Bureau of Transportation Statistics

Pocket Guide to Transportation









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Pocket Guide to Transportation

Bureau of Transportation Statistics

U.S. Department of Transportation



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merica'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	P77.2 (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.

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.

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

^c Earliest year available is 1984.

d BTS computations, November 2004.

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Transportation System Extent and Use

The U.S. transportation system is an extensive, interrelated 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

Mode Components

Lluban tuanait	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 (2002)					
	Great Lakes: 600 deep-draft					
	154 1 11 1 6					

154 shallow-draft

Inland: 2.361 shallow-draft 4.284 deep-draft Ocean:

1.765 shallow-draft

275

Pipeline Oil

> Crude lines: 64,336 miles of pipe Product lines: 75,565 miles of pipe

Gas (2002)

Locks:

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-ofway, 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).

2 Transportation Safety

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	P22
Commuter air carrier ^a	N	37	6	5	P ₂
On-demand air taxi ^a	N	105	51	71	P45
General aviation ^a	1,310	1,239	767	R596	P631
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 Nonvessel ^e	178 420	206 281	85 101	49 88	P46 P67
Recreational boating	1,418	1,360	865	701	P703
Gas and hazardous liquid pipeline	30	19	9	38	12

^a Includes people on planes and on the ground.

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.

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.

Table 3

Distribution of Transportation Fatalities: 2002

Category N	umber	%
Passenger car occupants	20,416	45.3
Light-truck occupants	12,182 4,808	27.0 10.7
Pedestrians struck by motor vehicles 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 Other nonoccupants struck by motor vehicles ^b	540 113	1.2 0.25
Heavy-rail transit (e.g., subway)	73	0.23
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 Railroad-related, not otherwise specified	35 25	0.08 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	!	<0.01
Hazardous liquid pipelines		<0.01
Other counts, redundant with above e	4.007	
Large-truck occupants and nonoccupants Public grade crossings, with motor vehicles	4,897 271	
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.

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).

^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.

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.

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.

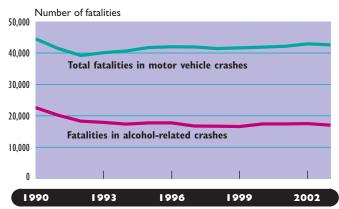
The National Highway Traffic Safety Administration estimates alcohol involvement when test results are unknown.

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

^b Fatalities in crashes that involve alcohol.

^c Percentage of all crash fatalities that involve alcohol.

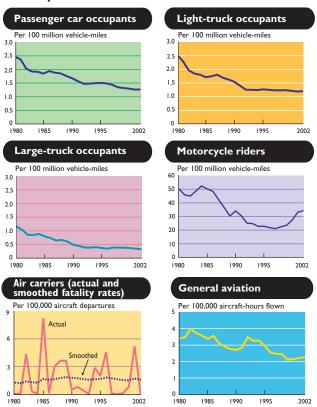
Figure |
Fatalities in Alcohol-Related Motor
Vehicle Crashes: 1990–2003



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



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	R29	30
Commuter air carrier	N	14	11	7	1
On-demand air taxi	N	43	36	12	15
General aviation	715	681	409	R309	326
Highway ^a	Ν	N	R3,230,666	R3,188,750	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 Nonvessel	105	180	175	130	P205
accidents ^d	U	U	U	567	P499
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.

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.

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.

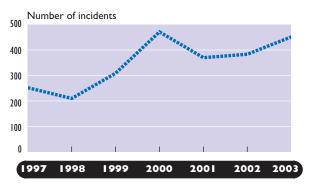
c Injuries resulting from all reportable incidents, not just from accidents. Includes commuter rail, heavy rail, light rail, motorbus, demand responsive, van pool, and automated guideway.

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

3

nsuring 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/	494,123
flammable materials	
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.

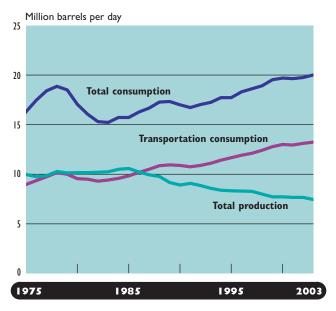
Firearms and guns refers to any weapon (excluding a starter gun) that is designed to or may be readily converted to expel a projectile by the action of an explosive.

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.

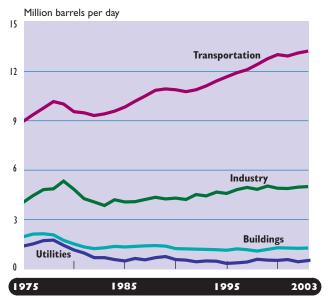
Figure 4
U.S. Petroleum Production and Consumption: 1975–2003



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

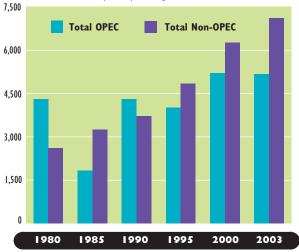


Notes: 2002 data are revised from previous editions. 2003 data are preliminary.

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 Total, all	4,884	3,628	6,729	7,823	9,954	10,359
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 Locomotives	2,128 419	1,863 318	1,894 378	2,896 372
Commuter railcars and locomotives Transit ^c	4,500 10,654	4,415 11,332	5,073 12,168	P5,300 P12,163
Class I rail:				
Freight cars Locomotives Other freight cars	1,168,114 28,094 542,713	658,902 18,835 553,359	560,154 20,028 820,642	477,751 20,506 821,919
Nonself-propelled 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.

Sources: Various sources, as cited in U.S. Department of Transportation, Bureau of Transportation Statistics, *National Transportation Statistics*, table 1-11, available at http://www.bts.gov (latest data forthcoming).

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.

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 Combination	27,081 35,134	39,813 68,678	51,901 94,341	70,500 135,020	75,887 138,643
Buses ^c	4,544	6,059	5,726	7,590	6,849
Rail ^d : Transit ^e Commuter Class I freight Intercity/Amtrak ^f	441 N 29,890 690	403 179 29,277 235	561 213 26,159 301	648 271 34,590 368	P682 P284 34,680 379
Other transit ^g	N	15	324	833	P886

^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.

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).

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

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

d Car-miles.

e Includes light and heavy rail only.

f Fiscal year data. Amtrak began operations in 1971.

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

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 Commuter Intercity/ Amtrak ^d	N 4,592 6,179	10,939 6,516 4,503	12,046 7,082 6,057	15,200 9,402 5,498	P15,095 P9,504 5,468
Other transit ^e	N	390	841	1,631	P1,696

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

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.

^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.

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)	R15
School/place of worship	10
Work-related	3
Other	1

	Minutes per day	Miles per day	
Average driving time	e 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

(Tribs of 50 miles or more from hom

(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	<
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 57 Air 43 Bus 55 45 Train 42 58 Other 30 70 43 57 All modes

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.

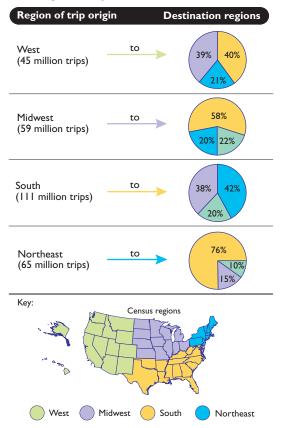
Business includes conference and meeting attendence or any other business purpose than commuting to and from work or such occupational trips as driving a bus. Work includes commuting to and from work, but does not include such occupational trips as driving a bus. Personal business includes medical visits,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

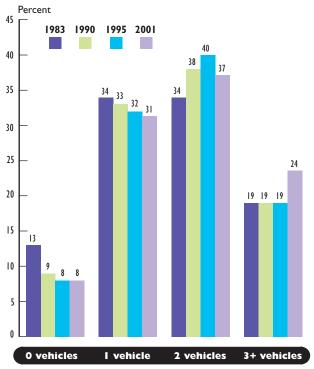
Origin and Destinations of Long-Distance
Interregional Trips: 2001



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 E	ntering the U.S.
All U.SMexican land gateways Personal vehicles Personal vehicle passengers Buses Bus passengers Train passengers Pedestrians	88,068 193,697 319 3,747 12 48,664
Personal vehicles—top 5 gateways San Ysidro, CA El Paso, TX Brownsville, TX Hidalgo, TX Laredo, TX	17,408 13,699 7,220 7,170 6,777
Personal vehicle passengers—top 5 gateways San Ysidro, CA El Paso, TX Brownsville, TX Hidalgo, TX Laredo, TX	39,181 26,317 15,673 15,588 15,209
Buses—top 5 gateways San Ysidro, CA Otay Mesa, CA Laredo, TX Hidalgo, TX El Paso, TX	111 73 35 33 30
Bus passengers—top 5 gateways San Ysidro, CA Laredo, TX Hidalgo, TX El Paso, TX Otay Mesa, CA	1,245 749 655 392 304
Train passengers—top 5 gateways Eagle Pass, TX El Paso, TX Nogales, AZ Calexico East, CA Otay Mesa, CA	6 2 2 I 0.5
Pedestrians—top 5 gateways El Paso,TX San Ysidro, CA Calexico, CA Nogales, AZ Laredo,TX	8,899 8,302 6,230 5,584 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 E	ntering the U.S
All U.SCanadian land gateways Personal vehicles Personal vehicle passengers Buses Bus passengers Train passengers Pedestrians	30,220 61,502 157 3,780 190 937
Personal vehicles—top 5 gateways Buffalo-Niagara Falls, NY Detroit, MI Blaine, WA Port Huron, MI Massena, NY	6,414 6,316 2,300 1,965 1,134
Personal vehicle passengers—top 5 gateways Buffalo-Niagara Falls, NY Detroit, MI Blaine, WA Port Huron, MI Champlain-Rouses Point, NY	13,216 10,966 4,492 3,822 3,521
Buses—top 5 gateways Buffalo-Niagara Falls, NY Detroit, MI Sault Ste. Marie, MI Blaine, WA Champlain-Rouses Point, NY	43 36 16 13
Bus passengers—top 5 gateways Buffalo-Niagara Falls, NY Detroit, MI Blaine, WA Champlain-Rouses Point, NY Sault Ste. Marie, MI	1,322 904 284 235 193
Train passengers—top 5 gateways Skagway, AK Blaine, WA Buffalo-Niagara Falls, NY Champlain-Rouses Point, NY Port Huron, MI	44 44 37 28 25
Pedestrians—top 5 gateways Buffalo-Niagara Falls, NY Sumas, WA Calais, ME Portland, ME (ferry crossing) International Falls, MN	656 59 45 38 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)

		1993	:	2003	
Airport	Rank	Total enplaned passengers	Rank	Total enplaned passengers	% change 1993–2003
Atlanta (Hartsfield), GA	3	22,295	- 1	38,229	71.5
Chicago (O'Hare), IL	I	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 All airports		250,266 466,677		323,205 593,974	29.1 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)

	1993		20	03
Airport	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	Ш	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 = I million-3 million population (e.g., Atlanta).

Medium = selected areas with 500,000-I 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%	^R 87%	R82%	76%
Long distance (>=400 miles)	R 69 %	^R 70%	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. I–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:

Trip length (miles)	Arrival time delay (minutes)		
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.

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.

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.

Table 21

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

	1992		2002		
Port	Rank	Total tons	Rank	Total tons	% change 1992–2002
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.I
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	I	,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.

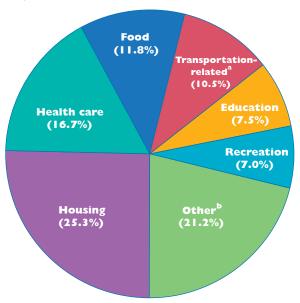
Sources: **1992**—U.S. Army Corps of Engineers, Waterborne Commerce of the United States, Calendar Years 1991 and 1992, Part 5, National Summaries (New Orleans, LA: 1993), table 5-4.

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 and the Economy

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.

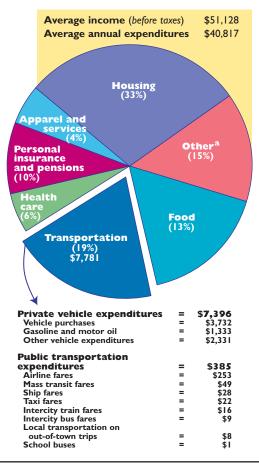
Figure 9
U.S. Gross Domestic Product by
Major Societal Function: 2003



^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)



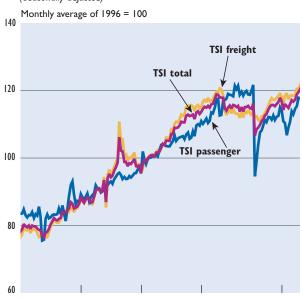
^a Includes entertainment, personal care products and services, education, tobacco products and smoking, and miscellaneous.

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.

33

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



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.

1999

2003

1996

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.

1993

1990

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,	1.993	2.119	2.360	2.367
supplies, equipment Travel arrangement/	1,773	2,117	2,360	2,367
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.)

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).

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.

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	Modal %	 Imports	Modal %		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

78,009

2.802

6.3

0.2

79,959

5.622

4.6

0.3

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 trans-	
portation 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.

1.951

2.820

0.4

0.6

Pipeline

Other, unknown, & miscellaneous

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.SNAFTA 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.SNAFTA 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.SNAFTA 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)

Rai	nk Gateway	Exports	Imports	Total
	Los Angeles, CA (w)	16.9	105.2	122.1
- 2	JFK International, NY (a)	46.6	65.3	111.9
3	Detroit, MI (I)	54.5	47.3	101.9
4	New York, NY and NJ (w)	24.3	76.9	101.2
	Long Beach, CA (w)	17.2	78.7	95.9
(Laredo, TX (I)	32.4	46.4	78.8
	Los Angeles Internatl. Airport, CA (a)	32.6	31.2	63.8
8	Port Huron, MI (I)	22.7	39.6	62.3
9	Buffalo-Niagara Falls, NY (I)	27.4	32.0	59.4
10	Chicago, IL (a)	20.6	33.7	54.3
1	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 (I)	16.7	22.5	39.2
13	Norfolk,VA (w)	11.0	18.5	29.5
16	New Orleans, LA (a)	13.7	13.7	27.4
17	7 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; I = 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%

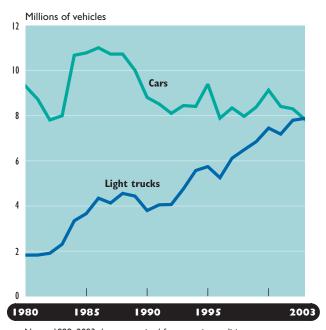
Notes: The numbers in parentheses are the classification categories from the Harmonized Schedule of Commodity Codes.

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—	7 (47	12.452	20.247	27.002
Highway Account	7,647	13,453	30,347	27,983
State Local	16,287	32,644	51,073	54,291
	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	1,002 U
Air total	4,100	10,119	21,627	Ü
Federal: Airport and	4,100	10,117	21,027	U
Airway Trust Fund	2,274	4.945	10.544	9.891
State	190	556	852	7,871
Local	1,636	4,617	10,231	U
				U
Water total	1,211	2,487	3,717	_
Federal: water receipts ^b	391 249	999 355	1,210 693	916
State Local	572			736 U
	3/2	1,133	1,813	
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.

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.

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.

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	R _{27,050}	U
Rail total	2,497	R540	R767	U
Federal	2,474	534	760	1,296
State and local	23	R ₆	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	R ₂₅₉	248
Total, all modes	56,407	R100,685	R _{167,360}	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.

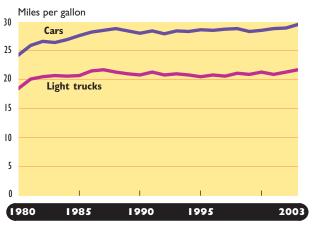
Sources: Various sources, as cited in U.S. Department of Transportation, Bureau of Transportation Statistics, Government Transportation Financial Statistics, available at http://www.bts.gov/government_transportation_financial_statistics/index.html, as of November 2004.

6

Transportation and the Environment

hile 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.

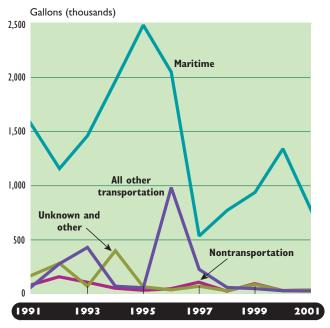
Figure 13
New Passenger Car and Light Truck Fuel Economy
Averages: Model Years 1980–2003



Note: 2003 data are preliminary.

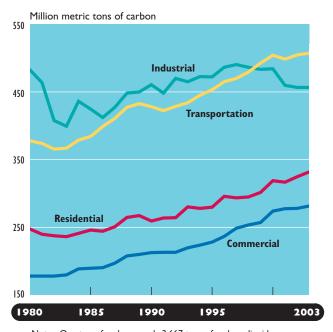
Source: U.S. Department of Transportation, National Highway Traffic Safety Administration, Automotive Fuel Economy Program, Annual Update Calendar Year 2002, September 2003, table II-6, available at http://www.nhtsa.dot.gov/cars/problems/studies, as of October 2003; and personal communication, November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



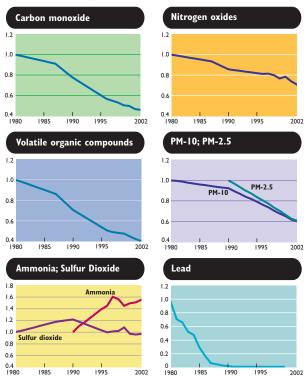
Notes: One ton of carbon equals 3.667 tons of carbon dioxide gas. Electric utility emissions are distributed across sectors.

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/oia/f1605/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/oia/f1605/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.). Freeflow 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 rightsof-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: I) 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.

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