Research & Innovative Technology Administration

Pocket Guide to Transportation

2009

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Pocket Guide to Transportation

Bureau of
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Research and Innovative
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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	1990	2007
Resident population (thousand)	248,791	301,621
Total area (thousand sq. mi.)	3,718	3,794 (2000)[a]
Total civilian labor force (thousand)	125,840	153,124
Real gross domestic product[b] (trillion)	$7.1	$11.5
Median household income[b,c]	$36,668	$41,924
Average household income[b,c]	$39,073	$51,929 (2006)
Average household expenditures [b,c]	$35,257	$42,204 (2006)
Number of households (thousand)	93,347	116,011
Life expectancy at birth (years)	75.4	77.8 (2005)

[a] Data for 2000 include inland water, coastal water, Great Lakes, and territorial water. The Census Bureau tabulates area data for the decennial census years only.
[b] Data in 2000 chained dollars (see Glossary for definition).
[c] BTS computations, November 2007 and October 2008.

Sources: **Area**—U.S. Department of Commerce (USDOC), U.S. Census Bureau, *Statistical Abstract of the United States: 2002 and 2008*, available at www.census.gov as of October 2008. **GDP**—USDOC, Bureau of Economic Analysis, available at www.bea.gov as of October 2008. **Population, number of households, and median household income**—USDOC, Census, available at www.census.gov as of October 2008. **Average household income and expenditures, and labor force**—U.S. Department of Labor, Bureau of Labor Statistics, available at www.bls.gov as of October 2007. **Life expectancy**—Centers for Disease Control and Prevention, available at www.cdc.gov as of October 2008.

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.

1-1
The Transportation Network: 2006

Mode	Components
Highway	**Public roads**
	46,893 miles of Interstate highway
	116,573 miles of other National Highway System roads
	3,869,541 miles of other roads
Air	***Public-use airports***
	5,233 airports
	Airports serving large certificated carriers (enplaned passengers)
	26 large hub areas[a] (67 airports), 487 million passengers
	37 medium hub areas (62 airports), 141 million passengers
	67 small hub areas (83 airports), 53 million passengers
	924 nonhub areas (959 airports), 23 million passengers
Rail	***Miles of railroad operated***
(2007)	94,313 miles by Class I freight railroads in the United States[b]
	16,930 miles by regional freight railroads
	28,891 miles by local freight railroads
	21,708 miles by Amtrak (passenger)[c]

1-1—continued

Mode	Components	
Urban transit	***Directional route-miles***[d]	
	Bus: 168,255[e]	
	Trolley bus: 424	
	Commuter rail: 4,490	
	Heavy rail: 1,603	
	Light rail: 1,178	
	Stations	
	Commuter rail: 1,169	
	Heavy rail: 1,042	
	Light rail: 764	
Water	***Navigable channels:*** *26,000 miles*	
	Ferry routes: *620 directional route-miles (2007)*	
	Commercial waterway facilities[a] *(2005)*	
	Great Lakes:	600 deep-draft
		154 shallow-draft
	Inland:	2,321 shallow-draft
	Ocean:	4,466 deep-draft
		2,043 shallow-draft
	Locks:	257
Pipeline	***Miles of oil pipe***	
	Total oil: 169,346	
	Miles of gas pipe	
	Transmission: 300,400	
	Distribution: 1,214,000	

[a] See Glossary for definitions. [b] There are also 561 miles of railroad operated within the U.S. Class I freight railroad system that are owned by Canadian railroads. [c] Approximately 97% of the trackage on which Amtrak operates is owned by freight railroads. [d] Directional route-miles includes only 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: **Highway**—USDOT, FHWA, *Highway Statistics 2006* (Washington, DC: 2008), table HM-18. **Air**—USDOT, RITA, BTS, *Airport Activity Statistics of Certificated Air Carriers*, Summary Tables, 12 Months Ending Dec. 31, 2006. **Rail**—Association of American Railroads, *Railroad Service in the United States 2008*. **Transit**—USDOT, Federal Transit Administration, *National Transit Database 2006*, tables 21, 23, and 24. **Commercial waterway facilities**—U.S. Army Corps of Engineers, Institute for Water Resources, Navigation Data Center, *The U.S. Waterway System Facts*, December 2007 (Alexandria, VA: 2007). **Navigable channels**—U.S. Army Corps of Engineers. **Pipeline**—PHMSA as cited in USDOT, RITA, BTS, *National Transportation Statistics*, tables 1-1, 1-3, and 1-10, available at http://www.bts.gov as of November 2008.

1-2

Condition of U.S. Highway Bridges: 1990–2007

Mode	1990	2000	2006	R2007
Total all bridges	572,205	589,674	597,340	599,766
Urban	108,770	133,384	146,041	151,171
Rural	463,435	456,290	451,299	448,595
Structurally deficient bridges, total	137,865	86,678	73,784	72,520
Urban	16,847	13,079	12,585	12,951
Rural	121,018	73,599	61,199	59,569
Functionally obsolete bridges, total	100,355	81,510	80,317	79,804
Urban	30,266	29,398	32,292	33,139
Rural	70,089	52,112	48,025	46,665

Key: R = revised.

Notes: Explanations for the terms Structurally Deficient and Functionally Obsolete can be found on pages 14 and 15 in Chapter 3 of the Federal Highway Administration, *2006 Conditions and Performance Report*, available at http://www.fhwa.dot.gov/policy/2006cpr/pdfs/chap3.pdf as of November 2008.

U.S. totals include the 50 states, the District of Columbia, and Puerto Rico. Data include: Rural–interstate, principal arterial, minor arterial, major collector, minor collector, and local roads; urban–interstate, other freeways or expressways, other principal arterial, minor arterial, collector, and local roads.

Data for 1990 are as of December of that year; data for 2000 are as of August of that year; data for 2006 are as of July of that year; data for 2007 are as of December of that year.

Sources: Federal Highway Administration, Office of Bridge Technology, National Bridge Inventory Database, *Count of Bridges by Highway System*, available at http://www.fhwa.dot.gov/bridge/britab.htm as of March 2008 as reported in U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *National Transportation Statistics*, Table 1-27, available at http://www.bts.gov as of November 2008.

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 41 percent of U.S. deaths due to unintentional injury involve transportation. Roughly 96 percent of transportation fatalities arise from motor vehicle crashes.

2-1
Transportation Fatalities by Mode: 1990–2007

Mode	R1990	R2005	R2006	2007
Air				
Large U.S. air carrier[a]	39	22	50	1
Commuter air carrier[a]	6	0	2	0
On-demand air taxi[a]	51	18	16	43
General aviation[a]	770	563	703	491
Highway[b]	44,599	43,510	42,708	41,059
Pipeline, gas and hazardous liquid	9	16	19	15
Railroad[c]	599	525	534	510
Transit[d]	339	236	227	214
Waterborne				
Vessel related, commercial ship	85	45	48	52
Nonvessel-related[e], commercial ship	101	35	39	32
Recreational boating	865	697	710	685

[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: R = revised.

Notes: 1990 and 2006 data for general aviation are revised. 2005 and 2006 data for railroad are revised. 2006 data for Highway is revised.

Sources: **Air**—National Transportation Safety Board, **Highway**—National Highway Traffic Safety Administration, **Pipeline**—Office of Pipeline Safety, Rail: Federal Railroad Administration, **Transit**—Federal Transit Administration and personal communication, **Water**—U.S. Coast Guard as cited in U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *National Transportation Statistics*, table 2-1, available at http://www.bts.gov/publications/national_transportation_statistics/ as of January 2009.

2-2

Distribution of Transportation Fatalities: 2007

Category	Number	%
Passenger car occupants	16,520	38.39
Light-truck occupants	12,413	28.85
Motorcycle riders	5,154	11.98
Pedestrians struck by motor vehicles	4,654	10.82
Large-truck occupants	802	1.86
Pedalcyclists struck by motor vehicles	698	1.62
Other and unknown motor vehicle occupants	629	1.46
Recreational boating	685	1.59
General aviation	491	1.14
Railroad trespassers (excl. grade crossings)[a]	469	1.09
Other nonoccupants struck by motor vehicles[b]	152	0.35
Grade crossings, not involving motor vehiclesa,[c]	73	0.17
Air carriers	1	0.002
Waterborne transportation (vessel-related)	52	0.12
Waterborne transportation (nonvessel-related)	32	0.07
Private grade crossings, with motor vehicles[a]	37	0.09
Heavy-rail transit (e.g., rail subway)	30	0.07
Bus occupants (school, intercity, transit)	37	0.09
Rail employees on duty and contractors[a]	21	0.05
Air taxi	43	0.10
Gas distribution pipelines	9	0.02
Light-rail transit	20	0.05
Gas transmission pipelines	2	0.005
Passengers on railroad trains	4	0.01
Commuter air	0	0.00
Hazardous liquid pipelines	4	0.01
Total, all modes[e]	**43,032**	**100.00**
Other counts, redundant with above		
Crashes involving large trucks[d]	U	
Public grade crossings, with motor vehicles[a]	263	
Commuter rail	70	

[a] Includes fatalities outside trains. [b] Includes all nonoccupant fatalities in motor vehicle (MV) crashes, except pedalcyclists and pedestrians. [c] Public grade crossing fatalities involving motor vehicles are included in MV counts. [d] Includes large truck occupants, other vehicle occupants, and non occupants. [e] Unless otherwise noted, includes fatalities outside vehicles.

Key: U = unavailable.

Note: The data for general aviation, air taxi, and commuter air are preliminary.

Sources: **Air**—National Transportation Safety Board, **Highway**—National Highway Traffic Safety Administration, **Rail**—Federal Railroad Administration, **Transit**—Federal Transit Administration, **Waterborne**—U.S. Coast Guard, **Recreational boating**—Office of Boating Safety, **Pipeline**—Pipeline and Hazardous Materials Safety Administration as cited in U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *National Transportation Statistics*, table 2-4, available at http://www.bts.gov/publications/national_transportation_statistics/ as of January 2009.

2-3

Fatalities in Motor Vehicle Crashes by Person Type, Crash Type, and Alcohol Involvement: 2007

Crash category	Fatalities in category[a]	Alcohol involvement[b]	Percent[c]
Occupants	**35,555**	**14,386**	**40**
Single-vehicle crashes	18,402	9,188	50
Two-vehicle crashes	14,293	4,288	30
More than two-vehicle crashes	2,860	911	32
Pedestrians	**4,654**	**2,307**	**50**
Single-vehicle crashes	4,264	2,088	49
Multiple-vehicle crashes	390	219	56
Pedalcyclists	**698**	**288**	**41**
Single-vehicle crashes	670	276	41
Multiple-vehicle crashes	28	12	43
Others/unknown	**152**	**55**	**36**
Total	**41,059**	**17,036**	**41**

[a] Fatalities in all crashes whether or not alcohol was involved.

[b] Fatalities in crashes that involve alcohol.

[c] Percentage of all crash fatalities in category 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 (e.g., 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.

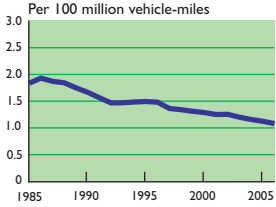
The National Highway Traffic Safety Administration estimates alcohol involvement when test results are unknown.

Source: U.S. Department of Transportation, National Highway Traffic Safety Administration, *Fatality Analysis Reporting System (FARS) Database*, personal communication, December 2008.

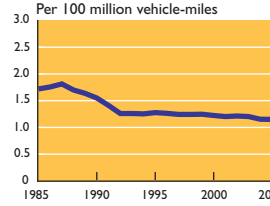
2-4

Fatality Rates for Selected Modes: 1985–2006

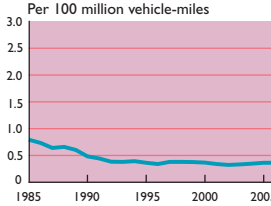
Passenger car occupants



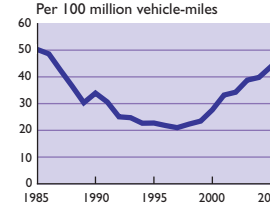
Light-truck occupants



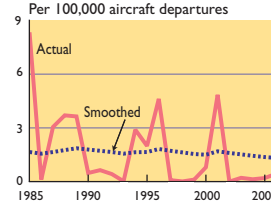
Large-truck occupants



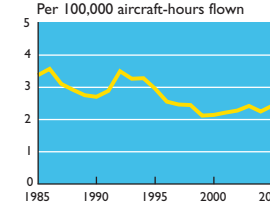
Motorcycle riders



Air carriers (actual and smoothed fatality rates)



General aviation



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: **Passenger car occupants, Light-truck occupants, Large-truck occupants, and Motorcycle riders**—U.S. Department of Transportation, National Highway Traffic Safety Administration, National Center for Statistics and Analysis, *Traffic Safety Facts 2006*, tables 7-10, available at http://www-nrd.nhtsa.dot.gov as of October 2008. **Air carriers and General aviation**—National Transportation Safety Board, *Annual Review of Aircraft Accident Data: U.S. Air Carrier Operations*, available at http://www.ntsb.gov/aviation/htm as of April 2008 as reported in U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *National Transportation Statistics*, tables 2-9 and 2-14, available at http://www.bts.gov/publications/national_transportation_statistics/ as of October 2008..

2-5

Injured Persons by Transportation Mode: 1990–2007

Mode	1990	2000	R2006	2007
Air				
Large U.S. air carrier	29	29	9	15
Commuter air carrier	11	7	1	0
On-demand air taxi	36	12	16	20
General aviation	409	309	264	260
Highway[a]	3,230,666	3,188,750	2,575,000	U
Pipeline, gas and hazardous liquid	76	81	32	43
Railroad[b]	22,736	10,424	7,623	8,300
Transit[c]	54,556	56,697	18,327	U
Waterborne				
Vessel-related commercial ship	175	150	177	167
Nonvessel related[d] commercial ship	U	607	594	495
Recreational boating	3,822	4,355	4,474	3,673

[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. Also includes train occupants and nonoccupants except motor vehicle occupants at grade crossings.

[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. The drop in the number of injuries in 2005 and 2006 is due largely to a change in definitions by the Federal Transit Administration. Only injuries requiring immediate medical treatment away from the scene now qualify as reportable. Previously, any injury was reportable.

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

Key: R = revised; U = unavailable.

Note: Modes may use different reporting criteria and/or estimation methods for injuries. Air and railroad data have been revised for 2006.

Sources: **Air**—National Transportation Safety Board, **Highway**—National Highway Traffic Safety Administration, **Pipeline**—Pipeline and Hazardous Materials Safety Administration, **Railroad**—Federal Railroad Administration, **Transit**—Federal Transit Administration, **Waterborne**—United States Coast Guard as cited in U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *National Transportation Statistics*, table 2-2, available at http://www.bts.gov/publications/national_transportation_statistics/ as of January 2009.

2-6

Hazardous Materials Transportation Incidents, Injuries, and Fatalities: 1990–2007

	R1990	2000	R2005	R2006	2007
Highway	**7,297**	**15,063**	**13,461**	**17,155**	**16,876**
Accident related	249	329	322	305	301
Injuries	311	164	179	192	155
Fatalities	8	16	24	6	10
Rail	**1,279**	**1,058**	**745**	**704**	**747**
Accident related	48	62	51	44	52
Injuries	73	82	693	24	53
Fatalities	0	0	10	0	0
Air	**297**	**1,419**	**1,654**	**2,411**	**1,552**
Accident related	0	3	9	7	7
Injuries	39	5	78	2	8
Fatalities	0	0	0	0	0
Water	**7**	**17**	**69**	**68**	**61**
Accident related	0	0	0	0	0
Injuries	0	0	0	15	3
Fatalities	0	0	0	0	0

Pipeline	1990	2000	2005	2006	2007
Liquid	**180**	**146**	**138**	**119**	**115**
Injuries	7	4	2	2	10
Fatalities	3	1	2	0	4
Natural gas distribution	**110**	**154**	**171**	**141**	**153**
Injuries	52	59	39	26	36
Fatalities	6	22	14	16	9
Natural gas transmission	**89**	**80**	**181**	**146**	**133**
Injuries	17	18	7	5	7
Fatalities	0	15	0	3	2

Key: R = revised.

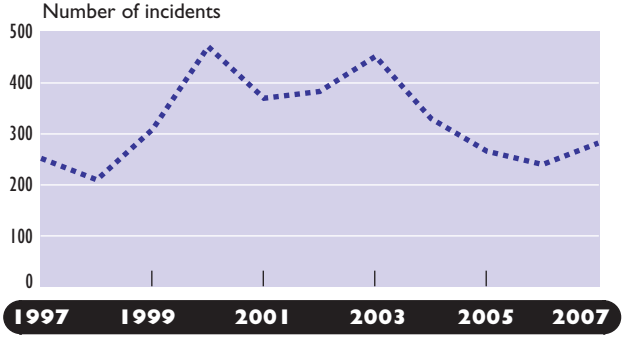
Notes: Accident related excludes human errors, package failures, and unreported cases. Water data are for incidents involving packaged materials only and do not include incidents where the vessel is the container (e.g., a barge or oil tanker). Nonpipeline reporting requirements changed in 2002.

Natural gas distribution incident total is revised for 1990. Highway injuries, rail injuries, liquid pipeline total, and natural gas distribution total and injuries are revised for 2005. The data for highway accident, air total, liquid pipeline total, natural gas distribution total and injuries, and natural gas transmission total are revised in 2006.

Sources: **Highway, Rail, Air and Water**—USDOT, Pipeline and Hazardous Materials Safety Administration (PHMSA), *Hazardous Materials Information System Database*, available at http://hazmat.dot.gov/pubs/inc/data/2007/2007frm.htm as of October 2008. **Pipeline**—USDOT, PHMSA, Office of Pipeline Safety, *Pipeline Statistics*, available at http://ops.dot.gov/stats/stats.htm as of October 2008.

Ensuring security of the transportation system and the people who use it is a national priority. While much of the initial national focus after the September 11, 2001, terrorist attack was on aircraft and airports, today 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 nearly two-thirds of the petroleum used in the United States is imported.

3-1
International Piracy and Armed Robbery at Sea: 1997–2007



Note: Incidents include attempts and threatening actions.

Source: International Maritime Organization, *Reports on Acts of Piracy and Armed Robbery Against Ships: Annual Report 2007,* available at http://www.imo.org/home.asp as of October 2008.

3-2
Prohibited Items Intercepted at U.S. Airport Screening Checkpoints: 2004–2007

Items	2004	2005	R2006	2007
Other cutting instruments	3,567,731	3,276,691	163,419	101,387
Knives	2,058,652	1,822,752	1,607,125	1,056,687
Incendiaries and explosive/flammable materials	693,649	398,830	113,700	89,623
Clubs	28,813	20,531	12,296	9,443
Box cutters	22,350	21,315	15,999	11,908
Firearms	650	2,217	2,075	1,416
Other	717,754	10,345,260	11,797,145	5,245,558
Total prohibited items	**7,089,599**	**15,887,596**	**13,711,759**	**6,516,022**

Key: R = revised.

Notes: Other cutting instruments includes scissors, hatchets, swords, sabers, meat cleavers, ice axes, and picks. Effective Dec. 22, 2005, scissors less than 4 inches and tools less than 7 inches were no longer prohibited.

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

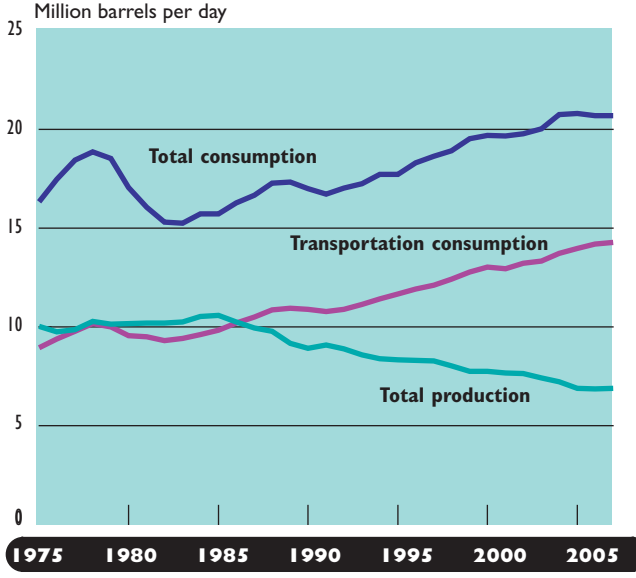
Clubs includes martial arts items, baseball bats, night sticks, hammers, pool cues, and billy clubs.

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, lighters, and certain sporting goods. The jump in the number of other prohibited items in 2005 is a result of the inclusion of lighters as prohibited items as of Apr. 14, 2005. Lighters (except for torch lighters and micro torches) were removed from the prohibited items list effective Aug. 4, 2007.

Source: U.S. Department of Homeland Security, Transportation Security Administration, personal communication, November 2008.

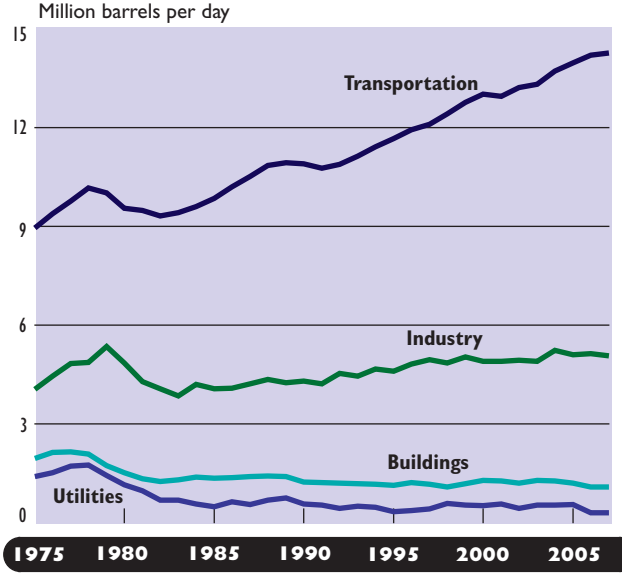
3-3
U.S. Petroleum Production and Consumption: 1975–2007



Note: 2007 data are preliminary.

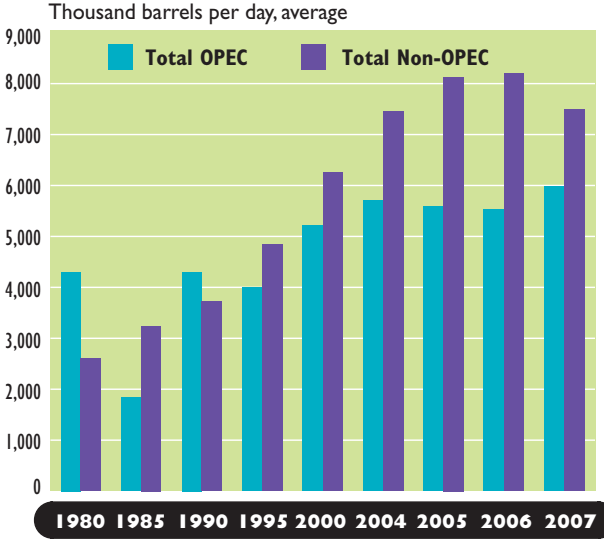
Source: U.S. Department of Energy, Energy Information Administration, *Annual Energy Review 2007* (Washington, DC: June 2008), tables 5.1 and 5.13a-d, available at http://www.eia.doe.gov/aer/petro.html as of October 2008.

3-4
Transportation's Share of U.S. Petroleum Use: 1975–2007



Source: U.S. Department of Energy, Energy Information Administration, *Annual Energy Review 2007* (Washington, DC: June 2008), tables 5.13a–d, available at http://www.eia.doe.gov/aer/petro.html as of October 2008.

3-5
U.S. Oil Imports: 1980–2007



Notes: The current members of the Organization of Petroleum Exporting Countries (OPEC) include Algeria, Angola, Ecuador, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela. Angola joined OPEC in January 2007. Ecuador was a member of OPEC from 1973-1992, and rejoined OPEC in November 2007. Data for 1975-1994 include imports from Gabon, a former member of OPEC during that period.

Source: U.S. Department of Energy, Energy Information Administration, *Monthly Energy Review*, September 2008, tables 3.3c and 3.3d, available at http://www.eia.doe.gov/emeu/mer/petro.html as of October 2008.

3-6
Major Suppliers of U.S. Imported Crude Oil and Petroleum Products: 1990–2007

(*Thousand barrels per day, average; rank in 2007*)

	1990	2000	R2006	2007
Canada	934	1,807	2,353	2,455
Mexico	755	1,373	1,705	1,532
Saudi Arabia	1,339	1,572	1,463	1,485
Venezuela	1,025	1,546	1,419	1,361
Nigeria	800	896	1,114	1,134
Algeria	280	225	657	670
Angola	237	301	534	508
Iraq	518	620	553	484
Russia	45	72	369	414
U.S. Virgin Islands	282	291	328	346
United Kingdom	189	366	272	277
Brazil	49	51	193	200
Kuwait	86	272	184	181
Colombia	182	342	155	155
Total, major suppliers	**6,722**	**9,734**	**11,299**	**11,202**
Total, all U.S. imports	8,018	11,459	13,707	13,468

Key: R = revised.

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.
Ranking is based on 2007 data.

Source: U.S. Department of Energy, Energy Information Administration, *Monthly Energy Review*, September 2008, tables 3.1, 3.3a–h, available at http://www.eia.doe.gov/emeu/mer/petro.html as of October 2008.

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.

4-1
Vehicle-Miles: 1990–2006
(*Millions*)

Mode	1990	2000	R 2005	2006
Air				
Air carrier	3,963	5,664	6,714	6,619
Highway				
Passenger cars	1,408,266	1,600,287	1,708,421	1,682,671
Other 2-axle, 4-tire vehicles[a]	574,571	923,059	1,041,051	1,089,013
Motorcycles	9,557	10,469	10,454	12,401
Buses[b]	5,726	7,590	6,980	6,994
Trucks				
Single-unit	51,901	70,500	78,496	80,331
Combination	94,341	135,020	144,028	142,706
Total highway	**2,144,362**	**2,746,925**	**2,989,430**	**3,014,116**
Rail[c]				
Transit[d]	561	648	715	726
Commuter	213	271	303	315
Intercity/Amtrak[e]	301	368	265	264
Class I freight	26,159	34,590	37,712	38,955
Other transit[f]	324	833	1,085	1,136

[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] Car-miles. [d] Includes light and heavy rail only. [e] Fiscal year data. [f] Includes demand response, ferryboat, and other transit not specified.

Key: R = revised.

Note: Highway data for 2005 are revised.

Sources: **Air Carrier**—Bureau of Transportation Statistics, General Aviation--National Transportation Safety Board, **Highway**—Federal Highway Administration, **Class I and Intercity Rail**—Association of American Railroads, **Transit and Commuter Rail**—American Public Transit Association 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 2008.

4-2

Number of Aircraft, Vehicles, Railcars, and Vessels: 1990–2006

Mode	1990	2000	R2005	2006
Air				
Air carrier	6,083	8,055	8,225	U
General aviation	198,000	217,533	224,352	221,943
Highway				
Automobiles	133,700,496	133,621,420	136,568,083	135,399,945
Other 2-axle, 4-tire vehicles[a]	48,274,555	79,084,979	95,336,839	99,124,775
Buses (municipally owned transit and commercial, federal, and school buses)	626,987	746,125	807,053	821,959
Motorcycles	4,259,462	4,346,068	6,227,146	6,686,147
Trucks				
Single-unit	4,486,981	5,926,030	6,395,240	6,649,337
Combination	1,708,895	2,096,619	2,086,759	2,169,670
Rail—Passenger				
Amtrak—Cars	1,863	1,894	1,186	1,191
Amtrak Locomotives	318	378	258	319
Commuter railcars and locomotives	5,007	5,498	6,392	6,403
Transit[b]	11,332	12,168	12,755	12,853
Rail—freight:				
Class I–Freight cars	658,902	560,154	474,839	475,415
Class I–Locomotives	18,835	20,028	22,779	23,732
Other freight cars	553,359	820,642	837,406	871,092
Waterborne				
Nonself-propelled vessels (barges)[c,d]	31,209	33,152	32,052	32,211
Self-propelled vessels[c,d]	8,236	8,202	8,976	8,898
Oceangoing ships[d] (1,000 gross tons and over)	636	454	357	286
Recreational boats (numbered boats)	10,996,253	12,782,143	12,942,414	12,746,126

[a] Includes vans, pickup trucks, sport utility vehicles, and other 2-axle, 4-tire motor vehicles that are not passenger cars. [b] Includes light and heavy rail transit only. [c] See Glossary for definitions. d U.S.-flag vessels.

Key: R = revised, U = unavailable.

Note: Other Freight Cars data for 2005 are revised. Transit and Commuter Rail data for 2006 are preliminary.

Sources: **Air**—Federal Aviation Administration, **Highway**—Federal Highway Administration, **Rail**—Amtrak and Association of American Railroads, **Transit**—American Public Transit Association, **Waterborne**—U.S. Army, Corps of Engineers and U.S. Coast Guard 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 January 2009.

4-3
Passenger-Miles: 1990–2006
(*Millions*)

Mode	1990	2000	R2005	2006
Air				
Air carrier	345,873	516,129	583,758	590,633
General aviation	13,000	15,200	U	U
Highway				
Passenger cars	2,281,391	2,544,457	2,699,305	2,658,621
Other 2-axle, 4-tire vehicles[a]	999,754	1,467,664	1,804,848	1,887,997
Buses[b]	121,398	160,919	147,992	148,285
Motorcycles	12,424	11,516	13,277	15,750
Rail				
Transit[c]	12,046	15,200	16,118	16,587
Commuter	7,082	9,402	9,473	10,361
Intercity/Amtrak[d]	6,057	5,498	5,381	5,410
Other transit[e]	841	1,631	2,091	2,221

[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.

Key: R = revised, U = unavailable.

Note: Highway and other transit data are revised for 2005.

Sources: **Air Carrier**—Bureau of Transportation Statistics, **General Aviation**—Eno Transportation Foundation, **Highway**—Federal Highway Administration, **Class I and Intercity Rail**—Association of American Railroads, **Transit and Commuter Rail**—American Public Transit Association 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 as of October 2008.

4-4

U.S. Domestic Freight Ton-Miles by Mode: 1990–2006

(Billions)

Mode	1990	2000	R2005	2006	Percent change 1990–2006
Total	**3,622**	**4,329**	**4,575**	**4,638**	**28.0**
Air	10.4	15.8	15.7	15.4	47.4
Truck	848.8	1,192.8	1,291.5	1,294.5	52.5
Railroad	1,064.4	1,546.3	1,733.8	1,852.8	74.1
Water	833.5	645.8	591.3	561.6	-32.6
Pipeline	864.8	927.9	942.4	913.2	5.6

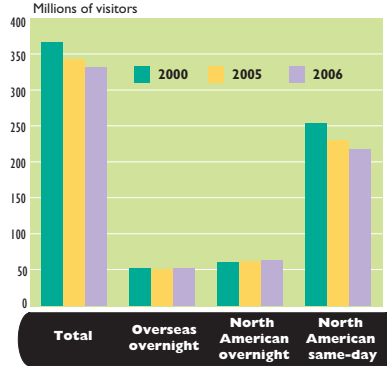
Key: R = revised.

Note: Air, Truck, and Pipeline data are revised for 2005.

Source: U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *National Transportation Statistics*, table 1-46b, available at http://www.bts.gov/publications/national_transportation_statistics/ as of October 2008.

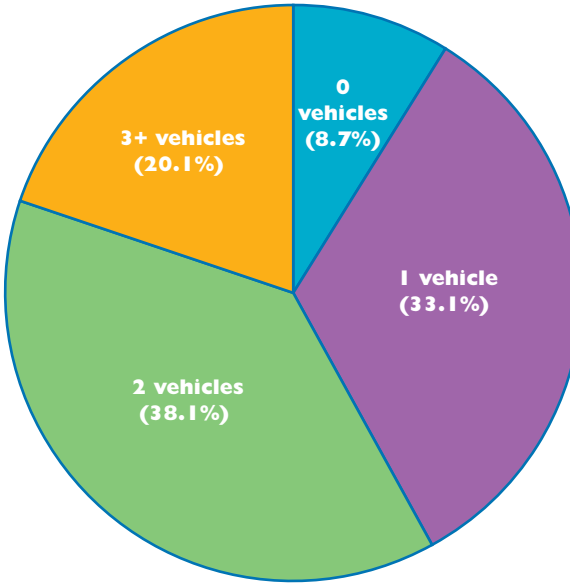
4-5

Travel Between the United States and Foreign Countries: 2000, 2005, 2006



Source: **Overseas overnight and North American overnight**—U.S. Department of Commerce, International Trade Administration, Office of Travel and Tourism Industries, *2007 United States Resident Travel Abroad*, available at http://tinet.ita.doc.gov as of October 2008. **North American same-day, Canada**—Statistics Canada, International Travel, 2006, Catalogue 66-201-XIE. **North American same-day, Mexico**—North American Transportation Statistics Database, Table 9-1c, available at http://nats.sct.gob.mx as of October 2008.

4-6
Households by Number of Vehicles: 2007



Note: Data cover the household population and exclude the population living in institutions, college dormitories, and other group quarters.

Source: U.S. Department of Commerce, U.S. Census Bureau, 2007 *American Community Survey*, annual issues, available at http://www.census.gov/acs/www/index.html as of October 2008.

4-7a

Top 20 World Airports by Passenger Movements[a]: 2006 and 2007

(Thousands of passengers enplaned, deplaned, and in-transit at airport)

2007 rank	City airport	R2006	2007	% change 2006–2007
1	Atlanta, GA (Hartsfield)	84,847	89,379	5.3
2	Chicago, IL (O'Hare)	76,283	76,178	-0.1
3	London, England (Heathrow)	67,530	68,068	0.8
4	Tokyo, Japan (Narita)	66,089	66,823	1.1
5	Los Angeles, CA (Los Angeles)	61,041	61,896	1.4
6	Paris, France (Charles de Gaulle)	56,850	59,922	5.4
7	Dallas/Ft Worth, TX (Dallas/Ft. Worth)	60,227	59,786	-0.7
8	Frankfurt, Germany (Frankfurt)	52,811	54,162	2.6
9	Beijing, China (Beijing Capital)	48,655	53,584	10.1
10	Madrid, Spain (Barajas)	45,770	52,123	13.9
11	Denver, CO (Denver)	47,327	49,863	5.4
12	Amsterdam, Netherlands (Schiphol)	46,066	47,795	3.8
13	New York, NY (JFK)	42,629	47,717	11.9
14	Hong Kong, China (Hong Kong)	43,858	47,042	7.3
15	Las Vegas, NV (McCarran)	45,519	46,961	3.2
16	Houston, TX (G. Bush)	42,550	42,998	1.1
17	Phoenix, AZ (Phoenix Sky Harbor)	41,436	42,185	1.8
18	Bangkok, Thailand (Suvarnabhumi)	42,800	41,210	-3.7
19	Changi, Singapore (Changi)	35,033	36,702	4.8
20	Orlando, FL (Orlando)	34,640	36,480	5.3

[a] Passenger movements include enplanements and deplanements, with intransit passengers counted once. Both domestic and international passenger movements are included. General aviation passengers are excluded.

Key: R = revised.

Notes: Airports include those participating in the ACI annual traffic statistics collection as of July 29, 2008. Airports are ranked based on 2007 data.

Source: Airports Council International, *Annual Traffic Data*, available at http://www.airports.org/cda/aci_common/display/main/aci_content07_c.jsp?zn=aci&cp=1-5-54-55_666_2__ as of Oct. 7, 2008.

4-7b

Top 20 U.S. Gateways for Nonstop International Air Travel: 2006 and 2007

(Thousands of international passengers[a])

2007 rank	Gateway airport	R2006	2007	% change 2006–2007
1	New York (JFK), NY	19,450	21,443	10.2
2	Los Angeles, CA	16,500	16,869	2.2
3	Miami, FL	14,852	15,586	4.9
4	Chicago (O'Hare), IL	11,517	11,539	0.2
5	Newark, NJ	9,895	10,538	6.5
6	Atlanta, GA	8,482	9,113	7.4
7	San Francisco, CA	8,164	8,601	5.3
8	Houston (G. Bush), TX	7,147	7,476	4.6
9	Washington (Dulles), DC	5,184	5,773	11.4
10	Dallas-Ft. Worth, TX	5,288	5,105	-3.5
11	Detroit, MI	3,695	3,830	3.7
12	Boston, MA	3,776	3,808	0.8
13	Honolulu, HI	4,050	3,757	-7.2
14	Philadelphia, PA	3,517	3,611	2.7
15	Fort Lauderdale, FL	2,420	2,883	19.1
16	Guam Island, GU	2,699	2,780	3.0
17	Seattle-Tacoma, WA	2,302	2,576	11.9
18	Minneapolis-St. Paul, MN	2,487	2,522	1.4
19	Las Vegas, NV	1,988	2,229	12.1
20	Orlando, FL	2,073	2,214	6.8
Total, top 20 U.S. international airports		**135,487**	**142,251**	**5.0**
Top 20, percentage of total		**87.2**	**88.1**	**1.0**
Total, all U.S. international airports		**155,394**	**161,468**	**3.9**

[a] International passengers are residents of any country traveling nonstop to and from the United States on U.S. and foreign carriers.

Key: R = revised.

Note: The data cover all passengers arriving and departing from U.S. airports on nonstop commercial international flights with 60 seats or more.

Source: U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, Office of Airline Information, *T-100 Segment Data*, October 2008.

4-8

U.S.-Mexican Border Land-Passenger Crossings: 2007

(Thousands)

	Entering the U.S.
Total for all U.S.-Mexico crossings	
Personal vehicles	81,788
Personal vehicle passengers	164,534
Buses	265
Bus passengers	3,389
Train passengers	20
Pedestrians	49,539
Personal vehicles—top 5 gateways	
San Ysidro, CA	15,696
El Paso, TX	14,062
Hidalgo, TX	6,835
Brownsville, TX	6,477
Calexico, CA	5,747
Personal vehicle passengers—top 5 gateways	
San Ysidro, CA	28,390
El Paso, TX	23,675
Laredo, TX	13,368
Hidalgo, TX	13,305
Brownsville, TX	13,063
Buses—top 5 gateways	
San Ysidro, CA	98
Otay Mesa, CA	47
Laredo, TX	37
Hidalgo, TX	29
El Paso, TX	19
Bus passengers—top 5 gateways	
Laredo, TX	899
San Ysidro, CA	875
El Paso, TX	442
Hidalgo, TX	310
Otay Mesa, CA	297
Train passengers—top 5 gateways	
El Paso, TX	10.5
Eagle Pass, TX	5.9
Nogales, AZ	2.4
Calexico East, CA	0.7
Otay Mesa/San Ysidro, CA	0.5
Pedestrians—top 5 gateways	
El Paso, TX	8,454
San Ysidro, CA	7,757
Nogales, AZ	7,723
Calexico, CA	5,291
Laredo, TX	4,625

Source: U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *Border Crossing/Entry Data*, available at http://www.bts.gov/itt/ as of October 2008.

4-9
U.S.-Canadian Border Land-Passenger Crossings: 2007
(Thousands)

	Entering the U.S.
Total for all U.S.-Canada crossings	
Personal vehicles	29,763
Personal vehicle passengers	58,248
Buses	136
Bus passengers	3,685
Train passengers	233
Pedestrians	441
Personal vehicles—top 5 gateways	
Buffalo-Niagara Falls, NY	5,977
Detroit, MI	5,472
Blaine, WA	2,763
Port Huron, MI	1,704
Calais, ME	1,033
Personal vehicle passengers—top 5 gateways	
Buffalo-Niagara Falls, NY	14,372
Detroit, MI	9,560
Blaine, WA	5,187
Port Huron, MI	3,523
Champlain-Rouses Point, NY	1,923
Buses—top 5 gateways	
Buffalo-Niagara Falls, NY	38
Detroit, MI	34
Blaine, WA	14
Skagway, AK	11
Champlain-Rouses Point, NY	8
Bus passengers—top 5 gateways	
Buffalo-Niagara Falls, NY	1,143
Detroit, MI	871
Blaine, WA	337
Champlain-Rouses Point, NY	307
Sault Ste. Marie, MI	165
Train passengers—top 5 gateways	
Skagway, AK	81
Buffalo-Niagara Falls, NY	40
Blaine, WA	32
Champlain-Rouses Point, NY	21
Detroit, MI	9
Pedestrians—top 5 gateways	
Buffalo-Niagara Falls, NY	277
Sumas, WA	33
Calais, ME	29
Point Roberts, WA	15
International Falls, MN	14

Source: U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *Border Crossing/Entry Data*, available at http://www.bts.gov/itt/ as of October 2008.

4-10

Top 20 U.S. Passenger Airports: 1997 and 2007

(Thousands of enplaned passengers on large certificated air carriers)

	1997		2007		
Airport	Rank	Total enplaned passengers	Rank	Total enplaned passengers	% change 1997–2007
Atlanta, GA	1	32,693	1	42,082	29
Chicago (O'Hare), IL	2	31,154	2	33,428	7
Dallas/Ft. Worth, TX	3	27,294	3	27,991	3
Los Angeles, CA	4	22,352	4	23,707	6
Denver, CO	6	16,002	5	23,350	46
Las Vegas, NV	12	13,689	6	21,466	57
Phoenix, AZ	8	14,331	7	20,564	43
Houston (G. Bush), TX	13	12,695	8	19,925	57
Detroit, MI	7	14,822	9	17,246	16
Minneapolis/St. Paul, MN	9	13,864	10	16,792	21
Newark, NJ	11	13,800	11	16,608	20
New York (JFK), NY	20	9,757	12	16,599	70
Orlando, FL	15	11,701	13	16,573	42
Charlotte, NC	18	10,358	14	16,167	56
Seattle, WA	16	11,688	15	14,912	28
San Francisco, CA	5	16,820	16	14,730	-12
Philadelphia, PA	21	9,716	17	14,307	47
Miami, FL	14	12,097	18	13,399	11
Boston, MA	17	10,463	19	12,449	19
New York (La Guardia), NY	19	9,868	20	11,959	21
Top 20 airports		**315,166**		**394,255**	**25**
All airports		570,928		717,847	26

Note: Airports are ranked based on 2007 data. Philadelphia, PA, was not in the top 20 in 1997.

Source: U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *Schedule T-3 data*, special tabulation, October 2008.

4-11

Major U.S. Airports' On-Time Arrival Performance: 2006 and 2007

Airport	R2006 On-Time rank	R2006 %	2007 On-Time rank	2007 %
Salt Lake City, UT	2	82.8	1	80.0
Oakland, CA	11	78.4	2	79.7
Houston (G. Bush), TX	14	77.7	3	78.7
Chicago (Midway), IL	12	78.0	4	78.4
San Diego, CA	13	78.0	5	78.4
Phoenix, AZ	3	80.3	6	77.9
Baltimore, MD	4	80.0	7	77.6
Las Vegas, NV	18	76.5	8	76.8
Cincinnati, OH	1	83.1	9	76.7
Orlando, FL	5	79.9	10	76.5
Tampa, FL	9	78.7	11	76.5
Los Angeles, CA	17	76.7	12	76.4
Portland, OR (PDX)	16	77.3	13	76.2
Denver, CO	8	78.7	14	75.8
St. Louis, MO (STL)	10	78.6	15	74.9
Atlanta, GA	25	71.9	16	74.4
Detroit, MI	21	76.3	17	73.7
Fort Lauderdale, FL	15	77.6	18	73.4
Minneapolis/St. Paul, MN	6	79.7	19	72.6
Washington (Dulles), DC	23	75.6	20	72.4
Dallas/Ft. Worth, TX	7	78.8	21	72.0
Washington (Reagan National), DC	19	76.4	22	71.7
Seattle, WA	24	73.9	23	71.4
Charlotte, NC	22	76.1	24	71.3
Miami, FL	20	76.3	25	71.0
San Francisco, CA	27	70.4	26	69.8
Boston, MA	26	71.8	27	69.7
Philadelphia, PA	28	70.4	28	66.5
Chicago (O'Hare), IL	30	68.2	29	65.9
New York (JFK), NY	29	69.4	30	62.8
Newark, NJ	32	62.6	31	59.5
New York (LaGuardia), NY	31	64.2	32	58.5

Key: R = revised.

Note: On-time flights arrive within 15 minutes of scheduled arrival time.

Source: U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *Airline On-Time Performance Data*, December 2007 issue, available at http://www.bts.gov/programs/airline_information/airline_ontime_tables as of October 2008.

4-12

Roadway Delay and Congestion Cost per Peak Traveler[a] in Urban Areas: 1995 and 2005

Annual Roadway Delay per Peak Traveler
(Hours per year)

	1995 delay per peak traveler	2005 delay per peak traveler	Percentage change 1995–2005	Annual growth rate 1995–2005
Very large areas	43	54	25.6	2.3
Large areas	30	37	23.3	2.1
Medium areas	21	28	33.3	2.9
Small areas	13	17	30.8	2.7
85-area average	**36**	**44**	**22.2**	**2.0**

Annual Roadway Congestion Cost per Peak Traveler
(Current dollars)

	1995 cost per peak traveler	2005 cost per peak traveler	Percentage change 1995–2005	Annual growth rate 1995–2005
Very large areas	620	1,014	63.5	5.0
Large areas	426	683	60.3	4.8
Medium areas	297	512	72.4	5.6
Small areas	175	318	81.7	6.2
85-area average	**505**	**824**	**63.2**	**5.0**

[a] A peak traveler is estimated to travel from 6:00 a.m. to 9:00 a.m. and 4:00 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., San Diego).
Medium = selected areas with 500,000–1 million population (e.g., Charlotte).
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, *2007 Urban Mobility Report,* Tables by Population Groups, available at http://mobility.tamu.edu/ums/congestion_data/ as of September 2007.

4-13

Amtrak On-Time Performance Trends and Hours of Delay by Cause: 2005–2008

	2005	2006	2007	2008
On-time performance				
Total (weighted)	69.8%	67.8%	68.6%	71.2%
Short distance (<400 miles)[a]	73.6%	72.8%	72.2%	73.6%
Long distance (>400 miles)	42.1%	29.9%	39.5%	52.0%
Hours of delay by cause				
Amtrak[b]	25,549	23,968	22,902	23,223
Host railroad[c]	64,097	71,387	72,565	64,724
Other[d]	5,613	6,166	6,187	6,618
Total[e]	**95,260**	**101,522**	**101,655**	**94,566**

[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 2008.

4-14

Top 20 U.S. Water Ports by Shipment Weight & Top 20 U.S. Water Ports by Container TEUs: 2006

Port by shipment weight	Short tons (millions)	Port by container TEUs	Full TEUs (thousands)
South Louisiana, LA	225.5	Los Angeles, CA	5,572
Houston, TX	222.1	Long Beach, CA	5,043
New York,/New Jersey	157.6	New York,/New Jersey	3,812
Long Beach, CA	84.4	Oakland, CA	1,579
Beaumont, TX	79.5	Savannah, GA	1,574
Corpus Christ, TX	77.6	Norfolk Harbor, VA	1,492
Huntington-Tristate, WV-OH-PA	77.2	Charleston, SC	1,483
New Orleans, LA	76.9	Seattle, WA	1,380
Los Angeles, CA	66.0	Tacoma, WA	1,380
Mobile, AL	59.8	Houston, TX	1,317
Lake Charles, LA	58.4	Honolulu, HI	890
Baton Rouge, LA	56.3	Miami, FL	740
Plaquemines, LA, Port of	55.9	San Juan, PR	690
Texas City, TX	48.9	Port Everglades, FL	633
Duluth-Superior, MN and WI	47.0	Jacksonville, FL	512
Tampa, FL	46.2	Baltimore, MD	483
Baltimore, MD	42.4	Anchorage, AK	277
Pittsburgh, PA	42.0	New Orleans, LA	185
Paulsboro, NJ	39.2	Portland, OR	183
Philadelphia, PA	38.6	Wilmington, DE	170
Total, top 20	**1,602**		**29,396**
Total, all ports	**2,681**		**31,320**

Note: Includes exports, imports, and domestic shipments. See table 5-8 for top 20 freight gateways by value of shipments.

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

Sources: U.S. Army Corps of Engineers, *Waterborne Commerce of the United States*, Calendar Year 2006, Part 5, National Summaries, table 5-2, available at http://www.iwr.usace.army.mil/ndc/wcsc/wcsc.htm as of October 2008. U.S. Army Corps of Engineers, *Waterborne Container Traffic for U.S. Ports and all 50 States and U.S. Territories*, Port TEUs, available at http://www.iwr.usace.army.mil/ndc/wcsc/wcsc.htm as of October 2008.

4-15

Top 20 World Container Ports: 2005 and 2006

(Thousands of full and empty TEUs)

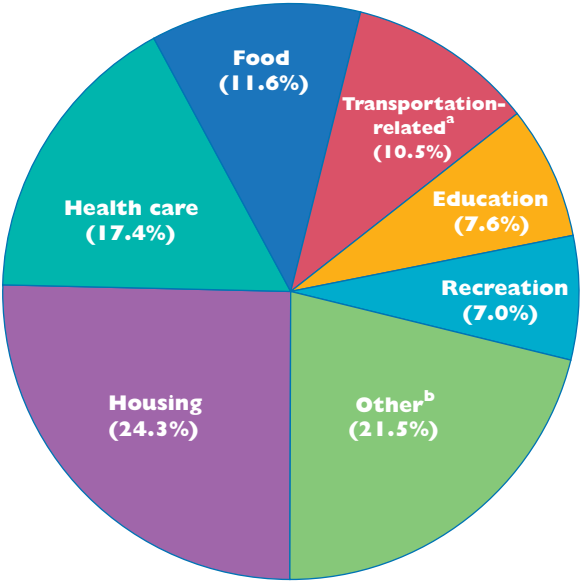
Rank (2005)	Rank (2006)	Port	Country	TEUs
1	1	Singapore	Singapore	24,792
2	2	Hong Kong	China	23,539
3	3	Shanghai	China	21,710
4	4	Shenzhen	China	18,469
5	5	Busan	South Korea	12,039
6	6	Kaohsiung	Taiwan	9,775
7	7	Rotterdam	Netherlands	9,655
9	8	Dubai	United Arab Emirates	8,923
8	9	Hamburg	Germany	8,862
10	10	Los Angeles	United States	8,470
13	11	Qingdao	China	7,702
11	12	Long Beach	United States	7,289
15	13	Ningbo	China	7,068
12	14	Antwerp	Belgium	7,019
18	15	Guangzhou	China	6,600
14	16	Port Klang	Malaysia	6,326
16	17	Tianjin	China	5,950
17	18	New York/New Jersey	United States	5,093
19	19	Tanjung Pelepas	Indonesia	4,770
21	20	Bremen/ Bremerhaven	Germany	4,450

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

Source: American Association of Port Authorities (AAPA), *World Port Rankings: 2005 and 2006* (Container Traffic), available at http://www.aapa-ports.org/ as of October 2008.

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 2007, transportation-related goods and services contributed $1.45 trillion to the $13.81 trillion U.S. Gross Domestic Product.

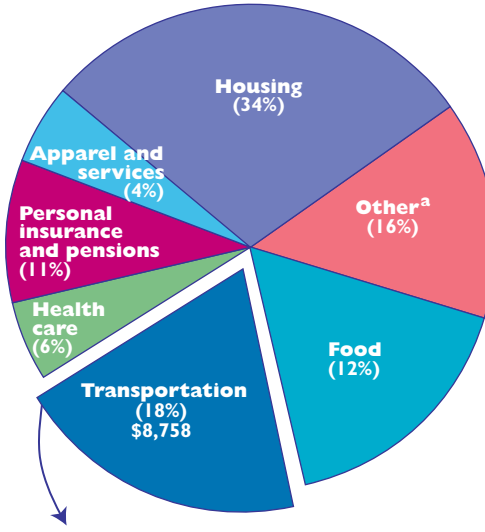
5-1
U.S. Gross Domestic Product by Major Societal Function: 2007



[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 based on data from U.S. Department of Commerce, Bureau of Economic Analysis, *National Income and Product Account Tables*, available at http://www.bea.gov/national/nipaweb/Index.asp as of October 2008.

5-2
Average Household Expenditures by Major Spending Category: 2007
(*Current dollars*)



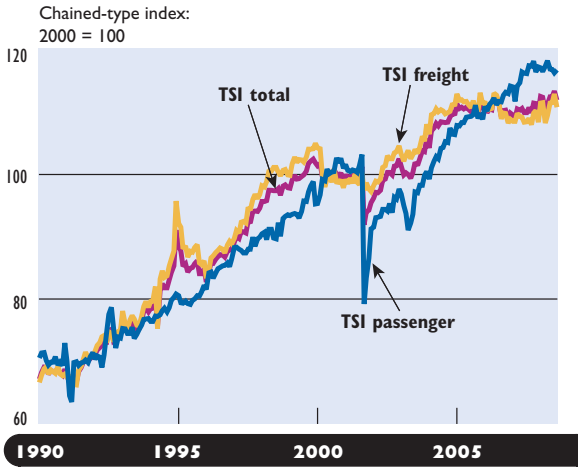
Private vehicle expenditures	**=**	**$8,220**
Vehicle purchases	=	$3,244
Gasoline and motor oil	=	$2,384
Other vehicle expenditures	=	$2,592
Public transportation expenditures	**=**	**$538**
Airline fares	=	$360
Ship fares	=	$53
Mass transit fares	=	$55
Taxi fares	=	$24
Intercity train fares	=	$21
Local transportation on out-of-town trips	=	$13
Intercity bus fares	=	$10
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, 2007*; and personal communication as of November 2008.

5-3
Transportation Services Index (TSI): 1990–2008
(*Seasonally adjusted*)



Notes: May–August 2008 data are preliminary. The TSI total is a monthly measure of the volume of services provided by for-hire transportation industries in the United States using 2000 as the base year.

Source: U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics (BTS), special calculation, avaliable at http://www.bts.gov/xml/tsi/src/index.xml as of October 2008.

5-4

Employment in Transportation and Selected Transportation-Related Industries[a] : 1990-2007

(*Thousands*)

	1990	R2000	R2006	2007
Total U.S. labor force (Nonfarm)	**109,487**	**131,785**	**136,086**	**137,623**
Total transportation related labor force[b]	**12,086**	**13,638**	**13,205**	**13,213**
Transportation as a percent of total U.S. labor force	**11**	**10**	**10**	**10**
For-hire transport & warehousing	**3,476**	**4,410**	**4,470**	**4,536**
Air	529	614	487	493
Water	57	56	63	64
Railroad	272	232	228	234
Transit/ground passenger transportation	274	372	399	410
Pipeline	60	46	39	40
Trucking	1,122	1,406	1,436	1,441
Support activities	364	537	571	583
Scenic/sightseeing transportation	16	28	28	29
Couriers/messengers	375	605	582	583
Warehousing/storage	407	514	638	659
Related services & construction	**5,256**	**6,177**	**6,009**	**6,015**
Automotive repair services/ parking; automotive equipment rental/leasing; gasoline stations	1,800	2,125	2,057	2,054
Highway, street, bridge construction	289	340	348	345
Dealers or wholesalers of motor vehicles, parts, petroleum, supplies, equipment	1,993	2,360	2,392	2,398
Travel arrangement/ reservation services	250	299	226	227
Ambulatory health care services	99	173	217	229
Postal service	825	880	770	762
Transportation-related manufacturing[c]	**2,681**	**2,447**	**2,128**	**2,069**
Government[b]	**673**	**604**	**599**	**592**

[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.

Key: R = revised. Notes: In 2000, the data on dealers or wholesalers of motor vehicles have been revised. USCG employees are excluded from government for years 2000 and after.

Source: **Total and transportation related labor force**—Bureau of Labor Statistics, **Government**—Bureau of the Census as cited in U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *National Transportation Statistics*, table 3-19b, available at http://www.bts.gov/publications/national_transportation_statistics/ as of December 2008.

5-5

Value of U.S.–International Merchandise Trade by Mode of Transportation: 2007

(Millions of current U.S. dollars)

	Exports	Modal %	Imports	Modal %	Total trade	Total modal %
Total	**1,162,708**	**100.0**	**1,953,699**	**100.0**	**3,116,407**	**100.0**
Water	375,152	32.3	1,023,796	52.4	1,398,949	44.9
Air	365,965	31.5	415,261	21.3	781,226	25.1
Truck	267,390	23.0	287,441	14.7	554,831	17.8
Rail	44,837	3.9	93,022	4.8	137,859	4.4
Pipeline	4,122	0.4	55,184	2.8	59,306	1.9
Other, unknown, & miscellaneous	105,243	9.1	78,994	4.0	184,237	5.9

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

Excludes intransit data (merchandise shipped from one foreign country to another via a U.S. 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: **Water, and air**—U.S. Department of Commerce, U.S. Census Bureau, Foreign Trade Division, *FT920 U.S. Merchandise Trade: Selected Highlights, December 2007*, available at http://www.census.gov/foreign-trade/Press-Release/ft920_index.html as of October 2008. **Truck; rail; pipeline; and other, unknown, & miscellaneous**—U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *Transborder Freight Data*, October 2008.

5-6
Weight of U.S.–International Merchandise Trade by Mode of Transportation: 2007

(Thousands of short tons)

	Exports	Modal %	Imports	Modal %	Total trade	Total modal %
Total	**618,901**	**100.0**	**1,334,117**	**100.0**	**1,953,018**	**100.0**
Water [a]	469,761	75.9	1,047,791	78.5	1,517,552	77.7
Air	3,719	0.6	4,753	0.4	8,472	0.4
Truck [b]	96,015	15.5	97,069	7.3	193,085	9.9
Rail [b]	42,465	6.9	93,050	7.0	135,515	6.9
Pipeline [b]	5,316	0.9	90,569	6.8	95,885	4.9
Other, unknown, & miscellaneous [b]	1,624	0.3	885	0.1	2,509	0.1

[a] The weight data for water transportation vary from those officially reported by the U.S. Army Corps of Engineers, because the data in this table exclude intransit shipments (merchandise shipped from one foreign country to another via a U.S. port but not part of U.S. official merchandise trade). BTS uses U.S. Census Bureau trade-based data to allow for a complete modal comparison among the different freight transportation modes. [b] BTS estimates the weight of exports for truck, rail, pipeline, and other and unknown based on value-to-weight ratios from the import data by country, mode of transportation, and two-digit HS commodity code. This is necessary because weights for exports by surface modes are not currently collected.

Notes: Numbers may not add to totals due to rounding. Excludes intransit data (merchandise shipped from one foreign country to another via a U.S. 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: **Water and air**—U.S. Department of Commerce, U.S. Census Bureau, Foreign Trade Division, *FT920 U.S. Merchandise Trade: Selected Highlights*, December 2007, available at http://www.census.gov/foreign-trade/Press-Release/ft920_index.html as of October 2008. **Truck; rail; pipeline; and other, unknown, and miscellaneous**—U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *TransBorder Freight Data*; and special calculation, October 2008.

5-7
U.S. Merchandise Trade with Canada and Mexico by Mode Share: 2007

Mode	Value (percent)	Weight (percent)
NAFTA trade, total	**100.0**	**100.0**
Truck[a]	61.0	28.9
Rail[a]	15.2	20.3
Pipeline[a]	6.5	14.3
Air	4.1	0.1
Water	8.1	36.1
Other and unknown[a]	5.0	0.4
U.S.-NAFTA imports, total	**100.0**	**100.0**
Truck	54.9	21.0
Rail	17.8	20.2
Pipeline	10.5	19.6
Air	2.6	0.0
Water	11.0	39.0
Other and unknown	3.2	0.2
U.S.-NAFTA exports, total	**100.0**	**100.0**
Truck[a]	69.5	46.4
Rail[a]	11.6	20.5
Pipeline[a]	1.1	2.6
Air	6.2	0.1
Water	4.3	29.6
Other and unknown[a]	7.4	0.8

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

Sources: **Water and air**—U.S. Department of Commerce, U.S. Census Bureau, Foreign Trade Division, *FT920 U.S. Merchandise Trade: Selected Highlights*, December 2007, available at http://www.census.gov/foreign-trade/Press-Release/ft920_index.html as of October 2008. **Truck, rail, pipeline, and other and unknown**—U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *Transborder Freight Data*; and special calculation, October 2008.

5-8

Top 20 U.S. Foreign Trade Freight Gateways by Value of Shipments: 2007

(Billions of current dollars)

Rank	Gateway	Exports	Imports	Total
1	Los Angeles, CA (w) P	29.9	150.4	180.2
2	New York, NY and NJ (w) P	40.6	124.6	165.2
3	JFK Intl. Airport, NY (a)	77.0	84.2	161.2
4	Long Beach, CA (w) P	26.7	120.4	147.1
5	Detroit, MI (l)	73.3	63.3	136.6
6	Houston, TX (w) P	53.4	61.2	114.6
7	Laredo, TX (l)	47.4	63.0	110.4
8	Chicago, IL (a)	33.4	53.1	86.6
9	Los Angeles Intl. Airport, CA (a)	41.6	38.0	79.6
10	Buffalo-Niagara Falls, NY (l)	38.6	40.0	78.6
11	Port Huron, MI (l)	30.7	46.3	77.1
12	San Francisco Intl. Airport, CA (a)	29.7	31.9	61.6
13	Charleston, SC (w) P	19.8	41.1	60.9
14	Savannah, GA (w) P	18.3	31.3	49.6
15	Norfolk, VA (w) P	20.7	28.8	49.5
16	El Paso, TX (l)	20.0	29.1	49.1
17	Anchorage, AK (a)	10.7	34.5	45.3
18	Baltimore, MD (w) P	14.0	28.0	42.0
19	Dallas/Fort Worth, TX (a)	18.1	23.4	41.5
20	New Orleans, LA (a)	18.2	22.9	41.1

Key: a = airport; l = land port; w = water port; P = preliminary.

Notes: Air gateways include a low level (generally less than 3% of the total value) of freight shipped through small user-fee airports located in the same area as the gateways listed. 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 Anchorage.

Sources: **Air**—U.S. Department of Commerce, U.S. Census Bureau, Foreign Trade Division, special tabulation, November 2008. **Water**—U.S. Army Corps of Engineers, Navigation Data Center, Waterborne Commerce Statistics Center, special tabulation, November 2008. **Land**—U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *TransBorder Freight Data*, October 2008.

5-9

U.S. Trade in Transportation-Related Commodities: 2007

(Millions of current U.S. dollars)

Commodity and code	Exports	Imports	Total trade	Balance
Motor vehicles and parts (87)	106,994	214,467	321,461	-107,473
Aircraft, spacecraft, and parts (88)	75,952	21,844	97,796	54,108
Ships, boats, and floating structures (89)	3,160	1,923	5,083	1,237
Railway or tramway locomotives and parts (86)	2,752	1,669	4,421	1,083
Total, transportation commodities	**188,858**	**239,903**	**428,761**	**-51,045**
Total, all commodities	1,162,708	1,953,699	3,116,407	-790,991
Transportation commodities share of trade	16.2%	12.3%	13.8%	6.5%

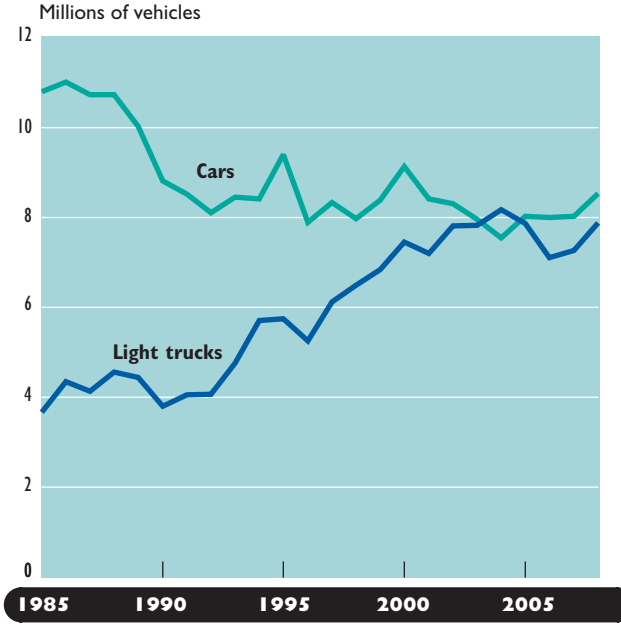
Notes: The numbers in parentheses are the classification categories from the Harmonized Tariff Schedule.

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, *Interactive Tariff and Trade DataWeb*, available at http://dataweb.usitc.gov as of October 2008.

5-10
New Passenger Car and Light Truck Sales: Model Years 1985–2008



Note: Data are based on Environmental Protection Agency (EPA) definitions of light trucks (gross vehicle weight of 8,500 pounds or less). Model year 2008 data are projected sales from the automotive companies.

Source: U.S. Environmental Protection Agency, *Light-Duty Automotive Technology and Fuel Economy Trends: 1975 Through 2008*, Table E-1 to E-15, available at http://www.epa.gov/otaq/fetrends.htm as of October 2008.

5-11

Government Transportation Revenues by Mode and Level of Government: 1995–2006

(Millions of current dollars)

	R1995	R2000	2005	2006
Highway total	**67,544**	**90,980**	**103,564**	**102,688**
Federal: Highway Trust Fund[a]	22,200	34,985	38,747	39,191
State and local	45,344	55,995	64,817	63,497
Transit total[b]	**8,575**	**10,670**	**12,512**	**15,117**
Railroad[c]	**36**	**1**	**0**	**0**
Air total	**14,518**	**22,298**	**25,645**	**27,072**
Federal: Airport and Airway Trust Fund[e]	6,291	10,544	10,797	11,137
State and local	8,227	11,754	14,848	15,935
Water total	**3,832**	**4,058**	**5,070**	**5,536**
Federal: water receipts[d]	1,909	1,551	1,676	1,837
State and local	1,923	2,507	3,394	3,699
Pipeline[c]	**35**	**40**	**56**	**58**
General support[c]	**7**	**26**	**8**	**21**
Total, all modes	**94,548**	**128,073**	**146,856**	**150,492**
Federal	30,478	47,147	51,284	52,244
State and local	64,070	80,926	95,572	98,248

[a] Includes both Highway and Transit Accounts of the Highway Trust Fund (HTF). Also includes other receipts from motor fuel and motor vehicle taxes not deposited in the HTF. [b] Includes state and local government only. [c] Includes federal only. [d] 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. [e] Receipts from aviation user fee, and aviation security fees are also included.

Key: R = revised.

Note: Government transportation revenue consists of money collected by governments from transportation user charges and taxes to finance transportation programs. The following types of receipts are excluded: 1) revenues collected from users of the transportation system that are directed to the general fund and used for non-transportation purposes, 2) nontransportation general fund revenues that are used to finance transportation programs, and 3) proceeds from borrowing. Local government receipts from motor fuel, motor vehicle, and toll highway charges are not included in 2006. Transit and general support revenue are revised for 1995 and 2000.

Source: U. S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *Government Transportation Financial Statistics 2008.*

5-12

Government Transportation Expenditures by Mode and Level of Government: 1995–2006

(Millions of current dollars)

	R1995	R2000	2005	2006
Highway total	**90,075**	**119,911**	**147,325**	**99,784**
Federal	1,685	2,190	2,661	2,972
State and local	88,391	117,720	144,664	96,812
Transit total	**25,460**	**34,828**	**41,900**	**44,097**
Federal	1,277	3,677	450	83
State and local	24,183	31,150	41,450	44,014
Rail total	**1,049**	**778**	**1,472**	**1,548**
Federal	1,023	765	1,437	1,528
State and local	26	13	35	20
Air total	**19,250**	**22,525**	**40,328**	**41,195**
Federal	10,807	9,285	22,366	22,802
State and local	8,443	13,240	17,962	18,393
Water total	**6,623**	**7,634**	**10,307**	**10,888**
Federal	4,314	4,493	6,411	6,603
State and local	2,309	3,141	3,896	4,286
Pipeline total	**24**	**46**	**82**	**91**
Federal	12	28	58	66
State and local	12	18	24	25
General support	**775**	**653**	**1,673**	**1,795**
Federal	769	645	1,659	1,783
State and local	6	8	14	12
Total, all modes	**143,256**	**186,374**	**243,086**	**199,397**
Federal	19,886	21,084	35,041	35,836
State and local	123,369	165,290	208,045	163,562

Key: R = revised.

Notes: Federal expenditure includes direct federal spending, excluding grants to state and local governments. State and local expenditure includes outlays from all sources of funds including funds from federal grants, except railroad and pipeline modes. State and local expenditure for rail and pipeline modes include outlays that are funded by federal grants only. The part of expenditure that may be funded by other funding sources of state and local governments are not covered due to lack of data.

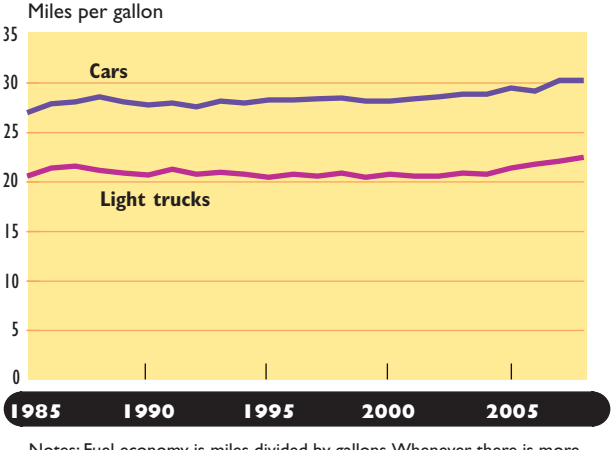
Water mode does not include outlays for civilian transportation-related activities of the U.S. Army Corps of Engineers for construction, operation, and maintenance of channels, harbors, locks, and dams, and protection of navigation. Local government outlays for highway are not included in 2006.

Federal highway expenditure has been revised for 2000. In addition, railroad and general support expenditure have been revised for 1995 and 2000.

Sources: U. S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *Government Transportation Financial Statistics 2008*.

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 in the United States, such as particulates, have declined since 1980 despite significant increases in U.S. population, Gross Domestic Product, and vehicle-miles traveled. However, carbon dioxide emissions from transportation fuel use have risen.

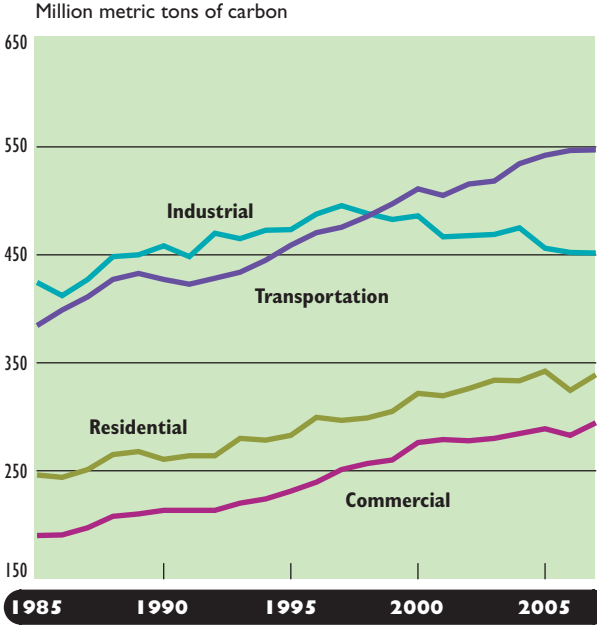
6-1
New Passenger Car and Light Truck Fuel Economy Averages: Model Years 1985–2008



Notes: Fuel economy is miles divided by gallons. Whenever there is more than one fuel economy value, dividing the total miles traveled by the total gallons consumed provides the average fuel economy.

Source: U.S. Environmental Protection Agency, *Light-Duty Automotive Technology and Fuel Economy Trends: 1975 Through 2008*, Table A-2, available at http://www.epa.gov/otaq/fetrends.htm as of October 2008.

6-2
U.S. Carbon Dioxide Emissions from Energy Use: 1985–2007



Notes: 2007 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 Gasses in the United States*, appendix E, available at http://www.eia.doe.gov/oiaf/1605/1605aold.html as of December 2005. **1990–2007**—USDOE, EIA, *U.S. Carbon Dioxide from Energy Sources 2008 Flash Estimate*, available at http://www.eia.doe.gov/oiaf/1605/flash/flash.html as of October 2008.

6-3

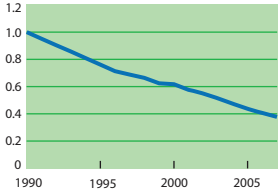
Wetlands Impacted and Mitigated Under the Federal-Aid Highway Program: 2000–2006

	2000	2001	2002	2003	2004	R2005	2006
Acres:							
Impacted	2,041	1,905	1,942	1,278	847	1,139	591
Mitigated	7,671	4,017	5,198	3,431	1,763	3,741	1,414
Gained (net)	5,630	2,112	3,256	2,153	916	2,602	823
Mitigation ratio	3.8:1	2.1:1	2.7:1	2.7:1	2.1:1	3.3:1	2.4:1

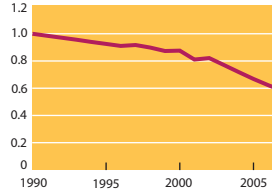
Notes: These data cover wetlands acreage affected by Federal-Aid Highway projects, approximately 24% of the total mileage of the U.S. public roads. These data are collected by states using varying collection methodologies. The mitigation ratio equals acres mitigated to acres impacted. Acres gained data have been revised for 2005.

Source: **2000-2004**—U.S. Department of Transportation (USDOT), Federal Highway Administration (FHWA), Federal Highway Administration Wetland Mitigation Performance Measure for Federal-Aid Highway Projects Fiscal Year 2004, available at http://fhwa.dot.gov/environment/perform/wetrpt04.htm. **2005-2006**—USDOT, FHWA, personal communication, August 2007.

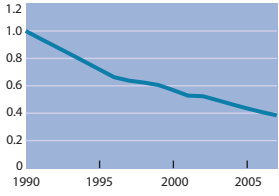
Carbon monoxide



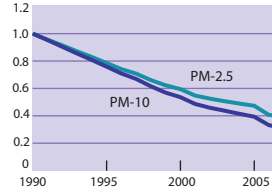
Nitrogen oxides



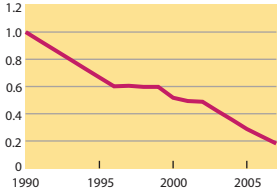
Volatile organic compounds



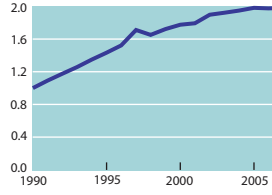
PM-10; PM-2.5



Sulfur Dioxide



Ammonia



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 railroads—Railroads earning adjusted annual operating revenues for three consecutive years of $250,000,000 or more.

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.

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