus, Class XXX ^a	0.0
3.32	Interstate bus, Class XXXI ^a	0.0
3.33	Interstate bus, Class XXXII ^a	0.0
3.34	Interstate bus, Class XXXIII ^a	0.0
3.35	Interstate bus, Class XXXIV ^a	0.0
3.36	Interstate bus, Class XXXV ^a	0.0
3.37	Interstate bus, Class XXXVI ^a	0.0
3.38	Interstate bus, Class XXXVII ^a	0.0
3.39	Interstate bus, Class XXXVIII ^a	0.0
3.40	Interstate bus, Class XXXIX ^a	0.0
3.41	Interstate bus, Class XL ^a	0.0
3.42	Interstate bus, Class XLI ^a	0.0
3.43	Interstate bus, Class XLII ^a	0.0
3.44	Interstate bus, Class XLIII ^a	0.0
3.45	Interstate bus, Class XLIV ^a	0.0
3.46	Interstate bus, Class XLV ^a	0.0
3.47	Interstate bus, Class XLVI ^a	0.0
3.48	Interstate bus, Class XLVII ^a	0.0
3.49	Interstate bus, Class XLVIII ^a	0.0
3.50	Interstate bus, Class XLIX ^a	0.0
3.51	Interstate bus, Class L ^a	0.0
3.52	Interstate bus, Class LI ^a	0.0
3.53	Interstate bus, Class LII ^a	0.0
3.54	Interstate bus, Class LIII ^a	0.0
3.55	Interstate bus, Class LIV ^a	0.0
3.56	Interstate bus, Class LV ^a	0.0
3.57	Interstate bus, Class LVI ^a	0.0
3.58	Interstate bus, Class LVII ^a	0.0
3.59	Interstate bus, Class LVIII ^a	0.0
3.60	Interstate bus, Class LIX ^a	0.0
3.61	Interstate bus, Class LX ^a	0.0
3.62	Interstate bus, Class LXI ^a	0.0
3.63	Interstate bus, Class LXII ^a	0.0
3.64	Interstate bus, Class LXIII ^a	0.0
3.65	Interstate bus, Class LXIV ^a	0.0
3.66	Interstate bus, Class LXV ^a	0.0
3.67	Interstate bus, Class LXVI ^a	0.0
3.68	Interstate bus, Class LXVII ^a	0.0
3.69	Interstate bus, Class LXVIII ^a	0.0
3.70	Interstate bus, Class LXIX ^a	0.0
3.71	Interstate bus, Class LXX ^a	0.0
3.72	Interstate bus, Class LXXI ^a	0.0
3.73	Interstate bus, Class LXXII ^a	0.0
3.74	Interstate bus, Class LXXIII ^a	0.0
3.75	Interstate bus, Class LXXIV ^a	0.0
3.76	Interstate bus, Class LXXV ^a	0.0
3.77	Interstate bus, Class LXXVI ^a	0.0
3.78	Interstate bus, Class LXXVII ^a	0.0
3.79	Interstate bus, Class LXXVIII ^a	0.0
3.80	Interstate bus, Class LXXIX ^a	0.0
3.81	Interstate bus, Class LXXX ^a	0.0
3.82	Interstate bus, Class LXXXI ^a	0.0
3.83	Interstate bus, Class LXXXII ^a	0.0
3.84	Interstate bus, Class LXXXIII ^a	0.0
3.85	Interstate bus, Class LXXXIV ^a	0.0
3.86	Interstate bus, Class LXXXV ^a	0.0
3.87	Interstate bus, Class LXXXVI ^a	0.0
3.88	Interstate bus, Class LXXXVII ^a	0.0
3.89	Interstate bus, Class LXXXVIII ^a	0.0
3.90	Interstate bus, Class LXXXIX ^a	0.0
3.91	Interstate bus, Class LXXXX ^a	0.0
3.92	Interstate bus, Class LXXXXI ^a	0.0
3.93	Interstate bus, Class LXXXXII ^a	0.0
3.94	Interstate bus, Class LXXXXIII ^a	0.0
3.95	Interstate bus, Class LXXXXIV ^a	0.0
3.96	Interstate bus, Class LXXXXV ^a	0.0
3.97	Interstate bus, Class LXXXXVI ^a	0.0
3.98	Interstate bus, Class LXXXXVII ^a	0.0
3.99	Interstate bus, Class LXXXXVIII ^a	0.0
4.00	Interstate bus, Class LXXXXIX ^a	0.0
4.01	Interstate bus, Class LXXXXX ^a	0.0
4.02	Interstate bus, Class LXXXXXI ^a	0.0
4.03	Interstate bus, Class LXXXXXII ^a	0.0
4.04	Interstate bus, Class LXXXXXIII ^a	0.0
4.05	Interstate bus, Class LXXXXXIV ^a	0.0
4.06	Interstate bus, Class LXXXXXV ^a	0.0
4.07	Interstate bus, Class LXXXXXVI ^a	0.0
4.08	Interstate bus, Class LXXXXXVII ^a	0.0
4.09	Interstate bus, Class LXXXXXVIII ^a	0.0
4.10	Interstate bus, Class LXXXXXIX ^a	0.0
4.11	Interstate bus, Class LXXXXXX ^a	0.0
4.12	Interstate bus, Class LXXXXXXI ^a	0.0
4.13	Interstate bus, Class LXXXXXXII ^a	0.0
4.14	Interstate bus, Class LXXXXXXIII ^a	0.0
4.15	Interstate bus, Class LXXXXXXIV ^a	0.0
4.16	Interstate bus, Class LXXXXXXV ^a	0.0
4.17	Interstate bus, Class LXXXXXXVI ^a	0.0
4.18	Interstate bus, Class LXXXXXXVII ^a	0.0
4.19	Interstate bus, Class LXXXXXXVIII ^a	0.0
4.20	Interstate bus, Class LXXXXXXIX ^a	0.0
4.21	Interstate bus, Class LXXXXXXX ^a	0.0
4.22	Interstate bus, Class LXXXXXXXI ^a	0.0
4.23	Interstate bus, Class LXXXXXXII ^a	0.0
4.24	Interstate bus, Class LXXXXXXIII ^a	0.0
4.25	Interstate bus, Class LXXXXXXIV ^a	0.0
4.26	Interstate bus, Class LXXXXXXV ^a	0.0
4.27	Interstate bus, Class LXXXXXXVI ^a	0.0
4.28	Interstate bus, Class LXXXXXXVII ^a	0.0
4.29	Interstate bus, Class LXXXXXXVIII ^a	0.0
4.30	Interstate bus, Class LXXXXXXIX ^a	0.0
4.31	Interstate bus, Class LXXXXXXX ^a	0.0
4.32	Interstate bus, Class LXXXXXXXI ^a	0.0
4.33	Interstate bus, Class LXXXXXXII ^a	0.0
4.34	Interstate bus, Class LXXXXXXIII ^a	0.0
4.35	Interstate bus, Class LXXXXXXIV ^a	0.0
4.36	Interstate bus, Class LXXXXXXV ^a	0.0
4.37	Interstate bus, Class LXXXXXXVI ^a	0.0
4.38	Interstate bus, Class LXXXXXXVII ^a	0.0
4.39	Interstate bus, Class LXXXXXXVIII ^a	0.0
4.40	Interstate bus, Class LXXXXXXIX ^a	0.0
4.41	Interstate bus, Class LXXXXXXX ^a	0.0
4.42	Interstate bus, Class LXXXXXXXI ^a	0.0
4.43	Interstate bus, Class LXXXXXXII ^a	0.0
4.44	Interstate bus, Class LXXXXXXIII ^a	0.0
4.45	Interstate bus, Class LXXXXXXIV ^a	0.0
4.46	Interstate bus, Class LXXXXXXV ^a	0.0
4.47	Interstate bus, Class LXXXXXXVI ^a	0.0
4.48	Interstate bus, Class LXXXXXXVII ^a	0.0
4.49	Interstate bus, Class LXXXXXXVIII ^a	0.0
4.50	Interstate bus, Class LXXXXXXIX ^a	0.0
4.51	Interstate bus, Class LXXXXXXX ^a	0.0
4.52	Interstate bus, Class LXXXXXXXI ^a	0.0
4.53	Interstate bus, Class LXXXXXXII ^a	0.0
4.54	Interstate bus, Class LXXXXXXIII ^a	0.0
4.55	Interstate bus, Class LXXXXXXIV ^a	0.0
4.56	Interstate bus, Class LXXXXXXV ^a	0.0
4.57	Interstate bus, Class LXXXXXXVI ^a	0.0
4.58	Interstate bus, Class LXXXXXXVII ^a	0.0
4.59	Interstate bus, Class LXXXXXXVIII ^a	0.0
4.60	Interstate bus, Class LXXXXXXIX ^a	0.0
4.61	Interstate bus, Class LXXXXXXX ^a	0.0
4.62	Interstate bus, Class LXXXXXXXI ^a	0.0
4.63	Interstate bus, Class LXXXXXXII ^a	0.0
4.64	Interstate bus, Class LXXXXXXIII ^a	0.0
4.65	Interstate bus, Class LXXXXXXIV ^a	0.0
4.66	Interstate bus, Class LXXXXXXV ^a	0.0
4.67	Interstate bus, Class LXXXXXXVI ^a	0.0
4.68	Interstate bus, Class LXXXXXXVII ^a	0.0
4.69	Interstate bus, Class LXXXXXXVIII ^a	0.0
4.70	Interstate bus, Class LXXXXXXIX ^a	0.0
4.71	Interstate bus, Class LXXXXXXX ^a	0.0
4.72	Interstate bus, Class LXXXXXXXI ^a	0.0
4.73	Interstate bus, Class LXXXXXXII ^a	0.0
4.74	Interstate bus, Class LXXXXXXIII ^a	0.0
4.75	Interstate bus, Class LXXXXXXIV ^a	0.0
4.76	Interstate bus, Class LXXXXXXV ^a	0.0
4.77	Interstate bus, Class LXXXXXXVI ^a	0.0
4.78	Interstate bus, Class LXXXXXXVII ^a	0.0
4.79	Interstate bus, Class LXXXXXXVIII ^a	0.0
4.80	Interstate bus, Class LXXXXXXIX ^a	0.0
4.81	Interstate bus, Class LXXXXXXX ^a	0.0
4.82	Interstate bus, Class LXXXXXXXI ^a	0.0
4.83	Interstate bus, Class LXXXXXXII ^a	0.0
4.84	Interstate bus, Class LXXXXXXIII ^a	0.0
4.85	Interstate bus, Class LXXXXXXIV ^a	0.0
4.86	Interstate bus, Class LXXXXXXV ^a	0.0
4.87	Interstate bus, Class LXXXXXXVI ^a	0.0
4.88	Interstate bus, Class LXXXXXXVII ^a	0.0
4.89	Interstate bus, Class LXXXXXXVIII ^a	0.0
4.90	Interstate bus, Class LXXXXXXIX ^a	0.0
4.91	Interstate bus, Class LXXXXXXX ^a	0.0
4.92	Interstate bus, Class LXXXXXXXI ^a	0.0
4.93	Interstate bus, Class LXXXXXXII ^a	0.0
4.94	Interstate bus, Class LXXXXXXIII ^a	0.0
4.95	Interstate bus, Class LXXXXXXIV ^a	0.0
4.96	Interstate bus, Class LXXXXXXV ^a	0.0
4.97	Interstate bus, Class LXXXXXXVI ^a	0.0
4.98	Interstate bus, Class LXXXXXXVII ^a	0.0
4.99	Interstate bus, Class LXXXXXXVIII ^a	0.0
5.00	Interstate bus, Class LXXXXXXIX ^a	0.0

TRUCK PROFILE

	<u>1972</u>	<u>1981</u>	<u>1982</u>	<u>1972-1982 Average Annual % Change</u>	<u>1981-1982 % Change</u>
I. FINANCIAL					
Revenues (\$ millions)					
Local	50,261.0 ^a	71,110.0 ^w	73,266.0 ^w	3.8	3.0
Intercity					
ICC-regulated	18,700.0	47,900.0	44,100.0	9.0	-7.9
Non-ICC-regulated	22,900.0	55,318.0	65,736.0	11.1	18.8
Operating Revenues of Class I					
Intercity Motor Carriers (millions)					
Freight, intercity, common carriers	13,564.0 ^b	28,856.0 ^c	27,997.0 ^c	7.5	-3.0
Freight, intercity, contract carriers	531.8	1,052.0	1,500.0	10.9	42.6
Freight, local cartage	625.7	305.0	307.0	-6.9	0.7
Trans. for other Classes I and II carriers	135.2	165.0	210.0	4.5	27.3
Others	137.5	2,145.0	2,232.0	32.3	4.1
Total	14,994.0	32,523.0 ^p	32,246.0	7.9	-0.9
Operating Expenses of Class I					
Intercity Motor Carriers (\$ millions)	14,156.0	31,235.0	31,337.0	8.3	0.3
II. INVENTORY					
Number of Truck Registrations					
Private and commercial	20,225,745.0 ^f	33,043,285.0 ^f	33,821,895.0 ^f	5.3	2.4
Federal	165,113.0	203,867.0	195,431.0	1.7	-4.1
State, county, municipal	848,305.0	1,203,958.0	1,235,439.0	3.8	2.6
Total	21,239,163.0	34,451,110.0	35,252,765.0	5.2	2.3
Total Number of Employees					
Trucking and trucking terminals	1,042,900.0 ⁱ	1,168,000.0 ^j	1,127,700.0 ^j	0.8	-3.5
Number of Companies, Class I					
Intercity Carriers of Property	1,525.0 ^b	741.0 ^c	957.0 ^c	-4.6	29.2
Number of Employees, Class I					
Intercity Carriers of Property	542,153.0	501,938.0	484,607.0	-1.1	-3.5
III. PERFORMANCE					
Vehicle Miles (millions) ²					
Urban ³					
Interstate Urban	n/a	38,936.0 ^k	41,449.0 ^k	-	6.5
Other Urban	n/a	166,646.0	171,259.0	-	2.8
All Urban	108,452.0 ^k	205,582.0	212,708.0	7.0	3.5
Rural					
Interstate Rural	n/a	47,194.0	49,109.0	-	4.1
Other Arterial Rural	n/a	82,257.0	84,500.0	-	2.7
Other Rural	n/a	90,094.0	90,642.0	-	0.6
All Rural	151,283	219,545.0	224,251.0	4.0	2.1
Total Rural and Urban	n/a	425,127.0	436,959.0	-	2.8
Average Miles Travelled per Vehicle					
Single-unit trucks	10,525.0	11,028.0	11,064.0	0.5	0.3
Combination trucks	47,084.0	47,023.0	49,847.0	0.6	6.0
All trucks	12,229.0	12,340.0	12,395.0	0.1	0.5
Ton-Miles (millions)					
Intercity	470,000.0 ^w	535,000.0 ^w	525,000.0 ^w	1.1	-1.9
Taxes Assignable to Operations (\$ millions)					
State highway-user taxes	4,045.3 ^u	7,157.0 ^e	7,970.0 ^e	7.0	11.4
Federal highway-user taxes	2,092.6	3,094.0	3,190.0	4.3	3.1
Total highway-user taxes	6,138.0	10,251.0	11,160.0	6.2	8.9

TRUCK PROFILE (Cont.)

	1972	1981	1982	1972-1982 Average Annual % Change	1981-1982 % Change
Average Length of Haul (statute miles)					
Class I Intercity motor carriers					
Common	280.0 ^s	363.9 ^v	359.9 ^v	2.8	-1.1
Total Fatalities, Motor Carriers of Property	n/a	2,810.0 ^t	2,479.0 ^t		-11.8
Private	n/a	711.0	618.0		-13.1
Authorized	n/a	2,028.0	1,712.0	-	-15.6
Exempt	n/a	66.0	127.0	-	92.4
Others	n/a	5.0	22.0	-	340.0
Total Accidents	n/a	32,306.0	31,759.0	-	-1.7
Private	n/a	6,330.0	6,341.0	-	0.2
Authorized	n/a	25,588.0	24,493.0	-	-4.3
Exempt	n/a	353.0	821.0	-	132.5
Others	n/a	35.0	104.0	-	197.1
Total Injuries	n/a	28,533.0	25,779.0	-	-9.7
Private	n/a	5,725.0	5,200.0	-	-9.2
Authorized	n/a	22,495.0	19,869.0	-	-11.7
Exempt	n/a	272.0	616.0	-	126.5
Others	n/a	41.0	94.0	-	129.3
Property Damage (\$ millions)	n/a	355.1	321.2	-	-9.6
Private	n/a	80.3	73.1	-	-9.0
Authorized	n/a	269.3	236.4	-	-12.2
Exempt	n/a	5.1	10.0	-	96.1
Others	n/a	0.4	1.7	-	325.0
Occupant Fatalities					
All Trucks -- Total	5,440.0 ^h	7,343.0 ^h	6,568.0 ^h	1.9	-10.5
Light Trucks	n/a	6,137.0	5,590.0	-	-8.9
Medium Trucks	n/a	235.0	154.0	-	-34.5
Heavy Trucks	n/a	897.0	789.0	-	-12.0
Other	n/a	74.0	35.0	-	-52.7
Fatalities in Vehicular Accidents ¹					
All Trucks, Total	n/a	17,430.0	16,257.0	-	-6.7
Light Trucks	n/a	11,631.0	10,991.0	-	-5.5
Medium Trucks	n/a	915.0	769.0	-	-16.0
Heavy Trucks	n/a	4,884.0	4,497.0	-	-7.9
Occupant Fatality Rate					
Per 100 million vehicle-miles					
Total Truck	2.09	1.73	1.50	-3.3	-13.3
Single-unit	n/a	.08	.05	-	-37.5
Combination	n/a	1.42	1.21	-	-14.8
Per 10,000 registered vehicles					
Total Truck	2.55	2.13	1.86	-3.1	-12.7
Single-unit	n/a	.09	.06	-	-33.3
Combination	n/a	6.69	6.02	-	-10.0
Vehicle Involvement Rate					
Per 100 million vehicle-miles					
Total	n/a	3.85	3.42	-	-11.2
Single-unit	n/a	0.33	0.24	-	-27.3
Combination	n/a	6.77	5.95	-	-12.1
Per 10,000 registered vehicles					
Total Truck	n/a	4.75	4.24	-	-10.7
Single-unit	n/a	0.37	0.27	-	-27.0
Combination	n/a	31.84	29.65	-	-6.9

n/a = not available.

¹ Includes all fatalities in the accident in which the vehicle types listed were involved.

² 1981 and 1982 data reflect changes in reporting methods by FHWA and may vary from previous years.

³ Urban consists of travel on all roads and streets in urban places of 5,000 or greater population.

TRUCK PROFILE (Cont.)

Source: The following data references are listed in Appendix A, p. 182.

References		Reference	
Source	Number/Location	Source	Number/Location
a	25 & 26) pp.2,4	i	41) SIC 421, 3: p. 714
b	17) Appendix E, Table 10	j	42) SIC 421, 3 : p. 219
c	19) Appendix E, Table 6	k	45) Table VM-1
d	17) Appendix E, Table 3	t	48) p.22
e	45) Table MV-1	u	5) p.3
f	45) Table MV-9	v	5) ATA, Dept. of Economics & Taxation, personal communication.
h	52) personal communication, NHTSA, NRD-30	w	27) pp. 4, 6, 7

LOCAL TRANSIT PROFILE[#]

I.	FINANCIAL	1979 ¹	1980 ²	1981 ³	1979-1981	1980-1981
					Average Annual % Change	% Change
	Operating Revenue (\$ millions)					
	Passenger Revenue					
	Single Motor Bus Properties	533.4 ^b	554.6 ^a	583.6 ^c	4.6	5.2
	All Properties	2,152.6 ^s	2,582.1 ^t	2,975.6 ^u	17.6	15.2
	Federal Cash Grants and Reimbursements					
	Single Motor Bus Properties	316.6 ^b	312.3 ^a	294.1 ^c	-3.6	-5.8
	All properties	1,177.3 ^s	995.7 ^t	929.0 ^u	-11.2	-6.7
	Total Operating Revenue					
	Single Motor Bus Properties	1,559.6 ^b	1,523.5 ^a	1,547.9 ^c	-0.4	1.6
	All Properties	5,771.0 ^s	6,637.7 ^t	7,552.2 ^u	14.4	13.8
	Operating Expenses (\$ millions)					
	All Systems					
	Motor Bus					
	Vehicle Operations	2,236.3 ^d	2,620.8 ^e	2,886.6 ^f	13.6	10.1
	Vehicle Maintenance	771.4	921.1	1,018.8	14.9	10.6
	Other	700.9	907.7	950.8	16.5	4.8
	Total Expenses	3,708.6	4,449.6	4,851.4	14.4	9.0
	Rail Rapid					
	Vehicle Operations	466.8	523.0	600.0	13.4	14.7
	Vehicle Maintenance	247.0	324.0	375.2	23.3	15.8
	Other	792.1	914.0	979.2	11.2	7.1
	Total Expenses	1,505.9	1,761.0	1,954.4	13.9	11.0
	Streetcar					
	Vehicle Operations	36.2	32.4	40.3	5.5	24.4
	Vehicle Maintenance	24.5	26.3	29.7	10.1	12.9
	Other	36.7	32.4	41.3	6.1	27.5
	Total Expenses	97.4	90.9	111.2	6.9	22.3
	Trolley Bus					
	Vehicle Operations	25.9	31.5	40.2	24.6	27.6
	Vehicle Maintenance	6.0	8.9	11.4	37.8	28.1
	Other	9.9	10.9	14.6	21.4	33.9
	Total Expenses	41.9	51.3	66.2	25.7	29.0
	Demand Response					
	Vehicle Operations	15.0	21.8	31.1	44.0	42.7
	Vehicle Maintenance	3.7	5.0	8.0	47.0	60.0
	Other	22.1	31.2	44.0	41.1	41.0
	Total Expenses	40.7	57.9	83.1	42.9	43.5
	Ferryboat					
	Vehicle Operations	4.4	6.4	6.0	16.8	-6.3
	Vehicle Maintenance	1.9	2.6	2.0	2.6	-23.1
	Other	2.3	2.3	33.7	282.8	1,365.2
	Total Expenses	8.5	11.3	41.7	121.5	269.0
	Other					
	Vehicle Operations	0.4	6.3	6.9	315.3	9.5
	Vehicle Maintenance	0.1	1.4	1.6	300.0	14.3
	Other	58.3	5.3	5.5	-69.3	3.8
	Total Expenses	58.8	13.0	14.0	-51.2	7.7
	Total All Modes					
	Vehicle Operations	2,785.5	3,243.2	3,610.9	13.9	11.3
	Vehicle Maintenance	1,054.1	1,287.0	1,445.8	17.1	12.3
	Other	1,622.1	1,904.8	2,065.4	12.8	8.4
	Total Expenses	5,461.7	6,435.0	7,122.0	14.2	10.7

LOCAL TRANSIT PROFILE# (Cont.)

	1979 ¹	1980 ²	1981 ³	1979-1981 Average Annual % Change	1980-1981 % Change
II. INVENTORY					
Number of Systems					
Single Motor Bus Properties	219.0 ^b	188.0 ^a	174.0 ^c	-10.9	-7.5
All Properties	321.0 ^s	319.0 ^t	336.0 ^u	2.3	5.3
Motor Bus	304.0 ^g	301.0 ^h	311.0 ⁱ	1.1	3.3
Rail Rapid	9.0	9.0	9.0	0.0	0.0
Streetcar	7.0	7.0	8.0	6.9	14.3
Trolley Bus	6.0	5.0	5.0	-8.7	0.0
Demand Response	98.0	118.0	147.0	22.5	24.6
Ferryboat	2.0	2.0	3.0	22.5	50.0
Other	9.0	6.0	6.0	-18.4	0.0
Number of Vehicles					
All Properties	61,014.0 [*]	66,834.0 [*]	69,813.0 [*]	7.0	4.5
Motor Bus	48,781.0 ^g	53,661.0 ^h	56,109.0 ⁱ	7.3	4.6
Rail Rapid	9,509.0	9,405.0	9,615.0	0.6	2.2
Streetcar	884.0	996.0	1,089.0	11.0	9.3
Trolley Bus	721.0	831.0	768.0	3.2	-7.6
Demand Response	1,053.0	1,671.0	1,966.0	36.6	17.7
Ferryboat	10.0	10.0	16.0	27.0	60.0
Other	56.0	260.0	250.0	111.3	3.9
Number of Employees					
All Properties	163,872.3 ^{j*}	173,286.9 ^{k*}	175,182.5 ^{m*}	3.4	1.1
Motor Bus	115,543.1	121,519.6	121,565.5	2.6	0.0
Rail Rapid	42,314.7	44,478.0	45,210.7	3.7	1.7
Streetcar	2,181.6	2,765.3	3,237.4	21.8	17.1
Trolley Bus	1,408.2	1,653.6	1,753.5	11.6	6.0
Demand Response	2,176.0	2,345.3	2,258.4	1.9	-3.7
Ferryboat	227.7	223.0	848.0	9.3	280.3
Other	21.0	302.1	309.0	283.6	2.3
III. PERFORMANCE					
Revenue Vehicle-Miles (thousands)					
Motor Bus	1,323,741.1 ⁿ	1,402,920.5 ^o	1,384,543.7 ^q	2.3	-1.3
Rail Rapid	67,138.5	68,594.4	67,415.4 ^v	0.2	-1.7
Streetcar	6,696.4	13,975.5	14,041.2	44.8	0.5
Trolley Bus	12,109.4	13,060.3	13,544.5 ^q	5.8	3.7
Demand Response	n/a	33,022.8	42,281.7		28.0
Ferryboat	144.7	139.8	274.1	37.6	96.1
Total All Modes	1,409,830.1 [*]	1,531,713.3 [*]	1,522,100.6 [*]	3.9	-0.6
Unlinked Passenger Trips (millions)					
Motor Bus	5,570.1	5,740.5	5,286.7	-2.6	-7.9
Rail Rapid	1,432.7	1,846.8	1,809.1 ^v	12.4	-2.0
Streetcar	122.3	126.5	132.5	4.1	4.7
Trolley Bus	136.0	125.3	152.8 ^q	6.0	22.0
Demand Response	n/a	11.8	11.7	-	-0.1
Ferryboat	4.2	4.6	24.9	143.5	441.3
Total All Modes	7,265.3 [*]	7,855.5 [*]	7,417.7 [*]	1.0	-5.6
Passenger Miles (millions)					
Motor Bus	17,766.7	20,793.6	19,138.7	3.8	-8.0
Rail Rapid	3,160.3	8,703.6	8,588.5 ^v	64.9	-1.3
Streetcar	355.2	336.4	377.3	3.1	12.2
Trolley Bus	218.7	305.9	251.5 ^q	7.2	-17.8
Demand Response	n/a	60.0	70.3	-	17.2
Ferryboat	16.3	18.7	112.6	162.8	502.1
Total All Modes	21,517.2 [*]	30,218.2 [*]	28,538.9 [*]	15.2	-5.6

LOCAL TRANSIT PROFILE# (Cont.)

n/a = not available

- * Figure obtained by addition/subtraction and may not appear directly in data source.
 # Data for the period July 1, 1982 through June 30, 1983 was not available due to changes in Section 15 reporting procedures from fiscal year basis to calendar year basis. Beginning in 1983, data will be reported on a calendar year basis.
 1 Data covers fiscal year between 7/01/79 and 6/30/80.
 2 Data covers fiscal year between 7/01/80 and 6/30/81.
 3 Data covers fiscal year between 7/01/81 and 6/30/82.

Source: The following data references are listed in Appendix A, p. 182.

References		Reference	
Source	Number/Location	Source	Number/Location
a	59) Table 001.02.1, p. 1-6	k	59) Table 001.14.1, p. 1-48
b	60) Table 001.02.1, p. 1-14	m	61) Table 002.14.1, p. 2-53
c	61) Table 002.02.1, p. 2-17	n	60) Tables 001.15.1, 001.16.1, p. 1-59
d	60) Table 001.07.1, p. 1-24	o	59) Tables 001.15.1, 001.16.1, p. 1-56
e	59) Table 001.07.1, p. 2-17	q	61) Tables 002.15.1, p. 2-61
f	61) Table 002.07.1, p. 2-26	s	60) Table 002.2.1, p. 1-14
g	60) Table 001.17.1, p. 1-63	t	59) Table 001.02.2, p. 1-6
h	59) Table 001.17.1, p. 2-60	u	61) Table 002.02.2, p. 2-17
i	61) Table 002.17.1, p. 2-65	v	61) Table 002.16.1, p. 2-63
j	60) Table 001.14.1, p. 1-52		

WATER TRANSPORT PROFILE

				1972-1982 Average Annual % Change	1981-1982 % Change
	1972	1981	1982		
I. FINANCIAL					
Revenues (\$ millions)					
Domestic Freight	2,086.0 ^{s*}	7,137.0 ^{b*}	6,864.0 ^{b*}	12.7	-3.8
Coastal waterways	844.0	3,493.0	3,377.0	14.9	-3.3
Inland waterways	582.0	1,871.0	1,747.0	11.6	-6.6
Great Lakes	243.0	570.0	521.0	7.9	-8.6
Locks, channels, etc.	417.0	1,203.0	1,219.0	11.3	1.3
International Freight	3,501.0	9,119.0	7,985.0	8.6	-12.4
Domestic passengers, intercity	14.0	20.0	20.0	3.6	0.0
International passenger ¹	268.0	374.0	388.0	3.8	3.7
Total Passenger	282.0	394.0	408.0	3.8	3.6
Revenues of U.S. Commercial Fishing Fleet					
U.S. Commercial Landings (\$ million)	748.0 ^e	2,388.0 ^e	2,390.0 ^e	12.3	0.1
II. INVENTORY					
Number of Companies, Class A & B Carriers Inland and Coastal Waterways	79.0 ^c	266.0 ^l	265.0 ^o	12.9	-0.4
Number of Companies, Maritime Carriers	17.0	6.0 ^d	6.0 ^d	-9.9	0.0
Number of Employees					
Ships, boat building, and repairing	193,100.0 ^u	230,600.0 ^f	212,800.0 ^f	1.0	-7.7
Water transportation	212,100.0	219,400.0	203,000.0	-0.4	-7.5
Number of Employees ²					
Passenger/combo	1,464.0 ^{aa}	606.0 ^{aa}	836.0 ^{aa}	-5.5	38.0
Cargo	16,346.0	8,733.0	8,004.0	-6.9	-8.4
Tankers	9,414.0	7,930.0	7,196.0	-2.7	-9.3
Total	27,224.0	17,269.0	16,036.0	-5.2	-7.1
Mileage of Commercially Navigable Inland Waterways	25,543.0 ^g	25,543.0 ^{bb}	25,543.0 ^{bb}	0.0	0.0
Number of Vessels					
Total non-self-propelled ³	22,245.0 ^y	34,448.0 ^y	n/a	-	-
Dry cargo barges and scows	18,804.0	29,479.0	n/a	-	-
Tank barges	3,313.0	4,909.0	n/a	-	-
Railroad car floats	128.0	60.0	n/a	-	-
Total self-propelled ³	6,186.0	7,631.0	n/a	-	-
Dry cargo/passenger	1,748.0	2,327.0	n/a	-	-
Ferries, railroad car	21.0	78.0	n/a	-	-
Tankers	343.0	333.0	n/a	-	-
Towboats/tugs	4,064.0	4,890.0	n/a	-	-
Sailing vessels	10.0	3.0	n/a	-	-
U.S. Merchant Marine (over 1,000 gross tons)					
Total U.S. Flag	1,150.0 ^j	853.0 ^j	832.0 ^j	-3.2	-2.5
Passenger/cargo	153.0	63.0	55.0	-9.7	-12.7
Freighters	569.0	305.0	296.0	-6.3	-3.0
Bulk carriers	32.0	16.0	21.0	-4.1	31.3
Tankers	280.0	292.0	282.0	0.1	-3.4
Intermodal	116.0	152.0	150.0	2.6	-1.3
Tug/barge	0.0	12.0	15.0	-	25.0
LNG	0.0	13.0	13.0	-	0.0
Privately Owned	651.0 ^{cc}	574.0 ^{cc}	573.0 ^{cc}	-1.3	-0.2
Government Owned	499.0	279.0	259.0	-6.4	-7.2
Number of Recreational Boats (millions)	8.5 ^q	14.6 ^q	14.9 ^q	5.8	2.1

WATER TRANSPORT PROFILE (Cont.)

	1972	1981	1982	1972-1982 Average Annual % Change	1981-1982 % Change
III. PERFORMANCE					
Ton-Miles (millions)					
Domestic waterfreight					
Coastwise	351,509.0 ^h	634,765.0 ^h	632,707.0 ^h	6.1	-0.3
Internal	177,539.0	231,184.0	217,027.0	2.0	-6.1
Lakewise	73,132.0	62,148.0	35,623.0	-6.9	-42.7
Local	1,364.0	1,316.0	1,112.0	-2.0	-15.5
Total	603,542.0	929,413.0	886,469.0	3.9	-4.6
Tons of Freight Hauled (millions)					
Domestic water					
Coastwise	243.0	322.0	311.0	2.5	-3.4
Internal	507.0	521.0	496.0	-0.2	-4.8
Lakewise	145.0	115.0	72.0	-6.8	-37.4
Local	90.0	93.0	76.0	-1.7	-18.3
Total	985.0	1,051.0	957.0	-0.3	-8.9
Exports					
Great Lakes ports	35.0*	44.0*	36.0*	0.3	-18.2
Coastal ports	197.0	366.0	367.0	6.4	0.3
Total	232.0	410.0	403.0	5.7	-1.7
Imports					
Great Lakes	25.0*	20.0*	14.0*	-5.6	-30.0
Coastal ports	372.0	457.0	403.0	0.8	-11.8
Total	398.0	477.0	417.0	0.5	-12.6
Tons of Freight, Intraterritorial (millions)					
	1.9	3.1	2.8	4.0	-9.7
Average Haul, Domestic System (miles-per-ton)					
Coastwise	1,448.6 ^h	1,971.4 ^h	2,034.0 ^h	3.5	3.2
Internal	350.2	444.0	438.0	2.3	-1.4
Lakewise	504.3	538.5	495.0	-0.2	-8.1
Local	15.1	14.1	15.0	-0.1	6.4
Total	612.8	884.0	926.3	4.2	4.8
Cargo Capacity (net tons)					
Total non-self-propelled vessels ³					
Dry cargo barges and scows	28,751,428.0 ^y	49,933,447.0 ^y	n/a	-	-
Tank barges	21,342,522.0	38,031,076.0	n/a	-	-
Total self-propelled vessels ³	7,408,906.0	11,902,371.0	n/a	-	-
Dry cargo/passenger	17,305,578.0	26,277,603.0	n/a	-	-
Tankers	8,523,667.0	7,998,876.0	n/a	-	-
	8,731,880.0	18,278,727.0	n/a	-	-
Total Number of Marine Accidents in Waterborne Transport ⁴					
	2,424.0 ^m	5,217.0 ^m	5,414.0 ^m	8.4	3.8
Total Number of Fatalities in Waterborne Transport ⁵					
Inspected, total	177.0	164.0	158.0	-1.1	-3.7
Passenger and ferry, large and small	56.0	11.0 ^x	120.0 ^x	7.9	990.9
Freight	0.0 ⁿ	5.0	15.0	+	200.0
Tank ships and tank barges	1.0	2.0	6.0	19.6	200.0
Government owned vessels	47.0	n/a	13.0	-7.2	-
MODU ⁶	0.0	0.0	n/a	-	-
Miscellaneous	n/a	0.0	86.0	-	-
Uninspected, total	8.0	4.0	0.0	-100.0	-100.0
Commercial fishing	121.0 ^m	188.0	102.0	-1.7	-45.7
Tugs	66.0 ⁿ	56.0	47.0	-3.3	-16.1
Cargo, barge	15.0	11.0	9.0	-5.0	-18.2
Foreign	0.0	7.0	0.0	0.0	-100.0
Miscellaneous	8.0	n/a	25.0	12.1	-
	32.0	14.0	21.0	-4.1	50.0

WATER TRANSPORT PROFILE (Cont.)

	1972	1981	1982	1972-1982 Average Annual % Change	1981-1982 % Change
Total Number of Injuries in Waterborne Transport ⁵	110.0 ^m	175.0 ^m	180.0 ^m	5.0	2.9
Inspected, total	40.0 ⁿ	93.0 ^x	n/a	-	-
Passenger and ferry, large and small	3.0	74.0	-	-	-
Freight	12.0	8.0	-	-	-
Tank ships and tank barges	18.0	11.0	-	-	-
Government owned vessels	0.0	n/a	-	-	-
MODU ⁶	n/a	0.0	-	-	-
Miscellaneous	7.0	0.0	-	-	-
Uninspected, total	71.0	48.0	-	-	-
Commercial fishing	14.0	19.0	-	-	-
Tugs	11.0	7.0	-	-	-
Cargo, barge	0.0	15.0	-	-	-
Foreign	5.0	n/a	-	-	-
Miscellaneous	40.0	5.0	-	-	-
Number of Fatalities in Recreational Boating					
Inboard	147.0 ^v	85.0 ^k	72.0 ^w	-6.9	-15.3
Outboard	761.0	570.0	580.0	-2.7	1.8
Inboard/outboard	41.0	50.0	36.0	-1.3	-28.0
Jet	n/a	4.0	10.0	-	150.0
Sail	n/a	28.0	52.0	-	85.7
Manual (oars and paddle)	n/a	282.0	294.0	-	4.3
Other	287.0	10.0	26.0	-21.4	160.0
Propulsion Unknown	201.0	179.0	108.0	-6.0	-39.7
Total	1,437.0	1,208.0	1,178.0	-2.0	-2.5

n/a = not available, + = not calculable.

* Figure obtained by addition/subtraction and may not appear directly in data source

1 Revenues paid by American travelers to U.S. and foreign flag carriers.

2 Number of Shipboard jobs on oceangoing commercial ships, 1,000 gross tons and over.

3 Number of vessels in CY81 column includes period Jan. 1, 1981 thru Apr. 30, 1982.

4 Casualties to commercial vessels under USCG jurisdiction.

5 Fatalities/injuries are on a calendar year basis due to vessel casualties.

6 Mobile Offshore Drilling Units.

Source: The following data references are listed in Appendix A, p. 182.

Source	Reference Number/Location	Source	Reference Number/Location
a	26) pp. 2,5	q	31) p. 11
b	27) pp. 4	s	25) pp. 4,5
c	17) Tables 1, 12 and 13	t	18) p. 59
d	27) personal communication	u	41) SIC 373, 372, and 44 p. 717
e	36) Table 1246	v	30) p. 21
f	42) SIC 373, p. 116 and SIC 44, p. 220	w	31) p. 22
g	7) pp. 1,2,3	y	54) Annual issues
h	29) Part 5, Sect 3, Table 1, 1A, 1B, 2	aa	50) Seafaring Employment, pp.5-6
j	50) personal communication	bb	28) personal communication
k	31) p. 24	cc	50) Table 6
l	18) Table 1	x	64) personal communication
m	53) Charts 28 and 31		
n	32) p. 12		
o	19) Table 1		

RAIL PROFILE

A. CLASS I RAILROADS

				1972-1982 Average Annual % Change	1981-1982 % Change
	1972	1981	1982		
I. FINANCIAL					
Revenues, Class I Line-Haul Railroads (\$ millions)					
Passenger	257.1 ^a	534.2 ^a	572.9 ^a	8.3	7.2
Freight	12,670.0	28,925.4	25,627.4	7.3	-11.4
Other	482.5	1,438.9	1,303.2	10.5	-9.4
Total Operating revenues	13,409.8	30,898.6	27,503.5	7.5	-11.0
Operating Expenses, Class I Line-Haul Railroads ² (\$ millions)	12,528.4	28,586.9	26,490.3	7.8	-7.3
II. INVENTORY					
Number of Vehicles, Class I Railroads					
Freight-carrying cars ¹	1,381,038.0 ^c	1,072,047.0 ^c	1,006,276.0 ^c	-3.1	-6.1
Passenger train cars	7,859.0 ^d	3,945.0 ^d	3,737.0 ^d	-7.2	-5.3
Locomotives	27,073.0 ^e	27,423.0 ^e	26,799.0 ^e	-0.1	-2.3
Number of Companies, Class I Railroads	68.0 ^b	38.0 ^b	33.0 ^b	-7.0	-13.2
Number of Employees, Class I Railroads	526,061.0 ^g	436,397.0 ^g	378,904.0 ^g	-3.2	-13.2
Line Mileage, Line-Haul Railroads	203,299.0 ^h	168,000.0 ^u	165,000.0 ^f	-2.1	-1.8
III. PERFORMANCE					
Car Mileage, Class I Railroads (millions)					
Freight	30,766.4 ^d	27,968.4 ^d	24,301.7 ^d	-2.3	-13.1
Passenger	118.7	60.8	58.7	-6.8	-3.5
Motorcar	88.1	97.7	n/a	-	-
Total	30,973.2	28,126.9	24,360.3	-2.4	-13.4
Train Mileage, Class I Railroads (millions)					
Freight	451.0	407.5	344.9	-2.7	-15.4
Passenger	33.4	29.7	27.6	-1.9	-7.1
Total	482.5	437.2	372.5	-2.6	-14.8
Locomotive Mileage, Class I Railroads (millions)					
Freight	1,646.0 [*]	1,474.9 [*]	1,252.0 [*]	-2.7	-15.1
Passenger	24.0 [*]	14.0 [*]	13.1 [*]	-5.9	-6.4
Total	1,669.8	1,488.8	1,265.0	-2.7	-15.0
Revenue Passengers Carried, Class I Railroads (millions)					
Commutation	190.6 ^k	n/a	n/a	-	-
Other than Commutation ¹	70.4	n/a	n/a	-	-
Total ¹	261.1	299.0 ^s	288.0 ^s	1.0	-3.7
Revenue Passenger Miles, Class I Railroads (millions)					
Commutation	4,229.0 ^z	5,171.0 ^z	5,068.0 ^z	1.8	-2.0
Other than Commutation ¹	4,329.0	6,244.0 [*]	5,561.0	2.5	-10.9
Total ¹	8,558.0	11,415.0	10,542.0	2.1	-7.7

RAIL PROFILE

A. CLASS I RAILROADS (Cont.)

	<u>1972</u>	<u>1981</u>	<u>1982</u>	<u>1972-1982 Average Annual % Change</u>	<u>1981-1982 % Change</u>
Average Passenger Trip Length, Class I Railroads (miles)					
Commutation ¹	22.2 ^q	n/a	n/a	-	-
Other than Commutation	61.5	n/a	n/a	-	-
All Railroads ¹	32.8	39.0 ^t	39.0 ^t	1.8	0.0
Revenue Ton-Miles, Class I Railroads (millions)					
Freight	776,745.8 ^j	910,169.3 ^j	797,758.6 ^j	0.3	-12.4
Average Haul, Class I Railroads (miles)					
Freight	305.0	381.4	403.0	2.8	5.7
Number of Fatalities, Railroads and Grade Crossings					
Passengers on trains	48.0 ^m	4.0 ^v	9.0 ^w	-15.4	125.0
Employees on duty	134.0	65.0	78.0	-5.3	20.0
Employees not on duty	n/a	2.0	2.0	-	-
Contractor employees	n/a	5.0	4.0	-	-
Trespassers	548.0	582.0	501.0	-0.9	-13.9
Non-Trespassers	1,296.0	626.0	525.0	-8.5	-16.1
Total Railroad and Grade Crossing	2,026.0 ⁿ	1,284.0	1,119.0	-5.8	-12.9
Grade Crossing only	1,328.0 ⁿ	728.0	607.0	-8.0	-16.6
Railroad only	698.0 ^m	556.0	512.0	-1.6	-7.9

n/a = not available

* Figure obtained by addition and may not appear directly in data source.

¹ Includes Amtrak.

² Operating expenses include equipment, joint facility rents, leased roads and equipment, and all taxes except Federal income.

Source: The following data references are listed in Appendix A.p. 182.

<u>Source</u>	<u>References Number/Location</u>	<u>Source</u>	<u>Reference Number/Location</u>
a	8) p. 1	m	21) p.78
b	9) Preface	n	21) p.77
c	8) p. 10	q	8) p. 8
d	8) p. 11	s	27) p.9
e	8) p. 9	t	27) p.13
f	9) personal communication	u	9) p.42
g	8) p. 5	v	53) Table 10, p.30
h	9) p. 42	w	53) Table 6, p.27
i	8) p. 12	z	27) p.35
j	8) p. 6		
k	8) p. 8		

RAIL PROFILE

B. AMTRAK

				1972-1982 Average Annual % Change	1981-1982 % Change
	1972	1981	1982		
I. FINANCIAL					
Revenues (\$ thousands)					
Passenger	137,911.0 ^b	412,626.0 ^b	406,782.0 ^b	11.4	-1.4
Commutation	3,214.0 ^a	n/a	n/a	-	-
Other than Commutation	129,591.0	n/a	n/a	-	-
Other	24,665.0 ^b	99,722.0	107,601.0	15.9	7.9
Total Operating revenues	162,576.0	512,348.0	514,383.0	12.2	0.4
Operating Expenses	286,339.0	1,160,098.0	1,109,008.0	14.5	-4.4
II. INVENTORY					
Number of Vehicles					
Passenger train cars	1,571.0 ^a	1,830.0 ^a	1,929.0 ^a	2.1	5.4
Locomotives	285.0	398.0	409.0	3.7	2.8
Number of Companies	1.0	1.0	1.0	0.0	0.0
Number of Employees	807.0	20,458.0	18,101.0	36.5	-11.5
Line Mileage	n/a	23,775.0 ^d	23,594.0 ^d	-	-0.8
III. PERFORMANCE					
Car mileage (millions)					
Passenger	213.3 ^a	222.8 ^a	217.4 ^a	0.2	-2.4
Train Mileage (millions)					
Passenger	26.3 [*]	30.4 [*]	28.8 [*]	0.9	-5.3
Locomotive Mileage (millions)					
Passenger	57.7	37.9	38.1	-4.1	0.5
Revenue Passengers Carried (millions)					
Non-commutation	16.6 ^e	20.6 ^e	19.0 ^e	14.5	-7.8
Revenue Passenger Miles (millions)					
Non-commutation	3,039.0 ^f	4,762.0 ^f	4,172.0 ^f	3.2	-12.4
Average Passenger Trip Length (miles)					
Non-commutation	210.5 ^j	232.0 ^h	220.0 ^h	4.5	-5.2

* Figure obtained by addition/subtraction and may not appear directly in data source.

Source: The following data references are listed in Appendix A, p. 182.

Source	Reference Number/Location
a	8) p. 17
b	8) p. 16
d	9) p. 61
e	27) p. 36
f	27) p. 35
g	59) Amtrak, personal communication
h	27) p. 13
j	8) p. 18

OIL PIPELINE PROFILE

	<u>1972</u>	<u>1981</u>	<u>1982</u>	<u>1972-1982 Average Annual % Change</u>	<u>1981-1982 % Change</u>
I. FINANCIAL					
Operating Revenues (\$ millions)					
ICC-regulated	1,338.0 ^a	6,678.0 ^u	7,140.0 ^u	18.2	6.9
Non-regulated	245.0	742.0	793.0	12.5	6.9
Total	1,583.0	7,420.0	7,933.0	17.5	6.9
Operating Expenses (\$ millions)					
ICC-regulated	780.2 ^b	n/a	n/a	-	-
II. INVENTORY					
Number of ICC-regulated Companies	99.0	133.0 ^g	138.0 ^g	3.4	3.8
Number of Employees					
ICC-regulated Companies	14,814.0	21,800.0 ^k	22,100.0 ^k	4.1	1.4
Miles of Pipeline (statute miles) ¹					
Crude lines					
Trunk	n/a	68,486.0 ^y	69,529.0 ^y	-	1.5
Gathering	n/a	57,099.0	53,421.0	-	-6.4
Products lines	n/a	89,456.0	90,727.0	-	1.4
All lines	221,127.0 ^f	215,041.0	213,677.0	-0.3	-0.6
III. PERFORMANCE					
Intercity Ton-Miles (millions)					
Crude petroleum	284,500.0 ^v	333,100.0 ^v	339,500.0 ^{p^v}	1.8	1.9
Petroleum products	191,300.0 ^w	230,600.0 ^w	231,000.0 ^w	1.9	0.2
Total	475,800.0 ^x	563,700.0 ^x	570,500.0 ^{p^x}	1.8	1.2
Tons Transported (millions)					
Crude petroleum	488.0 ^e	399.5 ^y	417.0 ^y	-1.6	4.4
Petroleum products (delivered from lines)	389.0 ^h	486.5	480.0	2.1	-1.3
Total	876.0 ⁱ	886.0	897.0	0.2	1.2
Average Length of Haul (statute miles)					
Crude petroleum	299.0 ^d	834.0	814.0	10.5	-2.4
Petroleum products	347.0	474.0	481.0	3.3	1.5
Total	n/a	636.0	636.0	n/a	0.0

¹ Regulated plus unregulated mileage of crude oil trunk and gathering lines, plus refined oil trunk lines.

n/a = not available

Source: The following data references are listed in Appendix A, p. 182.

<u>Source</u>	<u>Reference Number/Location</u>	<u>Source</u>	<u>Reference Number/Location</u>
a	25) p. 4	j	24) p. 101 & personal communication
b	17) Appendix E, Table 15	k	42) SIC 46, p. 221
c	26) p. 2	t	40) personal communication
d	25) p. 14	u	27) p. 5,7
e	11) Table 2	v	11) Table 2
f	27) p. 21	w	11) Table 3
g	63) personal communication	x	11) Table 1
h	11) Table 3	y	27) personal communication
i	11) Table 1		

NATURAL GAS PIPELINE PROFILE

				1972-1982 Average Annual % Change	1981-1982 % Change
I.	FINANCIAL ¹	1972	1981	1982	
	Transmission Companies				
	Operating Revenues (\$ millions)				
	Total Operating Revenues	7,390.0 ^{0a}	50,188.0 ^b	55,847.0 ^b	22..4 11.3
	Operation Expenses (\$ millions)				
	Operating Expenses	4,953.0	44,239.0	49,313.0	25.8 11.5
	Maintenance Expenses	134.0	488.0	524.0	14.6 7.4
	Total Operating and Maintenance Expenses	5,087.0	44,727.0	49,837.0	25.6 11.4
	Taxes				
	Federal Taxes*	429.0	1,357.0	1,456.0	13.0 7.3
	State and Local Taxes*	216.0	466.0	439.0	7.4 -5.8
	Total Taxes	644.0	1,823.0	1,895.0	11.4 4.0
	Total Operating Expenses	6,343.0	47,996.0	53,321.0	23.7 11.1
	Distribution Companies				
	Operating Revenues (\$ millions)				
	Total Operating Revenues	4,161.0 ^c	12,726.0 ^d	14,653.0 ^d	13.4 15.1
	Operating Expenses (\$ millions)				
	Operation Expenses	2,879.0	10,727.0	12,523.0	15.8 16.7
	Maintenance Expenses	119.0	206.0	217.0	6.2 5.3
	Total Operating and Maintenance Expenses	2,999.0	10,933.0	12,740.0	15.6 16.5
	Taxes				
	Federal Taxes*	198.0	271.0	286.0	3.8 5.5
	State and Local Taxes*	333.0	587.0	657.0	7.0 11.9
	Total Taxes	531.0	858.0	943.0	5.9 9.9
	Total Operating Expenses	3,716.0	12,083.0	13,997.0	14.2 15.8
II.	INVENTORY				
	Transmission Companies				
	Number of employees	35,400.0 ^e	46,600.0 ^f	48,400.0 ^f	3.2 3.9
	Miles of transmission pipeline	258,100.0 ^g	269,500.0 ^g	271,700.0 ^g	0.5 0.8
	Distribution Pipeline Companies				
	Number of employees	54,800.0 ^e	41,800.0 ^f	41,600.0 ^f	-2.7 -0.5
	Miles of distribution pipeline	623,400.0 ^g	714,100.0 ^g	720,900.0 ^g	1.5 1.0
	Number of Interstate Natural Gas Pipeline Companies	80.0 ^m	93.0 ^h	97.0 ⁿ	-1.9 4.3
III.	PERFORMANCE				
	Total Marketed Production				
	(million cubic feet)	22,531,698.0 ⁱ	19,955,823.0 ^{ir}	18,519,675.0	-1.9 -7.2
	Total Delivered to Consumers				
	(million cubic feet)	19,879,733.0 ^j	17,833,942.0 ^j	16,295,245.0 ^j	-2.0 -8.6
	Total Consumed (million cubic feet)	22,101,452.0	19,403,858.0	18,001,055.0	-2.0 -7.2
	Total Gas Used as a Pipeline				
	Fuel (million cubic feet)	766,156.0	642,325.0	596,411.0	-2.5 -7.2
	Total Fatalities*	35.0 ^l	22.0 ^l	29.0 ^l	-1.9 31.8
	Gas Pipeline	34.0	17.0	29.0	-1.6 29.0
	Liquid Pipeline	1.0	5.0	0.0	- -

* Figure obtained by addition/subtraction and may not appear directly in data source.

¹ Data for 1982 not directly comparable to previous years due to reclassification of several companies.

NATURAL GAS PIPELINE PROFILE (Cont.)

Source: The following data references are listed in Appendix A, p. 182.

<u>Source</u>	<u>Reference Number/Location</u>	<u>Source</u>	<u>Reference Number/Location</u>
a	2) Table 103	g	3) Table 5-1
b	3) Table 12-3	h	39) p. 1
c	2) Table 101	i	37) Table B1
d	3) Table 12-2	j	37) Table B3
e	2) Table 133	l	53) Chart 38B
f	3) Table 17-2	m	16) personal communication

SELECTED PASSENGER
AND CARGO PERFORMANCE
INDICATORS BY MODE
1972, 1981 and 1982

SELECTED PASSENGER AND CARGO PERFORMANCE INDICATORS BY MODE 1972, 1981 and 1982

SELECTED PASSENGER AND CARGO PERFORMANCE INDICATORS BY MODE, 1972, 1981 AND 1982

	<u>1972</u>	<u>1981</u>	<u>1982</u>
AIR CARRIER			
Revenue passenger-miles per capita			
Domestic operations			
Certificated, all services	588.2	878.3	922.7
Scheduled service	564.5	866.4	907.6
Non-scheduled service	17.6	11.9	15.0
International operations			
Certificated, all services	n/a	255.6	254.0
Scheduled service	n/a	218.8	213.8
Non-scheduled service	n/a	36.9	40.2
Revenue passenger-miles per aircraft (millions)			
Domestic and international operations, certificated route air carriers all services	n/a	94.6	94.1
Revenue ton-miles of freight per capita			
Domestic operations			
Certificated, all services	n/a	20.3	19.3
Scheduled service	n/a	19.0	17.5
Non-scheduled service	n/a	1.3	1.9
International operations			
Certificated, all services	n/a	14.2	14.4
Scheduled service	n/a	11.8	12.3
Non-scheduled service	n/a	2.4	2.1
Revenue miles flown per aircraft	n/a	1,038,436.5	1,078,716.2
Revenue hours flown per aircraft	n/a	2,595.2	2,619.0
Total flight time per capita (minutes)	n/a	1.9	1.8
Average number of certificated aircraft available for service per carrier	64.6	32.1	31.7
GENERAL AVIATION			
U.S. Population per eligible aircraft	1,443.2	1,075.6	1,103.7
Total number of miles flown per capita	15.8	n/a	n/a
Total number of miles flown per aircraft	22,874.3	n/a	n/a
Total number of hours flown per aircraft	186.2	190.9	174.0
Total flight time per capita (minutes)	7.7	10.6	9.5
AUTOMOBILE			
U.S. Population per registered vehicle			
Passenger cars and taxis	2.2	1.9	1.9
Motorcycles	55.4	39.5	40.5

SELECTED PASSENGER AND CARGO PERFORMANCE INDICATORS BY MODE, 1972, 1981 AND 1982 (Cont.)

	<u>1972</u>	<u>1981</u>	<u>1982</u>
AUTOMOBILE (Cont.)			
Vehicle-miles of travel per capita, passenger cars, taxis, motorcycles			
Rural			
Interstate rural	n/a	397.1	399.8
Other arterial rural	n/a	877.3	796.7
Other rural	n/a	807.6	804.7
All rural	2,083.1	2,005.5	2,001.3
Urban			
Interstate urban	n/a	552.9	576.5
Other urban	n/a	2,346.1	2,384.2
All urban	2,711.8	2,895.5	2,960.8
Total rural and urban	4,794.9	4,904.5	4,962.1
Passenger-miles per capita			
Passenger cars and taxis, total travel	10,369.1	10,646.1	10,774.0
Motorcycles, total travel	89.8	71.9	71.3
Vehicle-miles of travel per vehicle, passenger cars, taxis			
Rural	4,525.6	3,751.5	3,774.5
Urban	5,891.6	5,416.5	5,584.0
Total travel	10,417.2	9,174.6	9,358.5
Passenger-miles per vehicle			
Passenger cars and taxis	22,527.6	19,914.9	20,319.9
Motorcycles	4,980.1	2,844.8	2,889.1
BUS			
U.S. population per intercity bus	9,779.6	10,667.3	10,669.8
Vehicle-miles per capita			
Commercial buses			
Rural			
Interstate rural	n/a	1.4	1.4
Other arterial rural	n/a	2.1	2.0
Other rural	n/a	2.0	2.0
All rural	5.3	5.4	5.4
Urban			
Interstate urban	n/a	1.5	1.5
Other urban	n/a	8.6	8.6
All urban	7.9	10.0	10.1
Total rural and urban	13.1	15.4	15.4

SELECTED PASSENGER AND CARGO PERFORMANCE INDICATORS BY MODE, 1972, 1981 and 1982 (Cont.)

	<u>1972</u>	<u>1981</u>	<u>1982</u>
BUS (Cont.)			
School and non-revenue buses			
Rural			
Interstate rural	n/a	0.8	0.8
Other arterial rural	n/a	2.7	2.7
Other rural	n/a	4.2	4.4
All rural	9.0	7.8	7.9
Urban			
Interstate urban	n/a	0.8	0.8
Other urban	n/a	4.3	4.6
All urban	2.3	5.1	5.4
Total rural and urban	11.3	12.9	13.2
All buses			
Rural			
Interstate rural	n/a	2.2	2.2
Other arterial rural	n/a	4.8	4.7
Other rural	n/a	6.2	6.4
All rural	14.3	13.2	13.2
Urban			
Interstate urban	n/a	2.3	2.2
Other urban	n/a	12.9	13.2
All urban	10.6	15.2	15.4
Total rural and urban	24.4	28.3	28.7
Revenue passenger-miles per capita			
Total intercity bus	122.3	116.9	116.2
Revenue passenger-miles per vehicle			
Total intercity bus (millions)	1.2	1.3	1.2
TRUCK			
Vehicle-miles per capita, all trucks			
Rural			
Interstate rural	n/a	205.8	212.1
Other arterial rural	n/a	358.7	365.0
Other rural	n/a	392.8	391.5
All rural	722.9	957.3	968.5
Urban			
Interstate urban	n/a	169.8	179.0
Other urban	n/a	726.6	739.7
All urban	518.2	896.4	918.7
Total rural and urban	n/a	1,853.6	1,887.2
Vehicle-miles per truck registration			
All rural	7,122.8	6,372.7	6,361.2
All urban	5,106.2	5,871.6	6,033.8
Total rural and urban	n/a	12,340.0	12,395.0
Intercity ton-miles per capita	2,245.7	2,332.7	2,267.5

SELECTED PASSENGER AND CARGO PERFORMANCE INDICATORS BY MODE, 1972, 1981 and 1982 (Cont.)

	<u>1979</u>	<u>1980</u>	<u>1981</u>
LOCAL TRANSIT			
Total Vehicle Operating expenses (dollars) per vehicle-mile			
Motorbus	2.8	3.2	3.5
Rail rapid	6.9	7.6	8.9
Streetcar	5.4	2.3	2.9
Trolley bus	2.1	2.4	3.0
Demand response	n/a	0.7	0.7
Total annual passenger-miles per vehicle (thousands)			
Motorbus	364.2	387.5	341.1
Rail rapid	332.3	925.4	893.2
Streetcar	401.8	337.8	346.5
Trolley bus	155.3	185.0	127.9
Demand response	n/a	25.6	35.8
Total annual passenger-miles per vehicle-mile			
Motorbus	3.9	3.8	3.5
Rail rapid	3.9	4.7	4.6
Streetcar	8.8	8.2	8.3
Trolley bus	10.5	9.3	10.4
Demand response	0.3	0.3	0.3
	<u>1972</u>	<u>1981</u>	<u>1982</u>
WATER TRANSIT			
Ton-miles per capita, domestic water			
Coastwise	1,679.6	2,767.7	2,732.7
Internal	843.3	1,008.0	937.3
Lakewise	349.4	271.0	153.9
Local	6.5	5.7	4.8
Total	2,883.8	4,052.4	3,828.7
Tons of freight hauled per capita, domestic water			
Coastwise	1.2	1.4	1.3
Internal	2.4	2.3	2.1
Lakewise	0.7	0.5	0.3
Local	0.4	0.4	0.3
Total	4.7	4.6	4.1
CLASS I RAILROADS			
Revenue passenger-miles per capita			
Commutation	20.2	22.5	21.9
Other	20.7	27.2	24.0
Total	40.9	49.8	45.5

SELECTED PASSENGER AND CARGO PERFORMANCE INDICATORS BY MODE, 1972, 1981 and 1982 (Cont.)

	<u>1972</u>	<u>1981</u>	<u>1982</u>
CLASS I RAILROADS (Cont.)			
Revenue passenger-miles per passenger train car (millions)	1.1	2.9	2.8
Revenue ton-miles per capita	3,711.4	3,968.5	3,445.5
Revenue ton-miles per freight car (millions)	0.6	0.9	0.8
OIL PIPELINE			
Intercity ton-miles per mile of line (millions)	2,151.7	2,621.4	2,669.9
Tons of petroleum transported per capita	4.2	3.9	3.9
GAS PIPELINE			
Cubic feet of gas consumed per capita (thousands)	95.0	77.8	70.4
Cubic feet of gas consumed per mile of transmission pipeline (millions)	77.0	66.2	60.0
Cubic feet of gas consumed per mile of distribution pipeline (millions)	31.9	25.0	22.6
Cubic feet of gas produced per capita (thousands)	107.7	87.0	80.0
Cubic feet of gas produced per mile of transmission pipeline (millions)	87.3	74.0	68.2
Cubic feet of gas produced per mile of distribution pipeline (millions)	36.2	27.9	25.7
Operation expense per mile of transmission pipeline	19,190.2	164,152.0	181,899.7
Operation expense per mile of distribution pipeline	4,620.5	15,021.7	17,371.3
Maintenance expense per mile of transmission pipeline	519.2	1,810.8	1,928.6
Maintenance expense per mile of distribution pipeline	191.0	288.5	301.0

n/a = not available

Source: Per capita figures were based on 1972, 1981 and 1982 total resident populations of 209,284,000; 229,348,000; and 231,534,000, respectively (excluding Armed Forces abroad). Data was obtained from the *Statistical Abstract of the United States 1982-83*, Table 11, p. 12, for 1972 and *Statistical Abstract of the United States 1984*, Table 11, p. 11, for 1981 and 1982.

All other figures were taken directly from the "Modal Profiles" section of this book.

TRANSPORTATION TRENDS 1972 - 1982

**Table 1. Average Passenger Revenue per Passenger-Mile, 1972-1982
(cents)**

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Certificated air carrier ¹ (domestic)											
Total	6.40	6.63	7.52	7.69	8.16	8.61	8.49	8.96	11.53	12.74	12.02
(Index)*	(113)	(118)	(133)	(136)	(145)	(153)	(151)	(159)	(204)	(226)	(213)
First Class	8.70	8.93	9.89	10.58	11.50	12.21	11.97	11.43	14.35	14.14	13.82
(Index)*	(120)	(123)	(137)	(146)	(159)	(169)	(165)	(158)	(198)	(195)	(191)
Coach plus economy	5.88	6.11	6.94	7.05	7.49	7.92	7.81	8.34	10.87	12.37	11.53
(Index)*	(115)	(119)	(135)	(137)	(146)	(154)	(152)	(163)	(212)	(241)	(225)
Class I rail ²											
Total	4.79	4.88	4.98	4.99	5.65	5.74	5.86	6.02	6.75	8.06 ^r	8.47
(Index)*	(150)	(153)	(156)	(156)	(177)	(179)	(183)	(188)	(211)	(252)	(265)
Commutation	4.22	4.29	4.44	4.57	5.04	5.07	5.20	5.37	5.82 ^r	6.76 ^r	7.06
(Index)*	(126)	(128)	(132)	(132)	(150)	(151)	(155)	(160)	(173)	(201)	(210)
Other than commutation	6.66	6.81	6.75	6.25	7.60	7.85	7.84	7.93	9.39	10.49 ^r	11.42
(Index)*	(213)	(218)	(216)	(200)	(243)	(251)	(250)	(253)	(300)	(335)	(365)
Amtrak**											
Total	4.37	4.40	5.23	5.66	5.56	5.83	6.08	6.59	8.18	8.66	9.75
(Index)	(101)	(102)	(121)	(131)	(124)	(135)	(141)	(153)	(189)	(200)	(226)
Commutation	2.97	3.46	3.52	4.40	3.59	3.01	3.07	3.56	3.62	n/a	n/a
(Index)	(103)	(120)	(122)	(152)	(124)	(104)	(106)	(124)	(125)	-	-
Other than commutation	4.42	4.44	5.29	5.71	5.62	5.92	6.16	6.67	8.18 ^r	8.66 ^r	9.75
(Index)	(101)	(101)	(121)	(130)	(128)	(135)	(141)	(152)	(190)	(198)	(223)
Class I intercity bus ³	3.98	4.05	4.42	4.85	5.14	5.18	5.62	6.21	7.26	8.35 ^r	8.18
(Index)*	(134)	(136)	(148)	(163)	(172)	(174)	(189)	(209)	(244)	(280)	(275)
Consumer Price Index*	125	133	148	161	171	182	195	217	247	272	289

r = revised

¹ Scheduled service.

² Excludes Amtrak and Auto-Train service.

³ Regular route intercity service.

* Index = 100 in 1967.

** Amtrak established May 1, 1971, index = 100 in 1971.

Source: See Appendix A, p. 186.

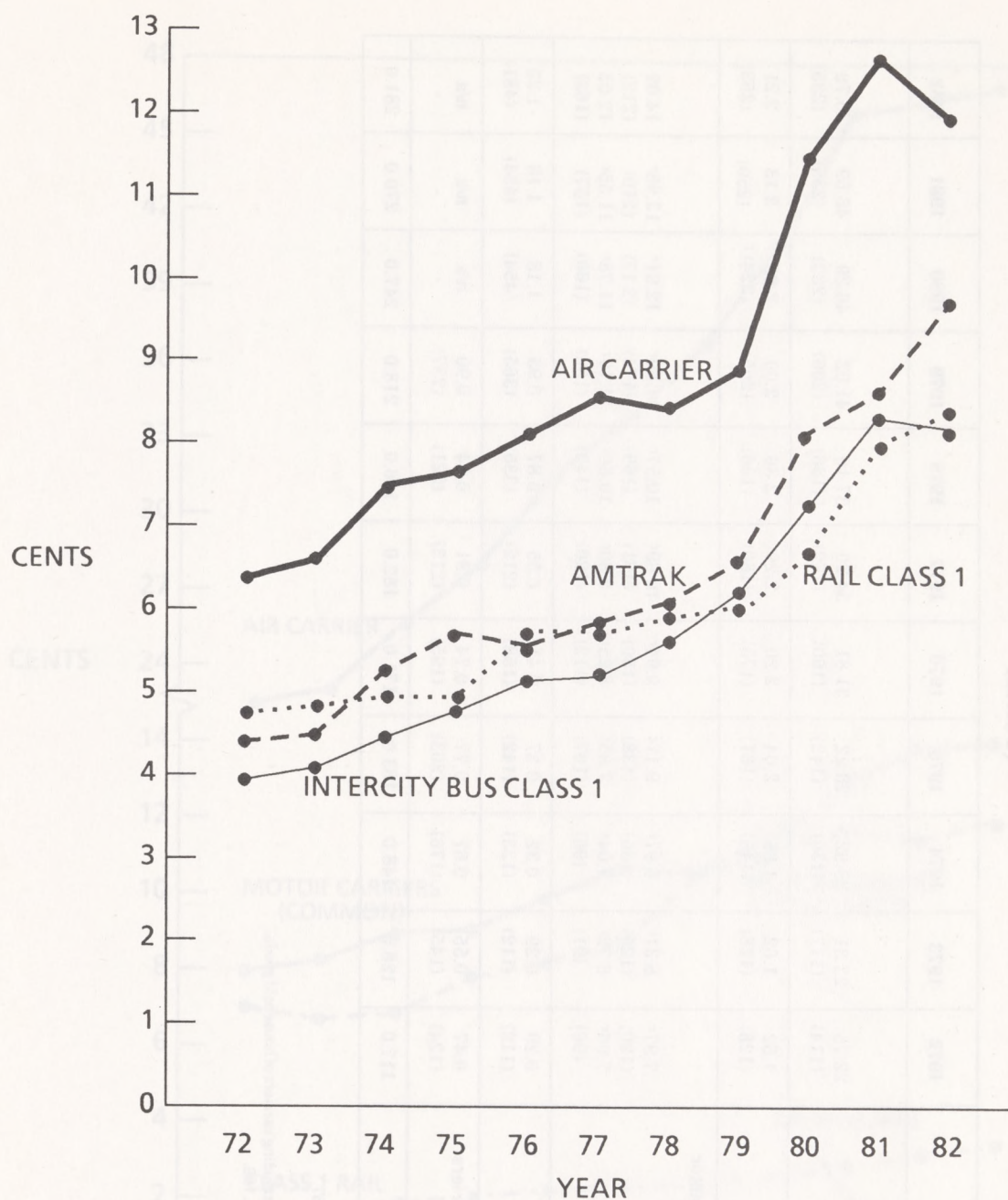


Figure 10. Average Passenger Revenue per Passenger-Mile, 1972-1982

**Table 2. Average Freight Revenue per Ton-Mile, 1972-1982
(cents)**

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Air carrier certificated, domestic operations, scheduled service (Index)*	22.75 (114)	23.31 (117)	25.92 (130)	28.22 (142)	31.81 (160)	34.20 (172)	37.10 (186)	41.02 (206)	46.29 (233)	46.69 (235)	46.78 (235)
Class I rail (Index)*	1.62 (128)	1.62 (128)	1.85 (146)	2.04 (161)	2.20 (173)	2.29 (180)	2.36 (186)	2.60 (205)	2.85 (224) r	3.18 (250)	3.21 (253)
Class I and II intercity motor carriers of property ¹											
Common (Index)*	7.97r (120)	8.31r (125)	8.97r (135)	9.17r (138)	9.94r (150)	10.69r (161)	10.57r (159)	11.59r (174)	12.91r (217)	13.98r (210)	14.09 (212)
Contract (Index)*	7.06r (96)	6.72r (91)	7.04r (96)	7.85r (107)	8.25r (112)	8.80r (120)	10.50r (143)	11.19r (152)	11.78r (160)	11.55r (157)	12.03 (163)
Oil Pipelines (Index)*	0.29 (112)	0.29 (112)	0.32 (123)	0.37 (142)	0.41 (158)	0.55 (212)	0.87 (335)	0.95 (365)	1.18 (454)	1.18 (454)	1.25 (481)
Class A and B water carriers (Index)*	0.47 (124)	0.55 (145)	0.67 (176)	0.77 (203)	0.74 (195)	0.81 (213)	0.84 (221)	0.90 (237)	n/a -	n/a -	n/a -
Producer Price Index*	117.0	128.0	148.0	163.0	171.0	182.0	196.0	218.0	247.0	270.0	281.0

* Index = 100 in 1967.

r = revised

¹ Intercity service excluding carriers of household goods.

Source: See Appendix A, p. 186.

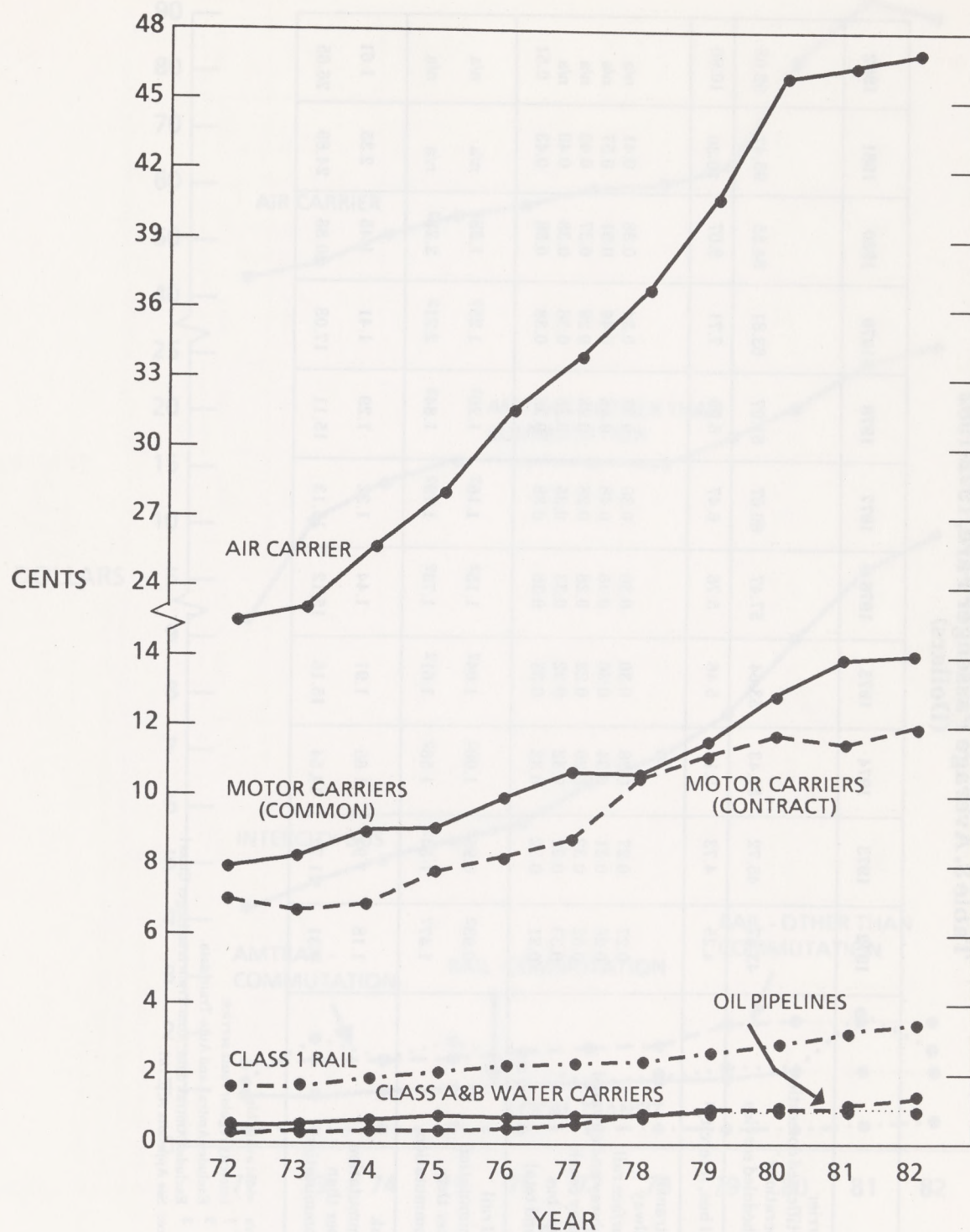


Figure 11. Average Freight Revenue per Ton-Mile, 1972-1982

**Table 3. Average Passenger Fare, 1972-1982
(Dollars)**

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Air carrier Certificated domestic operations scheduled service	43.87	45.72	51.43	53.64	57.47	60.67	61.07	63.81	84.55	95.42	92.08
Class I bus, intercity ¹	4.25	4.73	5.13	5.46	5.76	6.47	6.90	7.71	9.07	10.30	10.90
Local transit											
Railway											
Surface rail	0.27	0.27	0.28	0.30	0.30	0.30	0.33	0.34	0.38	0.41	n/a
Subway and elevated	0.28	0.31	0.34	0.36	0.46	0.48	0.46	0.46	0.51	0.57	n/a
Trolley coach	0.32	0.32	0.29	0.28	0.28	0.28	0.28	0.29	0.37	0.40	n/a
Motor bus	0.33	0.32	0.32	0.32	0.33	0.35	0.36	0.36	0.38	0.40	n/a
Grand total	0.31	0.32	0.32	0.33	0.36	0.38	0.38	0.38	0.38	0.43	0.51
Class I rail											
Commutation	0.93 ²	0.95 ²	1.00 ²	1.04 ²	1.15 ²	1.16 ²	1.20 ³	1.25 ³	1.38 ³	n/a	n/a
Other than Commutation	1.47 ²	1.54 ²	1.56 ²	1.61 ²	1.73 ²	1.79 ²	1.84 ³	2.21 ³	2.28 ³	n/a	n/a
Amtrak											
Commutation	1.18	1.94	1.65	1.91	1.44	1.22	1.29	1.41	1.45	2.35	1.61
Other than Commutation	9.31	11.72	14.54	15.16	15.12	15.13	15.11	17.08	20.86	24.89	26.65

n/a = not available

¹ Intercity regular route service.

² Excludes Amtrak and Auto-Train data.

³ Excludes Amtrak data, Auto-Train is no longer Class I.

Source: See Appendix A, p. 187.

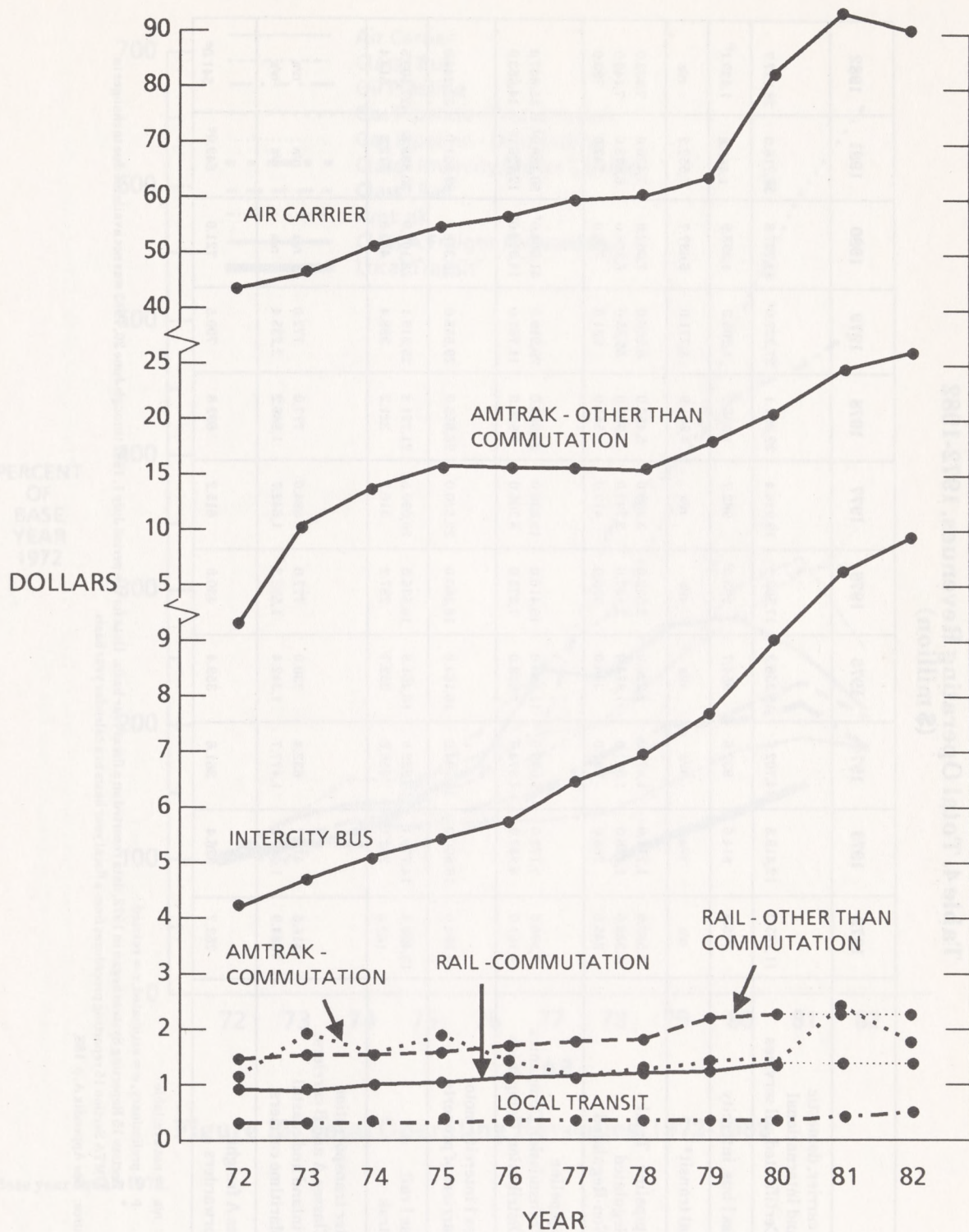


Figure 12. Average Passenger Fare, 1972-1982

Table 4. Total Operating Revenues, 1972-1982
(\$ million)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Air carrier, domestic and international Certificated, all services	11,163.3	12,418.8	14,702.6	15,356.3	17,503.2	19,926.4	22,892.1	27,227.0 ^r	33,727.8	36,216.0	28,727.7
Class I bus, intercity	775.3	814.6	932.6	954.7	993.0 ^r	982.7	1,036.7	1,205.2	1,393.9	1,465.8	1,439.1 ^p
Local transit*	n/a	n/a	n/a	n/a	n/a	n/a	4,861.9	5,771.0	6,637.7	7,552.2	n/a
Oil pipeline - Total	1,583.0	1,711.0	1,878.0	2,220.0	2,532.0	3,209.0	5,452.0	6,206.0	7,062.0	7,420.0	7,933.0
Regulated	1,338.0	1,446.0	1,587.0	1,874.0	2,137.0	2,792.0	4,907.0	55,85.0	6,356.0	6,678.0	7,140.0
Non-Regulated	245.0	265.0	291.0	346.0	395.0	417.0	545.0	621.0	706.0	742.0	793.0
Gas pipeline											
Transmission Companies	7,390.0	7,172.0	9,085.0	11,898.0	15,416.0	19,836.0	22,989.0	29,919.0	41,604.0 ^r	50,188.0 ^r	55,847.0
Distribution Companies	4,161.0	4,243.0	4,874.0	5,938.0	7,375.0	8,705.0	9,936.0	11,767.0	14,013.0 ^r	12,726.0 ^r	14,653.0
Class I intercity motor carriers of property	14,994.0	16,600.0	16,704.0	16,164.0	18,360.0	22,520.0	26,855.0	29,858.0	30,338.0	32,531.0	32,246.0
Class I rail Amtrak	13,409.8 162.6	14,770.1 202.1	16,922.8 256.9	16,401.9 252.7	18,536.5 287.2	20,090.5 310.2	21,721.3 321.2	25,219.1 398.4	28,102.9 453.5	30,898.6 512.3	27,503.5 514.4
Water transportation											
Classes A and B carriers, inland and coastal	416.5	473.7	632.4	730.0	777.0	694.0	777.0	772.0	n/a	n/a	n/a
Maritime carriers	7884.9	1,087.2	1,477.7	1,342.4	1,583.3	1,642.7	1,889.2	2,235.4	n/a	n/a	n/a
Class A freight forwarders	252.7	326.4	361.6	359.4	430.8	615.2	602.8	700.5	721.0	649.0 ^e	541.0 ^e

n/a = not available

p = preliminary, e = estimated, r = revised

* Section 15 Reporting System began in 1978, data reported on a fiscal year basis. Data for the period July 1, 1982 through June 30, 1983 was not available due to changes in UMTA Section 15 reporting procedures from a fiscal year basis to a calendar year basis.

Source: See Appendix A, p. 188.

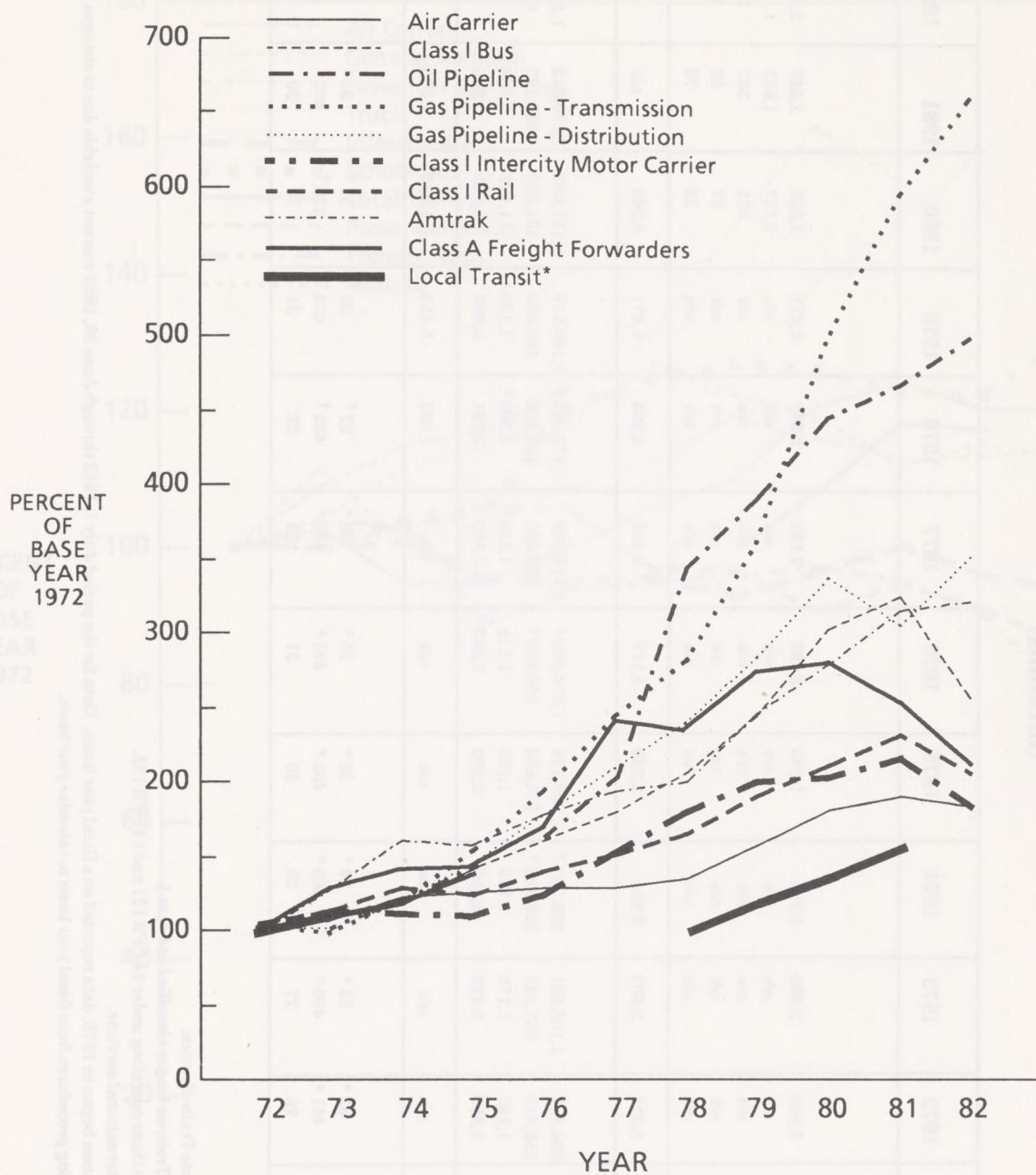


Figure 13. Total Operating Revenues, 1972-1982

* Base year equals 1978.

Table 5. Vehicle-Miles, 1972-1982
(millions)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Air carrier domestic operations											
Certificated, all services +	2,042	2,098	1,938	1,948	2,052	2,162	2,249	2,471	2,523	2,442	2,442
Total majors	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	2,137	1,953	1,902
Total nationals	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	331	367	388
Total large regionals	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	57	56	101
Total medium regionals ¹	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	23	70	69
General Aviation ^e	3,371	3,687	3,864	3,939	4,172	4,402	4,966	5,471	5,204	n/a	n/a
Highway											
Passenger car and taxi	986,407	1,106,861	995,544 ^r	1,028,121	1,074,000 ^r	1,118,649	1,171,092 ^e	1,140,518	1,111,887	1,190,843	1,133,883
Truck	259,735	267,147	266,694 ^r	274,454	306,950 ^r	329,465	347,906	360,500	384,570	425,127	436,959
Intercity bus	1,182	1,178	1,195	1,126	1,118	1,118 ^r	1,099 ^r	1,135 ^r	1,182	1,134	1,115
School bus	2,359	2,412	2,450	2,500	2,862	2,950	2,991	2,980	2,900	2,960	3,062
Local transit ²	n/a	n/a	n/a	n/a	n/a	n/a	1,303	1,410	1,532	1,522	n/a
Class I rail											
Passenger train	33 *	33 *	34 *	35 *	35 *	32 *	32 [†]	30 [†]	31 [†]	30 [†]	28 [†]
Freight train	451 *	469 *	469 *	403 *	425 *	428 *	433 [†]	438 [†]	429 [†]	408	345
Amtrak	26	27	29	30	31	33	32	31	29	30	29

e = estimated

r = revised

* Excludes Amtrak and Auto Train-Service.

† Excludes Amtrak. Auto-Train no longer classified as Class I.

+ All operations other than those operating under 14 CFR 121 and 14 CFR 135.

¹ Includes domestic and international services.

² Section 15 Reporting System began in 1978, data reported on a fiscal year basis. Data for the period July 1, 1982 through June 30, 1983 was not available due to changes in UMTA Section 15 reporting procedures from fiscal year basis to calendar year basis.

Source: See Appendix A, p.189.

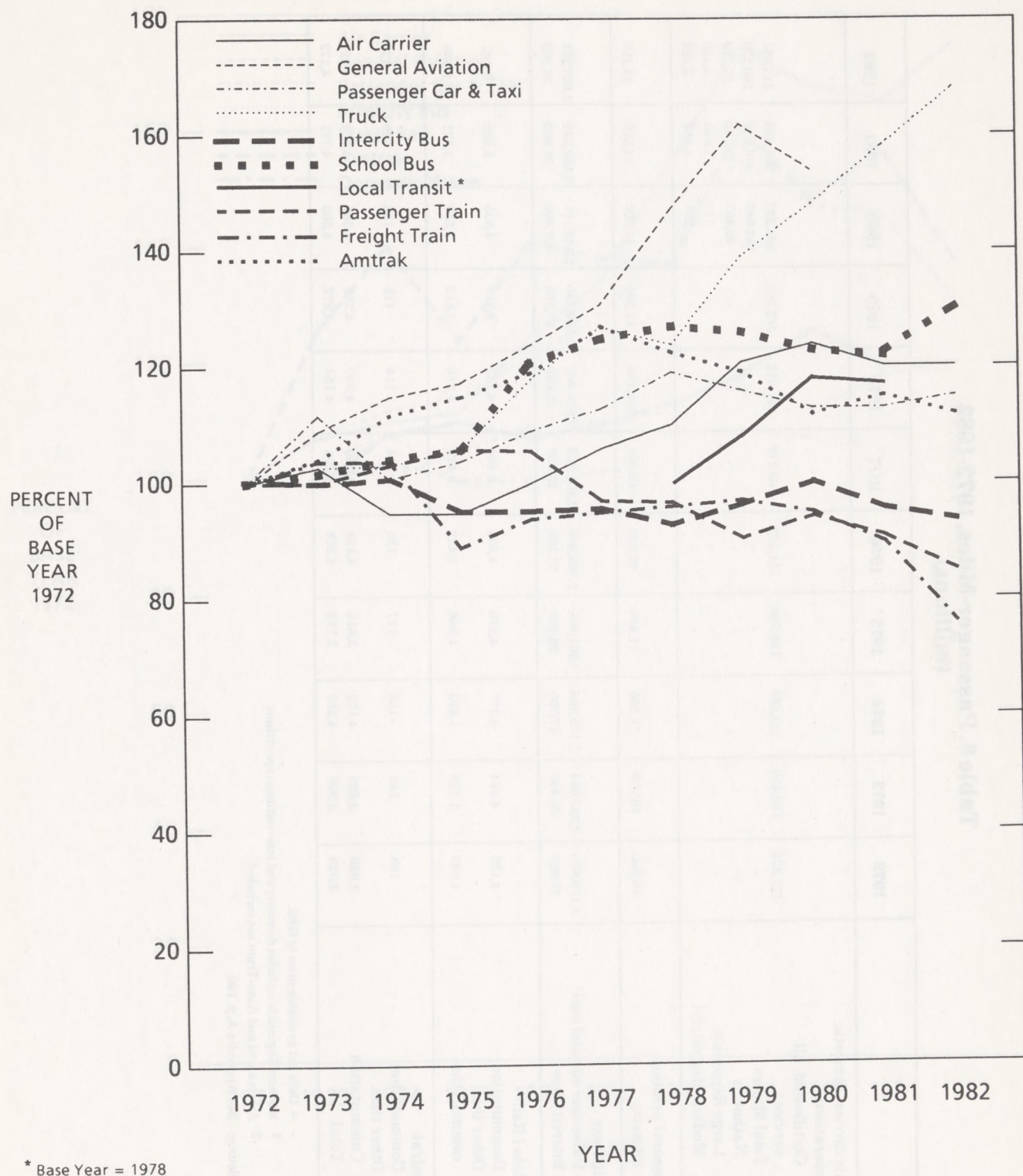


Figure 14. Vehicle-Miles, 1972-1982

Table 6. Passenger-Miles, 1972-1982
(millions)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Air carrier, domestic operations											
Certificated, all services	121,820	130,450	133,668	135,999	151,379	163,219	187,812	212,701	204,367	201,438	213,631
Total Majors	-	-	-	-	-	-	-	-	182,985	173,560	180,229
Nationals	-	-	-	-	-	-	-	-	20,467	25,149	27,368
Large Regionals	-	-	-	-	-	-	-	-	712	1,648	4,426
Medium Regionals ¹	-	-	-	-	-	-	-	-	251	1,352	3,888
General aviation, intercity	10,000	10,700	11,200	11,400	12,100	12,800	14,100	15,500	14,700	14,600	13,100
Highway											
Passenger car and taxi	2,170,095	2,237,094	2,179,586	2,261,866	2,366,676	2,461,028	2,576,402	2,509,140	2,446,151	2,552,639	2,607,931
Intercity bus	25,600	26,400	27,700	25,400	25,100	26,000	25,600	27,700	27,400	26,800	26,900
Class I Rail ²											
Commutation	4,120	4,064	4,377	4,376	4,339	4,464	4,552	4,719	4,935	5,039	5,145
Other than commutation	1,249	1,238	1,423	1,546	1,422	1,412	1,516	1,613	1,556	1,371	1,360
Amtrak											
Commutation	108	182	156	137	130	124	114	115	135	129	121
Other than Commutation	2,930	3,625	4,102	3,616	4,138	4,080	4,040	4,752	4,369	4,633	4,051
Total	3,039	3,807	4,259	3,753	4,268	4,204	4,154	4,876	4,503	4,762	4,172

- = Data not available prior to 1980.

¹ Medium Regionals includes domestic and international operations.

² Amtrak and Auto-Train not included.

Source: See Appendix A, p. 190.

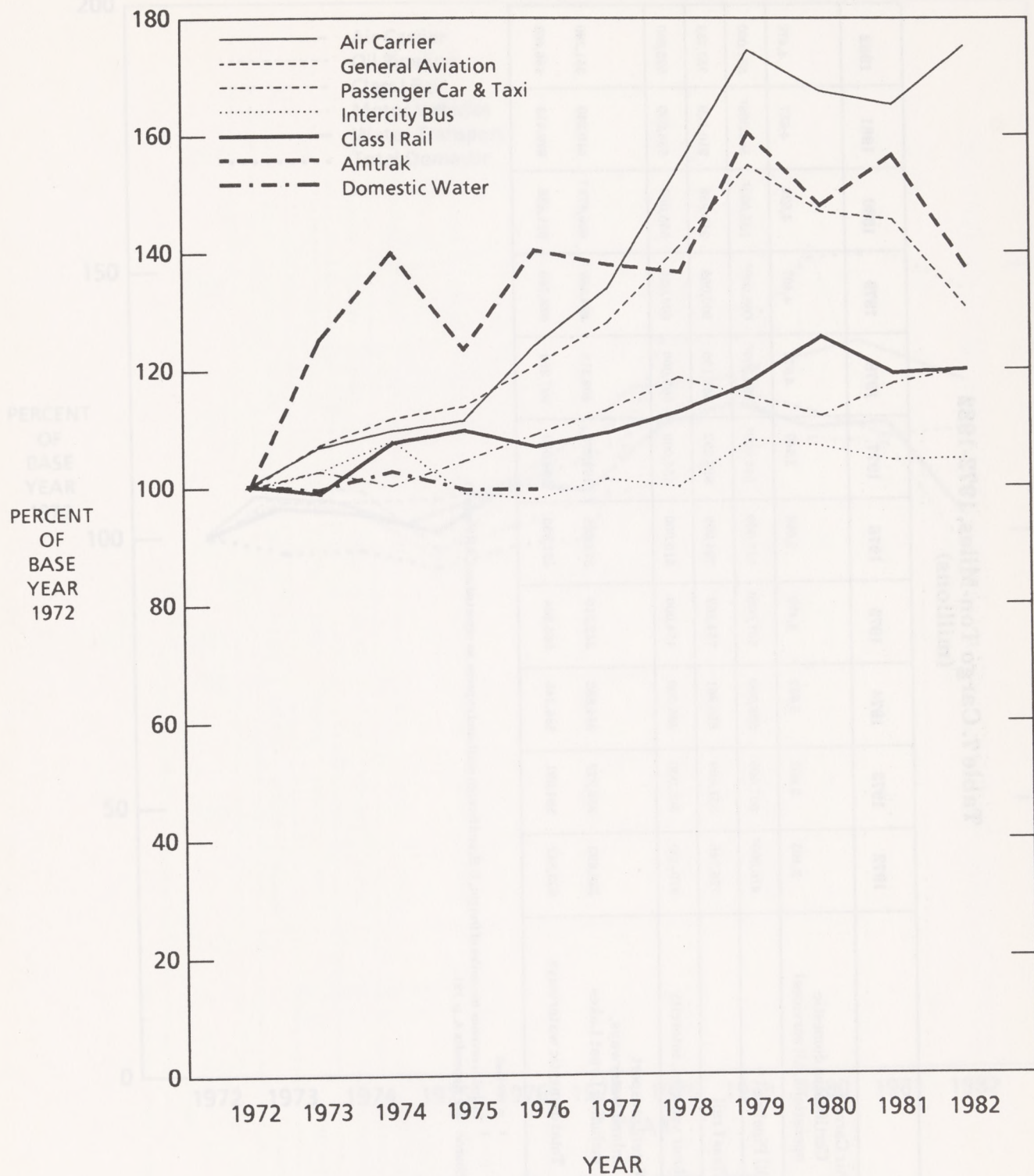


Figure 15. Passenger Miles, 1972-1982

Table 7. Cargo Ton-Miles, 1972-1982
(millions)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Air Carrier Certificated domestic operations, all services ¹	3,403	3,662	3,632	3,470	3,664	3,947	4,371	4,407	4,528	4,657	4,476
Oil Pipeline	476,000 ^r	507,000	506,000	507,000 ^r	515,000	546,000 ^r	586,000 ^r	608,000 ^r	588,000 ^r	564,000 ^r	571,000
Class I rail	776,746	851,809	850,961	754,252	794,059	826,292	858,105	902,059	918,958	910,169	757,759
Motor vehicles, intercity	470,000	505,000	495,000	454,000	510,000	555,000	599,000	608,000	555,000	535,000	525,000
Water transport Inland waterways, including Great Lakes	338,693	358,222	354,882	342,210	372,865	368,275	409,316	424,569 ^r	406,879 ^r	410,240	351,280
Total domestic waterways	603,542	584,691	586,345	565,984	591,853	599,000	827,263	828,760	921,836	929,413	886,469

^r = revised

¹ Includes revenue ton-miles of freight, U.S. and foreign mail, and express, as reported on CAB Form 41.
Source: See Appendix A, p. 191.

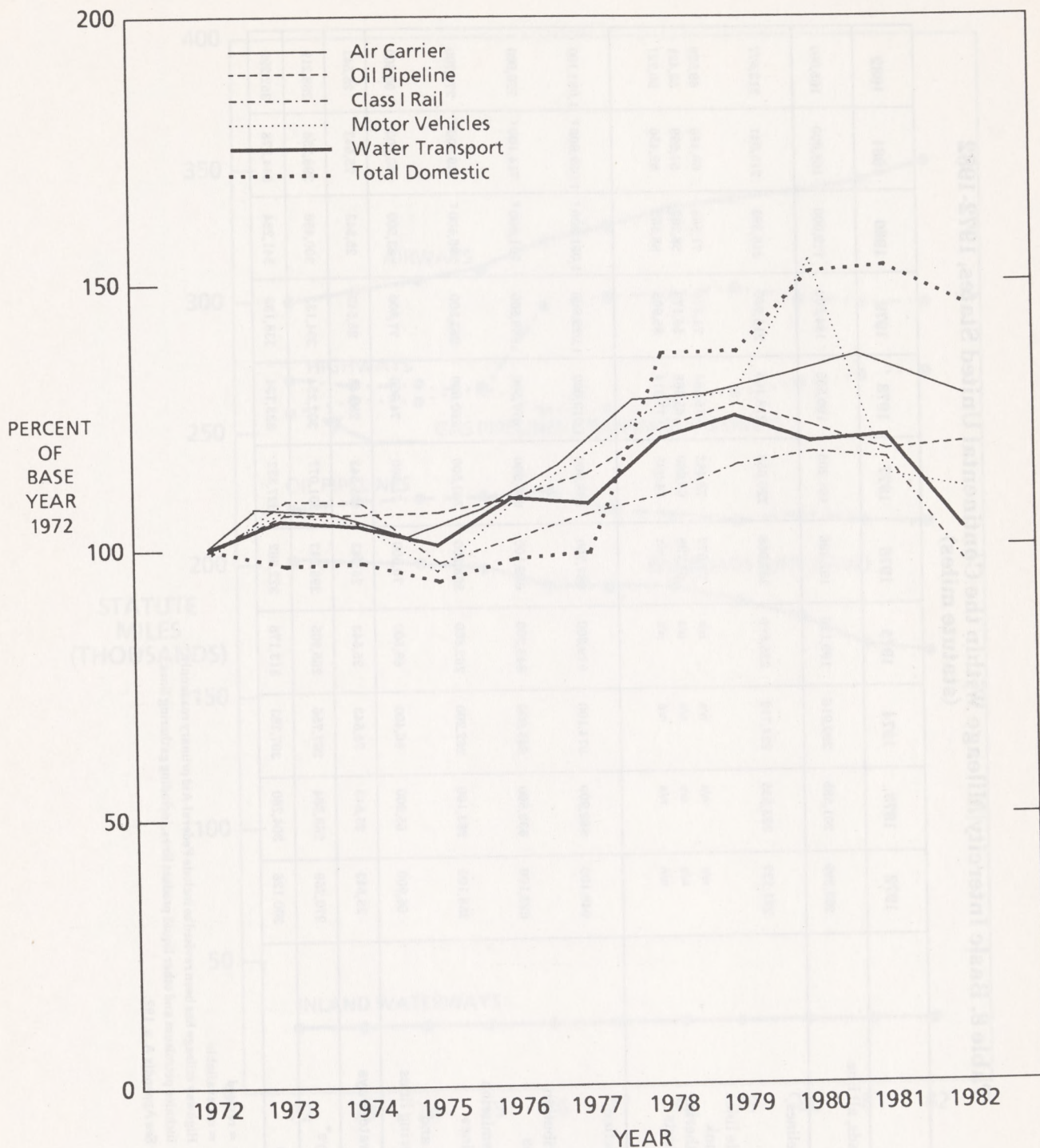


Figure 16. Cargo Ton-Miles, 1972-1982

Figure 17. Basic Inter-city Mileage Within the Continental United States, 1972-1982

Table 8. Basic Intercity Mileage Within the Continental United States, 1972-1982
(statute miles)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Railroads, all line haul	203,299	201,585	200,916	199,126	192,396	191,205	190,555	184,500	179,000	168,000	165,000
Oil pipelines, ¹ Total	221,127	223,535	224,712	225,889	227,066	220,058	218,165	215,960	218,393	215,041	213,677
Crude lines											
Trunk	n/a	n/a	n/a	n/a	77,972	78,483	75,483	71,876	71,568	68,486	69,529
Gathering	n/a	n/a	n/a	n/a	67,798	66,580	65,368	58,179	58,263	57,099	53,421
Products	n/a	n/a	n/a	n/a	n/a	74,995	77,314	85,905	88,562	89,456	90,727
Gas pipeline, Total	948,100	962,900	974,100	979,300	987,700	998,900	1,013,000	1,029,800	1,051,800 r	1,069,800 r	1,083,100
Distribution Mains	623,100	633,800	645,600	648,200	659,100	666,900	677,500	688,500	701,800 r	714,100 r	720,900
Transmission pipelines	258,100	263,100	262,200	262,600	258,200	260,500	260,600	263,500	266,500 r	269,500 r	271,700
Field and gathering lines	66,900	65,900	66,400	68,500	70,300	71,500	74,900	77,800	83,500	86,200	90,500
Inland waterways	25,543	25,543	25,543	25,543	25,543	25,543	25,543	25,543	25,543	25,543	25,543
Highways*	270,259	268,364	267,756	265,905	298,743	301,072	302,254	304,133	300,456	298,256	298,219
Airways	300,126	304,260	307,783	313,178	322,662	327,822	333,734	338,133	341,284	344,578	352,292

r = revised

n/a = not available

* Highway mileage has been revised to include Federal-Aid primary roads only.

¹ Includes petroleum and other liquid product lines, including gathering lines.

Source: See Appendix A, p. 192.

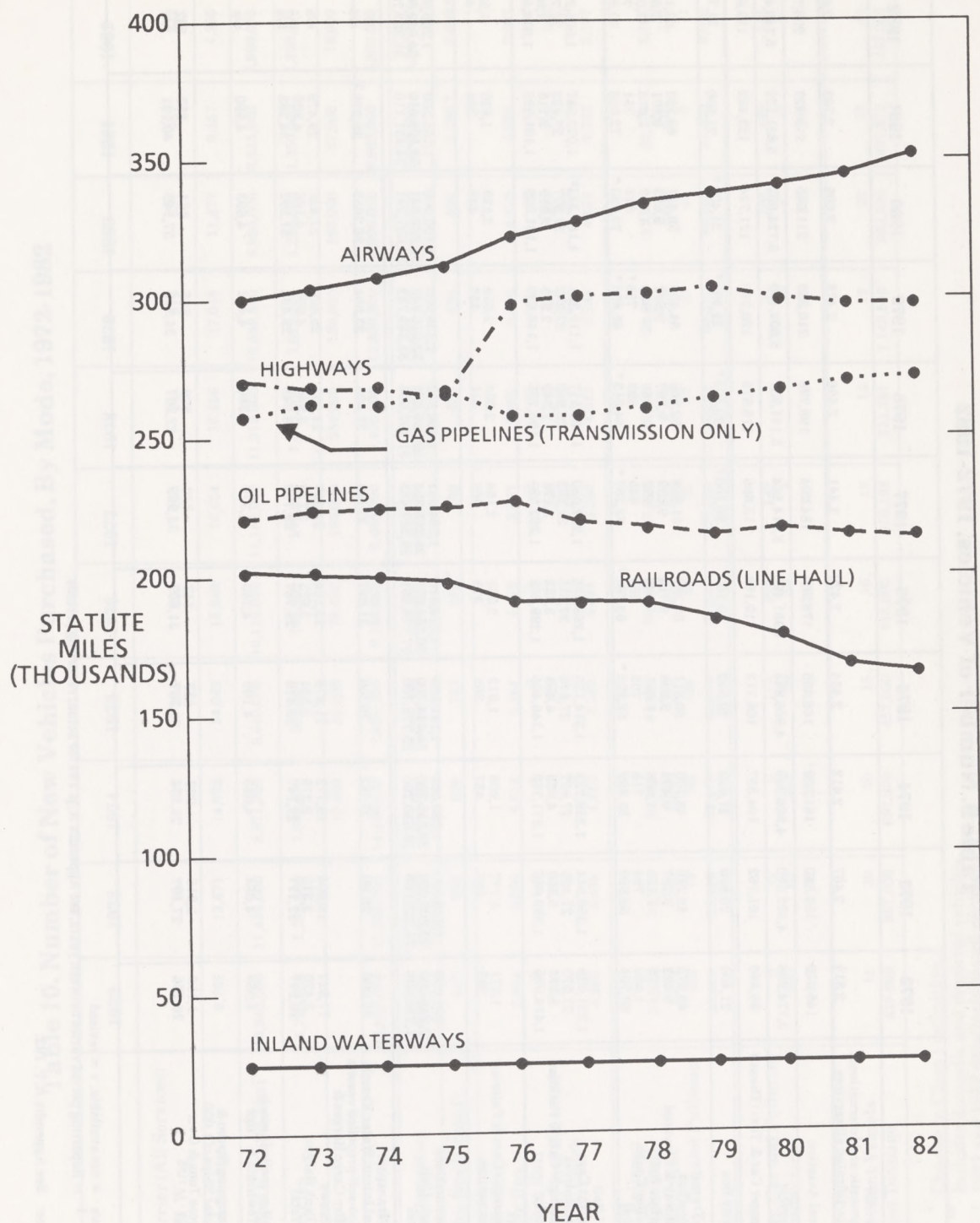


Figure 17. Basic Intercity Mileage Within the Continental United States, 1972-1982

Table 9. Number of Vehicles, 1972-1982

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Air carrier Domestic and International certificated all services	2,518	2,467	2,412	2,434	2,420	2,441	2,406	2,478	2,605	2,763	2,664
General Aviation	145,010	153,540	161,502	168,475	178,304	184,294	198,778	210,339	211,045	213,227	209,779
Motorcycle	3,774,996	4,332,580	4,966,399	4,966,844	4,981,496	5,014,564	5,141,957	5,502,450	5,724,602	5,831,132	5,743,463
Passenger Car & Taxi (Thous.)	96,860	101,762	104,857	106,713	110,189	113,696	116,575	120,248	121,724	123,462	123,698
Intercity Bus	21,400	20,800	21,000	20,500	20,100	20,100 ^r	20,400 ^r	21,300 ^r	21,400 ^r	21,500	21,700
Local Transit											
Motorbus	49,075	48,286	48,700	50,811	52,382	51,968	52,866	54,490	59,411	60,393	62,114
Subway & Elevated	9,423	9,387	9,403	9,608	9,714	9,639	9,567	9,522	9,693	9,801	9,867
Surface Rail	1,176	1,123	1,068	1,061	963	992	944	959	1,103	1,075	1,016
Trolley Coach	1,030	794	718	703	685	645	593	725 ^r	823	751	763
Total	60,704	59,590	59,889	62,226 [*]	63,787 [*]	63,287 [*]	64,013 [*]	65,696 [*]	70,983 [*]	72,063	73,803
Class I Rail											
Freight Cars	1,381,038	1,356,944	1,339,223	1,314,135	1,268,735	1,232,080	1,166,517	1,118,381	1,101,343 ^r	1,072,047	1,006,276
Locomotives	27,073	27,453	27,627	27,846	27,215	27,283	26,960	27,043	27,977	27,423	26,797
Passenger Cars & Pullman	5,974	5,360	4,933	4,484	3,253	3,176	2,242	2,215	2,219	2,115	1,808
Total	1,414,085	1,389,686	1,371,783	1,346,465	1,299,203	1,262,539	1,195,776	1,146,639	1,131,539	1,101,585	1,034,481
Amtrak											
Passenger Cars & Pullman	1,571	1,777	1,908	1,913	2,062	2,154	2,084	2,026	2,128	1,830	1,929
Locomotives	285	352	457	355	379	369	441	437	448	398	409
Truck											
Combinations	990,000	1,028,000	1,085,000	1,131,000	1,224,810	1,264,091	1,366,582	1,339,000	1,405,000	1,255,500	1,209,900
Single Unit	20,249,000	22,205,000	23,545,200	24,644,700	26,554,071	28,298,394	30,366,022	32,010,742	32,232,241	33,195,610	34,042,865
Total	21,239,000	23,233,000	24,630,200	25,775,700	27,778,881	29,562,485	31,702,604	33,349,742	33,637,241	34,451,110	35,252,765
Water Transport											
Total Inland Water Vessels	25,006	26,181	27,182	29,510	31,027	33,149	32,428	33,984	36,2855	39,278 ¹	n/a
Non-self-propelled vessels											
Dry Cargo Barges & Scows	17,527	18,804	19,772	21,876	23,164	24,937	24,037	25,420	27,426	29,479	n/a
Tank Barges	3,420	3,313	3,375	3,534	3,623	3,770	3,946	4,000	4,166	4,909	n/a
Total	20,947	22,117	23,147	25,410	26,787	28,770	28,048	29,492	31,592	34,388	n/a
Self-propelled vessels											
Towboats & Tugs	4,059	4,064	4,035	4,100	4,240	4,379	4,380	4,492	4,693	4,890	n/a
Oceangoing Steam & Motor Ships of 1,000 Gross Tons & Over											
Total	1,150	1,016	922	857	842	840	879	865	864	853	832
Total	26,156	27,197	28,104	30,367	31,869	33,989	22,207	34,849	37,149	40,131	n/a

n/a = not available, r = revised

¹ = Reporting period varies between years, see Appendix A, p. 194 for actual reporting periods.

Source: See Appendix A, P. 193.

Table 10. Number of New Vehicles Purchased, By Mode, 1972-1982

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Air Carrier (All Services) Fixed-Wing	227	294	332	315	222	155	241	376	387	387	232
General Aviation	9,765	13,671	14,026	14,043	15,648	16,624	16,456	17,048	11,877	9,457	4,266
Passenger Car and Taxi**	10,949,000	11,439,000	8,871,000	8,640,000	10,110,000	11,185,000	11,312,000	10,558,800	8,980,000	8,535,000	7,980,000
Motorcycles	1,725,000	1,255,000	1,580,000	990,000	740,000	970,000	1,015,000	1,010,000	1,250,000	1,350,000	1,300,000
Mopeds	-	-	13,000	32,000	78,000	190,000	350,000	130,000	180,000	67,000	18,000
Bicycles	13,900,000	15,200,000	14,100,000	7,300,000	8,100,000	9,400,000	9,400,000	10,800,000	9,000,000	8,900,000	6,800,000
Truck (Domestic)	2,446,000	2,915,000	2,511,000	2,351,000	3,040,000	3,500,600	6,920,860	3,120,159	2,231,500	1,972,200	2,247,800
Intercity Bus (Class I)	917	833	626	733	619 *	709	635	680	800	2,200 †	2,000 †
Local Transit											
Motor Bus	2,904	3,200	4,818	5,261	4,475	2,437	3,805	3,440	4,572	4,059	2,907
Surface Rail	0	0	0	0	4	62	35	70	32	87	111
Subway and Elevated	360	238	92	127	472	506	172	94	130	121	129
Trolley Coach	1	1	0	1	260	198	0	141	98	0	0
Total	3,265	3,439	4,910	5,389	5,481	3,203	4,012	3,745	4,832	4,267	3,147
Class I Railroad											
Freight Cars	37,931	34,171	36,315	41,692	30,836	27,098	28,003	28,640	31,193	20,900	5,765
Locomotives	1,377	1,165	1,018	772	438	820	1,214	1,709	1,466	470	323
Pass. Car and Pullman	334	73	85	156	44	20	42	43	44	0	1
Total	35,409	35,419	37,418	42,620	31,318	27,938	29,259	30,392	32,703	21,370	6,089
Amtrak											
Pass. Car and Pullman	0	10	0	109	305	133	1	56	108	119	101
Locomotives	285	67	362	30	58	4	75	39	17	43	35
Total	285	77	362	139	363	137	76	95	125	162	136
Water											
Merchant Vessels	15	30	20	15	16	18	14	15	23	12	11
Gross Tonnage	439,000	987,000	697,000	452,000	616,000	920,198	911,791	1,148,530	693,200	427,979	342,000

* Change in Class I definition.

** Includes domestic and imported vehicles.

† 1981 and 1982 data includes all carriers.

Source: See Appendix A, p. 194.

**Table 11. Number of Fatalities by Mode
1972-1983**

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
HIGHWAY												
Motor Vehicle Traffic	54,589	54,052	45,196	44,525	45,523	47,878	50,331	51,093	51,091	49,301	43,945	42,426 ^p
Motor Carriers of Property ¹	1,630	3,058	2,429	2,232	2,520	2,983	2,998	3,072	2,528	2,810	2,479	n/a
Motor Carriers of Passengers ¹	62	105	77	59	62	87	68	60	74	95	76	n/a
RAILROAD												
Rail-Highway Grade Crossing ²	1,260	1,186	1,224	966	1,174	996	1,064	883	833	728	607	578
Rail ²	685	730	689	575	510	534	582	546	584	556	512	495
RAIL RAPID TRANSIT												
	n/a	n/a	n/a	n/a	n/a	70	50	62	83	103 ^c	87 ^c	49 ^{cp}
AVIATION												
U.S. Air Carriers ³	186	221	460	122	38	78	160	351	0	4	235	15 ^p
Commuter Air Carriers ⁴	n/a	n/a	n/a	28	27	32	48	66	37	34	14	11 ^p
On-Demand Air Taxis ⁵	n/a	n/a	n/a	69	100	118	155	77	103	94	70	60 ^p
U.S. General Aviation ⁶	1,232	1,299	1,327	1,258	1,226	1,280	1,558	1,237	1,252	1,282	1,164	1,049 ^p
MARINE												
Waterborne Transportation	n/a	128	218	243	248	157	186	174	206	154	223 ^p	164 ^p
Recreational Boating	1,437	1,754	1,446	1,466	1,264	1,312	1,321	1,400	1,360	1,206	1,178	1,241 ^p
MATERIALS TRANSPORT												
Liquid Pipeline	1	7	10	7	5	3	3	4	3	5	0	6
Gas Pipeline	34	35	24	14	63	36	31 ^a	45 ^a	11	17	31	12 ^b
Hazardous Materials	12	21	32	27	18	32	46	18	19	10	12	8

n/a = not available.

p = Preliminary.

^a Includes preliminary notification of Pipeline leaks via telephone reports.

^b Beginning with 1983 data, Pipeline Incidents are credited to the year in which they occurred, not the year in which the report was received.

^c Fatalities resulting from train and nontrain accidents. Prior to 1981, fatality data include train accidents, train incidents and nontrain incidents.

¹ Includes only those motor carriers operating in interstate or foreign commerce.

² Fatalities resulting from train accidents, train incidents and non-train incidents.

³ Large carriers operating under 14 CFR 121 only, all scheduled service (airlines).

⁴ All scheduled service operating under 14 CFR 135 (commuter air carriers).

⁵ Non-scheduled service operating under 14 CFR 135.

⁶ All operations other than those operated under 14 CFR 121 and 14 CFR 135. Includes air carrier fatalities when in collision with General Aviation aircraft.

Source: See Appendix A, p. 195.

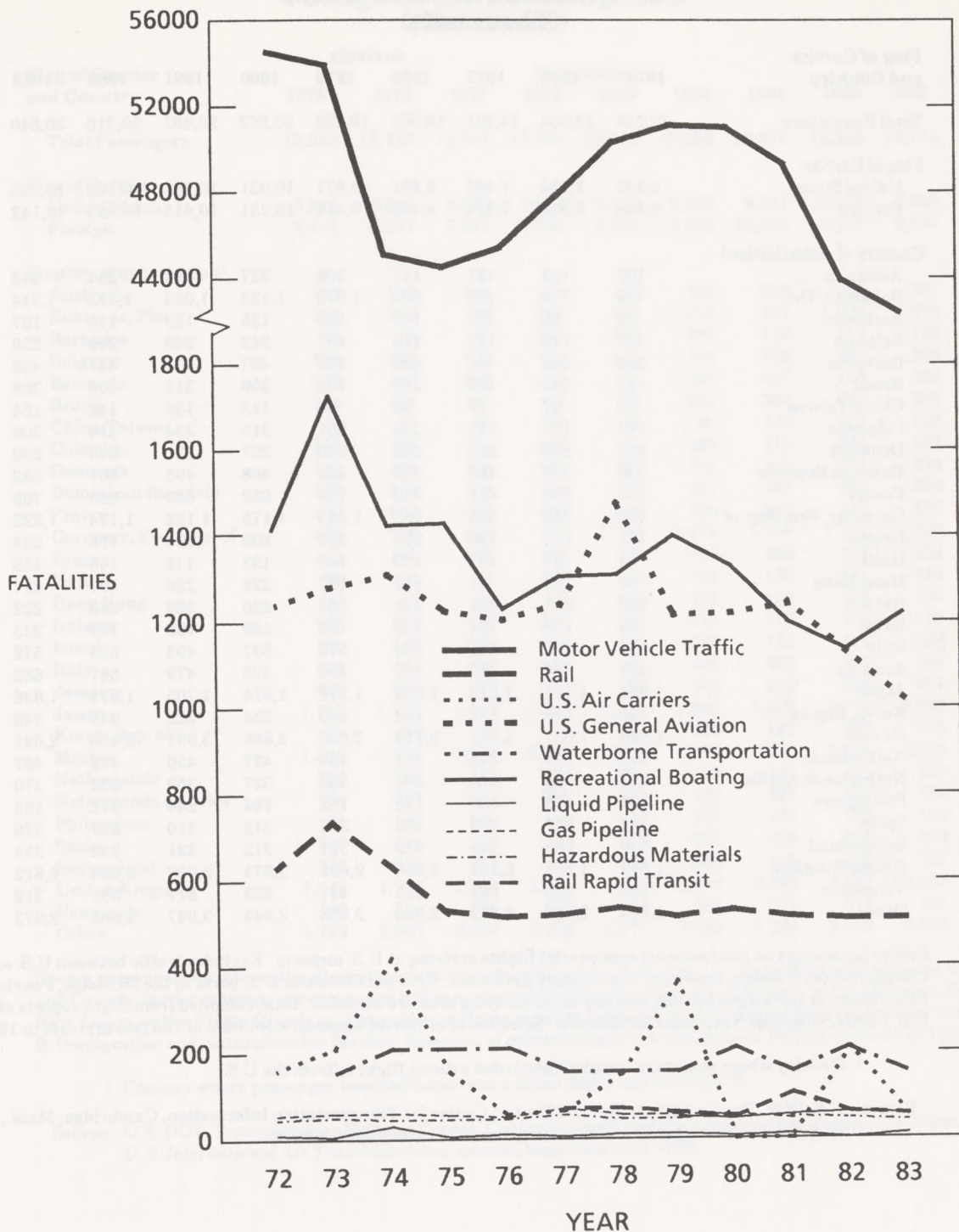


Figure 18. Number of Fatalities by Mode, 1972-1983

Table 12. Air Travel Arrivals Between the United States and Foreign Countries, 1975 to 1983
(Thousands)

Flag of Carrier and Country	Arrivals								
	1975	1976	1977	1978	1979	1980	1981	1982	1983
Total Passengers	12,646	13,964	14,701	16,955	19,282	20,262	20,881	20,216	20,840
Flag of Carrier:									
United States	6,503	7,124	7,487	8,551	9,871	10,031	10,265	10,163	10,698
Foreign	6,143	6,840	7,214	8,405	9,411	10,231	10,615	10,053	10,142
Country of embarkation ¹									
Australia	106	123	127	147	208	227	229	254	242
Bahamas, The	758	775	799	993	1,079	1,123	1,053	1,153	1,344
Barbados	76	85	104	117	139	135	123	115	167
Belgium	144	140	113	113	187	242	249	299	250
Bermuda	398	452	441	426	469	497	451	441	439
Brazil	212	183	186	219	253	300	311	308	308
China/Taiwan	50	57	67	92	96	113	138	148	154
Colombia	173	187	212	232	281	315	334	314	309
Denmark	222	238	238	248	260	267	251	243	230
Dominican Republic	336	370	416	429	465	468	495	501	532
France	512	596	611	656	707	689	686	695	705
Germany, Fed. Rep. of	622	749	863	963	1,053	1,175	1,182	1,174	1,223
Greece	121	161	198	220	231	208	206	198	234
Haiti	91	97	101	120	142	133	148	146	159
Hong Kong	98	123	91	112	187	228	230	197	217
Ireland	220	237	251	244	263	220	229	250	222
Israel	84	109	134	139	190	189	190	189	233
Italy	431	440	471	530	572	537	493	529	572
Jamaica	457	388	327	427	492	429	479	587	682
Japan	1,095	1,172	1,213	1,308	1,579	1,624	1,705	1,819	1,896
Korea, Rep. of	105	119	117	118	169	234	228	245	249
Mexico	1,626	1,661	1,647	2,118	2,620	2,886	3,091	2,456	2,691
Netherlands	312	314	322	371	460	427	450	482	467
Netherlands Antilles	213	273	269	307	353	327	359	332	370
Philippines	108	148	136	175	162	194	244	212	158
Spain	306	261	299	335	333	312	310	337	376
Switzerland	236	308	345	339	321	312	321	332	314
United Kingdom	1,549	1,851	2,102	2,596	2,692	2,973	3,092	2,694	2,812
Venezuela	205	225	282	355	431	533	577	581	312
Other	1,780	2,122	2,219	2,506	2,888	2,945	3,027	2,985	2,973

Covers passengers on international commercial flights arriving at U.S. airports. Excludes traffic between U.S. and Canada, border crossers, crewmen, and military personnel. Travelers between U.S. ports in the 50 States, Puerto Rico, Guam, or the Virgin Islands, and any other outlying area are included. Data compiled from flight reports of U.S. Immigration and Naturalization Service. Selection of countries based on minimum of 150,000 arrivals in 1983.

¹ Country where passenger boarded/deboarded a direct flight to/from the U.S.

Source: U.S. DOT, Transportation Systems Center, Center for Transportation Information, Cambridge, Mass., *U. S. International Air Travel Statistics*, annual, beginning with 1975.

**Table 13. Air Travel Departures Between the United States and Foreign Countries, 1975 to 1983
(Thousands)**

Flag of Carrier and Country	Departures								
	1975	1976	1977	1978	1979	1980	1981	1982	1983
Total Passengers	12,053	13,136	13,804	15,800	18,128	19,256	19,911	19,322	19,724
Flag of Carrier									
United States	5,913	6,519	6,889	7,834	9,142	9,369	9,581	9,485	9,888
Foreign	6,141	6,617	6,915	7,966	8,986	9,886	10,330	9,837	9,837
Country of debarkation ¹									
Australia	103	121	134	159	222	245	258	252	201
Bahamas, The	704	706	719	865	925	1,006	927	1,009	1,075
Barbados	74	76	97	105	124	126	116	113	168
Belgium	134	128	105	100	173	231	238	283	226
Bermuda	372	412	414	405	444	467	417	413	394
Brazil	206	192	181	217	252	291	301	303	303
China/Taiwan	41	53	61	77	85	90	105	123	128
Colombia	171	184	204	230	272	299	315	300	302
Denmark	188	203	210	214	238	254	243	235	219
Dominican Republic	322	358	390	402	419	443	466	464	490
France	470	503	539	569	646	635	646	647	656
Germany, Fed. Rep. of	649	728	824	897	1,003	1,178	1,149	1,164	1,220
Greece	123	167	185	198	220	190	189	197	222
Haiti	81	91	94	114	130	124	126	131	144
Hong Kong	59	67	51	76	127	152	166	144	184
Ireland	163	175	195	200	236	212	219	234	196
Israel	105	149	156	161	195	186	194	211	228
Italy	409	404	448	486	517	495	460	500	561
Jamaica	416	346	197	370	432	382	435	526	601
Japan	1,183	1,178	1,204	1,272	1,534	1,602	1,697	1,779	1,854
Korea, Rep. of	60	57	66	80	134	186	187	212	212
Mexico	1,524	1,655	1,570	2,062	2,537	2,886	3,157	2,516	2,670
Netherlands	304	289	314	338	422	409	443	477	458
Netherlands Antilles	184	237	230	256	302	282	322	297	321
Philippines	81	105	111	138	132	160	178	175	133
Spain	260	231	259	295	292	273	288	321	350
Switzerland	224	282	323	311	305	306	315	330	327
United Kingdom	1,446	1,722	1,984	2,478	2,609	2,840	2,989	2,607	2,687
Venezuela	198	234	281	356	424	518	571	571	321
Other	1,799	2,083	2,258	2,369	2,777	2,788	2,794	2,788	2,873

Covers passengers on international commercial flights departing from U.S. airports. Excludes traffic between U.S. and Canada, border crossers, crewmen, and military personnel. Travelers between U.S. ports in the 50 States, Puerto Rico, Guam, or the Virgin Islands, and any other outlying area are included. Data compiled from flight reports of U.S. Immigration and Naturalization Service. Selection of countries based on minimum of 150,000 arrivals in 1983.

¹ Country where passenger boarded/deboarded a direct flight to/from the U.S.

Source: U.S. DOT, Transportation Systems Center, Center for Transportation Information, Cambridge, Mass., *U.S. International Air Travel Statistics*, annual, beginning with 1975.

Table 14. U.S. Motor Vehicle Production & Factory Sales, 1972 - 1982
(Thousands)

DOMESTIC		IMPORTS				Total Pass. Car Sales
Year	U.S.	Japan	Germany	Other	Total	
1972	9,327.0	629.0	770.0	215.0	1,614.0	10,940.0
1973	9,676.0	743.0	788.0	218.0	1,748.0	11,424.0
1974	7,454.0	592.0	595.0	212.0	1,399.0	8,853.0
1975	7,053.0	808.0	493.0	271.0	1,571.0	8,624.0
1976	8,611.0	942.0	371.0	186.0	1,499.0	10,110.0
1977	9,109.0	1,388.0	460.0	227.0	2,074.0	11,183.0
1978	9,312.0	1,357.0	436.0	209.0	2,002.0	11,314.0
1979	8,341.0	1,770.0	352.0	210.0	2,332.0	10,673.0
1980	6,581.0	1,906.0	305.0	187.0	2,398.0	8,979.0
1981	6,209.0	1,859.0	284.0	186.0	2,323.0	8,537.0
1982	5,759.0	1,801.0	247.0	174.0	2,222.0	7,981.0

Note: Totals may not add due to rounding.

Source: Motor Vehicle Manufacturers Association of the U.S., Inc., *Facts & Figures*, 1983, p. 18.

Table 15.
U.S. Domestic and Import Retail Passenger Car Sales, 1972 - 1982
(Thousands)

PRODUCTION				FACTORY SALES		
Year	Pass. Cars	Motor Trucks and Buses	Total Vehicles	Pass. Cars	Motor Trucks and Buses	Total Vehicles
1972	8,828.0	2,483.0	11,311.0	8,824.0	2,447.0	11,271.0
1973	9,667.0	3,014.0	12,682.0	9,658.0	2,980.0	12,637.0
1974	7,325.0	2,747.0	10,071.0	7,331.0	2,727.0	10,059.0
1975	6,717.0	2,270.0	8,987.0	6,713.0	2,272.0	8,895.0
1976	8,498.0	2,300.0	11,498.0	8,500.0	2,979.0	11,480.0
1977	9,214.0	3,489.0	12,703.0	9,201.0	3,442.0	12,642.0
1978	9,177.0	3,723.0	12,899.0	9,165.0	3,706.0	12,871.0
1979	8,434.0	3,046.0	11,480.0	8,419.0	3,037.0	11,456.0
1980	6,376.0	1,634.0	8,010.0	6,400.0	1,667.0	8,067.0
1981	6,253.0	1,690.0	7,943.0	6,255.0	1,701.0	7,956.0
1982	5,073.0	1,913.0	6,986.0	5,049.0	1,906.0	6,956.0

Note: Totals may not add due to rounding. Factory sales in 1980 and 1981 were greater than production total because of sales from previous year's inventory.

Source: Motor Vehicle Manufacturers Association of the U.S., Inc., *Facts & Figures*, 1983, p. 9.

**Table 16. World Motor Vehicle Production, 1982
(Thousands)**

<u>Country</u>	<u>Passenger Cars</u>	<u>Trucks & Buses</u>	<u>Total</u>
Argentina	107	25	132
Australia	371	37	408
Austria	7	8	15
Belgium	243	35	278
Brazil	719	140	859
Canada	808	469	1,276
Czechoslovakia	174	50	224
France	2,777	372	3,149
Germany, East	180	38	218
Germany, West	3,761	301	4,063
Hungary	-	14	14
India	43	110	153
Italy	1,297	156	1,453
Japan	6,882	3,850	10,732
Korea	94	74	168
Mexico	301	172	473
The Netherlands	86	10	96
Poland	229	47	276
Portugal	-	100	100
Romania	75	50	125
Spain	926	142	1,068
Sweden	295	55	350
Switzerland	-	1	1
United Kingdom	888	269	1,156
United States	5,073	1,913	6,986
U.S.S.R.	1,320	890	2,210
Yugoslavia	211	30	241

Source: Motor Vehicle Manufacturers Association of the U.S., Inc., *Facts & Figures*, 1983, p. 31.

Table 17. U.S. Cars in Fleets by Type of Use, 1972-1982

Use	Cars in fleets of 10 or more (thousands)										
	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Business Fleets	2,635	2,863	2,902	2,909	3,040	3,067	3,124	3,174	3,259	3,287	3,286
Owned	1,152	1,119	1,088	1,069	1,051	1,036	1,033	1,033	1,025	1,019	1,018
Leased	1,483	1,744	1,814	1,840	1,989	2,031	2,091	2,141	2,234	2,268	2,268
10-24 cars	665	674	674	675	707	716	716	726	724	734	738
25 or more cars	1,970	2,189	2,228	2,234	2,333	2,351	2,408	2,448	2,535	2,553	2,548
Individually leased	925	994	1,008	1,072	1,217	1,385	1,610	1,690	1,708	1,713	1,645
Government ^a	670	686	701	715	735	743	747	732	731	757	603 ^b
Utilities	438	467	482	497	508	518	523	529	532	537	530
Police	236	249	261	278	286	292	294	291	288	284	223
Taxi	177	182	185	193	202	202	205	207	205	198	141
Daily rental	341	364	361	354	373	385	448	462	500	462	457
Driver school	29	27	26	25	26	26	24	21	20	19	18
Total (Cars in fleets of 10 or more)	5,451	5,832	5,926	6,043	6,387	6,618	6,975	7,106	7,243	7,234	6,903
Cars in fleets of 4 or more	10,094	10,214	10,324	10,398	10,403	10,414	10,423	10,428	10,433	10,436	10,076

^a Data from *Automotive Fleet* do not include federal government vehicles. Federal fleet data are taken from *Federal Motor Vehicle Fleet Report*, General Services Administration, Table 1 (all agencies -- domestic -- sedans and station wagons), and added to *Automotive Fleet* local government fleet figures.

^b Based on estimate of 103,376 cars in federal government fleets in 1982.

Source: Oak Ridge National Laboratory, *Transportation Energy Data Book*, Edition 7, Table 2.20, p. 2-39 and earlier editions.

SUPPLEMENTARY DATA

Section I: Transportation and the Economy

1972 - 1982

BILLIONS
OF
DOLLARS

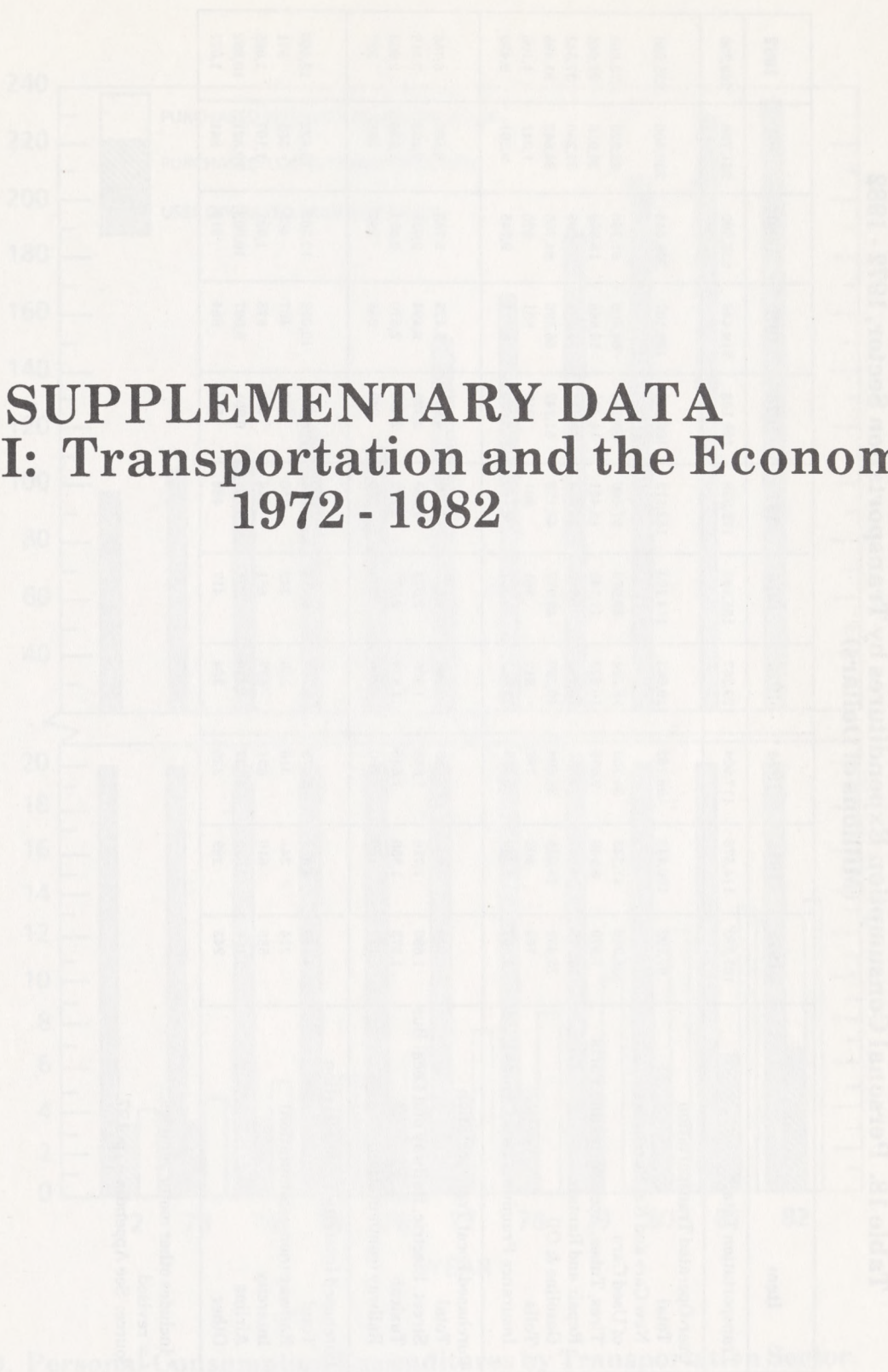


Figure 13. Personal Consumption Expenditures by Transportation Sector

Table 18. Personal Consumption Expenditures by Transportation Sector, 1972 - 1982
(Millions of Dollars)

Item	1972	1973	1974	1975	1976	1977	1978	1979	1980 ^r	1981 ^r	1982
Transportation Total*	105,382	114,576	117,924	129,367	155,189	179,328	198,108	219,446	236,590	261,738	269,756
User-Operated Transportation											
Total	97,792	106,443	108,762	119,663	114,103	153,112	166,690	189,107	208,444	230,400	235,080
New Cars and Net Purchases of Used Cars	38,239	41,243	34,763	38,224	49,974	57,460	63,115	64,809	61,766	69,320	73,868
Tires, Tubes, Accessories and Parts	7,970	8,939	9,639	10,528	11,745	13,451	14,699	16,866	18,899	20,916	21,645
Repair and Rental	13,779	14,657	15,885	18,781	21,266	25,054	28,057	31,194	32,299	35,280	37,542
Gasoline & Oil	25,432	28,635	36,608	40,390	43,973	48,126	51,242	66,596	84,765	94,642	91,495
Tolls	763	803	782	817	861	901	917	891	970	1,041	1,100
Insurance Premiums Less Claims Paid	5,407	5,240	5,059	3,862	5,431	8,120	8,660	8,771	9,745	9,201	9,430
Purchased Local Transportation											
Total	3,440	3,460	3,683	3,990	4,375	4,660	4,991	5,429	5,783	6,506	6,756
Street, Electric, Railway and Local Bus	1,690	1,724	1,848	1,905	2,074	2,208	2,325	2,494	2,629	3,202	3,516
Taxicab	1,573	1,556	1,635	1,879	2,077	2,222	2,426	2,670	2,857	2,936	2,903
Railway (commutation)	177	180	200	206	224	230	240	265	297	368	337
Purchased Intercity Transportation											
Total	4,150	4,673	5,479	5,714	6,711	7,655	8,531	10,033	12,303	13,422	13,560
Railway (non-commutation)	214	241	316	308	342	350	337	407	465	553	571
Intercity	585	610	691	677	681	716	739	875	1,021	1,107	1,085
Airline	3,108	3,533	4,137	4,375	5,271	6,101	6,901	8,067	10,003	10,821	10,832
Other	243	289	335	354	417	488	554	684	814	941	1,072

* Includes other motor vehicles.

^r = revised.

Source: See Appendix A, p. 197.

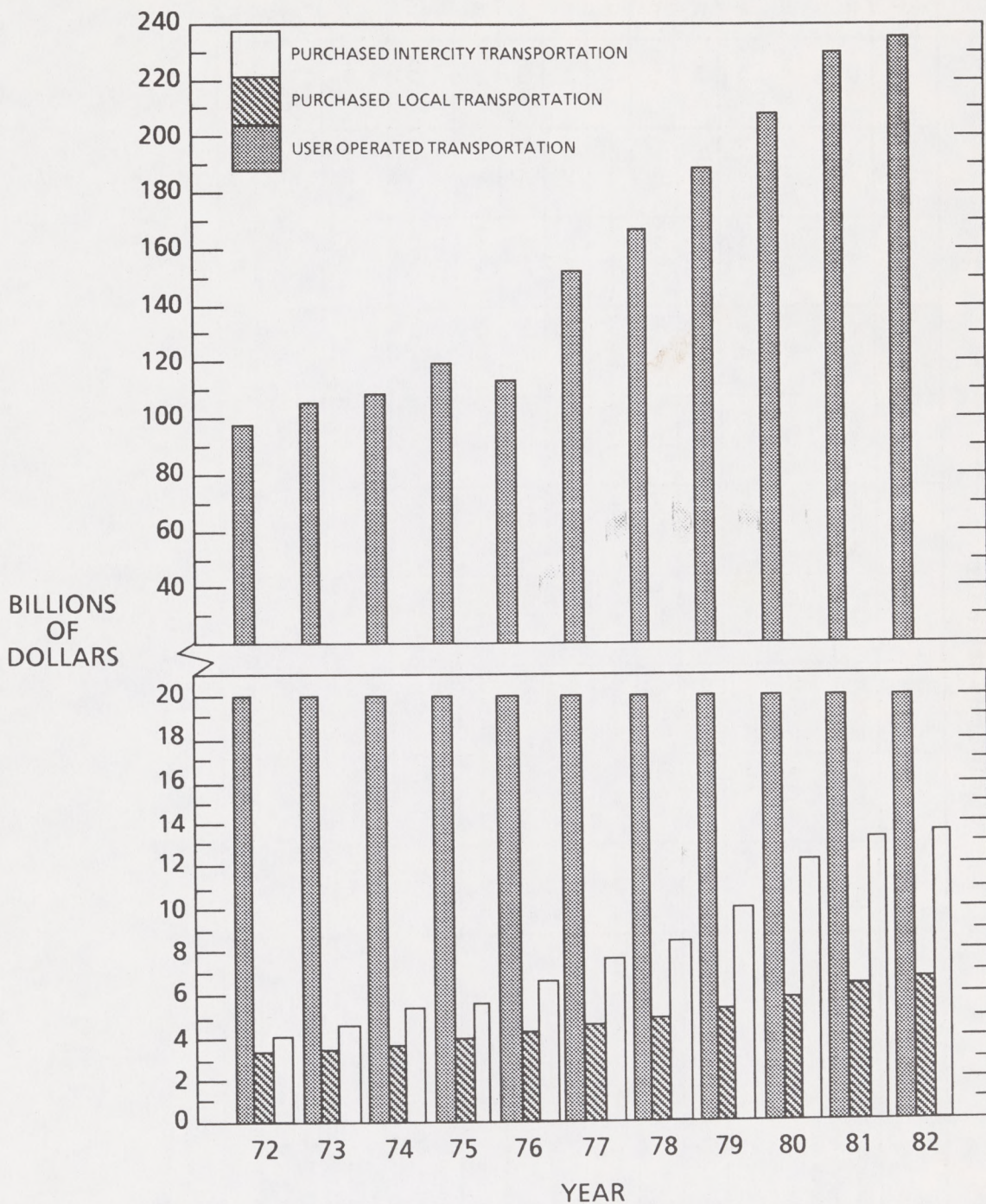


Figure 19. Personal Consumption Expenditures by Transportation Sector, 1972-1982

Table 19. Personal Consumption Expenditures by Type of Product, 1972 - 1982
(Millions of Dollars)

	1972	1973	1974	1975	1976	1977	1978	1979	1980 ^r	1981 ^r	1982
Food and tobacco	167,124	185,283	207,679	228,450	247,047	266,401	293,854	330,830	365,773	398,918	421,887
Clothing accessories and jewelry	65,123	72,019	76,024	81,579	88,566	96,765	108,193	116,341	124,157	136,518	140,746
Personal care	12,021	12,929	13,824	14,672	15,618	17,371	19,287	21,141	22,854	24,689	25,732
Housing	112,500	123,786	137,354	149,776	166,466	185,871	209,644	236,050	266,183	302,034	334,116
Household operation	98,541	109,919	121,345	132,870	148,312	166,173	184,649	207,914	230,308	255,882	272,291
Medical care expenses	62,200	69,148	77,266	87,632	98,418	112,868	126,412	144,193	166,787	197,388	221,333
Personal business	37,121	40,446	45,426	52,211	55,560	60,740	72,602	83,720	93,826	99,620	113,046
Transportation	105,382	114,576	117,924	129,367	155,189	179,328	198,108	219,446	236,590	261,738	269,756
Recreation	49,243	54,796	59,633	65,554	72,499	79,370	89,498	98,850	107,119	121,003	126,700
Private education and research	11,651	12,748	14,110	15,816	17,162	18,208	20,460	23,315	26,413	29,558	31,503
Religious and welfare activities	10,911	11,526	12,688	13,892	15,414	16,712	19,092	20,783	23,346	25,714	28,106
Foreign travel by U.S. residents	6,832	7,328	8,136	8,774	9,401	10,314	11,379	12,607	14,274	15,480	16,460
Total	737,054	811,964	888,111	976,449	1,084,271	1,204,440	1,346,474	1,507,165	1,668,059	1,857,180	1,991,861

^r = revised.

Source: See Appendix A, p. 197.

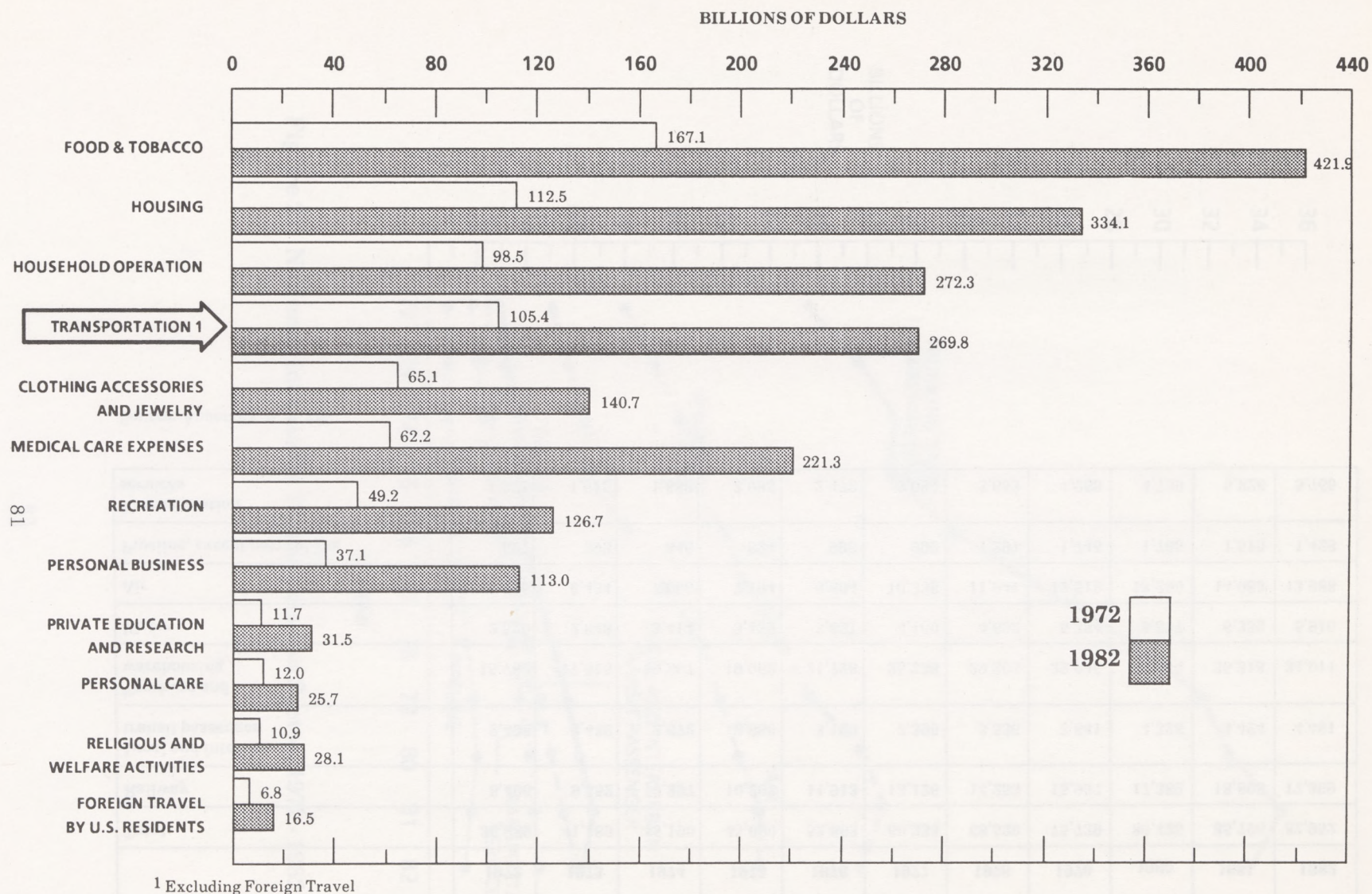


Figure 20. Personal Consumption Expenditures by Type of Product, 1972 and 1982

Table 20. National Income by Transportation Sector, 1972 - 1982
(Millions of Dollars)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Total	36,889	41,189	45,190	45,690	52,863	60,334	68,529	75,739	80,425	85,796	82,952
Railway	8,406	9,552	10,297	10,202	11,913	13,126	14,253	15,937	17,382	18,898	17,369
Local and interurban transit passenger	2,498	2,432	2,672	2,886	3,129	3,396	3,536	3,841	4,328	4,424	4,481
Trucking and warehousing	15,762	17,815	19,267	19,062	21,728	25,238	29,203	32,046	33,044	35,318	34,011
Water	2,520	2,848	3,414	3,439	3,821	4,160	4,652	5,384	5,877	6,332	5,910
Air	5,705	6,434	7,006	7,194	8,804	10,338	11,941	12,518	13,290	14,083	13,988
Pipeline, except natural gas	627	593	646	824	996	992	1,291	1,745	1,765	1,515	1,428
Transportation services	1,371	1,515	1,888	2,083	2,472	3,084	3,653	4,268	4,739	5,226	5,765

Source: Appendix A, p. 197.

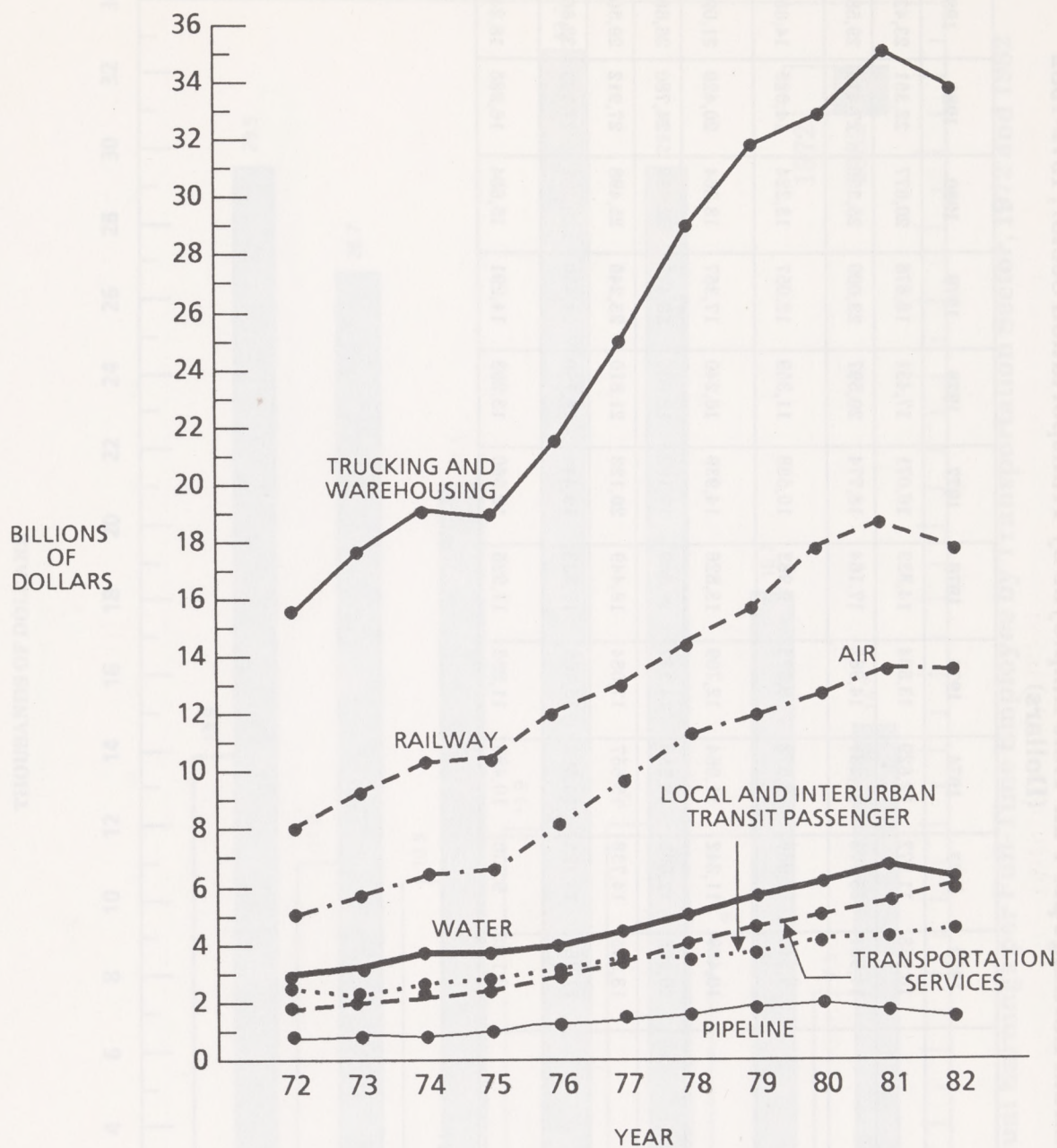


Figure 21. National Income by Transportation Sector, 1972 - 1982

Table 21. Average Annual Earnings per Full-Time Employee by Transportation Sector, 1972-1982
(Dollars)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Total	10,958	11,972	12,629	13,534	14,833	16,071	17,431	18,878	20,677	22,351	23,434
Railway	11,991	13,773	14,237	14,982	17,164	18,774	20,597	23,009	25,358	27,414	29,584
Local and interurban passenger transit	7,510	7,936	8,572	9,373	9,983	10,588	11,359	12,057	13,224	14,025	14,663
Trucking and warehousing	10,489	11,342	11,964	12,709	13,826	14,939	16,240	17,367	18,864	20,429	21,098
Water	10,995	12,005	12,880	14,247	15,549	17,192	18,635	20,477	22,990	24,780	26,663
Air	13,945	14,738	15,657	17,084	18,449	20,123	21,810	23,245	25,498	27,912	29,504
Pipeline, except natural gas	11,882	13,125	14,562	16,765	17,833	19,444	19,750	24,450	26,182	27,909	32,667
Transportation services	9,140	9,730	10,488	11,233	11,935	12,560	13,293	14,291	15,604	16,985	18,246

Source: See Appendix A, p. 197.

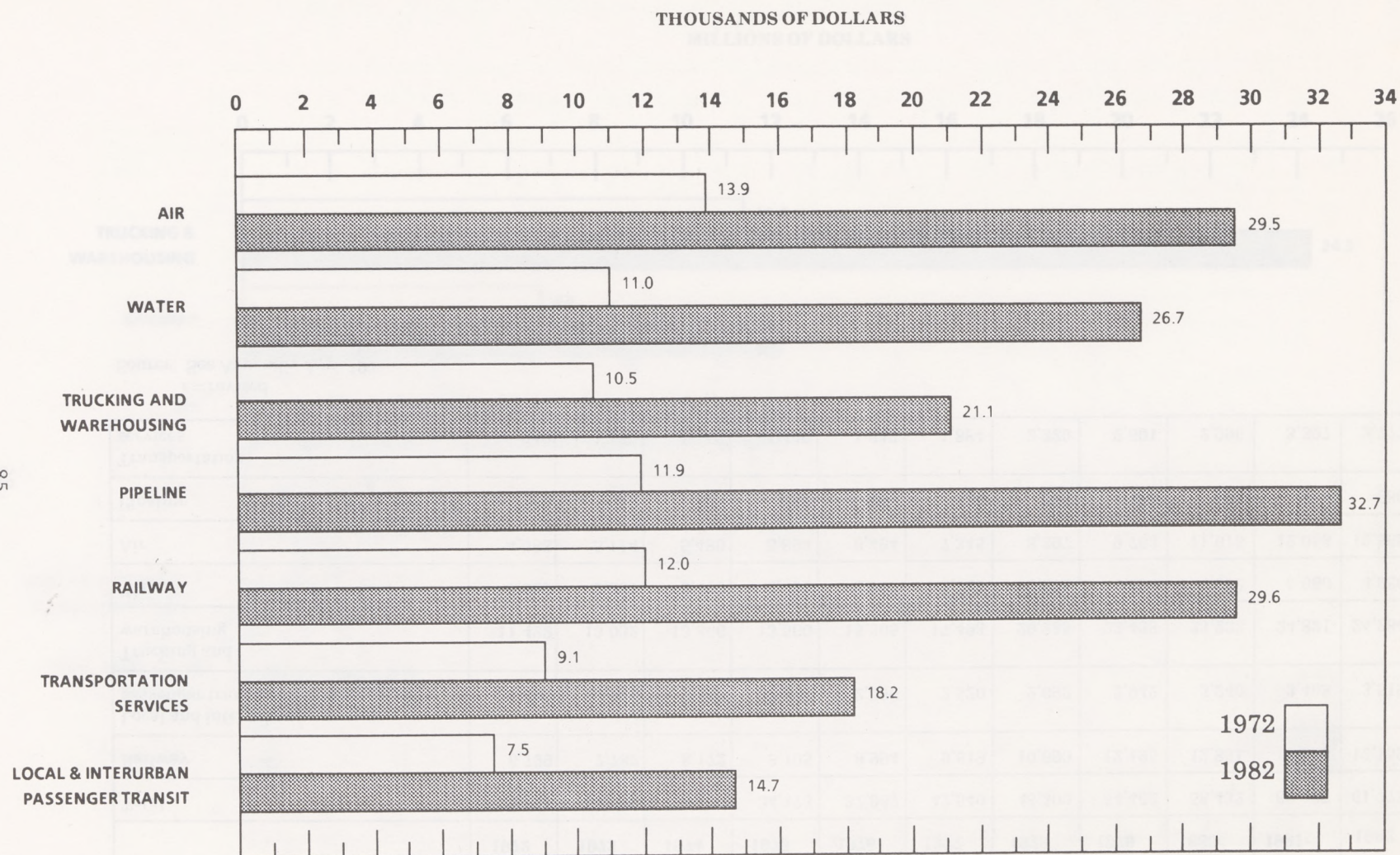


Figure 22. Average Annual Earnings per Full-Time Employee by Transportation Sector, 1972 and 1982

Table 22. Wages and Salaries by Transportation Sector, 1972-1982
(Millions of Dollars)

	1972	1973	1974	1975	1976	1977	1978	1979	1980 ^r	1981 ^r	1982
Total	28,042	31,582	33,720	34,173	37,987	42,540	48,300	54,462	58,432	62,427	61,773
Railway	6,799	7,782	8,172	8,105	8,994	9,819	10,690	12,195	12,831	13,049	12,159
Local and interurban passenger transit	1,900	1,976	2,143	2,287	2,396	2,520	2,692	2,942	3,240	3,408	3,519
Trucking and warehousing	11,422	13,032	13,866	13,560	15,305	17,493	20,235	22,438	23,222	24,821	24,284
Water	2,089	2,281	2,473	2,593	2,830	3,129	3,671	4,034	4,552	5,080	4,986
Air	4,588	5,114	5,480	5,894	6,494	7,345	8,397	9,763	11,015	12,058	12,362
Pipeline	202	210	233	285	321	350	395	489	576	614	686
Transportation services	1,042	1,187	1,353	1,449	1,647	1,884	2,220	2,601	2,996	3,397	3,777

r = revised

Source: See Appendix A, p. 197.

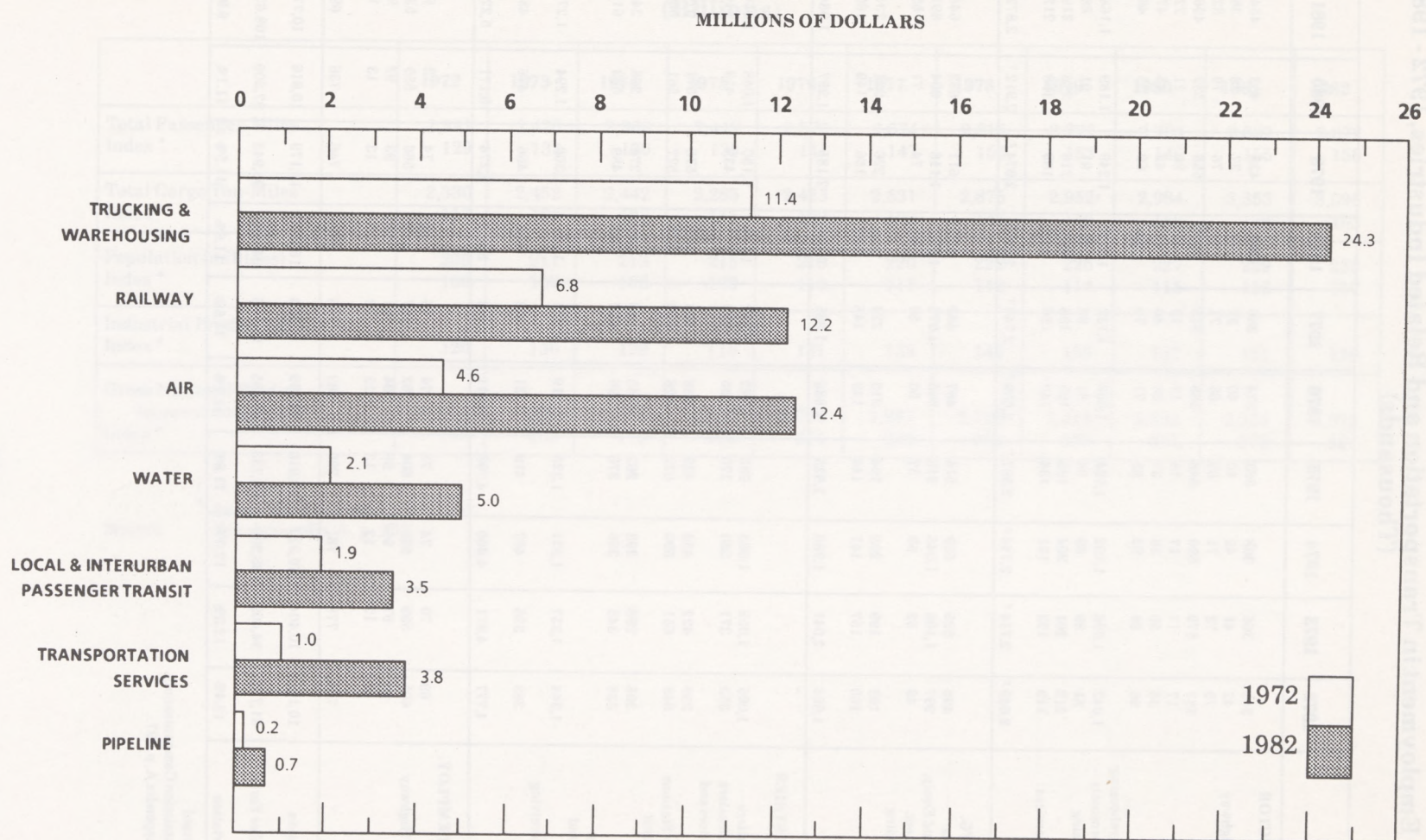


Figure 23. Wages and Salaries by Transportation Sector, 1972 and 1982

**Table 23. Employment in Transportation and Related Industries, 1972 - 1982
(Thousands)**

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
TRANSPORT SECTOR											
Air	348	366	368	363	374	386	408	438	453	454	445
Bus - Intercity Highway	42	41	42	40	40	37	36	37	38	38	37
Local Transport	75	72	71	69	68	71	72	76	79	82	85
Railroad	582	579	590	548	538	545	539	556	532	496	430
Oil Pipeline	17	17	17	18	18	19	20	20	21	22	22
Gas Pipeline*	35	36	36	37	38	40	42	42	45	47	48
Taxi	96	94	94	85	77	70	64	60	53	46	42
Trucking and Warehousing:											
Trucking and Terminals	1,042	1,096	1,102	1,024	1,068	1,132	1,212	1,249	1,189	1,168	1,128
Public Warehousing	81	89	89	84	81	88	91	91	91	88	84
Water	212	201	204	195	195	196	209	216	213	219	203
Transportation Services	119	123	131	134	142	156	170	189	198	212	217
Total	2,649 r	2,714 r	2,744 r	2,597 r	2,639 r	2,740 r	2,863 r	2,974 r	2,912 r	2,872	2,741
EQUIPMENT MFG.											
Aircraft and Parts	495	525	539	514	487	482	527	611	652	646	601
Motor Vehicles and Equip.	997	1,108	1,045	916	985	1,078	1,132	1,118	904	891	810
Railroad Equipment	49	52	58	57	50	56	64	74	71	55	37
Ship & Boat Building and Repairs	193	199	205	194	215	224	226	226	221	231	213
Other	160	157	141	144	149	145	162	156	149	160	175
Total	1,894	2,041	1,988	1,825	1,886	1,985	2,111	2,185	1,997	1,984	1,836
RELATED INDUSTRIES											
Automotive and Accessories Retailers	1,005	1,052	1,003	985	1,043	1,093	1,148	1,150	1,048	1,050	993
Automotive Wholesalers	353	371	380	370	385	399	421	439	418	410	404
Automotive Services and Garages	399	422	430	439	466	498	549	575	571	574	581
Gasoline Service Stations	649	651	590	622	626	629	628	577	561	562	548
Highway and Street Construction	306	298	293	262	245	246	263	278	268	246	216
Petroleum	338	345	366	376	396	422	456	489	533	617	571
Other Industries:											
Truck Drivers and Deliverymen	1,344	1,337	1,331	1,325	1,319	1,313	1,307	1,300	1,294	1,276	1,262
Shipping and Receiving Clerks	383	395	407	419	431	443	455	466	478	487	463
Total	4,777	4,871	4,800	4,798	4,911	5,043	5,227	5,274	5,171	5,222	5,038
GOVERNMENT EMPLOY.											
U.S. DOT	69	70	74	75	74	75	75	74	72	59	62
State and Local Highway	605	599	596	604	582	587	583	566	559	530	527
Post Office	98	97	99	98	94	91	92	93	92	93	93
Other	12	12	12	13	13	13	13	13	13	13	11
Total	784	778	781	790	763	766	763	746	736	695	693
Total Transportation	10,104	10,404	10,313	10,010	10,199	10,534	10,964	11,179	10,816	10,773	10,308
Total Civilian Labor Force	81,702	84,409	85,936	84,783	87,485	90,526	94,373	96,945	97,300	108,670	110,204
Percent Transportation	12.4%	12.3%	12.0%	11.8%	11.7%	11.6%	11.6%	11.5%	11.1%	9.9%	9.4%

r = revised

* Transmission Companies only.

Source: See Appendix A, p. 197.

Table 24. National Transportation and Economic Trends, 1972 - 1982
(Billions)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Total Passenger-Miles Index *	2,341 129	2,420 133	2,368 130	2,449 135	2,570 141	2,674 147	2,815 155	2,777 153	2,704 149	2,807 155	2,872 158
Total Cargo Ton-Miles Index *	2,330 117	2,452 123	2,442 123	2,285 115	2,423 122	2,531 127	2,875 145	2,952 ^r 149	2,984 150	3,353 176	3,096 163
Population (millions) Index *	209 106	211 107	213 108	215 109	218 110	220 111	222 112	225 114	227 115	229 116	232 117
Industrial Production Index *	120	130	129	118	131	138	146	153	147	151	139
Gross National Product (current dollars) Index *	1,158 146	1,307 165	1,413 178	1,529 193	1,700 214	1,887 238	2,128 268	2,418 305	2,632 331	2,954 372	3,073 387

r = revised.

* Index = 100 in 1967.

Source: See Appendix A, p. 201.

Table 25. Expenditures and Overseas Travel by U.S. Residents and Foreign Visitors, 1972 - 1982

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
U.S. Residents- Overseas Travelers (thousands)	6,790	6,933	6,467	6,354	6,897	7,390	7,790	7,835	8,163	8,040	8,510
Average Expenditures Overseas (dollars)	416	439	478	533	533	543	624	672	726	802	827
Total Travel and Passenger Fare Transactions (millions of dollars)	6,638	7,316	8,075	8,680	9,424	10,199	11,371	12,597	14,004	15,966	17,166
Travel payments in foreign countries (millions of dollars)	5,042	5,526	5,980	6,417	6,856	7,451	8,475	9,413	10,397	11,479	12,394
Passenger fare payments to foreign countries (millions of dollars)	1,596	1,790	2,095	2,263	2,568	2,748	2,896	3,184	3,607	4,487	4,772
Foreign Visitors to U.S. (thousands)	2,861	3,554	3,700	3,674	4,456	4,509	5,764	7,230	7,706	8,069	7,617
Average Expenditures of Visitors (dollars)	409	425	450	497	537	595	604	605	662	708	764
Total Travel and Passenger Fare Transactions (millions of dollars)	3,311	4,130	4,845	5,464	6,679	7,175	8,421	10,118	12,184	14,618	13,790
Travel receipts in U.S.	2,817	3,412	4,032	4,697	5,742	6,150	7,183	8,441	10,131	12,163	11,293
Passenger fare receipts in U.S. (millions of dollars)	494	718	813	767	937	1,025	1,238	1,677	2,053	2,455	2,497

Source: See Appendix A, p. 201.

SUPPLEMENTARY DATA
Section II: Energy in Transportation

Part 1. Energy Consumption

Table 27. U.S. Energy Consumption by the Transportation Sector
(at 5-Year Intervals 1965-1985 and Annually 1986-1989)

Year	Coal ¹	Petroleum	Natural Gas ²	Total Fuel ³	Electricity ⁴	Total Energy Consumption ⁵	Total Gross Energy Consumption ⁶
1965	15.5	1,057.3	0.98	1,059.2	4,463	5,522	5,522
1970	15.6	1,051.8	0.97	1,058.5	4,779	5,837	5,837
1975	15.7	1,047.0	0.96	1,052.9	4,893	5,946	5,946
1980	15.8	1,042.1	0.95	1,048.0	4,958	6,006	6,006
1985	15.9	1,037.2	0.94	1,045.1	5,023	6,068	6,068
1986	16.0	1,032.3	0.93	1,045.6	5,088	6,134	6,134
1987	16.1	1,027.4	0.92	1,045.1	5,153	6,198	6,198
1988	16.2	1,022.5	0.91	1,045.6	5,218	6,263	6,263
1989	16.3	1,017.6	0.90	1,046.1	5,283	6,328	6,328
1990	16.4	1,012.7	0.89	1,046.4	5,348	6,393	6,393
1991	16.5	1,007.8	0.88	1,046.6	5,413	6,458	6,458
1992	16.6	1,002.9	0.87	1,046.6	5,478	6,523	6,523
1993	16.7	998.0	0.86	1,046.8	5,543	6,588	6,588
1994	16.8	993.1	0.85	1,046.9	5,608	6,653	6,653
1995	16.9	988.2	0.84	1,047.1	5,673	6,718	6,718
1996	17.0	983.3	0.83	1,047.1	5,738	6,783	6,783
1997	17.1	978.4	0.82	1,047.2	5,803	6,848	6,848
1998	17.2	973.5	0.81	1,047.2	5,868	6,913	6,913
1999	17.3	968.6	0.80	1,047.3	5,933	6,978	6,978
2000	17.4	963.7	0.79	1,047.4	5,998	7,043	7,043
2001	17.5	958.8	0.78	1,047.5	6,063	7,108	7,108
2002	17.6	953.9	0.77	1,047.6	6,128	7,173	7,173
2003	17.7	949.0	0.76	1,047.7	6,193	7,238	7,238
2004	17.8	944.1	0.75	1,047.8	6,258	7,303	7,303
2005	17.9	939.2	0.74	1,047.9	6,323	7,368	7,368
2006	18.0	934.3	0.73	1,048.0	6,388	7,433	7,433
2007	18.1	929.4	0.72	1,048.1	6,453	7,498	7,498
2008	18.2	924.5	0.71	1,048.2	6,518	7,563	7,563
2009	18.3	919.6	0.70	1,048.3	6,583	7,628	7,628
2010	18.4	914.7	0.69	1,048.4	6,648	7,693	7,693
2011	18.5	909.8	0.68	1,048.5	6,713	7,758	7,758
2012	18.6	904.9	0.67	1,048.6	6,778	7,823	7,823
2013	18.7	899.9	0.66	1,048.7	6,843	7,888	7,888
2014	18.8	895.0	0.65	1,048.8	6,908	7,953	7,953
2015	18.9	890.1	0.64	1,048.9	6,973	8,018	8,018
2016	19.0	885.2	0.63	1,049.0	7,038	8,083	8,083
2017	19.1	880.3	0.62	1,049.1	7,103	8,148	8,148
2018	19.2	875.4	0.61	1,049.2	7,168	8,213	8,213
2019	19.3	870.5	0.60	1,049.3	7,233	8,278	8,278
2020	19.4	865.6	0.59	1,049.4	7,298	8,343	8,343
2021	19.5	860.7	0.58	1,049.5	7,363	8,408	8,408
2022	19.6	855.8	0.57	1,049.6	7,428	8,473	8,473
2023	19.7	850.9	0.56	1,049.7	7,493	8,538	8,538
2024	19.8	846.0	0.55	1,049.8	7,558	8,603	8,603
2025	19.9	841.1	0.54	1,049.9	7,623	8,668	8,668
2026	20.0	836.2	0.53	1,050.0	7,688	8,733	8,733
2027	20.1	831.3	0.52	1,050.1	7,753	8,798	8,798
2028	20.2	826.4	0.51	1,050.2	7,818	8,863	8,863
2029	20.3	821.5	0.50	1,050.3	7,883	8,928	8,928
2030	20.4	816.6	0.49	1,050.4	7,948	8,993	8,993
2031	20.5	811.7	0.48	1,050.5	8,013	9,058	9,058
2032	20.6	806.8	0.47	1,050.6	8,078	9,123	9,123
2033	20.7	801.9	0.46	1,050.7	8,143	9,188	9,188
2034	20.8	797.0	0.45	1,050.8	8,208	9,253	9,253
2035	20.9	792.1	0.44	1,050.9	8,273	9,318	9,318
2036	21.0	787.2	0.43	1,051.0	8,338	9,383	9,383
2037	21.1	782.3	0.42	1,051.1	8,403	9,448	9,448
2038	21.2	777.4	0.41	1,051.2	8,468	9,513	9,513
2039	21.3	772.5	0.40	1,051.3	8,533	9,578	9,578
2040	21.4	767.6	0.39	1,051.4	8,598	9,643	9,643
2041	21.5	762.7	0.38	1,051.5	8,663	9,708	9,708
2042	21.6	757.8	0.37	1,051.6	8,728	9,773	9,773
2043	21.7	752.9	0.36	1,051.7	8,793	9,838	9,838
2044	21.8	748.0	0.35	1,051.8	8,858	9,903	9,903
2045	21.9	743.1	0.34	1,051.9	8,923	9,968	9,968
2046	22.0	738.2	0.33	1,052.0	8,988	10,033	10,033
2047	22.1	733.3	0.32	1,052.1	9,053	10,098	10,098
2048	22.2	728.4	0.31	1,052.2	9,118	10,163	10,163
2049	22.3	723.5	0.30	1,052.3	9,183	10,228	10,228
2050	22.4	718.6	0.29	1,052.4	9,248	10,293	10,293
2051	22.5	713.7	0.28	1,052.5	9,313	10,358	10,358
2052	22.6	708.8	0.27	1,052.6	9,378	10,423	10,423
2053	22.7	703.9	0.26	1,052.7	9,443	10,488	10,488
2054	22.8	699.0	0.25	1,052.8	9,508	10,553	10,553
2055	22.9	694.1	0.24	1,052.9	9,573	10,618	10,618
2056	23.0	689.2	0.23	1,053.0	9,638	10,683	10,683
2057	23.1	684.3	0.22	1,053.1	9,703	10,748	10,748
2058	23.2	679.4	0.21	1,053.2	9,768	10,813	10,813
2059	23.3	674.5	0.20	1,053.3	9,833	10,878	10,878
2060	23.4	669.6	0.19	1,053.4	9,898	10,943	10,943
2061	23.5	664.7	0.18	1,053.5	9,963	11,008	11,008
2062	23.6	659.8	0.17	1,053.6	10,028	11,073	11,073
2063	23.7	654.9	0.16	1,053.7	10,093	11,138	11,138
2064	23.8	650.0	0.15	1,053.8	10,158	11,203	11,203
2065	23.9	645.1	0.14	1,053.9	10,223	11,268	11,268
2066	24.0	640.2	0.13	1,054.0	10,288	11,333	11,333
2067	24.1	635.3	0.12	1,054.1	10,353	11,398	11,398
2068	24.2	630.4	0.11	1,054.2	10,418	11,463	11,463
2069	24.3	625.5	0.10	1,054.3	10,483	11,528	11,528
2070	24.4	620.6	0.09	1,054.4	10,548	11,593	11,593
2071	24.5	615.7	0.08	1,054.5	10,613	11,658	11,658
2072	24.6	610.8	0.07	1,054.6	10,678	11,723	11,723
2073	24.7	605.9	0.06	1,054.7	10,743	11,788	11,788
2074	24.8	601.0	0.05	1,054.8	10,808	11,853	11,853
2075	24.9	596.1	0.04	1,054.9	10,873	11,918	11,918
2076	25.0	591.2	0.03	1,055.0	10,938	11,983	11,983
2077	25.1	586.3	0.02	1,055.1	11,003	12,048	12,048
2078	25.2	581.4	0.01	1,055.2	11,068	12,113	12,113
2079	25.3	576.5	0.00	1,055.3	11,133	12,178	12,178
2080	25.4	571.6	0.00	1,055.4	11,198	12,243	12,243
2081	25.5	566.7	0.00	1,055.5	11,263	12,308	12,308
2082	25.6	561.8	0.00	1,055.6	11,328	12,373	12,373
2083	25.7	556.9	0.00	1,055.7	11,393	12,438	12,438
2084	25.8	552.0	0.00	1,055.8	11,458	12,503	12,503
2085	25.9	547.1	0.00	1,055.9	11,523	12,568	12,568
2086	26.0	542.2	0.00	1,056.0	11,588	12,633	12,633
2087	26.1	537.3	0.00	1,056.1	11,653	12,698	12,698
2088	26.2	532.4	0.00	1,056.2	11,718	12,763	12,763
2089	26.3	527.5	0.00	1,056.3	11,783	12,828	12,828
2090	26.4	522.6	0.00	1,056.4	11,848	12,893	12,893
2091	26.5	517.7	0.00	1,056.5	11,913	12,958	12,958
2092	26.6	512.8	0.00	1,056.6	11,978	13,023	13,023
2093	26.7	507.9	0.00	1,056.7	12,043	13,088	13,088
2094	26.8	503.0	0.00	1,056.8	12,108	13,153	13,153
2095	26.9	498.1	0.00	1,056.9	12,173	13,218	13,218
2096	27.0	493.2	0.00	1,057.0	12,238	13,283	13,283
2097	27.1	488.3	0.00	1,057.1	12,303	13,348	13,348
2098	27.2	483.4	0.00	1,057.2	12,368	13,413	13,413
2099	27.3	478.5	0.00	1,057.3	12,433	13,478	13,478
2100	27.4	473.6	0.00	1,057.4	12,498	13,543	13,543

Source: U.S. Department of Energy, Energy Information Administration, Annual Energy Review, 2021 Edition, Table A-1.1, U.S. Energy Consumption by Sector, 1965-2020.

Notes: 1. Coal consumption includes lignite, subbituminous, and bituminous coal. 2. Natural gas consumption includes dry gas, wet gas, and gas liquids. 3. Total fuel consumption is the sum of coal, natural gas, and petroleum. 4. Electricity consumption is in kilowatt-hours. 5. Total energy consumption is the sum of total fuel and electricity. 6. Total gross energy consumption is the sum of total energy consumption and net imports of oil and coal.

U.S. Department of Energy, Energy Information Administration, Annual Energy Review, 2021 Edition, Table A-1.1, U.S. Energy Consumption by Sector, 1965-2020.

U.S. Department of Energy, Energy Information Administration, Annual Energy Review, 2021 Edition, Table A-1.1, U.S. Energy Consumption by Sector, 1965-2020.

**Table 26. Consumption of Energy by End-Use Sector
(Quadrillion Btu)
(at 5-Year Intervals 1955-1965 and Annually 1966-1983)**

Year	Residential and Commercial ¹	% of Total	Industrial and Misc. ¹	% of Total	Transportation ¹	% of Total	Electrical Utilities ¹	% of Total	Total Energy Consumption
1955	7.47	19.1	15.42	39.4	9.47	24.2	6.75	17.2	39.17
1960	8.75	20.0	16.19	37.0	10.56	24.1	8.21	18.8	43.75
1965	10.00	19.0	19.17	36.4	12.39	23.5	11.03	21.0	52.62
1966	10.47	18.8	20.03	36.0	13.05	23.5	12.01	21.6	55.59
1967	11.04	19.2	20.02	34.8	13.70	23.8	12.71	22.1	57.50
1968	11.39	18.7	20.80	34.1	14.81	24.3	13.89	22.8	60.94
1969	11.90	18.5	21.55	33.6	15.45	24.1	15.19	23.7	64.12
1970	12.14	18.3	21.86	32.9	16.04	24.2	16.28	24.5	66.36
1971	12.35	18.2	21.61	31.9	16.67	24.6	17.16	25.3	67.82
1972	12.64	17.8	22.33	31.4	17.67	24.8	18.53	26.0	71.19
1973	12.28	16.5	23.47	31.6	18.57	25.0	19.85	26.7	74.21
1974	11.77	16.2	22.56	31.1	18.08	24.9	20.02	27.6	72.48
1975	11.60	16.5	20.30	28.8	18.20	25.8	20.35	28.9	70.48
1976	12.25	16.5	21.38	28.8	19.06	25.6	21.57	29.0	74.30
1977	11.87	15.6	21.83	28.6	19.77	25.9	22.69	30.6	76.21
1978	11.91	15.3	21.81	27.9	20.56	26.3	23.72	30.4	78.04
1979	11.53	14.6	22.72	28.8	20.43	25.9	24.13	30.6	78.84
1980	10.72	14.1	20.99	27.6	19.66	25.9	24.50	32.3	75.90
1981	10.05	13.6	19.65	26.6	19.46	26.3	24.75	33.5	73.94
1982	10.07	14.2	17.42	24.6	19.03	26.9	24.27	34.3	70.82
1983 ^P	9.61	13.6	16.89	24.0	18.96	26.9	24.96	35.4	70.45

^P = preliminary

Note: Sum of components may not equal total due to independent rounding.

¹ Includes only those fossil fuels consumed directly in the Sector.

Source: 1955-1983: U.S. Department of Energy, *Annual Energy Review 1983*, Table 4.

Table 27. U.S. Energy Consumption by the Transportation Sector
(at 5-Year Intervals 1955-1965 and Annually 1966-1983)

Year	Coal ¹		Petroleum		Natural Gas ²		Total Fossil Fuels	Sales of Electricity ³		Total Transportation Consumption		Total Gross Energy Consumption
	Million Short Tons	Trillion ⁴ Btu	Million Barrels	Trillion ⁴ Btu	Trillion Cubic Feet	Trillion ⁴ Btu	Trillion Btu	Million Kilowatt-Hours	Trillion ⁴ Btu	Trillion Btu	% of Total Gross Energy Con- sumption	Quadrillion Btu
1955	17.0	439	1,627.9	8,804	0.25	259	9,502	4,563	15.6	9,518	24.3	39.17
1960	3.0	80	1,881.2	10,136	0.35	362	10,578	4,770	16.3	10,594	24.2	43.75
1965	0.7	19	2,201.0	11,859	0.50	516	12,394	4,652	15.9	12,410	23.6	52.62
1966	0.6	16	2,317.8	12,493	0.54	558	13,067	4,514	15.4	13,082	23.5	55.59
1967	0.5	13	2,427.3	13,093	0.58	599	13,705	4,572	16.6	13,722	23.9	57.50
1968	0.4	11	2,620.7	14,147	0.59	608	14,766	4,540	15.5	14,782	24.3	60.94
1969	0.3	8	2,741.2	14,794	0.63	650	15,452	4,531	15.5	15,468	24.1	64.12
1970	0.3	8	2,836.0	15,300	0.72	742	16,050	4,633	15.8	16,066	24.2	66.36
1971	0.2	5	2,949.2	15,902	0.74	763	16,670	4,537	15.5	16,686	24.6	67.82
1972	0.2	5	3,129.3	16,867	0.77	791	17,663	4,440	15.1	17,678	24.8	71.19
1973	0.1	3	3,303.0	17,826	0.73	745	18,574	4,186	14.3	18,588	25.0	74.21
1974	0.1	3	3,226.6	17,404	0.67	686	18,093	4,258	14.5	18,108	25.0	72.48
1975	*	**	3,267.0	17,616	0.58	592	18,208	4,273	14.6	18,223	25.9	70.48
1976	*	**	3,429.4	18,505	0.55	560	19,065	4,338	14.8	19,080	25.7	74.30
1977	*	**	3,558.8	19,225	0.53	540	19,765	4,212	14.4	19,779	26.0	76.21
1978	*	**	3,701.1	20,012	0.53	538	20,550	4,336	14.8	20,565	26.4	78.04
1979	*	**	3,650.0	19,820	0.60	611	20,431	4,256	14.5	20,446	25.9	78.84
1980	*	**	3,495.3	19,014	0.63	645	19,659	4,275	14.6	19,674	25.9	75.90
1981	*	**	3,460.2	18,803	0.64	657	19,460	4,206	14.4	19,474	26.3	73.94
1982	*	**	3,394.5	18,408	0.60	616	19,024	4,288	14.6	19,039	26.9	70.82
1983 ^P	*	**	3,398.2	18,391	0.56	575	18,966	4,152	14.2	18,980	26.9	70.45

Note: Sum of components may not equal total due to independent rounding.

P = preliminary

* Less than 0.05 million short tons.

** Less than 1 trillion Btu's.

¹ Bituminous Coal and Lignite only. ² Pipeline fuel. ³ Includes only energy used by Railroads and Railways.

⁴ Btu's derived by multiplying by conversion factors on p. 247 for bituminous coal and lignite consumption by Non-Utility, p. 248 for Natural Gas consumption by Non-Utility, p. 244 for petroleum in Transportation Use, and p. 243 for Electricity consumption, DOE, 1983 Annual Energy Review.

Source: U.S. Department of Energy, 1983 Annual Energy Review.

Coal: Table 75; Petroleum: Table 46; Natural Gas: Table 67; Total Gross Energy Consumption: Table 4.

Edison Electric Institute, Statistical Year Book, 1978, 1971 and Historical Statistics Through the Year 1970.

Sales of Electricity: 1955-1978: Ibid., Section IV, Table 19s; 1979-1980: Ibid., Source and Disposition of Electricity, Dec. 1980.

Sales of Electricity: 1981-1982. Statistical Year Book, current edition.

1983: Ibid., Quarterly Statistical Report, Vol. 51, No. 4, March 20, 1984.

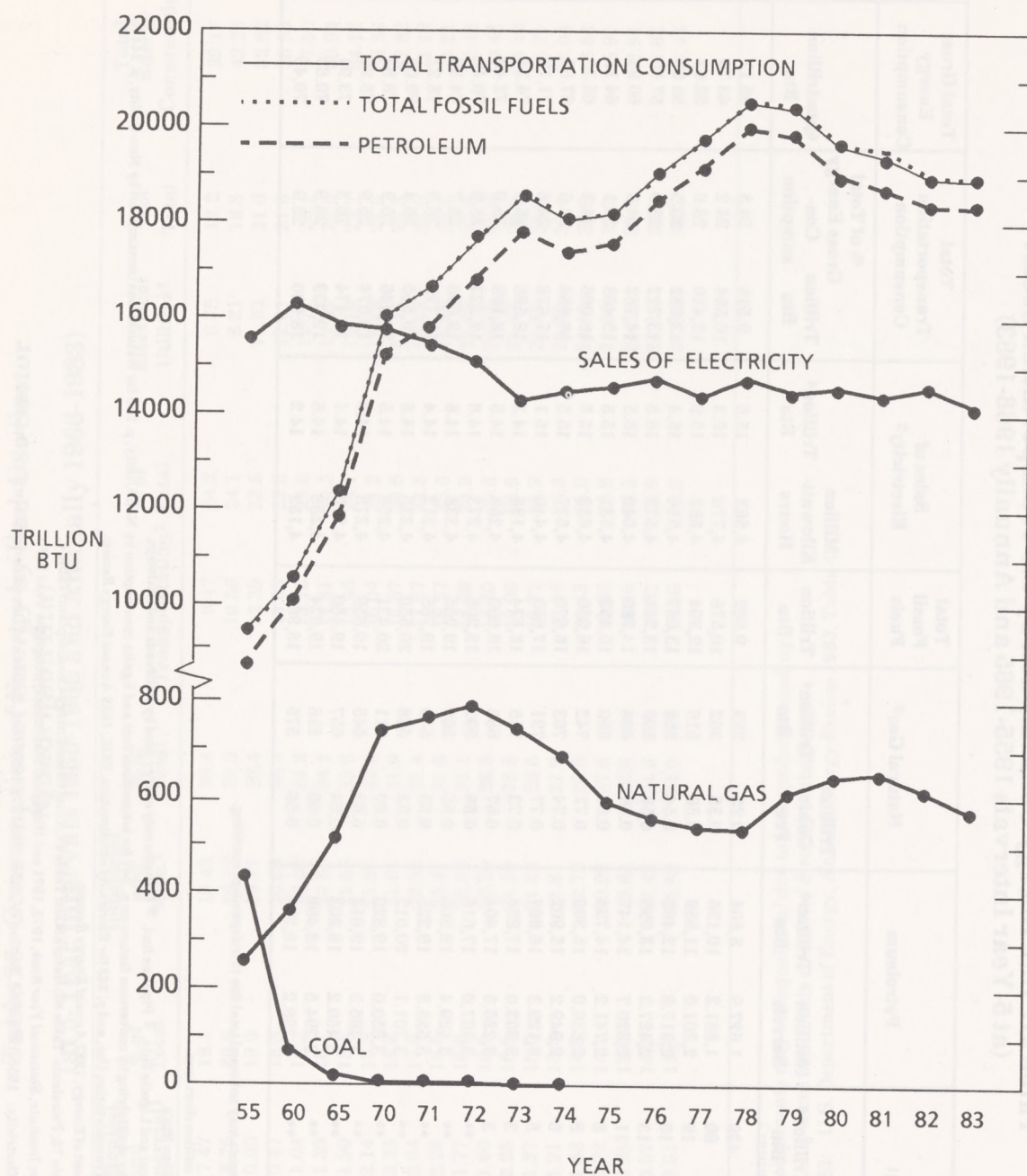


Figure 24. U.S. Energy Consumption by the Transportation Sector, 1955-1983

Table 28. Fuel Consumption by Mode of Transportation, 1972-1982

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Class I Railroads											
Locomotives											
Diesel Oil, gals x 10 ⁶	3,999	4,141	4,112	3,732	3,890	3,982	3,966	4,069	3,942	3,774	3,178
Electricity, kWh x 10 ⁶	435	346	467	422	353	417	331	309	190	81	34
Coal, tons	1,400	1,202	1,160	1,160	1,421	1,569	1,275	1,421	908	n/a	n/a
Motor Cars											
Diesel Oil, gals x 10 ⁶	3	3	4	4	5	3	2	3	2	1	1
Electricity, kWh x 10 ⁶	715	901	847	857	790	986	991	1,062	968	380	905
Air											
Certified Carriers											
Aviation Gasoline, gals x 10 ⁶	13	11	7	6	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Jet Fuel, gals x 10 ⁶	10,302	10,671	9,546	9,507	9,808 †	10,268 †	10,639 †	11,369 †	11,311 †	10,588 †	10,406
General Aviation ³											
Aviation Gasoline, gals x 10 ⁶	584	411	443	412	432	456	518	570	520	489	448
Jet Fuel, gals x 10 ⁶	245	304	357	453	495	536	763	736	766	759	887
Highway											
Gasoline, gals x 10 ⁶											
Pass. Cars & Taxis	73,121	77,619	73,770	76,010	78,398	80,225	83,312	79,793	73,375	71,418 ^r	69,430
Motorcycles	342	392	447	447	448	451	463	440	360	300 ^r	300
Diesel & Gasoline, gals x 10 ⁶											
Commercial Buses ²	561	520	525	553	574	583	615	618	696	711	721
School Buses	320	327	333	342	390	401	407	405	380	387	399
Single-unit Trucks ¹	22,118	22,755	21,125	21,868	24,914	26,255	27,780	28,544	29,241	30,903	31,568
Combination Trucks	8,600	8,860	10,101	9,764	10,974	11,709	12,491	12,315	10,909	10,734	10,966
Water Transport											
Residual Fuel Oil, gals x 10 ⁶	3,273	3,881	3,824	4,060	4,933	5,417	6,615	8,003	8,952	7,922	6,409
Distillate Fuel Oil, gals x 10 ⁶	929	1,125	1,040	1,098	1,190	1,408	1,579	1,631	1,478	1,723	1,423
Gasoline, gals x 10 ⁶	687	717	697	730	764	774	812	780	1,052	1,093	1,062
Transit*											
Electricity, kWh x 10 ⁶											
Rapid Transit	n/a	n/a	n/a	n/a	n/a	n/a	1,984	2,469	2,611	2,617	n/a
Streetcar	n/a	n/a	n/a	n/a	n/a	n/a	22	124	131	153	n/a
Trolley Bus	n/a	n/a	n/a	n/a	n/a	n/a	11	55	48	45	n/a
Other	n/a	n/a	n/a	n/a	n/a	n/a	0	0	3	3	n/a
Total	n/a	n/a	n/a	n/a	n/a	n/a	2,017	2,643	2,793	2,818	n/a
Gallons of Motor Fuel, gals x 10 ⁶											
Gasoline	20	12	7	5	5	8	8	18	11	9	n/a
Diesel Oil	253	283	316	365	389	403	362	376	411	424	n/a
Propane	24	15	3	3	1	1	0	3	3	2	n/a
Pipelines											
Natural Gas, cu. ft. x 10 ⁶	766,156	728,177	668,834	582,963	548,323	532,669	530,451	600,964	634,622	642,325	596,411
Total⁴											
Non-Highway Use of Gasoline x 10 ⁶	3,824	3,896	3,623	3,642	3,778	3,725	3,577	3,645	3,655	3,515	3,260

r = revised

n/a = not available

1 Includes non-freight truck movements.

2 Includes intercity and urban buses.

3 Data for 1971-1972 calculated by method different from that used for 1973-1982 data.

4 Private, commercial, and public non-highway use of gasoline.

† Includes Aviation Gasoline.

* Data for the period July 1, 1982 through June 30, 1983 was not available due to changes in Section 15 reporting requirements from fiscal year basis to calendar year basis.

Source: See Appendix A, p. 202.

Table 29. Total Motor Vehicle Fuel Consumption and Travel¹, 1972-1982

Year	Number Registered (thousands)	Total Vehicle Miles Traveled (millions)	Average Miles Traveled per Vehicle	Average Miles Traveled per Gallon	Total Fuel Consumed (millions of gallons)	Average Gallons Consumed per Vehicle
1972	122,304	1,268,342	10,370	12.07	105,062	859
1973	129,778	1,308,562	10,083	11.85	110,473	851
1974	134,900	1,285,647	9,530	12.09	106,301	788
1975	137,917	1,330,074	9,644	12.20	108,984	790
1976	143,427	1,411,990	9,844	12.20	115,700	807
1977	148,785	1,476,567	9,926	12.34	119,625	804
1978	153,920	1,548,213	10,059	12.38	125,067	813
1979	159,621	1,529,133	9,580	12.52	122,115	765
1980	161,614	1,520,857	9,410	13.23	114,960	711
1981	164,117	1,556,471	9,484	13.60	114,453	697
1982	165,253	1,592,481	9,637	14.05	113,383	686

¹ For the 50 states and District of Columbia, includes personal passenger vehicles, buses, and motor trucks.

Source: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics*, Table VM-1, annual issues.

Figure 24. U.S. Energy Consumption by the Transportation Sector, 1955-1983

Table 30. Fuel Consumption and Travel by Personal Passenger Vehicles², 1972 - 1982

Year	Number ¹ Registered (thousands)	Total ¹ Vehicle Miles Traveled (millions)	Average Miles Traveled per vehicle			Average Miles Traveled per Gallon			Total Fuel Consumed (millions of gallons)			Average Gallons Consumed per Vehicle		
			Passenger Cars	Motor- cycles	All Personal Passenger Vehicles	Passenger Cars	Motor- cycles	All Personal Passenger Vehicles	Passenger Cars	Motor- cycles	All Personal Passenger Vehicles	Passenger Cars	Motor- cycles	All Personal Passenger Vehicles
1972	100,658	1,003,498	10,184	4,500	9,969	13.49	50	13.67	73,121	342	73,463	755	90	730
1973	106,119	1,036,455	9,992	4,498	9,767	13.10	50	13.29	77,619	392	78,011	763	90	736
1974	109,823	1,013,068	9,448	4,500	9,225	13.43	50	13.65	73,770	447	74,217	704	90	676
1975	111,679	1,050,472	9,634	4,500	9,406	13.53	50	13.74	76,010	447	76,457	712	90	685
1976	115,170	1,098,179	9,763	4,500	9,535	13.72	50	13.93	78,398	448	78,847	711	90	685
1977	118,711	1,141,215	9,839	4,500	9,613	13.94	50	14.15	80,225	451	80,677	706	90	680
1978	132,717	1,194,231	10,046	4,500	9,812	14.06	50	14.26	83,312	463	83,775	715	90	688
1979	125,750	1,162,528	9,485	4,000	9,245	14.29	50	14.49	79,793	440	80,233	664	80	638
1980	127,448	1,129,887	9,135	3,144	8,865	15.15	50	15.32	73,375	360	73,735	603	63	579
1981	129,123	1,124,843	9,002	2,573	8,711	15.54	50	15.68	71,419	300	71,718	579	51	555
1982	129,441	1,148,883	9,167	2,612	8,876	16.33	50	16.48	69,430	300	69,730	561	52	539

¹ Includes motorcycles.

² For the 50 states and District of Columbia.

Source: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics*, Table VM-1, annual issues.

Table 31. Fuel Consumption and Travel by Buses¹, 1972 - 1982

Year	Number ¹ Registered (thousands)	Total ² Vehicle Miles Traveled (millions)	Average Miles Traveled per Vehicle			Average Miles Traveled per Gallon			Total Fuel Consumed (millions of gallons)			Average Gallons Consumed per Vehicle		
			Commercial	School	All Buses	Commercial	School	All Buses	Commercial	School	All Buses	Commercial	School	All Buses
1972	407	5,109	30,968	7,414	12,553	4.39	7.37	5.80	561	320	881	6,318	1,006	2,165
1973	426	4,960	28,469	7,178	11,662	4.90	7.37	5.86	520	327	847	5,810	973	1,991
1974	447	5,060	28,968	6,865	11,320	4.97	7.36	5.90	525	333	858	5,827	933	1,919
1975	462	5,148	28,230	6,788	11,140	4.79	7.31	5.75	553	342	895	5,896	929	1,937
1976	478	5,761	29,936	7,502	12,044	5.05	7.34	5.98	574	390	964	5,928	1,022	2,015
1977	492	5,887	30,011	7,491	11,973	5.04	7.35	5.98	583	401	984	5,955	1,019	2,002
1978	500	6,076	30,377	7,500	12,143	5.02	7.35	5.95	615	407	1,021	6,051	1,020	2,041
1979	520	6,105	29,691	7,179	11,732	5.06	7.36	5.97	618	405	1,023	5,872	976	1,966
1980	529	6,400	32,765	7,592	12,103	5.03	7.64	5.95	696	380	1,076	6,516	994	2,034
1981	544	6,501	32,996	6,780	11,953	4.98	7.65	5.92	711	387	1,098	6,626	886	2,019
1982	559	6,639	31,524	6,870	11,872	4.96	7.68	5.93	721	399	1,120	6,356	894	2,003

¹ For the 50 states and District of Columbia.

² Includes commercial, school and non-revenue buses.

Source: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics*, Table VM-1, annual issues.

Table 32. Fuel Consumption and Travel by Motor Trucks, 1972 - 1982

Year	Number Registered (thousands)	Total Vehicle Miles Traveled (millions)	Average Miles Traveled per Vehicle			Average Miles Traveled per Gallon			Total Fuel Consumed (millions of gallons)			Average Gallons of Fuel Consumed per Vehicle		
			Single-unit Trucks	Combi-nations	All Trucks	Single-unit Trucks	Combi-nations	All Trucks	Single-unit Trucks	Combi-nations	All Trucks	Single-unit Trucks	Combi-nations	All Trucks
1972	21,239	259,735	10,525	47,084	12,229	9.63	5.42	8.46	22,118	8,600	30,718	1,092	8,687	1,446
1973	23,233	267,147	9,868	46,716	11,538	9.63	5.42	8.45	22,755	8,860	31,615	1,025	8,620	1,361
1974	24,630	267,519	8,981	51,667	10,861	10.01	5.55	8.57	21,125	10,101	31,226	897	9,310	1,269
1975	25,776	274,454	8,882	49,125	10,648	10.01	5.69	8.68	21,868	9,764	31,632	887	8,633	1,227
1976	27,779	307,950	9,369	48,297	11,086	9.99	5.39	8.58	24,914	10,975	35,890	938	8,961	1,292
1977	29,562	329,465	9,400	50,206	11,145	10.13	5.42	8.68	26,255	11,709	37,964	928	9,263	1,284
1978	31,703	347,906	9,249	49,267	10,974	10.10	5.39	8.64	27,780	12,491	40,271	916	9,141	1,270
1979	33,350	360,500	9,184	49,664	10,810	10.30	5.40	8.82	28,544	12,315	40,859	892	9,197	1,225
1980	33,637	384,570	10,070	42,705	11,433	11.10	5.50	9.58	29,241	10,909	40,150	907	7,764	1,194
1981	34,451	425,127	11,028	47,023	12,340	11.84	5.50	10.21	30,903	10,734	41,637	931	8,550	1,209
1982	35,253	436,959	11,064	49,847	12,395	11.93	5.50	10.27	31,568	10,966	42,534	927	9,063	1,207

Source: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics*, Table VM-1, annual issues.

Table 33. Fuel Consumption by Certificated Air Carriers, 1972-1982
(Scheduled and Nonscheduled Service)
(Thousands of Gallons)

Year	Total Certificated Route Air Carriers	Domestic Operations								International and Territorial Operations		
		Total Domestic Operations	Total	Domestic Trunk	Passenger/Cargo Carriers					Total	Passenger/ Cargo Carriers	All-Cargo Carriers
					Local Service	Other ¹	Intra- Alaska	Intra- Hawaii	All-Cargo Carriers			
1972	10,180,102	7,753,262	7,685,374	7,172,159	649,397	1,090	38,899	33,187	67,888	2,426,839	2,178,294	248,545
1973	10,699,779	8,354,484	7,263,964	7,450,949	727,633	1,480 ²	44,661 ²	37,297	90,520	2,345,294	2,143,420	201,875
1974	9,553,792	7,508,899	7,423,640	6,612,145	720,372	1,492 ²	50,205 ²	37,307	85,260	2,044,893	1,864,685	180,208
1975	9,506,600	7,557,700	7,483,400	6,650,000	725,800	8,500	61,700	37,400	74,300	1,948,900	1,756,700	192,200
1976	9,808,051	8,008,306	7,914,145	7,043,139	766,019	6,400	56,573	42,015	94,161	1,799,745	1,635,266	164,479
1977	10,268,024	8,416,730	8,313,477	7,373,856	828,195	8,943	54,289	48,194	103,253	1,851,294	1,683,513	167,781
1978	10,639,227	8,726,033	8,561,973	7,527,587	918,531	11,558	58,276	46,021	164,060	1,913,194	1,741,918	171,276
1979	11,368,702	9,376,064	9,205,459	7,848,761	1,017,118	218,246	68,425	52,909	170,605	1,992,638	1,830,001	162,637
1980	11,034,038	9,096,323	8,938,874	7,424,555	1,094,678	295,062	80,498	44,081	157,449	1,937,715	1,764,506	173,209
1981	10,587,769	8,555,248	n/a	n/a	n/a	n/a	n/a	n/a	n/a	2,032,520	n/a	n/a
1982	10,405,726	8,438,672	n/a	n/a	n/a	n/a	n/a	n/a	n/a	1,967,054	n/a	n/a

n/a = not available

Note: Individual figures may not add up because of rounding.

¹ Includes helicopter carriers.

² Alaska Airline data transferred from Other to Intra-Alaska.

Source: 1970-1975: CAB, *Handbook to Airline Statistics*, 1973, Part II, Table 57, and advance information based on CAB Form 41, Schedule T-2(b), Quarterly Reports.

1976-1980: CAB, *Fuel Cost and Consumption, Twelve Months Ended December 31*, 1980 and 1979, Tables 1, 2, 3, 4, 6 and 7, and similar tables in earlier editions.

1981: CAB, *Fuel Cost and Consumption, Twelve Months Ended December 31*, 1982 and 1981.

1982: *Ibid.*, *Twelve Months Ended December 31*, 1983 and 1982.

**Table 34. Motor Fuel and Energy Consumption by the U.S. Transit Industry
(at 5-Year Intervals 1955-1965 and Annually 1966-1982)**

Year	Kilowatt Hours Consumed (In Millions)				Gallons of Motor Fuel Used (In Millions)		
	Heavy Rail	Light Rail	Trolley Coach	Total	Gasoline	Diesel Oil	Propane
1955	1,900	910	720	3,530	246.0	172.6	30.3
1960	2,098	393	417	2,908	153.6	208.1	38.3
1965	2,185	218	181	2,584	91.5	248.4	32.7
1966	2,075	226	166	2,467	76.0	256.0	33.6
1967	2,194	180	157	2,531	57.8	270.3	33.0
1968	2,250	179	157	2,586	45.7	274.2	32.2
1969	2,291	173	154	2,618	40.0	273.8	31.6
1970	2,261	157	143	2,561	37.2	270.6	31.0
1971	2,262	153	141	2,556	29.4	256.8	26.5
1972	2,149	146	133	2,428	19.6	253.3	24.4
1973	2,098	140	93	2,331	12.3	282.6	15.2
1974	n/a	n/a	n/a	2,630	7.5	316.4	3.1
1975	n/a	n/a	n/a	2,646	5.0	365.1	2.6
1976	n/a	n/a	n/a	2,576	5.2	389.2	1.0
1976	n/a	n/a	n/a	2,303	8.1	402.8	1.2
1978	n/a	n/a	n/a	2,017	8.0	362.0	0.4
1979	n/a	n/a	n/a	2,648	18.0	376.0	3.0
1980	n/a	n/a	n/a	2,793	11.0	411.0	3.0
1981	n/a	n/a	n/a	2,818	9.0	424.0	2.8
1982	n/a	n/a	n/a	n/a	n/a	n/a	n/a

n/a = not available

Source: 1955-1977: American Public Transit Association, *Transit Fact Book*, 1981 edition, Table 17.

1978-1981: UMTA, *National Mass Transportation Statistics, Section 15 Reports*, May 1981, June 1982, Nov. 1982, Nov. 1983, Table 002.22.2, p.2-42.

Note: Data for the period July 1, 1982 through June 30, 1983 was not available due to changes in Section 15 reporting procedures from fiscal year basis to calendar year basis.

Table 35. Coal Consumption by End-Use Sector, 1955-1983
(Million Short Tons)

Year	Industry and Miscellaneous						
	Electric Utilities	Coke Plants	Other Industry and Miscellaneous	Total	Transportation	Residential and Commercial	Total
1955	143.8	107.7	110.1	217.8	17.0	68.4	447.0
1960	176.7	81.4	96.0	177.4	3.0	40.9	398.1
1965	244.8	95.3	105.6	200.8	0.7	25.7	472.0
1966	266.5	96.4	108.7	205.1	0.6	25.6	497.7
1967	274.2	92.8	101.8	194.6	0.5	22.1	491.4
1968	297.8	91.3	100.4	191.6	0.4	20.0	509.8
1969	310.6	93.4	93.1	186.6	0.3	18.9	516.4
1970	320.2	96.5	90.2	186.6	0.3	16.1	523.2
1971	327.3	83.2	75.6	158.9	0.2	15.2	501.6
1972	351.8	87.7	72.9	160.6	0.2	11.7	524.3
1973	389.2	94.1	68.0	162.1	0.1	11.1	562.6
1974	391.8	90.2	64.9	155.1	0.1	11.4	558.4
1975	406.0	83.6	63.6	147.2	*	9.4	562.6
1976	448.4	84.7	61.8	146.5	*	8.9	603.8
1977	477.1	77.7	61.5	139.2	*	9.0	625.3
1978	481.2	71.4	63.1	134.5	*	9.5	625.2
1979	527.1	77.4	67.7	145.1	*	8.4	680.5
1980	569.3	66.7	60.3	127.0	*	6.5	702.7
1981	596.8	61.0	67.4	128.4	*	7.4	732.6
1982	593.7	40.9	64.1	105.0	*	8.2	706.9
1983 ^p	625.6	37.0	64.4	101.4	*	8.5	735.4

* = less than 0.05 million short tons. Quantities are included in the Other Industry and Miscellaneous category.

^p = preliminary

Note: Sum of components may not equal total due to independent rounding.

Source: DOE, 1983 *Annual Energy Review*, Table 75, p. 169.

Table 36. Average Retail Price of Transportation fuel (¢/gal.), 1975-1982

Year	Aviation Fuels				Highway Fuels			Railroad Fuel		Marine
	Aviation Gasoline	Jet Fuel		Regular	Motor Gasoline		Truck No. 2 Diesel	Diesel	Coal (\$/ton)	Bunker "C" Fuel
		Naphtha	Kerosene		Premium	Unleaded				
1975	41.1	30.7	29.8	56.7	60.9	57.1	n/a	30.00	16.90	24.66
1976	43.1	31.5	31.2	59.0	63.6	61.4	34.7	32.38	23.22	24.83
1977	47.7	35.0	35.8	62.2	67.4	65.6 r	39.3	36.38	33.14	27.74
1978	52.1	37.5	38.9	62.6	69.4	67.0	40.2	37.90	36.86	25.74
1979	69.5	52.3	55.1	85.7	92.2	90.3	62.4	57.58	32.99	n/a
1980	109.4	88.2	87.4	119.1	128.1	124.5	87.3	83.00	55.65	n/a
1981	131.5	105.7	103.1	131.1	143.9	137.8	106.2 r	100.22	n/a	n/a
1982	132.4	97.7	96.9	122.2	141.7	129.6	100.5	95.43	n/a	n/a

n/a = not available

r = revised

Source: Railroad Fuel, 1975-1982: AAR, *Statistics of Railroads of Class I, October 1983*, p. 15.

Other data: 1975: DOE/EIA, *Monthly Energy Review*, Part 9, January 1980.

1976-1982: *Ibid.*, March 1983, p 89, 92, 93.

Table 35. Coal Consumption by End-Use Sector, 1955-1983
(Million Short Tons)

Table 37. Average Energy Prices by Transportation Sector and Energy Source, 1970-1981
(Dollars Per Million Btu)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
Transportation Sector												
Coal	0.42	0.41	0.46	0.46	0.87	1.14	1.08	1.17	n/a	n/a	n/a	n/a
Petroleum*	2.32	2.39	2.39	2.58	3.72	4.05	4.21	4.48	4.61	6.19	8.60	9.75
Distillate Fuel Oil	1.29	1.36	1.35	1.58	2.61	2.79	2.95	3.21	3.31	4.90	7.06	8.29
Jet Fuel	0.78	0.82	0.82	0.97	1.67	2.18	2.39	2.75	3.04	4.15	6.76	7.58
Motor Gasoline	2.85	2.90	2.88	3.10	4.32	4.64	4.80	5.09	5.23	7.06	9.75	10.86
Residual Fuel Oil	0.36	0.49	0.53	0.64	1.41	1.45	1.52	1.68	1.51	2.37	3.18	4.11
Electricity Sales	4.38	5.03	5.63	6.43	10.06	10.92	11.07	10.14	11.50	12.70	14.16	15.24
Average	2.32	2.39	2.39	2.58	3.72	4.06	4.22	4.48	4.61	6.19	8.60	9.76

n/a = not applicable

* In addition to listed products, includes aviation gasoline, liquefied petroleum gases, and lubricants.

Source: U.S. DOE, 1983 Annual Energy Review, Table 19, p.41.

**Table 38. Price Trend of Gasoline vs. Other Consumer Goods and Services
(at 5-Year Intervals 1955-1970 and Annually 1971-1982)**

	Retail Price of Regular Grade Gasoline (Cents Per Gallon)			Price Indexes of Regular and Premium Gasoline and Other Consumer Items (Index: 1967 = 100)					
Year	Service Station Price Excl. Taxes	State and Federal Taxes	Service Station Price Incl. Taxes	All Items	Food	Rent	Apparel and Upkeep	Regular and Premium Gasoline	Entertainment*
1955	21.42	7.65	29.07	80.2	81.6	84.3	84.1	83.6	76.7
1960	20.99	10.14	31.13	88.7	88.0	91.7	89.6	92.5	87.3
1965	20.70	10.45	31.15	94.5	94.4	96.9	93.7	94.9	95.9
1970	24.55	11.14	36.69	116.3	114.9	110.1	116.1	105.6	113.4
1971	25.20	11.23	36.43	121.3	118.4	115.2	119.8	106.3	119.3
1972	24.46	11.67	36.13	125.3	123.5	119.2	122.3	107.6	122.8
1973	26.88	11.94	38.83	133.1	141.4	124.3	126.8	118.1	125.9
1974	40.41	12.00	52.41	147.7	161.7	130.6	136.2	159.9	139.8
1975	45.44	11.77	57.22	161.2	175.4	137.3	142.3	170.8	144.4
1976	47.44	12.03	59.47	170.5	180.8	144.7	147.6	177.9	151.2
1977	50.70	12.37	65.20	181.5	192.2	153.5	154.2	188.2	157.9
1978	53.09	12.62	88.20	195.4	211.4	164.0	159.6	195.3	176.6
1979	74.33	13.46	122.10	217.4	234.5	176.0	166.6	265.6	188.5
1980	107.35	14.37	122.10	246.8	254.6	191.6	178.4	369.1	205.3
1981	n/a	n/a	135.30	272.4	274.6	208.2 r	186.9 r	410.9	221.4 r
1982	n/a	n/a	122.20 r	289.1 r	285.7 r	224.0 r	191.8 r	389.3	235.8 r

* Includes reading materials, sporting goods, toys and hobbies, and entertainment services.

r = revised

n/a = not available

Source: Price of Gasoline and Consumer Price Index: 1955-1980: American Petroleum Institute, *Basic Petroleum Data Book*, Section VI, Table 4/4a.
1981-1982: DOL: Bureau of Labor Statistics, personal communication.
Price Indexes of Gasoline: 1955-1977: Bureau of Labor Statistics, *Handbook of Labor Statistics*, 1978, Table 122, p. 422.
1978-1982: DOL: Bureau of Labor Statistics, personal communication.

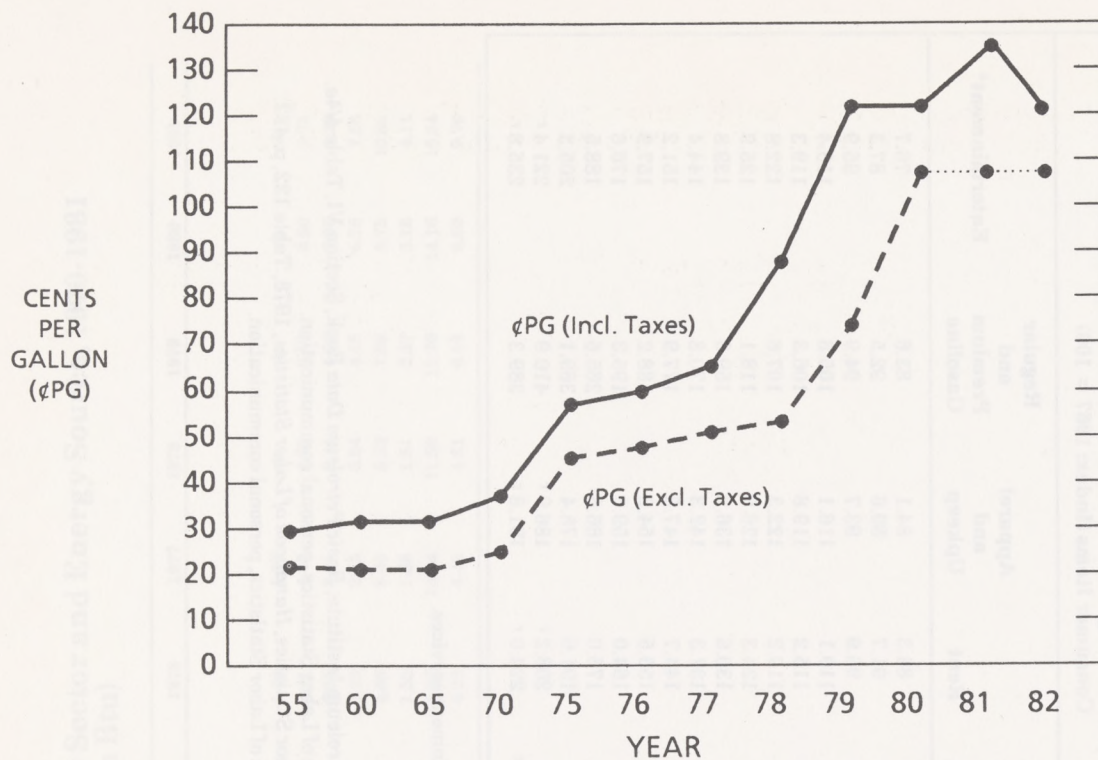


Figure 25. Price Trend of Regular Grade Gasoline Prices, 1955-1982

Source: See Appendix A, p. 180.

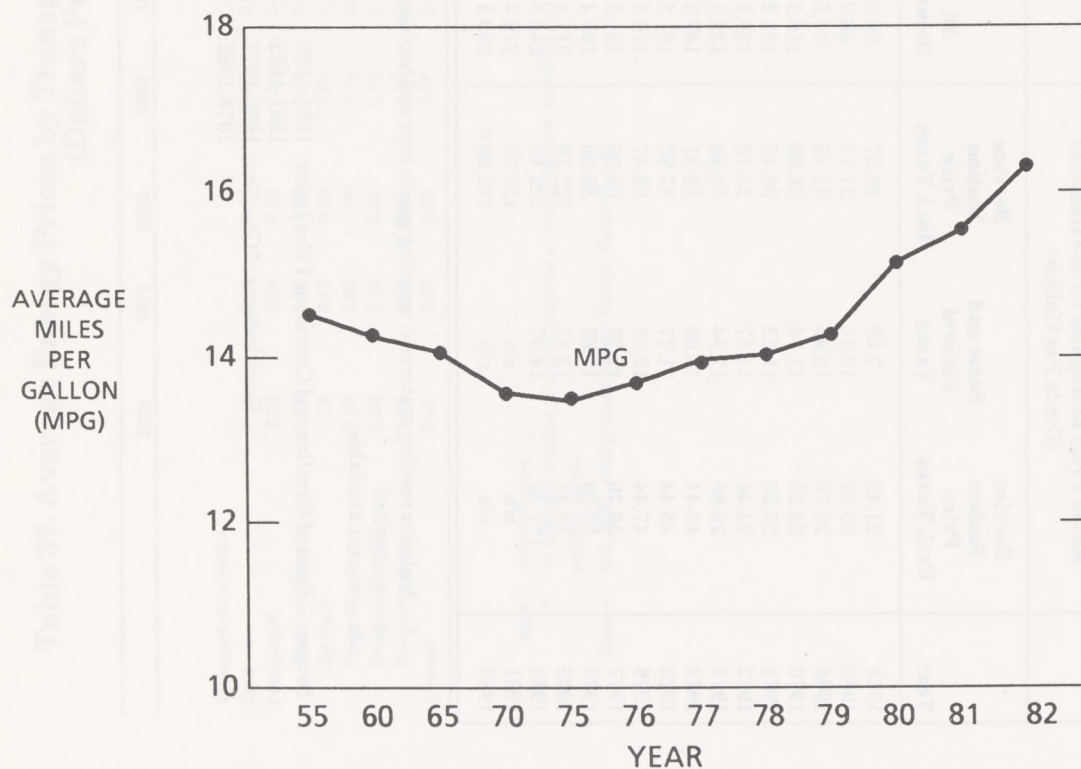


Figure 26. Average Fuel Efficiency of U.S. Passenger Cars, 1955-1982

Source: See Appendix A, p. 181.

**Table 39. Average Fuel Efficiency of U.S. Passenger Cars
(at 5-Year Intervals 1955-1965 and Annually 1966-1982)**

Year	Average Passenger Car Fuel Efficiency (Calendar Year Basis) (mpg) ¹	New Car Fuel Efficiency Big Four ² (Model Year Basis) (mpg) ¹
1955	14.53	16.0
1960	14.28	15.5
1965	14.07	15.4
1966	14.00	15.0
1967	13.93	14.6
1968	13.79	14.2
1969	13.63	14.1
1970	13.57	14.1
1971	13.57	13.7
1972	13.49	13.6
1973	13.10	13.3
1974	13.43	12.8
1975	13.53	15.1
1976	13.72	16.5
1977	13.94	17.7
1978	14.06	18.7
1979	14.29	19.3
1980	15.15	21.8
1981	15.54	23.5
1982	16.33	24.5

¹ 55% city, 45% highway miles sales weighted average.

² Big Four: American Motors, Chrysler, Ford, and General Motors (Domestic Fleet).

Source: Average Passenger Car Fuel Efficiency: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics*, Table VM-1, annual issues.

New Car Fuel Efficiency: U.S. DOT, NHTSA/NRM-21, personal communication.

Table 40. Model Year Sales, Market Shares, and Sales-Weighted Fuel Efficiencies of Domestic and Import Automobiles, Model Years 1978-1983a

	Domestic and Domestic-Sponsored						Import					
	1978	1979	1980 ^b	1981	1982	1983	1978	1979	1980 ^b	1981	1982	1983
MINICOMPACT												
Total sales, units	504,127	257,670	226,674	34,764	n/a	n/a	463,367	331,297	231,530	261,938	221,699	230,547
Market share, %	5.4	3.6	3.3	0.5	n/a	n/a	26.3	17.4	10.1	12.3	11.1	10.5
Fuel economy, mpg	24.4	24.4	27.1	27.0	n/a	n/a	31.2	30.7	32.1	34.6	36.5	36.5
SUBCOMPACT												
Total sales, units	1,071,103	2,087,141	1,988,545	1,350,419	1,003,193	924,900	996,355	1,204,051	1,680,322	1,573,955	1,404,496	1,461,429
Market share, %	11.5	23.4	26.3	20.2	17.9	14.4	56.6	63.4	73.5	73.6	70.1	66.3
Fuel economy, mpg	22.0	24.1	25.6	27.5	28.3	27.3	28.5	27.5	29.2	30.9	31.7	33.5
COMPACT												
Total sales, units	1,578,922	790,446	485,119	999,856	1,010,467	1,401,325	120,753	161,251	164,269	148,206	252,752	362,563
Market share, %	17.0	8.8	6.4	14.9	18.0	21.8	6.9	8.5	7.2	6.9	12.6	16.5
Fuel economy, mpg	20.2	19.5	22.1	29.0	31.2	30.5	20.5	21.6	22.5	23.9	27.5	28.1
MIDSIZE												
Total sales, units	3,576,055	3,643,453	3,352,648	3,113,806	2,530,583	2,772,300	4,798	14,960	16,565	n/a	2,538	6,878
Market share, %	38.5	40.8	44.3	46.5	45.0	43.1	0.3	0.8	0.7	n/a	0.1	0.3
Fuel economy, mpg	18.6	19.1	21.2	22.8	24.0	24.3	14.0	17.9	21.1	n/a	19.0	23.0
LARGE												
Total sales, units	2,515,329	2,116,298	1,472,517	1,107,627	995,561	1,275,939	n/a	n/a	n/a	n/a	n/a	n/a
Market share, %	27.1	23.7	19.5	16.7	17.7	19.8	n/a	n/a	n/a	n/a	n/a	n/a
Fuel economy, mpg	16.3	17.1	19.3	20.6	20.6	19.5	n/a	n/a	n/a	n/a	n/a	n/a
TWO SEATER												
Total sales, units	43,229	39,655	40,708	88,969	79,724	59,294	174,275	188,571	194,234	153,965	123,205	142,133
Market share, %	0.5	0.4	0.5	1.3	1.4	0.9	10.0	9.9	8.5	7.0	6.1	6.5
Fuel economy, mpg	16.5	15.1	16.9	24.4	27.4	25.5	20.6	20.5	20.5	23.9	23.8	22.9
FLEET												
Total sales, units	9,288,785	8,934,663	7,566,211	6,695,441	5,619,528	6,433,758	1,759,548	1,900,130	2,286,920	2,138,064	2,004,690	2,203,550
Market share, %	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	26.2
Fuel economy, mpg	18.7	19.6	21.9	24.0	25.1	24.6	27.3	26.4	28.0	29.9	30.9	31.8

n/a = not available.

^a These figures represent only those sales that could be matched to corresponding EPA fuel economy values.

^b Model year consists of 13 months, September 1979 through September 1980.

Source: Oak Ridge National Laboratory, *Motor Vehicle MPG and Market Shares Report*, February 1984, Table 4, p.7.

Table 41. Model Year Sales, Market Shares, and Sales-Weighted Fuel Efficiencies of Domestic and Import Light Trucks, Model Years 1978-1983

	Domestic and Domestic-Sponsored						Import					
	1978	1979	1980	1981	1982	1983	1978	1979	1980	1981	1982	1983
Small pickup truck												
Total sales, units	132,014	210,867	246,223	178,050	276,562	476,599	175,293	237,930	301,903	294,561	302,701	411,142
Market share, %	4.9	8.4	11.7	10.7	15.0	21.2	100.0	97.5	98.5	95.8	95.4	95.0
Fuel economy, mpg	27.6	25.1	25.8	26.9	27.7	28.4	25.3	22.0	24.7	28.4	29.1	29.0
Standard pickup truck												
Total sales, units	1,900,681	1,640,587	1,229,019	967,242	1,000,722	958,408	n/a	n/a	n/a	n/a	n/a	n/a
Market share, %	70.6	65.3	58.4	57.9	54.2	42.6	n/a	n/a	n/a	n/a	n/a	n/a
Fuel economy, mpg	17.2	16.6	16.9	18.5	18.9	18.9	n/a	n/a	n/a	n/a	n/a	n/a
Vans												
Total sales, units	661,103	590,479	367,202	327,730	379,110	491,050	n/a	n/a	n/a	11,007	11,964	13,619
Market share, %	24.5	23.5	17.4	19.6	20.5	21.8	n/a	n/a	n/a	3.6	3.8	3.1
Fuel economy, mpg	17.2	15.9	16.2	17.8	17.7	18.2	n/a	n/a	n/a	18.5	21.0	21.4
Special purpose vehicle												
Total sales, units	a	70,116	264,018	197,679	188,931	322,247	a	6,187	4,459	2,051	2,615	8,059
Market share, %	a	2.8	12.5	11.8	10.2	14.3	a	2.5	1.5	0.7	0.8	1.9
Fuel economy, mpg	a	16.9	15.5	17.7	18.4	20.4	a	13.5	13.5	14.0	14.0	18.1
Fleet												
Total sales, units	2,693,798	2,512,049	2,106,462	1,670,701	1,845,375	2,248,304	175,293	244,117	306,362	307,619	317,280	432,790
Market share, %	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Fuel economy, mpg	17.5	16.9	17.3	18.8	19.5	20.4	25.3	21.6	24.4	27.6	28.4	28.3

n/a = not available.

^a = EPA fuel economy data for special purpose vehicles are not available for model year 1978.

Source: Oak Ridge National Laboratory, *Motor Vehicle MPG and Market Shares Report*, February 1984, Tables 24, 25, 26 and 27.

Table 42. Estimated Cost of Owning and Operating a Large Size 1984 Model Automobile, Including Fuel
(Total costs in dollars, costs per mile in cents)¹

Item	First Year (14,500 miles)		Second Year (13,700 miles)		Totals & Averages for Twelve Years (120,000 miles)	
	Total Cost	Cost Per Mile	Total Cost	Cost Per Mile	Total Cost	Cost Per Mile
Cost Excluding Taxes:						
Depreciation	2,879.00	19.86	1,776.00	12.96	11,554.00	9.63
Scheduled Maintenance	(86.15)	(.59)	(110.55)	(.81)	(1,380.95)	(1.15)
Nonscheduled Repairs and Maintenance	(14.00)	(.10)	(62.36)	(.45)	(4,799.63)	(4.00)
Total Repairs and Maintenance	100.15	.69	172.91	1.26	6,180.58	5.15
Replacement Tires	19.54	.13	18.41	.13	807.60	.67
Accessories	14.12	.10	13.47	.10	198.14	.17
Gasoline	992.76	6.85	938.07	6.85	8,216.55	6.85
Oil	8.75	.06	15.75	.12	161.00	.13
Insurance	635.00	4.38	635.00	4.64	5,933.00	4.94
Parking and Tolls	136.56	.94	128.66	.94	1,128.60	.94
Total	4,785.88	33.01	3,698.27	27.00	34,179.47	28.48
Taxes and Fees:						
State:						
Gasoline	115.14	.79	108.80	.79	952.95	.79
Registration	20.00	.14	20.00	.15	240.00	.20
Titling	577.70	3.98	-	-	577.70	.48
Operating Cost Sales Tax ²	(.10)	-	(1.27)	(.01)	(121.63)	(.10)
Nonoperating Cost Sales Tax	(1.35)	(.01)	(3.51)	(.02)	(44.06)	(.04)
Total Sales Tax	1.45	.01	4.78	.03	165.69	.14
Subtotal	714.29	4.93	133.58	.97	1,936.35	1.61
Federal:						
Gasoline	76.76	.53	72.53	.53	635.30	.53
Total Taxes	791.05	5.45	206.11	1.50	2,571.64	2.14
Operating Costs	1,363.61	9.40	1,345.85	9.82	16,823.26	14.02
Ownership Costs	4,213.32	29.06	2,558.53	18.68	19,927.85	16.60
Total of All Costs	5,576.93	38.46	3,904.38	28.50	36,751.11	30.62

¹ This estimate covers the total cost of a medium priced, large size four-door sedan, purchased for \$11,554 and operated 120,000 miles over a 12-year period. Baltimore area prices, considered to be in the middle range, were used.

² Where costs per mile are less than .005 cent, a dash (-) appears.

Source: U.S. DOT, FHWA, *Cost of Owning and Operating Automobiles and Vans, 1984*.

Table 43. Estimated Cost of Owning and Operating an Intermediate Size 1984 Model Automobile, Including Fuel
(Total costs in dollars, costs per mile in cents)¹

Item	First Year (14,500 miles)		Second Year (13,700 miles)		Totals & Averages for Twelve Years (120,000 miles)	
	Total Cost	Cost Per Mile	Total Cost	Cost Per Mile	Total Cost	Cost Per Mile
Cost Excluding Taxes:						
Depreciation	2,385.00	16.45	1,401.00	10.23	10,320.00	8.60
Scheduled Maintenance	(65.85)	(.45)	(108.75)	(.79)	(1,169.40)	(.97)
Nonscheduled Repairs and Maintenance	<u>(11.34)</u>	<u>(.08)</u>	<u>(47.79)</u>	<u>(.35)</u>	<u>(4,254.55)</u>	<u>(3.55)</u>
Total Repairs and Maintenance	77.19	.53	156.54	1.14	5,423.95	4.52
Replacement Tires	15.43	.11	14.54	.11	637.58	.53
Accessories	14.09	.10	13.45	.10	197.88	.16
Gasoline	803.62	5.54	759.28	5.54	6,650.64	5.54
Oil	8.75	.06	15.75	.12	161.00	.13
Insurance	732.00	5.05	732.00	5.34	6,691.00	5.58
Parking and Tolls	<u>136.56</u>	<u>.94</u>	<u>128.66</u>	<u>.94</u>	<u>1,128.60</u>	<u>.94</u>
Total	4,172.64	24.78	3,221.22	23.52	31,210.65	26.00
Taxes and Fees:						
State:						
Gasoline	93.20	.64	88.06	.64	771.34	.64
Registration	20.00	.14	20.00	.14	240.00	.20
Titling	516.00	3.56	-	-	516.00	.43
Operating Cost Sales Tax ²	(.10)	-	(.68)	(.01)	(129.92)	(.11)
Nonoperating Cost Sales Tax	<u>(1.34)</u>	<u>(.01)</u>	<u>(3.16)</u>	<u>(.02)</u>	<u>(32.54)</u>	<u>(.02)</u>
Total Sales Tax	<u>1.44</u>	<u>.01</u>	<u>3.84</u>	<u>.03</u>	<u>162.46</u>	<u>.14</u>
Subtotal	630.64	4.35	111.90	.82	1,689.80	1.41
Federal:						
Gasoline	62.14	.43	58.71	.43	514.20	.43
Total Taxes	692.78	4.78	170.61	1.24	2,204.00	1.84
Operating Costs	1,131.14	7.80	1,113.47	8.13	14,247.83	11.87
Ownership Costs	3,734.28	25.76	2,278.36	16.63	19,166.82	15.97
Total of All Costs	4,865.42	33.56	3,391.83	24.76	33,414.65	27.84

- ¹ This estimate covers the total cost of a medium priced, intermediate size four-door sedan, purchased for \$10,320 and operated 120,000 miles over a 12-year period. Baltimore area prices, considered to be in the middle range, were used.
- ² Where costs per mile are less than .005 cent, a dash (-) appears.

Source: U.S. DOT, FHWA, *Cost of Owning and Operating Automobiles and Vans, 1984*.

Table 44. Estimated Cost of Owning and Operating a Compact Size 1984 Model Automobile, Including Fuel
(Total costs in dollars, costs per mile in cents)¹

Item	First Year (14,500 miles)		Second Year (13,700 miles)		Totals & Averages for Twelve Years (120,000 miles)	
	Total Cost	Cost Per Mile	Total Cost	Cost Per Mile	Total Cost	Cost Per Mile
Cost Excluding Taxes:						
Depreciation	1,595.00	11.00	1,105.00	8.07	8,799.00	7.33
Scheduled Maintenance	(34.80)	(.24)	(108.95)	(.80)	(914.40)	(.76)
Nonscheduled Repairs and Maintenance	(9.50)	(.07)	(45.45)	(.33)	(3,788.88)	(3.16)
Total Repairs and Maintenance	44.30	.31	154.40	1.13	4,703.28	3.92
Replacement Tires	12.57	.09	11.08	.08	519.64	.43
Accessories	17.13	.12	16.32	.12	223.02	.19
Gasoline	649.05	4.48	613.31	4.48	5,371.50	4.48
Oil	8.75	.06	15.75	.11	161.00	.13
Insurance	537.00	3.70	537.00	3.92	5,170.00	4.31
Parking and Tolls	136.56	.94	128.66	.94	1,128.60	.94
Total	3,000.36	20.70	2,581.52	18.85	26,074.04	21.73
Taxes and Fees:						
State:						
Gasoline	75.28	.52	71.13	.52	622.98	.52
Registration	20.00	.14	20.00	.15	240.00	.20
Titling	439.95	3.03	-	-	439.95	.37
Operating Cost Sales Tax ²	(.13)	-	(.68)	-	(139.62)	(.12)
Nonoperating Cost Sales Tax	(1.43)	(.01)	(2.78)	(.02)	(34.09)	(.03)
Total Sales Tax	1.56	.01	3.46	.02	173.71	.15
Subtotal	536.79	3.70	94.59	.69	1,476.64	1.24
Federal:						
Gasoline	50.18	.34	47.42	.34	415.31	.34
Total Taxes	586.97	4.04	142.01	1.03	1,891.95	1.58
Operating Costs	942.02	6.50	933.48	6.81	12,147.53	10.13
Ownership Costs	2,645.31	18.24	1,790.05	13.07	15,820.46	13.18
Total of All Costs	3,587.33	24.74	2,723.53	19.88	27,967.99	23.31

¹ This estimate covers the total cost of a medium priced, compact size four-door sedan, purchased for \$8,799 and operated 120,000 miles over a 12-year period. Baltimore area prices, considered to be in the middle range, were used.

² Where costs per mile are less than .005 cent, a dash (-) appears.

Source: U.S. DOT, FHWA, *Cost of Owning and Operating Automobiles and Vans, 1984*.

Table 45. Estimated Cost of Owning and Operating a Subcompact Size 1984 Model Automobile, Including Fuel
(Total costs in dollars, costs per mile in cents)¹

Item	First Year (14,500 miles)		Second Year (13,700 miles)		Totals & Averages for Twelve Years (120,000 miles)	
	Total Cost	Cost Per Mile	Total Cost	Cost Per Mile	Total Cost	Cost Per Mile
Cost Excluding Taxes:						
Depreciation	903.00	6.23	888.00	6.48	7,024.00	5.85
Scheduled Maintenance	(27.65)	(.19)	(73.30)	(.54)	(939.84)	(.78)
Nonscheduled Repairs and Maintenance	(8.50)	(.06)	(39.95)	(.29)	(4,440.00)	(3.70)
Total Repairs and Maintenance	36.15	.25	113.25	.83	5,379.84	4.48
Replacement Tires	11.67	.08	11.00	.08	483.20	.40
Accessories	14.62	.10	13.95	.10	202.21	.17
Gasoline	625.07	4.31	590.61	4.31	5,172.70	4.31
Oil	7.00	.05	14.00	.10	147.00	.12
Insurance	635.00	4.38	635.00	4.64	5,933.00	4.95
Parking and Tolls	136.56	.94	128.66	.94	1,128.60	.94
Total	2,369.07	16.34	2,394.47	17.48	25,470.55	21.22
Taxes and Fees:						
State:						
Gasoline	72.50	.50	68.50	.50	599.93	.50
Registration	20.00	.14	20.00	.15	240.00	.20
Titling	351.20	2.42	-	-	351.20	.29
Operating Cost Sales Tax ²	(.13)	-	(1.70)	(.01)	(159.06)	(.13)
Nonoperating Cost Sales Tax	(1.33)	(.01)	(1.66)	(.01)	(38.76)	(.03)
Total Sales Tax	1.46	.01	3.36	.02	197.82	.17
Subtotal	445.16	3.07	91.86	.67	1,388.95	1.16
Federal:						
Gasoline	48.33	.33	45.67	.33	399.96	.33
Total Taxes	493.49	3.40	137.53	1.00	1,788.91	1.49
Operating Costs	909.76	6.27	900.09	6.57	12,530.45	10.44
Ownership Costs	1,952.80	13.47	1,631.91	11.91	14,729.01	12.27
Total of All Costs	2,862.56	19.74	2,532.00	18.48	27,259.46	22.71

¹ This estimate covers the total cost of a medium priced, subcompact size four-door sedan, purchased for \$7,024 and operated 120,000 miles over a 12-year period. Baltimore area prices, considered to be in the middle range, were used.

² Where costs per mile are less than .005 cent, a dash (-) appears.

Source: U.S. DOT, FHWA, *Cost of Owning and Operating Automobiles and Vans, 1984*.

Table 46. Estimated Cost of Owning and Operating a 1984 Model Passenger Van, Including Fuel
(Total costs in dollars, costs per mile in cents)¹

Item	First Year (14,500 miles)		Second Year (13,700 miles)		Totals & Averages for Twelve Years (120,000 miles)	
	Total Cost	Cost Per Mile	Total Cost	Cost Per Mile	Total Cost	Cost Per Mile
Cost Excluding Taxes:						
Depreciation	3,914.00	26.99	1,851.00	13.51	12,788.00	10.65
Scheduled Maintenance	(113.12)	(.78)	(248.72)	(1.82)	(1,943.58)	(1.62)
Nonscheduled Repairs and Maintenance	(27.00)	(.19)	(190.20)	(1.39)	(5,025.52)	(4.19)
Total Repairs and Maintenance	140.12	.97	438.92	3.21	6,969.10	5.81
Replacement Tires	16.20	.11	15.27	.11	937.47	.78
Accessories	17.40	.12	16.63	.12	355.44	.30
Gasoline	1,298.21	8.95	1,226.62	8.95	10,743.96	8.95
Oil	10.50	.07	19.25	.14	187.25	.16
Insurance	1,129.00	7.79	1,129.00	8.24	10,671.00	8.89
Parking and Tolls	136.56	.94	128.66	.94	1,128.60	.94
Total	6,661.99	45.94	4,825.35	35.22	43,780.82	36.48
Taxes and Fees:						
State:						
Gasoline	150.57	1.04	142.26	1.04	1,246.06	1.04
Registration	30.00	.21	30.00	.22	360.00	.30
Titling	639.40	4.41	-	-	639.40	.53
Operating Cost Sales Tax ²	(.15)	-	(7.06)	(.05)	(179.52)	(.15)
Nonoperating Cost Sales Tax	(2.02)	(1.01)	(9.21)	(.07)	(74.31)	(.06)
Total Sales Tax	2.17	.01	16.27	.12	253.83	.21
Subtotal	822.14	5.67	188.53	1.38	2,499.29	2.08
Federal:						
Gasoline	100.38	.69	94.84	.69	830.73	.69
Total Taxes	922.52	6.36	283.37	2.07	3,330.02	2.77
Operating Costs	1,739.57	11.99	1,824.16	13.31	20,279.11	16.89
Ownership Costs	5,844.94	40.31	3,284.56	23.98	26,831.73	22.36
Total of All Costs	7,584.51	52.30	5,108.72	37.29	47,110.84	39.25

¹ This estimate covers the total cost of a passenger van purchased for \$12,788 and operated 120,000 miles over a 12-year period. Baltimore area prices, considered to be in the middle range, were used.

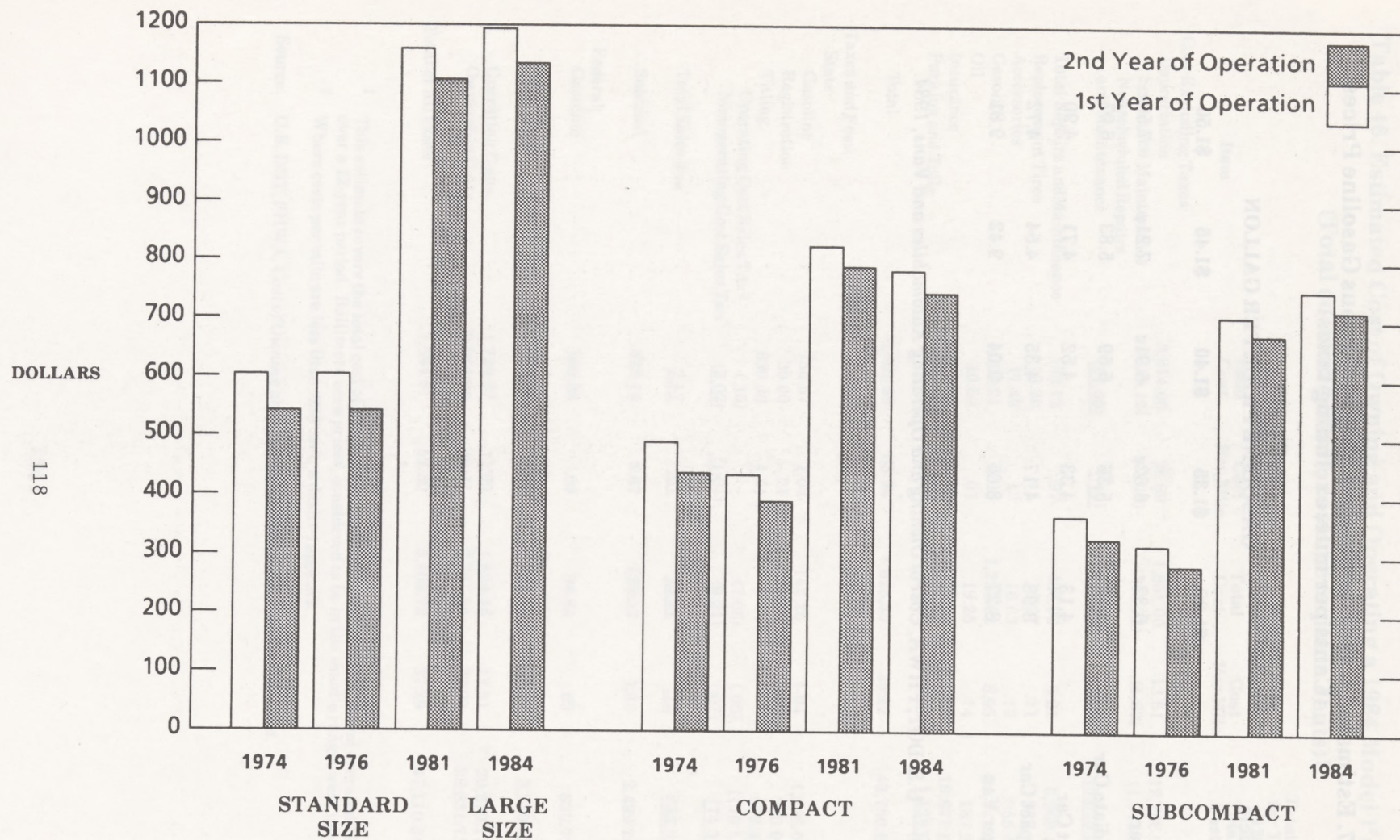
² Where costs per mile are less than .005 cent, a dash (-) appears.

Source: U.S. DOT, FHWA, *Cost of Owning and Operating Automobiles and Vans, 1984*.

**Table 47. Estimated Gasoline Cost per Mile at Various Gasoline Prices
(Cents per mile, excluding taxes)**

Vehicle	GASOLINE PRICE PER GALLON				
	\$1.30	\$1.35	\$1.40	\$1.45	\$1.50
Large Car	6.32¢	6.62¢	6.91¢	7.21¢	7.50¢
Intermediate Car	5.12	5.36	5.59	5.83	6.07
Compact Car	4.13	4.33	4.52	4.71	4.90
Subcompact Car	3.98	4.17	4.35	4.54	4.72
Passenger Van	8.27	8.65	9.04	9.42	9.81

Source: U.S. DOT, FHWA, *Cost of Owning and Operating Automobiles and Vans, 1984*.



See Appendix A, p. 181

Figure 27. Estimated Annual Automobile Gasoline and Oil Costs, Including Taxes, by Size and Year of Operation

**Table 48. Estimated Cost of Owning and Operating 1984 Model
Automobiles and Vans, Including Fuel**

SUBURBAN-BASED OPERATION TOTAL COSTS: CENTS PER MILE*							
SIZE	 ORIGINAL VEHICLE COST DEPRECIATED	 MAINTENANCE, ACCESSORIES, PARTS & TIRES	 GAS & OIL (EXCLUDING TAXES)	 PARKING & TOLLS	 INSURANCE	 STATE & FEDERAL TAXES	TOTAL COST
LARGE WITH STANDARD EQUIP- MENT, WEIGHT MORE THAN 3,500 LBS. EMPTY 	9.6	6.0	7.0	0.9	4.9	2.2	30.6
INTERMEDIATE WEIGHT LESS THAN 3,500 LBS. EMPTY 	8.6	5.2	5.7	0.9	5.6	1.8	27.8
COMPACT WEIGHT LESS THAN 3,000 LBS. EMPTY 	7.3	4.6	4.6	0.9	4.3	1.6	23.3
SUBCOMPACT WEIGHT LESS THAN 2,500 LBS. EMPTY 	5.9	5.1	4.4	0.9	5.0	1.4	22.7
PASSENGER VAN WEIGHT LESS THAN 5,000 LBS. EMPTY 	10.7	6.9	9.1	0.9	8.9	2.7	39.2

* Based on operations of 120,000 miles over 12 years.

Source: U.S. Department of Transportation, Federal Highway Administration,
Cost of Owning and Operating Automobiles and Vans, 1984.

Part 2. Energy Intensiveness

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Table 49. Energy Intensiveness of Automobiles and Motorcycles, 1972-1982

Year	Auto Pass-Miles (millions)	Motorcycle Pass-Miles (millions)	Fuel Consumed (Million gal.)		Autos (Btu/pass.- miles)	Motorcycle (Btu/pass.- miles)
			Autos	Motorcycles		
1972	2,170,095	18,800	73,121	342	4,212	2,274
1973	2,237,094	21,553	77,619	392	4,337	2,274
1974	2,179,586	24,582	73,770	447	4,231	2,273
1975	2,261,866	24,586	76,010	447	4,201	2,273
1976	2,366,676	24,659	78,398	448	4,141	2,271
1977	2,461,028	24,823	80,226	451	4,075	2,271
1978	2,693,512	25,463	83,312	463	3,866	2,274
1979	2,623,191	24,211	79,793	440	3,802	2,272
1980	2,557,340	19,800	73,375	360	3,586	2,273
1981 ^r	2,552,639	16,500	71,418	300	3,497	2,272
1982	2,607,931	16,500	69,430	300	3,328	2,272

^r = revised

Note: Passenger-Mile data is based on vehicle-miles obtained from the FHWA and an average occupancy rate of 2.3 for automobiles and 1.1 for motorcycles.

The heat equivalent factor used for Btu conversion is 125,000 Btu/gal.

Source: Passenger-Miles and Fuel Consumed:
FHWA, *Highway Statistics*, annual issues, Table VM-1.

Table 50. Energy Intensiveness of Trucks, 1972-1982

Year	Vehicle Miles (millions)			Fuel Consumed (million gal.)			Btu/Vehicle-Mile		
	Single-Unit Trucks	Combinations	All Trucks	Single-Unit Trucks	Combinations	All Trucks	Single-Unit Trucks	Combinations	All Trucks
1972	213,122	46,613	259,735	22,118	8,600	30,718	12,973	25,590	15,237
1973	219,128	48,019	267,147	22,755	8,860	31,615	12,980	25,592	15,247
1974	211,460	56,059	267,519	21,125	10,101	31,226	12,488	24,992	15,108
1975	218,894	55,560	274,454	21,868	9,764	31,632	12,488	24,375	14,894
1976	248,795	59,155	307,950	24,915	10,975	35,890	12,518	25,733	15,056
1977	266,000	63,465	329,465	26,255	11,709	37,964	12,338	25,590	14,890
1978	280,578	67,328	347,906	27,780	12,491	40,271	12,376	25,732	14,961
1979	294,000	66,500	360,500	28,544	12,315	40,859	12,136	25,686	14,635
1980	324,570	60,000	384,570	29,241	10,909	40,150	11,261	25,218	13,439
1981 ^r	366,090	59,037	425,127	30,903	10,734	41,637	10,552	25,218	12,242
1982	376,649	60,310	436,959	31,568	10,966	42,534	10,477	25,218	12,168

^r = revised

Note: The heat equivalent factors used for Btu conversions are:
Automotive gasoline = 125,000 Btu/gal (single-unit trucks)
Distillate fuel = 138,700 Btu/gal (combinations)

Source: FHWA, *Highway Statistics*, annual issues, Table VM-1.

**Table 51. Energy Intensiveness of Local Transit Buses and School Buses
1972-1982**

Year	Vehicle-Miles (millions)		Fuel Consumed		Btu/Vehicle-Mile	
	Motor# Bus	School Bus	Motor Bus (Diesel) (million gal.)	School Bus (Gasoline) (million gal.)	Motor Bus	School Bus
1972	1,308	2,359	253	320	26,828	16,956
1973	1,370	2,412	283	327	28,651	16,946
1974	1,431	2,450	316	333	30,628	16,990
1975	1,526	2,500	365	342	33,175	17,100
1976	1,581	2,862	389	390	34,127	17,034
1977	1,623	2,950	403	401	34,440	16,991
1978	1,329*	2,991	359*	407	37,461*	17,009
1979	1,461*	2,980	374*	405	35,506*	16,988
1980	1,541*	2,900	409*	380	36,813*	16,379
1981	1,524*	2,960 ^r	420*	387 ^r	38,224*	16,343 ^r
1982	n/a	3,062	n/a	399	n/a	16,288

* Data not directly comparable to prior years because of change in data source.

Data for the period July 1, 1982 through June 30, 1983 was not available due to changes in Section 15 reporting procedures from fiscal year basis to calendar year basis.

Note: The heat equivalent factors used for Btu conversions are:

Automotive gasoline = 125,000 Btu/gal. (School Bus)

Distillate oil = 138,700 Btu/gal. (Motor Bus)

Source: School Bus: FHWA, *Highway Statistics*, annual issues, Table VM-1.

Motor Bus: 1971-1977: APTA, *Transit Fact Book*, 1981 edition, Table 13 and 17.

1978-1982: UMTA, *National Urban Mass Transportation Statistics, Section 15 Reports*, May 1981, June 1982, Nov. 1982 and Nov. 1983, Table 002.15.1, p. 2-61 and Table 002.11.1, p. 2-42.

Table 52. Energy Intensiveness of Class I Intercity Buses, 1974-1982

Year	Revenue Passenger-Miles (10 ⁶)	Fuel Consumed (million gal.)	Btu/ Passenger-Mile
1974	19,500	140.7	1,001
1975	18,200	135.1	1,030
1976	16,440	134.8	1,049
1977	17,100	126.4	1,025
1978	16,230	121.9	1,042
1979	17,330	127.4	1,020
1980	17,080	132.2	1,074
1981	15,830	123.0	1,078
1982	15,890	123.1	1,075

Note: The heat equivalent factor used in Btu conversion is 138,700 Btu/gal.

Source: Revenue Passenger-Miles:
1974 - 1980: ABA, *Bus Facts* 1982 edition, p.5.
1981 - 1982: ABA, personal communication.
Fuel Consumed:
1972 - 1982: ABA, personal communication.

Table 53. Energy Intensiveness of Class I Railroad Freight, 1972-1982

Year	Revenue Freight Ton-Miles (millions)	Fuel Consumed* (million gal.)	Btu/ Revenue Freight Ton-Mile
1972	776,746	3,528	630
1973	851,809	3,664	597
1974	850,961	3,643	594
1975	754,252	3,314	609
1976	794,059	3,461	605
1977	826,292	3,537	594
1978	858,105	3,507	567
1979	901,059	3,637	559
1980	918,958	3,567	538
1981	910,169	3,429	523
1982	797,759	2,872	499

* Diesel fuel only. Does not include electrically powered locomotives.

Note: The heat equivalent factor used for Btu conversion is 138,700 Btu/gal.

Source: Revenue Freight Ton-Miles:
1972-1982: AAR, *Statistics of Railroads of Class I*, Oct. 1983, p. 6, line 50.
Fuel Consumed:
1972-1982: AAR, *Statistics of Railroads of Class I*, Oct. 1983, p. 15, line 1.

Table 54. Energy Intensiveness of Amtrak Service, 1973-1982

Year	Revenue Passenger- Miles (10 ⁶)	Fuel Consumed (million gal.)				Total Fuel Consumed (10 ⁹ Btu)*	Btu/Revenue Passenger- Mile*
		Locomotive		Rail Motor Car			
		Diesel	Electric*	Diesel	Electric*		
1973	3,809	75.6	181.5	0.4	92.9	11,477	3,013
1974	4,259	64.8	182.3	0.7	94.8	10,030	2,355
1975	3,753	63.1	180.3	6.7	94.0	10,617	2,829
1976	4,268	67.1	183.3	9.8	87.6	11,590	2,716
1977	4,204	66.9	187.4	14.9	76.3	12,245	2,913
1978	4,154	69.6	197.4	17.7	64.7	13,003	3,130
1979	4,867	70.0	247.9	7.4	79.9	11,854	2,436
1980	4,503	63.5	253.8	5.6	43.9	10,600	2,354
1981	4,633	48.9	215.5	3.2 **	63.0	8,177	1,765
1982	4,501	60.9	218.7	3.7**	27.8	9,801	2,419

* Does not include electric power generation and distribution losses; which, if included, would increase figures shown by about 20%.

** Includes Turboliners.

Note: The heat equivalent factors used in Btu conversion are:
 Diesel= 138,700 Btu/gal.
 Electric= 3,412 Btu/kwh.

Source: Revenue Passenger-Miles:
 1972-1980: AAR, *Statistics of Railroads of Class I*, Dec. 1982, p. 18.
 1981-1982: Amtrak, Marketing Dept., personal communication.
 Fuel Consumed:
 1973-1980: AAR, personal communication.
 1981-1982: Amtrak, Mechanical Dept., personal communication.

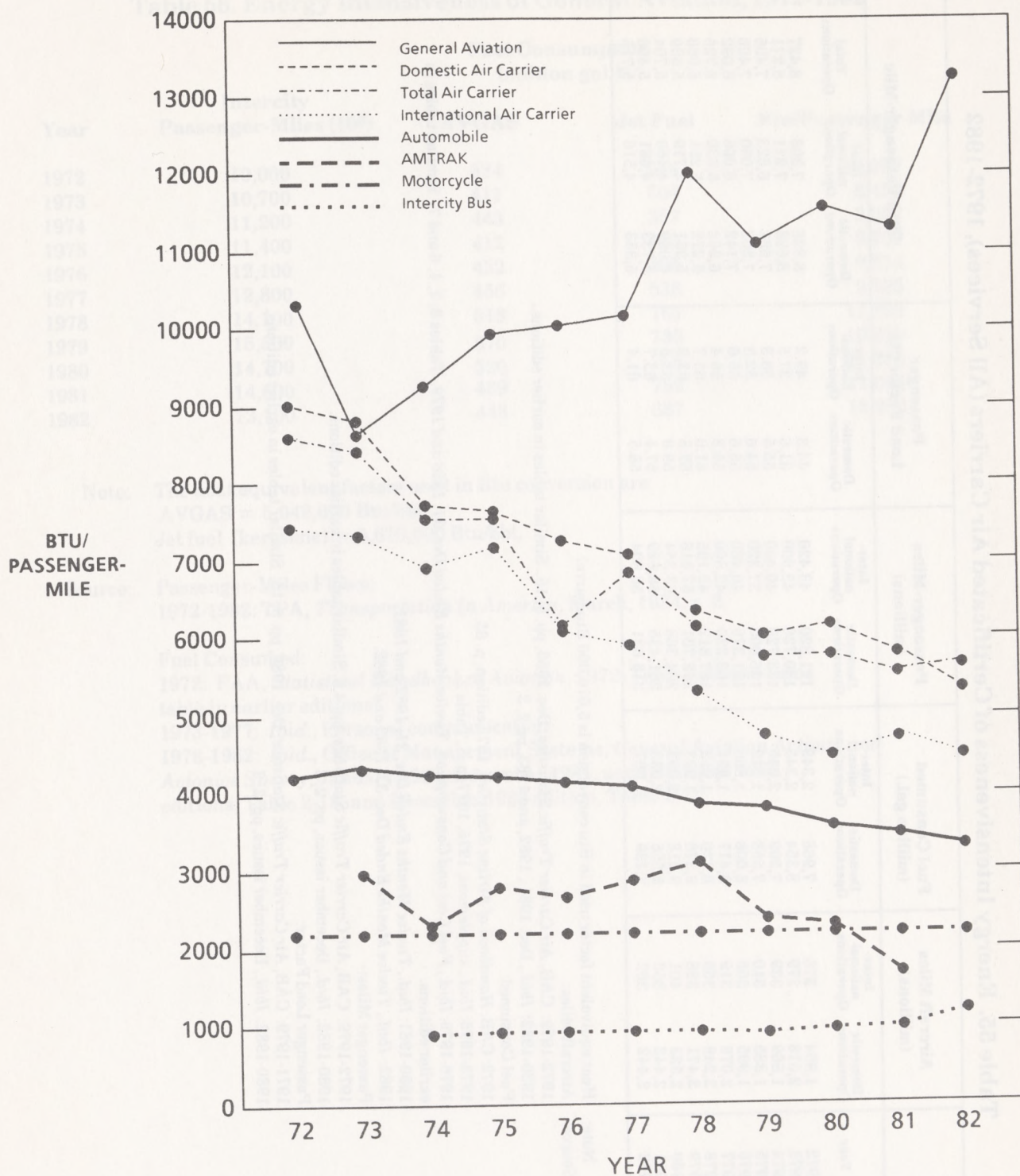


Figure 28. Energy Intensiveness by Passenger Mode, 1972-1982
(Btu/Passenger-Mile)

Table 55. Energy Intensiveness of Certificated Air Carriers (All Services), 1972-1982

Year	Aircraft Miles (millions)		Fuel Consumed (million gal.)		Passenger-Miles (millions)		Passenger Load Factor (%)		Btu/Passenger-Mile		
	Domestic Operations	Inter- national Operations	Domestic Operations	Inter- national Operations	Domestic Operations	Inter- national Operations	Domestic Operations	Inter- national Operations	Domestic Operations	Inter- national Operations	Total Operations
1972	1,954	378	7,966	2,349	121,820	43,420	44.3	49.2	8,828	7,303	8,427
1973	2,018	379	8,354	2,345	130,720	43,900	31.6	37.5	8,628	7,211	8,271
1974	1,869	339	7,509	2,045	133,720	40,460	55.5	38.3	7,581	6,823	7,405
1975	1,885	310	7,558	1,949	136,000	37,320	54.6	52.3	7,502	7,050	7,405
1976	1,995	305	8,008	1,800	151,370	40,460	55.6	55.6	7,142	6,006	6,092
1977	2,078	319	8,417	1,851	163,220	42,860	55.8	56.4	6,962	5,830	6,726
1978	2,249	359	8,726	1,913	187,812	49,185	61.0	63.7	6,272	5,251	6,060
1979	2,471	388	9,376	1,993	212,701	57,018	62.8	63.8	5,951	4,719	5,690
1980	2,523	401	9,218	2,093	204,368	63,354	58.0	62.8	6,089	4,460	5,704
1981	2,442	356	8,555	2,033	201,435	58,629	57.4	63.7	5,733	4,681	5,496
1982	2,442	362	8,439	1,967	213,631	58,804	58.5	61.4	5,333	4,516	5,715

Note: Heat equivalent factor used in Btu conversion is 5,670,000 Btu/barrel.

Source: Aircraft Miles:

1972-1979: CAB, *Air Carrier Traffic Statistics*, Dec. 1980, pp. 5, 15. Similar tables in earlier editions.

1980-1982: *Ibid.*, Dec. 1981, 1982, and 1983, pp. 2, 3.

Fuel Consumed:

1972: CAB, *Handbook of Airline Statistics*, 1973 edition, p. 65.

1973-1975: *Ibid.*, supplement, 1975, 1977, p. 5, Table 2.

1976-1979: *Ibid.*, *Fuel Cost and Consumption, Twelve Months Ended Dec. 31, 1980 and 1979*, Tables 2, 3, 4, 6 and 7. Similar tables in earlier editions.

1980-1981: *Ibid.*, *Twelve Months Ended Dec. 31, 1982 and 1981*.

1982: *Ibid.*, *Twelve Months Ended Dec. 31, 1983 and 1982*.

Passenger Miles:

1972-1979: CAB, *Air Carrier Traffic Statistics*, pp. 4, 5. Similar tables in earlier editions.

1980-1982: *Ibid.*, December issues, pp. 2, 3.

Passenger Load Factor:

1971-1979: CAB, *Air Carrier Traffic Statistics*, Dec. 1980, pp. 5, 15. Similar tables in earlier editions.

1980-1982: *Ibid.*, December issues, pp. 2, 3

Table 56. Energy Intensiveness of General Aviation, 1972-1982

Year	Intercity Passenger-Miles (10 ⁶)	Fuel Consumption (million gal.)		Btu/Passenger Mile
		AVGAS	Jet Fuel	
1972	10,000	584	245	10,327
1973	10,700	411	304	8,452
1974	11,200	443	357	9,057
1975	11,400	412	453	9,709
1976	12,100	432	495	9,814
1977	12,800	456	536	9,935
1978	14,100	518	763	11,723
1979	15,500	570	736	10,830
1980	14,700	520	766	11,286
1981	14,600	489	759	11,044
1982	13,100	448	887	13,252

Note: The heat equivalent factors used in Btu conversion are:

AVGAS = 5,048,000 Btu/bbl.

Jet fuel (kerosene) = 5,670,000 Btu/bbl.

Source: Passenger-Miles Flown:

1972-1982: TPA, *Transportation In America*, March, 1984, p. 8.

Fuel Consumed:

1972: FAA, *Statistical Handbook of Aviation*, 1972, Table 9.12 and same table in earlier editions.

1973-1977: *Ibid.*, Personal communication.

1978-1982: *Ibid.*, Office of Management Systems, *General Aviation Activity and Avionics Survey*, January 1981, December 1981, and December 1982 editions, Table 2-18, and December 1983 edition, Table 2-21.

Part 3. Energy Transport

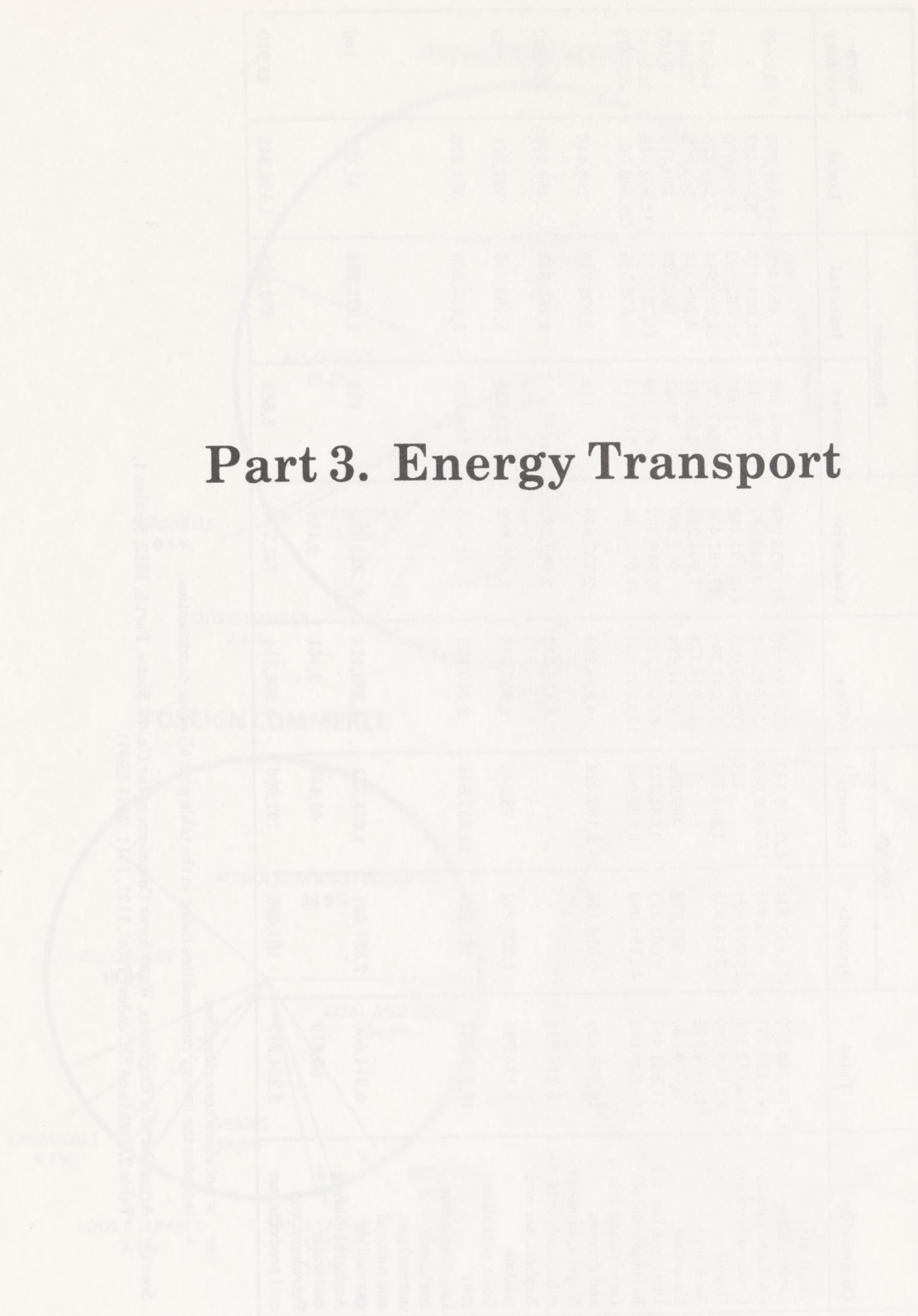


Figure 29. Principal Commodity Flows, 1982. (Source: U.S. Energy Information Administration, "Energy Flows in the United States, 1982", DOE/EIA-0131, Washington, D.C., 1983.)

Source: See Appendix A, p. 121.

**Table 57. Energy Transported by Foreign and Domestic Waterborne Commerce,
by Type of Traffic and Commodity, Calendar Year 1982
(Net Traffic in Tons of 2,000 Pounds)**

Commodity	Total	Foreign		Total	Coastwise	Domestic		Local	Intra-territory
		Imports	Exports			Lakewise	Internal		
Total, all commodities ¹	1,776,740,579	416,621,434	403,109,549	957,009,596	311,058,264	72,084,986	495,453,486	75,601,691	2,811,169
Coal and lignite	263,134,737	648,973	105,980,089	156,505,675	3,040,887	17,220,013	131,004,278	5,240,497	-
Crude petroleum	404,183,898	225,774,684	124	178,409,090	140,894,158	11,900	34,662,962	2,840,070	-
Gasoline	83,998,640	7,144,838	1,806,456	75,047,346	41,881,401	647,039	24,722,914	7,349,375	446,617
Jet Fuel	13,078,178	-	-	13,078,178	7,994,223	239,108	4,268,314	503,972	72,561
Kerosene	3,079,080	387,628	459,778	2,231,674	917,467	2,103	902,823	400,116	9,165
Distillate fuel oil	71,301,467	4,661,273	4,584,421	62,055,773	30,516,367	618,039	18,707,306	11,902,018	312,043
Residual fuel oil	169,336,640	43,104,083	12,930,660	113,301,897	41,059,366	762,010	40,638,580	29,520,462	1,321,479
Lubricating oils and greases	16,608,891	9,614,198	2,105,424	4,889,269	2,737,999	112	1,932,710	218,448	-
Naptha, mineral spirits, solvents, <i>nec</i>	5,118,513	-	-	5,118,513	2,063,282	-	2,165,843	459,796	429,592
Asphalt, tar and pitches	8,134,994	1,099,292	78,146	6,957,556	2,675,809	221,028	3,483,455	577,241	23
Coke, petroleum coke	15,641,347	161,923	11,633,849	3,845,575	1,495	119,499	3,132,805	591,776	-
Liquified gases, coal gases, natural gas, and natural gas liquids	5,914,866	2,857,001	1,664,751	1,393,114	283,152	433	1,072,264	37,125	140
Asphalt building materials	55,610	-	46,449	9,161	9,161	-	-	-	-
Petroleum and coal products, <i>nec</i>	3,224,915	164,695	193,906	2,866,314	742,774	5,689	893,593	1,198,348	25,910

nec = not elsewhere classified.

¹ Includes the energy commodities listed in the table plus all other commodities.

Source: Army Corps of Engineers, *Waterborne Commerce of the United States*, Part 5, 1982, Section 1, Table 2, Total and SIC codes (Total, 1121, 1311, 2911-2991).

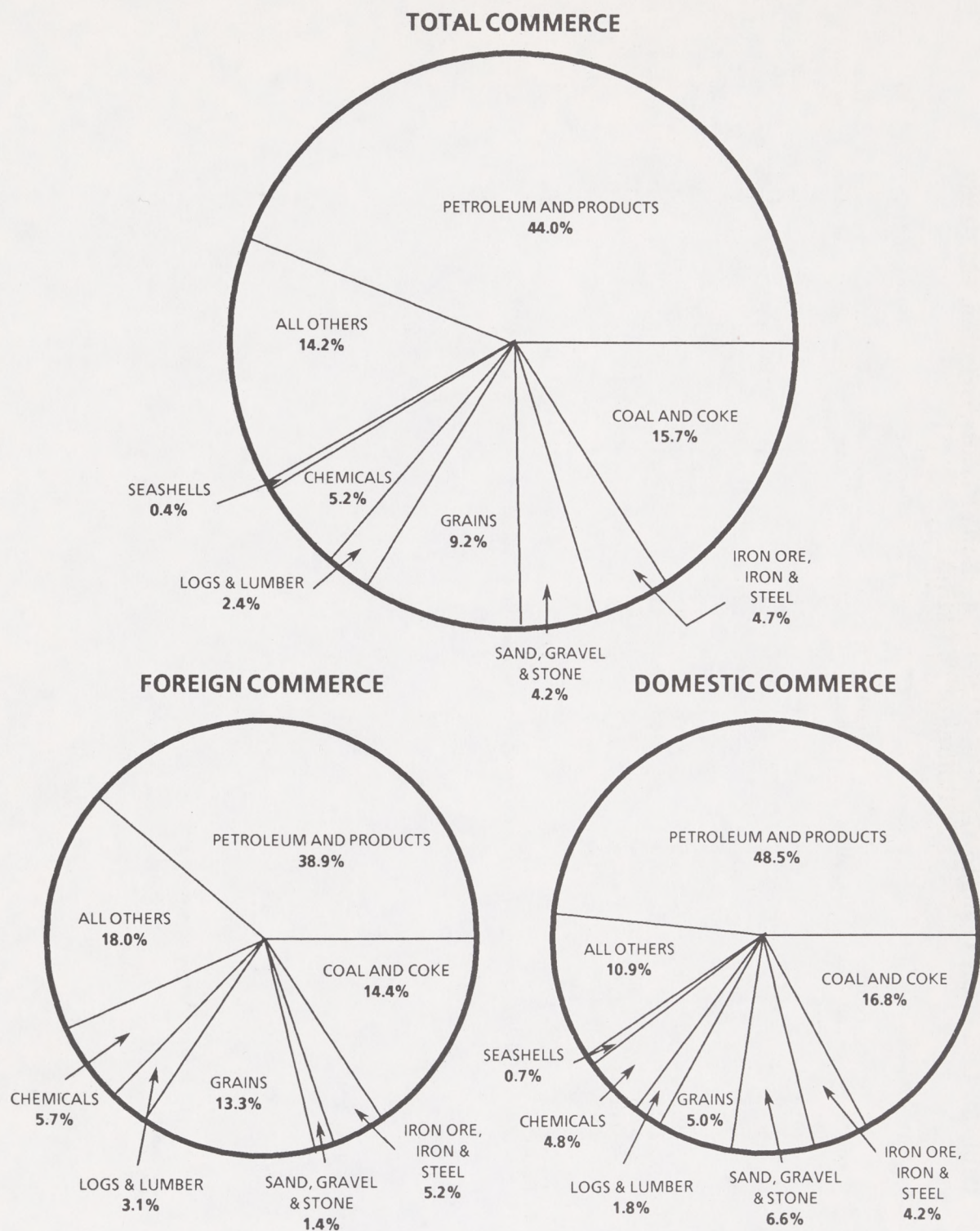


Figure 29. Principal Commodities Carried by Water, Calendar Year 1982

Source: See Appendix A, p. 181.

Table 58. Crude Oil Transported in the U.S. by Method of Transportation, 1972-1982
(Billions of Ton-Miles)

Year	Pipelines		Water Carriers		Trucks ¹		Railroads		Total Ton-Miles
	Ton-Miles	Percent of Total	Ton-Miles	Percent of Total	Ton-Miles	Percent of Total	Ton-Miles	Percent of Total	
1972	284.5	78.6	76.0	21.0	1.0	0.3	0.5	0.1	362.0
1973	302.0	83.1	58.8	16.1	1.3	0.4	1.1	0.4	363.2
1974	303.0	84.4	53.0	14.3	1.3	0.4	1.6	0.4	358.9
1975	288.0	86.9	40.6	12.2	1.4	0.4	1.5	0.5	331.5
1976	303.0	88.1	37.8	11.0	2.1	0.6	0.9	0.3	343.8
1977	326.6	83.2	63.1	16.1	2.0	0.5	0.8	0.2	392.5
1978	359.5	57.7	261.3	41.9	2.0	0.3	0.7	0.1	623.5
1979	372.2	58.1	265.5	41.4	2.3	0.4	0.6	0.1	640.6
1980	362.6	48.2	387.4	51.4	2.5	0.3	0.5	0.1	753.0
1981	333.1	45.0	404.9	54.6	2.2	0.3	0.5	0.1	740.7
1982	339.5	43.8	432.7	55.8	2.0	0.3	0.4	0.1	774.6

¹ Estimates

Source: Association of Oil Pipelines, *Shifts in Petroleum Transportation*, April 1984, Table 2.

Table 59. Refined Petroleum Products Transported in the U.S., 1972 - 1982
(Billions of Ton-Miles)

Year	Pipelines		Water Carriers		Trucks ¹		Railroads		Total Ton-Miles
	Ton-Miles	Percent of Total	Ton-Miles	Percent of Total	Ton-Miles	Percent of Total	Ton-Miles	Percent of Total	
1972	191.3	40.1	254.0	53.3	22.0	4.6	9.5	2.0	476.8
1973	205.0	42.7	238.0	49.5	23.7	4.9	13.7	2.9	480.4
1974	203.0	41.5	244.0	49.9	27.7	5.7	14.1	2.9	488.8
1975	219.0	42.5	257.4	50.0	26.2	5.1	12.6	2.4	515.2
1976	212.0	40.5	269.1	51.4	30.4	5.8	12.4	2.3	523.9
1977	219.4	41.3	270.2	50.9	27.6	5.2	13.7	2.6	530.9
1978	226.3	42.2	269.3	50.2	28.6	5.3	12.5	2.3	536.7
1979	236.1	44.2	257.4	48.2	27.8	5.2	12.9	2.4	534.2
1980	225.6	45.8	230.4	46.8	24.3	5.0	12.0	2.4	492.3
1981	230.6	48.3	212.3	44.4	22.7	4.8	12.1	2.5	477.7
1982	231.0 ^p	51.5	184.2	41.1	20.7	4.6	12.5	2.8	448.4

¹ Estimates
^p preliminary

Source: Association of Oil Pipelines, *Shifts in Petroleum Transportation*, April 1984, Table 3.

Table 60. Crude Petroleum and Petroleum Products Transported in the U.S.
by Method of Transportation, 1972 - 1982
(Billions of Ton-Miles)

Year	Pipelines		Water Carriers		Trucks ¹		Railroads		Total Ton-Miles
	Ton-Miles	Percent of Total	Ton-Miles	Percent of Total	Ton-Miles	Percent of Total	Ton-Miles	Percent of Total	
1972	475.8	56.73	330.0	39.34	23.0	2.74	10.0	1.19	838.8
1973	507.0	60.10	296.8	35.18	25.0	2.96	14.8	1.76	843.6
1974	506.0	59.69	297.0	35.04	29.0	3.42	15.7	1.85	847.7
1975	507.0	59.88	298.0	35.20	27.6	3.26	14.1	1.66	846.7
1976	515.0	59.35	306.9	35.37	32.5	3.75	13.3	1.53	867.7
1977	546.0	59.13	333.3	36.09	29.6	3.21	14.5	1.57	923.4
1978	585.8	50.49	530.6	45.73	30.6	2.64	13.2	1.14	1,160.2
1979	608.3	51.78	522.9	44.51	30.1	2.56	13.5	1.15	1,174.8
1980	588.2	47.24	617.8	49.61	26.8	2.15	12.5	1.00	1,245.3
1981	563.7 ^p	46.27	617.2	50.66	24.0 ^p	2.04	12.6	1.03	1,218.4
1982	570.5 ^p	46.65	616.9	50.44	22.7	1.86	12.9	1.05	1,223.0

¹ Estimates

^p preliminary

Source: Association of Oil Pipelines, *Shifts in Petroleum Transportation*, April 1984, Table 1.

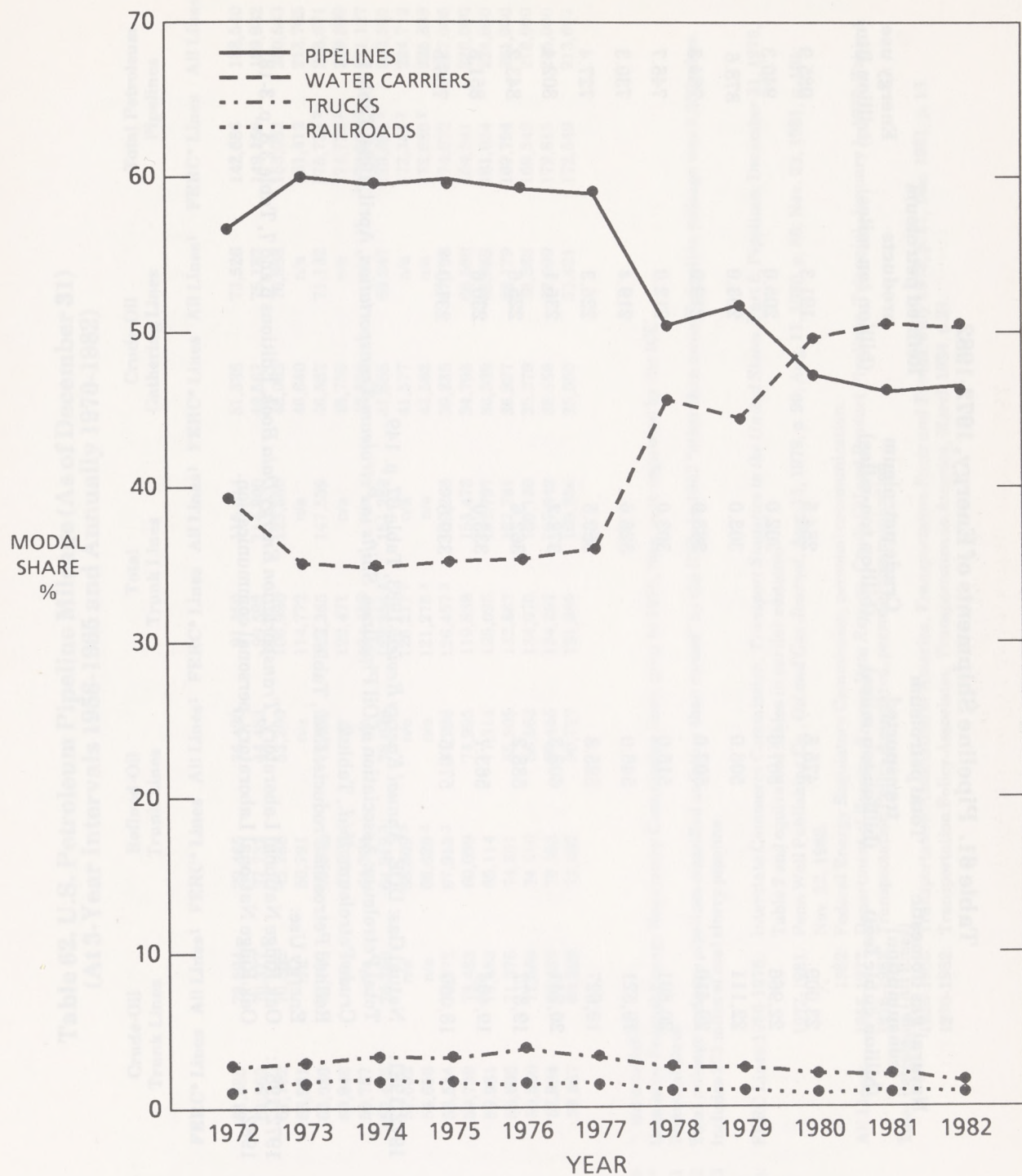


Figure 30. Crude Petroleum and Petroleum Products Transported in the U.S. by Modal Share, 1972-1982

Table 61. Pipeline Shipments of Energy, 1972-1982

	Natural gas domestic (consumption) (billion cubic feet)	Total petroleum transported (billion ton-miles)	Crude petroleum (billion ton-miles)	Refined petroleum products (billion ton-miles)	Energy use (trillion Btu)
1972	23,009	475.8	284.5	191.3	985.9
1973	22,966	507.0	302.0	205.0	940.3
1974	22,111	506.0	303.0	203.0	878.6
1975	20,410	507.0	288.0	219.0	784.3
1976	20,801	515.0	303.0	212.0	746.7
1977	19,521	546.0	326.6	219.4	730.3
1978	19,627	585.8	359.5	226.3	727.4
1979	20,241	608.3	372.2	236.1	802.4
1980	19,877	588.2	362.6	225.6	843.2
1981	19,404	563.7	333.0	230.6	851.8
1982	18,000	570.5	339.5	231.0	766.5

Source: 1972-1981: Natural Gas: DOE, *Annual Energy Review* 1983, Table 67, p. 149.
 Total Petroleum: Association of Oil Pipelines, *Shifts in Petroleum Transportation*, April, 1984, Table 1.
 Crude Petroleum: *Ibid.*, Table 2.
 Refined Petroleum Products: *Ibid.*, Table 3.
 Energy Use:
 1972-1981: Oak Ridge National Laboratory, *Transportation Energy Data Book*, Editions 6 and 7, Table 3.8, p. 3-18.
 1982: Oak Ridge National Laboratory, personal communication.

**Table 62. U.S. Petroleum Pipeline Mileage (As of December 31)
(At 3-Year Intervals 1956-1965 and Annually 1970-1982)**

Year	Crude-Oil Trunk Lines		Refined-Oil Trunk Lines		Total Trunk Lines		Crude-Oil Gathering Lines		Total Petroleum Pipelines	
	FERC* Lines	All Lines ¹	FERC* Lines	All Lines ¹	FERC* Lines	All Lines ¹	FERC* Lines	All Lines ¹	FERC* Lines	All Lines
1956	61,885	78,594	29,465	36,420	91,350	115,014	51,336	73,526	142,686	188,540
1959	61,860	70,317	37,732	44,483	99,592	114,800	49,567	75,182	149,159	189,982
1962	61,702	70,355	45,288	53,200	106,990	123,555	48,063	76,988	155,053	200,543
1965	63,981	n/a	50,791	n/a	114,772	n/a	46,640	n/a	161,412	213,765
1970	63,030	75,143	59,335	72,396	122,365	147,539	46,587	71,132	175,735 ²	218,671
1971	60,946	n/a	61,525	n/a	122,471	n/a	45,759	n/a	174,722 ²	219,899
1972	59,757	n/a	64,701	n/a	124,458	n/a	42,893	n/a	173,532 ²	221,127
1973	57,435	76,250	64,919 ³	78,038	122,354 ³	154,288	41,655	69,247	170,691 ²	223,535
1974	57,602	n/a	68,609 ³	n/a	126,211 ³	n/a	41,577	n/a	173,341 ²	224,712
1975	54,658	n/a	66,620 ³	n/a	121,278 ³	n/a	42,582	n/a	172,680 ²	225,889
1976	58,544	77,972	67,913 ³	81,296	126,457 ³	159,268	39,235	67,798	174,072	227,066
1977	59,739	78,483	60,099	74,995	119,838	153,478	34,703	66,580	154,541	226,000
1978	59,981	75,483	65,114	77,314	125,095	152,797	36,539	65,368	161,634	224,000
1979	58,606	71,876	74,261	85,905	132,867	157,781	36,927	58,179	169,794	221,000
1980	59,560	71,568	74,510	88,562	134,070	160,130	35,279	58,263	169,349	218,000
1981	57,904	68,486	76,353	89,456	134,257	157,942	38,558	57,099	172,815	215,000
1982	59,567	69,529	72,402	90,727	131,969	160,256	35,580	53,421	172,549	213,677

n/a = not available

* Data is for Federal Energy Regulatory Commission lines, prior to 1976, they were regulated by the ICC.

¹ Triennial Data.

² Total mileage includes pipelines classified as "other than owned" by the ICC. In 1967 "other than owned" pipeline mileage was 6,255 miles.

³ Includes 273 miles of coal slurry pipeline.

Source: FERC Lines:1956-1976: Interstate Commerce Commission, *Transport Statistics in the United States*, Part 6, Pipelines, December 31, 1976, Table 2 and equivalent tables in earlier editions.

1977-1981: Penn Well Publishing Co., *Oil and Gas Journal*, Aug. 13, 1979, p. 90; Aug. 11, 1980, p. 86; Nov. 23, 1981, p. 101; Nov. 22, 1982.

1982: Federal Energy Regulatory Commission, personal communication.

All Lines: 1956-1977: Department of Energy, *Energy Data Reports*, Crude Oil and Product Pipelines, Triennial, January 1, 1977, Table 1.

1978-1982: Transportation Policy Associated, personal communication.

Total Petroleum (All Lines)

1936-1965: Transportation Association of America, *Transportation Facts and Trends*, July 1978, p. 31, Dec. 1981, p. 13.

1970-1982: Transportation Policy Associates, *Transportation in America*, March 1984, p.21.

Table 63. U.S. Gas Utility Industry Miles of Pipeline and Main, by Type¹
(At 5-Year Intervals 1955-1965 and Annually 1966-1982)
(Thousands)

Year	Total	Field and Gathering	Transmission Pipeline ³	Distribution Main
1955	496.7	45.7	145.9	305.1
1960 ²	630.9	55.8	183.7	391.4
1965	767.5	61.7	211.3	494.5
1966	799.6	63.0	217.0	519.6
1967	828.3	63.7	225.4	539.2
1968	861.6	64.4	234.5	562.7
1969	891.6	64.9	248.1	578.6
1970	913.3	66.3	252.2	594.8
1971	931.4	66.2	254.8	610.4
1972	948.1	66.9	258.1	623.1
1973	962.9	65.9	263.1	633.8
1974	974.1	66.4	262.2	645.6
1975	979.3	68.5	262.6	648.2
1976	987.7	70.3	258.2	659.1
1977	998.9	71.5	260.5	666.9
1978	1,013.0	74.9	260.6	677.5
1979	1,029.8	77.8	263.5	688.5
1980 ^r	1,051.8	83.5	266.5	701.8
1981	1,069.8	86.2	269.5	714.1
1982	1,083.1	90.5	271.7	720.9

r = revised

¹ Excludes service pipe. Data not adjusted to common diameter equivalent.
Mileage shown as of the end of each year.

² These figures and those for subsequent years include Hawaii and Alaska.

³ Includes 3,300 miles of underground storage pipe in 1972, 3,400 miles in 1973, 4,900 miles in 1974, 5,000 miles in 1975, 5,300 miles in 1976, 5,200 miles in 1977, 6,000 in 1978, 5,700 in 1979, 6,200 in 1980 and 7,800 in 1981, and 5,600 in 1982, some of which was formerly included in Field and Gathering pipe.

Source: American Gas Association, 1982 *Gas Facts*, Table 5-1.

Table 64. World Tanker Fleet By Size, 1972-1982
(Million D.W.T.)

Size	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
10 - 25,000 dwt	23.5	22.6	21.9	19.7	17.5	16.1	14.8	14.2	14.1	13.8	13.5
25 - 45,000 dwt	28.1	29.5	30.5	28.8	27.3	26.6	24.6	24.2	24.6	26.0	27.2
45 - 65,000 dwt	22.5	22.4	22.6	21.9	19.9	18.2	16.1	15.3	16.1	16.6	16.1
65 - 125,000 dwt	40.2	41.6	46.4	51.2	54.4	54.2	50.8	51.2	52.5	55.4	51.8
125 - 205,000 dwt	13.1	14.8	18.0	23.6	28.7	32.3	33.3	33.4	33.0	31.2	30.2
205 - 285,000 dwt	58.6	78.2	105.5	125.9	138.8	142.2	142.6	142.2	139.1	131.2	118.3
285,000 dwt and over	3.5	6.5	10.9	20.3	34.1	42.9	46.3	47.4	45.4	46.0	46.6
Total	189.5	215.6	255.8	291.4	320.7	332.5	328.5	327.9	324.8	320.2	303.7

Source: British Petroleum Co., *BP Statistical Review of the World Energy*, 1982, p.24.

Table 65. World Tanker Fleet by Flag, 1972-1982
(Million D.W.T.)

Flag	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
U.S.A.	9.5	9.5	10.4	10.6	11.6	13.1	14.4	15.7	16.2	16.4	16.8
U.K.	25.1	27.8	32.2	32.7	30.8	28.9	28.4	24.8	24.8	21.3	17.6
Norway	19.7	21.2	23.9	26.1	29.6	28.7	26.7	24.4	24.0	24.4	21.2
Other Western Europe	42.0	48.2	57.5	64.3	71.2	74.0	74.4	76.8	74.9	76.8	70.7
"Convenience"*	57.6	66.8	82.3	98.4	109.8	117.6	113.0	114.2	112.5	106.0	100.3
Japan	21.8	26.1	29.2	31.8	32.4	29.4	29.3	30.0	30.0	29.7	28.5
Rest of World	13.8	16.0	20.3	27.5	35.3	40.8	42.3	42.0	42.4	45.6	48.6
TOTAL	189.5	215.6	255.8	291.4	320.7	332.5	328.5	327.9	324.8	320.2	303.7

* Panama, Liberia, etc.

Source: British Petroleum Company, *BP Statistical Review of World Energy*, 1982, p. 24.

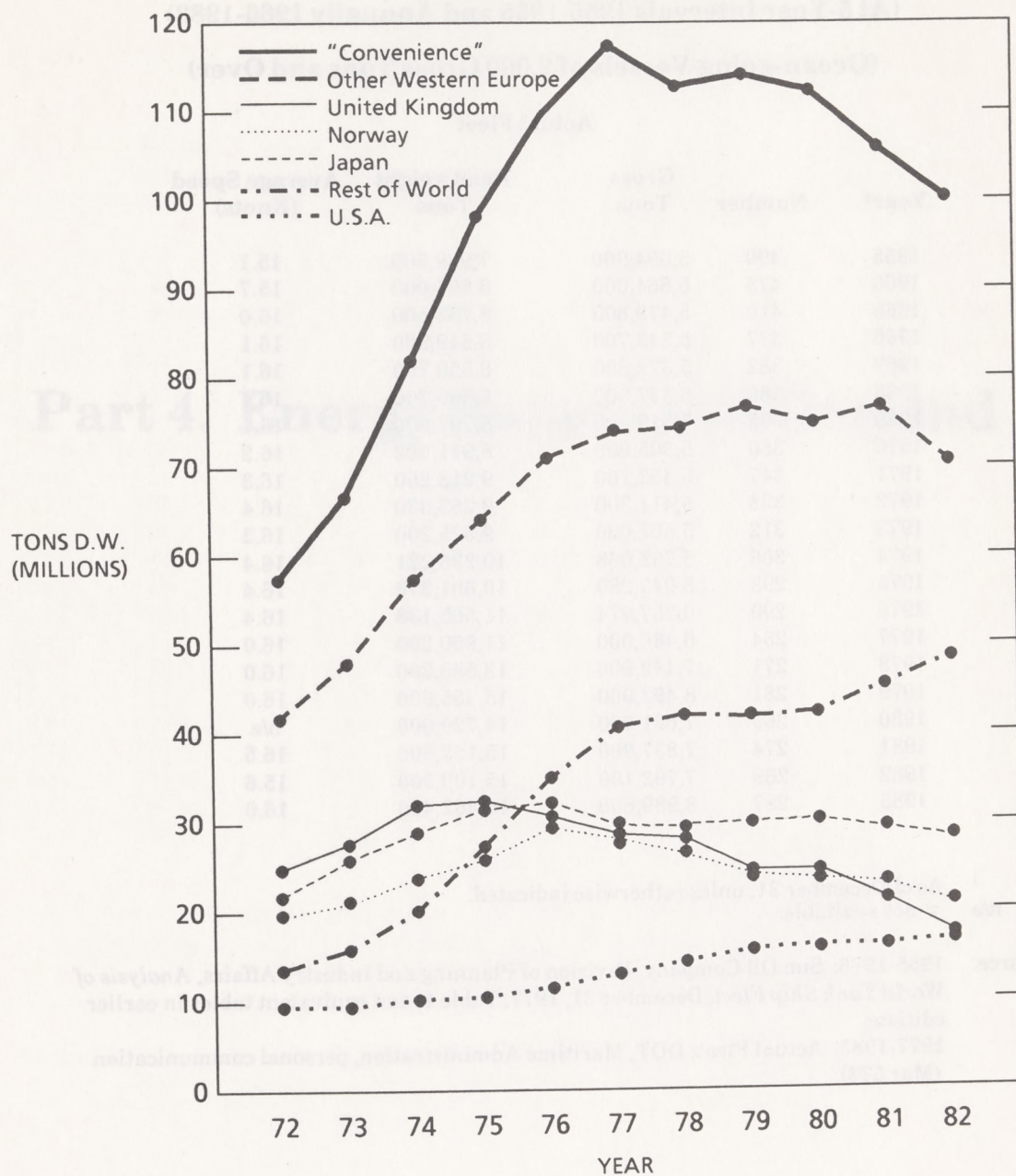


Figure 31. World Tanker Fleet by Flag, 1972 - 1982

Table 66. U.S. Tank Ship Fleet
(At 5-Year Intervals 1955-1965 and Annually 1966-1983)

(Ocean-going Vessels of 2,000 Gross Tons and Over)

Actual Fleet				
Year ¹	Number	Gross Tons	Deadweight Tons	Average Speed (Knots)
1955	490	5,094,900	7,989,500	15.1
1960	478	5,664,000	8,894,600	15.7
1965	410	5,479,800	8,733,500	16.0
1966	337	5,343,700	8,549,900	16.1
1967	382	5,322,800	8,550,700	16.1
1968	380	5,337,300	8,655,700	16.1
1969	365	5,319,400	8,797,900	16.1
1970	350	5,305,800	8,911,002	16.2
1971	347	5,453,100	9,218,250	16.3
1972	328	5,411,300	9,253,330	16.4
1973	312	5,507,000	9,525,200	16.3
1974	306	5,798,068	10,236,221	16.4
1975	293	5,943,289	10,601,370	16.4
1976	290	6,357,974	11,565,138	16.4
1977	254	6,486,000	11,950,200	16.0
1978	271	7,449,900	13,589,200	16.0
1979	281	8,493,900	15,455,600	16.0
1980	269	7,621,000	14,720,000	n/a
1981	274	7,837,000	15,153,800	16.5
1982	269	7,792,100	15,100,300	15.6
1983	287	8,989,600	16,462,400	16.0

¹ As of December 31, unless otherwise indicated.
n/a = not available.

Source: 1955-1976: Sun Oil Company, Division of Planning and Industry Affairs, *Analysis of World Tank Ship Fleet*, December 31, 1977, Table 1, and equivalent tables in earlier editions.

1977-1983: Actual Fleet; DOT, Maritime Administration, personal communication (Mar 573).

Part 4. Energy Supply and Demand

**Table 67. Domestic Demand for Refined Petroleum
Products Supplied to End-Use Sectors
(Million Barrels per Day)
(at 5-Year Intervals 1955-1965 and Annually 1966-1983)**

Year	Residential and Commercial	Industrial	Transportation	Transportation as % of Total	Electric Utilities ¹	Total
1955	1.40	2.39	4.46	52.7	0.21	8.46
1960	1.71	2.71	5.14	52.4	0.24	9.80
1965	1.91	3.25	6.03	52.4	0.32	11.51
1966	1.94	3.41	6.35	52.5	0.39	12.08
1967	2.02	3.45	6.65	52.9	0.44	12.56
1968	2.10	3.59	7.18	53.6	0.52	13.39
1969	2.16	3.78	7.51	53.1	0.69	14.14
1970	2.18	3.82	7.77	52.9	0.93	14.70
1971	2.18	3.86	8.08	53.1	1.09	15.21
1972	2.25	4.20	8.55	52.3	1.36	16.37
1973	2.23	4.49	9.05	52.3	1.54	17.31
1974	2.04	4.30	8.84	53.1	1.48	16.65
1975	1.95	4.04	8.95	54.8	1.39	16.32
1976	2.12	4.45	9.37	53.7	1.52	17.46
1977	2.14	4.83	9.75	52.9	1.71	18.43
1978	2.07	4.88	10.14	53.8	1.75	18.84
1979	1.73	5.35	10.00	54.0	1.44	18.51
1980	1.52	4.84	9.55	56.0	1.15	17.06
1981	1.33	4.28	9.48	59.1	0.96	16.05
1982	1.27	4.06	9.30	61.0	0.69	15.30
1983 ²	1.19	4.01	9.31	61.3	0.68	15.18

Note: Sum of components may not equal total due to independent rounding.

¹ These data are deliveries to electric utilities and do not equate to consumption by electric utilities.

² Estimated.

Source: U.S. Department of Energy, EIA, *1980 Annual Report to Congress*, Volume Two, Table 29.
1981-1982: U.S. Department of Energy, *1983 Annual Energy Review*, Table 46.

**Table 68. Domestic Demand for Refined Petroleum
Products Supplied to End-Use Sectors
(Trillion Btu's per Day)¹
(at 5-Year Intervals 1955-1965 and Annually 1966-1983)**

Year	Residential and Commercial	Industrial	Transportation	Transportation as % of Total	Electric Utilities ²	Total
1955	7.85	14.02	24.12	51.0	1.31	47.30
1960	9.53	15.72	27.69	50.9	1.50	54.44
1965	10.57	18.61	32.49	51.0	2.01	63.68
1966	10.71	19.50	34.23	51.2	2.44	66.88
1967	11.06	19.59	35.87	51.8	2.76	69.28
1968	11.45	20.24	38.76	52.6	3.26	73.71
1969	11.66	21.15	40.53	52.2	4.32	77.66
1970	11.78	21.38	41.60	51.6	5.81	80.57
1971	11.75	21.59	43.57	52.0	6.81	83.72
1972	12.08	23.35	46.08	51.2	8.48	89.99
1973	12.01	24.99	48.84	51.2	9.62	95.46
1974	10.97	23.81	47.68	52.0	9.23	91.69
1975	10.45	22.33	48.26	53.8	8.69	89.73
1976	11.41	24.64	50.56	52.6	9.50	96.11
1977	11.53	26.82	52.67	51.8	10.69	101.71
1978	11.42	27.06	54.83	52.6	10.94	104.25
1979	9.46	28.98	54.30	53.4	9.01	101.75
1980	8.31	26.02	51.95	55.6	7.19	93.47
1981	7.19	22.73	51.51	58.9	6.01	87.44
1982	6.69	21.36	50.43	60.9	4.32	82.80
1983 ³	6.38	21.17	50.39	61.3	4.25	82.19

Note: Sum of components may not equal total due to independent rounding.

¹ Data derived by multiplying figures on source page by conversion factors in each end-user sector column on page 244 in D.O.E.'s *1983 Annual Energy Review*.

² These data are deliveries to electric utilities and do not equate to consumption by electric utilities.

³ Estimated.

Source: U.S. Department of Energy, EIA, *1983 Annual Energy Review*, Table 46, p. 101.

Table 69. Petroleum Supply and Disposition
(At 5-Year Intervals 1955-1965 and Annually 1966-1983)
(Million Barrels per Day)

Supply											Disposition		
Production				Imports			Other						
Year	Crude Oil ⁴	Natural Gas Plant Liquids	Total Production	Crude Oil ¹	Refined Products	Total Imports	Change in Stocks ³	Other Supply ²	Total Supply	Refined Petroleum Products Supplied	Exports	Crude Oil Losses	Total Disposition
1955	6.81	0.77	7.58	0.78	0.47	1.25	*	0.04	8.86	8.46	0.37	0.04	8.86
1960	7.04	0.93	7.96	1.02	0.80	1.81	0.08	0.15	10.01	9.80	0.20	0.01	10.01
1965	7.80	1.21	9.01	1.24	1.23	2.47	0.01	0.22	11.71	11.51	0.19	0.01	11.71
1966	8.30	1.28	9.58	1.22	1.35	2.57	-0.10	0.25	12.29	12.08	0.20	0.01	12.29
1967	8.81	1.41	10.22	1.13	1.41	2.54	-0.17	0.29	12.88	12.56	0.31	0.01	12.88
1968	9.10	1.50	10.60	1.29	1.55	2.84	-0.15	0.35	13.64	13.39	0.23	0.01	13.64
1969	9.24	1.59	10.83	1.41	1.76	3.17	0.05	0.34	14.38	14.14	0.23	0.01	14.38
1970	9.64	1.66	11.30	1.32	2.10	3.42	-0.10	0.35	14.97	14.70	0.26	0.01	14.97
1971	9.46	1.69	11.16	1.68	2.25	3.93	-0.07	0.44	15.45	15.21	0.22	0.01	15.45
1972	9.44	1.74	11.18	2.22	2.53	4.74	0.23	0.44	16.60	16.37	0.22	0.01	16.60
1973	9.21	1.74	10.95	3.24	3.01	6.26	-0.14	0.49	17.55	17.31	0.23	0.01	17.55
1974	8.77	1.69	10.46	3.48	2.64	6.11	-0.18	0.49	16.89	16.65	0.22	0.01	16.89
1975	8.37	1.63	10.01	4.10	1.95	6.06	-0.03	0.51	16.54	16.32	0.21	0.01	16.54
1976	8.13	1.60	9.74	5.29	2.03	7.31	0.06	0.59	17.70	17.46	0.22	0.01	17.70
1977	8.24	1.62	9.86	6.61	2.19	8.81	-0.55	0.57	18.69	18.43	0.24	0.02	18.69
1978	8.71	1.57	10.27	6.36	2.01	8.36	0.09	0.49	19.22	18.85	0.36	0.02	19.22
1979	8.55	1.58	10.14	6.52	1.94	8.46	-0.15	0.56	19.00	18.51	0.47	0.02	19.00
1980	8.60	1.57	10.17	5.26	1.65	6.91	-0.14	0.68	17.61	17.06	0.54	0.01	17.61
1981	8.57	1.61	10.18	4.40	1.60	6.00	-0.16	0.64	16.66	16.06	0.59	*	16.66
1982	8.65	1.55	10.20	3.49	1.63	5.11	0.15	0.65	16.11	15.30	0.82	*	16.11
1983P	8.66	1.56	10.22	3.30	1.69	4.99	-0.02	0.74	15.92	15.18	0.74	*	15.92

* Less than 5,000 Barrels per Day

P = preliminary

Note: Sum of components may not equal total due to independent rounding.

1 Includes imports for the Strategic Petroleum Reserve which began in 1977.

2 Includes benzol, other hydrocarbons, and hydrogen.

3 Negative numbers denote a net addition to stocks or a reduction in supply. Positive numbers denote a net withdrawal from stocks or an addition to supply.

4 Includes Lease Condensate.

Source: U.S. Department of Energy, 1983 Annual Energy Review, Table 35.

Table 70. Domestic Supply and Disposition for Motor Gasoline, 1965-1983
(Daily Averages in Thousands of Barrels).

Year	Supply			Stocks as of Dec. 31 (barrels x 10 ³)	Change in Stocks	Disposition		
	Total Production	Imports	Total Supply			Total Product Supplied	Exports	Total Disposition
1965	4,537	27	4,564	174,717	-30	4,593	1	4,594
1966	4,798	43	4,841	186,393	31	4,808	2	4,810
1967	4,956	42	4,998	200,055	37	4,958	3	4,961
1968	5,215	59	5,274	204,496	13	5,260	1	5,261
1969	5,484	62	5,546	211,199	18	5,526	2	5,528
1970	5,714	67	5,781	209,255	-5	5,785	1	5,786
1971	5,984	59	6,043	219,352	28	6,014	1	6,015
1972	6,292	68	6,360	212,894	-18	6,377	1	6,378
1973	6,535	134	6,669	209,478	-9	6,674 ^r	4	6,678
1974	6,360	204	6,564	218,410 ¹	24	6,537 ^r	2	6,539
1975	6,520	184	6,704	234,978	28	6,675	2	6,677
1976	6,841	131	6,972	231,432	10	6,978	3	6,981
1977	7,033	217	7,250	257,623	72	7,177	2	7,179
1978	7,169	190	7,359	237,979	-54	7,412	1	7,413
1979	6,852	181	7,033	237,200	-2	7,034	*	7,034
1980	6,506	140	6,646	261,398	66	6,579	1	6,580
1981	6,405	151	6,556	203,062	28	6,588	2	6,590
1982	6,347	186	6,533	194,436	24	6,537	20	6,557
1983	6,332	249	6,581	185,495	47	6,617	10	6,607

* = Less than 500 barrels per day.

¹ U.S. Bureau of Mines altered its stock reporting base as of January 1975. On the new basis, year-end, 1974 stocks were 224,719 thousand barrels. This figure was used to compute the 1975 stock change.

Source: 1965-1972: American Petroleum Institute, *Basic Petroleum Data Book* Section VII, Table 5.
1973-1982: U.S. Department of Energy, *Monthly Energy Review*, March 1983, p. 46.

Stocks Only:

1973-1982: *Ibid.*, *Petroleum Statement, Monthly*, December 1977, 1978, 1979, 1980, 1981, 1982, Table 2, 2a, 3a, 3.5. (converted to daily averages, using column 6).

1983: *Ibid.*, Tables 2 and 5.

Table 71. Domestic Demand for Gasoline
(at 5 year Intervals 1955-1970 and Annually 1971-1982)
(Thousands of Gallons)

Year	Total Demand	Highway	NonHighway				
			Agriculture	Aviation	Marine	Other ¹	Total
1955	52,566,255	47,731,734	2,156,434	999,440	25,885	1,652,762	4,834,521
1960	63,221,243	57,879,908	2,291,666	1,323,769	60,633	1,656,267	5,332,335
1965	75,312,613	71,104,430	1,963,432	501,339	96,336	1,647,076	4,208,183
1970	96,331,909	92,329,056	1,931,966	393,012	598,159	1,079,713	4,002,850
1971	101,471,956	97,558,586	1,864,708	359,549	645,428	1,043,865	3,913,370
1972	108,886,206	105,062,178	1,698,185	355,178	686,763	1,083,902	3,824,028
1973	114,368,632	110,472,881	1,749,776	395,018	716,990	1,033,967	3,895,751
1974	109,923,280	106,300,765	1,605,809	394,806	696,906	924,994	3,622,515
1975	112,626,656	108,984,347	1,564,882	409,713	729,718	937,996	3,642,309
1976	119,478,018	115,700,146	1,472,272	529,238	763,803	1,012,559	3,777,872
1977	123,350,479	119,625,280	1,360,220	552,615	774,066	1,038,298	3,725,199
1978	115,816,431	112,239,066	1,228,772	457,372	811,850	1,079,371	3,577,365
1979	111,771,026	108,125,994	1,152,097	502,977	780,171	1,209,787	3,645,032
1980	104,837,657	101,183,014	1,059,044	412,883	1,052,185	1,130,531	3,654,643
1981	103,111,410	99,596,671	962,149	376,708	1,092,982	1,082,900	3,514,739
1982	101,738,767	98,478,881	912,062	372,637	1,061,931	913,256	3,259,886

¹ Other includes state, county, and municipal use, industrial, commercial, construction, miscellaneous and unclassified users.

Source: 1955-1975: Department of Transportation, *Highway Statistics*, Annual Issues, Tables MF21 and MF24.

1976: *Ibid.*, personal communication.

1977-1982: *Ibid.*, Annual Issues, Tables MF21A and MF24.

Table 72. Domestic Supply and Demand for Naphtha Type Jet Fuel, 1965-1983
(Daily Averages in Thousands of Barrels)

Year	Supply			Stocks as of Dec. 31 (barrels x 10 ³)	Demand			
	Production	Imports	New Supply		Change in Stocks	Total Demand	Exports	Domestic Demand
1965	226	44	270	8,338	-	270	2	268
1966	245	35	280	7,235	-3	283	4	279
1967	300	15	315	9,037	5	310	5	305
1968	332	19	351	8,904	-	351	5	346
1969	287	14	301	8,556	-1	302	5	297
1970	230	20	250	6,621	5	255	6	249
1971	234	30	264	6,990	1	263	3	260
1972	209	33	242	6,147	-2	244	2	242
1973	181	36	217	5,599	-2	219	2	217
1974	195	27	222	5,529	-	222	-	222
1975	180	28	208	5,222	-1	209	-	209
1976	187	15	202	6,495	3	199	-	199
1977	186	21	207	6,285	-1	208	-	208
1978	182	19	201	5,960	-1	202	-	202
1979	176	22	198	5,599	-2	200	-	200
1980	188	31	219	6,308	2	217	-	217
1981	193	7	200	6,925	-1	199	1	198
1982	200	5	205	5,673	4	208	1	207
1983	203	0	203	6,213	3	205	1	204

- Less than 1,000 barrels.

Source: 1965-1975: American Petroleum Institute, *Basic Petroleum Data Book* Section VII, Table 14.

1976-1980: U.S. Department of Energy, *Petroleum Statement, Monthly*,
December 1980, 1979, 1978, 1977, Table 2, (converted to daily averages, using
column 6).

1981-1982: *Ibid.*, December 1981, Table 2a, 3a, February 1983, Table 3, 5.

1983: *Ibid.*, December 1983, Tables 2 and 5.

Table 73. Domestic Supply and Demand for Kerosene Type Jet Fuel, 1965-1983
(Daily Averages in Thousands of Barrels)

Year	Supply			Stocks as of Dec. 31 (barrels x 10 ³)	Demand			
	Production	Imports	New Supply		Change in Stocks	Total Demand	Exports	Domestic Demand
1965	298	37	335	10,361	-	335	1	334
1966	345	52	397	13,139	5	392	1	391
1967	448	74	522	13,174	3	519	1	518
1968	529	86	615	15,373	6	609	-	609
1969	594	111	705	19,517	11	694	-	694
1970	597	125	722	20,989	4	718	-	718
1971	601	150	751	20,747	1	752	1	751
1972	638	162	800	19,346	3	803	-	803
1973	679	176	855	22,945	10	845	3	842
1974	641	135	776	23,906	3	773	2	771
1975	691	105	796	25,158	3	793	2	791
1976	731	61	792	25,590	1	791	2	789
1977	787	53	840	28,263	7	833	2	831
1978	791	67	858	27,707	2	859	1	858
1979	835	56	891	32,921	14	877	1	876
1980	811	50	861	35,723	8	853	1	852
1981	775	31	806	34,011	-5	811	1	809
1982	777	22	799	31,176	8	801	5	796
1983	817	26	843	32,368	-1	837	5	832

Source: 1965-1975: Less than 1,000 barrels.
 American Petroleum Institute, *Basic Petroleum Data Book* Section VII, Table 15.
 1976-1980: U.S. Department of Energy, *Petroleum Statement, Monthly*, December 1980, 1979,
 1978, 1977, Table 2, (converted to daily averages, using column 6).
 1981-1982: *Ibid.*, December 1981, Table 2a, 3a.; February 1983, Table 3, 5.
 1983: *Ibid.*, December 1983, Tables 2 and 5.

**Table 74. Domestic Demand for Naphtha and Kerosene-Type Jet Fuel
(Thousand Barrels)
(1965-1983)**

Year	Naphtha Type Total	Barrels Per Day	Kerosene Type Total	Barrels Per Day	Naphtha and Kerosine	Barrels Per Day	Annual Percentage Change
1965	97,813	268	121,819	334	219,632	602	-0.2
1966	101,635	278	142,751	391	244,386	670	11.3
1967	111,546	306	189,224	518	300,770	824	23.0
1968	126,601	346	222,777	609	349,378	955	16.2
1969	108,518	297	253,213	694	361,731	991	3.5
1970	90,927	249	262,051	718	352,978	967	-2.4
1971	94,732	260	273,991	751	368,723	1,010	4.5
1972	88,495	242	293,995	803	382,490	1,045	3.7
1973	79,220	217	307,407	842	386,627	1,059	1.1
1974	81,171	222	281,429	771	362,600	993	-6.2
1975	76,543	210	288,747	791	365,290	1,001	0.7
1976	72,713	199	288,645	789	361,358	987	-1.1
1977	75,888	208	303,369	831	379,257	1,039	5.0
1978	72,546	202	313,108	858	385,654	1,060	1.7
1979	72,925	200	319,774	876	392,699	1,076	1.8
1980	79,283	217	311,813	852	391,096	1,069	-0.4
1981	72,495	199	295,626	809	368,121	1,008	-5.9
1982	75,754	208	292,529	801	368,283	1,009	0.4
1983	74,761	204	303,453	832	378,214	1,036	2.7

Source: 1965-1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, Petroleum Statement, Annual, Table 1.

1976-1982: U.S. Department of Energy, *Petroleum Statement, Monthly*, December 1981, 1980, 1979, 1978, 1977, Table 2; February 1983, Table 3.5.

1983: *Ibid.*, December 1983, Tables 2 and 5.

Table 75. Dry Natural Gas Supply and Disposition*
(At 5-Year Intervals 1955-1965 and Annually 1966-1983)
(Trillion Cubic Feet)

Year	Supply					Disposition				
	Dry Natural Gas Production	Imports	Withdrawal From Storage ¹	Supplemental Gaseous Fuels	Total Supply	Consumption	Exports	Additions To Storage ¹	Unaccounted For ²	Total Disposition
1955	9.03	0.01	0.44	n/a	9.48	8.69	0.03	0.51	0.25	9.48
1960	12.23	0.16	0.71	n/a	13.10	11.97	0.01	0.84	0.27	13.10
1965 ³	15.29	0.46	0.96	n/a	16.70	15.28	0.03	1.08	0.32	16.70
1966	16.47	0.48	1.14	n/a	18.09	16.45	0.02	1.21	0.40	18.09
1967	17.39	0.56	1.13	n/a	19.08	17.39	0.08	1.32	0.30	19.08
1968	18.49	0.65	1.33	n/a	20.48	18.63	0.09	1.43	0.33	20.48
1969	19.83	0.73	1.38	n/a	21.94	20.06	0.05	1.50	0.33	21.94
1970	21.01	0.82	1.46	n/a	23.29	21.14	0.07	1.86	0.23	23.29
1971	21.61	0.93	1.51	n/a	24.05	21.79	0.08	1.84	0.34	24.05
1972	21.62	1.02	1.76	n/a	24.40	22.10	0.08	1.89	0.33	24.40
1973	21.73	1.03	1.53	n/a	24.30	22.05	0.08	1.97	0.20	24.30
1974	20.71	0.96	1.70	n/a	23.37	21.22	0.08	1.78	0.29	23.37
1975	19.24	0.95	1.76	n/a	21.95	19.54	0.07	2.10	0.24	21.95
1976	19.10	0.96	1.92	n/a	21.98	19.95	0.06	1.76	0.22	21.98
1977	19.16	1.01	1.75	n/a	21.92	19.52	0.06	2.31	0.04	21.92
1978	19.12	0.97	2.16	n/a	22.25	19.63	0.05	2.28	0.29	22.25
1979	19.66	1.25	2.05	n/a	22.96	20.24	0.06	2.30	0.37	22.96
1980	19.40	0.98	1.97	0.15	22.51	19.88	0.05	1.95	0.64	22.51
1981	19.18	0.90	1.93	0.18	22.19	19.40	0.06	2.23	0.50	22.19
1982	17.76	0.93	2.16	0.14	21.00	18.00	0.05	2.47	0.47	21.00
1983 ^p	15.90	0.94	2.14	0.14	19.12	16.95	0.06	1.68	0.42	19.72

^p = preliminary

* Includes Supplemental gaseous fuels.

¹ Beginning with 1980, includes liquefied natural gas (LNG) Storage in a above ground tanks

² Unaccounted for gas is the imbalance between available supplies for consumption and actual consumption.

³ Beginning with 1965 data, all volumes are shown on pressure base of 14.73 psia at 60° F.

Note: Sum of components may not equal total due to independent rounding.

Source: U.S. Department of Energy, 1983 *Annual Energy Review*, Table 66.

Table 76. Natural Gas Production, 1955-1983
(Trillion Cubic Feet)

Year	Gross Withdrawals			Reservoir Repressuring	Non Hydrocarbon Gases Removed	Vented and Flared	Marketed Production	Extraction Loss ¹	Dry Natural Gas Production
	From Gas Wells	From Oil Wells	Total						
1955	7.84	3.88	11.72	1.54	n/a	0.77	9.41	0.38	9.03
1960	10.85	4.23	15.09	1.75	n/a	0.56	12.77	0.54	12.23
1965	13.52	4.44	17.96	1.60	n/a	0.32	16.04	0.75	15.29
1966	13.89	5.14	19.03	1.45	n/a	0.38	17.21	0.74	16.47
1967	15.35	4.91	20.25	1.59	n/a	0.49	18.17	0.78	17.39
1968	16.54	4.79	21.32	1.49	n/a	0.52	19.32	0.83	18.49
1969	17.49	5.19	22.68	1.46	n/a	0.53	20.70	0.87	19.83
1970	18.59	5.19	23.79	1.38	n/a	0.49	21.92	0.91	21.01
1971	18.93	5.16	24.09	1.31	n/a	0.28	22.49	0.88	21.61
1972	19.04	4.97	24.02	1.24	n/a	0.25	22.53	0.91	21.62
1973	19.37	4.70	24.07	1.17	n/a	0.25	22.65	0.92	21.73
1974	18.67	4.18	22.85	1.08	n/a	0.17	21.60	0.89	20.71
1975	17.38	3.72	21.10	0.86	n/a	0.13	20.11	0.87	19.24
1976	17.19	3.75	20.94	0.86	n/a	0.13	19.95	0.85	19.10
1977	17.42	3.68	21.10	0.93	n/a	0.14	20.03	0.86	19.16
1978	17.39	3.91	21.31	1.18	n/a	0.15	19.97	0.85	19.12
1979	18.03	3.85	21.88	1.25	n/a	0.17	20.47	0.81	19.66
1980	17.57	4.30	21.87	1.37	0.20	0.13	20.18	0.78	19.40
1981	17.34	4.25	21.59	1.31	0.22	0.10	19.96	0.77	19.18
1982	15.80	4.41	20.21	1.39	0.21	0.09	18.52	0.76	17.76
1983 ²	13.88	4.44	18.32	1.44	0.22	0.08	16.58	0.68	15.90

¹ Volume reduction resulting from the removal of natural gas plant liquids. Natural plant gas liquids are transferred to petroleum supply.

² Preliminary

Note: Sum of components may not equal due to rounding.

Note: Beginning with 1965 data, all volumes are on a pressure base of 14.73 p.s.i.a at 60 F. For prior years, the pressure base is 14.65 p.s.i.a. at 60 F.

Source: U.S. DOE, 1983 Annual Energy Review, Table 65, p. 145.

Table 77. Coal Supply and Disposition, 1955-1983
(Million Short Tons)

Year	Supply				Disposition			
	Production	Imports	Change In Stocks, Losses and Unaccounted For ¹	Total	Exports	Anthracite Shipped Overseas to U.S. Armed Forces	Consumption	Total
1955	490.8	0.3	10.3	501.4	54.4	0.0	447.0	501.4
1960	434.3	0.3	1.5	436.1	38.0	0.0	398.1	436.1
1965	527.0	0.2	-3.0	524.1	51.0	1.13	472.0	524.1
1966	546.8	0.2	1.6	548.6	50.1	0.77	497.7	548.6
1967	564.9	0.2	-22.7	542.4	50.1	0.83	491.4	542.4
1968	556.7	0.2	4.9	561.8	51.2	0.82	509.8	561.8
1969	571.0	0.1	3.2	574.3	56.9	1.04	516.4	574.3
1970	612.7	a	-17.0	595.6	71.7	0.69	523.2	595.6
1971	560.9	0.1	-1.4	559.6	57.3	0.72	501.6	559.6
1972	602.5	a	-21.1	581.5	56.7	0.45	524.3	581.5
1973	598.6	0.1	17.9	616.6	53.6	0.44	562.6	616.6
1974	610.0	2.1	7.4	619.5	60.7	0.43	558.4	619.5
1975	654.6	0.9	-26.2	629.4	66.3	0.46	562.6	629.4
1976	684.9	1.2	-21.7	664.4	60.0	0.57	603.8	664.4
1977	697.2	1.6	-18.8	680.0	54.3	0.40	625.3	680.0
1978	670.2	3.0	-6.9	666.2	40.7	0.28	625.2	666.2
1979	781.1	2.1	-36.3	746.9	66.0	0.37	680.5	746.9
1980	829.7	1.2	-36.1	794.8	91.7	0.34	702.7	794.8
1981	823.8	1.0	20.7	845.5	112.5	0.37	732.6	845.5
1982	838.1	0.7	-25.3	813.5	106.3	0.34	706.9	813.5
1983 ^p	784.9	1.3	27.4	813.6	77.8	0.36	735.4	813.6

^p = preliminary

^a Less than 5,000 short tons.

Note: Sum of components may not equal total due to independent rounding.

Source: DOE, *Annual Energy Review* 1983, Table 73, p. 165.

Table 78. Deliveries of Residual Fuel Oil by Use
(Thousands of Barrels)
(at 5-Year Intervals 1955-1970 and Annually 1971-1982)

Year	Vessel Bunkering	Gas and Electrical Public-Utility Plants*	Railroads	Oil Company Use	Industrial Use (Except Oil Co's.)	Heating Oils	Military Use	Misc. Uses	Total
1955	115,128	75,966	15,018	53,387	173,030	86,282	28,368	9,804	556,983
1960 ¹	94,084	85,408	5,610	45,061	157,270	125,088	31,724	6,291	550,536
1965	73,639	114,884	4,001	34,354	140,602	156,254	40,380	10,004	574,118
1970	89,850	312,420	2,222	38,318	139,647	185,831	28,704	7,295	804,287
1971	78,727	371,820	1,262	32,626	136,221	182,062	29,217	6,109	838,044
1972	77,932	435,348	1,137	44,291	142,320	191,111	24,622	8,886	925,647
1973	92,415	509,457	1,214	50,652	152,267	192,252	22,892	9,028	1,030,177
1974	91,052	475,204	1,176	50,236	143,726	172,896	20,423	8,503	963,216
1975	96,673	454,935	583	50,487	116,657	154,103	19,068	6,066	898,572
1976	117,458	492,974	423	58,212	153,596	178,139	18,561	5,785	1,025,148
1977	128,966	569,429	329	60,582	171,967	168,279	16,646	4,729	1,120,927
1978	157,495	533,193	206	57,690	169,403	164,536	16,583	4,127	1,103,233
1979	190,543	486,636	245	51,062	198,759	82,729 ²	7,736	16,900	1,034,610
1980	213,131	390,105	665	59,519	163,564	98,034 ²	8,066	4,382	937,466
1981	188,632	325,486	178	51,870	117,024	67,035 ²	7,008	4,795	762,030
1982 ^p	160,312	227,419	170	45,319	122,619	65,781 ²	7,829	4,784	634,233

p preliminary

¹ Includes Alaska and Hawaii.

* Beginning with 1967, represents use by electric public-utility plants only.

² Beginning in 1979, Heating Oil has been reclassified commercial and is a part of the total called "heating and industrial."

Source: 1955-1982: American Petroleum Institute, *Basic Petroleum Data Book*, Volume III, Number 3, September 1983, Section VII, Table 13, 13a.

Table 79. Deliveries of Distillate Fuel Oil by Use
(Thousands of Barrels)
(at 5-Year Intervals 1955-1970 and Annually 1971-1982)

Year	Heating Oils	Industrial Use	Oil Company Fuel	Electric Utility	Railroads	Vessel Bunkering	Military Use	Diesel Type		Total	All Other	Total
								On Highway	Off Highway			
1955	356,589	43,606	8,597	5,884	84,668	16,675	10,945	23,446	20,769	44,215	9,948	581,127
1960 ¹	438,010	34,271	8,347	4,742	86,490	18,730	10,793	36,467	38,095	74,562	7,380	633,325
1965	475,992	42,484	10,430	3,661	86,436	15,532	14,953	73,776	50,346	124,122	13,281	786,891
1970	521,135	43,668	11,518	24,770 ²	88,416	19,503	12,447	148,796	46,123	194,919	10,874	927,250
1971	522,475	50,731	14,088	35,329	86,251	20,959	17,427	166,981	46,925	213,906	10,154	971,320
1972	543,337	60,388	13,405	68,334	97,001	22,125	20,187	189,055	50,186	239,241	10,852	1,074,807
1973	536,856	67,306	14,902	77,950	102,828	26,786	19,598	221,420	55,541	276,961	11,876	1,135,063
1974	493,223	64,036	13,805	84,661	102,949	24,757	17,748	221,033	48,743	269,776	10,131	1,081,086
1975	488,388	63,993	13,633	63,420	93,191	26,138	18,004	217,906	48,977	266,883	10,096	1,043,746
1976	540,895	79,956	14,523	60,570	97,467	28,330	17,574	242,820	54,429	297,249	11,365	1,150,929
1977	538,845 ^r	96,502	19,954	76,681	99,306	33,512	20,121	264,412	66,452	330,864	14,394	1,230,179
1978	533,069	94,797	19,410	77,175	99,841	37,591	20,320	290,943	69,856	360,799	14,059	1,257,061
1979	454,955 ³	99,583	22,043	46,579	103,493	41,725	18,570	327,402	65,212	392,614	34,812	1,214,374
1980	393,122 ³	86,089	24,205	31,812	102,022	35,201	19,138	323,431	51,705	375,136	19,994	1,086,709
1981	345,728 ³	80,216	29,185	18,192	100,482	41,025	17,763	340,002	38,851	378,853	21,032	1,032,476
1982	324,912 ³	71,340	29,482	12,134	93,150	33,885	15,201	338,006	37,118	375,124	19,639	974,864

^r = revised.

¹ Includes Alaska and Hawaii.

² Includes gas turbine plants in 1970 and subsequent years.

³ Beginning in 1979, heating oil is no longer a separate category. The figure is derived by adding residential, commercial and farming.

Source: 1955-1982: American Petroleum Institute, *Basic Petroleum Data Book*, Volume III, Number 3, September 1983, Section VII, Table 11, 11a.

**Table 80. Refined Petroleum Products Supplied by Type
and To End-Use Sectors, 1982-1983**

Year and Refined Product	Residential and Commerical		Industrial		Transportation		Electric Utilities		Total	
	Million Barrels Per Day	Qua- drillion Btu	Million Barrels Per Day	Qua- drillion Btu	Million Barrels Per Day	Qua- drillion Btu	Million Barrels Per Day	Qua- drillion Btu	Million Barrels Per Day	Qua- drillion Btu
1982										
Asphalt and Road Oil	0	0	0.34	0.83	0	0	0	0	0.34	0.83
Aviation Gasoline	0	0	0	0	0.03	0.05	0	0	0.03	0.05
Distillate Fuel Oil	0.70	1.49	0.62	1.31	1.31	2.79	0.04	0.09	2.67	5.68
Jet Fuel	0	0	0	0	1.01	2.07	*	**	1.01	2.07
Kerosene	0.06	0.13	0.07	0.14	0	0	0	0	0.13	0.27
Liquefied Gases and Ethane	0.26	0.35	1.21	1.60	0.02	0.03	0	0	1.50	1.98
Lubricants	0	0	0.07	0.16	0.07	0.15	0	0	0.14	0.31
Motor Gasoline	0.05	0.09	0.07	0.14	6.42	12.31	0	0	6.54	12.54
Residual Fuel Oil	0.17	0.40	0.46	1.05	0.44	1.02	0.64	1.47	1.72	3.94
All Other ¹	0	0	1.22	2.57	0	0	*	**	1.22	2.57
Total	1.24	2.45	4.06	7.80	9.30	18.42	0.69	1.57	15.30	30.23
1983^p										
Asphalt and Road Oil	0	0	0.37	0.90	0.	0	0	0	0.37	0.90
Aviation Gasoline	0	0	0	0	0.03	0.05	0	0	0.03	0.05
Distillate Fuel Oil	0.70	1.48	0.61	1.30	1.33	2.83	0.05	0.10	2.68	5.70
Jet Fuel	0	0	0	0	1.04	2.13	*	**	1.04	2.13
Kerosene	0.06	0.12	0.07	0.14	0	0	0	0	0.13	0.26
Liquefied Gases and Ethane	0.26	0.34	1.19	1.57	0.02	0.03	0	0	1.47	1.94
Lubricants	0	0	0.07	0.16	0.07	0.15	0	0	0.14	0.31
Motor Gasoline	0.05	0.09	0.07	0.14	6.50	12.46	0	0	6.62	12.69
Residual Fuel Oil	0.13	0.29	0.33	0.76	0.32	0.73	0.63	1.44	1.40	3.22
All Other ¹	0	0	1.29	2.76	0	0	*	0.01	1.30	2.77
Total	1.19	2.33	4.01	7.73	9.31	18.38	0.68	1.54	15.18	29.98

* Less than 0.005 million barrels per day.

** Less than 0.005 quadrillion million Btu.

¹ Includes petrochemical feedstock, special naphthas, waxes, petroleum coke, still gas, natural gasoline, crude oil and miscellaneous products.

^p Preliminary

Note: Sum of componets may not equal total due to independent rounding.
Source: U.S. DOE, 1983 Annual Energy Review, Table 47, p.103.

Table 81. Imports and Exports, Crude Oil and Products, 1982

Country/Area	Million Tonnes (Metric Tons) ¹				Thousand Barrels Daily			
	Imports		Exports		Imports		Exports	
	Crude	Products	Crude	Products	Crude	Products	Crude	Products
U.S.A.	172.5	76.1	11.7	31.2	3,460	1,580	235	580
Canada	17.3	2.9	10.4	13.6	350	60	210	275
Latin America	90.1	14.6	121.3	83.0	1,815	295	2,445	1,690
Western Europe	383.0	83.1	29.6	18.3	7,715	1,635	595	370
Middle East	6.4	10.7	544.0	34.7	130	215	10,950	710
North Africa	2.6	2.3	93.0	13.3	50	45	1,875	270
West Africa	0.3	2.9	72.7	1.9	5	60	1,460	40
East and South Africa	19.6	4.5	-	1.2	395	90	-	25
South Asia	21.2	6.9	1.4	1.9	425	140	30	40
South East Asia	78.8	19.6	52.9	20.4	1,585	395	1,065	415
Japan	180.8	25.4	-	0.4	3,645	510	-	15
Australia	10.0	6.0	-	1.3	200	120	-	25
U.S.S.R., E. Europe & China	8.1	6.4	61.4	50.2	165	130	1,230	1,015
Destination not known*	7.7	10.0	-	-	155	195	-	-
Total	998.4	271.4	998.4	271.4	20,095	5,470	20,095	5,470

* Includes increased quantities in transit, transit losses, minor movements not otherwise shown, military use, etc.

¹ One metric ton (tonne) equals 1.102 short tons.

Source: British Petroleum Company, *BP Statistical Review of World Energy*, 1982, p.14.

Figure References (Figure 3-Figure 9)

Figure 3. Expenditures and Revenues, 1982

- (1) Total Transportation: Sum of Domestic and International.
- (2) Domestic: Sum of Highway, Rail, Air, Water, and Pipeline, Local Transit data is not available.
- (3) International: Sum of Air and Water.
- (4) Highway: Sum of Auto, Truck, and Bus.
- (5) Auto: Sum of Personal Passenger Car, Taxi and Motorcycle.
- (6) Personal Passenger Car: Dept. of Commerce, Bureau of Economic Analysis, *Survey of Current Business*, July 1983, Table 2.4, line 64.
- (7) Taxi: *Ibid.*, line 75.
- (8) Motorcycle: Motorcycle Industry Council, Inc., *1983 Motorcycle Statistical Annual*, p. 11. Due to changes in reporting methods, this figure is not directly comparable to previous years.
- (9) Truck: Sum of Local Truck and Intercity Truck.
- (10) Local Truck: TPA, *Transportation In America*, Second Edition, Mar. 1984, p. 4.
- (11) Intercity Truck: Sum of ICC-Regulated Truck and Nonregulated Truck.
- (12) ICC-Regulated Truck: TPA, *Transportation In America*, Second Edition, Mar. 1984, p. 4. 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: American Bus Association, personal communication, 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.* Total passenger revenues of Class I carriers plus 25 percent of this amount as estimated passenger revenues for Class II and Class III and intrastate carriers.
- (17) Cargo, Intercity Bus: *Ibid.*, personal communication. Total package express and mail revenues for Class I carriers plus 25 percent of this amount as estimated cargo revenues for Class II and III and intrastate carriers.
- (18) School Bus: TPA, *Transportation In America*, Second Edition, Mar. 1984, p. 5.

Figure 3. Expenditures and Revenues, 1982 (Cont.)

- (19) Local Transit: Not available.
- (20) Motorbus: Not available.
- (21) Trolley Coach: Not available.
- (22) Light Rail: Not available.
- (23) Heavy Rail: Not available.
- (24) Rail: Sum of Passenger and Cargo. Includes Amtrak.
- (25) Rail, Passenger: Sum of Class I Rail and Amtrak.
- (26) Rail, Class I: AAR, *Statistics of Railroads of Class I*, Oct. 1983, p. 3. Total passenger service operating revenue (501-3).
- (27) Rail, Amtrak: *Ibid.*, p. 16. Total operating passenger service revenues.
- (28) Rail, Cargo: *Ibid.*, p. 3. Class I freight service revenue (501-3).
- (29) Air: Sum of General Aviation and Air Carrier.
- (30) General Aviation: TPA, *Transportation In America*, Second Edition, Mar. 1984, p. 5. Figure represents the sum of operating costs and total retail value of new general aviation aircraft.
- (31) Air Carrier: Same as Total Certificated figure, block (32).
- (32) Total Certificated: CAB, *Air Carrier Financial Statistics*, Dec. 1983, p. 1. Total operating revenues, domestic operations.
- (33) Total Domestic Majors: *Ibid.*, p. 3. Total operating revenues in scheduled and nonscheduled services.
- (34) Passenger: *Ibid.*, p. 3. Sum of passenger revenues in scheduled and nonscheduled service.
- (35) Freight: *Ibid.*, p. 3. Sum of scheduled and nonscheduled freight revenues.
- (36) Total Domestic Nationals: *Ibid.*, p. 27. Total operating revenues in scheduled and nonscheduled services.
- (37) Passenger: *Ibid.*, p. 27. Sum of scheduled and nonscheduled passenger service.
- (38) Freight: *Ibid.*, p. 27. Sum of scheduled and nonscheduled freight service.
- (39) Total Domestic Large Regionals: *Ibid.*, p. 45. Total operating revenues in scheduled and non-scheduled service.
- (40) Passenger: *Ibid.*, p. 45. Sum of scheduled and nonscheduled passenger service.

Figure 3. Expenditures and Revenues, 1982 (Cont.)

- (41) Freight: *Ibid.*, p. 45. Sum of scheduled and nonscheduled freight services.
- (42) Water: Sum of Passenger, Cargo, and Commercial Fishing.
- (43) Passenger, Water: TPA, *Transportation In America*, Second Edition, Mar. 1984, p. 5. Figure represents revenues of ICC-regulated carriers. Expenditures for private boating are not available.
- (44) Cargo, Water: *Ibid.*, p. 4.
- (45) Commercial Fishing: U.S. Department of Commerce, *Fisheries of the U.S.*, 1982, p. 6.
- (46) Pipeline: TPA, *Transportation In America*, Second Edition, Mar. 1984, p. 5. Includes revenues of regulated and unregulated oil pipelines.
- (47) Air Carrier: Figure represents overall operating revenues of the certificated carriers, total international operations. Same as Total Certificated figure, block (48).
- (48) Total Certificated: CAB, *Air Carrier Financial Statistics*, Dec. 1983, p. 2. Total operating revenues, international operations only.
- (49) Total International Majors: *Ibid.*, p. 4. Total operating revenues in scheduled and nonscheduled service.
- (50) Passenger: *Ibid.*, p. 4. Sum of scheduled and nonscheduled passenger service.
- (51) Freight: *Ibid.*, p. 4. Sum of scheduled and nonscheduled freight service.
- (52) Total International Nationals: *Ibid.*, p. 28. Total operating revenues in scheduled and nonscheduled service.
- (53) Passenger: *Ibid.*, p. 28. Sum of scheduled and nonscheduled passenger service.
- (54) Freight: *Ibid.*, p. 28. Sum of scheduled and nonscheduled freight service.
- (55) Water: Sum of Passenger and Cargo.
- (56) Passenger, Water: TPA, *Transportation In America*, Second Edition, Mar. 1984, p. 5.
- (57) Cargo, Water: *Ibid.*, p. 4.

Figure 4. Vehicle-Miles, 1982

- (1) Total Transportation: Sum of Domestic and International.
- (2) Domestic: Sum of Highway, Rail, and Air, Local Transit and Water data not available.
- (3) International: Includes Total Certificated, Water data not available.
- (4) Highway: Sum of Auto, Truck, and Bus.
- (5) Auto: Sum of Personal Passenger Car and Motorcycle.
- (6) Personal Passenger Car: Federal Highway Administration, *Highway Statistics*, 1982, Table VM-1. Includes total rural and urban. This figure includes Taxi.
- (7) Taxi: Data for Taxi are included in the Personal Passenger Car category.
- (8) Motorcycle: Federal Highway Administration, *Highway Statistics*, 1982, Table VM-1. Includes total rural and urban.
- (9) Truck: *Ibid.*
- (10) Single-Unit: *Ibid.*
- (11) Combinations: *Ibid.*
- (12) Bus: Sum of Intercity Bus and School Bus.
- (13) Intercity Bus: American Bus Association, personal communication. Includes Class I, II, and III carriers reporting to the ICC and Intrastate carriers. Preliminary figure.
- (14) Class I: *Ibid.*, p. 6. Total vehicle-miles operated.
- (15) Regular-route: *Ibid.*, Regular-route intercity service.
- (16) Local and Suburban: *Ibid.*, Local and suburban service.
- (17) Charter and Special: *Ibid.*, Charter and special service.
- (18) Non-Passenger: *Ibid.*, Non-passenger service.
- (19) Class II and III: Figure derived by subtracting Class I from Intercity Bus.
- (20) School Bus: Federal Highway Administration, *Highway Statistics*, 1982, Table VM-1. Includes total rural and urban.
- (21) Local Transit: Not available due to changes in UMTA Section 15 reporting procedures from fiscal year basis to calendar year basis.
- (22) Motorbus: *Ibid.*
- (23) Trolley Bus: *Ibid.*

Figure 4. Vehicle-Miles, 1982 (Cont.)

- (24) Streetcar: *Ibid.*
- (25) Rail Rapid: *Ibid.*
- (26) Rail: Sum of Passenger and Freight.
- (27) Passenger Rail: AAR, *Statistics of Railroads of Class I*, October 1983. This figure is the sum of the passenger train-miles of Class I railroads, p. 11, and Amtrak (NRPC), p. 17, train mileage which includes miles with locomotives, and miles of motorcar trains.
- (28) Freight, Rail: *Ibid.*, p. 11.
- (29) Air: Includes total certificated, General Aviation not available.
- (30) General Aviation: Not available.
- (31) Total Domestic Certificated: CAB, *Air Carrier Traffic Statistics*, Dec. 1983, p. 2. Sum of scheduled aircraft revenue miles, line 27, and nonscheduled aircraft revenue miles, line 50.
- (32) Total Domestic Majors: *Ibid.*, p. 5. Sum of scheduled, line 27, and nonscheduled, line 50, services.
- (33) Scheduled: *Ibid.*, p. 5, line 27.
- (34) Passenger: *Ibid.*, p. 5, line 25.
- (35) Freight: *Ibid.*, p. 5, line 26.
- (36) Nonscheduled: *Ibid.*, p. 5, line 50.
- (37) Total Domestic Nationals: *Ibid.*, p. 47. Sum of scheduled, line 27, and nonscheduled, line 50, services.
- (38) Scheduled: *Ibid.*, p. 47, line 27.
- (39) Passenger: *Ibid.*, p. 47, line 25.
- (40) Freight: *Ibid.*, p. 47, line 26.
- (41) Nonscheduled: *Ibid.*, p. 47, line 50.
- (42) Total Domestic Large Regionals: *Ibid.*, p. 83. Sum of scheduled, line 27, and nonscheduled, line 50, services.
- (43) Scheduled: *Ibid.*, p. 83, line 27.
- (44) Passenger: *Ibid.*, p. 83, line 25.
- (45) Freight: *Ibid.*, p. 83, line 26.
- (46) Nonscheduled: *Ibid.*, p. 83, line 50.

Figure 4. Vehicle-Miles, 1982 (Cont.)

- (47) Total Domestic Medium Regionals: *Ibid.*, p. 113. Includes domestic and international operations. Sum of scheduled, line 27, and nonscheduled, line 50, services.
- (48) Scheduled: *Ibid.*, p. 113, line 27.
- (49) Passenger: *Ibid.*, p. 113, line 25.
- (50) Freight: *Ibid.*, p. 113, line 26.
- (51) Nonscheduled: *Ibid.*, p. 113, line 50.
- (52) Water: Not available.
- (53) International Air: Same as Total International Certificated, block (54).
- (54) Total International Certificated: CAB, *Air Carrier Traffic Statistics*, Dec. 1983, p. 3. Sum of scheduled aircraft revenue miles, line 27, and nonscheduled aircraft revenue miles, line 50.
- (55) Total International Majors: *Ibid.*, p. 6. Sum of scheduled, line 27, and nonscheduled, line 50.
- (56) Scheduled: *Ibid.*, p. 6, line 27.
- (57) Passenger: *Ibid.*, p. 6, line 25.
- (58) Freight: *Ibid.*, p. 6, line 26.
- (59) Nonscheduled: *Ibid.*, p. 6, line 27.
- (60) Total International Nationals: *Ibid.*, p. 48. Sum of scheduled, line 27, and nonscheduled, line 50, services.
- (61) Scheduled: *Ibid.*, p. 48, line 27.
- (62) Passenger: *Ibid.*, p. 48, line 25.
- (63) Freight: *Ibid.*, p. 48, line 26.
- (64) Nonscheduled: *Ibid.*, p. 48, line 50.
- (65) Total International Large Regionals: *Ibid.*, p. 84. Sum of scheduled, line 27, and nonscheduled, line 50, services.
- (66) Scheduled: *Ibid.*, p. 84, line 27.
- (67) Passenger: *Ibid.*, p. 84, line 25.
- (68) Freight: *Ibid.*, p. 84, line 26.
- (69) Nonscheduled: *Ibid.*, p. 84, line 50.
- (70) Water: Not available.

Figure 5. Passenger-Miles, 1981

- (1) Total Transportation: Sum of Domestic and International.
- (2) Domestic: Sum of Highway, Local Transit, Rail, and Air, Water data not available.
- (3) International: Includes Air, Water data not available.
- (4) Highway: Sum of Auto and Bus.
- (5) Auto: Sum of Personal Passenger Car, Taxi, and Motorcycle.
- (6) Personal Passenger Car: FHWA, *Highway Statistics*, 1982, Table VM-1. Passenger miles derived by multiplying total rural and urban passenger car travel by an average occupancy level of 2.3.
- (7) Taxi: Included in Personal Passenger Car.
- (8) Motorcycle: FHWA, *Highway Statistics*, 1982, Table VM-1. Passenger miles derived by multiplying total rural and urban motorcycle travel by an average occupancy level of 1.1.
- (9) Bus: Sum of Intercity Bus and School Bus passenger-miles.
- (10) Intercity Bus: American Bus Association, personal communication. Revenue passenger-miles, includes Classes I, II, and III carriers reporting to ICC plus Intrastate Carriers. Preliminary figure.
- (11) Class I: *Ibid.*, p. 6.
- (12) Regular-Route: *Ibid.*, personal communication.
- (13) Class II and III: Figure derived by subtraction of Class I from Intercity.
- (14) School Bus: Best estimate by NHTSA, National Center for Statistics and Analysis.
- (15) Local Transit: Not available due to changes in UMTA Section 15 reporting procedures from fiscal year basis to calendar year basis.
- (16) Rail: TPA, *Transportation In America*, Mar. 1984, p. 35.
- (17) Amtrak: Amtrak, Sum of commutation and other than commutation.
- (18) Commutation: Amtrak, Marketing Department, personal communication.
- (19) Other Than Commutation: *Ibid.*
- (20) Air: Sum of General Aviation and Total Certificated.
- (21) General Aviation: TPA, *Transportation In America*, Mar. 1984, p. 8.

Figure 5. Passenger-Miles, 1982 (Cont.)

- (22) Total Domestic Certificated: CAB, *Air Carrier Traffic Statistics*, Dec. 1983, p. 2. Revenue passenger miles, all services, line 1.
- (23) Total Domestic Majors: *Ibid.*, p. 5. Sum of scheduled, line 9, and nonscheduled, line 41, services.
- (24) Scheduled: *Ibid.*, line 9.
- (25) First Class: *Ibid.*, line 7.
- (26) Coach: *Ibid.*, line 8.
- (27) Nonscheduled: *Ibid.*, line 41.
- (28) Civilian: *Ibid.*, line 39.
- (29) Military: *Ibid.*, line 40.
- (30) Total Domestic Nationals: *Ibid.*, p. 47. Sum of scheduled, line 9, and nonscheduled, line 41, services.
- (31) Scheduled: *Ibid.*, line 9.
- (32) First Class: *Ibid.*, line 7.
- (33) Coach: *Ibid.*, line 8.
- (34) Nonscheduled: *Ibid.*, line 41.
- (35) Civilian: *Ibid.*, line 39.
- (36) Military: *Ibid.*, line 40.
- (37) Total Domestic Large Regionals: *Ibid.*, p. 83. Sum of scheduled, line 9, and nonscheduled, line 41, services.
- (38) Scheduled: *Ibid.*, line 9.
- (39) First Class: *Ibid.*, line 7.
- (40) Coach: *Ibid.*, line 8.
- (41) Nonscheduled: *Ibid.*, line 41.
- (42) Civilian: *Ibid.*, line 39.
- (43) Military: *Ibid.*, line 40.
- (44) Total Domestic Medium Regionals: *Ibid.*, p. 113. Includes domestic and international operations. Sum of scheduled, line 9, and nonscheduled, line 41, services.
- (45) Scheduled: *Ibid.*, line 9.

Figure 5. Passenger-Miles, 1982 (Cont.)

- (46) First Class: *Ibid.*, line 7.
- (47) Coach: *Ibid.*, line 8.
- (48) Nonscheduled: *Ibid.*, line 41.
- (49) Civilian: *Ibid.*, line 39.
- (50) Military: *Ibid.*, line 40.
- (51) Water: Not available.
- (52) International Air: Same as Total International Certificated, block (53).
- (53) Total International Certificated: CAB, *Air Carrier Traffic Statistics*, Dec. 1983, p. 3. Revenue passenger miles, all services, line 1.
- (54) Total International Majors: *Ibid.*, p. 6. Sum of scheduled, line 9, and nonscheduled, line 41, services.
- (55) Scheduled: *Ibid.*, line 9.
- (56) First Class: *Ibid.*, line 7.
- (57) Coach: *Ibid.*, line 8.
- (58) Nonscheduled: *Ibid.*, line 41.
- (59) Civilian: *Ibid.*, line 39.
- (60) Military: *Ibid.*, line 40.
- (61) Total International Nationals: *Ibid.*, p. 48. Sum of scheduled, line 9, and nonscheduled, line 41, services.
- (62) Scheduled: *Ibid.*, line 9.
- (63) First Class: *Ibid.*, line 7.
- (64) Coach: *Ibid.*, line 8.
- (65) Nonscheduled: *Ibid.*, line 41.
- (66) Civilian: *Ibid.*, line 39.
- (67) Military: *Ibid.*, line 40.
- (68) Total International Large Regionals: *Ibid.*, p. 84. Sum of scheduled, line 9, and nonscheduled, line 41, services.
- (69) Scheduled: *Ibid.*, line 9.

Figure 5. Passenger-Miles, 1982 (Cont.)

- (70) First Class: *Ibid.*, line 7.
- (71) Coach: *Ibid.*, line 8.
- (72) Nonscheduled: *Ibid.*, line 41.
- (73) Civilian: *Ibid.*, line 39.
- (74) Military: *Ibid.*, line 40.
- (75) Water: Not Available.

Figure 6. Cargo Ton-Miles, 1982

- (1) Total Transportation: Sum of Domestic and International.
- (2) Domestic: Sum of Highway, Rail, Air, Water and Pipeline.
- (3) International: Sum of Air and Water.
- (4) Highway: Figure represents total intercity ton-miles of motor vehicle transport.
- (5) Truck: Sum of local and intercity ton-miles .
- (6) Local Truck: TPA, personal communication, letter dated May 22, 1984.
- (7) Intercity: TPA, *Transportation In America*, Second Edition, Mar. 1984, p. 6. Total intercity ton-miles.
- (8) Single-Unit: TPA, personal communication, letter dated May 22, 1984.
- (9) Combination: *Ibid.*
- (10) Rail: AAR, *Statistics of Railroads of Class I*, Oct. 1983, p. 6, line 50.
- (11) Air: Same as Total Domestic Certificated, block (12).
- (12) Total Domestic Certificated: CAB. *Air Carrier Traffic Statistics*, Dec. 1983, p. 2. Freight, Express, U.S. and Foreign Mail Revenue ton miles, all services, line 3.
- (13) Total Domestic Majors: *Ibid.*, p. 5, line 3.
- (14) Scheduled: *Ibid.*, p. 5. Sum of Freight, Air Express, U.S. Mail and Foreign Mail, lines 18-21.
- (15) Freight: *Ibid.*, p. 5, line 18.
- (16) Other: *Ibid.*, p. 5. Sum of lines 19-21.

Figure 6. Cargo Ton-Miles, 1982 (Cont.)

- (17) Nonscheduled: *Ibid.*, p. 5. Sum of Civilian Freight, line 44, and Military Freight, line 45.
- (18) Civilian Freight: *Ibid.*, p. 5, line 44.
- (19) Military Freight: *Ibid.*, p. 5, line 45.
- (20) Total Domestic Nationals: *Ibid.*, p. 47, line 3.
- (21) Scheduled: *Ibid.*, p. 47. Sum of Freight, Air Express, U.S. Mail and Foreign Mail, lines 18-21.
- (22) Freight: *Ibid.*, p. 47, line 18.
- (23) Other: *Ibid.*, p. 47. Sum of lines 19-21.
- (24) Nonscheduled: *Ibid.*, p. 47. Sum of Civilian Freight, line 44, and Military Freight, line 45.
- (25) Civilian Freight: *Ibid.*, p. 47, line 44.
- (26) Military Freight: *Ibid.*, p. 47, line 45.
- (27) Total Domestic Large Regionals: *Ibid.*, p. 83, line 3.
- (28) Scheduled: *Ibid.*, p. 83. Sum of Freight, Air Express, U.S. Mail and Foreign Mail, lines 18-21.
- (29) Freight: *Ibid.*, p. 83, line 18.
- (30) Other: *Ibid.*, p. 83. Sum of lines 19-21.
- (31) Nonscheduled: *Ibid.*, p. 83. Sum of Civilian Freight, line 44, and Military Freight, line 45.
- (32) Civilian Freight: *Ibid.*, p. 83, line 44.
- (33) Military Freight: *Ibid.*, p. 83, line 45.
- (34) Total Domestic Medium Regionals: *Ibid.*, p. 113, line 3. Includes international operations.
- (35) Scheduled: *Ibid.*, p. 113. Sum of Freight, Air Express, U.S. Mail and Foreign Mail, lines 18-21.
- (36) Freight: *Ibid.*, p. 113, line 18.
- (37) Other: *Ibid.*, p. 113. Sum of lines 19-21.
- (38) Nonscheduled: *Ibid.*, p. 113. Sum of Civilian Freight, line 44, and Military Freight, line 45.
- (39) Civilian Freight: *Ibid.*, p. 113, line 44.
- (40) Military Freight: *Ibid.*, p. 113, line 45.
- (41) Water: U.S. Department of the Army, Corps of Engineers, *Waterborne Commerce of the United States*, Calendar Year 1982, Part 5, Section 3, Table 1, total domestic ton-miles.

Figure 6. Cargo-Ton-Miles, 1982 (Cont.)

- (42) Coastwise: *Ibid.*
- (43) Lakewise: *Ibid.*
- (44) Internal: *Ibid.*
- (45) Local: *Ibid.*
- (46) Pipeline: TPA, *Transportation In America*, Mar. 1984, p. 6. Intercity ton-miles.
- (47) ICC-Regulated: Estimated to be 84% of total pipeline.
- (48) Non-Regulated: Estimated to be 16% of total pipeline.
- (49) Air: Same as Total International Certificated, block (50).
- (50) Total International Certificated: CAB, *Air Carrier Traffic Statistics*, Dec. 1983, p.3, line 3.
- (51) Total International Majors: *Ibid.*, p. 6, line 3.
- (52) Scheduled: *Ibid.*, p. 6. Sum of Freight, Air Express, U.S. Mail and Foreign Mail, lines 18-21.
- (53) Freight: *Ibid.*, p. 6, line 18.
- (54) Other: *Ibid.*, p. 6. Sum of lines 19-21.
- (55) Nonscheduled: *Ibid.*, p. 6. Sum of Civilian Freight, line 44, and Military Freight, line 45.
- (56) Civilian Freight: *Ibid.*, p. 6, line 44.
- (57) Military Freight: *Ibid.*, p. 6, line 45.
- (58) Total International Nationals: *Ibid.*, p. 48, line 3.
- (59) Scheduled: *Ibid.*, p. 48. Sum of Freight, Air Express, U.S. Mail and Foreign Mail, lines 18-21.
- (60) Freight: *Ibid.*, p. 48, line 18.
- (61) Other: *Ibid.*, p. 48. Sum of lines 19-21.
- (62) Nonscheduled: *Ibid.*, p.48. Sum of Civilian Freight, line 44, and Military Freight, line 45.
- (63) Civilian Freight: *Ibid.*, p. 48, line 44.
- (64) Military Freight: *Ibid.*, p. 48, line 45.
- (65) Total International Large Regionals: *Ibid.*, p. 84, line 3.
- (66) Scheduled: *Ibid.*, p. 84. Sum of Freight, Air Express, U.S. Mail and Foreign Mail, lines 18-21.
- (67) Freight: *Ibid.*, p. 84, line 18.

Figure 6. Cargo Ton-Miles, 1982 (Cont.)

- (68) Other: *Ibid.*, p. 84. Sum of lines 19-21.
- (69) Nonscheduled: *Ibid.*, p. 84. Sum of Civilian Freight, line 44, and Military Freight, line 45.
- (70) Civilian Freight: *Ibid.*, p. 84, line 44.
- (71) Military Freight: *Ibid.*, p. 84, line 45.
- (72) Water: U.S. Department of the Army, Corps of Engineers, *Waterborne Commerce of the United States*, Calendar Year 1982, Part 5, Section 3, Table 1, total foreign ton-miles.
- (73) Great Lakes: *Ibid.*
- (74) Coastal Ports: *Ibid.*

Figure 7. Number of Vehicles, 1982

- (1) Total Transportation: Sum of Domestic and International.
- (2) Domestic: Sum of Highway, Local Transit, Rail, Air, and Water.
- (3) International: Includes Water, Air data included in domestic category.
- (4) Highway: Sum of Auto, Truck, and Bus.
- (5) Auto: Sum of Personal Passenger Car and Motorcycle.
- (6) Personal Passenger Car: FHWA, *Highway Statistics*, 1982, Table MV-1. This figure includes private and commercial automobiles (including taxi cabs) for the 50 states and the District of Columbia (Number of Motorized Vehicles Registered).
- (7) Taxi: Data for Taxi are included in the Personal Passenger Car category.
- (8) Motorcycle: FHWA, *Highway Statistics*, 1982, Table MV-1. This figure includes private and commercial motorcycles (Number of Motorized Vehicles).
- (9) Truck: *Ibid.*, Table MV-9.
- (10) Private: *Ibid.*
- (11) Public: *Ibid.*
- (12) Bus: Sum of Intercity Bus and School Bus.
- (13) Intercity Bus: American Bus Association, personal communication. This figure includes operations of Class I, II, and III carriers reporting to the ICC and the Intrastate carriers. Preliminary figure.

Figure 7. Number of Vehicles, 1982 (Cont.)

- (14) Class I: *Ibid.*, p. 6, Class I carriers including Greyhound and Trailways.
- (15) Class II and III: Figure derived by subtracting Class I from Intercity.
- (16) School: FHWA, *Highway Statistics*, 1982, Table MV-10. (Total school and other non-revenue buses).
- (17) Local Transit: Data not available due to changes in UMTA Section 15 reporting procedures from fiscal year basis to calendar year basis.
- (18) Motorbus: *Ibid.*
- (19) TrolleyBus: *Ibid.*
- (20) Streetcar: *Ibid.*
- (21) Rail Rapid: *Ibid.*
- (22) Rail: Sum of passenger and freight.
- (23) Rail, Passenger: AAR, *Statistics of Railroads of Class I*, Oct 1983, p. 10, line 8.
- (24) Rail, Freight: *Ibid.*, Total Freight Carrying Cars, p. 9.
- (25) Air: Sum of General Aviation and Total Certificated.
- (26) General Aviation: FAA, Office of Management Systems, *General Aviation Activity and Avionics Survey*, Dec. 1983, Table 2-9, p. 2-32.
- (27) Rental: *Ibid.*
- (28) Business: *Ibid.* This category includes Business and Executive Transportation.
- (29) Commercial: *Ibid.* This category includes Air Taxi, Commuter Carrier and Aerial Application.
- (30) Instructional: *Ibid.*
- (31) Personal: *Ibid.*
- (32) Other: *Ibid.* This category includes Other Work.
- (33) Total Certificated: Includes domestic and international aircraft. Sum of Major, National and Regional airlines.
- (34) Majors: CAB, Financial and Cost Analysis Division, personal communication.
- (35) Nationals: *Ibid.*
- (36) Regionals: *Ibid.* Includes Large and Medium Regional airlines.

Figure 7. Number of Vehicles, 1982 (Cont.)

- (37) Water: Data not available for 1982 due to changes in collection procedures.
- (38) Self-Propelled: *Ibid*
- (39) Dry Cargo/Passenger: *Ibid*.
- (40) Ferries, Railroad Car: *Ibid*.
- (41) Tankers: *Ibid*.
- (42) Towboats: *Ibid*.
- (43) Sailing Vessels: *Ibid*.
- (44) Non-Self-Propelled: *Ibid*.
- (45) Barges/Scows: *Ibid*.
- (46) Tankers: *Ibid*.
- (47) Railroad Car Floats: *Ibid*.
- (48) Air: Not available. Figure included in Domestic Total Certificated, block (33).
- (49) Water: U.S. Department of Transportation, Maritime Administration, *Merchant Fleets of the World*, Jan. 1983, p. 4.
- (50) Government: *Ibid*.
- (51) Private: *Ibid*.

Figure 8. Number of Fatalities, 1982

- (1) Total Transportation: Includes domestic fatalities only.
- (2) Domestic: Sum of Highway, Rail Rapid Transit, Rail, Air, Marine and Pipeline.
- (3) International: Not available, Air included in domestic category.
- (4) Highway: Sum of Auto, Motorcycle, Truck, Bus, Bicycle and Pedestrian. This figure includes 500 rail/highway grade crossing fatalities.
- (5) Personal Passenger Car: U.S. DOT, TSC/DTS-32, *Transportation Safety Information Report, 1983 Annual Summary*, Chart 7, p.12.
- (6) Taxi: National Safety Council, *Accident Facts*, 1983, p. 56.

Figure 8. Number of Fatalities, 1982 (Cont.)

- (7) Motorcycle: U.S. DOT, TSC/DTS-32, *Transportation Safety Information Report, 1983 Annual Summary*, Table 4, p. 14.
- (8) Truck: *Ibid.*
- (9) Light: *Ibid.*
- (10) Medium: *Ibid.*, NHTSA/NRD-30, personal communication.
- (11) Heavy: TSC/DTS-32, *Transportation Safety Information Report, 1983 Annual Summary*, Table 4, p. 14.
- (12) Other: *Ibid.*, NHTSA/NRD-30, personal communication.
- (13) Bus: Sum of commercial and school bus occupant fatalities.
- (14) Commercial Bus: *Ibid.*
- (15) School Bus: *Ibid.*
- (16) Bicycle: *Ibid.*, TSC/DTS-32, *Transportation Safety Information Report, 1983 Annual Summary*, Table 4, p. 14.
- (17) Pedestrian: *Ibid.*, Motor vehicle involvement only.
- (18) Other: *Ibid.*, Includes Occupant and Non-Occupant fatalities. Does not include Bus fatalities.
- (19) Rail Rapid Transit: *Ibid.*, Table 1, p. 4.
- (20) Rail: *Ibid.*, Table 1, p. 4. This figure includes railroad passengers, employees, trespassers, and others killed in railroad operations. It does not include those killed in rail/highway grade crossing accidents (107).
- (21) Train Accident: *Ibid.*, Chart 11, p. 30.
- (22) Non-Train Incident: *Ibid.*, Chart 13, p. 32.
- (23) Train Incident: *Ibid.*, Chart 12, p. 31.
- (24) Rail-Highway Grade Crossing: *Ibid.*, Table 6, p. 27. This figure includes 107 fatalities which are not reported in the Railroad figure.
- (25) Air: Sum of General Aviation and Total Certificated.
- (26) General Aviation: National Transportation Safety Board, Safety Studies and Analysis Division (SP-10), personal communication.
- (27) Executive: *Ibid.*
- (28) Aerial Application: *Ibid.*
- (29) Business: *Ibid.*

Figure 8. Number of Fatalities, 1982 (Cont.)

- (30) Instructional: *Ibid.*
- (31) Personal: *Ibid.*
- (32) Other: *Ibid.*
- (33) Total Certificated: NTSB, Office of Safety Studies Division, personal communication. Air Carriers operating under 14 CFR 121 and 14 CFR 135 (Commuter air carriers and On-Demand Air Taxis). Includes domestic and international operations.
- (34) Air Carrier: *Ibid.* Airlines operating under 14 CFR 121, scheduled and nonscheduled services.
- (35) Commuter: *Ibid.* Air Carriers operating under 14 CFR 135.
- (36) Air Taxis: *Ibid.* On-Demand Air Carriers operating under 14 CFR 135.
- (37) Water: Sum of Waterborne and Recreational Boating.
- (38) Waterborne: U.S. DOT, TSC, *Transportation Safety Information Report, 1983 Annual Summary*, Chart 32, p. 60. Vessel-casualty related fatalities only.
- (39) Recreational Boating: U.S. Coast Guard, *Boating Statistics 1982*, June 1983, p. 22. This figure represents total fatalities in recreational boating.
- (40) Inboard: *Ibid.* This figure is the sum of inboard gasoline and diesel powered boats.
- (41) Outboard: *Ibid.*
- (42) Inboard/Outboard: *Ibid.*
- (43) Manual: *Ibid.* This figure includes boats propelled by oars and paddles.
- (44) Other: *Ibid.* This figure includes boats propelled by jet, sail, and other methods.
- (45) Unknown: *Ibid.* This figure includes all boats in which the propulsion was unknown.
- (46) Pipeline: U.S. Department of Transportation, TSC, *Transportation Safety Information Report, 1983 Annual Summary*, Chart 43B. This figure includes gas distribution and transmission lines (including gathering lines), and liquid transmission lines.
- (47) Air: Not available. Figure is included in Total Certificated, block (33).
- (48) Water: Not available.

Figure 9. Energy Consumed in Transportation (Converted to 10^{12} Btu), 1982

- (1) Total Transportation: Sum of Domestic and International.
- (2) Domestic: Sum of Highway, Rail, Air, Water and Pipeline, Local Transit data is not available.
- (3) International: Includes Total Certificated, Water data not available.
- (4) Highway: Sum of Personal Passenger Car, Truck, and Bus.
- (5) Personal Passenger: Sum of Personal Passenger Car, Taxi, and Motorcycle
- (6) Personal Passenger Car (includes Taxi): FHWA, *Highway Statistics*, 1982, Table VM-1, multiplied by the conversion factor of motor gasoline (125,000 Btu/gallon).
- (7) Taxi: Included in Passenger Car.
- (8) Motorcycle: FHWA, *Highway Statistics*, 1982, Table VM-1, multiplied by the conversion factor of motor gasoline (125,000 Btu/gallon).
- (9) Truck: Sum of Single-Unit and Combination.
- (10) Single-Unit: FHWA, *Highway Statistics*, 1981, Table VM-1, multiplied by the conversion factor of motor gasoline (125,000 Btu/gallon).
- (11) Combination: *Ibid.*, multiplied by the conversion factor of distillate fuel oil (138,700 Btu/gallon).
- (12) Bus: Sum of Class I Intercity and School Bus. Transit Motorbus data is not available.
- (13) Class I Intercity: ABA, personal communication, fuel consumed, multiplied by the conversion factor of distillate fuel oil (138,700 Btu/gallon).
- (14) School Bus: FHWA, *Highway Statistics*, 1982, Table VM-1, multiplied by the conversion factor of motor gasoline (125,000 Btu/gallon).
- (15) Motorbus: Data not available due to changes in UMTA Section 15 reporting procedures from fiscal year basis to calendar year basis.
- (16) Local Transit: *Ibid.*
- (17) Rail: Sum of Passenger and Class I Freight.
- (18) Passenger: Sum of Class I Passenger and Amtrak.
- (19) Class I Rail Passenger: AAR, *Statistics of Railroads of Class I*, Oct. 1983, p. 15, lines 3 and 9, multiplied by the conversion factor of distillate fuel oil (138,700 Btu/gallon), excludes electricity.
- (20) Amtrak: Amtrak Mechanical Department, personal communication

Figure 9. Energy Consumed in Transportation (Converted to 10^{12} Btu), 1982 (Cont.)

- (21) Class I Rail Freight: AAR, *Statistics of Railroads of Class I*, Oct. 1983, p. 15, line 2, multiplied by the conversion factor of distillate fuel oil.
- (22) Air: Sum of Total Certificated and General Aviation.
- (23) General Aviation: FAA, *General Aviation Activity and Avionics Survey*, Dec. 1983, Table 2-21. Figure derived by the addition of jet fuel (kerosene type) and aviation gasoline, converted to Btu by their respective conversion factors.
- (24) Total Domestic Certificated: CAB, *Fuel Cost and Consumption, Twelve Months Ended Dec. 31, 1983 and 1982*. Total Domestic Certificated figure converted into barrels and multiplied by the conversion factor of 5,670,000 Btu/barrel (jet fuel kerosene-type).
- (25) Total Domestic Majors: *Ibid.*
- (26) Total Domestic Nationals: *Ibid.*
- (27) Total Domestic Large Regionals: *Ibid.*
- (28) Total Domestic Medium Regionals: *Ibid.*
- (29) Water: FHWA, *Highway Statistics*, 1982, Table MF-24, multiplied by the conversion factor of motor gasoline, (125,000 Btu/gallon).
- (30) Pipeline: DOE, Energy Information Administration, *1983 Annual Energy Review*, Table 67, p. 149, converted to Btu by thermal conversion factor for natural gas p. 248.
- (31) Total International Certificated: CAB, *Fuel Cost and Consumption, Twelve Months Ended Dec. 31, 1983 and 1982*. Total International figure converted into barrels and multiplied by the conversion factor of 5,670,000 Btu/barrel (jet fuel kerosene-type).
- (32) Total International Majors: *Ibid.*
- (33) Total International Nationals: *Ibid.*
- (34) Total International Large Regionals: *Ibid.*
- (35) Total International Medium Regionals: *Ibid.*
- (36) Water: Not Available.

Figure 25. Price Trend of Regular Grade Gasoline Prices, 1955-1982

1955-1980: American Petroleum Institute, *Basic Petroleum Data Book*, Section VI, Table 4/4A.
1981-1982: DOL, Bureau of Labor Statistics, personal communication.

Figure 26. Average Fuel Efficiency of U.S. Passenger Cars, 1955-1982

MPG: 1955-1982: FHWA, *Highway Statistics*, annual issues, Table VM-1.

Figure 27. Estimated Annual Automobile Gasoline and Oil Costs, Including Taxes, by Size and Years of Operation

1974, 1976: U.S. DOT, FHWA, *Cost of Operating an Automobile*, 1974, 1976.
1979, 1981, 1984: *Ibid.*, *Cost of Owning and Operating Automobiles and Vans*, 1979, 1982, 1984.

Figure 29. Principal Commodities Carried by Water, Calendar Year 1982

1982: Army Corps of Engineers, *Waterborne Commerce of the United States*, Part 5, 1982.

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- (1) American Bus Association, *Bus Facts*, 1982 edition.
- (2) American Gas Association, *Gas Facts*, 1974.
- (3) *Ibid.*, 1982.
- (4) American Public Transit Association, *Transit Fact Book*, 1981.
- (5) American Trucking Association, *Truck Taxes by State*, 30th Annual Edition, March 1982, April 1983 Supplement.
- (6) *Ibid.*, *American Trucking Trends*, 1979-1980.
- (7) American Waterway Operators, *Inland Waterborne Commerce Statistics*, 1972, 1979.
- (8) Assoc. of Amer. Railroads, *Statistics of Railroads of Class I in the U.S.*, Years 1971-1981, December 1982, Years 1972-1982, October 1983.
- (9) *Ibid.*, *Yearbook of Railroad Facts*, 1973 and 1983 editions.
- (10) *Ibid.*, *Operating & Traffic Statistics*, August 1981.
- (11) Association of Oil Pipelines, *Shifts in Petroleum Transportation*, April 6, 1984.
- (12) Civil Aeronautics Board, personal communication.
- (13) *Ibid.*, *Air Carrier Financial Statistics*, December 1982, 1983.
- (14) *Ibid.*, *Air Carrier Traffic Statistics*, December 1983, 1982.
- (15) *Ibid.*, *Handbook of Airline Statistics*, 1973 edition.
- (16) DOE/NEIC, *Sales for Resales* report from computer tape number FE6753, personal communication.
- (17) Interstate Commerce Commission, *87th/88th Annual Report of the ICC*, 1973, 1974.
- (18) *Ibid.*, *95th/96th Annual Report of the ICC*, 1981, 1982.
- (19) *Ibid.*, *97th Annual Report of the ICC*, 1983.
- (20) *Ibid.*, Bureau of Accounts and Statistics, personal communication.
- (21) National Safety Council, *Accident Facts*, 1973, 1982, 1983.

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- (22) National Transportation Safety Board, Information Systems Division, personal communication.
- (23) *Ibid.*, News Release SB 82-4, January 28, 1982; News Release SB 84-3, Jan 12, 1984.
- (24) *Oil and Gas Journal*, November 23, 1981 and November 22, 1982.
- (25) Transportation Association of America, *Transportation Facts and Trends*, 12th edition, 1975.
- (26) *Ibid.*, 17th edition, December 1981.
- (27) Transportation Policy Associates, *Transportation In America*, March 1984, 2nd Edition.
- (28) U.S. Army Corps of Engineers, *Waterborne Commerce of the United States*, Part 5, Calendar Year 1981.
- (29) *Ibid.*, Calendar Year 1982.
- (30) U.S. Coast Guard, *Boating Statistics*, 1972.
- (31) *Ibid.*, 1981, 1982.
- (32) *Ibid.*, *Proceedings of the Marine Safety Council*, January 1973.
- (33) U.S. Department of Commerce, Bureau of Economic Analysis, *National Income and Product Accounts of the U.S.*, 1929-1979 Statistics.
- (34) *Ibid.*, *Survey of Current Business*, July 1982, July 1983.
- (35) *Ibid.*, *Fisheries of the U.S.*, 1974, 1980, April 1981, 1982.
- (36) *Ibid.*, Bureau of the Census, *Statistical Abstract of the United States*, 1977, 98th edition; 1978, 99th edition, 1981, 102nd edition, 1982-83, 103rd edition.
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- (38) *Ibid.*, *Energy Data Reports*, Petroleum Statement, Annual, 1980.
- (39) *Ibid.*, *Statistics of Interstate Natural Gas Pipeline Companies*, October 1981, 1982, 1983.
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- (41) U.S. Department of Labor, Bureau of Statistics, *Employment and Earnings*, 1909-1978 Bulletin 1312-11, July 1979.
- (42) *Ibid.*, *Supplement to Employment and Earnings, Revised Establishment Data*, July 1983.

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- (43) U.S. Department of Transportation, Federal Aviation Administration, *FAA Statistical Handbook of Aviation*, 1973 edition.
- (44) *Ibid.*, Office of Management Systems, *General Aviation Activity and Avionics Survey, Annual Summary Reports*, December 1982 and December 1983.
- (45) *Ibid.*, Federal Highway Administration, *Highway Statistics*, 1972, 1981, 1982.
- (46) *Ibid.*, *Highway Statistics Summary to 1975*, October 1977.
- (47) *Ibid.*, News Release, Table HF-11.
- (48) *Ibid.*, Federal Highway Administration, Bureau of Motor Carrier Safety, *Accidents of Motor Carriers of Property*, 1982.
- (49) *Ibid.*, Federal Railroad Administration, Office of Standards and Procedures, personal communication.
- (50) *Ibid.*, Maritime Administration, Merchant Fleet of the World, Jan. 1983, Office of Maritime Labor and Training (MAR-250), personal communication.
- (51) *Ibid.*, NHTSA/FHWA, *Highway Safety*, 1979, 1980.
- (52) *Ibid.*, NHTSA/NRD30, National Center for Statistics and Analysis, Mathematical Analysis Division, *Fatal Accident Reporting System (FARS)*, 1981 report or personal communication.
- (53) *Ibid.*, Transportation Systems Center (DTS-32), *Transportation Safety Information Report*, 1982 Annual Summary, June 1983, and 1983 Annual Summary, April 1984.
- (54) U.S. Army, Corp of Engineers, *Summary of U.S. Passenger Flag Vessels*, Annual Issues.
- (55) DOT/TSC *U.S. International Air Travel Statistics*, annual issues.
- (56) NTSB, Safety Studies and Analysis Division (annual news releases).
- (57) American Petroleum Institute, *Basic Petroleum Data Book*, Volume 3, Number 1, January 1983.
- (58) National Railroad Passenger Corporation, Amtrak, personal communication, Marketing and Mechanical Departments.
- (59) Urban Mass Transportation Administration, *National Urban Mass Transportation Statistics, 1981 Section 15 Report*, Nov. 1982.
- (60) *Ibid.*, *National Urban Mass Transportation Statistics, Section 15 Reporting System*, June 1982.

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- (61) *Ibid.*, National Urban Mass Transportation Statistics, 1982 Section 15 Report, Nov. 1983.
- (62) Motor Vehicle Manufacturers Association, *MVMA Motor Vehicle Facts & Figures*, 1983.
- (63) Federal Energy Regulatory Commission (FERC), personal communication.
- (64) U.S. Coast Guard, Marine Investigation Division, G-MM1.

TABLE REFERENCES

Table 1. Average Passenger Revenue Per Passenger Mile, 1972-1982

Certificated Air Carrier, Domestic Operations, Scheduled Service:

- 1972: CAB, *Handbook of Airline Statistics*, 1973, p. 81, 85, and 88.
 1973-1981: CAB, *Air Carrier Financial Statistics*, Dec. 1974, 1976, 1978, 1980, 1981, 1982, p. 2, lines 1, 2, 3; *Air Carrier Traffic Statistics*, 1974-1982 December issues, p. 4/5, lines 7, 8, 9. Passenger revenue (*Financial Statistics*, p. 2) divided by revenue passenger-miles (*Traffic Statistics*, p. 4/5), gives average passenger revenue per passenger mile for First Class, Coach and Total, i.e., line 1 divided by line 7, line 2 divided by line 8, and line 3 divided by line 9.
 1982: *Ibid.*, CAB, *Air Carrier Financial Statistics*, Dec. 1983, p. 1, line 1, 2 and 3 and *Air Carrier Traffic Statistics*, p. 2, lines 7, 8 and 9.

Class I Rail:

- 1972-1979: AAR, *Statistics of Railroads of Class I*, Nov. 1980, p. 8, lines 2, 3, 4 and p. 18, lines 12, 13, 14. All Class I average passenger revenue per passenger mile data was calculated by dividing passenger revenue by passenger miles and subtracting Amtrak and Auto-Train passenger revenue and revenue passenger mile data. As of 1978, Auto-Train is no longer Class I.
 1980-1982: TPA, personal communication, letter dated April 16, 1984.

Amtrak:

- 1972-1979: AAR, *Statistics of Railroads of Class I*, Dec. 1982, p. 17, passenger revenue (Acct. 102) divided by passenger mile data, abstracted from Transportation Policy Associates, *Transportation in America*, Mar, 1983, p. 14.
 1980-1982: TPA, personal communication, letter dated April 16, 1984.

Class I Intercity Bus:

- 1972-1979: ABA, *Bus Facts*, 1981, p. 12.
 1981-1982: *Ibid.*, 1982, p. 7.
 1982: ABA, personal communication.

Consumer Price Index:

- 1972-1980: U.S. Department of Commerce, BEA, *Survey of Current Business*, July issues, p. S-6.
 1981-1982: *Ibid.*, July issues, p. S-5.

Table 2. Average Freight Revenue Per Ton-Mile, 1972-1982

Certificated Air Carrier, Domestic Operations, Scheduled Service:

- 1972: CAB, *Handbook of Airline Statistics*, 1973, p. 93.
 1973-1980: CAB, *Air Carrier Financial Statistics*, Dec. 1974, 1976, 1978, 1980, 1981, 1982, p. 2, line 4; *Air Carrier Traffic Statistics*, 1974-1980 December issues, p. 4/5, line 18. Freight revenue (*Financial Statistics*) divided by revenue ton-miles of freight (*Traffic Statistics*).
 1981-1982: CAB *Air Carrier Financial Statistics* Dec. 1982, Dec. 1983, p. 1, Freight revenue; *Air Carrier Traffic Statistics*, p. 2, line 18, divided by revenue ton-miles.

Class I Rail:

- 1972-1974: ICC, *Transport Economics*, Vol. III, No. 2, 1976, p. 14.

Table 2. Average Freight Revenue Per Ton-Mile, 1972-1982 (Cont.)

- 1975-1976: *Ibid.*, Vol. V, No. 1, 1978, p. 11.
1977-1980: AAR, *Operating and Traffic Statistics*, Aug. 1981.
1981-1982: Transportation Policy Associates, *Transportation in America*, Mar. 84, p. 11.

Class I Intercity Motor Carriers, Common and Contract:

- 1972-1982: TPA, personal communication, letter dated May 22, 1984.

Oil Pipelines:

- 1972-1974: ICC, *Transport Economics*, Vol. III, No. 2, 1976, p. 4.
1975-1976: *Ibid.*, Vol. V, No. 1, 1978, p. 11.
1977-1980: TAA, *Transportation Facts and Trends*, Dec. 1981, p. 8.
1981: TPA, *Transportation in America*, Mar. 1983, p. 11.

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

- 1972-1974: ICC, *Transport Economics*, Vol. III, No. 2, 1976, p. 4.
1975-1976: *Ibid.*, Vol. V, No. 1, 1978, p. 11.
1977-1979: Interstate Commerce Commission, Office of Policy and Analysis, personal communication.
1980-1981: Not available per ICC.

Table 3. Average Passenger Fare, 1972-1982

Producer Price Index:

- 1972-1980: TAA, *Transportation Facts and Trends*, Dec. 1981, p. 8.
1981: TPA, *Transportation In America*, Mar. 1983, p. 19.

Certificated Air Carrier, Domestic Operations, Scheduled service:

- 1972: CAB, *Handbook of Airline Statistics*, 1973. Total passenger revenues (p. 216, line 3) divided by revenue passenger enplanements (p. 106, line 20).
1973-1981: CAB, *Air Carrier Financial Statistics*, Dec. 1974, 1976, 1978, 1980, 1981, 1982, p. 2, line 3.
1974-1981: CAB, *Air Carrier Traffic Statistics*, December issues, p. 2, 4, 5, line 16. Total passenger revenue (Financial Statistics) divided by revenue passenger enplanements (Traffic Statistics).
1982: *Ibid.*, *Air Carrier Financial Statistics*, Dec. 1983, p. 1, line 3 and *Air Carrier Traffic Statistics*, Dec. 1983, p. 2, line 16.

Class I Bus, Intercity:

- 1972-1979: ABA, *Bus Facts*, 1981, p. 12.
1980-1981: *Ibid.*, 1982, p. 7.
1982: ABA, personal communication.

Local Transit:

- 1972-1979: APTA, *Transit Fact Book*, 1981 edition, Table 14, p. 60.
1980-1982: TPA, personal communication, letter dated May 4, 1984.

Class I Rail:

- 1972-1979: AAR, *Statistics of Railroads of Class I*, Nov. 1980, p. 8, lines 19 and 20 and p. 18. The average passenger fare was calculated by dividing passenger revenue by revenue passengers carried, and subtracting Amtrak and Auto-Train passenger revenue and revenue passengers carried data. As of 1978 Auto-Train is no longer Class I.

Table 3. Average Passenger Fare, 1972-1982 (Cont.)

1980: AAR, *Operating & Traffic Statistics*, Aug. 1981, p. 7/8.
1981-1982: Not available.

Amtrak:

1972-1979: AAR, *Statistics of Railroads of Class I*, Nov. 1980, p. 18. The average passenger fare was calculated by dividing passenger revenue by revenue passengers carried.
1980: AAR, *Operating & Traffic Statistics*, Aug. 1981, p. 7/8.
1981-1982: Amtrak, Marketing Department, personal communication. Data varies from 1981 to 1982 due to changes in accounting methods. In 1981, unknown was considered part of commutation services and in 1982 unknown was considered part of non-commutation services.

Table 4. Total Operating Revenues, 1972-1982

Certificated Air Carriers:

1972: 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).
1973-1979: CAB, *Air Carrier Financial Statistics*, 1974-1980 December issues, p. 1, line 19.
1980-1982: *Ibid.*, Dec. 81, Dec. 1982 and 1983, p. 1.

Intercity Bus, Class I:

1972-1980: ABA, *Bus Facts*, 1982, p. 5.
1981-1982: ABA, personal communication.

Local Transit:

1972-1977: Not available.
1978-1981: UMTA, Section 15 Reports, May 1981, June 1982, Nov. 1982, Table 001.02.2 and Nov. 1983, Table 002.02.
1982z: Not available due to changes in Section 15 reporting procedures from fiscal year basis to calendar year basis.

Oil Pipeline, ICC Regulated only:

1972-1976: TAA, *Transportation Facts and Trends*, 1978 edition, p. 4.
1977-1979: *Ibid.*, Dec. 1981, p. 2.
1980-1982: TPA, *Transportation In America*, Mar. 1984, p. 4.

Gas Pipeline:

1972-1982: Transmission Companies: American Gas Association, *Gas Facts*, annual issues, table titled "Composite Income Accounts Investor-Owned Gas Utility Industry Transmission Companies."
1972-1982: Distribution Companies: *Ibid.*, Annual issues, table titled "Composite Income Accounts Investor-Owned Gas Utility Industry Distribution Companies."

Class I Intercity Motor Carriers of Property:

1972-1979: ICC, *95th Annual Report of the ICC*, 1981, Table 8 and equivalent tables in earlier editions.
1980-1982: *Ibid.*, *97th Annual Report of the ICC*, 1983, Appendix E, Table 6, total operating revenues.

Class I Rail:

1972-1982: AAR, *Statistics of Railroads Class I*, Oct. 1983, table titled "Distribution of Railway Operating Revenues," line 1. (1979-1982 Figures exclude Rock Island Railroad).

Table 4. Total Operating Revenues, 1972-1982 (Cont.)

Amtrak:

1972-1982: *Ibid.*, table titled "Statistics of The National Railroad Passenger Corporation (Amtrak)," p.16.

Water Transport:

Classes A and B Carriers, Inland and Coastal Waterways:

1972-1979: ICC, *94th Annual Report of the ICC*, 1980, Table 10 and equivalent tables in earlier editions.

1980-1982: Not available.

Maritime Carriers:

1972-1979: *Ibid.*, Table 11 and equivalent tables in earlier editions.

1980-1982: Not available.

Class A Freight Forwarders:

1972-1979: *Ibid.*, Table 12 and equivalent tables in earlier editions.

1980-1982: TPA, *Transportation In America*, Mar. 1984, p. 4.

Table 5. Vehicle-Miles, 1972-1982

Air Carriers:

Certificated Domestic Operations, All services:

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

1973-1978: CAB, *Air Carrier Traffic Statistics*, p. 4; 1974-1979 December issues, line (27) plus line (50).

1979: *Ibid.*, p.5, Dec. 1980. line (27) plus line (50).

1980-1982: *Ibid.*, p. 2, 1981, 1982 and 1983 December issues, line (27) plus line (50).

Total Majors, domestic operations:

1972-1979: Not available.

1980-1982: CAB, *Air carrier Traffic Statistics*, Dec.1983, p. 5, line (27) and line (50) similar table in earlier editions.

Total Nationals, domestic operations:

1972-1979: Not available.

1980-1982: *Ibid.*, p.47.

Total Large Regionals, domestic operations:

1972-1979: Not available.

1980-1982: *Ibid.*, p.83.

Total Medium Regionals, domestic and international operations:

1972-1979: Not available.

1980-1982: *Ibid.*, p.113.

General Aviation:

1972-1980: National Transportation Safety Board, Information Systems Division (SP-10), *News Release SB 81-1*, Jan. 13, 1981, Table 13.

1981: Data no longer available from NTSB (SP-10).

Table 5. Vehicle-Miles, 1972-1982 (Cont.)

Highway:

Passenger Car and Taxi:

1972-1982: FHWA, *Highway Statistics*, 1982, Table VM-1 and equivalent tables in earlier editions.

Truck:

1972-1982: *Ibid.*

Intercity Bus:

1972-1980: ABA, *Bus Facts*, 1981, p. 3.

1981: *Ibid.*, 1982, p. 6.

1982: ABA, personal communication.

School Bus:

1972-1982: FHWA, *Highway Statistics*, 1982, Table VM-1, annual issues.

Local Transit:

1972-1977: Not available.

1978-1981: UMTA, Section Reports, May 1981, June 1982, Nov. 1982, Table 001.15.1 and Nov. 1983, Table 002.15.1. These figures are revenue vehicle miles.

Class I Rail:

Passenger Train:

1972-1982: AAR, *Statistics of Railroads of Class I*, Oct., 1983, p. 11, line 15.

Freight Train:

1972-1982: *Ibid.*, p. 11, line 12.

Amtrak:

1972-1982: *Ibid.*, p. 17.

Table 6. Passenger-Miles, 1972-1982

Air Carrier:

Certificated:

1972: CAB, *Handbook of Airline Statistics*, 1973, p. 106. Sum of total domestic passenger miles in scheduled service (line 11) and non-scheduled service (line 47).

1973-1979: CAB, *Air Carrier Traffic Statistics*, 1974-1980, December issues, p. 4/5. Sum of lines 9 and 41.

1980-1982: *Ibid.*, 1981-1982, December issues, p. 2, line 1.

Total Majors, domestic operations:

1972-1979: Not available.

1980-1982: *Ibid.*, Dec. 1983 p. 5, line 1. Similar table in earlier editions.

Total Nationals, domestic operations:

1972-1979: Not available.

1980-1982: *Ibid.*, p. 47, line 1.

Total Large Regionals, domestic operations:

1972-1979: Not available.

1980-1982: *Ibid.*, p. 83.

Table 6. Passenger-Miles, 1972-1982 (Cont.)

Total Medium Regionals, domestic and international operations.

1972-1979: Not available.

1980-1982: *Ibid.*, p. 113.

General Aviation:

1972-1982: TPA, *Transportation In America*, Mar. 1984, p. 8.

Highway:

Passenger Car and Taxi:

1972-1982: FHWA, *Highway Statistics*, 1982, Table VM-1 and equivalent tables in earlier editions. Vehicle-miles multiplied by a constant average occupancy of 2.3.

Intercity Bus:

1972-1980: ABA, *Bus Facts*, 1982, p. 2.

1981-1982: ABA, personal communication.

Class I Rail:

Commutation and Other Than Commutation:

1972-1979: AAR, *Statistics of Railroads of Class I*, p. 8 and p. 18. Amtrak and Auto-Train data (p. 18) subtracted from Class I data (p. 8).

1980: AAR, *Operating & Traffic Statistics*, Aug. 1981, p. 8.

1981-1982: TPA, personal communication, letter dated April 16, 1984.

Amtrak:

Commutation and Other Than Commutation:

1972-1979: AAR, *Statistics of Railroads of Class I*, Nov. 1980, p. 18.

1980: AAR, *Operating & Traffic Statistics*, Aug. 1981, p. 8.

1981-1982: Amtrak, personal communication, Marketing Department.

Domestic Water:

1972-1976: TAA, *Transportation Facts and Trends*, July 1977, p. 18.

1977-1982: Not available.

Table 7. Cargo Ton-Miles, 1972-1982

Air Carrier:

Certificated:

1972: 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).

1973-1979: CAB, *Air Carrier Traffic Statistics*, 1974-1980, December issues, p. 4/5, line 3.

1980-1982: *Ibid.*, 1981-1983 December issues, p. 2, line 3.

Oil Pipeline:

1972-1982: TPA, *Transportation In America*, Mar. 1984, p. 6.

Class I Rail:

1972-1982: AAR, *Statistics of Railroads of Class I*, Oct. 1983, p. 6, line 50.

Motor Vehicles:

1972-1982: TPA, *Transportation In America*, Mar. 1984, p. 6.

Table 7. Cargo Ton-Miles, 1972-1982 (Cont.)

Water Transport:

Inland Waterways, including Great Lakes:

1972-1982: U.S. Army Corps of Engineers, *Waterborne Commerce of the U.S.*, Calendar year 1982, Part 5, Sect. 1, Table 6 and equivalent tables in earlier editions.

Total Domestic Waterways:

1972-1980: *Ibid.*, Calendar year 1980, Part 5, p. 91, Table III.

1981: *Ibid.*, Part 5, Calendar year 1981, Section III, Table 1, p. 89.

1982: *Ibid.*, Part 5, Calendar year 1982, Section III, Table 2.

Table 8. Basic Intercity Mileage Within the Continental United States, 1972-1982

Railroads, All Line Haul:

1972-1980: AAR, *Yearbook of Railroad Facts*, 1982 edition, p. 43. 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.

1981: *Ibid.*, 1983 edition, p. 42.

1982: *Ibid.*, personal communication.

Oil Pipelines:

Total:

1972-1982: TPA, personal communication, letter dated May 4, 1984.

Crude Lines and Products Lines:

1972-1976: DOE, *Energy Data Reports*, Crude Oil and Product Pipelines, Triennial, Jan. 1, 1977, Table 1.

1977-1982: Not available.

Gas Pipelines:

Total Pipelines; Distribution Mains, Transmission Pipelines, and Field and Gathering Lines.

1972-1982: AGA, *Gas Facts*, 1982, table titled "Gas Utility Industry Miles of Pipeline and Main."

Inland Waterways:

1972-1979: American Waterways Operators, *Inland Waterborne Commerce Statistics*, 1979, and previous years, p. 1, 2.

1980-1982: U.S. Army Corps of Engineers, personal communication.

Highways:

1972-1975: FHWA, *Highway Statistics*, Summary to 1975, Table FM-210.

1976-1979: *Ibid.*, Annual issues, Table FM-1/FM-2.

1980-1982: *Ibid.*, Annual issues, Table HM-14.

Airways:

1972: FAA, *FAA Statistical Handbook of Aviation*, 1981, Table 2.1. Mileage equals sum of VHF low altitude direct and VHF jet route mileages multiplied by 1.151 to convert from nautical miles.

1973-1982: *Ibid.*, 1982 edition.

Table 9. Number of Vehicles, 1972-1982

Air Carrier:

- 1972: CAB, *Handbook of Airline Statistics*, 1973, Part VII, Table 7a and similar tables in earlier editions or by special communication from CAB.
- 1973: AB, Statistical Data Division, personal communication.
- 1974: CAB, Supplement to *Handbook of Airline Statistics*, Dec. 1975, p. 126.
- 1975: CAB, Bureau of Accounts and Statistics: Special communication based on CAB Form 41, Schedule T-2.
- 1976: CAB, Supplement to *Handbook of Airline Statistics*, Dec. 1977, Part VII, Table 7A.
- 1977-1982: CAB, Bureau of Carrier Accounts and Audits: Special communication based on CAB Form 41, Schedules B-7, B-8, and B-43.

General Aviation:

- 1972-1977: FAA, *FAA Statistical Handbook of Aviation*, 1978, Table 8.3 and equivalent tables in earlier editions.
- 1978-1982: FAA, *General Aviation Activity and Avionics Survey*, Mar. 1980, Jan. 1981, Dec. 1981, Dec. 1982, and Dec. 1983, Table 2-6.

Motorcycle:

- 1972-1982: FHWA, *Highway Statistics*, 1982, Table VM-1 and same table in earlier editions.

Passenger Car and Taxi:

- 1972-1982: *Ibid.*

Intercity Bus:

- 1972-1980: ABA, *Bus Facts*, 1982, p. 2.
- 1981-1982: ABA, personal communication.

Local Transit:

- 1972-1980: APTA, *Transit Fact Book*, 1981 edition, Table 15.
- 1981: *Ibid.*, 1982/1983 edition, Table 13.
- 1982: *Ibid.*, personal communication, letter dated Feb. 3, 1984.

Class I Rail:

Freight Cars:

- 1972-1982: AAR, *Statistics of Railroads of Class I*, Oct. 1983, p. 9.

Locomotives:

- 1972-1982: *Ibid.*, Oct. 1983, p. 8, line 5.

Passenger Cars and Pullman:

- 1972-1982: *Ibid.*, Oct. 1983, p. 10, line 8, minus Amtrak and Auto-Train data, p. 17.

Amtrak:

Passenger Cars and Pullman and Locomotives:

- 1972-1982: *Ibid.*, p. 17.

Truck:

- 1972-1982: FHWA, *Highway Statistics*, 1982, Table VM-1, and similar table in earlier editions.

Table 9. Number of Vehicles, 1972-1982 (Cont.)

Water Transport:

Total Inland Water Vessels:

1972-1982: Sum of Non-self-propelled Vessels and Self-propelled Vessels.

Non-self propelled vessels and Self-propelled vessels:

1972-1976: U.S. Army Corps. of Engineers, *Summary of U.S. Passenger Flag Vessels*, Annual issues. Data as of Jan. 1, 1972, 1973, 1974, 1975 and 1976, respectively.

1977-1979: *Ibid.*, Data as of Oct. 1, 1977, 1978 and 1979 respectively.

1980: *Ibid.*, Data as of Dec. 31, 1980.

1981: *Ibid.*, Data as of May 1, 1982.

1982: Not available due to changes in collection methods.

Oceangoing Steam and Motor Ships:

1972-1974: *Ibid.*, *Commerce News, Merchant Marine Data Sheet*, 1972-1974.

1975: *Ibid.*, *Merchant Fleets of the World*, Dec. 1976, p. 6.

1976: *Ibid.*, *Merchant Fleets of the World*, Dec. 1977, p. 2.

1977-1978: *Ibid.*, *Merchant Fleets of the World*, Jan. 1979, Oct. 1980, p. 7.

1979: *Ibid.*, *A Statistical Analysis of the World's Merchant Fleets*, June 1981.

1980: *Ibid.*, *Merchant Fleets of the World*, Dec. 1981, p. 2.

1981: U.S. D.O.T. Maritime Administration, personal communication, MAR-371.

1982: *Ibid.*, *Merchant Fleet of the World*, Jan. 1983, p. 4.

Table 10. Number of New Vehicles Purchased, By Mode, 1972-1982

Air Carrier:

1972-1982: Aerospace Industries Association, *1983 Aerospace Year-End Review and Forecast*, Table V, Number of Commercial Transport Aircraft Shipped in the U.S.

General Aviation:

1972-1978: FAA, *Statistical Handbook of Aviation*, Calendar year 1978, Table 9-2.

1979-1982: General Aviation Manufacturers Association, personal communication, data includes shipments of aircraft only.

Passenger Car and Taxi:

1972-1980: DOC, Bureau of Economic Analysis, *Survey of Current Business*, July issues, p. S-36/S-40.

1981-1982: *Ibid.*, July issues, p. S-32.

Motorcycle:

1972-1982: Motorcycle Industry Council, Inc. *1983 Motorcycle Statistical Annual*, p. 12.

Mopeds:

1974-1982: *Ibid.*

Bicycle:

1972-1981: Bicycle Mfg. Assoc. of America, personal communication.

1982: *Ibid.*, *The 1983 Bicycle Market in Review*, p. 2.

Truck:

1972-1980: DOC, Bureau of Economic Analysis, *Survey of Current Business*, July issues, p. S-36/S-40.

1981-1982: *Ibid.*, July issue, p. S-32. Total of light, medium, and heavy duty.

Table 10. Number of New Vehicles Purchased, By Mode, 1972-1982 (Cont.)

Intercity Bus (Class I):

- 1972-1980: ABA, personal communication.
- 1981-1982: *Ibid.*, Data includes all carriers--not just Class I.

Local Transit (New Passenger Vehicles Delivered):

- 1972-1980: APTA, *Transit Fact Book*, 1981 edition, Table 16.
- 1981: *Ibid.*, 1982/1983 edition, Table 14.
- 1982: *Ibid.*, personal communication.

Class I Rail:

Freight Cars:

- 1972-1982: AAR, *Statistics of Railroads of Class I*, Oct. 1983, p. 9.

Locomotives:

- 1972-1982: *Ibid.*, p. 8, line 19.

Passenger Cars and Pullman:

- 1972-1982: *Ibid.*, p. 10, line 10.

Amtrak:

- 1972-1982: *Ibid.*, p. 17.

Water: Merchant Vessels and Gross Tonnage:

- 1972-1977: DOC, *Merchants Fleets of the World*, 1977, p. 18; 1976, p. 44; 1975, p. 31; 1974, p. 19; 1973, p. 13; 1972, p. 13; 1971, p. 13; 1970, p. 12.
- 1978-1981: DOT, Maritime Administration, personal communication, MAR-573.
- 1982: *Ibid.*, *Merchant Fleets of the World*, Jan. 1983, p. 27, total of Freighters, Bulk Carriers and Tankers.

Table 11. Number of Fatalities by Mode, 1972-1983

Motor Vehicle Traffic:

- 1972: DOT/TSC, *Transportation Safety Information Report*, 1982 Annual Summary, Table 2, p. 8.
- 1973-1983: *Ibid.*, 1983 Annual Summary, Chart 7, p. 12.

Motor Carriers of Property:

- 1972-1973: DOT/FHWA, Bureau of Motor Carrier Safety, HMC-12.
- 1974-1975: DOT/TSC, *Transportation Safety Information Report*, 1980 Annual Summary, Table 5, p. 9.
- 1976-1982: *Ibid.*, 1982 Annual Summary, Table 5, p. 15.

Motor Carriers of Passengers:

- 1972-1973: DOT/FHWA, Bureau of Motor Carrier Safety, HMC-12.
- 1974-1975: DOT/TSC, *Transportation Safety Information Report*, 1980 Annual Summary.
- 1976-1982: *Ibid.*, 1982 Annual Summary, Table 5, p. 15.

Rail-Highway Grade Crossing:

- 1972: DOT/TSC, *Transportation Safety Information Report*, 1982 Annual Summary, Chart 8, p. 31.
- 1973-1983: *Ibid.*, 1983 Annual Summary, Chart 9, p. 28.

Table 11. Number of Fatalities by Mode, 1972-1983

Rail:	
1972:	DOT/TSC, <i>Transportation Safety Information Report</i> , 1982 Annual Summary, Chart 8, p. 31.
1973-1983:	<i>Ibid.</i> , 1983 Annual Summary, Chart 8, p. 31.
Rail Rapid Transit:	
1972-1976:	Not available.
1977:	DOT/TSC, <i>Transportation Safety Information Report</i> , 1978 Annual Summary, Chart 15, p. 36.
1978:	<i>Ibid.</i> , 1979 Annual Summary, Charts 15, 16, and 17, p. 32-33.
1979:	<i>Ibid.</i> , 1980 Annual Summary, p. 26.
1980:	<i>Ibid.</i> , 1981 Annual Summary, Tables 11, 12 and 13, p. 31-32.
1982-1983:	<i>Ibid.</i> , 1983 Annual Summary, Tables 7 and 8, p. 37-38.
U.S. Air Carriers:	
1972:	DOT/TSC, <i>Transportation Safety Information Report</i> , 1982 Annual Summary, Chart 15, p. 46.
1973-1983:	<i>Ibid.</i> , 1983 Annual Summary, Chart 16, p. 42.
Commuter Air Carriers:	
1972-1974:	Not available.
1975-1983:	DOT/TSC, <i>Transportation Safety Information Report</i> , 1983 Annual Summary, Table 9, p. 50.
On-Demand Air Taxi:	
1972-1974:	Not available.
1975-1983:	DOT/TSC, <i>Transportation Safety Information Report</i> , 1983 Annual Summary, Table 9, p. 50.
U.S. General Aviation:	
1972:	NTSB, SP-10, personal communication.
1973-1983:	<i>Ibid.</i> , 1983 Annual Summary, Chart 26, p. 51.
Waterborne Transportation:	
1972:	Not available.
1973-1983:	DOT/TSC, <i>Transportation Safety Information Report</i> , 1983 Annual Summary, Chart 32, p. 60.
Recreational Boating:	
1972:	DOT/TSC, <i>Transportation Safety Information Report</i> , 1982 Annual Summary, Chart 32, p. 69.
1973-1983:	<i>Ibid.</i> , 1983 Annual Summary, Chart 38, p. 68.
Liquid Pipeline:	
1972:	DOT/TSC, <i>Transportation Safety Information Report</i> , 1982 Annual Summary, Chart 38B, p. 77.
1973-1983:	<i>Ibid.</i> , 1983 Annual Summary, Chart 43B, p. 77.
Gas Pipeline:	
1972:	DOT/TSC, <i>Transportation Safety Information Report</i> , 1982 Annual Summary, Chart 38B, p. 77.
1973-1983:	<i>Ibid.</i> , 1983 Annual Summary, Chart 43B, p. 77.

Table 11 Number of Fatalities by Mode, 1972-1983 (cont.)

Hazardous Materials:

- 1972: DOT/TSC, *Transportation Safety Information Report*, 1982 Annual Summary, Chart 39B, p. 78.
1973-1983: *Ibid.*, 1983 Annual Summary, Chart 44B, p. 78.

Table 18. Personal Consumption Expenditures by Transportation Sector, 1972-1982

- 1972-1976: U.S. Department of Commerce, Bureau of Economic Analysis, *National Income and Product Accounts of the U.S.*, 1929-1976 Statistics, Table 2.4, lines 63-81.
1977-1979: *Ibid.*, *Survey of Current Business*, July 1982, Table 2.4, lines 63-81. (excluding line 67)
1980-1982: *Ibid.*, July 1983, Table 2.4, lines 63-81. (excluding line 67).

Table 19. Personal Consumption Expenditures by Type of Product, 1972-1982

- 1972-1976: U.S. Department of Commerce, Bureau of Economic Analysis, *National Income and Product Accounts of the U.S.*, 1929-1976 Statistics, Table 2.4, lines 2, 11, 20, 23, 28, 44, 55, 63, 82, 98, 102, and 104.
1977-1979: *Ibid.*, *Survey of Current Business*, July 1982, Table 2.4.
1980-1982: *Ibid.*, July 1983, Table 2.4.

Table 20. National Income by Transportation Sector, 1972-1982

- 1972-1976: U.S. Department of Commerce, Bureau of Economic Analysis, *National Income and Product Tables*, 1972-1976, Table 6.3B, lines 38-45.
1977-1979: *Ibid.*, *Survey of Current Business*, July 1982, Table 6.3B, lines 38-45.
1980-1982: *Ibid.*, July 1983, Table 6.3B, lines 38-45.

Table 21. Average Annual Earnings Per Full-Time Employee by Transportation Sector, 1972-1982

- 1972-1976: U.S. Department of Commerce, Bureau of Economic Analysis, *National Income and Product Accounts*, 1926-1976, Table 6.9B, lines 38-45.
1977-1979: *Ibid.*, *Survey of Current Business*, July 1982, Table 6.9B, lines 38-45.
1980-1982: *Ibid.*, July 1983, Table 6.9B, lines 38-45.

Table 22. Wages and Salaries by Transportation Sector, 1972-1982

- 1972-1976: U.S. Department of Commerce, Bureau of Economic Analysis, *National Income and Product Accounts*, 1929-1976, Table 6.6B, lines 38-45.
1977-1979: *Ibid.*, *Survey of Current Business*, July 1982, Table 6.6B, lines 38-45.
1980-1982: *Ibid.*, July 1983, Table 6.6B, lines 38-45.

Table 23. Employment in Transportation and Related Industries, 1972-1982

Transport Sector:

Air:

- 1972-1976: U.S. Department of Labor, Bureau of Labor Statistics, *Employment and Earnings, United States, 1909-78*, SIC 45, p. 717.

Table 23. Employment in Transportation and Related Industries, 1972-1982 (Cont.)

1977-1982: *Ibid.*, *Supplement to Employment and Earnings, Revised Establishment Data*, July 1983, SIC 45.

Bus:

1972-1976: *Ibid.*, *Employment and Earnings, United States, 1909-78*, SIC 413, p. 712.

1977-1981: *Ibid.*, *Supplement to Employment and Earnings, Revised Establishment Data*, July 1983, SIC 413, p. 218.

Local Transport:

1972-1976: *Ibid.*, *Employment and Earnings, United States, 1909-1978*, Section B-2, SIC 411, p. 711.

1977-1982: *Ibid.*, *Supplement to Employment and Earnings, Revised Establishment Data*, July 1983, SIC 411, p. 217.

Railroad:

1972-1976: *Ibid.*, *Employment and Earnings, United States, 1909-78*, SIC 40, p. 708.

1977-1982: *Ibid.*, *Supplement to Employment and Earnings, Revised Establishment Data*, July 1983, SIC 40, p. 216.

Oil Pipeline:

1972-1976: *Ibid.*, *Employment and Earnings, United States, 1909-78*, SIC 46, p. 718.

1977-1982: *Ibid.*, *Supplement to Employment and Earnings, Revised Establishment Data*, July 1983, SIC 46, p. 221. ICC regulated companies employ approximately 85% of the total.

Gas Pipeline:

1972-1982: American Gas Association, *Gas Facts*, 1982 edition, table titled, "Gas Utility Industry Employees and payroll by type of payroll and type of company," p. 190, and similar table in earlier editions.

Taxi:

1972-1976: *Ibid.*, *Employment and Earnings, United States, 1909-78*, SIC 412, p. 711.

1977-1982: *Ibid.*, *Supplement to Employment and Earnings, Revised Establishment Data*, July 1983, SIC 412, p. 218.

Trucking and Terminals:

1972-1976: *Ibid.*, *Employment and Earnings, United States, 1909-78*, SIC 421, 3, p. 714.

1977-1982: *Ibid.*, *Supplement to Employment and Earnings, Revised Establishment Data*, July 1983, SIC 421, 3, p. 219.

Public Warehousing:

1972-1976: *Ibid.*, *Employment and Earnings, United States, 1909-78*, SIC 422, p. 715.

1977-1982: *Ibid.*, *Supplement to Employment and Earnings, Revised Establishment Data*, July 1983, SIC 422, p. 220.

Water:

1972-1976: *Ibid.*, *Employment and Earnings, United States, 1909-78*, SIC 44, p. 717.

1977-1982: *Ibid.*, *Supplement to Employment and Earnings, Revised Establishment Data*, July 1983, SIC 44, p. 220.

Transportation Services:

1972-1976: *Ibid.*, *Employment and Earnings, United States, 1909-78*, SIC 47, p. 719.

Table 23. Employment in Transportation and Related Industries, 1972-1982 (Cont.)

1977-1982: *Ibid.*, *Supplement to Employment and Earnings, Revised Establishment Data*, July 1983, SIC 47, p. 221.

Equipment Manufacturing:

Aircraft and Parts:

1972-1976: *Ibid.*, *Employment and Earnings, United States*, 1909-78, SIC 372, p. 363.

1977-1982: *Ibid.*, *Supplement to Employment and Earnings, Revised Establishment Data*, July 1983, SIC 372, p. 91.

Motor Vehicles and Equipment:

1972-1976: *Ibid.*, *Employment and Earnings, United States*, 1909-78, SIC 301, 371. Sum of motor vehicles and equipment and tires.

1977-1982: *Ibid.*, *Supplement to Employment and Earnings, Revised Establishment Data*, July 1983, SIC 301, p. 207 and 371, p. 110. Sum of motor vehicles and equipment and tires.

Railroad Equipment:

1972-1976: *Ibid.*, *Employment and Earnings, United States*, 1909-78, SIC 374, p. 381.

1977-1982: *Ibid.*, *Supplement to Employment and Earnings, Revised Establishment Data*, July 1983, SIC 374, p. 117.

Ships and Boat Building and Repair:

1972-1976: *Ibid.*, *Employment and Earnings, United States*, 1909-78, SIC 373, p. 372.

1977-1982: *Ibid.*, *Supplement to Employment and Earnings, Revised Establishment Data*, July 1983, SIC 373, p. 116.

Other:

1972: *Ibid.*, *Employment and Earnings, United States*, 1909-75, sum of SIC 375 and 379, p. 332.

1972-1976: *Ibid.*, *Supplement to Employment and Earnings, Revised Establishment Data*, July 1983, Sum of SIC 376, p. 118 and SIC 379, p. 119.

Related Industries:

Automotive and Accessory Retailers:

1972-1976: *Ibid.*, *Employment and Earnings, United States*, 1909-78, SIC 553, p. 763 and SIC 551, 2, p. 764.

1977-1982: *Ibid.*, *Supplement to Employment and Earnings, Revised Establishment Data*, July 1983, SIC 551, 2 and 553, p. 244. Sum of new and used automobile dealers and other auto and home supply stores.

Automotive Wholesalers:

1972-1976: *Ibid.*, *Employment and Earnings, United States*, 1909-78, SIC 501, p. 740.

1977-1982: *Ibid.*, *Supplement to Employment and Earnings, Revised Establishment Data*, July 1983, SIC 501, p. 228.

Automotive Services and Garages:

1972-1976: U.S. Department of Labor, Bureau of Labor Statistics, *Employment and Earnings, United States*, 1909-78, SIC 75, p. 806.

1977-1982: *Ibid.*, *Supplement to Employment and Earnings, Revised Establishment Data*, July 1983, SIC 75, p. 268.

Table 23. Employment in Transportation and Related Industries, 1972-1982 (Cont.)

Gasoline Service Stations:

- 1972-1976: *Ibid.*, *Employment and Earnings, United States, 1909-78*, SIC 554, p. 764.
1977-1982: *Ibid.*, *Supplement to Employment and Earnings, Revised Establishment Data*, July 1983, SIC 554, p. 245.

Highway and Street Construction:

- 1972-1976: *Ibid.*, *Employment and Earnings, United States, 1909-78*, SIC 161, p. 40.
1977-1982: *Ibid.*, *Supplement to Employment and Earnings, Revised Establishment Data*, July 1983, SIC 161, p. 13.

Petroleum:

- 1972-1976: *Ibid.*, *Employment and Earnings, United States, 1909-78*, Section B- 2, SIC 13, 291, and 50. Sum of SIC 13, 291, and 4.5% of SIC 50 (to account for petroleum bulk stations and terminals.) The totals are adjusted for 56% transportation use.
1977-1982: *Ibid.*, *Supplement to Employment and Earnings, Revised Establishment Data*, June 1983, sum of SIC 13, p. 6, SIC 291, p. 205, and 4.5% of SIC 50, p. 228. The totals are adjusted for 56% transportation use.

Other Industries:

Truckdrivers and Deliverymen:

- 1972-1979: TAA, *Transportation Facts and Trends*, July issues, p. 22/23.
1980: TPA, *Transportation in America*, Mar. 1983, p. 29.
1981-1982: TPA, personal communication.

Shipping and Receiving Clerks:

- 1972-1979: TAA, *Transportation Facts and Trends*, July issues, p. 22/23.
1980: TPA, *Transportation In America*, Mar. 1983, p. 29.
1981-1982: TPA, personal communication.

Government Employees:

U.S.D.O.T.

- 1972-1981: DOC, *Statistical Abstract of the U.S.*, 103rd edition, Dec. 1982, Table 454 and similar tables in earlier editions.
1982: *Ibid.*, 104th edition, Dec. 1983, Table 542, p. 336.

State and Local Highway:

- 1972-1981: *Ibid.*, Dec. 1982, Table 501 and similar tables in earlier editions.
1982: *Ibid.*, 104th edition, 1983, Table 488, p. 303.

Post Office:

- 1972-1981: *Ibid.*, 103rd edition, Table 454 and similar tables in earlier editions. Figures based on assuming 14% of postal workers are engaged in transportation work.
1982: *Ibid.*, 104th edition, Table 488, p. 303.

Other:

- 1972-1980: *Ibid.*, 102nd edition, Table 459 and similar table in earlier editions. Includes CAB, FMC, ICC, RRB, MARAD, and estimated percentage of USCG.
1981: TPA, *Transportation In America*, Mar. 1983, p. 29.
1982: TPA, personal communication.

Total Civilian Labor Force:

- 1972-1981: *Ibid.*, U.S. DOC, *Statistical Abstract of the U.S.*, 103rd edition, Dec. 1982, Table 629 and similar tables in earlier editions.

Table 24. National Transportation and Economic Trends, 1972-1982

Passenger-Miles:

1972-1982: Summation of all modes from Table 6, p. 52. (This edition of NTS).

Ton Miles:

1972-1980: Summation of all modes from Table 7, p. 54. (This edition of NTS).

1981: Not available.

Population:

1972-1980: Department of Commerce, Bureau of the Census, *Statistical Abstract of the U.S.*, 102nd edition, December 1981, Table 8, p. 9.

1981-1982: Department of Commerce, BOC, *Statistical Abstract of the U.S.*, 1984, Table 11, p. 11.

Industrial Production:

1972-1980: *Ibid.*, Bureau of Economic Analysis, *Survey of Current Business*, Vol. 61, No. 7, July 1981, p. S-2, and similar table in earlier editions.

1981-1982: *Ibid.*, Bureau of Economic Analysis, *Survey of Current Business*, Vol 63, No. 7, July 1983, p. S-1.

Gross National Product:

1972-1982: *Ibid.*, Table 1.1, p. 22 and similar table in earlier editions.

Table 25. Expenditures and Overseas Travel by U.S. Residents and Foreign Visitors, 1972-1982

U.S. Residents - Overseas Travelers:

1972-1980: Department of Commerce, Bureau of the Census, *Statistical Abstract of the U.S.*, 102nd edition, Dec. 1981, Table 414, p. 240.

1981: *Ibid.*, 103d edition, Dec. 1982, Table 412, p. 241.

1982: *Ibid.*, 104th edition, 1984, Table 413, p. 245.

Average Expenditures:

1972-1980: Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business*, May 1981, Table 6, p. 33 and similar table in earlier editions.

1981-1982: *Ibid.*, May 1983, Table 6, p. 16.

Total Travel and Passenger Fare Transactions:

1972-1973: Department of Commerce, Bureau of the Census, *Statistical Abstract of the U.S.*, 102nd edition, Dec. 1981, Table 414, p. 240.

1974-1982: *Ibid.*, 104th edition, 1984, Table 413, p. 245.

Foreign Visitors to U.S.:

1972-1973: *Ibid.*, Table 413, p. 239.

1974-1982: *Ibid.*, 104th edition, 1984, Table 412, p. 244.

Average Expenditures of Visitors:

1972: Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business*, May 1981, Table 4, p. 32 and similar table in earlier editions.

1981-1982: *Ibid.*, May 1983, Table 3, p. 15.

**Table 25. Expenditures and Overseas Travel by U.S. Residents and Foreign Visitors,
1972-1982 (Cont.)**

Total Travel and Passenger Fare Transactions:

- 1972-1973: Department of Commerce, Bureau of the Census, *Statistical Abstract of the U.S.*, 102nd edition, Dec. 1981, Table 413, p. 239.
- 1974-1982: *Ibid.*, 104th edition, 1984, Table 412, p. 244.

Table 28. Fuel Consumption by Mode of Transport, 1972-1982

Class I Rail:

Locomotives and Motorcars:

- 1972-1982: AAR, *Statistics of Railroads of Class I*, Oct. 1983, p. 15, lines 2, 3, 4, 5, 6, 7, 9 and 10.

Air Carriers:

Certificated Carriers, Domestic and International:

- 1972-1975: FAA, *FAA Statistical Handbook of Aviation*, 1975, Table 6.27.
- 1976-1979: CAB, *Fuel Cost and Consumption, Twelve Months Ended Dec. 31, 1980 and 1979*. Total of Tables 2, 3, 4, 6 and 7 and similar table in earlier editions.
- 1980-1982: *Ibid.*, *Twelve Months Ended Dec. 31, 1981 and 1980; 1982 and 1981*, p. 1.

General Aviation:

- 1972: FAA, *FAA Statistical Handbook of Aviation*, 1972, Table 9.12 and similar table in earlier editions.
- 1973-1975: FAA, Information and Statistical Division, personal communication.
- 1976-1977: FAA, Office of Aviation Policy, personal communication.
- 1978-1982: FAA *General Aviation Activity and Avionics Survey*, December 1983, Table 2-21, and similar table in earlier editions.

Highway:

- 1972-1982: FHWA, *Highway Statistics*, 1982, Table VM-1 and similar table in earlier editions.

Water Transport:

Residual and Distillate Fuel Oil:

- 1972-1974: Bureau of Mines, *Mineral Industry Surveys, Fuel Oil Sales-Annual*, Sept. 17, 1976, Tables 2 and 3 and equivalent tables in earlier editions.
- 1975-1976: U.S. Department of Energy, *Energy Data Reports, Deliveries of Fuel Oil and Kerosene*, Tables 12 and 13.
- 1977-1982: U.S. Department of Energy, *Petroleum Supply Annual 1982*, Tables 11, and similar tables in earlier editions. Contains vessel bunkering data only. Converted to gallons by multiplying by 42 gallons per barrel.

Gasoline:

- 1972-1982: FHWA, *Highway Statistics*, 1982, Table MF-24 and similar table in earlier editions.

Table 28. Fuel Consumption by Mode of Transport, 1972-1982 (Cont.)

Transit:

Electricity:

- 1972-1977: Not available.
- 1978-1981: UMTA, Section 15 Reports, May 1981, June 1982, Nov. 1982, Nov. 1983. Table 002.11.1, p. 2-47. Section 15 Reporting System began in 1978, data reported on a fiscal year basis.
- 1982: Data for 1982 not available due to changes in Section 15 reporting procedures from fiscal year basis to calendar year basis.

Gallons of Motor Fuel:

- 1971-1977: APTA, *Transit Fact Book*, 1981 edition, Table 17.
- 1978-1981: UMTA, *Urban Mass Transportation Statistics, Section 15 Report*, May 1981, June 1982, Nov. 1982, Nov. 1983, Table 002.11.1, p. 2-47. Section 15 Reporting System began in 1978, data reported on a fiscal year basis.
- 1982: Data for 1982 was not available due to changes in Section 15 reporting procedures from fiscal year basis to calendar year basis.

Pipelines:

- 1971-1974: American Gas Association, *Gas Facts*, 1975, Table 53.
- 1975: U.S. Department of the Interior, Bureau of Mines, *Natural Gas, Annual*, 1975, Table 6.
- 1976: U.S. Department of Energy, *Energy Data Reports, Natural Gas, Annual*, 1980, Table 10.
- 1977: U.S. Department of Energy, *Natural Gas, Annual*, 1981, Table 13.
- 1978-1982: *Ibid.*, 1982, Table 13.

Total Non-Highway Use of Gasoline:

- 1972-1982: FHWA, *Highway Statistics*, 1982, Table MF-21 and similar table in earlier editions.

APPENDIX B

Glossary

Glossary

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.

AIR CARRIER:

Any carrier operating under Code of Federal Regulations, Title 14, Part 121. Includes those operators who have been issued a Certificate of Public Convenience and Necessity by the Civil Aeronautics Board, i.e., U.S. air carrier operations include Air Carriers, Commercial Operators, All Cargo Carriers, using large aircraft; Commuter Air Carriers and On-Demand Air Taxi Operators using Small Aircraft operating under 14 CFR 121 or 14 CFR 135. Commercial operators of large aircraft (over 12,500 pounds) are also classified as air carriers.

AIRCRAFT ACCIDENT:

For the purpose of this report, an aircraft accident is "an occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, in which any person suffers death or serious injury as a result of being in or upon the aircraft or by direct contact with the aircraft or anything attached thereto, or the aircraft receives substantial damage."

AIRCRAFT OPERATION:

An aircraft arrival at, or departure from, an airport with FAA airport traffic control service. There are two types of operations--local and itinerant.

1. Local operations are performed by aircraft which:
 - (a) operate in the local traffic pattern or within sight of the tower;
 - (b) are known to be departing for, or arriving from, flight in local practice areas located within a 20-mile radius of the control tower;
 - (c) execute simulated instrument approaches or low passes at the airport.
2. Itinerant operations:

All aircraft arrivals and departures other than local operations.

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.

AIR TAXI OPERATIONS:

Air taxi operations and commuter air carrier operations (takeoffs and landings) carrying passengers, mail, or cargo for revenue in accordance with Federal Air Regulations (FAR) 14 CFR 135.

ALL-CARGO CARRIER:

One of a class of air carriers holding certificates of public convenience and necessity (issued by the Civil Aeronautics Board) authorizing the performance of scheduled air freight, express, and mail transportation over specified routes as well as the conduct of nonscheduled operations, which may include passengers. These operations are conducted under 14 CFR 121.

ALL OPERATIONS:

Refers to all flight operations including test, training, ferry, scheduled and nonscheduled passenger and cargo service, both revenue and nonrevenue.

AVIATION GASOLINE (AVGAS):

All special grades of gasoline for use in aviation reciprocating engines, as given in ASTM Specification D 910. Includes all refinery products within the gasoline range that are to be marketed straight or in blends as aviation gasoline without further processing (i.e., any refinery operation except mechanical blending). Also includes finished components in the gasoline range which will be used for blending or compounding into aviation gasoline.

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 comprise 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.

CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY, "CC AND N":

A certificate issued to an air carrier under Section 401 of the Federal Aviation Act, by the Civil Aeronautics Board, authorizing the carrier to engage in air transportation.

COMMERCIAL OPERATOR:

A commercial operator is an air carrier certificated to engage in scheduled intrastate common carrier operations and private carriage in interstate operations. The intended interstate operations will not be in common carriage. A "CC and N" is not required of a commercial operator. These revenue operations are conducted under 14 CFR 121.

COMMUTER AIR CARRIERS:

Commuter air carriers are certificated air taxi operators who perform scheduled services, as defined by the CAB as "those operators who perform, pursuant to published schedules, at least five round trips per week between two or more points, or carry mail." These operations are conducted under 14 CFR 135.

DOMESTIC OPERATIONS:

Operations within and between the 50 States and the District of Columbia. Includes domestic operations of the certificated trunk carriers, Pan American, 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.

FIXED-WING AIRCRAFT:

Aircraft having nonrotating wings fixed to the airplane fuselage and outspread in flight.

GENERAL AVIATION:

General Aviation refers to the operation of U.S. Civil Aircraft owned and operated by persons, corporations, etc., other than those engaged in U.S. air carrier operations. (U.S. air carrier operations include the Air Carriers, Commercial Operators, All Cargo Carriers, using large aircraft; Commuter Air Carriers and On-Demand Air Taxi Operators using small aircraft, operating under 14 CFR 121 or 14 CFR 135). All other operations not assigned to one of the above are classified as General Aviation operations.

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.

JET ENGINE:

An engine which converts fuel and air into a fast-moving stream of hot gases which effect propulsion of the device of which the engine is a part.

JET FUEL:

Includes both naphtha-type and kerosene-type fuels meeting standards for use in aircraft turbine engines. Although most jet fuel is used in aircraft, some is used for other purposes such as for generating electricity in gas turbines.

KEROSENE-BASE JET FUEL:

A quality kerosene product with an average gravity of 40.7 degrees API and 10 to 90% distillation temperatures of 217 to 261 degrees Centigrade. Used primarily as fuel for commercial turbojet and turboprop aircraft engines. It is a relatively low freezing point distillate of the kerosene type.

LARGE REGIONALS:

Carrier groups with annual operating revenues of \$10,000,000-\$74,999,999. Included in this group are Air Midwest, Air Wisconsin, Alaska International, Empire, Evergreen, Hawaii Express, Jet America, Midway, Muse, New York Air, Pacific East, Pacific Express, People Express, Reeve, Rosenbalm, South Pacific, Southern Air, and Zantop.

MAJORS:

Carrier groups with annual operating revenues of \$1,000,000,000 +. Included in this group are American, Braniff, Continental, Delta, Eastern, Northwest, Pan American, Republic, Trans World, United, USAir, and Western.

MEDIUM REGIONALS:

Carrier groups with annual operating revenues of \$0-\$9,999,999 (or that operate only aircraft with 60 seats or less or 18,000 pounds maximum payload or loss). Included in this group are AeroMech, Aerostar, Air Nevada, Air New England, Air North, Air North/Nenana, Altair, American Eagle, American International, American Trans Air, Apollo, Arista, Arrow, Aspen, Best, Big Sky, Britt, Cascade, Challenge, Cochise, Colgan, Elan, Emerald, Global, Golden Gate, Golden West, Great American, Gulf Air Transport, Guy-America, Imperial, Intercontinental, Jet Charter, Kodiak, L.A.B., Mid-South, Midstate, Mississippi Valley, Munz, NewAir, Northeastern, Overseas, Peninsula, Rich, Rocky Mountain, Sea Airmotive, Sky West, Sun Land, Swift Aire, T-Bird, Western Yukon, and Wright.

NAPHTHA-BASE JET FUEL:

A fuel in the heavy naphtha boiling range with an average gravity of 52.8 degrees API and 10 to 90% distillation temperatures of 117 to 233 degrees C. Used for turbojet and turboprop aircraft engines, primarily by the military. Excludes ramjet and petroleum.

NATIONALS:

Carrier groups with annual operating revenues of \$75,000,000-\$1,000,000,000. Included in this group are Air California, Air Florida, Airlift, Alaska, Aloha, Capitol, Flying Tiger/Metro Intl., Frontier, Hawaiian, Ozark, Pacific Southwest, Piedmont, Southwest, Texas International, Transamerica, Wien and World.

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, 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 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 rated 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 tonmiles by the over-all aircraft miles flown in revenue services.

OVER-ALL TRANSPORT REVENUES:

See "Transport Revenues."

PASSENGER-MILE:

One passenger transported 1 mile. Passenger-miles are computed by summation of the products of the aircraft miles flown on each interairport 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 stopover 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 1 mile. The passenger weight standard for both "Domestic" and "International" operation is 200 pounds.

REVENUE PASSENGER ENPLANEMENTS:

The total number of passengers boarding aircraft derived from a standard number of passenger enplanements per on-line originating passenger.

REVENUE PASSENGER LOAD FACTOR:

The percent that revenue passenger-miles are of available seat-miles in revenue passenger services, representing 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.

SCHEDULED ALL-CARGO 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 freight, express, and mail transportation over specified routes, as well as the conduct of nonscheduled operations (charter), which may include passengers.

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., nonscheduled 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 under "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.

TURBOFAN AIRCRAFT:

Aircraft propelled by a turbojet engine whose thrust has been increased by the addition of a low-pressure compressor (fan). The turbofan engine can have an oversized low-pressure compressor at the front, with part of the flow by-passing the rest of the engine (front-fan or forward-fan), or it can have a separate fan driven by a turbine stage (aft-fan).

TURBOJET AIRCRAFT:

Aircraft propelled by jet engines incorporating a turbine-driven air compressor to take in and compress the air for the combustion of fuel, the gases of combustion (or the heated air) being used both to rotate the turbine and to create a thrust-producing jet.

TURBOPROP AIRCRAFT:

Aircraft in which the main propulsive force is supplied by a conventional propeller driven by a gas turbine. Additional propulsive force may be supplied from the discharged turbine exhaust gas.

TURBOJET AIRCRAFT:

Aircraft propelled by jet engines incorporating a turbine-driven air compressor to take in and compress the air for the combustion of fuel, the gases of combustion (or the heated air) being used both to rotate the turbine and to create a thrust-producing jet.

TURBOPROP AIRCRAFT:

Aircraft in which the main propulsive force is supplied by a conventional propeller driven by a gas turbine. Additional propulsive force may be supplied from the discharged turbine exhaust gas.

HIGHWAY TERMINOLOGY

FEDERAL EXPENDITURES:

Intergovernmental payments to the State, 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 secondary system.

AUTOMOBILE TERMINOLOGY

ACCIDENT:

An accident is an unintended event that produces injury or damage. The word "injury" includes "fatal injury."

COMPACT-SIZE CAR:

An automobile industry designation usually consisting of cars with a wheelbase between 101 and 111 inches. After 1975 these are included in the SMALL category

FATAL ACCIDENT:

A fatal accident is any motor vehicle or other road vehicle accident that results in fatal injuries to one or more persons.

INTERMEDIATE-SIZE CAR:

An automobile industry designation usually consisting of cars with a wheelbase between 112 and 118 inches.

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.

MOTORCYCLE:

Two-wheeled automotive vehicle having one or two saddles and sometimes a sidecar with a third supporting wheel.

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.

STANDARD-SIZE CAR:

An automobile industry designation usually consisting of cars with a wheelbase of greater than or equal to 119 inches.

SUBCOMPACT-SIZE CAR:

An automobile industry designation usually consisting of cars with a wheelbase of less than or equal to 100 inches. After 1975 these are included in the SMALL category.

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-MILE (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:

Street 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.

MOTORBUS:

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

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. Thus, total vehicle-miles is 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.

COMBINATION TRUCKS:

Consist of a power unit (a truck tractor) and one or two trailing units (a semi-trailer). The most frequently used combination is popularly referred to as a "tractor-semitrailer" or a "tractor trailer."

GROSS VEHICLE WEIGHT (GVW):

The weight of the empty vehicle plus the maximum anticipated load weight.

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 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

ACCIDENTS:

Incidents in which there is property damage or personal injury, involving revenue or non-revenue transit vehicles or stations. Accidents are classified as "collision," "non-collision," or "station."

COMMUTER RAIL:

Typically characterized as urban passenger train service for local short distance travel between a central city and adjacent suburbs. It does not include "heavy" rail rapid transit or light rail/streetcar service. Service of a predominantly intercity nature is excluded, except where a portion of it is operated under contract to a public transit agency for commuter purposes.

DIAL-A-RIDE OR DEMAND RESPONSE (DR) VEHICLES:

Rubber-tired passenger vehicles operated on city streets, propelled by gas, gasoline, or diesel engines, equipped to provide personal demand transit service, normally upon dispatch, and used exclusively for this service.

ELECTRIFIED ROADWAY (RAILROAD):

Track along which a locomotive or rail motor car can receive electrical power generated at a remote location.

FERRYBOATS (FB):

Vessels for carrying passengers and/or vehicles over a body of water. The vessels generally are steam or diesel powered conventional ferry vessels. They also may be hovercraft, hydrofoils, and other high-speed vessels.

FIXED GUIDEWAY MODES:

Any public mass transportation service which utilizes a separate right-of-way or rails. These modes include but are not limited to fixed rail, automated guideway transit, and exclusive facilities for buses and other high occupancy vehicles (i.e., motor buses on "exclusive" and "controlled access" rights-of-way). By statute, the fixed guideway category for Section 9 purposes also includes ferry boat and fixed catenary systems (e.g., trolley bus) which can share a right-of-way with other modes.

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 operations at all times, capability for on-board fare collection, and actual on-board fare collection most of the time.

LINE MILES:

(See "Miles of Directional").

MILES OF DIRECTIONAL ROADWAY:

Defined as synonymous with "route miles," "line miles," and "directional route miles." The total miles over which public transportation vehicles travel while in revenue service, computed with regard to direction, but without regard to the number of traffic lanes or rail tracks existing in the right-of-way. If vehicles travel in only one direction within the right-of-way, each mile is counted once. If vehicles travel in both directions, each mile is counted twice. For example, a mile of single track over which streetcars operate in both directions represents two directional route miles. And a mile of exclusive busway on which a transit agency operates six different routes in only a single direction represents one directional route mile, regardless of the number of lanes.

MOTOR BUSES (MB):

Rubber-tired passenger vehicles operated on city streets, propelled by gas, gasoline, or diesel engines. Class A motor buses are equipped with more than 35 seats, Class B with 25 to 35 seats, and Class C with less than 25 seats.

OTHER REVENUE VEHICLES (OR):

Other modes of transit service such as cable cars, personal rapid transit systems of varying designs, monorail vehicles, inclined railway cars, etc., not covered otherwise.

OPERATING EXPENSES:

For Section 9 purposes, the total of all expenses associated with operation of an individual mode by a given operator. At the required level, total operating expense is reported on line 14 of Form 301 for a single mode system, and is derived from Form 310 for a multi-mode system. Operating expenses include distributions of "joint expenses" to individual modes, and exclude "reconciling items" such as interest expenses and depreciation.

OPERATING REVENUE:

Includes passenger revenue and revenue from charter and contract services.

PASSENGER MILE:

A measure of service utilization, equal to one passenger traveling in a vehicle for one mile. (For example, ten passengers riding in a vehicle for two miles equates to 20 passenger miles.)

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.

PERFORMANCE INDICATORS:

Representations of how well an activity, task, or function is being performed. Usually computed by relating a measure of service output or utilization to a measure of service input or cost.

RAIL RAPID TRANSIT CARS (RR):

Rail cars with motive capability, driven by electric power taken from overhead lines or third rails, configured for passenger traffic and usually operated on exclusive right-of-way.

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.

SCHOOL BUSES:

Type I and Type II school vehicles as defined in Highway Safety Program Standard No. 17, used exclusively to transport students, personnel, and equipment.

STREETCARS (SC):

Relatively lightweight passenger rail cars operating singly or in short trains or fixed rails in right-of-way that is not always separated from other traffic for much of the way. Streetcars do not necessarily have the right-of-way at grade crossings with other traffic.

TROLLYBUSES (TB):

Rubber-tired, electrically powered passenger vehicles operated on city streets drawing power from overhead lines with trolleys.

UNLINKED PASSENGER TRIPS:

The number of passengers who board public transportation vehicles. Passengers are counted each time they board a vehicle, even though more than one vehicle may be used for a single journey from origin to destination.

VEHICLE MILES:

The total distance traveled by revenue vehicles, including both revenue miles and deadhead miles.

VEHICLE OPERATIONS EXPENSES:

The costs associated with operating vehicles, such as operators' wages and fringe benefits, fuel, tires, and vehicle licensing.

WATER TRANSPORT TERMINOLOGY

BULK CARRIER:

Carries dry cargo in bulk, stowed in cargo holds within vessel hull. Cargo is poured aboard from elevator spouts, conveyor belts or slurry pipelines. It is unloaded using grab buckets, conveyor systems or vacuum equipment. Only nine vessels, mostly converted tankships are presently eligible for domestic service. Commonly referred to as "dry bulker."

BUNKER C/NUMBER 6 FUEL OIL:

A high viscosity oil used mostly by ships, industry, and large-scale heating installations. This heavy fuel requires preheating in the storage tank to permit pumping and additional preheating to permit atomizing at the burners.

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.

CONTAINERSHIP:

Carries cargo in special intermodal cargo containers which are stowed below deck in specially fitted holds and stacked on deck several units high. Popular container sizes are 8'x8'x20' and 8'x8'x40', although other lengths are also used. Loading and unloading are accomplished by shoreside travelling crane or, occasionally, by shipboard gantry crane. Sometimes referred to as "lift-on/lift-off" vessel. Twenty-six are presently in domestic service.

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.

LAKEWISE 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 1 mile on a trip between two cities generates 1 intercity passenger mile.

PASSENGER VESSELS:

Domestic passenger service, other than short-haul ferry, is limited. However, two operators offer coastwise and river system cruises with small cruise vessels accommodating about 100 passengers each. One operator provides cruises within the Hawaiian Islands, using a refurbished trans-Atlantic passenger liner. The State of Alaska seasonally operates several large passenger/vehicle ferries between Seattle and points in southeastern Alaska, plus service between points in and around Cook Inlet and Prince William Sound.

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.

TANKSHIP:

Carries liquid cargo in bulk, stowed in cargo tanks within vessel hull. Cargo is pumped aboard by a shore terminal and unloaded using vessel's installed pumping system. Some of the largest and newest vessels used in domestic commerce, sizes range from 16,000 to 190,000 deadweight tons. Commonly referred to as "tanker." Approximately 180 are presently in domestic service.

TON-MILE:

Moving 1 ton 1 mile generates 1 ton-mile.

TON-MILE, DOMESTIC DEEP SEA:

Moving 1 ton 1 mile by a domestic water carrier over open ocean generates 1 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, self-propelled boat used for towing and pushing.

RAILROAD TERMINOLOGY

AMTRAK (AMERICAN RAILROAD TRACKS):

Operated by the National Railroad Passenger Corporation of Washington, D.C. This rail system was created by President Nixon in 1970 and was given the responsibility for the operation of intercity, as distinct from suburban, passenger trains between points designated by the Secretary of Transportation.

AVERAGE HAUL:

The average distance in miles that 1 ton is 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; on January 1, 1978, the requirement was raised to \$50,000,000.

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.

RAIL MOTOR CARS:

Self-propelled passenger rail cars which are driven by electric motors energized from an electrified roadway or by a generator driven by a diesel or gas turbine engine.

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 $n \times m$ revenue ton-miles.

TOTAL OPERATING REVENUES:

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

OIL PIPELINE TERMINOLOGY

COKE:

The residue left by petroleum which has been distilled to dryness.

CRUDE OIL:

A mixture of hydrocarbons that exists in the liquid phase in natural underground reservoirs and remains liquid at atmospheric pressure after passing through surface-separating facilities.

CRUDE OIL GATHERING LINES (PIPELINE SYSTEMS):

A network of pipelines transporting crude oil from individual wells to compressor station, processing point, or main trunk pipeline.

CRUDE OIL TRUNK LINES (PIPELINE SYSTEMS):

One of three types of pipeline network that is used to transport crude oil to the refineries for processing.

CRUDE RUNS:

Amount of crude actually processed by the refiner for the production of petroleum products, as distinct from capacity.

CRUDE SHALE OIL:

The oil obtained as a distillate by the destructive distillation of oil shale.

DISTILLATE FUEL OIL:

The lighter fuel oils distilled off during the refining process. Included are products known as ASTM grades Nos. 1 and 2 heating oils, diesel fuels, and No. 4 fuel oil. The major uses of distillate fuel oils include heating, fuel for on- and off-highway diesel engines, and railroad diesel fuel.

DISTILLATE OIL:

Fuel which may be used in diesel engines (i.e., water vessels, railroads, trucks, etc.).

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.

MIDDLE DISTILLATES:

A category of petroleum fuel that includes the diesel fuels burned by surface transportation carriers, as well as home heating oil.

NON-REGULATED PIPELINE:

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

NO. 2 DISTILLATE FUEL OIL:

A petroleum distillate which meets the specifications for No. 2 heating oil and/or the specifications for diesel fuel grade No. 2.

OIL SHALE:

A finely grained sedimentary rock composed mostly of clay that contains an organic material called kerogen. When the kerogen is heated to about 482 degrees C (900 degrees F), it is converted to shale oil and gas. The shale oil that is derived from kerogen is low in sulfur; and although it varies in some respects from conventional petroleum, it can be refined into most petroleum products.

OPEC:

Organization of Petroleum Exporting Countries including Saudi Arabia, Iran, Venezuela, Libya, Indonesia, United Arab Emirates, Algeria, Nigeria, Ecuador, Gabon, Iraq, Kuwait, and Qatar.

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.

OTHER DISTILLATE FUEL OILS:

All other refined petroleum products not included in any other category and which, when produced in conventional distillation operations, have a boiling range from 10% point at 167 degrees C to 90% point at 375 degrees C. Included are products known as No. 1 and No. 4 distillate fuel oils and diesel oils.

PETROLEUM:

A material occurring naturally in the earth and predominantly composed of mixtures of chemical compounds of carbon and hydrogen with or without other nonmetallic elements such as sulfur, oxygen, nitrogen, etc. Petroleum may contain, or be composed of, such compounds in the gaseous, liquid, and/or solid state, depending on the nature of these compounds and the existent conditions of temperature and pressure.

PETROLEUM CONSUMPTION, ELECTRIC UTILITY SECTOR:

Domestic demand for all fuel oils at electric utilities.

PETROLEUM CONSUMPTION, INDUSTRIAL SECTOR:

Domestic demand for petroleum products for use by establishments engaged in processing unfinished materials into another form or product. Excludes industrial space heating.

PETROLEUM CONSUMPTION, "OTHER" SECTOR:

Domestic demand for miscellaneous products and for some agricultural uses.

PETROLEUM CONSUMPTION, RESIDENTIAL AND COMMERCIAL:

Domestic demand for petroleum products by private households and non-manufacturing establishments. Includes industrial space heating and road paving.

PETROLEUM CONSUMPTION, TRANSPORTATION SECTOR:

Domestic demand for petroleum products for on-highway use, aircraft and vessel bunkering, and railroad use.

REFINED PRODUCT TRUNK LINES (PIPELINE SYSTEMS):

One of three types of pipeline network that is used to transport refined petroleum products (i.e., gasoline, kerosene, residual oil, etc.) from the refineries to local distribution centers near large market areas.

RESIDUAL FUEL OIL:

The heavier oils that remain after the distillate fuel oils and lighter hydrocarbons are boiled off in refinery operations. Included are products known as ASTM grade Nos. 5 and 6 oil, heavy diesel oil, Navy Special Fuel Oil, Bunker C oil, and acid sludge and pitch used as refinery fuels. Residual fuel oil is used for the production of electric power, for heating, and for various industrial purposes.

SHALE OIL:

The liquid oil product recoverable from the thermal decomposition of kerogen, the organic material present in oil shale.

WAXES:

Derivatives of petroleum which are extracted from lubricating oil fractions by chilling, filtering and solvent washing. There are two types: paraffin and microcrystalline.

GAS PIPELINE TERMINOLOGY

GAS TRANSMISSION COMPANY:

A company which obtains most of its gas operating revenues from the operation of a gas transmission pipeline and/or from main line sales to industrial customers.

DISTRIBUTION MAINS:

Generally, mains which carry or control the supply of gas from the point of supply to the sales meters.

FIELD AND GATHERING PIPELINES:

A network of pipelines transporting natural gas from individual wells to a compressor station, processing point, or main trunk pipeline.

LIQUID PETROLEUM GAS (LPG):

Consists of propane and butane and is usually derived from natural gas. In locations where there is no natural gas and the gasoline consumption is low, naphtha is converted to LPG by catalytic reforming.

NATURAL GAS LIQUIDS:

Those liquid hydrocarbon mixtures which are gaseous at reservoir temperatures and pressures but are recoverable by condensation or absorption. Natural gasoline and liquefied petroleum gas such as propane and butane are principal examples.

NATURAL GAS:

A naturally occurring mixture of hydrocarbon and non-hydrocarbon gases found in porous geologic formations beneath the earth's surface, often in association with petroleum. The principal constituent is methane.

TRANSMISSION PIPELINE:

Pipelines installed for the purpose of transmitting gas from a source of supply to one or more distribution centers, to one or more large-volume customers, or a pipeline installed to interconnect sources of supply.

ENERGY TERMINOLOGY

ANTHRACITE:

A hard, black, lustrous coal containing a high percentage of fixed carbon and a low percentage of volatile matter. It is often referred to as hard coal. Includes meta-anthracite and semi-anthracite. Conforms to ASTM Specification D388 for anthracite.

ASPHALT:

A dark-brown-to-black cement-like material containing bitumens as the predominant constituents, obtained by petroleum processing. The definition includes crude asphalt as well as the following finished products; cements, fluxes, the asphalt content of emulsions (exclusive of water), and petroleum distillates blended with asphalt to make cutback asphalts.

AVIATION GASOLINE, FINISHED:

All special grades of gasoline for use in aviation reciprocating engines, as given in ASTM Specification D910. Excludes blending components that will be used in blending or compounding into finished aviation gasoline.

BTU--BRITISH THERMAL UNIT:

The amount of energy required to raise the temperature of 1 pound of water 1° F. at or near 39.2° F. One Btu is equivalent to about 252 IT (International Steam Table) calories. An average Btu content of fuel is a heat value per unit quantity of fuel as determined from tests of fuel samples.

COAL:

A solid, brittle, more or less distinctly stratified combustible carbonaceous rock formed by partial to complete decomposition of vegetation. It varies in color from dark brown to black, is not fusible without decomposition, and is very insoluble. Coals can be ranked or divided into the following classes: (1) lignite, (2) sub-bituminous, (3) bituminous, (4) semibituminous, (5) semi-anthracite, and (6) anthracite.

CONDENSATE:

The liquid resulting when a vapor is subjected to cooling and/or pressure reduction. Also, liquid hydrocarbons condensed from gas and oil wells.

CRUDE OIL (Including Lease Condensate):

A mixture of hydrocarbons that existed in liquid phase in underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities. Included are lease condensate and liquid hydrocarbons produced from tar sands, gilsonite, and oil shale. Drip gases are also included, but topped crude oil (residual oil) and other unfinished oils are excluded. Liquids produced at natural gas processing plants and mixed with crude oil are likewise excluded where identifiable.

CRUDE OIL STOCKS:

Stocks of crude oil and lease condensate held at refineries, in pipeline terminals, and on leases.

DISTILLATE FUEL OIL:

A general classification for one of the petroleum fractions produced in conventional distillation operations. Included are products known as No. 1 and No. 2 heating oils, diesel fuels, and No. 4 fuel oil, which conform to either ASTM Specification D396 or D975. These products are used primarily for space heating, on- and off-highway diesel engine fuel (including railroad engine fuel), and electric power generation.

DRY NATURAL GAS PRODUCTION:

Derived by subtracting extraction loss from "marketed production." It represents the amount of domestic gas production that is available to be marketed and consumed as a gas.

FOSSIL FUELS:

Any naturally occurring fuel of an organic nature such as coal, crude oil, or natural gas.

GASOHOL:

A blend of finished motor gasoline (leaded or unleaded) and alcohol (generally ethanol but sometimes methanol) in which 10 percent or more of the product is alcohol.

GASOLINE:

A refined petroleum product which, by its composition, is suitable for use as a fuel in internal combustion engines.

IMPORTS:

All imports of crude petroleum, natural gas liquids, and petroleum products from foreign countries and receipts from Guam, Puerto Rico, the Virgin Islands, and the Hawaiian Trade Zone. The commodities included are crude oil, unfinished oils, plant condensate, and refined petroleum products.

INVENTORIES:

The amounts of crude oil, unfinished oil, petroleum products, and natural gas liquids held at refineries, at natural gas processing plants, in pipelines, at bulk terminals operated by refining and pipelines companies, and at independent bulk terminals. Crude oil held in storage on leases is also included; these stocks are known as primary stocks. Secondary stocks in those held by jobbers, dealers, service station operators, and consumers are excluded. Prior to 1975, stocks held at independent bulk terminals were classified as secondary stocks.

JET FUEL:

Includes both naphtha-type and kerosene-type jet fuel meeting standards for use in aircraft turbine engines or meeting ASTM Specification D1655. Although most jet fuel is used in aircraft, some is used for other purposes, such as fuel for turbines to produce electricity.

KEROSENE:

A petroleum middle distillate having burning properties suitable for use as an illuminant when burned in wick lamps. Included are No. 1-K and No. 2-K recognized in ASTM Specification

D3699 and grades of kerosene called range oil having properties similar to No. 1 fuel oil, and is used primarily in space heaters, cooking stoves, and water heaters.

LEASE CONDENSATE:

A natural gas liquid recovered from gas-well gas (associated and non-associated) in lease separators or natural gas field facilities. Lease condensate consists primarily of pentanes and heavier hydrocarbons. Generally, it is blended with crude oil for refining.

LIQUEFIED GASES:

Propane, propylene, butane, butylene, ethane-propane mixtures, propane-butane mixtures, and isobutane produced at refineries or natural gas processing plants, including plants that fractionate raw natural gas plant liquids. Excludes ethane and ethylene.

LUBRICANTS:

Substances used to reduce friction between bearing surfaces. Petroleum lubricants may be produced either from distillates or residues. Other substances may be added to impart or improve certain required properties. Lubricants include all grades of lubricating oils from spindle oil to cylinder oil and those used in greases. The three categories include bright stock lubricants, and other lubricants, lubricating oil base stock used in finished lubricating oils and greases, including black, coastal, and red oils.

MARKETED PRODUCTION:

This quantity is derived. It is gross withdrawals of natural gas from production reservoirs, less gas used for reservoir repressuring, quantities vented and flared, and nonhydrocarbon gases removed in treating and processing operations.

MOTOR GASOLINE, FINISHED:

A complex mixture of relatively volatile hydrocarbons, with or without small quantities of additives, that have been blended to form a fuel suitable for use in spark-ignition engines and conforming to ASTM Specification D439. Included are finished leaded gasoline, finished unleaded gasoline, and gasohol. Blendstock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

MOTOR GASOLINE, REGULAR GRADE:

Finished motor gasoline (see above) that has an antiknock designation of 2 or less for unleaded motor gasoline and 3 or less for leaded motor gasoline.

NATURAL GAS:

A mixture of hydrocarbons and small quantities of various nonhydrocarbons existing in the gaseous phase or in solution with crude oil in underground reservoirs.

NATURAL GAS LIQUIDS:

Those hydrocarbons in natural gas that are separated as a liquid from the gas at lease separators, field facilities, and natural gas processing plants. Natural gas liquids include natural gas plant liquids and lease condensate.

NATURAL GAS, WET:

Natural gas prior to the extraction of liquids and other miscellaneous products.

PETROLEUM:

A generic term applied to oil and oil products in all forms, such as crude oil, lease condensate, unfinished oils, refined petroleum products, natural gas plant liquids, and nonhydrocarbon compounds blended into finished petroleum products.

PIPELINE:

A line of pipe with pumping machinery and apparatus for conveying a liquid or gas.

PROVED RESERVES (ECONOMICALLY RECOVERABLE RESERVES):

Those resources (coal, oil, natural gas) that have actually been discovered and can be produced under current economic and technological conditions.

PSI:

Pounds per square inch.

REFINED PETROLEUM PRODUCTS:

Petroleum products are obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds. Petroleum products include unfinished oils, liquefied petroleum gases, pentanes plus, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, naphtha less than 400° F. end-point, other oils over 400° F. end-point, special naphthas, lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.

RESERVES:

Identified deposits of minerals known to be recoverable with current technology under present economic conditions. Categories of reserves are: (1) Measured Reserves--identified resources from which an energy commodity can be economically extracted with existing technology and whose location, quality, and quantity are known for geologic evidence supported by engineering evidence; (2) Indicated Reserves--reserves based partly on specific measurements, samples, or production data, and partly on projections for a reasonable distance on geologic knowledge for which quantitative measurements are not available. Such reserves are estimated to be recoverable in the future as a result of extensions, revisions of estimates, and deeper drilling in known fields.

RESERVOIR REPRESSURING:

The injection of natural gas into oil and gas reservoir formations for pressure maintenance and cycling.

RESIDUAL FUEL OIL:

The topped crude of refinery operations that includes No. 5 and No. 6 fuel oils as defined in ASTM Specification D396, Navy Special fuel oil, and Bunker C fuel oil. Residual fuel oil is used for the production of electric power, space heating, vessel bunkering, and for various industrial purposes. Imports of residual fuel oil include "imported crude oil burned as fuel."

RESIDUE GAS:

Natural gas from which natural gas processing plant liquid products and, in some cases, nonhydrocarbon components have been extracted.

ROAD OIL:

Any heavy petroleum oil, including residual asphaltic oil used as a dust palliative and surface treatment on roads and highways. It is generally produced in six grades from O, the most liquid, to 5, the most viscous.

SOLVENT REFINED COAL:

A coal liquefaction process in which the coal is mixed with a liquid solvent, then heated and passed to a high pressure reactor where hydrogen and hydrogen sulfide are separated from the mixture. It is then filtered, the solvent is distilled for reuse, and the final product is recovered either as liquid or solid.

STILL GAS (REFINERY GAS):

Any form or mixture of gas produced in refineries by distillation, cracking, reforming, and other processes. The principal constituents are methane, ethane, ethylene, normal butane, butylene, propane, propylene, etc. It is used primarily as refinery fuel and petrochemical feedstock.

TRANSPORTATION TERMINOLOGY

CONSTANT DOLLARS:

A series is said to be expressed in "constant dollars" when the effect of change in the purchasing power of the dollar has been removed. Usually the data are expressed in terms of dollars of some selected year or the average of some set of years.

CURRENT DOLLARS:

Dollars current at the time designated or at the time the transaction listed took place. In most contexts, the same meaning would be conveyed by the simple term "dollars."

DIESEL ENGINE:

An internal combustion engine in which the fuel is sprayed directly into the combustion chamber and ignited by the high temperature to which the air in the combustion chamber has been heated during the compression process. There are approximately 400 different variations in size, number of cylinders, and power output of diesel engines. The engines are relatively costly, but they operate with high efficiency combined with a long life span.

ENERGY EFFICIENCY:

In reference to transportation, the inverse of energy intensiveness: the ratio of outputs from a process to the energy inputs; for example, passenger-miles traveled (PMT) per gallon of fuel.

GROSS NATIONAL PRODUCT (GNP):

Total value at market prices of all goods and services produced by the nation's economy. As calculated quarterly by the Department of Commerce, Gross National Product is the broadest available measure of the level of economic activity.

LOAD FACTOR:

The ratio of actual load to full capacity.

MILE (STATUTE):

5280 feet.

TOTAL VEHICLE-MILES OPERATED:

Sum of all passenger vehicle-miles operated in line (regular) service, special (charter) service, and nonrevenue service. When vehicles are operated in trains, each vehicle is counted separately: an eight-vehicle train operating for 1 mile equals 8 vehicle-miles.

TRANSPORTATION SECTOR:

Consists of both private and public passenger and freight transportation as well as government transportation, including military operations.

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