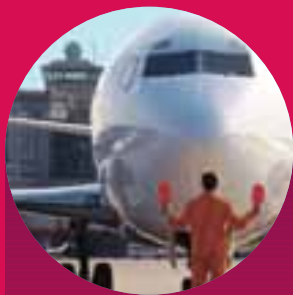


Bureau of Transportation Statistics

Pocket Guide to Transportation



2005

Bureau of Transportation Statistics

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January 2005

Pocket Guide to Transportation

**Bureau of
Transportation
Statistics**

**U.S. Department of
Transportation**



U.S. Department of Transportation

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America's transportation system continues to change along with the population, work force, and economy. The following table puts those changes in perspective:

| Context | 1980 | 2003 |
|---|-----------------------------|--------------------------|
| Resident population (thous.) | 226,542 | 290,810 |
| Total area (thous. sq. mi.) ^a | 3,619 | 3,794 (2000) |
| Total civilian labor force (thous.) | 106,940 | 146,510 |
| Real gross domestic product ^b | ^R \$5.2 trillion | \$10.4 trillion |
| Median household income ^{b,d} | \$34,007 | \$41,055 |
| Average household income ^{b,d} | \$40,445 | \$55,982 |
| Average household expenditures ^{b,c,d} | \$33,915 (1984) | \$39,283 |
| Number of households (thous.) | 80,776 | 111,278 |
| Life expectancy at birth (years) | 73.7 | ^P 77.2 (2001) |

^a 1980 data include inland water. Since 1990, the data include inland water, coastal water, and Great Lakes, but exclude territorial water. The Census Bureau tabulates area data for the decennial census years only.

^b 2000 chained dollars (see Glossary for definition).

^c Earliest year available is 1984.

^d BTS computations, November 2004.

Key: P = preliminary data; R = revised.

Sources: **Area**—U.S. Department of Commerce (USDOC), U.S. Census Bureau, *Statistical Abstract of the United States: 2003*, available at www.census.gov, as of Nov. 2004. **GDP**—USDOC, Bureau of Economic Analysis, available at www.bea.gov, as of Nov. 2004. **Population, number of households, median and average household income**—USDOC, Census, available at www.census.gov, as of Nov. 2004. **Average household expenditures, labor force**—U.S. Department of Labor; Bureau of Labor Statistics, available at www.bls.gov, as of Nov. 2004. **Life expectancy**—Centers for Disease Control and Prevention, available at www.cdc.gov, as of Oct. 2003.

The U.S. transportation system is an extensive, inter-related public and private network of roads, airports, railroads, transit routes, waterways, terminals, ports, and pipelines. Millions of people and businesses rely on this expanding system to get to work, embark on vacations, conduct business, and ship goods within the United States and abroad. The transportation system links regions and connects small and large cities and urban and rural areas.

Table I
The Transportation Network: 2003

| Mode | Components |
|---|--|
| Highway | Public roads |
| | 46,769 miles of Interstate highway |
| | 115,032 miles of other National Highway System roads |
| | 3,828,046 miles of other roads |
| Air | Public-use airports |
| | 5,286 airports |
| | Airports serving large certificated carriers (2002) |
| | 29 large hub areas ^a (72 airports), 443 million enplaned passengers |
| | 33 medium hub areas (38 airports), 103 million enplaned passengers |
| | 63 small hub areas (71 airports), 43 million enplaned passengers |
| 651 nonhub areas (664 airports), 16 million enplaned passengers | |
| Rail | Miles of railroad operated |
| | 98,944 miles by Class I freight railroads in the United States ^b |
| | 15,648 miles by regional freight railroads |
| | 26,347 miles by local freight railroads |
| | 23,000 miles by Amtrak (passenger) ^c |

Urban transit *Directional route-miles^d*

(2002)

Bus: 185,216^e

Trolley bus: 468

Commuter rail: 4,440

Heavy rail: 1,572

Light rail: 943

Stations

Commuter rail: 919

Heavy rail: 994

Light rail: 625

Water

26,000 miles of navigable waterways (2002)

Ferry routes: 487 (2000)

Commercial waterway facilities^a (2002)

Great Lakes: 600 deep-draft

154 shallow-draft

Inland: 2,361 shallow-draft

Ocean: 4,284 deep-draft

1,765 shallow-draft

Locks: 275

Pipeline**Oil**

Crude lines: 64,336 miles of pipe

Product lines: 75,565 miles of pipe

Gas (2002)

Transmission: 309,503 miles of pipe

Distribution: 1,079,565 miles of pipe

^a See Glossary for definitions. ^b There are also 570 miles of railroad operated by U.S. Class I freight railroads in Canada and Mexico.

^c The Amtrak mileage includes the 745 miles of trackage it owns and route-miles operated on the tracks of the freight railroads. ^d Directly operated service. Does not include contracted service. ^e Includes directional route-miles on exclusive right-of-way, controlled right-of-way, and mixed traffic.

Sources: Various sources, as cited in USDOT, Bureau of Transportation Statistics (BTS), *National Transportation Statistics*, available at <http://www.bts.gov>; Association of American Railroads, *Railroad Facts, 2003* (Washington, DC: 2004); USDOT, Federal Highway Administration, *Highway Statistics 2003* (Washington, DC: 2004), table HM-18; *Oil & Gas Journal*, Aug. 23, 2004; USDOT, Federal Transit Administration, *2002 National Transit Summaries and Trends*, table 18 and appendix, available at www.ntdprogram.com; USDOT, BTS, "Airport Activity Statistics of Certificated Air Carriers, Summary Tables, 12 Months Ending Dec. 31, 2002," 2004; U.S. Army Corps of Engineers, Institute for Water Resources, Navigation Data Center, *The U.S. Waterway System Facts, December 2003* (Alexandria, VA: 2003).

The safety of the traveling public is of major concern for the U.S. Department of Transportation. Although progress has been made in reducing fatalities, roughly 45 percent of U.S. deaths due to unintentional injury involve transportation. Roughly 95 percent of these transportation fatalities arise from motor vehicle crashes.

Table 2
Transportation Fatalities by Mode

| Mode | 1970 | 1980 | 1990 | 2000 | 2003 |
|-----------------------------------|--------|--------|--------|------------------|------------------|
| Large air carrier ^a | 146 | 1 | 39 | 92 | P ₂₂ |
| Commuter air carrier ^a | N | 37 | 6 | 5 | P ₂ |
| On-demand air taxi ^a | N | 105 | 51 | 71 | P ₄₅ |
| General aviation ^a | 1,310 | 1,239 | 767 | R ₅₉₆ | P ₆₃₁ |
| Highway ^b | 52,627 | 51,091 | 44,599 | 41,945 | 42,643 |
| Railroad ^c | 785 | 584 | 599 | 512 | 531 |
| Transit ^d | N | N | 339 | 295 | U |
| Commercial ship | | | | | |
| Vessel | 178 | 206 | 85 | 49 | P ₄₆ |
| Nonvessel ^e | 420 | 281 | 101 | 88 | P ₆₇ |
| Recreational boating | 1,418 | 1,360 | 865 | 701 | P ₇₀₃ |
| Gas and hazardous liquid pipeline | 30 | 19 | 9 | 38 | 12 |

^a Includes people on planes and on the ground.

^b Includes motor vehicle occupants, nonoccupants, and fatalities at railroad crossings.

^c Includes fatalities from nontrain incidents as well as train incidents and accidents. Also includes train occupants and nonoccupants except motor vehicle occupants at grade crossings.

^d Fatalities resulting from all reportable incidents, not just accidents. Includes commuter rail, heavy rail, light rail, motorbus, demand responsive, van pool, and automated guideway.

^e Fatalities unrelated to vessel accidents, e.g., individual falling overboard and drowning.

Key: N = data are nonexistent or not cited because of reporting changes; P = preliminary; R = revised; U = unavailable.

Sources: Various sources, as cited in USDOT, Bureau of Transportation Statistics, *National Transportation Statistics*, table 2-1, available at <http://www.bts.gov> (latest data forthcoming). **Recreational boating (2003)**—Based on data provided by the states, the District of Columbia, and the five U.S. territories to the Coast Guard Boating Accident Report Database (BARD) system.

Table 3

Distribution of Transportation Fatalities: 2002

| Category | Number | % |
|--|---------------|--------------|
| Passenger car occupants | 20,416 | 45.3 |
| Light-truck occupants | 12,182 | 27.0 |
| Pedestrians struck by motor vehicles | 4,808 | 10.7 |
| Motorcyclists | 3,244 | 7.2 |
| Recreational boating | 750 | 1.7 |
| Large-truck occupants | 684 | 1.5 |
| Pedalcyclists struck by motor vehicles | 662 | 1.5 |
| Other and unknown motor vehicle occupants | 661 | 1.5 |
| General aviation | 581 | 1.3 |
| Railroad trespassers (excl. grade crossings) ^a | 540 | 1.2 |
| Other nonoccupants struck by motor vehicles ^b | 113 | 0.25 |
| Heavy-rail transit (e.g., subway) | 73 | 0.16 |
| Waterborne transportation (vessel-related) | 64 | 0.14 |
| Waterborne transportation (nonvessel) | 59 | 0.13 |
| Grade crossings, not involving motor vehicles ^c | 47 | 0.10 |
| Bus occupants (school, intercity, and transit) | 45 | 0.10 |
| Private grade crossings, with motor vehicles | 39 | 0.09 |
| Air taxi | 35 | 0.08 |
| Railroad-related, not otherwise specified | 25 | 0.06 |
| Railroad employees on duty and contractors | 22 | 0.05 |
| Transit buses, not related to accidents ^d | 14 | 0.03 |
| Light-rail transit | 13 | 0.03 |
| Gas distribution pipelines | 10 | 0.02 |
| Passengers on railroad trains | 7 | 0.02 |
| Gas transmission pipelines | 1 | <0.01 |
| Hazardous liquid pipelines | 1 | <0.01 |
| Other counts, redundant with above^e | | |
| Large-truck occupants and nonoccupants | 4,897 | |
| Public grade crossings, with motor vehicles | 271 | |
| Commuter rail | 116 | |
| Transit buses, accident-related | 64 | |
| Outside planes in crashes ^f | 6 | |
| Total, all modes^g | 45,096 | 100.0 |

^a Includes fatalities outside trains.

^b Includes all nonoccupant fatalities except pedalcyclists and pedestrians.

^c Public grade-crossing fatalities involving motor vehicles are included in motor vehicle counts.

^d Fatalities not included under highway submodes.

^e Fatalities at grade crossings with motor vehicles are included under relevant motor vehicle modes. Commuter rail fatalities are counted under rail. Transit bus and demand-responsive transit occupant fatalities are counted under "bus" and nonoccupant fatalities are counted under "pedestrians," "pedalcyclists," or other motor vehicle categories.

^f Includes nonoccupant fatalities resulting from aviation accidents.

^g Unless otherwise specified, includes fatalities outside the vehicle.

Sources: Various sources, as cited in U.S. Department of Transportation, Bureau of Transportation Statistics, *National Transportation Statistics*, table 2-4, available at <http://www.bts.gov> (latest data forthcoming).

Table 4
Fatalities in Motor Vehicle Crashes by Number of Vehicles and Alcohol Involvement: 2003

| Number of vehicles | Fatalities^a | Alcohol involvement^b | Percent^c |
|-------------------------------|-------------------------------|--|----------------------------|
| Occupants | 37,132 | 14,476 | 39 |
| Single-vehicle crashes | 18,175 | 8,939 | 49 |
| Two-vehicle crashes | 15,795 | 4,606 | 29 |
| More than two-vehicle crashes | 3,162 | 931 | 29 |
| Pedestrians | 4,749 | 2,253 | 47 |
| Single-vehicle crashes | 4,288 | 2,014 | 47 |
| Multiple-vehicle crashes | 457 | 239 | 52 |
| Pedalcyclists | 622 | 238 | 38 |
| Single-vehicle crashes | 589 | 220 | 37 |
| Multiple-vehicle crashes | 33 | 19 | 55 |
| Others/unknown | 140 | 46 | 33 |
| Total | 42,643 | 17,013 | 40 |

^a Fatalities in all crashes.

^b Fatalities in crashes that involve alcohol.

^c Percentage of all crash fatalities that involve alcohol.

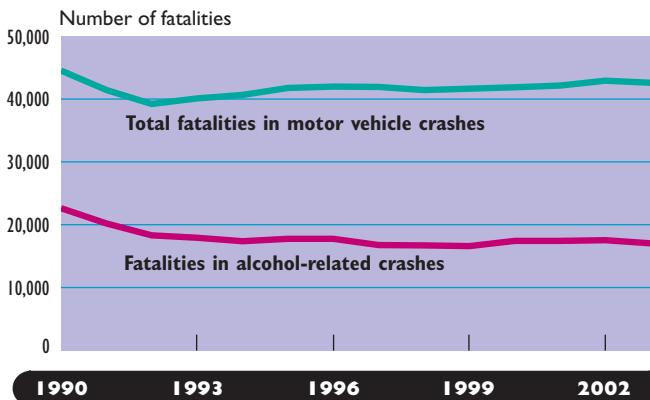
Notes: Numbers may not add to totals due to rounding.

A motor vehicle crash is considered to be alcohol-related if at least one driver or nonoccupant (such as a pedestrian or pedalcyclist) involved in the crash is determined to have had a blood alcohol concentration of 0.01 grams per deciliter or greater.

The National Highway Traffic Safety Administration estimates alcohol involvement when test results are unknown.

Source: U.S. Department of Transportation, National Highway Traffic Safety Administration, Fatality Analysis Reporting System (FARS) database, personal communication, October 2004.

Figure 1
**Fatalities in Alcohol-Related Motor
Vehicle Crashes: 1990–2003**

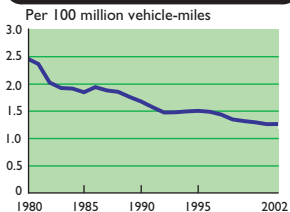


Note: Some data have been revised and differ from previous editions.

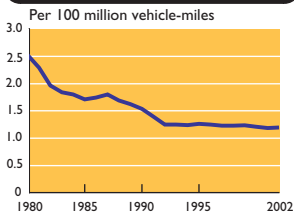
Source: U.S. Department of Transportation, National Highway Traffic Safety Administration, National Center for Statistics and Analysis, *Traffic Safety Facts 2003, Early Edition*, available at <http://www-nrd.nhtsa.dot.gov/pdf/nrd-30/NCSA/TSFAnn/TSF2003EarlyEdition.pdf>, as of October 2004.

Figure 2
Fatality Rates for Selected Modes

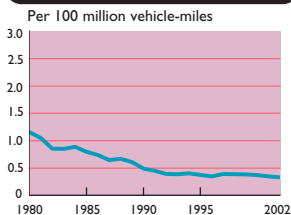
Passenger car occupants



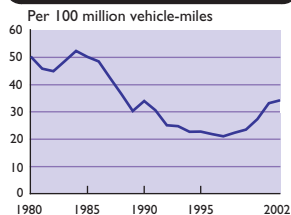
Light-truck occupants



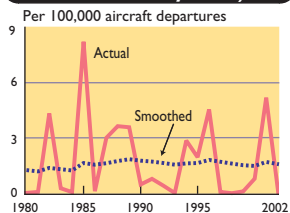
Large-truck occupants



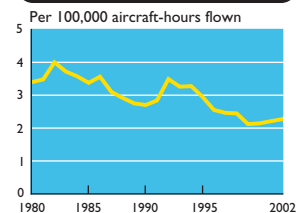
Motorcycle riders



Air carriers (actual and smoothed fatality rates)



General aviation



Notes: Data revised from previous editions—air: 1990–1991, 1994, 1999–2001; light truck: 1998–1999, 2001. Air carrier data were smoothed using an exponential smoothing model, with a weight of 0.94 to reduce the year-to-year fluctuations. Air carrier fatalities resulting from the Sept. 11, 2001, terrorist attacks include only those persons onboard aircraft.

Sources: USDOT, National Highway Traffic Safety Administration, *Traffic Safety Facts 2002*, tables 7–10, available at <http://www-nrd.nhtsa.dot.gov/pdf/nrd-30/NCSA/TSFAnn/TSF2002Final.pdf>, as of Oct. 2004. **Air carriers and general aviation**—USDOT, Bureau of Transportation Statistics, *National Transportation Statistics*, tables 2-9 and 2-14, available at <http://www.bts.gov>.

Table 5
Injured Persons by Transportation Mode

| Mode | 1970 | 1980 | 1990 | 2000 | 2003 |
|-----------------------------------|-------------|-------------|------------------------|------------------------|------------------|
| Air carrier | 107 | 19 | 29 | R ₂₉ | 30 |
| Commuter air carrier | N | 14 | 11 | 7 | 1 |
| On-demand air taxi | N | 43 | 36 | 12 | 15 |
| General aviation | 715 | 681 | 409 | R ₃₀₉ | 326 |
| Highway ^a | N | N | R _{3,230,666} | R _{3,188,750} | 2,888,601 |
| Railroad ^b | 17,394 | 58,696 | 22,736 | 10,424 | 7,956 |
| Transit ^c | N | N | 54,556 | 56,697 | U |
| Commercial ship | | | | | |
| Vessel accidents | 105 | 180 | 175 | 130 | P ₂₀₅ |
| Nonvessel accidents ^d | U | U | U | 567 | P ₄₉₉ |
| Recreational boating | 780 | 2,650 | 3,822 | 4,355 | 3,888 |
| Gas and hazardous liquid pipeline | 254 | 192 | 76 | 81 | 71 |

^a Includes passenger car occupants, motorcyclists, light-duty and large truck occupants, bus occupants, pedestrians, pedalcyclists, occupants of unknown vehicle types, and other nonmotorists.

^b Injuries resulting from train accidents, train and nontrain incidents, and occupational illness. Includes Amtrak. 1970 data are not comparable to data for later years due to a change in the reporting system.

^c Injuries resulting from all reportable incidents, not just from accidents. Includes commuter rail, heavy rail, light rail, motorbus, demand responsive, van pool, and automated guideway.

^d Injuries unrelated to vessel accidents, e.g., an individual getting a cut while onboard a vessel.

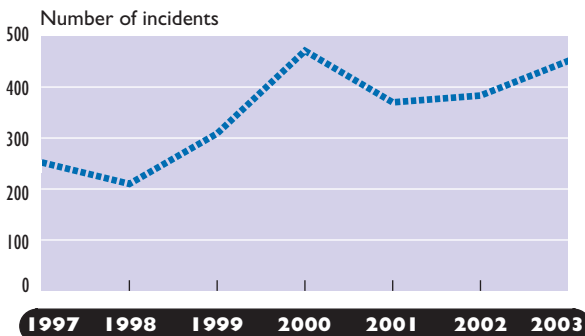
Key: N = data are nonexistent; P = preliminary; R = revised; U = unavailable.

Note: Each mode may use different reporting criteria for injuries.

Sources: Except as noted, various sources, as cited in U.S. Department of Transportation (USDOT), Bureau of Transportation Statistics, *National Transportation Statistics*, table 2-2, available at <http://www.bts.gov> (latest data forthcoming). **Highway**—USDOT, National Highway Traffic Safety Administration, *Traffic Safety Facts 2003 (Early Edition)*, table 2, p. 3, available at <http://www-nrd.nhtsa.dot.gov/pdf/nrd-30/NCSA/TSFAnn/TSF2003EarlyEdition.pdf>, as of October 2004. **2003 recreational boating**—U.S. Coast Guard, *Boating Statistics 2003* (annual issues), available at http://www.uscgboating.org/statistics/accident_stats.htm, as of December 2004.

Ensuring security of all transportation modes and facilities and the people who use them is a national priority. While much of the initial national focus after the September 11, 2001, terrorist attacks was on aircraft and airports, attention is also directed at other modes, including rail, water, highways, and pipelines. Another security matter is the U.S. dependency on foreign sources of oil. The U.S. transportation sector remains almost entirely dependent on petroleum as an energy source and more than 55 percent of the petroleum used in the United States is currently imported.

Figure 3
**International Piracy and
Armed Robbery at Sea**



Notes: Incidents include attempts and threatening actions. 1997–2001 data are revised from previous editions.

Source: International Maritime Organization, *Annual Report 2003*, available at <http://www.imo.org/home.asp>, as of April 2004.

Table 6
**Prohibited Items Intercepted at U.S. Airport
 Screening Checkpoints: 2003**

| Items | Number |
|--|------------------|
| Other cutting instruments | 2,973,413 |
| Knives | 1,961,849 |
| Incendiaries and explosive/ flammable materials | 494,123 |
| Clubs | 25,139 |
| Box cutters | 20,991 |
| Firearms | 683 |
| Other | 638,414 |
| Total prohibited items | 6,114,612 |

Notes: Other cutting instruments refers to, e.g., scissors, swords, sabers, and ice axes/picks.

Knives include any length and type except round-bladed, butter, and plastic cutlery.

Clubs refers to, e.g., baseball bats, night sticks, and billy clubs.

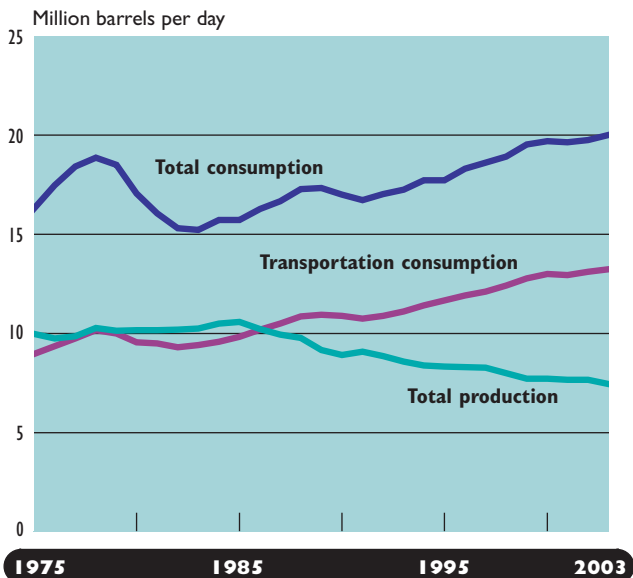
Firearms and guns refers to any weapon (excluding a starter gun) that is designed to or may be readily converted to expel a projectile by the action of an explosive.

Other refers to tools, self-defense items, and sporting goods (excluding baseball bats).

For further clarification about terms, see http://www.tsa.gov/interweb/assetlibrary/Permitted_Prohibited_8_23_2004.pdf.

Source: U.S. Department of Homeland Security, Transportation Security Administration, personal communication, November 2004.

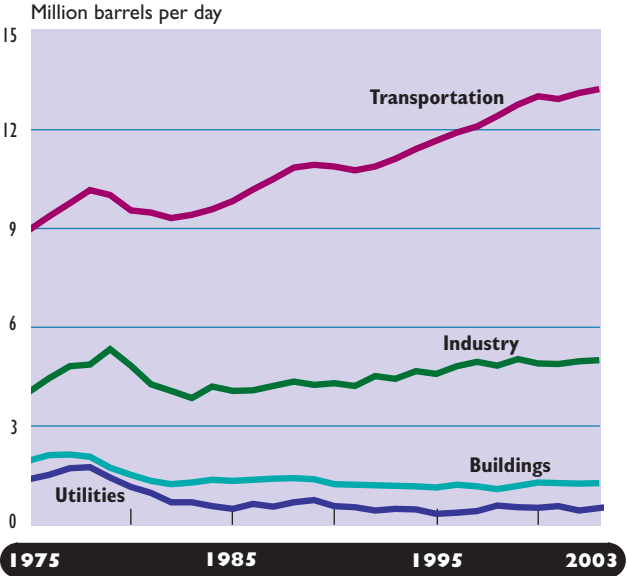
Figure 4
U.S. Petroleum Production and Consumption: 1975–2003



Notes: 2002 data are revised from previous editions. 2003 data are preliminary.

Source: U.S. Department of Energy, Energy Information Administration, *Annual Energy Review 2003* (Washington, DC: September 2004), tables 5.1 and 5.13c.

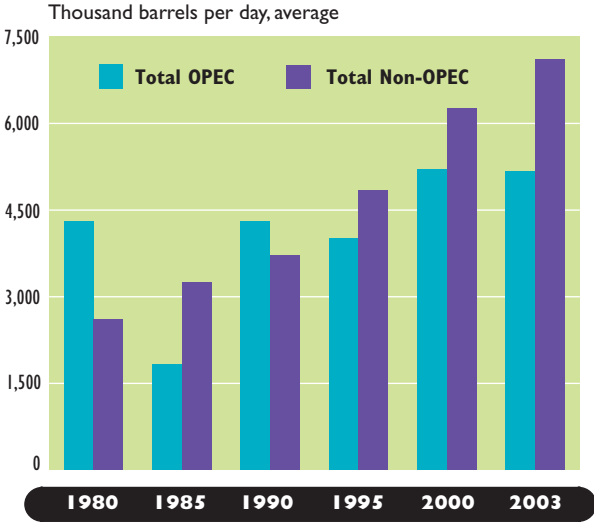
Figure 5
**Transportation's Share of
 U.S. Petroleum Use: 1975–2003**



Notes: 2002 data are revised from previous editions. 2003 data are preliminary.

Source: U.S. Department of Energy, Energy Information Administration, *Annual Energy Review 2003* (Washington, DC: September 2004), tables 5.13a–d.

Figure 6
U.S. Oil Imports



Notes: OPEC (Organization of Petroleum Exporting Countries) members are Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela. Former members Ecuador (until 1992) and Gabon (until 1994) are included in 1990 and prior years.

Source: U.S. Department of Energy, Energy Information Administration, *Monthly Energy Review*, August 2004, tables 3.3d and 3.3h, available at <http://www.eia.doe.gov/emeu/mer/petro.html>, as of September 2004.

Table 7
**Major Suppliers of U.S. Crude Oil
 and Petroleum Products**
(Thousand barrels per day, average; rank in 2003)

| | 1980 | 1985 | 1990 | 1995 | 2000 | 2003 |
|-----------------------------------|--------------|--------------|--------------|--------------|--------------|---------------|
| Canada | 455 | 770 | 934 | 1,332 | 1,807 | 2,072 |
| Saudi Arabia | 1,261 | 168 | 1,339 | 1,344 | 1,572 | 1,774 |
| Mexico | 533 | 816 | 755 | 1,068 | 1,373 | 1,623 |
| Venezuela | 481 | 605 | 1,025 | 1,480 | 1,546 | 1,376 |
| Nigeria | 857 | 293 | 800 | 627 | 896 | 867 |
| Iraq | 28 | 46 | 518 | 0 | 620 | 481 |
| United Kingdom | 176 | 310 | 189 | 383 | 366 | 440 |
| Algeria | 488 | 187 | 280 | 234 | 225 | 382 |
| Angola | 42 | 110 | 237 | 367 | 301 | 371 |
| U.S. Virgin Islands | 388 | 247 | 282 | 278 | 291 | 288 |
| Norway | 144 | 32 | 102 | 273 | 343 | 270 |
| Kuwait | 27 | 21 | 86 | 218 | 272 | 220 |
| Colombia | 4 | 23 | 182 | 219 | 342 | 195 |
| Total, major suppliers | 4,884 | 3,628 | 6,729 | 7,823 | 9,954 | 10,359 |
| Total, all U.S. imports | 6,909 | 5,067 | 8,018 | 8,835 | 11,459 | 12,264 |

Note: The country of origin for petroleum products may not be the country of origin for the crude oil used to produce the products. For example, refined products imported from western European refineries may have been produced from Middle Eastern crude oil.

Source: U.S. Department of Energy, Energy Information Administration, *Monthly Energy Review*, August 2004, tables 3.1b, 3.3a–h, available at <http://www.eia.doe.gov/emeu/mer/petro.html>, as of August 2004.

The U.S. transportation network makes possible a high degree of personal mobility and freight activity. The data in this section show growth in travel and freight shipments over time. Factors influencing this growth include, among others: greater vehicle availability, reduced travel costs, population increases, congestion, the economy, and consumer income.

Table 8
**Passenger Travel and Freight Transportation
 Per Capita**

| | Number |
|---|---------------|
| Passenger travel (2001) | |
| Trips | |
| Daily trips per person | 4.1 |
| Daily trips per person per year ^a | 1,483 |
| Miles | |
| Daily miles per person | 40 |
| Daily miles per person per year ^a | 14,524 |
| Domestic freight transportation (2002)^P | |
| Tons per person, annually | 40.1 |
| Ton-miles per person, annually | 11,112 |

^a Calculated on an annualized basis.

Key: P = preliminary.

Notes: Data used for passenger travel are from the National Household Travel Survey (NHTS) travel-day file and include trips of all lengths; about 95 percent of these daily trips were 30 miles or less. Calculations are based on weighted estimates from the 2001 NHTS.

Sources: **Passenger**—U.S. Department of Transportation (USDOT), Federal Highway Administration and Bureau of Transportation Statistics, National Household Travel Survey, available at http://www.bts.gov/programs/national_household_travel_survey, as of November 2004.

Freight—USDOT, Bureau of Transportation Statistics, and U.S. Department of Commerce, U.S. Census Bureau, *2002 Commodity Flow Survey United States—Preliminary*, available at <http://www.bts.gov>, as of November 2004.

Table 9
Number of Aircraft, Railcars, Vehicles, and Vessels

| Mode | 1980 | 1990 | 2000 | 2002 |
|---|-------------|-------------|-------------|---------------------|
| Air carriers | 3,808 | 6,083 | 8,055 | 8,194 |
| General aviation | 211,045 | 198,000 | 217,533 | 211,244 |
| Automobiles | 121,600,843 | 133,700,496 | 133,621,420 | 135,920,677 |
| Motorcycles | 5,693,940 | 4,259,462 | 4,346,068 | 5,004,156 |
| Other 2-axle, 4-tire vehicles ^a | 27,875,934 | 48,274,555 | 79,084,979 | 85,011,305 |
| Trucks: Single-unit | 4,373,784 | 4,486,981 | 5,926,030 | 5,650,619 |
| Combination | 1,416,869 | 1,708,895 | 2,096,619 | 2,276,661 |
| Buses ^b | 528,789 | 626,987 | 746,125 | 760,717 |
| Passenger rail: | | | | |
| Amtrak—Cars | 2,128 | 1,863 | 1,894 | 2,896 |
| Locomotives | 419 | 318 | 378 | 372 |
| Commuter railcars and locomotives | 4,500 | 4,415 | 5,073 | ^P 5,300 |
| Transit ^c | 10,654 | 11,332 | 12,168 | ^P 12,163 |
| Class I rail: | | | | |
| Freight cars | 1,168,114 | 658,902 | 560,154 | 477,751 |
| Locomotives | 28,094 | 18,835 | 20,028 | 20,506 |
| Other freight cars | 542,713 | 553,359 | 820,642 | 821,919 |
| Nonsel­propelled vessels (barges) ^{d,e} | 31,662 | 31,209 | 33,152 | 32,381 |
| Self-propelled vessels ^{d,e} | 7,126 | 8,236 | 8,202 | 8,621 |
| Oceangoing ships ^e (1,000 gross tons and over) | 864 | 636 | 454 | 426 |
| Recreational boats ^f | 8,577,857 | 10,996,253 | 12,782,143 | 12,854,054 |

^a Includes vans, pickup trucks, sport utility vehicles, and other 2-axle, 4-tire vehicles that are not passenger cars.

^b Includes municipally owned transit, commercial, federal, and school buses.

^c Includes light and heavy rail only.

^d See Glossary for definitions.

^e U.S.-flag vessels.

^f Numbered boats.

Key: P = preliminary.

Sources: Various sources, as cited in U.S. Department of Transportation, Bureau of Transportation Statistics, *National Transportation Statistics*, table I-11, available at <http://www.bts.gov> (latest data forthcoming).

Table 10
Vehicle-Miles
(Millions)

| Mode | 1970 | 1980 | 1990 | 2000 | 2002 |
|---|-------------|-------------|-------------|----------------|------------------|
| Air carriers | 2,068 | 2,523 | 3,963 | 5,664 | 6,085 |
| General aviation | 3,207 | 5,204 | 4,548 | ^a N | ^a N |
| Passenger cars | 916,700 | 1,111,596 | 1,408,266 | 1,600,287 | 1,658,640 |
| Motorcycles | 2,979 | 10,214 | 9,557 | 10,469 | 9,553 |
| Other 2-axle, 4-tire vehicles ^b | 123,286 | 290,935 | 574,571 | 923,059 | 966,184 |
| Trucks: | | | | | |
| Single-unit | 27,081 | 39,813 | 51,901 | 70,500 | 75,887 |
| Combination | 35,134 | 68,678 | 94,341 | 135,020 | 138,643 |
| Buses ^c | 4,544 | 6,059 | 5,726 | 7,590 | 6,849 |
| Rail ^d : | | | | | |
| Transit ^e | 441 | 403 | 561 | 648 | ^P 682 |
| Commuter | N | 179 | 213 | 271 | ^P 284 |
| Class I freight | 29,890 | 29,277 | 26,159 | 34,590 | 34,680 |
| Intercity/Amtrak ^f | 690 | 235 | 301 | 368 | 379 |
| Other transit ^g | N | 15 | 324 | 833 | ^P 886 |

^aThe Federal Aviation Administration has estimated vehicle-miles for general aviation aircraft through 1997, relying in part on hours-flown survey data. Vehicle-miles estimates for subsequent years are not yet available.

^bIncludes vans, pickup trucks, sport utility vehicles, and other 2-axle, 4-tire vehicles that are not passenger cars.

^cIncludes municipally owned transit, commercial, federal, and school buses.

^dCar-miles.

^eIncludes light and heavy rail only.

^fFiscal year data. Amtrak began operations in 1971.

^gIncludes demand responsive, ferryboat, and other transit not specified; 1980 data include "other transit" only.

Key: N = data are nonexistent; P = preliminary.

Sources: Various sources, as cited in U.S. Department of Transportation, Bureau of Transportation Statistics, *National Transportation Statistics*, table I-32, available at <http://www.bts.gov> (latest data forthcoming).

Table 11
Passenger-Miles
(Millions)

| Mode | 1970 | 1980 | 1990 | 2000 | 2002 |
|---|-------------|-------------|-------------|-------------|---------------------|
| Air carriers | 108,442 | 204,368 | 345,873 | 516,129 | 483,057 |
| General aviation | 9,100 | 14,700 | 13,000 | 15,200 | U |
| Passenger cars | 1,750,897 | 2,011,989 | 2,281,391 | 2,544,457 | 2,604,065 |
| Motorcycles | 3,277 | 12,257 | 12,424 | 11,516 | 11,655 |
| Other 2-axle, 4-tire vehicles ^a | 225,613 | 520,774 | 999,754 | 1,467,664 | 1,719,750 |
| Buses ^b | N | N | 121,398 | 160,919 | 145,208 |
| Rail: | | | | | |
| Transit ^c | N | 10,939 | 12,046 | 15,200 | ^P 15,095 |
| Commuter | 4,592 | 6,516 | 7,082 | 9,402 | ^P 9,504 |
| Intercity/ Amtrak ^d | 6,179 | 4,503 | 6,057 | 5,498 | 5,468 |
| Other transit ^e | N | 390 | 841 | 1,631 | ^P 1,696 |

^a Includes vans, pickup trucks, sport utility vehicles, and other 2-axle, 4-tire vehicles that are not passenger cars.

^b Includes municipally owned transit, commercial, federal, and school buses.

^c Includes light and heavy rail only.

^d Fiscal year data. Amtrak began operations in 1971.

^e Includes demand responsive, ferryboat, and other transit not specified; 1980 data include ferryboat and "other transit" only.

Key: N = data are nonexistent; P = preliminary; U = unavailable.

Sources: Except as noted, various sources, as cited in U.S. Department of Transportation (USDOT), Bureau of Transportation Statistics (BTS), *National Transportation Statistics*, table 1-37, available at <http://www.bts.gov> (latest data forthcoming).

2002 air carriers—USDOT, BTS, *Air Carrier Traffic Statistics* (Washington, DC: Annual December issues), p. 2, line 1.

Table 12

Daily Travel: 2001

(Trips from one point to another on a single day;
most daily trips are local)

| | Percent |
|--------------------------------------|-----------------|
| Modal shares of daily trips | |
| Personal vehicle (multiple occupant) | 49 |
| Personal vehicle (single occupant) | 38 |
| Walking | 9 |
| School bus | 2 |
| Transit | 2 |
| Other | 2 |
| Trip purpose | |
| Family/personal business | 45 |
| Social/recreational | 27 |
| Work (commute) | ^R 15 |
| School/place of worship | 10 |
| Work-related | 3 |
| Other | 1 |

| | Minutes per day | Miles per day |
|--|----------------------------|--------------------------|
| Average driving time and distance | | |
| Female drivers | 44 | 21 |
| Male drivers | 67 | 38 |
| All drivers | 55 | 29 |

Key: R = revised.

Notes: Data were collected between March 2001–May 2002. Percentages may not add to 100 due to rounding. Transit includes public bus, commuter bus and train, subway/elevated train, and streetcar/trolley.

Other includes air, intercity or charter bus, intercity rail, ship, taxi, limousine, shuttle, or bicycle. Family/personal business includes shopping, medical visits, picking people up or dropping them off, banking, etc.

Social/recreational includes visiting friends and relatives, going to the movies or other entertainment, vacation trips, or participating in sports activities. Work (commute) trips are those to and from a person's place of work. Work-related trips are those made for one's job other than to or from the place of work, but do not include such occupational trips as driving a taxi, bus, or delivery truck.

Sources: U.S. Department of Transportation (USDOT), Federal Highway Administration and Bureau of Transportation Statistics (BTS), *National Household Travel Survey* (Washington, DC: 2002); USDOT, BTS, *National Household Travel Survey 2001 Highlights Report*, BTS03-05 (Washington, DC: 2003), tables A-10, A-11, and A-16.

Table 13

Long-Distance Travel: 2001*(Trips of 50 miles or more from home to the farthest destination)*

| | Percent |
|--|----------------|
| Modal shares of long-distance trips | |
| Personal vehicle | 90 |
| Air | 7 |
| Bus | 2 |
| Train | 1 |
| Other | <1 |
| Trip purpose | |
| Pleasure | 56 |
| Business | 16 |
| Work (commute) | 13 |
| Personal business | 13 |
| Other | 3 |

| | Share of trips by gender | |
|------------------|---------------------------------|----------------|
| Mode | Women (%) | Men (%) |
| Personal vehicle | 42 | 58 |
| Air | 43 | 57 |
| Bus | 55 | 45 |
| Train | 42 | 58 |
| Other | 30 | 70 |
| All modes | 43 | 57 |

Notes: Data were collected between March 2001–May 2002. Percentages may not add to 100 due to rounding.

Trip purpose—Pleasure includes vacations, sightseeing excursions, rest and relaxation, visiting friends and family, or outdoor recreation.

Business includes conference and meeting attendance or any other business purpose than commuting to and from work or such occupational trips as driving a bus. Work includes commuting to and from work, but does not include such occupational trips as driving a bus.

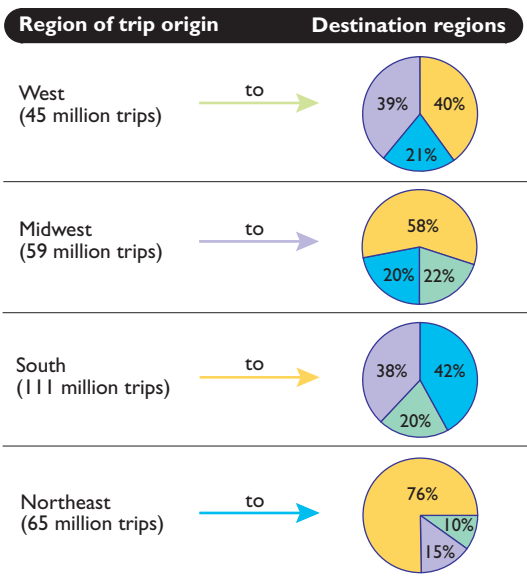
Personal business includes medical visits, shopping trips, and trips to attend weddings, funerals, etc.

Mode—Other includes ship, taxicab, limousine, shuttle, or bicycle.

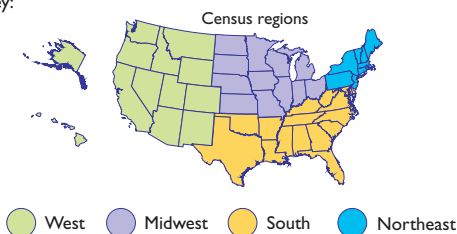
Sources: U.S. Department of Transportation (USDOT), Federal Highway Administration and Bureau of Transportation Statistics (BTS), *National Household Travel Survey* (Washington, DC: 2002); USDOT, BTS, *National Household Travel Survey 2001 Highlights Report*, BTS03-05 (Washington, DC: 2003), tables 4, A-18a, and A-24b.

Figure 7

Origin and Destinations of Long-Distance Interregional Trips: 2001



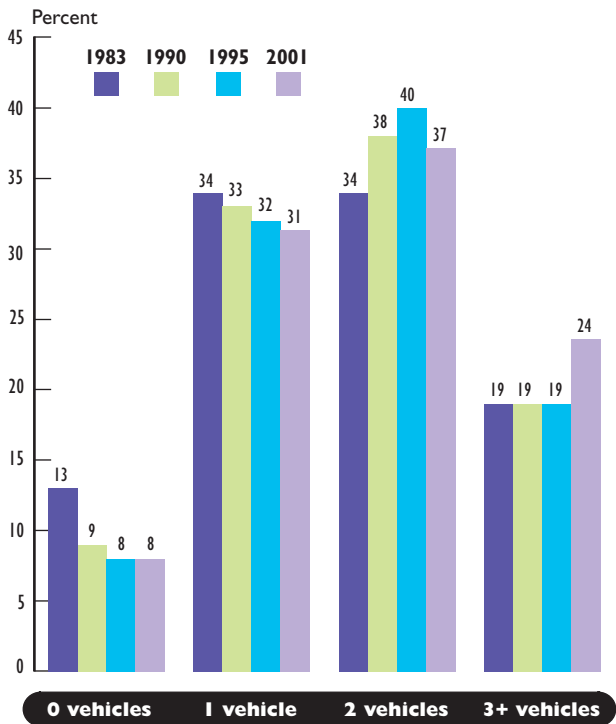
Key:



Notes: Data were collected between March 2001-May 2002. Data are revised from previous editions. Trips within the same region make up roughly 89 percent of all long-distance trips. Only interregional trips are included in this figure.

Source: U.S. Department of Transportation, Bureau of Transportation Statistics and Federal Highway Administration, 2001 National Household Travel Survey, preliminary long-distance trip data file, 2003.

Figure 8
Households by Number of Vehicles



Sources: 1983–1995—U.S. Department of Transportation (USDOT), Federal Highway Administration (FHWA), *Nationwide Personal Transportation Survey, Our Nation's Travel* (Washington, DC: 1997).

2001—USDOT, Bureau of Transportation Statistics and FHWA, *National Household Travel Survey* (Washington, DC: 2003).

Table 14

U.S.-Mexican Border Land-Passenger Gateways: 2003
(Thousands)

| Land gateway | Entering the U.S. |
|---|--------------------------|
| All U.S.-Mexican land gateways | |
| Personal vehicles | 88,068 |
| Personal vehicle passengers | 193,697 |
| Buses | 319 |
| Bus passengers | 3,747 |
| Train passengers | 12 |
| Pedestrians | 48,664 |
| Personal vehicles—top 5 gateways | |
| San Ysidro, CA | 17,408 |
| El Paso, TX | 13,699 |
| Brownsville, TX | 7,220 |
| Hidalgo, TX | 7,170 |
| Laredo, TX | 6,777 |
| Personal vehicle passengers—top 5 gateways | |
| San Ysidro, CA | 39,181 |
| El Paso, TX | 26,317 |
| Brownsville, TX | 15,673 |
| Hidalgo, TX | 15,588 |
| Laredo, TX | 15,209 |
| Buses—top 5 gateways | |
| San Ysidro, CA | 111 |
| Otay Mesa, CA | 73 |
| Laredo, TX | 35 |
| Hidalgo, TX | 33 |
| El Paso, TX | 30 |
| Bus passengers—top 5 gateways | |
| San Ysidro, CA | 1,245 |
| Laredo, TX | 749 |
| Hidalgo, TX | 655 |
| El Paso, TX | 392 |
| Otay Mesa, CA | 304 |
| Train passengers—top 5 gateways | |
| Eagle Pass, TX | 6 |
| El Paso, TX | 2 |
| Nogales, AZ | 2 |
| Calexico East, CA | 1 |
| Otay Mesa, CA | 0.5 |
| Pedestrians—top 5 gateways | |
| El Paso, TX | 8,899 |
| San Ysidro, CA | 8,302 |
| Calexico, CA | 6,230 |
| Nogales, AZ | 5,584 |
| Laredo, TX | 4,578 |

Source: U.S. Department of Transportation, Bureau of Transportation Statistics, special tabulation, October 2004; based on U.S. Department of Homeland Security, U.S. Customs and Border Protection, Office of Field Operations, Operations Management database, as of August 2004.

Table 15

U.S.-Canadian Border Land-Passenger Gateways: 2003
(Thousands)

| Land gateway | Entering the U.S. |
|---|--------------------------|
| All U.S.-Canadian land gateways | |
| Personal vehicles | 30,220 |
| Personal vehicle passengers | 61,502 |
| Buses | 157 |
| Bus passengers | 3,780 |
| Train passengers | 190 |
| Pedestrians | 937 |
| Personal vehicles—top 5 gateways | |
| Buffalo-Niagara Falls, NY | 6,414 |
| Detroit, MI | 6,316 |
| Blaine, WA | 2,300 |
| Port Huron, MI | 1,965 |
| Massena, NY | 1,134 |
| Personal vehicle passengers—top 5 gateways | |
| Buffalo-Niagara Falls, NY | 13,216 |
| Detroit, MI | 10,966 |
| Blaine, WA | 4,492 |
| Port Huron, MI | 3,822 |
| Champlain-Rouses Point, NY | 3,521 |
| Buses—top 5 gateways | |
| Buffalo-Niagara Falls, NY | 43 |
| Detroit, MI | 36 |
| Sault Ste. Marie, MI | 16 |
| Blaine, WA | 13 |
| Champlain-Rouses Point, NY | 11 |
| Bus passengers—top 5 gateways | |
| Buffalo-Niagara Falls, NY | 1,322 |
| Detroit, MI | 904 |
| Blaine, WA | 284 |
| Champlain-Rouses Point, NY | 235 |
| Sault Ste. Marie, MI | 193 |
| Train passengers—top 5 gateways | |
| Skagway, AK | 44 |
| Blaine, WA | 44 |
| Buffalo-Niagara Falls, NY | 37 |
| Champlain-Rouses Point, NY | 28 |
| Port Huron, MI | 25 |
| Pedestrians—top 5 gateways | |
| Buffalo-Niagara Falls, NY | 656 |
| Sumas, WA | 59 |
| Calais, ME | 45 |
| Portland, ME (ferry crossing) | 38 |
| International Falls, MN | 28 |

Source: U.S. Department of Transportation, Bureau of Transportation Statistics, special tabulation, October 2004; based on U.S. Department of Homeland Security, U.S. Customs and Border Protection, Office of Field Operations, Operations Management database, as of August 2004.

Table 16

Top 20 U.S. Passenger Airports*(Thousands of enplaned passengers on large certificated air carriers)*

| Airport | 1993 | | 2003 | | % change 1993–2003 |
|--------------------------------|------|---------------------------|------|---------------------------|--------------------|
| | Rank | Total enplaned passengers | Rank | Total enplaned passengers | |
| Atlanta (Hartsfield), GA | 3 | 22,295 | 1 | 38,229 | 71.5 |
| Chicago (O'Hare), IL | 1 | 28,459 | 2 | 30,798 | 8.2 |
| Dallas/Ft. Worth, TX | 2 | 24,654 | 3 | 24,502 | -0.6 |
| Los Angeles, CA | 4 | 18,445 | 4 | 20,913 | 13.4 |
| Denver, CO | 5 | 14,210 | 5 | 17,272 | 21.5 |
| Phoenix (Sky Harbor), AZ | 7 | 11,294 | 6 | 17,176 | 52.1 |
| Las Vegas (McCarran), NV | 13 | 10,118 | 7 | 16,702 | 65.1 |
| Houston (Intercontinental), TX | 18 | 8,697 | 8 | 15,495 | 78.2 |
| Minneapolis, MN | 10 | 10,377 | 9 | 15,362 | 48.0 |
| Detroit (Wayne County), MI | 8 | 11,045 | 10 | 14,656 | 32.7 |
| Newark, NJ | 9 | 10,970 | 11 | 13,088 | 19.3 |
| Seattle, WA | 16 | 9,010 | 12 | 12,788 | 41.9 |
| San Francisco, CA | 6 | 14,004 | 13 | 12,228 | -12.7 |
| Orlando, FL | 17 | 8,725 | 14 | 12,049 | 38.1 |
| Miami, FL | 12 | 10,138 | 15 | 11,050 | 9.0 |
| New York (John F. Kennedy), NY | 21 | 8,258 | 16 | 10,746 | 30.1 |
| Cincinnati, OH | 27 | 5,128 | 17 | 10,257 | 100.0 |
| Philadelphia, PA | 23 | 7,294 | 18 | 10,185 | 39.6 |
| New York (La Guardia), NY | 15 | 9,340 | 19 | 10,136 | 8.5 |
| Charlotte (Douglas), NC | 22 | 7,805 | 20 | 9,573 | 22.6 |
| Top 20 airports | | 250,266 | | 323,205 | 29.1 |
| All airports | | 466,677 | | 593,974 | 27.3 |

Note: Numbers may not add to totals due to rounding.

Source: U.S. Department of Transportation, Bureau of Transportation Statistics, Office of Airline Information, Schedule T-3 data, special tabulation, October 2004.

Table 17

U.S. Airports with the Highest Percentage of Arriving Passenger Flight Delays

(Percentage of scheduled flights canceled, diverted, or arriving at least 15 minutes after the scheduled arrival time)

| Airport | 1993 | | 2003 | |
|--|------------|------|------------|------|
| | Delay rank | % | Delay rank | % |
| Newark Int., NJ | 1 | 29.0 | 1 | 25.8 |
| Chicago O'Hare Int., IL | 9 | 20.1 | 2 | 22.7 |
| Philadelphia Int., PA | 20 | 17.7 | 3 | 22.7 |
| New York La Guardia, NY | 15 | 18.8 | 4 | 22.4 |
| Miami Int., FL | 14 | 19.2 | 5 | 20.1 |
| Fort Lauderdale- Hollywood Int., FL | 7 | 21.9 | 6 | 19.5 |
| New York JFK Int., NY | 6 | 22.5 | 7 | 19.4 |
| Atlanta Hartsfield Int., GA | 5 | 23.2 | 8 | 19.4 |
| San Francisco Int., CA | 4 | 23.3 | 9 | 18.4 |
| Boston Logan Int., MA | 2 | 25.4 | 10 | 17.7 |
| Seattle-Tacoma Int., WA | 10 | 20.0 | 11 | 17.5 |
| Washington Reagan National, DC | 23 | 17.3 | 12 | 17.0 |
| Orlando Int., FL | 21 | 17.5 | 13 | 17.0 |
| San Diego Int., CA | 16 | 18.8 | 14 | 16.9 |
| Charlotte Douglas, NC | 31 | 11.6 | 15 | 16.8 |
| Tampa Int., FL | 18 | 18.1 | 16 | 16.5 |
| Las Vegas McCarran Int., NV | 27 | 15.2 | 17 | 16.4 |
| Pittsburgh Int., PA | 11 | 19.7 | 18 | 16.4 |
| Baltimore/Washington Int., MD | 24 | 16.1 | 19 | 16.2 |
| Cincinnati Int., KY | 22 | 17.5 | 20 | 15.7 |

Notes: Delay rank is based on the list of the 31 airports (of which only the top 20 are shown here) that handled at least 1% of all domestically enplaned passengers each in 2003. Data are collected from major carriers.

Source: U.S. Department of Transportation, Bureau of Transportation Statistics, Office of Airline Information, special tabulation, November 2004.

Table 18
**Roadway Delay and Congestion Cost per Person
 in Urban Areas: 1992 and 2002**

**Annual Roadway Delay per Person
 (Hours per year)**

| | 1992 delay per person | 2002 delay per person | Percentage change 1992–2002 | Annual growth rate 1992–2002 |
|------------------------|-----------------------------|-----------------------------|-----------------------------------|------------------------------------|
| Very large areas | 55 | 62 | 13 | 1.2 |
| Large areas | 28 | 38 | 36 | 3.1 |
| Medium areas | 14 | 25 | 79 | 6.0 |
| Small areas | 9 | 12 | 33 | 2.9 |
| 85-area average | 38 | 46 | 21 | 1.9 |

**Annual Roadway Congestion Cost per Person
 (Current dollars)**

| | 1992 cost per person | 2002 cost per person | Percentage change 1992–2002 | Annual growth rate 1992–2002 |
|------------------------|----------------------------|----------------------------|-----------------------------------|------------------------------------|
| Very large areas | 338 | 567 | 68 | 5.3 |
| Large areas | 178 | 364 | 104 | 7.4 |
| Medium areas | 95 | 238 | 151 | 9.6 |
| Small areas | 57 | 116 | 104 | 7.4 |
| 85-area average | 242 | 435 | 80 | 6.0 |

Key:

Very large = over 3 million population (e.g., New York-Northern NJ).

Large = 1 million–3 million population (e.g., Atlanta).

Medium = selected areas with 500,000–1 million population (e.g., Memphis).

Small = selected areas under 500,000 population (e.g., Colorado Springs).

Notes: The Texas Transportation Institute (TTI) estimates delay indirectly by using traffic volumes and methodology developed by the Federal Highway Administration for estimating the effects of roadway incidents.

TTI estimates cost by taking into account fuel cost, value of time, and commercial vehicle operating cost.

Source: Texas Transportation Institute, *2004 Urban Mobility Report*, "Base Statistics for the 85 Urban Areas" spreadsheet, available at http://mobility.tamu.edu/ums/congestion_data/, as of November 2004.

Table 19

Amtrak On-Time Performance Trends and Hours of Delay by Cause

| | 2001 | 2002 | 2003 | 2004 |
|---|---------------|---------------|---------------|---------------|
| On-time performance | | | | |
| Total (weighted) | 75% | 76% | 74% | 71% |
| Short distance (<400 miles) ^a | R85% | R87% | R82% | 76% |
| Long distance (≥400 miles) | R69% | R70% | R70% | 68% |
| Hours of delay by cause | | | | |
| Amtrak ^b | 27,822 | 26,575 | 25,711 | 28,323 |
| Host railroad ^c | 52,273 | 55,090 | 57,346 | 61,256 |
| Other ^d | 3,741 | 4,266 | 5,355 | 5,582 |
| Total^e | 83,837 | 85,932 | 88,413 | 95,162 |

^a Includes all Amtrak Northeast Corridor and Empire Service (New York state) trains. ^b Includes all delays when operating on Amtrak-owned tracks and delays for equipment or engine failure, passenger handling, holding for connections, train servicing, and mail/baggage handling when on tracks of a host railroad. ^c Includes all operating delays not attributable to Amtrak when operating on tracks of a host railroad (e.g., track- and signal-related delays, power failures, freight and commuter train interference, routing delays). ^d Includes delays not attributable to Amtrak or host railroads (e.g., customs and immigration, law enforcement action, weather, or waiting for scheduled departure time). ^e Numbers may not add to totals due to rounding.

Key: R = revised.

Notes: All percentages are based on Amtrak's fiscal year (Oct. 1–Sept. 30). Host railroad is a freight or commuter railroad over which many Amtrak trains operate for all or part of their trips.

Amtrak trips are considered delayed based on the following chart:

| <u>Trip length (miles)</u> | <u>Arrival time delay (minutes)</u> |
|--------------------------------|---|
| 0–250 | 10 |
| 251–350 | 15 |
| 351–450 | 20 |
| 451–550 | 25 |
| ≥ 551 | 30 |

Source: Amtrak, personal communication, October 2004.

Table 20

**U.S. Domestic Freight Shipments by Mode:
Preliminary 2002***(Commodity Flow Survey data only)*

| Mode | Value (\$ billions) | Tons (millions) | Ton-miles (billions) |
|---|--------------------------------|----------------------------|---------------------------------|
| Total | 8,483 | 11,573 | 3,204 |
| Truck (for-hire and private) | 6,200 | 7,622 | 1,311 |
| Rail | 320 | 1,817 | 1,199 |
| Water | 91 | 714 | 323 |
| Air (includes truck and air) | 279 | 4 | 6 |
| Pipeline ^a | 162 | 722 | S |
| Intermodal total^b | 1,111 | 198 | 215 |
| Parcel, postal, and courier services | 1,022 | 26 | 21 |
| Truck and rail | S | S | S |
| Other intermodal combinations | 26 | 131 | 147 |
| Unknown | 319 | 496 | 77 |

^a Estimates of pipeline exclude shipments of crude petroleum.

^b Includes 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.

Key: S = withheld due to high sampling variability or poor response quality.

Note: The data presented in this table exclude shipments from the following establishments classified in the North American Industry Classification System (NAICS) as: farms, forestry, logging, fisheries, construction, publishing, and crude petroleum production; households; governments; and most retail and service businesses. Also excluded are most imports and commodities shipped from a foreign location to another foreign destination that pass through the United States.

Source: U.S. Department of Transportation, Bureau of Transportation Statistics and U.S. Department of Commerce, U.S. Census Bureau, "2002 Economic Census: Transportation Commodity Flow Survey, Preliminary Report," December 2003.

Table 21
Top 20 U.S. Water Ports by Shipment Weight
(Millions of tons)

| Port | 1992 | | 2002 | | % change 1992–2002 |
|---|------|----------------|------|----------------|-----------------------|
| | Rank | Total tons | Rank | Total tons | |
| South Louisiana, LA | 1 | 199.7 | 1 | 216.4 | 8.4 |
| Houston, TX | 2 | 137.7 | 2 | 177.6 | 29.0 |
| New York, NY & NJ | 3 | 115.3 | 3 | 134.5 | 16.6 |
| Beaumont, TX | 26 | 22.4 | 4 | 85.9 | 283.8 |
| New Orleans, LA | 6 | 66.4 | 5 | 85.0 | 27.9 |
| Huntington-Tristate, WV-OH-PA ^a | N | N | 6 | 81.1 | N |
| Corpus Christi, TX | 7 | 60.9 | 7 | 72.0 | 18.3 |
| Long Beach, CA | 10 | 52.0 | 8 | 67.9 | 30.4 |
| Baton Rouge, LA | 5 | 84.7 | 9 | 60.6 | -28.5 |
| Plaquemine, LA | 8 | 58.5 | 10 | 59.1 | 1.1 |
| Texas City, TX | 13 | 43.1 | 11 | 55.2 | 28.1 |
| Los Angeles, CA | 15 | 40.1 | 12 | 52.2 | 30.2 |
| Pittsburgh, PA | 19 | 34.3 | 13 | 52.1 | 51.7 |
| Valdez, AK | 4 | 93.7 | 14 | 50.5 | -46.1 |
| Tampa, FL | 11 | 46.4 | 15 | 48.4 | 4.2 |
| Lake Charles, LA | 12 | 44.0 | 16 | 47.5 | 7.9 |
| Mobile, AL | 14 | 40.5 | 17 | 46.0 | 13.7 |
| Duluth-Superior, MN & WI | 17 | 39.3 | 18 | 44.2 | 12.4 |
| Baltimore, MD | 18 | 37.7 | 19 | 38.8 | 3.1 |
| Philadelphia, PA | 16 | 39.7 | 20 | 34.1 | -14.0 |
| Total top 20^b | | 1,256.4 | | 1,509.0 | 20.1 |

^a Huntington-Tristate, WV-OH-PA, is a newly defined port. Data collection began in 2000. ^b For purposes of comparison, Huntington-Tristate, WV-OH-PA, is excluded.

Key: N = data are nonexistent.

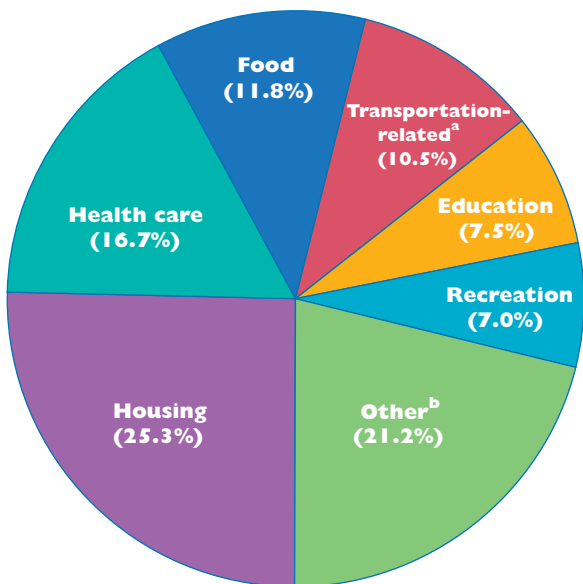
Note: See table 26 for top 20 freight gateways by value.

Sources: 1992—U.S. Army Corps of Engineers, *Waterborne Commerce of the United States, Calendar Years 1991 and 1992, Part 5, National Summaries* (New Orleans, LA: 1993), table 5-4.

2002—U.S. Army Corps of Engineers, *Waterborne Commerce of the United States, Calendar Year 2002, Part 5, National Summaries*, table 5-2, available at <http://www.iwr.usace.army.mil/ndc/wcsc/wcsc.htm>, as of October 2004.

Transportation is a major sector of the U.S. economy. It moves people and goods, employs millions of workers, generates revenue, and consumes resources and services produced by other sectors of the economy. In 2003, transportation-related goods and services contributed \$1,150 billion to an \$11 trillion U.S. Gross Domestic Product.

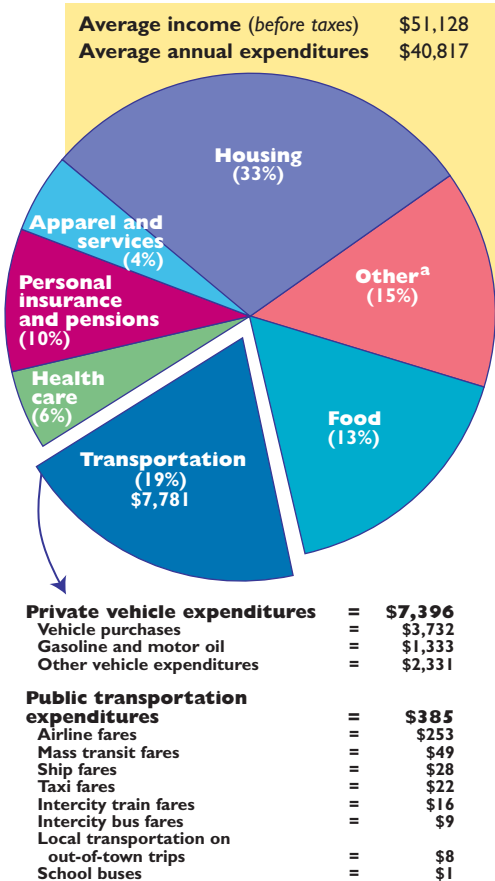
Figure 9
**U.S. Gross Domestic Product by
 Major Societal Function: 2003**



^a Includes all consumer and government purchases of goods (e.g., vehicles and fuel) and services (e.g., auto insurance) and exports related to transportation. ^b Includes all other categories (e.g., entertainment, personal care products and services, and payments to pension plans).

Source: U.S. Department of Transportation, Bureau of Transportation Statistics, calculated from data in U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business*, October 2004.

Figure 10
Average Household Expenditures by Major Spending Category: 2003
(Current dollars)

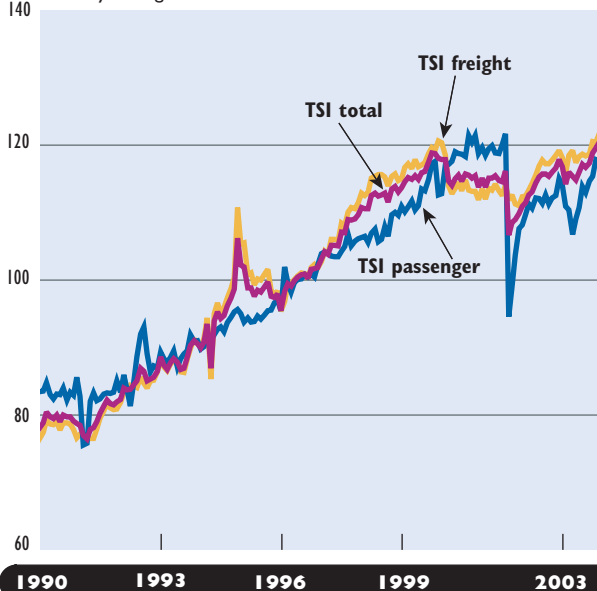


^a Includes entertainment, personal care products and services, education, tobacco products and smoking, and miscellaneous.
 Note: Numbers do not add to totals due to rounding.

Source: U.S. Department of Labor, Bureau of Labor Statistics, Consumer Expenditure Survey, 2004; and personal communication, December 2004.

Figure 11
Transportation Services Index (TSI)
(Seasonally adjusted)

Monthly average of 1996 = 100



Note: TSI is a chain-type index. The TSI total is a single monthly measure of transportation services in the United States. By seasonally adjusting and indexing the separate modal numbers of freight traffic and passenger travel, the TSI portrays the total change in for-hire transportation services.

Source: Compiled by U.S. Department of Transportation, Bureau of Transportation Statistics (BTS), November 2004, available at www.bts.gov/xml/tsi/src/index.xml. Monthly Gross Domestic Product (GDP) Quantity Index numbers are BTS estimates based on quarterly GDP data published by the Bureau of Economic Analysis.

Table 22

Employment in Transportation and Selected Transportation-Related Industries^a*(Thousands)*

| | 1990 | 1995 | 2000 | 2003 |
|---|---------------|---------------|---------------|--------------|
| For-hire transport & warehousing | 3,476 | 3,839 | 4,410 | 4,176 |
| Air | 529 | 511 | 614 | 527 |
| Water | 57 | 51 | 56 | 53 |
| Railroad | 272 | 233 | 232 | 215 |
| Transit/ground passenger transportation | 274 | 328 | 372 | 380 |
| Pipeline | 60 | 54 | 46 | 40 |
| Trucking | 1,122 | 1,249 | 1,406 | 1,328 |
| Support activities | 364 | 430 | 537 | 516 |
| Scenic/sightseeing transportation | 16 | 22 | 28 | 28 |
| Couriers/messengers | 375 | 517 | 605 | 567 |
| Warehousing/storage | 407 | 444 | 514 | 522 |
| Government^b | 671 | 644 | 646 | U |
| Related services & construction | 5,256 | 5,577 | 6,177 | 6,024 |
| Automotive repair services/ parking; automotive equipment rental/leasing; gasoline stations | 1,800 | 1,906 | 2,125 | 2,071 |
| Highway, street, bridge construction | 289 | 278 | 340 | 341 |
| Dealers or wholesalers of motor vehicles, parts, petroleum, supplies, equipment | 1,993 | 2,119 | 2,360 | 2,367 |
| Travel arrangement/ reservation services | 250 | 281 | 299 | 240 |
| Ambulatory health care services | 99 | 143 | 173 | 196 |
| Postal service | 825 | 850 | 880 | 809 |
| Transportation-related manufacturing^c | 2,681 | 2,390 | 2,446 | 2,134 |
| Total | 12,084 | 12,450 | 13,679 | U |

^a Annual averages. Data are NAICS-based and differ from previous editions that are SIC-based. (See Glossary for definitions.)

^b Fiscal year data. Includes U.S. DOT and state and local highway personnel.

^c Includes transportation equipment; petroleum products; tires; rubber; plastics; search, detection, navigation, guidance, aeronautical, and nautical systems; and instrument manufacturing.

Key: U = unavailable.

Sources: Various sources, as cited in USDOT, BTS, *National Transportation Statistics*, table 3-19b, available at www.bts.gov (latest data forthcoming).

Table 23
Value of U.S. International Merchandise Trade by Mode of Transportation: 2003
 (Millions of current U.S. dollars)

| | Exports | Modal % | Imports | Modal % | Total trade | Total modal % |
|---------------------------------|----------------|--------------|------------------|--------------|------------------|---------------|
| Total | 723,743 | 100.0 | 1,259,396 | 100.0 | 1,983,139 | 100.0 |
| Water | 206,205 | 28.5 | 604,881 | 48.0 | 811,086 | 40.9 |
| Air | 235,602 | 32.6 | 284,741 | 22.6 | 523,343 | 26.4 |
| Truck | 194,786 | 26.9 | 209,249 | 16.6 | 404,035 | 20.4 |
| Rail | 26,041 | 3.6 | 69,683 | 5.5 | 95,724 | 4.8 |
| Pipeline | 915 | 0.1 | 31,451 | 2.5 | 32,366 | 1.6 |
| Other, unknown, & miscellaneous | 60,194 | 8.3 | 56,390 | 4.5 | 116,584 | 5.9 |

Notes: Numbers may not add to totals due to rounding.

Water—Excludes intransit data (merchandise shipped from one foreign country to another via a U.S. water port).

Imports—Excludes imports valued at less than \$1,250. Import value is based on U.S. general imports, customs value basis.

Exports—Excludes exports valued at less than \$2,500. Export value is FAS (free alongside ship) and represents the value of exports at the port of export, including the transaction price and inland freight, insurance, and other charges.

Sources: Compiled by U.S. Department of Transportation (USDOT), Bureau of Transportation Statistics (BTS), May 2004. **Water and air data**—U.S. Department of Commerce, U.S. Census Bureau, Foreign Trade Division, *U.S. Exports of Merchandise*, CD-ROM and *U.S. Imports of Merchandise*, CD-ROM, December 2003. **Total, truck, rail, pipeline, other and unknown data**—USDOT, BTS, *Transborder Surface Freight Data* 2004.

Table 24
**Weight of U.S. International Merchandise
 Trade by Mode of Transportation: 2003**
 (Thousands of short tons)

| | Exports ^a | Modal % | Imports | Modal % | Total trade ^a | Total modal % |
|---------------------------------------|----------------------|--------------|------------------|--------------|--------------------------|---------------|
| Total | 492,046 | 100.0 | 1,230,540 | 100.0 | 1,722,586 | 100.0 |
| Water ^b | 364,613 | 74.1 | 969,996 | 78.8 | 1,334,609 | 77.5 |
| Air | 2,634 | 0.5 | 3,912 | 0.3 | 6,547 | 0.4 |
| Truck | 93,851 | 19.1 | 94,954 | 7.7 | 188,806 | 11.0 |
| Rail | 26,176 | 5.3 | 80,867 | 6.6 | 107,043 | 6.2 |
| Pipeline | 1,951 | 0.4 | 78,009 | 6.3 | 79,959 | 4.6 |
| Other, unknown, & miscellaneous | 2,820 | 0.6 | 2,802 | 0.2 | 5,622 | 0.3 |

^a BTS estimated those weights for truck, rail, pipeline, and other and unknown based on value-to-weight ratios from the import data because export weights for surface modes are not currently reported. Weight for water and air exports and imports are from U.S. Department of Commerce, U.S. Census Bureau. ^b The weight data for water transportation vary from those officially reported by the U.S. Army Corps of Engineers, because the data in this table exclude intransit shipments (merchandise shipped from one foreign country to another via a U.S. port but not part of U.S. official merchandise trade).

Notes: Numbers may not add to totals due to rounding.

Water—Excludes intransit data (merchandise shipped from one foreign country to another via a U.S. water port).

Imports—Excludes imports valued at less than \$1,250. Import value is based on U.S. general imports, customs value basis.

Exports—Excludes exports valued at less than \$2,500. Export value is FAS (free alongside ship) and represents the value of exports at the port of export, including the transaction price and inland freight, insurance, and other charges.

Sources: Compiled by U.S. Department of Transportation (USDOT), Bureau of Transportation Statistics (BTS), October 2004. **Water and air data**—U.S. Department of Commerce, U.S. Census Bureau, Foreign Trade Division, *U.S. Exports of Merchandise*, CD-ROM and *U.S. Imports of Merchandise*, CD-ROM, December 2003. **Total, truck, rail, pipeline, other and unknown data**—USDOT, BTS, Transborder Surface Freight Data 2004; and special tabulation, October 2004.

Table 25

U.S. Merchandise Trade with Canada and Mexico by Mode Share: 2003

| Mode | Value (percent) | Weight (percent) |
|--|--------------------|---------------------|
| U.S.-NAFTA trade, total^a | 100.0 | 100.0 |
| Truck | 64.2 | 30.4 |
| Rail | 15.2 | 17.2 |
| Pipeline | 5.1 | 12.9 |
| Air | 4.5 | 0.1 |
| Water | 6.0 | 39.2 |
| Other and unknown | 4.9 | 0.2 |
| U.S.-NAFTA imports, total | 100.0 | 100.0 |
| Truck | 57.8 | 21.7 |
| Rail | 19.2 | 18.5 |
| Pipeline | 8.7 | 17.8 |
| Air | 3.1 | 0.0 |
| Water | 8.0 | 41.8 |
| Other and unknown | 3.3 | 0.1 |
| U.S.-NAFTA exports, total^a | 100.0 | 100.0 |
| Truck | 73.0 | 51.1 |
| Rail | 9.8 | 14.3 |
| Pipeline | 0.3 | 1.1 |
| Air | 6.4 | 0.1 |
| Water | 3.5 | 32.9 |
| Other and unknown | 7.0 | 0.5 |

^a BTS estimated those weights for truck, rail, pipeline, and other and unknown based on value-to-weight ratios from the import data because export weights for surface modes are not currently reported. Weight for water and air exports and imports are from the U.S. Department of Commerce, U.S. Census Bureau.

Notes: Value based on millions of U.S. dollars; weight based on millions of short tons.

U.S.-NAFTA (North American Free Trade Agreement) refers to U.S. trade with Canada and Mexico, our partners in this agreement.

Sources: Compiled by U.S. Department of Transportation (USDOT), Bureau of Transportation Statistics (BTS). **Water and air data**—U.S. Department of Commerce, U.S. Census Bureau, Foreign Trade Division, *U.S. Exports of Merchandise*, CD-ROM and *U.S. Imports of Merchandise*, CD-ROM, December 2003. **Total, truck, rail, pipeline, other and unknown data**—USDOT, BTS, *Transborder Surface Freight Data 2003*; and special tabulation, October 2004.

Table 26

Top 20 U.S. Foreign Trade Freight Gateways by Value of Shipments: 2003

(Billions of current dollars)

| Rank | Gateway | Exports | Imports | Total |
|------|---|---------|---------|-------|
| 1 | Los Angeles, CA (w) | 16.9 | 105.2 | 122.1 |
| 2 | JFK International, NY (a) | 46.6 | 65.3 | 111.9 |
| 3 | Detroit, MI (l) | 54.5 | 47.3 | 101.9 |
| 4 | New York, NY and NJ (w) | 24.3 | 76.9 | 101.2 |
| 5 | Long Beach, CA (w) | 17.2 | 78.7 | 95.9 |
| 6 | Laredo, TX (l) | 32.4 | 46.4 | 78.8 |
| 7 | Los Angeles Internatl. Airport, CA (a) | 32.6 | 31.2 | 63.8 |
| 8 | Port Huron, MI (l) | 22.7 | 39.6 | 62.3 |
| 9 | Buffalo-Niagara Falls, NY (l) | 27.4 | 32.0 | 59.4 |
| 10 | Chicago, IL (a) | 20.6 | 33.7 | 54.3 |
| 11 | Houston, TX (w) | 21.4 | 28.5 | 49.9 |
| 12 | San Francisco Internatl. Airport, CA (a) | 20.6 | 26.1 | 46.6 |
| 13 | Charleston, SC (w) | 13.4 | 26.0 | 39.4 |
| 14 | El Paso, TX (l) | 16.7 | 22.5 | 39.2 |
| 15 | Norfolk, VA (w) | 11.0 | 18.5 | 29.5 |
| 16 | New Orleans, LA (a) | 13.7 | 13.7 | 27.4 |
| 17 | Tacoma, WA (w) | 5.2 | 21.1 | 26.3 |
| 18 | Baltimore, MD (w) | 5.7 | 20.3 | 26.0 |
| 19 | Oakland, CA (w) | 7.8 | 17.4 | 25.1 |
| 20 | Dallas-Fort Worth, TX (a) | 11.4 | 12.2 | 23.6 |

Key: a = air; l = land port/border crossing; w = water port.

Notes: Trade excludes imports of less than \$1,250 and exports of less than \$2,500. Air: Includes a low level (generally less than 2%–3% of the total value) of small user-fee airports located in the same region. Air gateways not identified by airport name (e.g., Chicago, IL) include major airport(s) in that area and small regional airports. Due to Census Bureau confidentiality regulations, courier operations are included in airport totals for only JFK, Los Angeles, Chicago, and New Orleans. Numbers may not add to totals due to rounding.

Sources: Compiled by U.S. Department of Transportation (USDOT), Bureau of Transportation Statistics (BTS). **Air**—U.S. Department of Commerce, U.S. Census Bureau, Foreign Trade Division, special tabulation, August 2004. **Water**—USDOT, Maritime Administration, Office of Statistical and Economic Analysis, personal communication, August 2004. **Land**—USDOT, BTS, Transborder Surface Freight Data, August 2004.

Table 27

U.S. Trade in Transportation-Related Commodities: 2003*(Millions of current U.S. dollars)*

| Commodity and code | Exports | Imports | Total trade | Balance |
|---|----------------|----------------|--------------------|----------------|
| Motor vehicles and parts (87) | 65,182 | 175,165 | 240,347 | -109,983 |
| Aircraft, spacecraft, and parts (88) | 39,670 | 17,001 | 56,671 | 22,669 |
| Ships, boats, and floating structures (89) | 1,335 | 1,592 | 2,927 | -257 |
| Railway or tramway locomotives and parts (86) | 1,609 | 1,105 | 2,714 | 504 |
| Total, transportation goods | 107,796 | 194,863 | 302,658 | -87,067 |
| Total, all goods | 723,743 | 1,259,396 | 1,983,139 | -535,652 |
| Transportation goods share of trade | 14.9% | 15.5% | 15.3% | 16.3% |

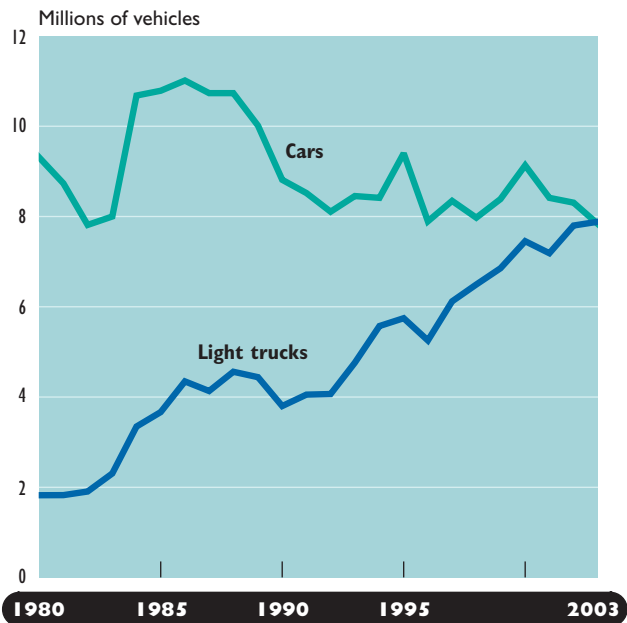
Notes: The numbers in parentheses are the classification categories from the Harmonized Schedule of Commodity Codes.

Classification category (87) also includes bicycles, wheelchairs, and baby carriages.

Total trade = exports plus imports. Balance = exports minus imports.

Source: U.S. Department of Transportation, Bureau of Transportation Statistics; based on data from U.S. Department of Commerce, U.S. International Trade Commission, Interactive Tariff and Trade DataWeb, available at <http://dataweb.usitc.gov>, as of October 2004.

Figure 12
**New Passenger Car and Light Truck Sales:
 Model Years 1980–2003**



Notes: 1998–2003 data are revised from previous editions.

Data are based on Environmental Protection Agency definitions of light trucks (gross vehicle weight 8,500 pounds or less).

Source: U.S. Environmental Protection Agency, *Light-Duty Automotive Technology and Fuel Economy Trends: 1975 Through 2004*, appendix E, April 2004, available at <http://www.epa.gov/otaq/fetrends.htm>, as of April 2004.

Table 28
Government Transportation Revenues by Mode
and Level of Government
(Millions of current dollars)

| | 1980 | 1990 | 2000 | 2002 |
|---|---------------|---------------|----------------|-------------|
| Highway total | 25,268 | 49,945 | 87,800 | U |
| Federal: | | | | |
| Highway Trust Fund— Highway Account ^a | 7,647 | 13,453 | 30,347 | 27,983 |
| State | 16,287 | 32,644 | 51,073 | 54,291 |
| Local | 1,334 | 3,848 | 6,380 | U |
| Transit total | 2,397 | 7,193 | 12,674 | U |
| Federal: | | | | |
| Highway Trust Fund— Mass Transit Account | — | 1,977 | 4,625 | 4,621 |
| State | 362 | 1,074 | 1,524 | 1,662 |
| Local | 2,035 | 4,142 | 6,525 | U |
| Air total | 4,100 | 10,119 | 21,627 | U |
| Federal: Airport and Airway Trust Fund | 2,274 | 4,945 | 10,544 | 9,891 |
| State | 190 | 556 | 852 | 792 |
| Local | 1,636 | 4,617 | 10,231 | U |
| Water total | 1,211 | 2,487 | 3,717 | U |
| Federal: water receipts ^b | 391 | 999 | 1,210 | 916 |
| State | 249 | 355 | 693 | 736 |
| Local | 572 | 1,133 | 1,813 | U |
| Pipeline^c | — | 10 | 40 | 57 |
| General support^d | — | — | 25 | 25 |
| Total, all modes | 32,977 | 69,753 | 125,882 | U |
| Federal | 10,312 | 21,384 | 46,791 | 43,493 |
| State | 17,088 | 34,629 | 54,142 | 57,480 |
| Local | 5,577 | 13,740 | 24,949 | U |

^a Since 1983, some Highway Trust Fund fuel tax has gone to transit.

^b Includes Harbor Maintenance Trust Fund, St. Lawrence Seaway tolls, Inland Waterway Trust Fund, Panama Canal receipts, Oil Spill Liability Trust Fund, Offshore Oil Pollution Fund, Deep Water Port Liability Fund, and excise taxes of the Boat Safety Program.

^c Includes federal only: Pipeline Safety Fund.

^d Includes federal only: Emergency Preparedness Fund.

Key: — = no activity or a value of zero; U = unavailable.

Note: Numbers may not add to totals due to rounding.

Sources: Various sources, as cited in U.S. Department of Transportation, Bureau of Transportation Statistics, *Government Transportation Financial Statistics*, available at http://www.bts.gov/government_transportation_financial_statistics/index.html, as of November 2004.

Table 29

Government Transportation Expenditures by Mode and Level of Government From Own Funds*(Millions of current dollars)*

| | 1980 | 1990 | 2000 | 2002 |
|------------------------------------|---------------|-----------------|-----------------|-------------|
| Highway total | 34,553 | 62,629 | 103,952 | U |
| Federal | 11,706 | 15,517 | 27,759 | 33,214 |
| State and local | 22,847 | 47,112 | 76,192 | U |
| Transit total | 8,949 | R19,251 | R32,384 | U |
| Federal | 3,307 | 3,832 | 5,334 | 7,695 |
| State and local | 5,642 | R15,420 | R27,050 | U |
| Rail total | 2,497 | R540 | R767 | U |
| Federal | 2,474 | 534 | 760 | 1,296 |
| State and local | 23 | R6 | R7 | U |
| Air total | 5,673 | 12,568 | R22,017 | U |
| Federal | 3,762 | 7,305 | R10,481 | 15,249 |
| State and local | 1,911 | 5,263 | 11,536 | U |
| Water total | 4,477 | 5,480 | 7,946 | U |
| Federal | 3,308 | 3,537 | 4,814 | 5,223 |
| State and local | 1,168 | 1,943 | 3,132 | U |
| Pipeline total^a | - | 26 | 36 | U |
| Federal | - | 9 | 36 | 43 |
| State and local | - | 17 | U | U |
| General support^b | 259 | 191 | R259 | 248 |
| Total, all modes | 56,407 | R100,685 | R167,360 | U |
| Federal | 24,815 | 30,924 | R49,443 | 62,968 |
| State and local | 31,592 | 69,770 | R117,916 | U |

^a Includes gas and liquid pipeline. ^b Includes federal only: administrative and operating expenditures of the Office of the Secretary of Transportation (excluding outlays for Payments to Air Carriers and Commission on Aircraft Safety programs included under "Air" above), the Interstate Commerce Commission (1995 and prior), Office of the Inspector General, the Research and Special Programs Administration (excluding outlays for the Pipeline Safety program included in "Pipeline" above), the National Transportation Safety Board, the Bureau of Transportation Statistics, and the Surface Transportation Board.

Key: - = no activity or a value of zero; R = revised; U = unavailable.

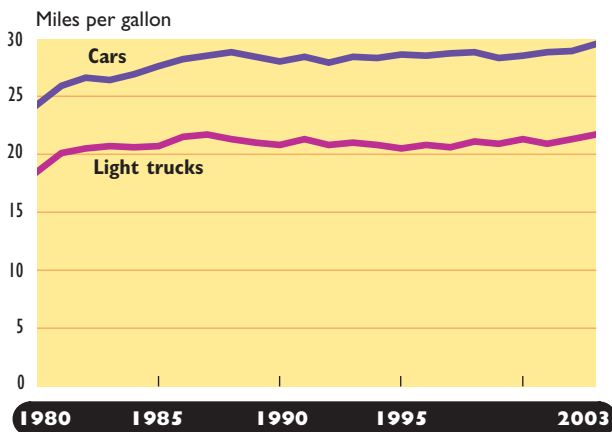
Notes: Expenditures are from "own funds" for specified level of government. Federal includes direct spending and grants to states and localities. State and local includes outlays from all sources except federal grants. Numbers may not add to totals due to rounding. Only federal government expenditures are included for 2002.

Sources: Various sources, as cited in U.S. Department of Transportation, Bureau of Transportation Statistics, *Government Transportation Financial Statistics*, available at http://www.bts.gov/government_transportation_financial_statistics/index.html, as of November 2004.

While transportation enhances the quality of our lives, it also generates environmental impacts that can lead to human health problems and ecological damage. Overall, most transportation air emissions, such as particulates, have declined since 1980 despite significant increases in U.S. population, Gross Domestic Product, and vehicle-miles traveled. Only ammonia remains above its 1990 level.

Figure 13

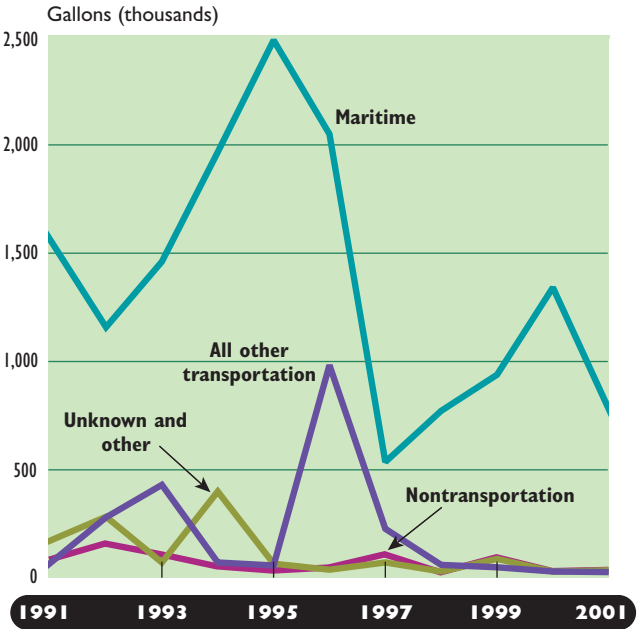
New Passenger Car and Light Truck Fuel Economy Averages: Model Years 1980–2003



Note: 2003 data are preliminary.

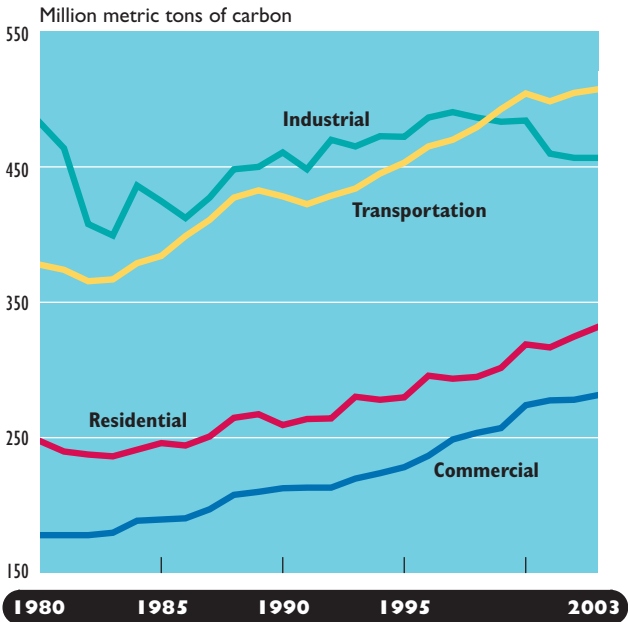
Source: U.S. Department of Transportation, National Highway Traffic Safety Administration, Automotive Fuel Economy Program, *Annual Update Calendar Year 2002*, September 2003, table II-6, available at <http://www.nhtsa.dot.gov/cars/problems/studies>, as of October 2003; and personal communication, November 2004.

Figure 14
**Oil Spills Reported to U.S. Coast Guard
 by Sources: 1991–2001**



Source: U.S. Department of Transportation, Bureau of Transportation Statistics, special tabulation, based on U.S. Department of Homeland Security, U.S. Coast Guard, *Pollution Incidents In and Around U.S. Waters*, available at <http://www.uscg.mil/hq/g-m/nmc/response/stats/aa.htm>, as of October 2003.

Figure 15
**U.S. Carbon Dioxide Emissions from
 Energy Use: 1980–2003**



Notes: One ton of carbon equals 3.667 tons of carbon dioxide gas.
 Electric utility emissions are distributed across sectors.

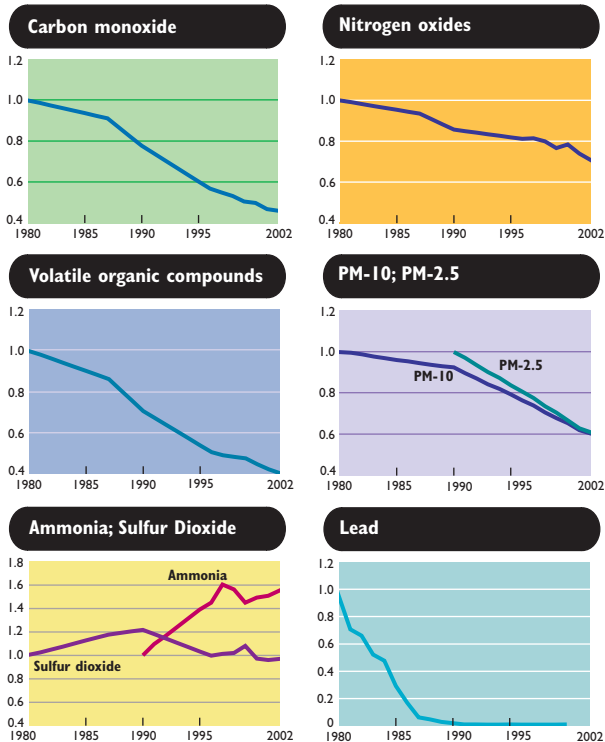
1990–2002 data are revised from previous editions. 2003 data are preliminary.

Sources: 1980–1989—U.S. Department of Energy (USDOE), Energy Information Administration (EIA), Appendix E, available at <http://www.eia.doe.gov/oiaf/1605/ggrpt/index.html>, as of November 2004.

1990–2003—USDOE, EIA, U.S. Carbon Dioxide from Energy Sources 2003 Flash Estimate, available at <http://www.eia.doe.gov/oiaf/1605/flash/flash.html>, as of June 2004.

Figure 16 Index of Key Air Pollutant Emissions from U.S. Transportation: 1980–2002

Index: 1980 = 1.0, 1990 = 1.0 for PM-2.5 and ammonia



Key: PM-10 and PM-2.5 = airborne particulates of less than 10 microns or 2.5 microns, respectively.

Notes: Transportation emissions include all onroad mobile sources and the following nonroad mobile sources: recreational vehicles and boats, airport service equipment, aircraft, marine vessels, and railroads. Lead includes onroad mobile sources only. EPA discontinued lead emissions estimates in 2001. Trend lines shown differ from previous editions due to a new EPA estimating methodology.

Source: U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, *Average Annual Emissions, All Criteria Pollutants 1970–2002*, available at <http://www.epa.gov/ttn/chief/trends>, as of November 2004.

Glossary

Air carrier—Certificated provider of scheduled and nonscheduled services.

Annual delay—Extra travel time for peak period travel during the year divided by the number of travelers who begin a trip during the peak period (6 to 9 a.m. and 4 to 7 p.m.). Free-flow speeds (60 mph on freeways and 35 mph on principal arterials) are used as the comparison threshold.

Chained dollars—A method to measure real changes in dollar values between years that uses chain-type indices, rather than constant dollars. The method first calculates the real changes between adjacent years. Annual rates of real changes are then chained (multiplied) together to obtain the rate of real changes between nonadjacent years.

Class I railroad—A freight railroad with an annual gross operating revenue indexed to a base of \$250 million in 1991 dollars. In 2003, the adjusted base had increased to \$277.5 million.

Commercial waterway facilities—Waterway facilities as counted by the U.S. Army Corps of Engineers are piers, wharves, and docks. Not included are those facilities used exclusively for recreational or active military craft and generally those providing nonmaritime use.

Commuter rail—Urban/suburban passenger train service for short-distance travel between a central city and adjacent suburbs run on tracks of a traditional railroad system. Does not include heavy- or light-rail transit service.

Congestion cost—Value of travel time delay (estimated at \$13.45 per hour of person travel and \$71.05 per hour of truck travel) and excess fuel consumption (estimated using the average cost per gallon by state).

Contracted service (purchased transportation)—Transportation service provided to a public transit agency or governmental unit from a public or private transportation provider based on a written contract.

Demand-responsive transit—A nonfixed-route, nonfixed-schedule form of transportation that operates in response to calls from passengers or their agents to the transit operator or dispatcher.

Directional route-miles—The sum of the mileage in each direction over which transit vehicles travel while in revenue service.

Directly operated service—Transportation service provided directly by a transit agency, using their employees to supply the necessary labor to operate the revenue vehicles.

Draft—The depth of water a vessel draws, loaded or unloaded.

General aviation—Civil aviation operations other than those air carriers holding a Certificate of Public Convenience and Necessity. Types of aircraft used in general aviation range from corporate, multi-engine jets piloted by a professional crew to amateur-built, single-engine, piston-driven, acrobatic planes.

Gross Domestic Product—The total value of goods and services produced by labor and property located in the United States. As long as the labor and property are located in the United States, the suppliers may be either U.S. residents or residents of foreign countries.

Heavy-rail transit—High-speed transit rail operated on rights-of-way that exclude all other vehicles and pedestrians.

Hub area—As used here, a geographic area based on the percentage of total enplaned passengers in that area. A hub area can comprise more than one airport and falls into one of the following classes: large, a community enplaning 1% or more of the total enplaned passengers; medium, 0.25%–0.99%; small, 0.05%–0.24%; nonhub area, less than 0.05%. The definition of hub used here should not be confused with airline usage of the term to describe “hub and spoke” route structures or other definitions of hubs used by the Federal Aviation Administration focusing on traffic at individual airports.

Intermodal—Transportation activities involving more than one mode of transportation, including transportation connections, choices, cooperation and coordination of various modes.

Large certificated air carrier—Carriers operating aircraft with a maximum passenger capacity of more than 60 seats or a maximum payload of more than 18,000 pounds. These carriers are also grouped by annual operating revenues: 1) majors—more than \$1 billion; 2) nationals—between \$100 million and \$1 billion; 3) large regionals—between \$20 million and \$99,999,999; and 4) medium regionals—less than \$20 million.

Long-distance travel—As defined in the Bureau of Transportation Statistics’ National Household Travel Survey, long-distance trips are trips of 50 miles or more from home to the farthest destination traveled and include the return component as well as any overnight stops and stops to change transportation mode.

Light-rail transit—Urban transit rail operated on a reserved right-of-way that may be crossed by roads used by motor vehicles and pedestrians.

Light truck—Trucks of 10,000 pounds gross vehicle weight rating or less, including pickup trucks, vans, truck-based station wagons, and sport utility vehicles.

Metric ton—A unit of weight equal to 2,204.6 pounds.

North American Industry Classification System

(NAICS)—NAICS (established in April 1997) replaces the Standard Industrial Classification (SIC) and groups producing and nonproducing economic activities into 20 sectors and 1,170 industries in the United States version. It was developed to provide common industry definitions for Canada, Mexico, and the United States to facilitate analyses of the economies of the three countries.

Nonself-propelled vessels—Includes dry cargo and tank barges and railroad car floats that operate in U.S. ports and waterways.

Particulates—Carbon particles formed by partial oxidation and reduction of hydrocarbon fuel. Also included are trace quantities of metal oxides and nitrides, originating from engine wear, component degradation, and inorganic fuel additives.

Passenger-mile—One passenger transported one mile. For example, one vehicle traveling 3 miles carrying 5 passengers generates 15 passenger-miles.

Self-propelled vessels—Includes dry cargo vessels, tankers, and offshore supply vessels, tugboats, pushboats, and passenger vessels, such as excursion/sightseeing boats, combination passenger and dry cargo vessels, and ferries.

Short-ton—A unit of weight equal to 2,000 pounds.

Standard Industrial Classification (SIC)—SIC (first used in 1937) groups establishments by primary activity to ease data collection, tabulation, presentation, and analysis. SIC was intended to promote greater uniformity and comparability in data presentations by government, industry, and research institutions. SIC classifies industries by composition and structure of the economy.

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” noted above.

Combination—A power unit (truck or truck tractor) and one or more trailing units.

Vehicle-mile—One vehicle traveling one mile.

Statistics published in this *Pocket Guide to Transportation* come from many different sources. Some statistics are based on samples and are subject to sampling variability. Statistics may also be subject to omissions and errors in reporting, recording, and processing.

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Ship in Baltimore Harbor
Dennis Roos, Sr.

Back cover

Passenger train
National Railroad Passenger
Corporation (Amtrak)



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