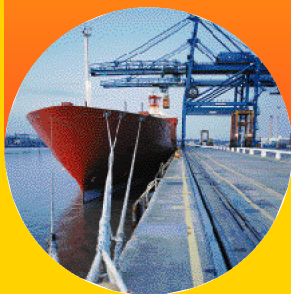


Pocket Guide to Transportation



The Bureau of Transportation Statistics (BTS) was established by the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991. As the newest operating administration of the U.S. Department of Transportation, the BTS mission is to compile, analyze, and make accessible information about the nation's transportation systems; to collect information on intermodal transportation and other areas as needed; and to enhance the quality and effectiveness of the Department's statistical programs through research, the development of guidelines, and the promotion of improvements in data acquisition and use.

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BTS98-S-01

January 1998

As the social and economic characteristics of America have changed, so has the nation's transportation system and its role in American society and the economy. The following table puts changes of the last 25 years in perspective:

| Characteristic | 1970 | 1995 |
|------------------------------------|-----------------|-----------------|
| Resident population | 203,984,000 | 262,755,000 |
| Land area ¹ | 3,540,023 sq mi | 3,536,278 sq mi |
| Total civilian labor force | 82,771,000 | 132,304,000 |
| Gross Domestic Product* | \$3,388 billion | \$6,739 billion |
| Median household income* | \$29,619 | \$32,618 |
| Average household expenditures* | \$24,596 | \$29,999 |
| Number of households | 63,401,000 | 98,990,000 |
| Average life expectancy | 70.8 years | 76.3 years |
| Labor force participation of women | 49% | 72% |

Note: All dollar amounts are in 1992 chained dollars.

* Converted from current dollars to 1992 chained dollars using implicit deflators for disposable personal income or personal consumption expenditures in table 692 of source publication.

¹ Land areas were derived from different base data and changed due to construction of reservoirs, draining of lakes, etc.

Source: U.S. Bureau of the Census, *Statistical Abstract of the United States: 1996*, 116th Edition (Washington, DC: 1996), various tables.

The statistics in this Pocket Guide to Transportation were compiled by the Bureau of Transportation Statistics from multiple sources. The guide is divided into four sections:

Transportation System Extent and Use 2

Transportation and the Economy 14

Transportation and Safety 19

Transportation, Energy, and the Environment 22

The United States has the world's most extensive transportation system, serving 265 million people and 6 million business establishments. Use of the system grew rapidly between 1970 and 1995: passenger travel nearly doubled and freight activity increased by 65 percent. In absolute-miles traveled, automobile use dwarfed all other modes, growing by over 1 trillion passenger-miles.

Table 1.
The Transportation Network: 1995

| Mode | Components |
|---------|---|
| Highway | <p>Public roads</p> <p>45,744 miles of interstate highway</p> <p>111,237 miles of other National Highway System roads</p> <p>3,755,245 miles of other roads</p> |
| Air | <p>Public use airports</p> <p>5,415 airports</p> <hr/> <p>Airports serving large certificated carriers</p> <p>29 large hubs (67 airports), 393 million enplaned passengers</p> <p>33 medium hubs (59 airports), 86 million enplaned passengers</p> <p>58 small hubs (73 airports), 34 million enplaned passengers</p> <p>561 nonhubs (593 airports), 14 million enplaned passengers</p> |
| Rail | <p>Miles operated (freight)</p> <p>125,072 miles of major (class I)</p> <p>18,815 miles of regional</p> <p>26,546 miles of local</p> <p>24,500 miles of Amtrak (passenger only)</p> |

Mode**Components****Urban Transit** *Directional route miles serviced*

Bus: 157,756
 Commuter rail: 4,159
 Heavy rail: 1,458
 Light rail: 568

Stations

Commuter rail: 915
 Heavy rail: 989
 Light rail: 478

Water

25,777 miles of navigable waterways
 275 locks
 322 miles of ferry service

Ports

Great Lakes: 362 terminals
 507 berths
 Inland: 1,811 terminals
 Ocean: 1,578 terminals
 2,672 berths

Pipeline**Oil**

Crude lines: 114,000 miles of pipe
 Product lines: 86,500 miles of pipe

Gas

Transmission: 276,000 miles of pipe
 Distribution: 919,000 miles of pipe

Source: U.S. Department of Transportation, Bureau of Transportation Statistics, *Transportation Statistics Annual Report 1997* (Washington, DC: 1997), tables 1-1 and 1-5.

Table 2.
Number of Vehicles

| Mode | 1970 | 1980 | 1985 | 1990 | 1995 |
|-----------------------------------|------------|-------------|-------------|-------------|-------------|
| Air carriers | 2,690 | 2,818 | 3,100 | 4,727 | 5,567 |
| General aviation | 125,618 | 202,487 | 210,654 | 196,800 | 181,341 |
| Passenger cars,taxis | 89,243,557 | 121,600,843 | 131,864,029 | 143,453,040 | 136,066,045 |
| Motorcycles | 2,824,098 | 5,693,940 | 5,444,404 | 4,259,462 | 3,767,029 |
| Other 2-axle, 4-tire vehicles | 14,210,591 | 27,875,934 | 37,213,863 | 48,274,555 | 65,738,322 |
| Trucks: | | | | | |
| Single-unit | 3,681,405 | 4,373,784 | 4,593,071 | 4,486,981 | 5,023,669 |
| Combination | 905,082 | 1,416,869 | 1,403,266 | 1,708,895 | 1,695,751 |
| Buses ¹ | 380,071 | 529,624 | 594,203 | 627,819 | 686,389 |
| Other ² | N | N | 15,357 | 17,668 | 30,932 |
| Passenger rail: | | | | | |
| Amtrak | | | | | |
| Cars | N | 2,128 | 1,854 | 1,983 | 1,921 |
| Locomotives | N | 419 | 291 | 318 | 356 |
| Commuter | N | 4,500 | 4,035 | 4,415 | 4,565 |
| Transit ³ | 10,548 | 10,654 | 10,043 | 11,332 | 11,156 |
| Class I rail: | | | | | |
| Freight cars | 1,423,921 | 1,168,114 | 867,070 | 658,902 | 583,486 |
| Locomotives | 27,077 | 28,094 | 22,548 | 18,835 | 18,812 |
| Inland water vessels ⁴ | 22,908 | 36,285 | 38,493 | 36,222 | 39,641 |
| Oceangoing ships | 1,579 | 864 | 737 | 636 | 509 |
| Recreational boats | 7,400,000 | 8,600,000 | 9,589,483 | 10,996,253 | 11,700,000 |

N Data are nonexistent.

¹ Includes commercial, federal, school, and transit buses.

² Includes demand response, ferry boat, and other transit not specified.

³ Includes light and heavy rail.

⁴ See glossary, page 24.

Source: U.S. Department of Transportation, Bureau of Transportation Statistics, *National Transportation Statistics 1997* (Washington, DC:1996), table 1-22.

Table 3.
Vehicle Miles
(In millions)

| Mode | 1970 | 1980 | 1985 | 1990 | 1995 |
|---|---------|-----------|-----------|-----------|-----------|
| Air carriers (domestic) | 2,068 | 2,523 | 3,046 | 3,963 | 4,629 |
| General aviation | 3,207 | 5,204 | 4,817 | 4,831 | 3,796 |
| Passenger cars, taxis, and motorcycles | 919,679 | 1,121,810 | 1,255,884 | 1,417,823 | 1,448,207 |
| Other 2-axle, 4-tire vehicles | 123,286 | 290,935 | 390,961 | 574,571 | 790,071 |
| Trucks: | | | | | |
| Single unit | 27,081 | 39,813 | 45,441 | 51,901 | 62,707 |
| Combination | 35,134 | 68,678 | 78,063 | 94,341 | 115,455 |
| Buses ¹ | 4,577 | 6,072 | 4,494 | 5,740 | 6,397 |
| Other ² | N | 15 | 262 | 324 | 532 |
| Rail: | | | | | |
| Transit ³ | 441 | 403 | 468 | 561 | 537 |
| Commuter | N | 179 | 183 | 213 | 238 |
| Freight [*] | 29,890 | 29,277 | 24,920 | 26,159 | 30,383 |
| Intercity/Amtrak ^{4*} | 690 | 235 | 251 | 305 | 283 |

N Data are nonexistent.

* Car miles.

¹ Includes commercial, federal, school, and transit buses.

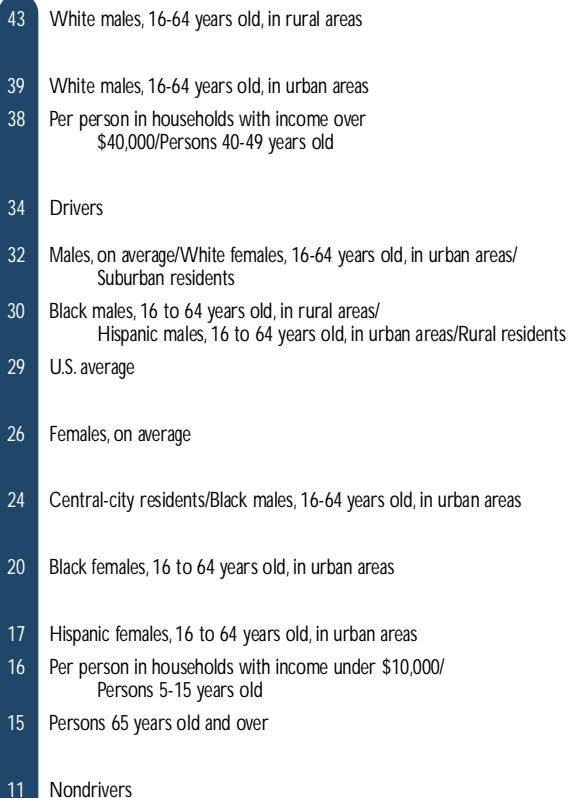
² Includes demand response, ferry boat, and other transit not specified; 1980 data include "other" only; 1985 data include demand response and "other" only.

³ Includes light and heavy rail; 1995 data include heavy rail only.

⁴ Amtrak began operations in 1971.

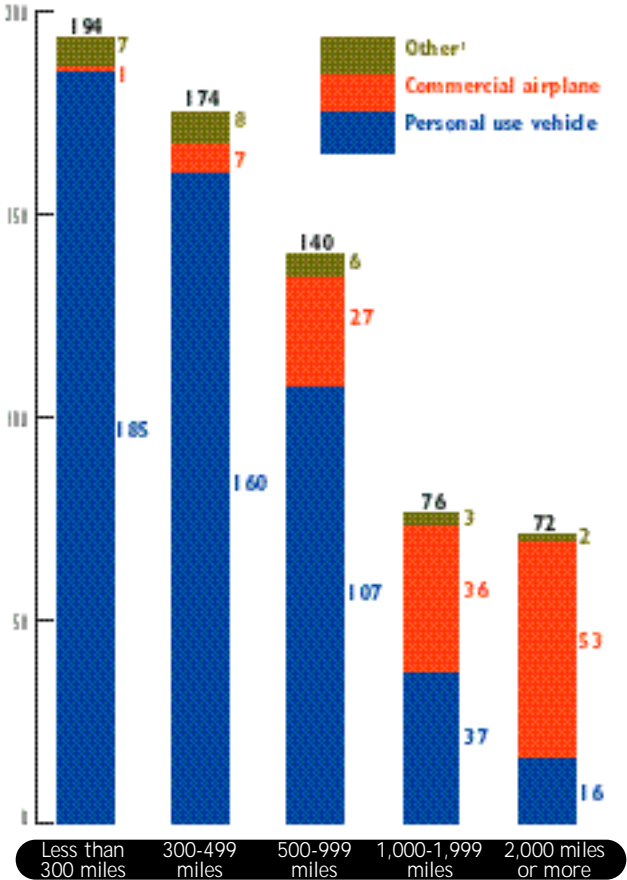
Source: U.S. Department of Transportation, Bureau of Transportation Statistics, *National Transportation Statistics 1997* (Washington, DC: 1996), table 1-8.

Figure 1.
Miles of Daily Travel:1990



Source: U.S. Department of Transportation, Bureau of Transportation Statistics, *Transportation Statistics Annual Report 1997* (Washington, DC:1997), figure 7-1.

Figure 2.
Household Trips by Principal Means of
Transportation and Round-Trip Distance:1995
(In millions)



NOTE: Numbers may not add due to rounding.

¹ Intercity bus; charter or tour bus; train; and ship, boat, or ferry; and others.

Source: U.S. Department of Transportation, Bureau of Transportation Statistics, 1995 American Travel Survey: United States Profile (Washington, DC:1997), figure 3 and table 3.

Table 4.
Passenger Miles
(In millions)

| Mode | 1970 | 1980 | 1985 | 1990 | 1995 |
|----------------------------------|-----------|-----------|-----------|-----------|-----------|
| Air carriers | 108,442 | 204,368 | 277,836 | 345,873 | 403,888 |
| General aviation | 9,100 | 14,700 | 12,300 | 13,000 | 11,300 |
| Cars, taxis, motorcycles | 1,837,094 | 2,014,150 | 2,119,215 | 2,140,913 | 2,663,170 |
| Other 2-axle, 4-tire vehicles | 192,326 | 439,312 | 508,249 | 896,331 | 1,040,788 |
| Trucks: | | | | | |
| Single-unit | 27,081 | 39,813 | 45,441 | 51,901 | 62,707 |
| Combination | 35,134 | 68,678 | 78,063 | 94,341 | 115,455 |
| Buses ¹ | U | U | 95,231 | 121,591 | 135,509 |
| Other ² | N | 390 | 803 | 841 | 894 |
| Rail: | | | | | |
| Transit ³ | N | 10,939 | 10,777 | 12,046 | 11,419 |
| Commuter | 4,592 | 6,516 | 6,534 | 7,082 | 8,247 |
| Intercity/Amtrak ⁴ | 6,179 | 4,503 | 4,825 | 6,057 | 5,545 |

N Data are nonexistent.

U Data are unavailable.

¹ Includes commercial, federal, school, and transit buses.

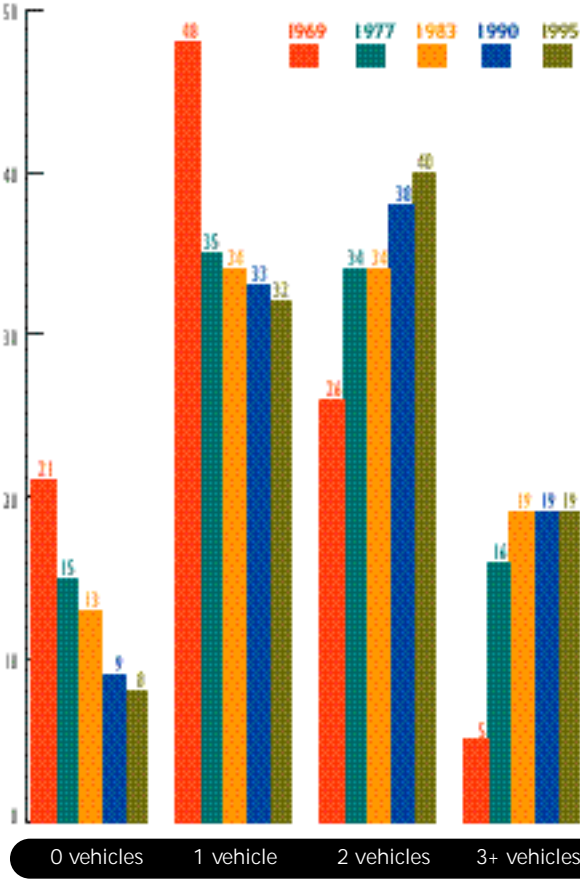
² Includes demand response, ferry boat, and other transit not specified; 1980 data include "other" only; 1985 data include demand response and "other" only.

³ Includes light and heavy rail.

⁴ Amtrak began operations in 1971.

Source: U.S. Department of Transportation, Bureau of Transportation Statistics, *National Transportation Statistics 1997* (Washington, DC:1996), table 1-7.

Figure 3.
Households by Number of Vehicles
(In percent)



Source: U.S. Department of Transportation, Federal Highway Administration, *National Personal Transportation Survey, Our Nation's Travel* (Washington, DC: 1997).

Table 5.
U.S. Freight Shipments by Transportation Mode:
1993

| Mode | Tons | | Ton-miles | | Value | |
|--|----------------------|-------|----------------------|-------|-----------------------|-------|
| | Number (millions) | % | Number (millions) | % | Dollars (billions) | % |
| Total ¹ | 12,157 | 100.0 | 3,627,919 | 100.0 | \$6,124 | 100.0 |
| Truck (for-hire and private) | 6,386 | 52.5 | 869,536 | 24.0 | 4,403 | 71.9 |
| Water | 2,128 | 17.5 | 886,085 | 24.4 | 251 | 4.1 |
| Rail | 1,544 | 12.7 | 942,561 | 26.0 | 247 | 4.0 |
| Pipeline | 1,343 | 11.0 | 592,900 | 16.3 | 180 | 2.9 |
| Air (includes truck and air) | 3 | 0.03 | 4,009 | 0.1 | 139 | 2.3 |
| Intermodal total ² | 208 | 1.7 | 235,856 | 6.5 | 660 | 10.8 |
| Parcel, postal, and courier services | 19 | 0.2 | 13,151 | 0.4 | 563 | 9.2 |
| Truck and rail | 41 | 0.3 | 37,675 | 1.0 | 83 | 1.4 |
| Other intermodal combinations ³ | 149 | 1.2 | 185,030 | 5.1 | 13 | 0.2 |
| Unknown | 544 | 4.5 | 96,972 | 2.7 | 243 | 4.0 |

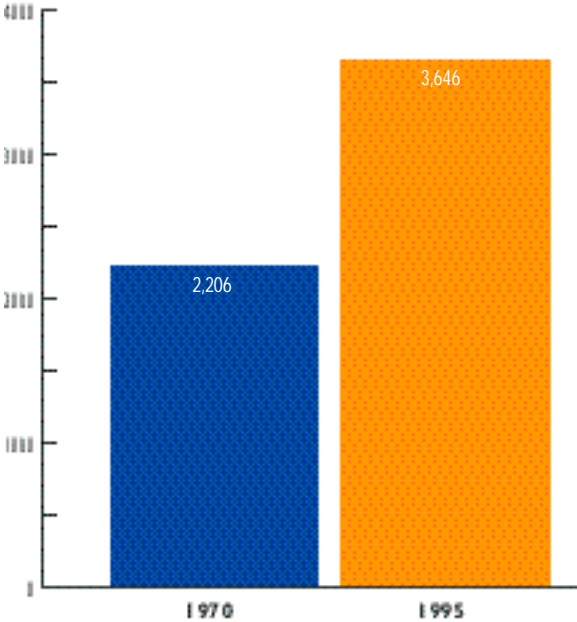
¹ Commodity Flow Survey plus Oak Ridge National Laboratory estimates.

² A combination of parcel, postal, and courier services; truck and rail; and other intermodal combinations, including truck and water and rail and water. Excludes truck and air combination, which is added to air transportation.

³ Includes truck and water, rail and water, and other combinations.

Source: U.S. Department of Transportation, Bureau of Transportation Statistics, *Transportation Statistics Annual Report 1997* (Washington, DC: 1997), table 9-5.

Figure 4.
Trends in Domestic Ton-Miles of Freight:
1970 and 1995
(Billions of ton-miles of domestic freight)



Note: Data do not include local truck ton-miles.

Source: U.S. Department of Transportation, Bureau of Transportation Statistics, *Transportation Statistics Annual Report 1997* (Washington, DC:1997), figure 9-10.

Table 6.
Top 20 U.S. Airports
(Large, certificated air carriers)

| | | 1995 | 1985 | | |
|------|---------------------------------|---------------------------|------|---------------------------|------------------|
| Rank | Airport | Total enplaned passengers | Rank | Total enplaned passengers | % change 1985-95 |
| 1 | Chicago (O'Hare), IL | 29,885,987 | 1 | 21,510,371 | 39 |
| 2 | Atlanta, GA | 27,556,894 | 2 | 20,678,095 | 33 |
| 3 | Dallas/Ft. Worth (Regional), TX | 25,963,950 | 3 | 17,715,224 | 47 |
| 4 | Los Angeles, CA | 21,072,273 | 4 | 15,957,127 | 32 |
| 5 | San Francisco, CA | 15,013,265 | 7 | 10,948,098 | 37 |
| 6 | Denver, CO | 14,328,457 | 6 | 13,862,996 | 3 |
| 7 | Phoenix, AZ | 13,557,883 | 17 | 6,713,293 | 102 |
| 8 | Detroit, MI | 13,293,568 | 14 | 7,163,840 | 86 |
| 9 | St. Louis, MO | 12,736,060 | 10 | 9,555,195 | 33 |
| 10 | Las Vegas, NV | 12,657,051 | 24 | 4,627,078 | 174 |
| 11 | Miami, FL | 12,030,812 | 12 | 7,717,685 | 56 |
| 12 | Newark, NJ | 11,899,633 | 5 | 14,272,558 | -17 |
| 13 | Minneapolis/St. Paul, MN | 11,835,783 | 13 | 7,250,302 | 63 |
| 14 | Houston (Intercontinental), TX | 10,950,826 | 18 | 6,307,582 | 74 |
| 15 | Seattle-Tacoma, WA | 10,731,233 | 20 | 5,709,488 | 88 |
| 16 | Boston, MA | 10,507,611 | 11 | 9,112,901 | 15 |
| 17 | New York (La Guardia), NY | 9,682,171 | 9 | 9,613,913 | 1 |
| 18 | Charlotte, NC | 9,588,900 | 21 | 5,102,703 | 88 |
| 19 | New York (John F. Kennedy), NY | 9,283,314 | 8 | 10,052,007 | -8 |
| 20 | Pittsburgh, PA | 9,209,903 | 15 | 7,002,343 | 32 |

Source: U.S. Department of Transportation, *FAA Statistical Handbook of Aviation*, 1995 data, table 4.11; and 1985 data, table 4.10.

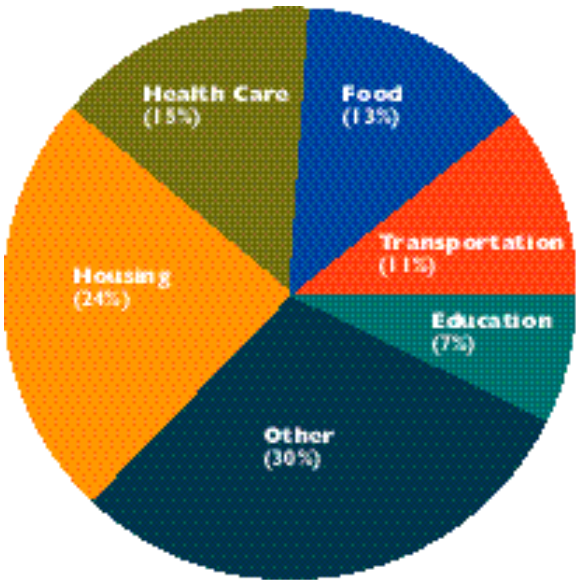
Table 7.
 Top 20 U.S. Ports
 (by tons)

| | | 1995 | 1990 | | |
|------|-----------------------------|-------------|------|-------------|---------------------|
| Rank | Port | Total tons | Rank | Total tons | % change 1990-95 |
| 1 | South Louisiana, LA | 204,482,591 | 1 | 194,190,341 | 5 |
| 2 | Houston, TX | 135,231,322 | 3 | 126,177,644 | 7 |
| 3 | New York, NY & NJ | 119,341,574 | 2 | 140,019,925 | -15 |
| 4 | Baton Rouge, LA | 83,612,788 | 5 | 78,132,291 | 7 |
| 5 | Valdez, AK | 80,955,084 | 4 | 95,953,448 | -16 |
| 6 | New Orleans, LA | 76,984,036 | 6 | 62,740,327 | 23 |
| 7 | Plaquemine, LA | 72,897,301 | 8 | 56,597,710 | 29 |
| 8 | Corpus Christi, TX | 70,456,033 | 7 | 62,023,736 | 14 |
| 9 | Long Beach, CA | 53,227,490 | 10 | 52,425,196 | 2 |
| 10 | Tampa, FL | 51,911,335 | 11 | 51,557,974 | 1 |
| 11 | Mobile, AL | 50,972,223 | 15 | 41,136,444 | 24 |
| 12 | Texas City, TX | 50,402,938 | 12 | 48,071,123 | 5 |
| 13 | Port Arthur, TX | 49,799,977 | 20 | 30,679,583 | 62 |
| 14 | Pittsburgh, PA | 48,849,508 | 19 | 35,492,000 | 38 |
| 15 | Norfolk Harbor, VA | 47,658,182 | 9 | 53,722,136 | -11 |
| 16 | Lake Charles, LA | 46,569,641 | 16 | 40,882,808 | 14 |
| 17 | Los Angeles, CA | 46,478,586 | 13 | 46,352,325 | <1 |
| 18 | Duluth-Superior, MN & WI | 45,049,184 | 17 | 40,766,374 | 11 |
| 19 | Baltimore, MD | 44,695,812 | 18 | 39,538,194 | 13 |
| 20 | Philadelphia, PA | 40,634,284 | 14 | 41,830,443 | -3 |

Source: U.S. Army Corps of Engineers, *Waterborne Commerce of the United States, Calendar Year 1995* (New Orleans, LA:1996), part 5, table 5-2.

Transportation is vital to the U.S. economy and indispensable in contemporary society. As a share of gross domestic product (GDP), transportation has held steady at just under 11 percent since 1989, and contributed \$777 billion to a \$7.25 trillion GDP in 1995.

Figure 5.
U.S. Gross Domestic Product by Major Social Category: 1995



Source: U.S. Department of Transportation, Bureau of Transportation Statistics, *Transportation in the United States: A Review* (Washington, DC: 1997), figure 1.

Table 8.

U.S. Merchandise Trade by Mode and Region: 1995

(In billions of 1995 dollars)

| Mode and region | Value of imports | Value of exports |
|--|------------------|------------------|
| U.S.-Canada border: | | |
| Truck | \$88.97 | \$97.42 |
| Rail | 40.01 | 15.27 |
| Pipeline | 10.61 | 0.12 |
| U.S.-Mexico border: | | |
| Truck | 43.01 | 35.91 |
| Rail | 9.14 | 4.69 |
| Pipeline | 0.03 | 0.001 |
| Atlantic Coast: Waterborne ¹ | 145.50 | 91.76 |
| Pacific Coast: Waterborne ² | 196.94 | 80.83 |
| Gulf Coast: Waterborne | 46.49 | 53.09 |
| Great Lakes: Waterborne | 2.59 | 2.52 |
| All air freight ³ | 174.24 | 181.09 |

Note: Values for truck, rail, pipeline, and waterborne trade contain data for in-transit shipment (shipments which entered or exited the United States through U.S. Customs ports even when the actual origin or final destination was other than the United States).

¹ Contain data for Puerto Rico and the U.S. Virgin Islands.

² Contain data for Hawaii and Alaska.

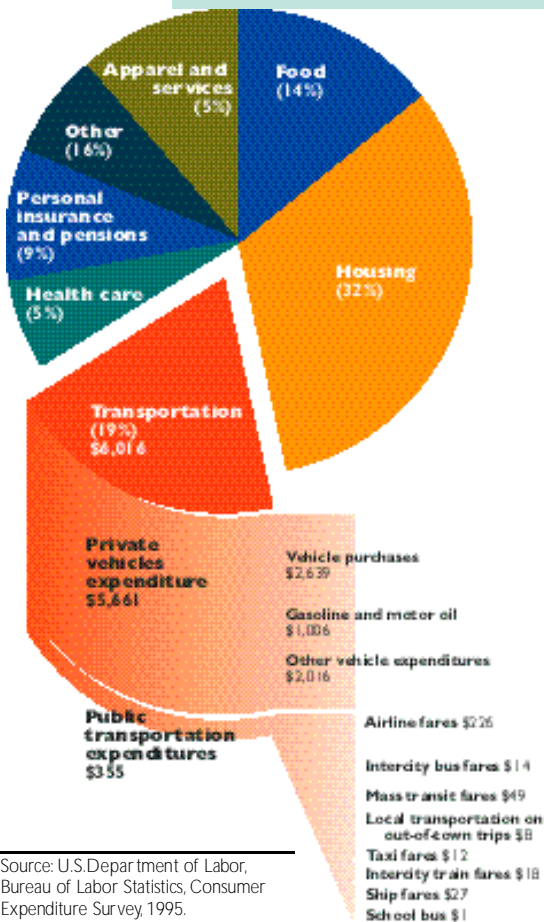
³ Exclude data for imports that are valued at less than \$1,250.

⁴ Exclude data for exports that are valued at less than \$2,500.

Sources: Truck, rail, and pipeline data: U.S. Department of Transportation, Bureau of Transportation Statistics, Transborder Surface Freight Dataset. Waterborne data: U.S. Department of Commerce, U.S. Census Bureau, Foreign Trade Division, *U.S. Waterborne Exports and General Imports, 1995*. Air freight data: U.S. Department of Commerce, U.S. Census Bureau, Foreign Trade Division, *FT920: U.S. Merchandise Trade: Selected Highlights, 1995*.

Figure 6.
Average Household Expenditures by Major
Category:1995
(In 1995 dollars)

| | |
|-----------------------------|----------|
| Average income | \$36,948 |
| Average annual expenditures | \$32,277 |



Source: U.S. Department of Labor,
Bureau of Labor Statistics, Consumer
Expenditure Survey, 1995.

Table 9.
Employment in Transportation and Related Industries
(In thousands)

| | 1970 | 1980 | 1985 | 1990 | 1995 |
|---|-------|-------|-------|--------|------------------|
| Total transportation employment | 8,007 | 8,803 | 9,253 | 10,150 | 9,993 |
| Transport sector | | | | | |
| Total | 2,694 | 3,175 | 3,214 | 3,732 | 4,098 |
| Air | 352 | 453 | 522 | 745 | 788 |
| Local and interurban passenger transit | 280 | 265 | 277 | 338 | 424 |
| Pipeline | 118 | 236 | 235 | 223 | 193 |
| Railroad | 634 | 532 | 359 | 279 | 239 |
| Transportation services | 115 | 198 | 275 | 345 | 413 |
| Trucking and warehousing | 1,083 | 1,280 | 1,361 | 1,625 | 1,867 |
| Water | 212 | 211 | 185 | 177 | 174 |
| Equipment manufacturing | | | | | |
| Total | 1,949 | 1,995 | 2,054 | 2,073 | 1,865 |
| Related industries | | | | | |
| Total | 2,652 | 2,962 | 3,336 | 3,672 | 3,929 |
| Automotive and home supply stores | N | 261 | 304 | 337 | 373 |
| Automotive services, and parking | 997 | 1,132 | 1,318 | 1,516 | 1,667 |
| Highway and street construction | 331 | 268 | 264 | 239 | 227 |
| Motor vehicle wholesalers and retailers | 1,324 | 1,301 | 1,450 | 1,535 | 1,662 |
| Government employment ² | | | | | |
| Total | 711 | 671 | 649 | 673 | ³ 101 |

N Data are nonexistent.

¹ Includes only liquid pipelines.

² Only U.S.DOT and state and local highway agencies.

³ Only U.S.DOT.

Source: U.S. Department of Transportation, Bureau of Transportation Statistics, *National Transportation Statistics 1997* (Washington, DC:1996), table 2-18.

Table 10.
Federal, State, and Local Transportation Revenues
and Expenditures
(In millions)

| Subject | 1982 | 1985 | 1990 | 1994 |
|---|---------|----------|----------|----------|
| Constant 1987 dollars | | | | |
| Revenues: | | | | |
| Federal | \$9,525 | \$18,977 | \$19,398 | \$19,731 |
| State | 23,176 | 26,077 | 30,591 | 33,990 |
| Local | 8,847 | 9,950 | 12,137 | 13,930 |
| Expenditures: | | | | |
| Federal (less grants) | 26,888 | 28,600 | 27,379 | 30,166 |
| Federal grants to states and localities | 15,597 | 18,810 | 17,825 | 18,319 |
| State and local | 45,317 | 50,118 | 61,575 | 67,729 |
| Current dollars | | | | |
| Revenues: | | | | |
| Federal | 8,296 | 18,388 | 21,532 | 25,552 |
| State | 18,935 | 24,355 | 34,629 | 42,861 |
| Local | 7,228 | 9,294 | 13,740 | 17,565 |
| Expenditures: | | | | |
| Federal (less grants) | 23,419 | 27,713 | 30,391 | 39,065 |
| Federal grants to states and localities | 13,585 | 18,226 | 19,786 | 23,723 |
| State and local | 37,024 | 46,810 | 69,703 | 85,407 |

Source: U.S. Department of Transportation, Bureau of Transportation Statistics, *Federal, State, and Local Transportation Financial Statistics, FY 1982-94* (Washington, DC:1997), tables 2, 4, and 5.

Over the past 25 years, transportation has caused roughly half of all accidental deaths in the United States. While most of these transportation fatalities involve motor vehicle crashes, the death toll on America's highways is dropping. Had the 1969 death rate persisted in 1995, more than 120,000 people would have died from motor vehicle crashes instead of the 41,798 fatalities that actually occurred. Fatality trends show that commercial airlines, buses, and railroads are the safer passenger modes.

Table 11.
Fatalities by Transportation Mode

| Mode | 1970 | 1980 | 1985 | 1990 | 1995 |
|-----------------------------------|--------|--------|--------|--------|--------|
| Large air carrier | 146 | 1 | 526 | 39 | 168 |
| Commuter air | C | 37 | 37 | 7 | 9 |
| On-demand air taxi | C | 105 | 76 | 50 | 52 |
| General aviation | 1,310 | 1,239 | 955 | 766 | 732 |
| Motor vehicles ¹ | 52,627 | 51,091 | 43,825 | 44,599 | 41,798 |
| Rail ² | 785 | 584 | 454 | 599 | 567 |
| Transit | C | C | C | 339 | 274 |
| Waterborne vessels | 178 | 206 | 131 | 85 | 46 |
| Recreational boating | 1,418 | 1,360 | 1,116 | 865 | 836 |
| Gas and hazardous liquid pipeline | 30 | 19 | 33 | 9 | 21 |

C Data not cited because of reporting changes.

¹ Includes occupants and nonoccupants and motor vehicle fatalities at railroad crossings.

² Includes train occupants and nonoccupants, except motor vehicle occupants at grade crossings.

Source: U.S. Department of Transportation, Bureau of Transportation Statistics, *Transportation Statistics Annual Report 1997* (Washington, DC: 1997), table 3-3.

Table 12.
Distribution of Transportation Fatalities:1995

| Category | Number | Percent |
|--|--------|---------|
| Total | 44,394 | 100.0 |
| Passenger car occupants | 22,358 | 50.4 |
| Light-truck occupants | 9,539 | 21.5 |
| Pedestrians struck by motor vehicles | 5,585 | 12.6 |
| Motorcyclists | 2,221 | 5.0 |
| Recreational boaters | 836 | 1.9 |
| Pedalcyclists struck by motor vehicles | 830 | 1.9 |
| General aviation | 732 | 1.6 |
| Large-truck occupants | 644 | 1.5 |
| Other and unknown motor vehicle occupants | 480 | 1.1 |
| Railroads ¹ | 475 | 1.1 |
| Air carriers | 168 | 0.4 |
| Other nonoccupants struck by motor vehicles ² | 109 | 0.2 |
| Commuter rail | 92 | 0.2 |
| Heavy-rail transit | 79 | 0.2 |
| Grade crossings (not involving motor vehicles) | 71 | 0.2 |
| Air taxis | 52 | 0.1 |
| Waterborne transportation | 46 | 0.1 |
| Bus occupants ³ | 32 | <0.1 |
| Gas distribution pipelines | 16 | <0.1 |
| Light-rail transit | 15 | <0.1 |
| Commuter air | 9 | <0.1 |
| Hazardous liquid and gas pipelines | 5 | <0.1 |
| Redundant with above: | | |
| Grade crossings, with motor vehicles | 508 | NA |
| Transit bus occupants | 82 | NA |
| Demand response and other transit vehicles | 6 | NA |

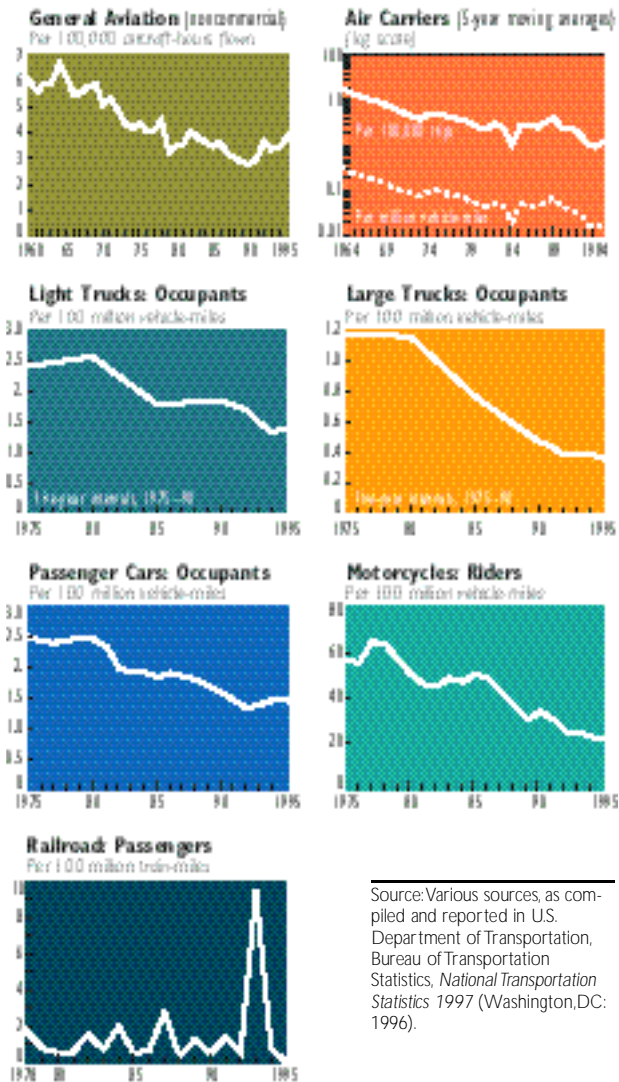
¹ Includes fatalities on and outside trains, except at grade crossings.

² Excludes pedalcyclists and pedestrians.

³ Includes school, intercity, and transit.

Source: U.S. Department of Transportation, Bureau of Transportation Statistics, *Transportation Statistics Annual Report 1997* (Washington, DC:1997), table 3-4.

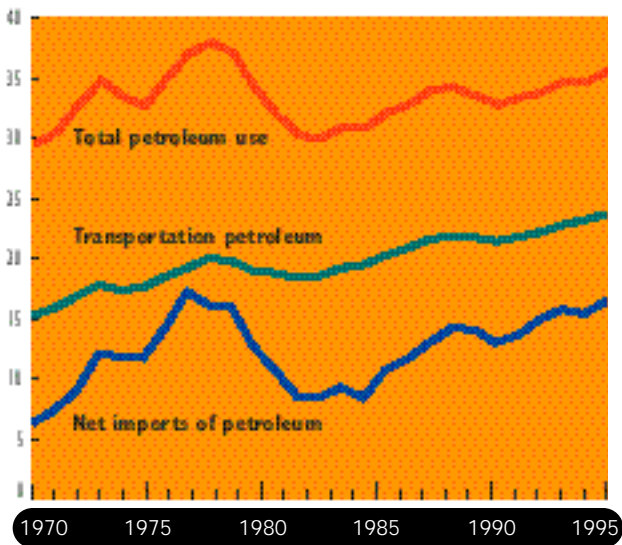
Figure 7.
Fatality Rates for Selected Modes



Source: Various sources, as compiled and reported in U.S. Department of Transportation, Bureau of Transportation Statistics, *National Transportation Statistics 1997* (Washington, DC: 1996).

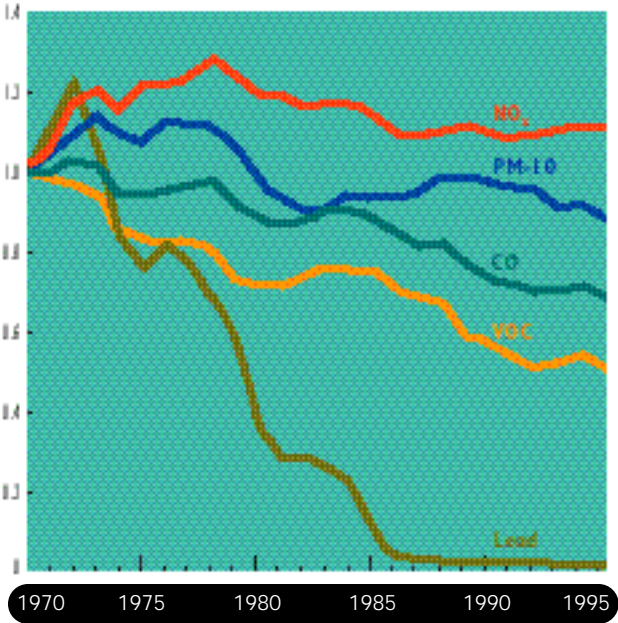
The benefits of the U.S. transportation system are great, but they are not problem free: dependence on imported oil, pollution of air and water, noise, the alteration of plant and animal habitats, and the frustration of congestion. While other sectors have moved away from oil over the last 20 years, transportation remains almost entirely dependent on petroleum as its energy source. The environmental impact of transportation is significant, but progress is being made, particularly in reducing many types of air pollution from transportation.

Figure 8.
Transportation Petroleum Use and Imports
Quadrillion Btu



Source: S.C. Davis and D.N. McFarlin, Oak Ridge National Laboratory, *Transportation Energy Data Book, Edition 16*, ORNL-6898 (Oak Ridge, TN:1996).

Figure 9.
U.S. Transportation-Related Air Emissions:
1970-95
Index (1970=1)



Key: NOx = oxides of nitrogen; PM-10 = airborne particulates of less than 10 microns; CO = carbon monoxide; VOC = volatile organic compounds.

Note: Transportation emissions include all onroad mobile sources and the following nonroad mobile sources: recreational vehicles, recreational marine vessels, airport service equipment, aircraft, marine vessels, and railroads. Lead estimates include onroad mobile sources only.

Source: U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, *National Air Quality and Emission Trends, 1900 to 1995* (Research Triangle Park, NC:1996).

Glossary

- Air carrier** —Certificated providers of scheduled and nonscheduled services.
- Commuter rail** —Local and regional passenger train operations between a central city and adjacent suburbs.
- Directional route-miles** —The sum of the mileage in each direction over which transit vehicles travel while in revenue service.
- Fatality** —For purposes of compiling DOT safety statistics, any injury that results in death within 30 days of a transportation crash or incident.
- General aviation** —All civil aviation operations other than scheduled air services and nonscheduled air transportation operations.
- Inland water vessels** —Includes self-propelled dry cargo, ferries, railroad cars, tankers, and towboats; and non-self-propelled dry cargo and tanker barges, and railroad car floats operating on the Atlantic, Gulf and Pacific coasts, Mississippi River System, Gulf Intracoastal Waterway, and Great Lakes System.
- Other 2-axle, 4-tire vehicles** —Includes vans, pickup trucks, and sport/utility vehicles.
- Passenger-mile** —One passenger transported one mile. One vehicle traveling 3 miles carrying 5 passengers generates 15 passenger miles.
- Personal-use vehicle** —car, pickup truck, or van; other small truck; rental car, truck, or van; recreational vehicle or motor home; or motorcycle or moped.
- Ton-miles** —A unit of measure equal to the movement of one ton over one mile.
- Truck:**
- Single unit** —A large truck on a single frame with at least 2 axles and 6 tires. Excludes other 2-axle, 4-tire vehicles.
 - Combination** —A power unit (truck or truck tractor) and one or more trailing units.
- Vehicle-mile** —One vehicle traveling one mile.

U. S. Department of Transportation

