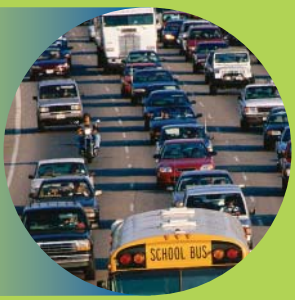
Bureau of Transportation Statistics

Pocket Guide to Transportation 2006



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Pocket Guide to Transportation

Bureau of
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Research and Innovative
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U.S. Department of
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U.S. Department of Transportation

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Contents

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	2004
Resident population (thous.)	226,542	293,655
Total area (thous. sq. mi.)[a]	3,619	3,794 (2000)
Total civilian labor force (thous.)	106,940	147,401
Real gross domestic product[b]	$5.2 trillion	$10.8 trillion
Median household income[b,d]	$34,007	$41,008
Average household income[b,d]	$40,445	$55,917
Average household expenditures[b,c]	$33,915 (1984)	$40,089
Number of households (thous.)	80,776	113,146
Life expectancy at birth (years)	73.7	P77.6 (2003)

[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 2005.
Key: P = preliminary data.

Sources: **Area**—U.S. Department of Commerce (USDOC), U.S. Census Bureau, *Statistical Abstract of the United States: 2004–2005,* available at www.census.gov, as of Nov. 2005. **GDP**—USDOC, Bureau of Economic Analysis, available at www.bea.gov, as of Oct. 2005. **Population, number of households, median and average household income**—USDOC, Census, available at www.census.gov, as of Oct. 2005. **Average household expenditures, labor force**—U.S. Department of Labor, Bureau of Labor Statistics, available at www.bls.gov, as of Nov. 2005. **Life expectancy**—Centers for Disease Control and Prevention, available at www.cdc.gov, as of Nov. 2005.

1 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 1
The Transportation Network: 2004

Mode	Components
Highway	**Public roads**
	46,837 miles of Interstate highway
	115,319 miles of other National Highway System roads
	3,835,305 miles of other roads
Air	***Public-use airports***
	5,288 airports
	Airports serving large certificated carriers
	27 large hub areas[a] (70 airports), 467 million enplaned passengers
	35 medium hub areas (35 airports), 127 million enplaned passengers
	68 small hub areas (68 airports), 53 million enplaned passengers
	970 nonhub areas (1,009 airports), 22 million enplaned passengers
Rail	***Miles of railroad operated***
	97,496 miles by Class I freight railroads in the United States[b]
	15,641 miles by regional freight railroads
	27,109 miles by local freight railroads
	23,000 miles by Amtrak (passenger)[c]

Mode	Components	
Urban transit (2003)	***Directional route-miles***[d]	
	Bus: 165,854[e]	
	Trolley bus: 425	
	Commuter rail: 4,407	
	Heavy rail: 1,597	
	Light rail: 1,097	
	Stations	
	Commuter rail: 1,153	
	Heavy rail: 1,023	
	Light rail: 723	
Water	**26,000 miles of navigable channels (2003)**	
	Ferry routes: 487 (2000)	
	Commercial waterway facilities[a] ***(2003)***	
	Great Lakes:	600 deep-draft
		154 shallow-draft
	Inland:	2,361 shallow-draft
	Ocean:	4,287 deep-draft
		1,770 shallow-draft
	Locks:	257
Pipeline	***Oil***	
	Crude lines: 65,942 miles of pipe	
	Product lines: 76,258 miles of pipe	
	Gas (2003)	
	Transmission: 304,000 miles of pipe	
	Distribution: 1,097,900 miles of pipe	

[a] See Glossary for definitions. [b] There are also 560 miles of railroad operated within the U.S. Class I freight railroad system that are owned by Canada. [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, RITA, BTS, *National Transportation Statistics,* available at http://www.bts.gov; Association of American Railroads, *Railroad Facts, 2005* (Washington, DC: 2005); USDOT, FHWA, *Highway Statistics 2004* (Washington, DC: 2005), table HM-18; *Oil & Gas Journal,* Sept. 12, 2005; USDOT, Federal Transit Administration, *2003 National Transit Summaries and Trends,* tables 21, 23, 24, and appendix, available at www.ntdprogram.com; USDOT, RITA, BTS, "Airport Activity Statistics of Certificated Air Carriers, Summary Tables, 12 Months Ending Dec. 31, 2004," 2005; U.S. Army Corps of Engineers, Institute for Water Resources, Navigation Data Center, *The U.S. Waterway System Facts, December 2004* (Alexandria, VA: 2004).

2 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 93 percent of transportation fatalities arise from motor vehicle crashes.

Table 2
Transportation Fatalities by Mode

Mode	1970	1980	1990	2000	2004
Large air carrier[a]	146	1	39	92	P14
Commuter air carrier[a]	N	37	6	5	P0
On-demand air taxi[a]	N	105	51	71	P65
General aviation[a]	1,310	1,239	767	596	P556
Highway[b]	52,627	51,091	44,599	41,945	42,636
Railroad[c]	785	584	599	512	P528
Transit[d]	N	N	339	295	248
Commercial ship					
Vessel	178	206	85	49	36
Nonvessel[e]	420	281	101	88	57
Recreational boating	1,418	1,360	865	701	676
Gas and hazardous liquid pipeline	30	19	9	38	23

[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 response, 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.

Sources: Various sources, as cited in USDOT, RITA, BTS, *National Transportation Statistics*, table 2-1, available at http://www.bts.gov, as of September 2005. **2004—Highway:** USDOT, NHTSA, National Center for Statistics and Analysis, personal communication, October 2005; **Transit:** USDOT, Volpe Center, personal communication, October 2005; **Recreational boating:** U.S. Department of Homeland Security, Coast Guard, *Boating Statistics 2004*, available at http://www.uscgboating.org/statistics/stats.htm, as of September 2005.

Table 3

Distribution of Transportation Fatalities: 2003

Category	Number	%
Passenger car occupants	19,460	43.3
Light-truck occupants	12,444	27.7
Pedestrians struck by motor vehicles	4,749	10.6
Motorcyclists	3,661	8.2
Other and unknown motor vehicle occupants	804	1.8
Large-truck occupants	723	1.6
Recreational boating	703	1.6
General aviation	632	1.4
Pedalcyclists struck by motor vehicles	622	1.4
Railroad trespassers (excl. grade crossings)[a]	501	1.1
Other nonoccupants struck by motor vehicles[b]	140	0.31
Waterborne transportation (nonvessel-related)	74	0.16
Grade crossings, not involving motor vehicles[c]	62	0.14
Waterborne transportation (vessel-related)	53	0.12
Heavy-rail transit (e.g., subway)	49	0.11
Air taxi	42	0.09
Bus occupants (school, intercity, transit)	40	0.09
Private grade crossings, with motor vehicles	30	0.07
Air carriers	22	0.05
Rail employees on duty and contractors	20	0.04
Light-rail transit	17	0.04
Transit buses, not accident-related[d]	14	0.03
Gas distribution pipelines	11	0.02
Rail-related, not otherwise specified	10	0.02
Demand-response transit, not accident-related[d]	3	<0.01
Passengers on railroad trains	2	<0.01
Commuter air	2	<0.01
Gas transmission pipelines	1	<0.01
Total, all modes[e]	**44,891**	**100.0**
Other counts, redundant with above[f]		
Large-truck occupants and nonoccupants	4,986	
Public grade crossings, with motor vehicles	240	
Commuter rail	77	
Transit buses, accident-related	73	
Outside planes in crashes[g]	6	
Demand-response transit, accident-related	1	

[a] Includes fatalities outside trains. [b] Includes all nonoccupant fatalities, except pedalcyclists and pedestrians. [c] Public grade-crossing fatalities involving motor vehicles (MVs) are included in MV counts. [d] Fatalities unrelated to transit bus and demand-response accidents are not included under highway submodes. [e] Unless otherwise noted, includes fatalities outside vehicles. [f] Fatalities at grade crossings with MVs are included under relevant MV modes. Commuter rail fatalities are counted under rail. Transit bus and demand-response occupant fatalities are counted under "bus," and nonoccupant fatalities are counted under "pedestrians," "pedalcyclists," or other MV categories. [g] Includes nonoccupant fatalities in aviation accidents.

Sources: Various sources as cited in USDOT, RITA, BTS, *National Transportation Statistics,* table 2-4, available at http://www.bts.gov, forthcoming.

Table 4

Fatalities in Motor Vehicle Crashes by Vehicles and by Alcohol Involvement: 2004

Number of vehicles	Fatalities[a]	Alcohol involvement[b]	Percent[c]
Occupants	**37,142**	**14,195**	**38**
Single-vehicle crashes	18,288	8,808	48
Two-vehicle crashes	15,737	4,492	29
More than two-vehicle crashes	3,117	896	29
Pedestrians	**4,641**	**2,211**	**48**
Single-vehicle crashes	4,207	1,976	47
Multiple-vehicle crashes	434	234	54
Pedalcyclists	**725**	**249**	**34**
Single-vehicle crashes	697	237	34
Multiple-vehicle crashes	28	11	39
Others/unknown	**128**	**39**	**30**
Total	**42,636**	**16,694**	**39**

[a] Fatalities in all crashes.

[b] Fatalities in crashes that involve alcohol.

[c] Percentage of all crash fatalities that involve alcohol.

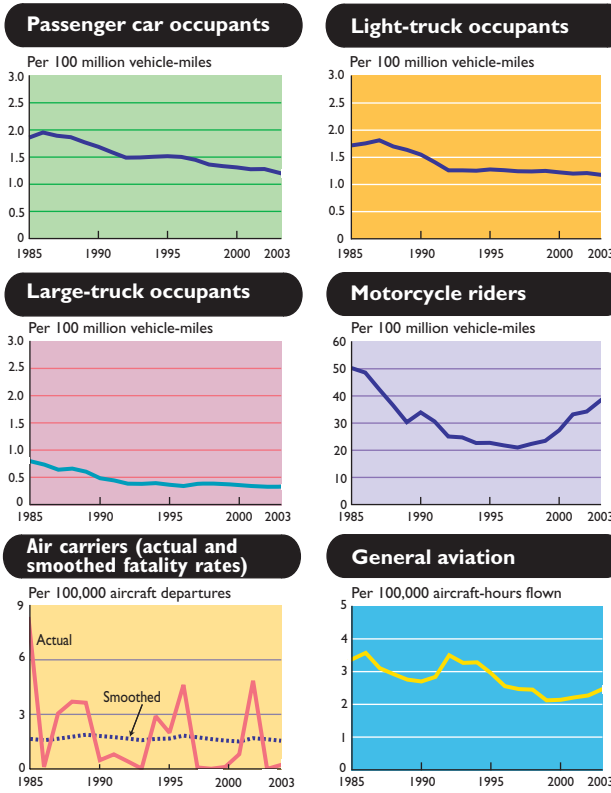
Notes: Numbers may not add to totals due to rounding.

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 2005.

Figure 1
Fatality Rates for Selected Modes



Notes: Air carrier data were smoothed using an exponential smoothing model, with a weight of 0.945 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: U.S. Department of Transportation (USDOT), National Highway Traffic Safety Administration, *Traffic Satety Facts 2003,* tables 7-10, available at http://www.nhtsa.dot.gov, as of January 2005.
Air carriers and general aviation—USDOT, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *National Transportation Statistics,* tables 2-9 and 2-14, available at http://www.bts.gov, as of September 2005.

Table 5
Injured Persons by Transportation Mode

Mode	1970	1980	1990	2000	2004
Air carrier	107	19	29	29	P19
Commuter air carrier	N	14	11	7	P1
On-demand air taxi	N	43	36	12	P18
General aviation	715	681	409	309	P266
Highway[a]	N	N	3,230,666	3,188,750	2,788,378
Railroad[b]	17,394	58,696	22,736	10,424	P8,402
Transit[c]	N	N	54,556	56,697	d17,618
Commercial ship					
Vessel accidents	105	180	175	130	198
Nonvessel accidents[e]	U	U	U	567	505
Recreational boating	780	2,650	3,822	4,355	3,363
Gas and hazardous liquid pipeline	254	192	76	81	55

[a] Includes passenger car occupants, motorcyclists, light-duty and large-truck occupants, bus occupants, occupants of unknown vehicle types, and pedestrians, pedalcyclists, 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 response, van pool, and automated guideway.

[d] The National Transit Database (NTD) injury definition was changed in 2002 so that only incidents involving immediate medical treatment away from the scene qualify as reportable injuries. Previously, any reported incident/injury was reported to NTD.

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

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

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

Sources: Except as noted, various sources, as cited in USDOT, RITA, BTS, *National Transportation Statistics,* table 2-2, available at http://www.bts.gov, forthcoming. **2004 highway**—USDOT, National Highway Traffic Safety Administration, National Center for Statistics and Analysis, personal communication, October 2005. **2004 recreational boating**—U.S. Coast Guard, *Boating Statistics 2004* (annual issues), available at http://www.uscgboating.org/, as of September 2005.

Table 6
Hazardous Materials Transportation Incidents

	1990	1995	2000	2004
Highway	**7,297**	**12,869**	**15,063**	**12,977**
Accident related	249	253	327	233
Injuries	311	296	164	156
Fatalities	8	7	16	10
Rail	**1,279**	**1,155**	**1,058**	**753**
Accident related	48	50	62	48
Injuries	73	71	82	121
Fatalities	0	0	0	3
Air	**297**	**817**	**1,419**	**995**
Accident related	0	0	1	0
Injuries	39	33	5	12
Fatalities	0	0	0	0
Water	**7**	**12**	**17**	**15**
Accident related	0	0	0	0
Injuries	0	0	0	0
Fatalities	0	0	0	0

Pipeline	**1990**	**1995**	**2000**	**2004**
Liquid	**180**	**188**	**146**	**141**
Injuries	7	11	4	13
Fatalities	3	3	1	5
Natural gas distribution	**109**	**97**	**154**	**172**
Injuries	52	43	59	41
Fatalities	6	16	22	18
Natural gas transmission	**89**	**64**	**80**	**121**
Injuries	17	10	18	3
Fatalities	0	2	15	1

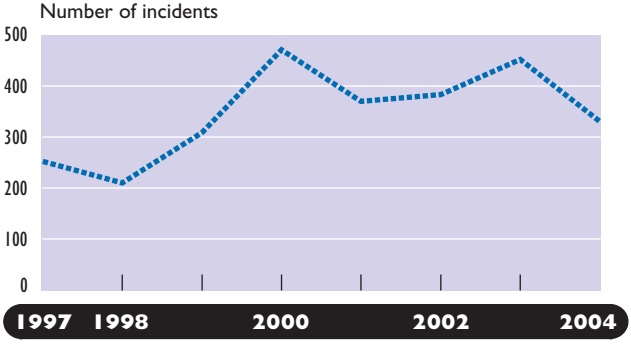
Note: Injuries/fatalities data are for number of people injured or killed. Accident related excludes human errors, package failures, and unreported cases. Water data are for incidents involving packaged materials only and do not include incidents where the vessel is the container (e.g., a barge or oil tanker). Nonpipeline reporting requirements changed in 2002.

Sources: USDOT, PHMSA, Hazardous Materials Information System Database. **1990 data**—available at http://hazmat.dot.gov/pubs/biennial/ 96_97biennial.rpt.pdf, as of December 2005. **1995–2004 data**—available at http://hazmat.dot.gov/pubs/inc/data/2004/2004frm.htm, as of December 2005. **Pipeline data**—USDOT, PHMSA, Office of Pipeline Safety, available at http://ops.dot.gov/stats/LQ_SUM.HTM, as of November 2005.

3 Security

Ensuring security of all transportation systems 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 issue 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 64.5 percent of the petroleum used in the United States is currently imported.

Figure 2
International Piracy and Armed Robbery at Sea



Note: Incidents include attempts and threatening actions.

Source: International Maritime Organization, *Reports on Acts of Piracy and Armed Robbery Against Ships: Annual Report 2004,* available at http://www.imo.org/home.asp, as of May 2005.

Table 7
Prohibited Items Intercepted at U.S. Airport Screening Checkpoints: 2003 and 2004

Items	2003	2004
Other cutting instruments	2,973,413	3,567,731
Knives	1,961,849	2,058,652
Incendiaries and explosive/ flammable materials	494,123	693,649
Clubs	25,139	28,813
Box cutters	20,991	22,350
Firearms	683	650
Other	638,414	717,754
Total prohibited items	**6,114,612**	**7,089,599**

Notes: Other cutting instruments includes scissors, hatchets, swords, sabers, meat cleavers, ice axes, and picks.

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

Clubs includes martial arts items, baseball bats, night sticks, hammers, pool cues, and billy clubs.

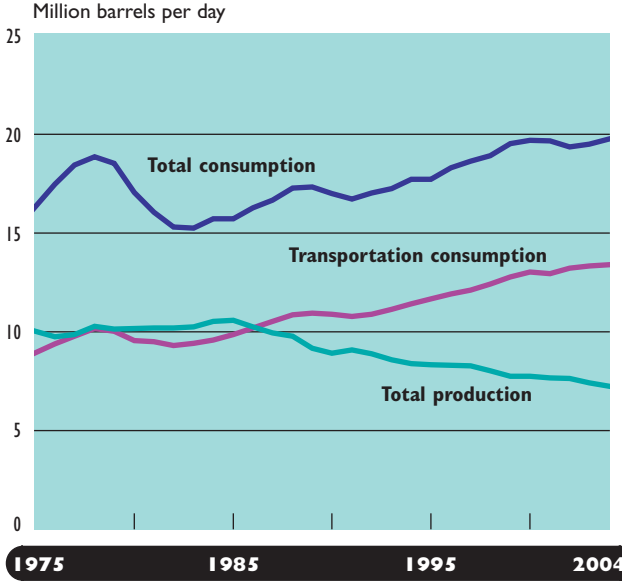
Firearms includes any weapon (including a starter gun) that is designed to or may readily be converted to expel a projectile by the action of an explosive, as well as spear guns, BB guns, flare pistols, compressed air guns, and stunning devices.

Other refers to tools, self-defense items, compressed gas cylinders, bleach, and certain sporting goods.

For further clarification about terms, see http://www.tsa.gov/interweb/assetlibrary/Permitted_Prohibited_9_6_2005.pdf.

Source: U.S. Department of Homeland Security, Transportation Security Administration, personal communication, July 2005.

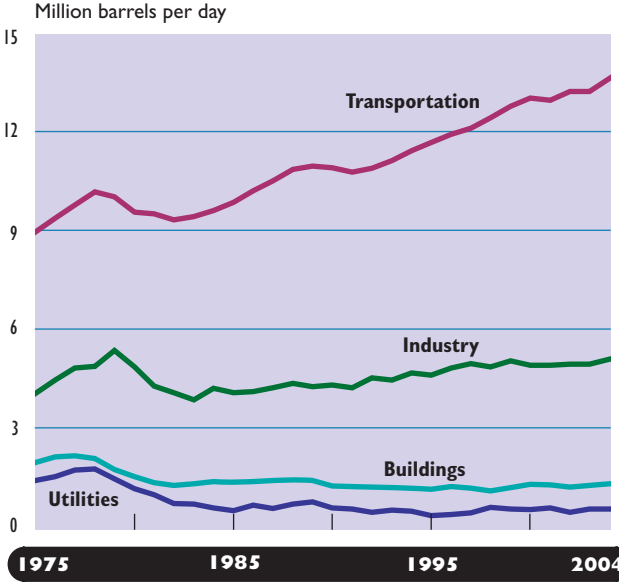
Figure 3
U.S. Petroleum Production and Consumption: 1975–2004



Notes: 2002–2003 data are revised from previous editions. 2004 data are preliminary.

Source: U.S. Department of Energy, Energy Information Administration, *Annual Energy Review 2004* (Washington, DC: August 2005), tables 5.1 and 5.13c.

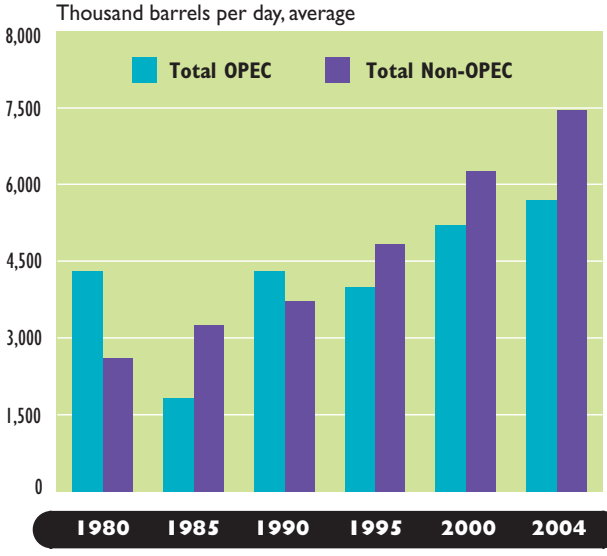
Figure 4
Transportation's Share of U.S. Petroleum Use: 1975–2004



Notes: 2002–2003 data are revised from previous editions. 2004 data are preliminary.

Source: U.S. Department of Energy, Energy Information Administration, *Annual Energy Review 2004* (Washington, DC: August 2005), tables 5.13a–d.

Figure 5
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,* September 2005, tables 3.3d and 3.3h, available at http://www.eia.doe.gov/emeu/mer/petro.html, as of October 2005.

Table 8
Major Suppliers of U.S. Imported Crude Oil and Petroleum Products
(*Thousand barrels per day, average; rank in 2004*)

	1980	1985	1990	1995	2000	2004
Canada	455	770	934	1,332	1,807	2,138
Mexico	533	816	755	1,068	1,373	1,665
Saudi Arabia	1,261	168	1,339	1,344	1,572	1,558
Venezuela	481	605	1,025	1,480	1,546	1,554
Nigeria	857	293	800	627	896	1,140
Iraq	28	46	518	0	620	656
Algeria	488	187	280	234	225	452
United Kingdom	176	310	189	383	366	380
U.S. Virgin Islands	388	247	282	278	291	330
Angola	42	110	237	367	301	316
Russia	1	8	45	25	72	298
Kuwait	27	21	86	218	272	250
Norway	144	32	102	273	343	244
Colombia	4	23	182	219	342	176
Total, major suppliers	**4,884**	**3,628**	**6,729**	**7,823**	**9,954**	**11,158**
Total, all U.S. imports	6,909	5,067	8,018	8,835	11,459	13,145

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,* September 2005, tables 3.1a, 3.3a–h, available at http://www.eia.doe.gov/emeu/mer/petro.html, as of October 2005.

4 Mobility

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: vehicle availability, travel costs, population, congestion, the economy, and consumer income.

Table 9
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)	
Tons per person, annually	40.5
Ton-miles per person, annually	10,882

[a] Calculated on an annualized basis.

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 Research and Innovative Technology Administration (RITA), Bureau of Transportation Statistics (BTS), *National Household Travel Survey* (Washington, DC: 2002). **Freight**—USDOT, RITA, BTS, and U.S. Department of Commerce, U.S. Census Bureau, *2002 Commodity Flow Survey United States—Final,* available at http://www.bts.gov/publications/commodity_flow_survey/2002/united_states_final/, as of December 2004.

Table 10
Number of Aircraft, Railcars, Vehicles, and Vessels

Mode	1980	1990	2000	2003
Air carrier	3,808	6,083	8,055	8,176
General aviation	211,045	198,000	217,533	209,708
Automobiles	121,600,843	133,700,496	133,621,420	135,669,897
Motorcycles	5,693,940	4,259,462	4,346,068	5,370,035
Other 2-axle, 4-tire vehicles[a]	27,875,934	48,274,555	79,084,979	87,031,553
Trucks: Single-unit	4,373,784	4,486,981	5,926,030	5,666,933
Combination	1,416,869	1,708,895	2,096,619	2,245,085
Buses[b]	528,789	626,987	746,125	776,550
Passenger rail:				
Amtrak—Cars	2,128	1,863	1,894	1,623
Locomotives	419	318	378	442
Commuter railcars and locomotives	4,500	R5,007	R5,498	P5,959
Transit[c]	10,654	11,332	12,168	P12,236
Class I rail:				
Freight cars	1,168,114	658,902	560,154	467,063
Locomotives	28,094	18,835	20,028	20,774
Other freight cars	542,713	553,359	820,642	811,917
Nonself-propelled vessels (barges)[d,e]	31,662	31,209	33,152	31,335
Self-propelled vessels[d,e]	7,126	8,236	8,202	8,648
Oceangoing ships[e] (1,000 gross tons and over)	864	636	454	412
Recreational boats[f]	8,577,857	10,996,253	12,782,143	12,794,616

[a] Includes vans, pickup trucks, sport utility vehicles, and other 2-axle, 4-tire motor vehicles that are not passenger cars.
[b] Includes municipally owned transit and 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; R = revised.

Sources: Except as noted, various sources, as cited in U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *National Transportation Statistics,* table 1-11, available at http://www.bts.gov, as of October 2005.
2003 commuter railcars and locomotives, and transit: American Public Transportation Association, *2005 Public Transportation Fact Book,* table 25, available at http://www.apta.com/research/stats/, as of October 2005.

Table 11
Vehicle-Miles
(*Millions*)

Mode	1970	1980	1990	2000	2003
Air carrier	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	1,672,079
Motorcycles	2,979	10,214	9,557	10,469	9,577
Other 2-axle, 4-tire vehicles[b]	123,286	290,935	574,571	923,059	984,094
Trucks:					
Single-unit	27,081	39,813	51,901	70,500	77,757
Combination	35,134	68,678	94,341	135,020	140,160
Buses[c]	4,544	6,059	5,726	7,590	6,783
Rail[d]:					
Transit[e]	441	403	561	648	[P]694
Commuter	N	179	213	271	[P]286
Class I freight	29,890	29,277	26,159	34,590	35,555
Intercity/Amtrak[f]	690	235	301	368	332
Other transit[g]	N	15	324	833	[P]964

[a] The 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.

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

[c] Includes municipally owned transit and 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 response, ferryboat, and other transit not specified; 1980 data include "other transit" only.

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

Sources: Except as noted, various sources, as cited in U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *National Transportation Statistics,* table 1-32, available at http://www.bts.gov, as of October 2005.
2003 transit, commuter, and other transit: American Public Transportation Association, *2005 Public Transportation Fact Book,* table 19, available at http://www.apta.com/research/stats/, forthcoming.

Table 12
Passenger-Miles
(*Millions*)

Mode	1970	1980	1990	2000	2003
Air carrier	108,442	204,368	345,873	516,129	505,339
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	2,641,885
Motorcycles	3,277	12,257	12,424	11,516	12,163
Other 2-axle, 4-tire vehicles[a]	225,613	520,774	999,754	1,467,664	1,706,103
Buses[b]	N	N	121,398	160,919	140,160
Rail:					
Transit[c]	N	10,939	12,046	15,200	P15,082
Commuter	4,592	6,516	7,082	9,402	P9,559
Intercity/ Amtrak[d]	6,179	4,503	6,057	5,498	5,680
Other transit[e]	N	390	841	1,631	P1,892

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

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

[c] Includes light and heavy rail only.

[d] Fiscal year data. Amtrak began operations in 1971.

[e] Includes demand response, ferryboat, and other transit not specified; 1980 data include ferryboat and "other transit" only.

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

Sources: Various sources, as cited in U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *National Transportation Statistics,* table 1-37, available at http://www.bts.gov, forthcoming.

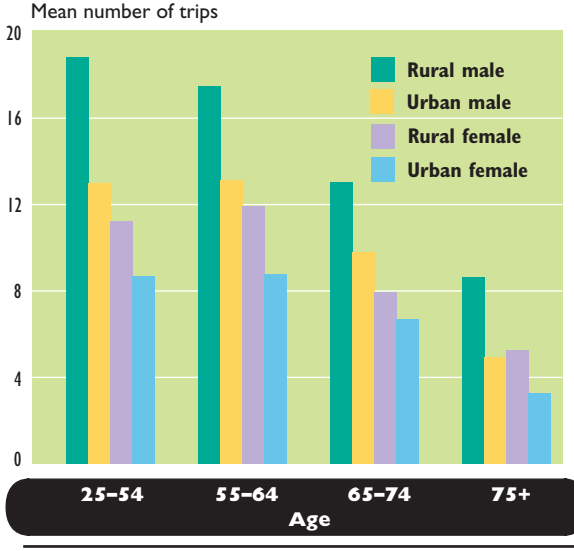
Table 13
Daily Travel by Gender: 2001
(Trips from one point to another on a single day; most daily trips are local)

Mode	Percent		
	Male	Female	All travelers
Car	45	56	51
Van	11	13	12
Sport utility vehicle	11	12	11
Pickup truck	18	5	11
Other	13	13	14
Trip purpose			
Family/personal business	23	28	23
Social/recreational	19	18	19
Shopping	17	21	19
Work (commute)	17	13	15
School/place of worship	10	10	10
Visit friend/relative	8	8	8
Work-related	4	2	3
Other	2	2	3
Average driving time and distance			
Minutes per day	44	67	55
Miles per day	21	38	29

Notes: Data were collected between March 2001–May 2002. Percentages may not add to 100 due to rounding. Other includes air, intercity or charter bus, intercity rail, public bus, commuter bus and train, subway/elevated train, streetcar/trolley, ship, taxi, limousine, shuttle, or bicycle. Family/personal business includes, e.g., medical visits, picking people up or dropping them off, banking. 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.

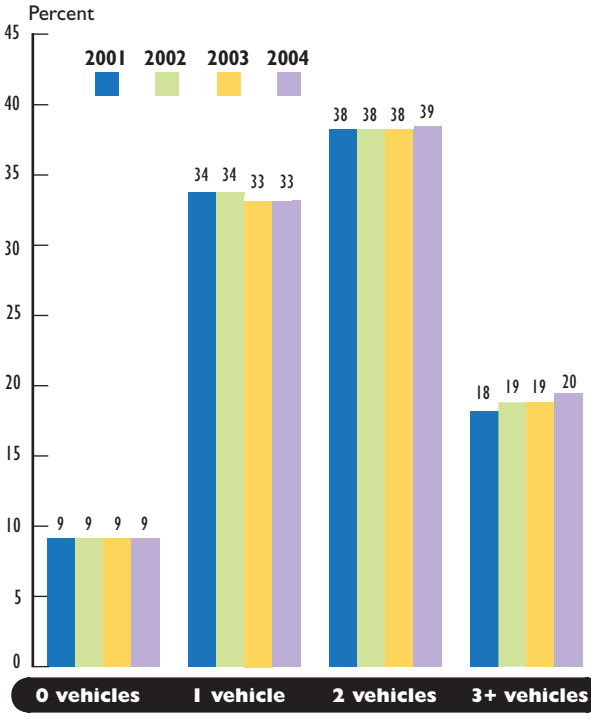
Source: U.S. Department of Transportation, Federal Highway Administration and Research and Innovative Technology Administration, Bureau of Transportation Statistics, *National Household Travel Survey* (Washington, DC: 2002).

Figure 6
Long-Distance Trips by Gender, Area, and Age: 2001



Source: U.S. Department of Transportation, Federal Highway Administration and Bureau of Transportation Statistics, *National Household Travel Survey* (Washington, DC: 2002).

Figure 7
Households by Number of Vehicles



Source: U.S. Department of Commerce, U.S. Census Bureau, *American Community Survey,* annual issues, available at http://www.census.gov/acs/www/index.html, as of November 2005.

Table 14

Commercial Freight Activity in the United States by Mode of Transportation: 2002[a]

Mode	Value (billion $)	Tons (millions)	Ton-miles (billions)
All modes	**13,052**	**19,487**	**4,409**
Single modes	**11,599**	**18,894**	**4,073**
Truck[b]	9,075	11,712	1,515
Rail	392	1,979	1,372
Water	673	1,668	485
Air (includes truck and air)	563	6	13
Pipeline[c]	896	3,529	688
Multiple modes	**1,121**	**229**	**233**
Parcel, postal, or courier	1,022	27	21
Truck and rail	77	52	50
Other multiple modes[d]	22	150	103
Unknown modes	**331**	**365**	**103**

[a] These estimates include Commodity Flow Survey (CFS) data plus data on sectors that are not included in the CFS such as imports, logging, construction, retail, services, publishing, municipal solid waste, and household and business moves. They also include estimates of shipments for sectors that are covered in the CFS but may have been underestimated due to a small sample size, such as exports, intermodal, and petroleum products.

[b] "Truck" as a single mode includes shipments that were made only by private truck, for-hire truck, or a combination of private and for-hire truck.

[c] Estimates for pipeline include shipments of crude petroleum.

[d] Other multiple modes includes a combination of truck and water, rail and water, and other combinations.

Source: U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *Freight in America* (Washington, DC: In press).

Table 15
U.S.-Mexican Border Land-Passenger Crossings: 2004
(Thousands)

	Entering the U.S.
Total U.S.-Mexico crossings	
Personal vehicles	91,134
Personal vehicle passengers	190,937
Buses	269
Bus passengers	3,389
Train passengers	13
Pedestrians	48,084
Personal vehicles—top 5 gateways	
San Ysidro, CA	17,621
El Paso, TX	14,817
Brownsville, TX	7,211
Hidalgo, TX	7,184
Laredo, TX	6,725
Personal vehicle passengers—top 5 gateways	
San Ysidro, CA	33,383
El Paso, TX	28,108
Hidalgo, TX	15,515
Brownsville, TX	15,374
Laredo, TX	15,033
Buses—top 5 gateways	
San Ysidro, CA	110
Otay Mesa, CA	41
Laredo, TX	38
Hidalgo, TX	33
El Paso, TX	18
Bus passengers—top 5 gateways	
San Ysidro, CA	1,032
Laredo, TX	803
Hidalgo, TX	650
El Paso, TX	265
Otay Mesa, CA	251
Train passengers—top 5 gateways	
Eagle Pass, TX	7
El Paso, TX	2
Nogales, AZ	2
Calexico East, CA	2
Otay Mesa/San Ysidro, CA	1
Pedestrians—top 5 gateways	
San Ysidro, CA	9,458
El Paso, TX	8,442
Nogales, AZ	6,131
Calexico, CA	4,847
Laredo, TX	4,507

Note: Totals may not add due to rounding.

Source: USDOT, RITA, BTS, special tabulation, September 2005; based on U.S. Department of Homeland Security, U.S. Customs and Border Protection, Office of Field Operations, Operations Management database, as of September 2005.

Table 16
U.S.-Canadian Border Land-Passenger Crossings: 2004
(Thousands)

	Entering the U.S.
Total U.S.-Canada crossings	
Personal vehicles	30,660
Personal vehicle passengers	64,848
Buses	156
Bus passengers	3,890
Train passengers	223
Pedestrians	826
Personal vehicles—top 5 gateways	
Buffalo-Niagara Falls, NY	6,149
Detroit, MI	6,131
Blaine, WA	2,524
Port Huron, MI	1,996
Calais, ME	1,200
Personal vehicle passengers—top 5 gateways	
Buffalo-Niagara Falls, NY	13,195
Detroit, MI	10,574
Blaine, WA	4,936
Port Huron, MI	3,909
Massena, NY	3,598
Buses—top 5 gateways	
Buffalo-Niagara Falls, NY	40
Detroit, MI	37
Sault Ste. Marie, MI	17
Blaine, WA	14
Skagway, AK	10
Bus passengers—top 5 gateways	
Buffalo-Niagara Falls, NY	1,223
Detroit, MI	931
Blaine, WA	329
Champlain-Rouses Point, NY	277
Sault Ste. Marie, MI	224
Train passengers—top 5 gateways	
Skagway, AK	52
Blaine, WA	42
Buffalo-Niagara Falls, NY	31
Champlain-Rouses Point, NY	30
Port Huron, MI	18
Pedestrians—top 5 gateways	
Buffalo-Niagara Falls, NY	547
Sumas, WA	55
Calais, ME	45
International Falls, MN	28
Portland, ME (ferry crossing)	22

Note: Totals may not add due to rounding.

Source: USDOT, RITA, BTS, special tabulation, October 2005; based on U.S. Department of Homeland Security, U.S. Customs and Border Protection, Office of Field Operations, Operations Management database, as of October 2005.

Table 17

Top 20 U.S. Passenger Airports

(Thousands of enplaned passengers on large certificated air carriers)

	1994		2004		
Airport	**Rank**	**Total enplaned passengers**	**Rank**	**Total enplaned passengers**	**% change 1994–2004**
Atlanta (Hartsfield), GA	2	25,695	1	40,425	57
Chicago (O'Hare), IL	1	29,970	2	33,863	13
Dallas/Ft. Worth, TX	3	25,486	3	27,827	9
Los Angeles, CA	4	19,912	4	22,892	15
Denver, CO	5	14,810	5	20,102	36
Las Vegas (McCarran), NV	10	12,003	6	19,414	62
Phoenix (Sky Harbor), AZ	7	12,458	7	19,151	54
Minneapolis, MN	12	10,892	8	17,371	59
Detroit (Wayne County), MI	8	12,258	9	16,891	38
Houston (Intercontinental), TX	17	9,681	10	16,749	73
Orlando, FL	19	9,183	11	14,363	56
Newark, NJ	9	12,023	12	14,188	18
Seattle, WA	15	9,963	13	13,747	38
San Francisco, CA	6	14,469	14	13,504	–7
Philadelphia, PA	24	7,613	15	13,462	77
New York (John F. Kennedy), NY	21	8,949	16	13,264	48
Charlotte (Douglas), NC	18	9,388	17	12,433	32
New York (La Guardia), NY	16	9,806	18	11,917	22
Miami, FL	13	10,847	19	11,694	8
Boston, MA	14	10,677	20	11,460	7
Top 20 airports		**276,085**		**364,719**	**32**
All airports		540,621		671,723	24

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

Source: U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, Schedule T-3 data, special tabulation, October 2005.

Table 18

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

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

	1994		2004	
Airport	**Delay rank**	**%**	**Delay rank**	**%**
Chicago (O'Hare), IL	26	16.5	1	29.9
Newark, NJ	1	29.9	2	28.8
Atlanta (Hartsfield), GA	7	21.6	3	27.0
New York (La Guardia), NY	6	21.8	4	26.7
Philadelphia, PA	5	21.9	5	26.5
Fort Lauderdale-Hollywood, FL	4	23.0	6	24.4
New York (JFK), NY	3	26.5	7	23.9
San Francisco, CA	9	21.4	8	23.1
Las Vegas (McCarran), NV	21	17.8	9	22.4
Seattle-Tacoma, WA	13	20.6	10	22.2
Miami, FL	12	20.8	11	22.2
Boston (Logan), MA	2	26.8	12	22.1
Orlando, FL	15	19.9	13	22.0
Washington (Dulles), VA	8	21.6	14	21.6
Tampa, FL	11	20.9	15	20.7
Chicago (Midway), IL	30	14.1	16	20.7
Portland, OR	14	20.5	17	20.6
Phoenix (Sky Harbor), AZ	25	16.8	18	20.0
Cincinnati, OH	28	16.2	19	20.0
San Diego (Lindbergh), CA	23	17.2	20	19.9

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 2004. BTS collects data from large carriers.

Source: U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, special tabulation, November 2005.

Table 19
Roadway Delay and Congestion Cost per Peak Traveler[a] in Urban Areas: 1993 and 2003

Annual Roadway Delay per Peak Traveler
(Hours per year)

	1993 delay per peak traveler	2003 delay per peak traveler	Percentage change 1993–2003	Annual growth rate 1993–2003
Very large areas	55	61	11	1.0
Large areas	28	37	32	2.8
Medium areas	15	25	67	5.2
Small areas	9	13	44	3.7
85-area average	**40**	**47**	**18**	**1.6**

Annual Roadway Congestion Cost per Peak Traveler
(Current dollars)

	1993 cost per peak traveler	2003 cost per peak traveler	Percentage change 1993–2003	Annual growth rate 1993–2003
Very large areas	719	1,038	44	3.7
Large areas	374	620	66	5.2
Medium areas	199	418	110	7.7
Small areas	118	222	88	6.5
85-area average	**523**	**794**	**52**	**4.3**

[a] A peak traveler is estimated to travel from 6:00 a.m. to 9:30 a.m. and 3:30 p.m. to 7:00 p.m.

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

Note: See Glossary for definitions of delay and congestion cost.

Source: Texas Transportation Institute, *2005 Urban Mobility Report,* "Base Statistics for the 85 Urban Areas" spreadsheet, available at http://mobility.tamu.edu/ums/congestion_data/tables/complete_data.xls, as of September 2005.

Table 20
Amtrak On-Time Performance Trends and Hours of Delay by Cause

	2002	2003	2004	2005
On-time performance				
Total (weighted)	76%	74%	71%	70%
Short distance (<400 miles)[a]	87%	82%	76%	78%
Long distance (≥400 miles)	70%	70%	68%	66%
Hours of delay by cause				
Amtrak[b]	26,575	25,711	28,323	25,549
Host railroad[c]	55,090	57,346	61,256	64,097
Other[d]	4,266	5,355	5,582	5,613
Total[e]	**85,932**	**88,413**	**95,162**	**95,260**

[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.

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:

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 2005.

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

	1993		2003		
Port	**Rank**	**Total tons**	**Rank**	**Total tons**	**% change 1993–2003**
South Louisiana, LA	1	193.7	1	198.8	2.6
Houston, TX	2	141.4	2	190.9	34.9
New York, NY and NJ	3	116.7	3	145.8	25.0
Beaumont, TX	25	25.4	4	87.5	244.5
New Orleans, LA	6	67.3	5	83.8	24.6
Huntington-Tristate, WV-OH-PA[a]	N	N	6	77.6	N
Corpus Christi, TX	7	59.6	7	77.2	29.5
Long Beach, CA	8	54.3	8	69.1	27.4
Texas City, TX	9	53.6	9	61.3	14.3
Baton Rouge, LA	5	85.1	10	61.2	–28.0
Plaquemine, LA	10	53.1	11	55.9	5.3
Lake Charles, LA	12	45.4	12	53.3	17.4
Los Angeles, CA	16	43.6	13	51.3	17.7
Mobile, AL	15	43.9	14	50.2	14.2
Valdez, AK	4	85.7	15	49.8	–41.8
Tampa, FL	13	44.9	16	48.2	7.2
Pittsburgh, PA	14	44.4	17	41.6	–6.3
Baltimore, MD	20	37.1	18	40.1	8.1
Duluth-Superior, MN and WI	19	37.6	19	38.3	1.8
Philadelphia, PA	17	42.7	20	33.2	–22.1
Total[b]		**1,276.3**		**1,516**	**18.8**

[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 27 for top 20 freight gateways by value of shipments.

Sources: **1993**—U.S. Army Corps of Engineers, *Waterborne Commerce of the United States, Calendar Year 1993, Part 5, National Summaries* (New Orleans, LA: 1995), table 5-4. **2003**—U.S. Army Corps of Engineers, *Waterborne Commerce of the United States, Calendar Year 2003, Part 5, National Summaries,* table 5-2, available at http://www.iwr.usace.army.mil/ndc/wcsc/wcsc.htm, as of October 2005.

Table 22
Top 20 World Container Ports: 2003
(Thousands of TEUs)

Rank	Port	Country	TEUs
1	Hong Kong	China	20,499
2	Singapore	Singapore	18,411
3	Shanghai	China	11,280
4	Shenzhen	China	10,615
5	Busan	South Korea	10,408
6	Kaohsiung	Taiwan	8,843
7	Los Angeles	United States	7,149
8	Rotterdam	Netherlands	7,107
9	Hamburg	Germany	6,138
10	Antwerp	Belgium	5,445
11	Dubai	United Arab Emirates	5,152
12	Port Kalang	Malaysia	4,840
13	Long Beach	United States	4,658
14	Quingdao	China	4,239
15	New York/New Jersey	United States	4,068
16	Tanjung Pelepas	Indonesia	3,487
17	Tokyo	Japan	3,314
18	Bremen/Bremerhafen	Germany	3,190
19	Laem Chabang	Thailand	3,181
20	Gioia Tauro	Italy	3,149

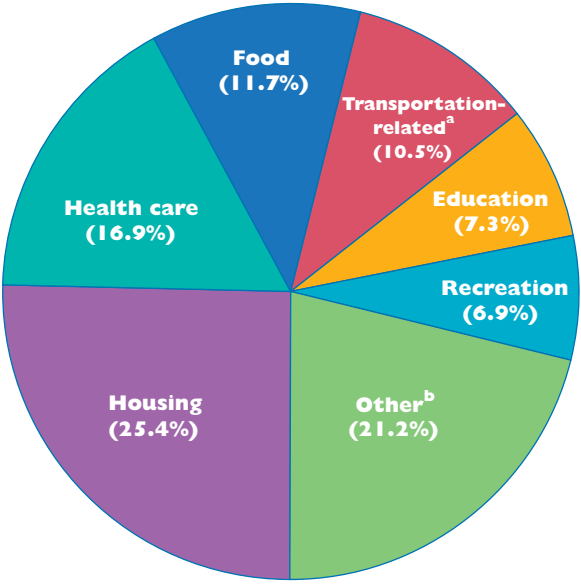
Note: TEUs = 20-foot equivalent units. One 20-foot container equals one TEU.

Source: American Association of Port Authorities, *World Port Rankings: 2003* (Container Traffic), available at http://www.aapa-ports.org/industryinfo/statistics.htm, as of June 2005.

5 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 2004, transportation-related goods and service contributed $1,231.7 billion to the $11.7 trillion U.S. Gross Domestic Product.

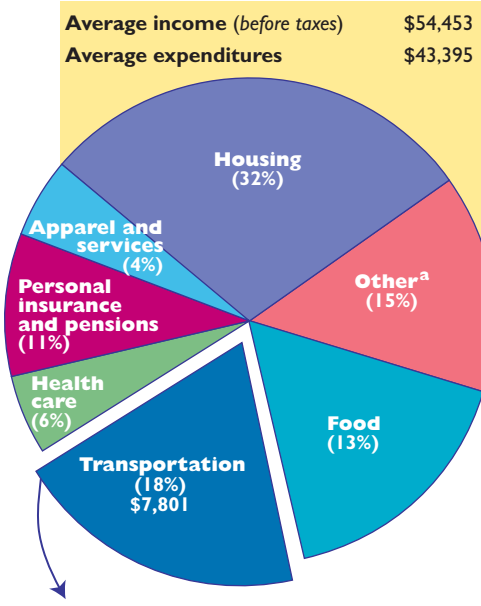
Figure 8
U.S. Gross Domestic Product by Major Societal Function: 2004



[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, Research and Innovative Technology Administration, Bureau of Transportation Statistics, calculated from data in U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business,* October 2005.

Figure 9
Average Household Expenditures by Major Spending Category: 2004
(*Current dollars*)



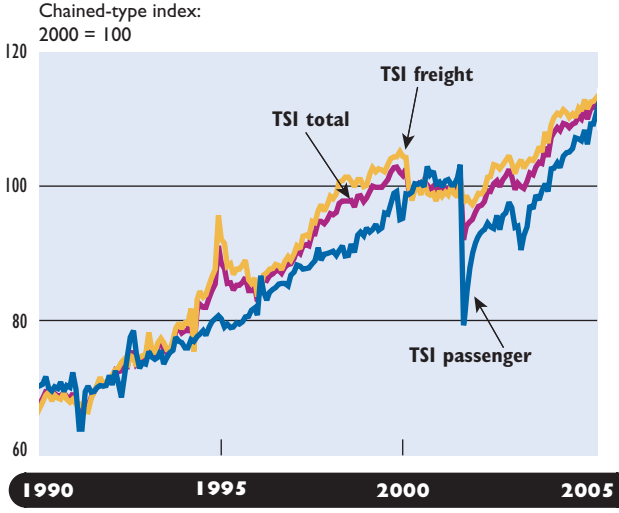
Private vehicle expenditures	**=**	**$7,360**
Vehicle purchases	=	$3,397
Gasoline and motor oil	=	$1,598
Other vehicle expenditures	=	$2,365
Public transportation expenditures	**=**	**$441**
Airline fares	=	$276
Ship fares	=	$52
Mass transit fares	=	$46
Taxi fares	=	$29
Intercity train fares	=	$18
Local transportation on out-of-town trips	=	$10
Intercity bus fares	=	$9
School bus	=	$1

[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 2005.

Figure 10
Transportation Services Index (TSI)
(*Seasonally adjusted*)



Notes: 2005 data are through May. March–May 2005 data are preliminary.

The TSI total is a single index measure of monthly output of for-hire transportation services in the United States using 2000 as the base year.

Source: Compiled by U.S. Department of Transportation (USDOT), Bureau of Transportation Statistics (BTS), special calculation, October 2005, available at http://www.bts.gov/xml/tsi/src/index.xml.

Table 23
Employment in Transportation and Selected Transportation-Related Industries[a]
(*Thousands*)

	1990	1995	2000	2004
For-hire transport & warehousing	**3,476**	**3,839**	**4,410**	**4,250**
Air	529	511	614	515
Water	57	51	56	57
Railroad	272	233	232	224
Transit/ground passenger transportation	274	328	372	386
Pipeline	60	54	46	39
Trucking	1,122	1,249	1,406	1,351
Support activities	364	430	537	536
Scenic/sightseeing transportation	16	22	28	27
Couriers/messengers	375	517	605	561
Warehousing/storage	407	444	514	556
Government[b]	**671**	**644**	**646**	**600**
Related services & construction	**5,256**	**5,577**	**6,177**	**5,999**
Automotive repair services/ parking; automotive equipment rental/leasing; gasoline stations	1,800	1,906	2,125	2,067
Highway, street, bridge construction	289	278	340	348
Dealers or wholesalers of motor vehicles, parts, petroleum, supplies, equipment	1,993	2,119	2,360	2,374
Travel arrangement/ reservation services	250	281	299	226
Ambulatory health care services	99	143	173	201
Postal service	825	850	880	784
Transportation-related manufacturing[c]	**2,681**	**2,390**	**2,446**	**2,123**
Total	**12,084**	**12,450**	**13,679**	**12,972**

[a] Annual averages. Data are NAICS-based. (See Glossary for definition.)
[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.

Sources: Various sources, as cited in USDOT, RITA, BTS, *National Transportation Statistics,* table 3-19b, available at www.bts.gov, as of October 2005.

Table 24
Value of U.S. International Merchandise Trade by Mode of Transportation: 2004
(Millions of current U.S. dollars)

	Exports	Modal %	Imports	Modal %	Total trade	Total modal %
Total	**817,936**	**100.0**	**1,469,671**	**100.0**	**2,287,607**	**100.0**
Water	233,639	28.6	724,946	49.3	958,585	41.9
Air	270,041	33.0	329,387	22.4	599,428	26.2
Truck	215,247	26.3	237,706	16.2	452,953	19.8
Rail	30,229	3.7	78,131	5.3	108,360	4.7
Pipeline	1,671	0.2	36,829	2.5	38,500	1.7
Other, unknown, & miscellaneous	67,109	8.2	62,672	4.3	129,781	5.7

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), Research and Innovative Technology Administration (RITA), Bureau of Transportation Statistics (BTS), October 2005. **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 2004. **Total, truck, rail, pipeline, other and unknown data**—USDOT, RITA, BTS, Transborder Surface Freight Data 2004; and special calculation, October 2005.

Table 25
Weight of U.S. International Merchandise Trade by Mode of Transportation: 2004
(Thousands of short tons)

	Exports	Modal %	Imports	Modal %	Total trade	Total modal %
Total	522,510	100.0	1,332,873	100.0	1,855,383	100.0
Water [a]	386,511	74.0	1,052,689	79.0	1,439,200	77.6
Air	2,964	0.6	4,382	0.3	7,346	0.4
Truck[b]	95,950	18.4	101,106	7.6	197,056	10.6
Rail[b]	29,531	5.7	90,445	6.8	119,976	6.5
Pipeline[b]	5,985	1.1	82,614	6.2	88,599	4.8
Other, unknown, & miscellaneous[b]	1,570	0.3	1,637	0.1	3,207	0.2

[a] These weight data 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). BTS uses Census Bureau trade-based data to allow for a complete modal comparison among the different freight transportation modes.

[b] BTS estimated the export weight for truck, rail, pipeline, and other and unknown based on value-to-weight ratios from the import data. This was necessary, 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.

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

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), Research and Innovative Technology Administration (RITA), Bureau of Transportation Statistics (BTS), October 2005. **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 2004. **Total, truck, rail, pipeline, other and unknown data**—USDOT, RITA, BTS, Transborder Surface Freight Data 2004; and special calculation, October 2005.

Table 26
U.S. Merchandise Trade with Canada and Mexico by Mode Share: 2004

Mode	Value (percent)	Weight (percent)
NAFTA trade, total	**100.0**	**100.0**
Truck[a]	63.6	30.2
Rail[a]	15.2	18.4
Pipeline[a]	5.4	13.6
Air	4.5	0.0
Water	6.5	37.6
Other and unknown[a]	4.7	0.1
U.S.-NAFTA imports, total	**100.0**	**100.0**
Truck	57.7	21.9
Rail	19.0	19.6
Pipeline	8.9	17.9
Air	2.9	0.0
Water	8.6	40.6
Other and unknown	2.8	0.1
U.S.-NAFTA exports, total	**100.0**	**100.0**
Truck[a]	71.8	50.5
Rail[a]	10.1	15.6
Pipeline[a]	0.6	3.2
Air	6.7	0.2
Water	3.5	30.3
Other and unknown[a]	7.3	0.3

[a] BTS estimated the export weight 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. Percentages may not add to 100 due to rounding.

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), Research and Innovative Technology Administration, Bureau of Transportation Statistics (BTS), October 2005. **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 2004. **Total, truck, rail, pipeline, other and unknown data**—USDOT, BTS, Transborder Surface Freight Data 2004; and special calculation, October 2005.

Table 27

Top 20 U.S. Foreign Trade Freight Gateways by Value of Shipments: 2004

(Billions of current dollars)

Rank	Gateway	Exports	Imports	Total
1	JFK International, NY (a)	52.7	72.6	125.3
2	Los Angeles, CA (w)[P]	16.4	105.1	121.4
3	Long Beach, CA (w)[P]	18.6	102.8	121.3
4	Detroit, MI (l)	58.2	55.6	113.8
5	New York, NY and NJ (w)[P]	23.1	90.4	113.5
6	Laredo, TX (l)	38.4	51.1	89.5
7	Los Angeles Internatl., CA (a)	33.9	34.8	68.7
8	Buffalo-Niagara Falls, NY (l)	31.7	36.6	68.3
9	Houston, TX (w)[P]	29.2	37.2	66.4
10	Port Huron, MI (l)	23.6	42.3	65.9
11	Chicago, IL (a)	25.2	40.1	65.4
12	San Francisco Internatl., CA (a)	24.3	30.3	54.6
13	Charleston, SC (w)[P]	15.4	31.3	46.7
14	El Paso, TX (l)	18.3	24.4	42.8
15	Norfolk, VA (w)[P]	12.0	21.5	33.5
16	Baltimore, MD (w)[P]	6.9	24.4	31.3
17	Dallas/Fort Worth, TX (a)	14.6	16.6	31.2
18	New Orleans, LA (a)	15.2	14.8	30.0
19	Seattle, WA (w)[P]	6.7	22.9	29.6
20	Tacoma, WA (w)[P]	5.3	23.6	28.9

Key: a = air; l = land/port/border crossing; P = preliminary; 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: **Air**—U.S. Department of Commerce, U.S. Census Bureau, Foreign Trade Division, special tabulation, October 2005. **Water**—U.S. Army Corps of Engineers, Navigation Data Center, special tabulation, November 2005. **Land**—U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, Transborder Freight Data, October 2005.

Table 28
U.S. Trade in Transportation-Related Commodities: 2004
(Millions of current U.S. dollars)

Commodity and code	Exports	Imports	Total trade	Balance
Motor vehicles and parts (87)	73,100	191,250	264,349	–118,150
Aircraft, spacecraft, and parts (88)	42,117	16,496	58,613	25,621
Ships, boats, and floating structures (89)	1,780	2,084	3,864	–304
Railway or tramway locomotives and parts (86)	1,752	1,282	3,034	471
Total, transportation commodities	**118,749**	**211,111**	**329,860**	**–92,362**
Total, all commodities	816,548	1,469,673	2,286,221	–653,126
Transportation commodities share of trade	14.5%	14.4%	14.4%	14.1%

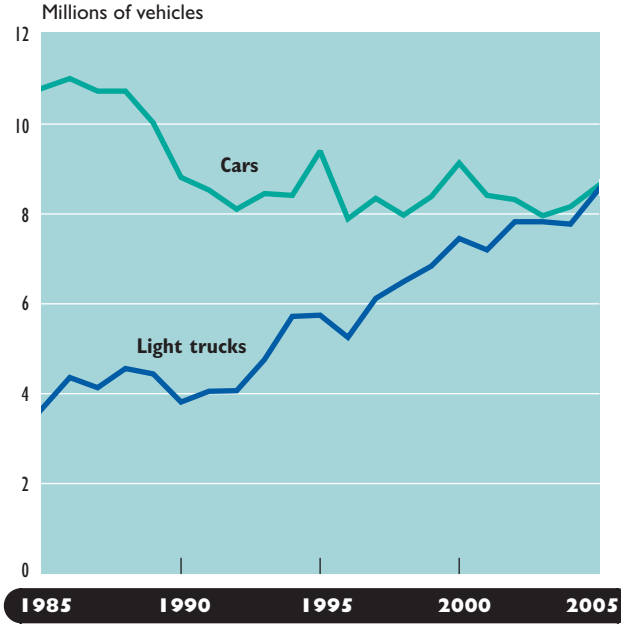
Notes: The numbers in parentheses are the classification categories from the Harmonized Schedule of Commodity Codes.

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, Research and Innovative Technology Administration, 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 2005.

Figure 11
New Passenger Car and Light Truck Sales: Model Years 1985–2005



Notes: Data are based on Environmental Protection Agency (EPA) definitions of light trucks (gross vehicle weight of 8,500 pounds or less). Model year 2005 data are projected sales from the automotive companies.

Data are revised from the previous edition.

Source: U.S. Environmental Protection Agency, *Light-Duty Automotive Technology and Fuel Economy Trends: 1975 Through 2005,* Table 1, July 2005, available at http://www.epa.gov/otaq/fetrends.htm, as of July 2005.

Table 29
Government Transportation Revenues by Mode and Level of Government
(Millions of current dollars)

	1980	1990	2000	2003
Highway total	**25,268**	**49,945**	**87,800**	**U**
Federal:				
Highway Trust Fund—Highway Account[a]	7,647	13,453	30,347	28,964
State	16,287	32,644	51,073	55,347
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	4,762
State	362	1,074	1,524	1,693
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	10,088
State	190	556	852	871
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	944
State	249	355	693	809
Local	572	1,133	1,813	U
Pipeline[c]	**–**	**10**	**40**	**57**
General support[d]	**–**	**–**	**25**	**9**
Total, all modes	**32,977**	**69,753**	**125,882**	**U**
Federal	10,312	21,384	46,791	44,824
State	17,088	34,629	54,142	58,719
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 through 2000, 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 Tranportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *Government Transportation Financial Statistics 2003,* available at http://www.bts.gov/publications/government_transportation_financial_statistics/, as of November 2005.

Table 30

Government Transportation Expenditures by Mode and Level of Government From Own Funds

(Millions of current dollars)

	1980	1990	2000	2003
Highway total	**34,553**	**62,629**	**103,952**	**U**
Federal	11,706	15,517	27,759	32,633
State and local	22,847	47,112	76,192	U
Transit total	**8,949**	**19,251**	**32,384**	**U**
Federal	3,307	3,832	5,334	4,922
State and local	5,642	15,420	27,050	U
Rail total	**2,497**	**540**	**767**	**U**
Federal	2,474	534	760	1,206
State and local	23	6	7	U
Air total	**5,673**	**12,568**	**22,017**	**U**
Federal	3,762	7,305	10,481	13,179
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	5,475
State and local	1,168	1,943	3,132	U
Pipeline total[a]	**–**	**26**	**36**	**U**
Federal	–	9	36	61
State and local	–	17	U	U
General support[b]	**259**	**191**	**259**	**8,554**
Total, all modes	**56,407**	**100,685**	**167,360**	**U**
Federal	24,815	30,924	49,443	66,029
State and local	31,592	69,770	117,916	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; U = unavailable.

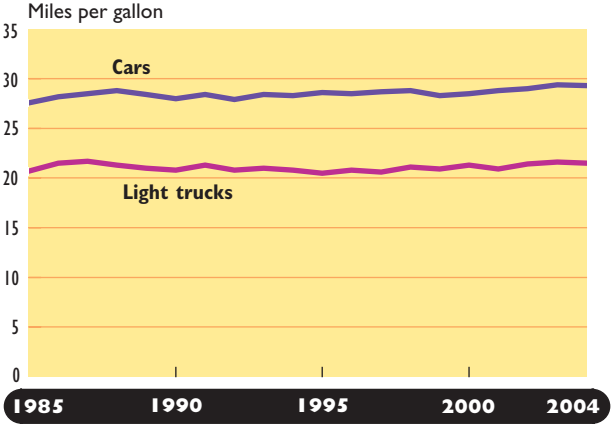
Notes: Expenditures are from "own funds" for specified level of government. Federal includes direct spending and grants to states and localities. State and local includes outlays from all sources except federal grants. Numbers may not add to totals due to rounding. Only federal government expenditures are included for 2003.

Sources: Various sources, as cited in U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *Government Transportation Financial Statistics 2003,* available at http://www.bts.gov/government_transportation_financial_statistics/index.html, as of October 2005.

6 Environment

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 among criteria pollutants remains above its 1990 level; also carbon dioxide emissions from transportation fuel use are rising.

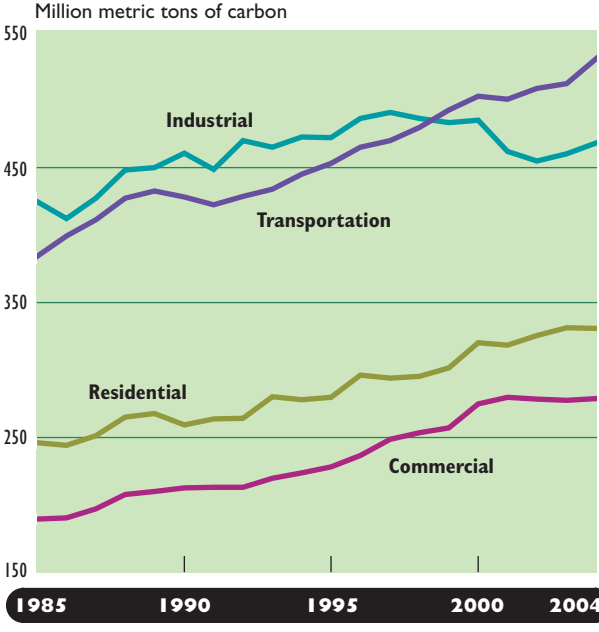
Figure 12
New Passenger Car and Light Truck Fuel Economy Averages: Model Years 1985–2004



Note: 2002 and 2003 data are revised from the previous edition.

Source: U.S. Department of Transportation, National Highway Traffic Safety Administration, *Summary of Fuel Economy Performance,* available at http://www.nhtsa.dot.gov/cars/rules/CAFE/CAFEData.htm, as of October 2005.

Figure 13
U.S. Carbon Dioxide Emissions from Energy Use: 1985–2004



Notes: 2000–2003 data are revised from previous editions. 2004 data are preliminary.

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

Sources: **1985–1989**—U.S. Department of Energy (USDOE), Energy Information Administration (EIA), *Emissions of Greenhouse Gases in the United States,* appendix E, available at http://www.eia.doe.gov/oiaf/1605/gg02rpt/appendixes.html, as of December 2005.
1990–2004—USDOE, EIA, U.S. Carbon Dioxide from Energy Sources 2005 Flash Estimate, available at http://www.eia.doe.gov/oiaf/1605/flash/flash.html, as of June 2005.

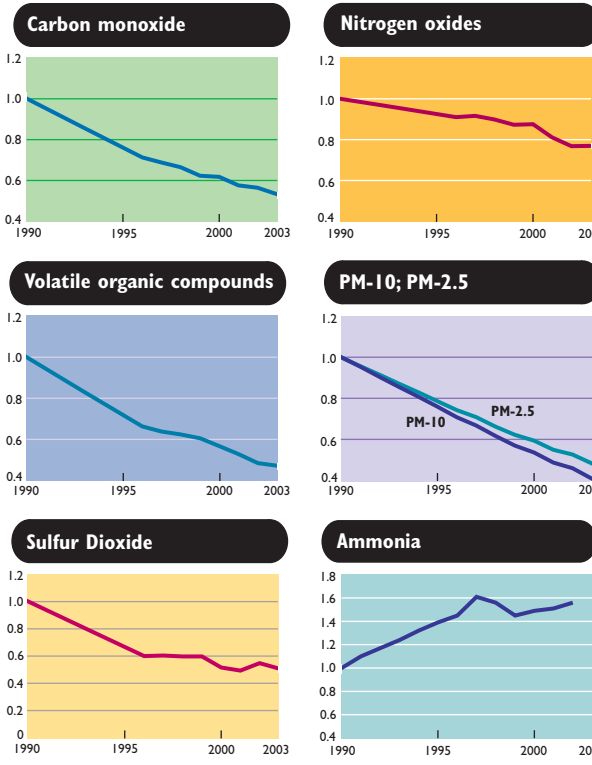
Table 31
Wetlands Impacted and Mitigated Under the Federal-Aid Highway Program

	2000	2001	2002	2003	2004
Acres impacted	2,041	1,905	1,942	1,278	847
Acres mitigated	7,671	4,017	5,198	3,431	1,763
Acres gained (net)	5,630	2,112	3,256	2,153	916
Mitigation ratio	3.8:1	2.1:1	2.7:1	2.7:1	2.1:1

Notes: These data cover wetlands acreage affected by Federal-Aid Highway projects, approximately 24% of the total mileage of the U.S. public roads. These data are collected by states using varying collection methodologies. The mitigation ratio equals acres mitigated to acres impacted.

Source: U.S. Department of Transportation, Federal Highway Administration, Federal Highway Administration Wetland Mitigation Performance Measure for Federal-Aid Highway Projects Fiscal Year (FY) 2004, available at http://www.fhwa.dot.gov/environment/perform/wetrpt04.htm, as of October 2005.

Figure 14
Index of Key Air Pollutant Emissions from U.S. Transportation: 1990–2003
Index: 1990 = 1.0



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

Notes: Data in the previous edition include all onroad mobile sources and some nonroad mobile sources. EPA revised the emissions estimation methodology for onroad mobile sources. EPA discontinued lead emissions estimates in 2001.

Source: U.S. Environmental Protection Agency (EPA), Office of Air Quality Planning and Standards, *Air Emissions Trend,* available at http://www.epa.gov/airtrends/2005/econ-emissions.html, as of December 2005.

Glossary

Air carrier—Certificated provider of scheduled and nonscheduled services.

Chained dollars—A method to measure real changes in dollar values between years that uses chain-type indexes, 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 2004, the adjusted base had increased to $289.5 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.

Delay—The extra travel time (hours) spent traveling at congested speeds rather than free-flow speeds (60 mph on freeways and 35 mph on principal arterials) divided by the number of persons making a trip during the peak period (6:00 a.m.–9:30 a.m. and 3:30 p.m.–7:00 p.m.).

Demand-response 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, which focus 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, 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)

U.S. Department of Transportation