Transportation Statistics Annual Report

2007

U.S. Department of Transportation
Research and Innovative Technology Administration
Bureau of Transportation Statistics

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Preface

Congress requires the Bureau of Transportation Statistics (BTS) of the Research and Innovative Technology Administration (RITA) to report on transportation statistics to the President and Congress. This *Transportation Statistics Annual Report* is the 13th such report prepared in response to this congressional mandate, laid out in 49 U.S.C. 111 (1). In addition to presenting the state of transportation statistics, the report focuses on transportation indicators pertinent to the Strategic Plan of the U.S. Department of Transportation; the RITA report, *Transportation Vision for 2030*; and the 13 topics specified in the Safe, Accountability, Flexible, Efficient Transportation Equity Act: a Legacy for Users, under 49 U.S.C. III(c)(5).

The BTS publication, *National Transportation Statistics* (NTS), a companion to this annual report, has more comprehensive and longer time-series data than could be accommodated here. NTS, which is updated regularly, is available online at www.bts.gov.

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Chapter 1

Summary

Summary

This edition of the *Transportation Statistics Annual Report* (TSAR) presents selected transportation data on topics specified in the legislative mandate of the U.S. Department of Transportation's Research and Innovative Technology Administration, Bureau of Transportation Statistics (RITA/BTS). The data, presented in chapter 2 and summarized here, are grouped under headings that correspond to the U.S. Department of Transportation's strategic goals and the *Transportation Vision for 2030*[1]. The discussion begins with context information about the extent and condition of the transportation system, vehicle characteristics, and traffic flows. In most cases, the data cover the 10 most recent years for which data are available. An appendix provides information on U.S. population, labor force, and economic conditions—variables that influence travel behavior and goods movement. Maps showing safety belt laws and use, per capita transortation revenues, and vehicle miles of travel (VMT) are also included in the appendix.

The legislative mandate, SAFETEA-LU[2], also requires RITA/BTS to make recommendations for improving transportation statistical information and to document methods used to obtain and ensure the quality of the report's statistics. These two subjects are discussed in chapter 3. The focus for improvements is on data gaps, including gaps that may arise because of suspension of several data collection efforts. The chapter also discusses methodological guidelines that apply to federal data quality; documentation on specific data accompanies each table in chapter 2.

For the reader's convenience, the following table lists each of the topics covered by this report in the order of their appearance in the law. Congress modified and expanded this list in its 2005 establishment of RITA and the reauthorization of BTS.

[1] U.S. Department of Transportation, Research and Innovative Technology Administration, *Transportation Vision for 2030*, Washington DC, January 2008.

[2] Safe, Accountable, Flexible, Efficient Transportation Equity Act: a Legacy for Users. 49 U-S-C-111.

Data Reporting Requirements in 49 U.S.C. 111(c)(5)

Subsection	Topic
A	Productivity in various parts of the transportation sector
B	Traffic flows for all modes of transportation
C	Other elements of the Intermodal Transportation Database established under subsection (e) of 49 U.S.C. 111
D	Travel times and measures of congestion
E	Vehicle weights and other vehicle characteristics
F	Demographic, economic, and other variables influencing traveling behavior, (including choice of transportation mode) and goods movement
G	Transportation costs for passenger travel and goods movement
H	Availability and use of mass transit (including number of passengers served by each mass transit authority) and other forms of for-hire passenger travel
I	Frequency of vehicle and transportation facility repairs and other interruptions of transportation service
J	Safety and security for travelers, vehicles, and transportation systems
K	Consequences of transportation for the human and natural environment
L	The extent, connectivity, and condition of the transportation system, building on the National Transportation Atlas Database developed under subsection (g) of 49 U.S.C. 111
M	Transportation-related variables that influence the domestic economy and global competitiveness.

The Transportation System

The United States, the fourth largest country in the world by land area, has developed an extensive transportation system to serve its 300 million residents and 7 million business establishments. Americans travel extensively as they go to and from work, run errands and shop, transport children, visit their family and friends, take vacations, enjoy leisure time pursuits, and engage in other activities. U.S. businesses depend on the transportation system as they move their goods to markets here and abroad, set up supply chains and distribution networks, and send employees throughout the country and the world to conduct business. Trucks are the most widely used means of transporting freight in domestic transportation, but rail, water, and pipeline together account for a majority of ton-miles. Both passenger travel and freight shipments require an interconnected system of transportation modes to function effectively.

Table 1

Key Elements of the U.S. Transportation System*

Air

Extent

5,233 public use airports (2006)
14,757 private use airports (2006)

Aircraft and use

8,024 certificated air carrier aircraft (2007), 6.6 billion airplane-miles traveled (2007), 592.4 billion passenger-miles traveled; 11.2 billion revenue ton-miles of freight (domestic, scheduled)

Passenger and freight companies

17 major air carriers, 85 companies total, 501 thousand employees

Highways

Extent

2,601,490 miles of paved roads; 8,371,704 lane miles of paved roads
1,408,757 miles of unpaved roads
599,893 highway bridges (2007)

Personal vehicles and light trucks

136,568,083 passenger cars; 1,689,965 million vehicle-miles traveled;
2,670,145 million person-miles traveled
95,336,839 light trucks; 1,059,590 million vehicle-miles traveled;
1,836,988 person-miles traveled
6,227,146 motorcycles; 10,770 million vehicle-miles traveled;
13,677 million person-miles traveled

Heavy truck vehicles and use

8,481,999 heavy trucks; 222,836 million vehicle-miles traveled

Pipeline

Extent

159,512 miles of hazardous liquid pipeline
296,400 miles of natural gas gathering and transmission pipeline
1,117,800 miles of natural gas distribution pipeline

Pipeline operators

292 hazardous liquid pipeline operators

* 2005 (unless otherwise noted)

(continued)

(Table 1 continued)

945 natural gas transmission pipeline operators
1,291 natural gas distribution pipeline operators

38 thousand employees

Rail

Extent

95,830-miles operated by Class I railroads
15,388-miles operated by Regional railroads
29,197-miles operated by Local railroads
22,007-miles operated by Amtrak

505 Amtrak stations (2006)

Equipment and use

474,839 thousand Class I freight cars; 1,696,425 million revenue ton-miles of freight
22,779 Class I locomotives

1,186 Amtrak-owned passenger cars in service; 25,076,496 revenue passengers carried
258 Amtrak-owned locomotives in service

Freight rail

7 Class I companies with 162,438 employees
30 Regional companies with 7,322 employees
523 Local companies with 12,047 employees

Passenger rail (Amtrak)

19,234 employees (average)

Transit

Extent

165,854 directional route-miles of bus (2004)
8,076 directional route-miles of commuter rail
1,622 directional route-miles of heavy rail
1,188 directional route-miles of light rail

Vehicles and use

82 thousand buses; 21,825 million passenger-miles; 5,855 million unlinked trips
11 thousand heavy rail cars; 14,418 million passenger-miles; 2,808 million unlinked trips
6 thousand commuter rail cars and locomotives; 9,473 million passenger-miles; 423 million unlinked trips

(continued)

(Table 1 continued)

1.4 thousand light rail cars; 1,700 million passenger-miles; 381 million unlinked trips
42 thousand demand response vehicles

Transit agencies
6,429 transit agencies, 366.8 thousand employees

Water

Extent
26 thousand miles of navigable waterways

Vessels
32,052 nonself propelled vessels; 8,976 self-propelled vessels; 357 oceangoing steam and motor ships in the U.S.-flag domestic fleet

Marine vessel operators
773 marine vessels operators; 61 thousand employees

SOURCES:
Air: Airports—U.S. Department of Transportation, Federal Aviation Administration, *Administrator's Factbook* (Washington, DC: March 2006). Number of Aircraft—Aerospace Industries Association, *Aerospace Facts and Figures 2005/6* (Washington, DC: 2006), p. 90. VMT, PMT, ton-miles—U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, Office of Airline Information, *Air Carrier Traffic Statistics* (Washington, DC: Annual December issues). Passenger and Freight Companies—U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *National Transportation Statistics*, table 1-2, available at http://www.bts.gov/. Employees— U.S. Department of Labor, Bureau of Labor Statistics Data, *National Employment Hours and Earnings*, table B-1.
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Extent, connectivity, and condition of the transportation system

Extent (chapter 2, section A)

- The United States has about 4 million miles of highways, 117,837 miles of railroad, about 1.6 million miles of oil and gas pipelines, and approximately 26,000 miles of navigable waterways. [A-1] If laid end to end, the nation's waterways would circle the Earth once, its railroads would circle the Earth nearly 5 times; its pipelines 64 times, and its roads 160 times.
- It has 5,233 public use airports, 9,399 waterway facilities, 2,936 rail transit stations, and 505 Amtrak railway stations. [A-3, A-4, A-5]
- Transportation capital stock, a measure of the amount of productive assets (buildings, structures, machinery, and equipment) in use at a particular time, reached $5.5 trillion in 2005, $2.5 trillion more than in 1995. Although highways and consumer motor vehicles constitute over $3.4 trillion of the total, all components have grown—with air growing fastest (more than doubling) between 1995 and 2005. [A-7]
- In 2005, there were over 247 million highway motor vehicles (42 million more than in 1995), nearly 13 million recreational boats and vessels, 1.3 million railcars and locomotives, and 232,577 general aviation and commercial airplanes in the United States. [A-6]
- Freight was hauled in over 9 million trucks (not including pickup trucks and other light trucks), rail cars, water vessels, and airplanes in 2005. [A-6]

Condition (chapter 2, section A)

- The condition of interstates generally improved between 1995 and 2005, although some road categories (rural and urban collectors and urban minor arterials) showed a higher percentage of roads in poor or mediocre condition. [A-8]
- The number of structurally deficient highway bridges declined between 1995 and 2006 while the total number of bridges increased; however, the percent of functionally deficient bridges increased between 1997 and 2006. [A-9]
- Seventy-seven percent of airports identified in the National Plan of Integrated Airport Systems (NPIAS) as significant to national air transportation were in "good" condition in 2006; only 4 percent were in poor condition. [A-10]

Vehicle weights and other vehicle characteristics (chapter 2, section A)

- The median age of passenger cars in 2006 was 9.2 years. [A-14]
- The average age of full-size transit buses in 2005 was 7.6 years. [A-15]
- The average age of all commercial aircraft in 2005 was 11.3 years. [A-18]

- Between 1998 and 2005, the average freight loading capacity of oceangoing vessels calling at U.S. ports has increased by nearly 4,800 deadweight tons. [A-12]
- Average loaded railcar weights have declined from the high point during the period of 1995 to 2005 (65.3 tons in 1995 to 61 tons in 2005). [A-13]

Box 1

Personal Travel

- In 2006, 8.8 percent of U.S. households were without a vehicle. [A-19]
- 76 percent of people commuting drive themselves to work, while only 4.8 percent use mass transportation. [A-20]
- The largest percent (15.1 percent in 2003 and 14.9 percent in 2006) of households depart to work between 7:00 am and 7:29 am. [A-21]

Safety and Security

Safety and security for travelers, vehicles, and transportation systems

Safety (chapter 2, section B)

- There were 45,346 fatalities in transportation accidents in the United States in 2006, of which 94 percent involved highway motor vehicles [B-1].
- In 2006, more than 42 thousand motorists and nonmotorists were killed in crashes involving motor vehicles, down 2 percent compared with 2005; and about 2.6 million people were injured. [B-1, B-4]
- There were 1.43 fatalities per 100 million vehicle-miles of highway travel in 2006, the lowest rate ever recorded by the U.S. Department of Transportation. [B-1, C-26]
- A total of 30,521 passenger vehicle (including light trucks, i.e., SUV's, vans, etc.) occupants were killed in traffic crashes in 2006, down 0.3 percent since 2005. [B-2]
- There were 5,557 pedestrians and pedalcyclists killed in traffic crashes in 2006. [B-1]
- 4,810 motorcyclists were killed in traffic crashes in 2006, 5 percent more than in 2005. [B-1]
- There were 213 transit related fatalities in 2006, down 9.7 percent from 2005. [B-1]
- 68 people were killed in U.S. domestic commercial aviation accidents (including air carriers, commuter carriers, and air taxis) in 2006, while 698 fatalities resulted from general aviation accidents. [B-1]
- There were 48 waterborne commercial vessel-related fatalities and 710 recreational boating fatalities in 2006. [B-1]

- There were 19 gas pipeline fatalities in 2006. [B-1]
- Of the 909 railroad-related fatalities in 2006, 369 fatalities were at highway-rail grade crossings, and the other 540 fatalities were primarily trespasser-related. [B-1]
- An estimated 2.6 million people suffered some kind of transportation-related injury in 2006. About 99 percent of these injuries resulted from highway crashes. [B-4]

Security (chapter 2, section F)

- The transportation sector used 19 percent more energy in 2006 (28.4 quadrillion British thermal units—Btu) than it did in 1995 (23.85 quadrillion Btu). [F-1]
- Transportation consumed 67.9 percent of U.S. petroleum usage in 2006. [F-3]
- Travel in passenger cars was 7.1 percent more energy efficient in 2005 than in 1995. [F-4]
- The total number of prohibited items intercepted at airport screening checkpoints more than doubled between 2004 and 2005; the large increase was primarily due to the prohibition of lighters on board beginning in April 2005. [F-5]
- The number of firearms intercepted at airport screening checkpoints jumped from 650 in 2004 to 2,217 in 2005. [F-5]
- The number of international piracy and armed robberies at sea steadily declined from 452 in 2003 to 241 in 2006. [F-6]

Congestion and other impediments to use of the transportation system

Travel times and measures of congestion (chapter 2, section C)

- Highway travel times increased between 1995 and 2005 in all but 15 of the 85 urban areas (82 percent) studied by the Texas Transportation Institute. [C-1]
- It took 30 percent longer, on average, in 2005 to make a peak period trip in these 85 urban areas compared with the time it would take if traffic were flowing freely. [C-1]
- About 75 percent of domestic air flights or reporting carriers arrived on time in 2006, compared with 79 percent in 1995. In 2007, the percentage of on time operations dropped to 73 percent. [C-3]
- Sixty-eight percent of Amtrak trains arrived at their final destination on-time in 2006. Short-distance trains—those with runs of less than 400 miles—consistently registered better on-time performance than long-distance trains. [C-4]
- Average line-haul speed of Class I freight railroads has been generally decreasing since a peak in early 2002. Between the second quarter 2002 and the fourth quarter 2006 line-haul speed decreased 14 percent. [C-6]
- The average wait time in 2004 for passenger vehicles crossing the border between the United States and Canada was 5.9 minutes and 14.6 minutes for those between the United States and Mexico. The average wait time in 2004 for commercial vehicles entering the United States from Canada was 8.5 minutes and 7.3 minutes for those entering from Mexico. [C-8, C-7]

Frequency of vehicle and transportation facility repairs and other interruptions of transportation service (chapter 2, section C)

- There were over 2.4 million roadside truck inspections in 2006, with 552 thousand out-of-service orders issued for serious violations. [C-9]
- In 2005, rail companies replaced 424,000 tons of rail (36 percent fewer than in 1995 and 42 percent fewer than in 2000) and 13.4 million crossties (11 percent more than in 1995 and 24 percent more than in 2000). Railroads also periodically replace or rebuild locomotives and freight cars. On average, new and rebuilt locomotives made up almost 4.3 percent of Class I railroad fleets between 1995 and 2005. [C-10, C-11, C-12]
- Transit service interruptions per 100,000 vehicle-miles for all types of transit decreased 19.9 percent between 1995 and 2000 and 6.9 percent between 2001 and 2005. [C-13]
- Fifty-five percent of downtime at St. Lawrence Seaway locks in 2006 was a result of vessel incidents; the next largest cause of downtime was weather. [C-14]

Availability and use of mass transit and other forms of for-hire passenger transportation (chapter 2, section C)

- U.S. domestic commercial airlines carried 692.1 million passengers in 2006. [C-16]
- Total domestic enplanements in the U.S. increased 31 percent between 1995 and 2006. [C-16]
- Amtrak carried 24.5 million riders in fiscal year 2006. Ridership increased 21 percent between 1995 and 2006. [C-18]
- Approximately 66 percent of all unlinked transit passenger trips (6.5 billion of 9.8 billion trips in 2005) were within the service area of only 20 transit agencies. New York City alone accounted for 28 percent of all transit trips in 2005. [C-19]
- There were 49.7 billion transit passenger-miles traveled (PMT) in 2005 compared with 39.8 billion PMT in 1995, an increase of 25 percent. As they have historically, transit buses had the largest PMT share in 2005, generating 22 billion PMT or 44 percent of all transit PMT. [C-21]
- Measured in unlinked trips, transit ridership has grown 22 percent since 1995 to 9.2 billion unlinked trips in 2005. Bus ridership comprised the majority of unlinked trips (5.2 billion) in 2005. However, rail transit ridership, with 3.6 billion trips in 2005, posted stronger growth (37.5 percent) between 1995 and 2005. [C-22]
- As of 2005, 59.5 percent of transit rail stations had complied with the Americans with Disabilities Act (ADA) accessibility requirements, up from 28.3 percent in 1995. Ninety-nine (99) percent of transit buses, also subject to ADA requirements, were equipped with lifts or ramps by 2006. [C-23, C-24]

Traffic flows for all modes of transportation (chapter 2, section C)

- U.S. vehicle-miles of travel (VMT) for all modes of transportation reached 3 trillion in 2005, compared to 2.4 trillion in 1995. Vehicle-miles grew for all modes, but the most rapid VMT growth was for air carriers, which increased by 45.3 percent. [C-26]
- Passenger-miles of travel (PMT) in the United States exceeded 5.0 trillion in 2005, or about 17,800 miles for the average person. [C-27]
- 86 percent of PMT in 2005 was in personal vehicles (passenger cars and light trucks, which include sport utility vehicles, pickup trucks, and minivans). Air carriers accounted for another 11 percent of PMT. [C-27]
- Vehicle-miles of transit grew by 25.9 percent between 1995 and 2004, to almost 4.5 billion miles, while passenger-miles on transit grew 23.3 percent to over 49 billion. [C-26, C-27]
- Freight ton-miles within the United States amounted to over 4.5 trillion in 2005, compared to about 4.1 trillion in 1995. [C-28]

Global Connectivity

Transportation-related variables that influence the domestic economy and global competitiveness (chapter 2, section D)

- The United States traded $401.2 billion worth (in current dollars) of transportation-related goods (e.g., cars, trains, boats, and airplanes and their related parts) in 2006 with its partners. As is the case with its overall international trade, the United States had a merchandise trade deficit in transportation-related goods (with an excess of imports over exports) totaling $71.4 billion in 2006. [D-1]
- U.S. trade in transportation services in 2006 totaled $163.2 billion (in current dollars). The United States had a surplus in transportation services from 1995 through 1997. The trade surplus in 1995 was $3.3 billion. By 2006, however, 57 percent of trade was imports (payments to foreign countries), resulting in trade deficit of $22.6 billion. [D-3]
- Truck remains the dominant mode for transporting U.S.-North American freight followed by rail, pipeline, maritime, air, and other unknown modes. Between 1996 and 2006, trucks accounted for most of the growth in the value of U.S.-North American freight. [D-4]
- In 2006, the ports of Los Angeles and Long Beach, CA, handled 38 percent of U.S. maritime container volume. This represents a 9.4 percent average annual growth rate since 2001. Savannah, GA, has grown the most between 2001 and 2006 (with an annual average growth rate of 14.2 percent). [D-5]
- In 2006, the United States ranked second in the world in terms of maritime container volume and first in terms of U.S. Gross Domestic Product (GDP). In 2006, U.S. share of world volumes and GDP were 11.1 and 27.3 percent, respectively. [D-7]

International vehicle and passenger traffic (chapter 2, section D)

- In 2006, over 242 million people (both U.S. residents and residents of other countries) crossed into the United States from Canada and Mexico in personal vehicles, compared to nearly 266 million in 1995 and almost 331 million in 1999, the high point. The number of pedestrians crossing into the country in 2006 was 46.8 million, compared to 33.5 million in 1995, and down from a high of 52.3 million in 2001. [D-12, D-15]
- In 2006, 11.4 million trucks crossed into the United States from Mexico and Canada, and 1.8 million full rail containers crossed into the United States. [D-8, D-11]

Energy and Environment

Consequences of transportation for the human and natural environment (chapter 2, section E)

- Highway vehicles emitted 82% of all transportation carbon dioxide emissions in 2005. [E-2]
- Transportation emitted 54% of the nation's pollution from carbon monoxide, 36% of nitrogen oxides, 22% of volatile organic compounds, and 1.4% of sulfur dioxide in 2006. All of these emissions have declined in the last decade despite a rise in vehicle-miles of travel. [E-3]

Transportation and the Economy

Productivity in various parts of the transportation sector (chapter 2, section G)

- Labor productivity for the rail sector increased 50 percent from 1995 to 2005. Despite a decline of 6 percent between 2000 and 2001, air transportation labor productivity grew 43.2 percent over the entire period. [G-1]
- Multifactor productivity of all business sectors combined increased 17 percent, while multifactor productivity in rail and air transportation increased by 50.5 and 42.4 percent, respectively, from 1995 to 2005. [G-2]
- Transportation-related demand accounted for over 10.3 percent of U.S. Gross Domestic Product (GDP) in 2005. This broad measure includes consumer and government purchases of goods and services ranging from vehicles, fuels, and insurance to road building and public transportation. [G-5]
- The contribution of for-hire transportation services to the U.S. economy, as measured by their value added (or net output), increased (in chained 2000 dollars) from $242.7 billion in 1995 to $335.2 billion in 2005. In the same time period, this segment's share in the GDP fluctuated slightly, at around 3 percent. [G-4]
- Over 13 million people worked in a transportation-related job in the United States in 2006. That is equal to approximately 1 out of every 10 workers. [G-6]

Transportation costs for passenger travel and goods movement (chapter 2, section G)

- U.S. households spent $8,344, on average, on transportation in 2005 – second in spending behind housing. [G-15]
- Driving an automobile 15,000 miles per year cost $0.52 per mile in 2005, or 24 percent more than it did in 1995, when total costs per mile were $0.42. [G-18]
- The average transit fare increased from 88¢ to $1.02 between 1995 and 2005. [G-16]
- On average, intercity trips via Amtrak cost $56.45 in 2006, up 30 percent from $43.31 in 1996. Meanwhile, average intercity Class I bus fares rose 32 percent, from $22.9 to $30.1, between 1996 and 2002. [G-16]
- The RITA/BTS "U.S. origin only" Air Travel Price Index (ATPI) increased 14 percent between the first quarter of 1995 and the fourth quarter of 2006. During the same period, the ATPI "Foreign origin only" index decreased 5 percent. [G-17]

Box 2

Government Transportation Revenues and Expenditures

The Research and Innovative Technology Administration's Bureau of Transportation Statistics gathers Government Transportation Financial Statistics (GTFS) data from various sources — including the Office of Management and Budget, the U.S. Census Bureau, the Federal Highway Administration, the Federal Aviation Administration, the United States Army Corps of Engineers, the Saint Lawrence Seaway Development Corporation, the National Aeronautics and Space Administration, and other federal government agencies — that provide statistics on transportation-related revenues and expenditures of the federal, state and local governments for all modes of transportation. GTFS also contains federal budget authority and obligations, and grants to state and local governments. Statistics on federal expenditures, budget authority and obligations are provided at the agency and program level.

- Federal, state, and local government transportation revenues targeted to finance transportation programs increased 8.5 percent from $114.2 billion in 1995 to $123.9 billion in 2003 (in chained 2000 dollars). [G-19]
- Spending on building, maintaining, operating, and administering the nation's transportation system by all levels of government totaled $219.7 billion in 2003 (chained 2000 dollars). [G-21]

State of Transportation Statistics

Data gaps in several transportation areas have emerged because of resource constraints. Some surveys providing long term benchmark data have been reduced in scope, postponed, delayed or discontinued. BTS will be unable to carryout a previously planned long distance travel survey because of funding constraints, making 2001/2002 the last year for which this survey data are available. The long distance travel surveys, also undertaken in 1995, and 1977, provided data on the number, length, origins and destinations, modes of transportation, purpose, and traveler characteristics of U.S. residents making long distance trips.

Also, the Census Bureau has discontinued its Vehicle Inventory and Use Survey (VIUS), making 2002 the last VIUS. The survey is the most in depth inventory of the characteristics of the nation's highway truck fleet, covering all categories from lightweight pickups and utility vehicles through large trucks. Previous editions of this survey, and its earlier counterpart, the Truck Inventory and Use Survey, were conducted as part of Economic Census twice a decade extending back to 1963.

In addition, the U.S. Army Corps of Engineers (USACE) has discontinued one of its international maritime statistics data sets - the U.S. foreign trade-based data series. Preliminary and monthly cargo summary reports previously available on the Navigation Data Center and U.S. Department of Transportation, Maritime Administration web sites (type service, dollar value, weight) and the monthly and annual waterborne databanks were discontinued. Monthly foreign trade and transportation data will no longer be publicly available from the USACE. The foreign waterborne commerce annual data set will be publicly available but will not include cargo value.

Transportation data needs continue to be an important matter for the transportation community. The Transportation Research Board, part of the National Academy of Sciences, has enlisted its numerous committees of transportation experts and officials to identify key needs. It has suggested that TRB committees annually review data needs, priorities, and costs. In August 2007, TRB released results of discussions by State transportation officials on actions to ensure availability of data for effective transportation decision-making and opportunities for national efforts to advance transportation data systems. These opportunities are:

- to conduct "…synthesis studies to document innovative data practices, including data business plan development; protocols and management systems for sharing data within and between agencies; data reporting strategies and technologies; and studies of the uses and importance of national data bases…"

- to develop "…new data tools, such as analysis and forecasting methods to support transportation decisions; practical methods to calculate return on investments (ROI) for all transportation investments; techniques to identify and quantify the risks and benefits of alternative investment scenarios; and advanced tools for integrating real-time traffic data with transportation management and planning functions."

- to identify "… effective designs for cooperative and collaborative interagency decisions on selection, sharing, and application of multiple data sources for decision making."[1]

[1] Transportation Research Board, Transportation Circular E-C121, *Information Assets to Support Transportation Decision-Making* (Washington, DC: Transportation Research Board of the National Academy of Sciences), December 2006, p. 2

Chapter 2

Transportation Indicators

The Extent, Connectivity, and Condition of the Transportation System

TABLE A-1 System Mileage Within the United States: 1995–2005
Miles

		Rail		Transit rail				Pipeline	
	Highway	Class I	Amtrak	Commuter rail	Heavy rail	Light rail	Navigable waterways	Hazardous liquid	Gas
1995	3,912,226	108,264	24,000	4,160	1,458	568	26,000	181,912	1,277,600
1996	3,919,652	105,779	25,000	3,682	1,478	638	26,000	177,535	1,323,600
1997	3,945,872	102,128	25,000	4,417	1,527	659	26,000	179,873	1,331,800
1998	3,906,290	100,570	22,000	5,172	1,527	676	26,000	178,648	1,351,200
1999	3,917,243	99,430	23,000	5,191	1,540	802	26,000	177,463	1,340,300
2000	3,936,222	99,250	23,000	5,209	1,558	834	26,000	176,996	1,369,300
2001	3,948,335	97,817	23,000	5,209	1,572	897	26,000	158,248	1,373,500
2002	3,966,485	100,125	23,000	6,831	1,572	960	26,000	160,990	1,411,400
2003	3,974,107	99,126	22,675	6,809	1,597	996	26,000	159,889	1,424,200
2004	3,981,512	97,662	22,256	6,875	1,596	1,187	26,000	161,670	1,462,300
2005	3,995,635	95,830	22,007	7,118	1,622	1,188	26,000	159,512	1,437,500

NOTES: *Highway* includes all public road and street mileage in the 50 states and the District of Columbia. Beginning in 1998, approximately 43,000 miles of Bureau of Land Management Roads are excluded. *Class I* rail data represent miles of road owned (aggregate length of road, excluding yard tracks, sidings, and parallel lines). Portions of Class I freight railroads, Amtrak, and commuter rail networks share common trackage. *Amtrak* data represent miles of road operated. *Transit* system length is measured in directional route-miles. Directional route-miles is the distance in each direction over which public transportation vehicles travel while in revenue service. Directional route-miles are computed with regard to direction of service, but without regard to the number of traffic lanes or rail tracks existing in the right-of-way. Beginning in 2002, directional route-mileage data for the commuter and light rail modes include purchased transportation.

Navigable waterways are estimated sums of all domestic waterways, which include rivers, bays, channels, and the inner route of the Southeast Alaskan Islands, but does not include the Great Lakes or deep ocean traffic. The Waterborne Commerce Statistics Center monitored 12,612 miles as commercially significant inland shallow-draft waterways in 2001. *Hazardous liquid pipeline* includes trunk and gathering lines for crude-oil pipeline. *Gas pipeline* mileage includes transmission, gathering, and distribution.

SOURCES: Various sources, as cited in U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *National Transportation Statistics 2007*, table 1-1, available at http://www.bts.gov/ as of April 2007.

TABLE A-2 Number of Air Carriers, Railroads, Interstate Motor Carriers, Marine Vessel Operators, and Pipeline Operators: 1995–2005

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Air carriers	**96**	**96**	**96**	**96**	**94**	**91**	**87**	**83**	**80**	**83**	**85**
Major air carriers	11	12	13	13	13	15	15	15	14	14	17
Other air carriers	85	84	83	83	81	76	72	68	66	69	68
Railroads	**541**	**553**	**550**	**559**	**555**	**560**	**571**	**552**	**549**	**556**	**560**
Class I railroads	11	10	9	9	9	8	8	7	7	7	7
Other railroads	530	543	541	550	546	552	563	545	542	549	553
Interstate motor carriers	**346,000**	**379,000**	**417,000**	**477,486**	**517,297**	**560,393**	**592,909**	**600,104**	**674,314**	**677,317**	**679,744**
Marine vessel operators	**1,381**	**1,348**	**1,311**	**1,235**	**1,174**	**1,114**	**1,063**	**877**	**798**	**767**	**773**
Pipeline operators	**2,387**	**2,346**	**2,301**	**2,260**	**2,260**	**2,172**	**2,128**	**2,171**	**2,196**	**2,216**	**2,166**
Hazardous gas transmission	217	225	237	243	239	237	232	222	235	275	292
Natural gas transmission	975	971	957	889	885	844	816	900	925	913	945
Natural gas distribution	1,444	1,397	1,365	1,375	1,393	1,363	1,341	1,331	1,309	1,318	1,291

KEY: U = Data are unavailable.

NOTES: *Air carrier* groups are categorized based on their annual operating revenues as major, national, large regional, and medium regional. The thresholds were last adjusted July 1, 1999, and the threshold for major air carriers is currently $1 billion. The other air carrier category contains all national, large regional, and medium regional air carriers. *Interstate motor carrier* figures are for the fiscal year, October through September. The Federal Motor Carrier Safety Administration deletes motor carriers from the Motor Carrier Management Information System (MCMIS) when they receive an official notice of a change in status. This most often occurs when a safety audit or compliance review is attempted. As a result, inactive carriers may be included in the MCMIS. There is some overlap among the operators for the pipeline modes so the total number of pipeline operators is lower than the sum for the three pipeline modes.

SOURCE: Various sources, as cited in U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *National Transportation Statistics 2007*, table 1-2, available at http://www.bts.gov/ as of April 2007.

TABLE A-3 Number of U.S. Airports: 1995–2006

	Airports, total	Public use, total	Runways (percent)		Private use, total	Runways (percent)		Certificated, total	Civil	Military
			Lighted	Paved		Lighted	Paved			
1995	18,224	5,415	74.3	73.3	12,809	6.4	33.0	667	572	95
1996	18,292	5,389	74.5	73.7	12,903	6.4	32.9	671	577	94
1997	18,345	5,357	74.6	74.0	12,988	6.4	33.0	660	566	94
1998	18,770	5,352	74.8	74.2	13,418	6.3	33.2	660	566	94
1999	19,098	5,324	76.1	74.2	13,774	6.7	31.8	655	565	90
2000	19,281	5,317	75.9	74.3	13,964	7.2	32.0	651	563	88
2001	19,356	5,294	76.2	74.6	14,062	8.0	32.4	635	560	75
2002	19,572	5,286	76.1	74.5	14,286	8.3	32.4	633	558	75
2003	19,581	5,286	76.2	74.5	14,295	8.6	32.7	628	555	73
2004	19,820	5,288	76.3	74.5	14,532	9.0	32.8	599	542	57
2005	19,854	5,270	76.7	74.8	14,584	9.2	33.1	575	U	U
2006	19,983	5,233	77.1	75.2	14,757	9.5	33.2	604	U	U

KEY: U = Data are unavailable.

NOTES: Includes civil and joint-use civil-military airports, heliports, STOL (short takeoff and landing) ports, and seaplane bases in the United States and its territories. Publicly owned facilities are open for public use with no prior authorization or permission. *Certificated* airports serve air-carrier operations with aircraft seating more than 9 passengers.

SOURCE: U.S. Department of Transportation, Federal Aviation Administration, *Administrator's Fact Book* (various editions), available at http://www.faa.gov/ as of April 2007.

TABLE A-4 Number of Stations Served by Amtrak and Rail Transit: FY 1995–2006

Fiscal years	Amtrak	Rail transit
1995	530	2,382
1996	542	2,325
1997	516	2,391
1998	508	2,524
1999	510	2,567
2000	515	2,595
2001	512	2,621
2002	515	2,784
2003	526	2,797
2004	526	2,909
2005	527	2,936
2006	505	U

KEY: U = Data are unavailable.

NOTES: Rail transit is the sum of commuter rail, heavy rail, and light rail. In several large urban areas, Amtrak and commuter rail stations are shared. Starting in 2001, stations serving the Alaska Railroad are included in the rail transit total. Rail transit data for 2002 and later years include service both directly operated and purchased. Prior to 2002, data only include directly operated service.

SOURCES: Amtrak: 1995-2002—Amtrak, Amtrak Annual Report, Statistical Appendix (Washington, DC: annual issues). **2003-2004—**Ibid, State Fact Sheets, available at http://www.amtrak.com/ as of Nov. 11, 2005. **2005—2006:** Ibid, State Fact Sheets, available at http://www.amtrak.com/ as of June 2007. **Rail transit**: U.S. Department of Transportation, Federal Transit Administration, *National Transit Database 2005* (Washington, DC: 2006), table 21 and similar tables in earlier editions.

TABLE A-5 U.S. Waterway Facilities: 2000–2005

	Commercial facilities	Great lakes	Inland	Ocean	Locks
2000	9,307	763	2,376	6,171	230
2001	9,309	754	2,367	6,188	230
2002	9,188	754	2,367	6,067	230
2003	9,164	754	2,361	6,049	230
2004	9,172	754	2,361	6,057	212
2005	9,399	754	2,320	6,059	212

SOURCE: U.S. Army Corps of Engineers, The U.S. Waterway System—Transportation Facts (Alexandria, VA: annual releases), Geographic Distribution of U.S. Waterway Facilities.

TABLE A-6 Number of U.S. Aircraft, Vehicles, and Other Conveyances: 1995–2005

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Air											
Air carrier	7,411	7,478	7,616	8,111	8,228	8,055	8,497	8,194	8,176	8,186	8,225
General aviation (active fleet)	188,089	191,129	192,414	204,710	219,464	217,533	211,535	211,345	209,788	219,426	224,352
Highway, total (registered vehicles)	**205,427,212**	**210,441,249**	**211,580,033**	**215,496,003**	**220,461,056**	**225,821,241**	**235,331,382**	**234,624,135**	**236,760,033**	**243,010,549**	**247,421,120**
Passenger car	128,386,775	129,728,341	129,748,704	131,838,538	132,432,044	133,621,420	137,633,467	135,920,677	135,669,897	136,430,651	136,568,083
Motorcycle	3,897,191	3,871,599	3,826,373	3,879,450	4,152,433	4,346,068	4,903,056	5,004,156	5,370,035	5,767,934	6,227,146
Other 2-axle 4-tire vehicle	65,738,322	69,133,913	70,224,082	71,330,205	75,356,376	79,084,979	84,187,636	85,011,305	87,186,663	91,845,327	95,336,839
Truck, single-unit 2-axle 6-tire or more	5,023,670	5,266,029	5,293,358	5,734,925	5,762,864	5,926,030	5,703,501	5,650,619	5,848,523	6,161,028	6,395,240
Truck, combination	1,695,751	1,746,586	1,789,968	1,997,345	2,028,562	2,096,619	2,154,174	2,276,661	1,908,365	2,010,335	2,086,759
Bus	685,503	694,781	697,548	715,540	728,777	746,125	749,548	760,717	776,550	795,274	807,053
Transit											
Motor bus	67,107	71,678	72,770	72,142	74,228	75,013	76,075	76,190	77,328	81,033	82,027
Light rail cars	1,048	1,140	1,229	1,220	1,297	1,577	1,366	1,445	1,482	1,622	1,645
Heavy rail cars	10,166	10,201	10,242	10,301	10,306	10,591	10,718	10,718	10,754	10,858	11,110
Trolley bus	695	871	859	880	859	951	600	600	672	597	615
Commuter rail cars and locomotives	5,164	4,665	4,943	4,963	4,883	5,073	5,124	5,300	5,959	6,228	6,392
Demand response	29,352	30,804	32,509	29,646	31,884	33,080	34,661	34,699	35,954	37,078	41,958
Other	2,809	3,003	3,808	4,703	5,059	5,208	5,727	6,330	6,990	6,566	7,251
Rail											
Class I, freight cars	583,486	570,865	568,493	575,604	579,140	560,154	499,860	477,751	467,063	473,773	474,839
Class I, locomotive	18,812	19,269	19,684	20,261	20,256	20,028	19,745	20,506	20,774	22,015	22,779
Nonclass I freight cars	84,724	87,364	116,108	121,659	126,762	132,448	125,470	130,590	124,580	120,169	120,195
Car companies and shippers freight cars	550,717	582,344	585,818	618,404	662,934	688,194	688,806	691,329	687,337	693,978	717,211
Amtrak, passenger train car	1,722	1,730	1,728	1,962	1,992	1,894	2,084	2,896	1,623	1,211	1,186
Amtrak, locomotive	313	299	332	345	329	378	401	372	442	276	258
Water											
Nonself-propelled vessels	31,360	32,811	33,011	33,509	33,387	33,152	33,042	32,381	31,335	31,296	32,052
Self-propelled vessels	8,281	8,293	8,408	8,523	8,379	8,202	8,546	8,621	8,648	8,994	8,976
Oceangoing steam and motor ships (1,000 gross tons and over)	512	509	495	473	470	461	454	443	416	412	357
Recreational boats	11,734,710	11,877,938	12,312,982	12,565,930	12,738,271	12,782,143	12,876,346	12,854,054	12,794,616	12,781,476	12,942,414

KEY: U = Data are unavailable.

NOTES: *Air carrier* are those aircraft carrying passengers or cargo for hire under 14 CFR 121 and 14 CFR 135. The number of aircraft is the monthly average of the number of aircraft reported in use for the last three months of the year. *General aviation* data includes air taxi aircraft. *Other* transit includes aerial tramway, automated guideway transit, cablecar, ferry boat, inclined plane, monorail, and vanpool. *Nonself-propelled vessels* include dry-cargo barges, tank barges, and railroad-car floats.

Self-propelled vessels include dry-cargo and/or passenger, offshore supply vessels, railroad-car ferries, tankers, and towboats. *Recreational boats* include those that are required to be numbered in accordance with Chapter 123 of Title 46 U.S.C.

SOURCE: Various sources, as cited in U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *National Transportation Statistics 2007*, table 1-11, available at http://www.bts.gov/ as of July 2007.

TABLE A-7 Transportation Capital Stock by Mode: 1995–2005
Current dollars (billions)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Public highways and streets	1,074.1	1,127.4	1,211.1	1,254.9	1,337.2	1,437.3	1,500.4	1,568.5	1,595.5	1,834.1	2,077.4
Consumer motor vehicles	842.2	875.1	899.4	950.4	1,020.8	1,092.2	1,156.0	1,213.5	1,256.1	1,326.9	1,375.8
In-house transportation	391.2	428.2	459.2	496.1	547.8	587.6	603.6	612.3	638.2	659.5	683.2
Other publicly owned transportation	U	U	215.0	229.5	245.2	266.5	280.4	305.7	325.4	379.3	429.0
Railroad transportation	246.8	254.3	254.8	260.1	262.7	266.9	272.3	273.4	279.6	284.2	292.0
Air transportation	118.0	128.6	140.8	157.6	173.4	195.7	215.6	223.5	229.6	238.2	245.2
Other privately owned transportation	97.1	97.8	98.4	100.5	102.2	105.2	106.2	103.9	102.5	104.4	105.8
Pipeline transportation	57.8	60.1	62.9	65.0	69.2	73.7	76.7	81.8	83.4	94.4	100.7
Commercial truck transportation	52.2	54.7	59.9	63.6	66.4	68.1	66.4	65.8	65.5	68.6	73.2
Water transportation	32.3	33.6	35.7	37.1	38.3	39.4	40.0	42.3	44.5	48.9	53.6
Private ground passenger transportation	25.1	26.7	27.4	29.0	31.7	33.9	35.1	34.8	35.8	37.2	38.3
Total	**2,936.8**	**3,086.5**	**3,464.6**	**3,643.8**	**3,894.9**	**4,166.5**	**4,352.7**	**4,525.5**	**4,656.1**	**5,075.7**	**5,474.2**

KEY: U = Data are unavailable.

NOTES: Capital stock is a commonly used economic measure of the capacity of the transportation system. It combines the capabilities of modes, components, and owners into a single measure of capacity in dollar value. This measure takes into account both the quantity of each component (through initial investment) and its condition (through depreciation and retirements). Data include only privately owned capital stock unless otherwise noted. Capital stock data are reported after deducting depreciation. *Consumer motor vehicles* are considered consumer durable goods. *In-house transportation* includes transportation services provided within a firm whose main business is not transportation. For example, grocery companies often use their own truck fleets to move goods from their warehouses to their retail outlets. *Other publicly owned* transportation includes publicly owned airway, waterway, and transit structures but does not include associated equipment. *Other privately owned transportation* includes sightseeing, couriers and messengers, and transportation support activities, such as freight transportation brokers. Data may not add to total because of independent rounding.

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, *Fixed Assets and Consumer Durable Goods in the United States*, tables 3.1ES, 7.1B, and 8.1, available at http://www.bea.gov/ as of June 2007.

TABLE A-8 Rural and Urban Roads in Poor or Mediocre Condition by Functional Class: 1995–2005
Percentage of mileage in roadway class

	Rural				Urban				
	Interstates	Other principal arterials	Minor arterials	Collectors	Interstates	Other freeways and expressways	Other principal arterials	Minor arterials	Collectors
1995	27.0	12.0	12.7	18.0	37.2	14.6	27.1	20.3	26.5
1996	23.0	7.3	10.5	17.0	36.9	12.1	25.9	19.9	26.3
1997	22.7	6.5	9.0	20.1	36.0	12.0	26.7	20.2	26.6
1998	20.6	6.1	7.9	21.8	34.9	12.0	31.3	17.9	20.9
1999	16.4	4.5	6.9	31.2	30.4	10.6	30.6	36.8	39.6
2000	14.3	4.0	7.0	21.2	28.2	10.9	30.0	26.0	32.1
2001	13.6	3.7	6.9	20.4	28.2	10.2	29.3	26.4	31.9
2002	12.3	3.4	5.8	19.5	28.2	10.3	29.7	26.6	32.8
2003	11.4	3.5	6.1	19.1	26.8	10.7	29.1	27.9	34.0
2004	12.4	4.2	6.5	18.8	24.9	9.7	27.8	28.8	34.8
2005	11.2	3.6	5.4	18.5	22.8	7.8	27.4	27.5	33.5

NOTES: Data are for the 50 states and the District of Columbia. The terms *poor* and *mediocre* as used here are Federal Highway Administration (FHWA) pavement condition criteria term categories for quantitative International Roughness Index and Present Serviceability Ratings. For further information, see U.S. Department of Transportation, FHWA, *Status of the Nation's Highways, Bridges, and Transit: 2002 Conditions and Performance Report*, Exhibit 3-3, available at http://www.fhwa.dot.gov/policy as of August 2005.

SOURCE: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics* (Washington, DC: Annual issues), table HM-63.

Table A-9 Households Without a Vehicle: 2006

	All households	65 or older
Number of households with out a vehicle (thousands)	9,804	3,381
Percentage of all households	8.8%	14.9%

SOURCE: U.S. Department of Commerce, U.S. Census Bureau, American Community Survey, (Washington, DC: Annual issues), available at http://www.census.gov/acs/www/index.html as of September 2007.

TABLE A-10 U.S. Airport Runway Pavement Conditions: 1999–2006

	NPIAS airports (number)	Condition (percent)			Commercial service airports (number)	Condition (percent)		
		Good	Fair	Poor		Good	Fair	Poor
1999	3,344	72	23	5	547	78	20	2
2000	3,361	73	22	5	546	79	19	2
2001	3,364	73	22	5	546	79	19	2
2002	3,358	71	24	5	536	79	19	2
2003	3,346	75	21	4	510	80	18	2
2004	3,356	75	21	4	513	82	16	2
2005	3,357	75	21	4	517	79	19	2
2006	3,365	77	19	4	517	79	18	3

KEY: NPIAS = National Plan Integrated Airport Systems.

NOTES: The U.S. Department of Transportation, Federal Aviation Administration's (FAA's) *National Plan of Integrated Airport Systems* is composed of all commercial service airports, all reliever airports, and selected general aviation airports. It does not include over 1,000 publicly owned public-use landing areas, privately owned public-use airports, and other civil landing areas not open to the general public. NPIAS airports account for almost all enplanements. In 2005, there were 16,500 non-NPIAS airports. *Commercial service airports* are defined as public airports receiving scheduled passenger service, and having at least 2,500 enplaned passengers per year.

SOURCES: Various sources, as cited in U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, National Transportation Statistics 2007, table 1-24, available at http://www.bts.gov/ as of September 2007.

Table A-11 U.S. Ferry Transportation: 2006

State/Territory	Operators	Vessels
Alaska	6	22
Alabama	2	2
Arkansas	1	4
Arizona	1	10
California	18	62
Connecticut	5	22
Delaware	1	1
Florida	11	23
Georgia	3	8
Hawaii	1	3
Illinois	5	19
Kentucky	8	16
Louisiana	8	24
Massachusetts	15	61
Maryland	7	6
Maine	10	24
Michigan	16	46
Minnesota	1	2
Missouri	4	6
Northern Mariana Islands, Tinian	1	2
Mississippi	2	4
Montana	2	3
New Brunswick, Canada	1	*
North Carolina	7	33
New Hampshire	1	1
New Jersey	4	44
New York	15	69
Ohio	5	9
Ontario, Canada	2	4
Oregon	2	3
Pennsylvania	2	3
Prince Edward Island (Canada)	1	1
Puerto Rico	2	5
Rhode Island	3	3
South Carolina	5	10
Tennessee	1	2
Texas	5	15
Utah	1	2
Virginia	8	12
U.S. Virgin Islands	9	21
Vermont	2	13
Virgin Gorda (British Virgin Islands)	1	2
Washington	17	51
Wisconsin	7	15
West Virginia	1	2
Total	**230**	**690**

* Vessels carry freight only.

NOTES: 2006 Survey collected data for calendar year 2005. The vessel data includes carrying passengers and freight or passengers only.

SOURCE: U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *Ferry - National Census of Ferry Operators*, available at http://www.bts.gov/.

TABLE A-12 Average Capacity of Vessels Calling at U.S. Ports by Type: 1998–2005
Deadweight tons (DWT) per call

	Combination	Tanker	Dry bulk	Container	Roll-on, roll-off vessels	Gas carriers	General cargo	All vessels
1998	82,895	68,670	41,740	36,243	19,898	29,954	21,409	45,289
1999	88,433	67,723	41,833	36,586	18,662	31,402	22,331	45,117
2000	89,462	67,551	41,694	37,784	18,456	31,397	22,857	45,646
2001	87,873	69,313	42,142	39,656	20,445	33,438	23,416	47,034
2002	84,459	69,412	42,876	42,158	20,376	32,099	23,496	47,625
2003	84,016	72,387	42,685	43,168	20,270	37,818	23,655	49,557
2004	84,699	70,690	42,972	43,610	20,190	39,145	24,542	49,125
2005	87,151	72,056	43,276	44,593	19,838	41,411	25,101	50,083

NOTES: Calls are by oceangoing vessels of 10,000 dwt or greater at U.S. ports, excluding Great Lakes ports. 1998 is the first year for which data are available. Beginning in 2002, chemical tanker data are no longer reported separately and are, instead, included in tanker data; historical data were adjusted for consistency. *Combination* includes ore/bulk/oil carriers, and bulk/oil carriers. *Gas carriers* includes liquefied natural gas carriers (LNG), liquefied petroleum gas (LPG) carriers, and LNG/LPG carriers. *General cargo* includes general cargo carriers, partial containerships, refrigerated ships, barge carriers, and livestock carriers. *Roll-on, roll-off* vessels are especially designed to carry wheeled container trailers or other wheeled cargo and use the roll-on, roll-off method for loading and unloading.

SOURCE: U.S. Department of Transportation, Maritime Administration, Office of Statistical and Economic Analysis, *Vessel Calls at U.S. Ports (annual releases)*, table S-1, available at http://www.marad.dot.gov/marad_statistics/ as of June 2006.

TABLE A-13 Average Loaded U.S. Railcar Weight: 1995–2005

	Tons per carload
1995	65.3
1996	66.6
1997	63.4
1998	64.1
1999	63.4
2000	62.6
2001	64.0
2002	63.3
2003	62.3
2004	61.3
2005	61.0

NOTE: Average railcar weight is total tons transported divided by total carloads transported.

SOURCE: Association of American *Railroads, Railroad Facts 2006* (Washington, DC: 2006), pp. 37.

TABLE A-14 Median Age of Automobiles and Trucks in Operation in the United States: 1995–2006
Years

	Cars	Light trucks	All trucks
1995	7.7	7.4	7.6
1996	7.9	7.5	7.7
1997	8.1	7.3	7.8
1998	8.3	7.1	7.6
1999	8.3	6.9	7.2
2000	8.3	6.7	6.9
2001	8.3	6.1	6.8
2002	8.4	6.6	6.8
2003	8.6	6.5	6.7
2004	8.9	6.4	6.6
2005	9.0	6.6	6.8
2006	9.2	6.8	6.9

NOTE: *Light Trucks* are 14,000 lb. and under (gross vehicle weight classes 1-3).

SOURCE: The R.L. Polk Co., available at http://www.polk.com/ as of February 2007.

TABLE A-15 Average Age of Urban Transit Vehicles: 1995–2005
Years

	Heavy-rail passenger cars	Commuter-rail passenger coaches	Light-rail vehicles	Full-size transit buses	Vans	Ferryboats
1995	19.3	21.4	16.8	8.6	3.1	23.4
1996	20.2	24.1	16.0	8.7	3.1	25.3
1997	21.1	21.6	15.9	8.5	3.0	25.4
1998	22.0	19.4	15.7	8.5	2.9	25.8
1999	22.5	17.5	15.7	8.4	3.1	25.1
2000	22.9	16.9	16.1	8.1	3.1	25.6
2001	21.7	18.1	16.4	7.8	3.3	24.7
2002	20.0	20.1	16.3	7.5	4.9	26.8
2003	19.0	20.5	15.6	7.3	3.4	27.1
2004	19.8	17.9	15.5	7.2	3.4	25.6
2005	20.8	18.6	14.5	7.6	3.4	25.6

NOTES: *Full-size transit buses* have more than 35 seats. Data are for directly operated service vehicles only.

SOURCES: All data except full-size transit buses—U.S. Department of Transportation, Federal Transit Administration, *National Transit Database 2005* (Washington, DC: 2006). **Full-size transit buses—**U.S. Department of Transportation, Federal Transit Administration, *National Transit Summaries and Trends 2005* (Washington, DC: 2007).

TABLE A-16 Average Age of Amtrak Locomotive and Train Car Fleets: FY 1995–2006

Fiscal years	Locomotives	Passenger and other train cars
1995	13.9	21.8
1996	14.4	20.7
1997	12.0	19.8
1998	12.6	21.1
1999	12.8	22.2
2000	11.2	19.4
2001	13.9	18.5
2002	13.7	20.4
2003	14.8	21.4
2004	15.7	22.4
2005	16.4	23.3
2006	17.5	22.5

SOURCES: 1995-2000—U.S. Department of Transportation (USDOT), Research and Innovative Technology Administration, Bureau of Transportation Statistics (BTS), *National Transportation Statistics 2003*, table 1-30, available at http://www.bts.gov/ as of March 2004. **2001—**USDOT, BTS, calculation based on data provided by Amtrak, personal communication, March 2004. **2002-2006—**USDOT, BTS, calculations based on data provided by Amtrak, personal communication, June 2007.

TABLE A-17 U.S. Flag Vessels by Type and Age: 2005
Number

	Age group (years)					
Vessel types	< 6	6–10	11–15	16–20	21–25	> 25
Dry cargo	115	106	74	137	116	419
Tanker	11	13	4	3	30	39
Towboat	336	321	157	155	907	3,406
Passenger	62	96	114	150	98	321
Offshore support/crewboats	244	26,247	107	59	464	629
Dry barge	4,140	5,611	3,120	1,507	5,174	8,113
Tank/liquid barge	743	512	333	43	535	1,985

NOTES: Data includes vessels available for operation. Age is based on the year vessels were built or rebuilt. *Passenger* includes passenger excursion/sightseeing, combination passenger and dry-cargo vessels, and ferries.

SOURCE: U.S. Army Corps of Engineers, *Waterborne Transportation Lines of the United States, Volume 1, National Summaries* (New Orleans, LA: annual issues).

TABLE A-18 Average Age of U.S. Commercial Aircraft: 1995–2005
Years, unless noted

	All commercial aircraft	Major airlines aircraft	Major airlines share of commercial aircraft (percent)
1995	12.4	11.3	76.1%
1996	13.2	12.3	72.5%
1997	13.5	12.4	78.7%
1998	13.6	12.3	77.8%
1999	12.9	11.8	78.5%
2000	12.8	11.8	78.8%
2001	12.3	11.6	82.9%
2002	11.7	11.7	77.8%
2003	11.0	11.7	72.9%
2004	10.8	11.1	74.9%
2005	11.3	11.3	81.5%

NOTES: Average aircraft age is based on the year that an aircraft was delivered to the original owner from the manufacturer and does not reflect the age of the engines or other parts that may have been replaced more recently. *Commercial aircraft* are aircraft of air carriers providing scheduled or nonscheduled passenger or freight service, including commuter and air taxi on-demand services. *Major airlines* includes only commercial airlines with operating revenues greater than $1 billion annually. In 2005 they were: Abx Air, AirTran Airways, Alaska Airlines, American Airlines, America West Airlines, American Eagle Airlines, ATA Airlines, Atlantic Southeast Airlines, Comair, Continental Air Lines, Delta Air Lines, Expressjet Airlines, Federal Express, JetBlue Airways, Mesa Airlines, Northwest Airlines, Skywest Airlines, Southwest Airlines, United Air Lines, United Parcel Service, and US Airways.

SOURCE: U.S. Department of Transportation (USDOT), Research and Innovative Technology Administration (RITA), Bureau of Transportation Statistics (BTS), calculations using data from USDOT, RITA, BTS, Form 41, Schedule B-43, 1995–2006.

TABLE A-19 Condition of U.S. Highway Bridges: 1990-2007

Number of Bridges

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total all bridges	**572,205**	**574,036**	**572,197**	**573,716**	**576,460**	**581,135**	**581,863**	**582,751**	**582,976**	**585,542**	**589,674**	**589,685**	**590,887**	**591,940**	**593,813**	**595,363**	**597,340**	**599,766**
Urban	108,770	112,363	115,312	117,488	121,141	122,537	124,950	127,633	128,312	130,339	133,384	133,401	135,339	135,415	137,598	142,408	146,041	151,171
Rural	463,435	461,673	456,885	456,228	455,319	458,598	456,913	455,118	454,664	455,203	456,290	456,284	455,548	456,525	456,215	452,955	451,299	448,595
Structurally deficient bridges, total	**137,865**	**134,534**	**118,698**	**111,980**	**107,683**	**104,317**	**101,518**	**98,475**	**93,072**	**88,150**	**86,678**	**83,595**	**81,261**	**79,775**	**77,752**	**75,923**	**73,784**	**72,520**
Urban	16,847	17,032	16,323	15,932	15,692	15,205	15,094	14,846	14,073	12,967	13,079	12,705	12,503	12,316	12,175	12,600	12,585	12,951
Rural	121,018	117,502	102,375	96,048	91,991	89,112	86,424	83,629	78,999	75,183	73,599	70,890	68,758	67,459	65,577	63,323	61,199	59,569
Functionally obsolete bridges, total	**100,355**	**97,593**	**80,393**	**80,000**	**79,832**	**80,950**	**81,208**	**77,410**	**79,500**	**81,900**	**81,510**	**81,439**	**81,537**	**80,990**	**80,567**	**80,412**	**80,317**	**79,804**
Urban	30,266	30,842	26,243	26,511	27,024	27,487	28,087	26,865	27,588	29,065	29,398	29,383	29,675	29,886	30,298	31,391	32,292	33,139
Rural	70,089	66,751	54,150	53,489	52,808	53,463	53,121	50,545	51,912	52,835	52,112	52,056	51,862	51,104	50,269	49,021	48,025	46,665

KEY: U = Data are not available

NOTES: Explanation Data for 1990, 1992, 1997-99, and 2001 are as of December of those years; data for 1991 and 1994-96 are as of June of those years; data for 1993 are as of September of that year; data for 2000 are as of August of that year; data for 2002-06 are as of July of those years. Data for 2007 is as of Decembers 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; the following is a link to Chapter 3 of the report: http://www.fhwa.dot.gov/policy/2006cpr/pdfs/chap3.pdf. U.S. totals include the 50 states, the District of Columbia, and Puerto Rico.
Table includes: 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, 1992, 1997-99, and 2001 are as of December of those years; data for 1991 and 1994-96 are as of June of those years; data for 1993 are as of September of that year; data for 2000 are as of August of that year; data for 2002-06 are as of July of those years. Data for 2007 is as of December.

SOURCES: 1990-2000: U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics; based on data from Federal Highway Administration, Office of Bridge Technology, National Bridge Inventory Database, personal communication, Aug. 14, 2001.
2001-06: U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics; based on data from Federal Highway Administration, Office of Bridge Technology, National Bridge Inventory Database, Count of Bridges by Highway System, Internet site http://www.fhwa.dot.gov/bridge/britab.htm as of Mar. 30, 2007. 2007: U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics; based on data from Federal Highway Administration, Office of Bridge Technology, National Bridge Inventory Database, special tabulation. Data as of Feb. 17, 2008.

TABLE A-20 How People Get to Work: 2006

	Percentage of workers	Number of workers (thousands)
Drives self	76.0	105,046
Carpool	10.7	14,852
Mass transportation	4.8	6,684
Works at home	3.9	5,411
Walks only	2.9	3,952
Taxicab, motorcycle, and other means	1.2	1,638
Bicycle	0.5	683
Total	**100.0**	**138,266**

SOURCE: U.S. Department of Commerce, U.S. Census Bureau, American Community Survey (Washington, DC: Annual issues), available at http://www.census.gov/acs/www/index.html as of September 2007.

TABLE A-21 Departure Time to Work

	2003		2006	
	Number of households (thousands)	Percentage of households	Number of households (thousands)	Percentage of households
5:00 a.m. to 5:29 a.m.	4,164	3.3	4,790	3.6
5:30 a.m. to 5:59 a.m.	5,992	4.8	6,555	5.0
6:00 a.m. to 6:29 a.m.	10,980	8.8	12,099	9.2
6:30 a.m. to 6:59 a.m.	13,484	10.8	14,020	10.6
7:00 a.m. to 7:29 a.m.	18,806	15.1	19,687	14.9
7:30 a.m. to 7:59 a.m.	17,577	14.1	17,651	13.4
8:00 a.m. to 8:29 a.m.	13,658	11.0	14,313	10.8
8:30 a.m. to 8:59 a.m.	6,830	5.5	7,206	5.5
9:00 a.m. to 9:59 a.m.	7,284	5.8	7,992	6.1
10:00 a.m. to 10:59 a.m.	3,097	2.5	3,535	2.7
11:00 a.m. to 11:59 a.m.	1,502	1.2	1,617	1.2
12:00 p.m. to 3:59 p.m.	8,551	6.9	9,197	7.0
4:00 p.m. to 11:59 p.m.	8,233	6.6	8,854	6.7
12:00 a.m. to 4:59 a.m.	4,466	3.6	4,490	3.4
Total	**124,624**	**100**	**132,008**	**100**

SOURCE: U.S. Department of Commerce, U.S. Census Bureau, *American Community Survey* (Washington, DC: Annual issues), available at http://www.census.gov/acs/www/index.html as of September 2007.

TABLE B-1 Transportation Fatalities by Mode: 1995-2006

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Air	**964**	**1,093**	**724**	**671**	**681**	**764**	**1,166**	**616**	**699**	**637**	**603**	**766**
U.S. air carrier	168	380	8	1	12	92	531	0	22	14	22	50
Commuter carrier	9	14	46	0	12	5	13	0	2	0	0	2
On-demand air taxi	52	63	39	45	38	71	60	35	42	64	18	16
General aviation	735	636	631	625	619	596	562	581	633	559	563	698
Highway	**41,817**	**42,065**	**42,013**	**41,501**	**41,717**	**41,945**	**42,196**	**43,005**	**42,884**	**42,836**	**43,510**	**42,642**
Passenger car occupants	22,423	22,505	22,199	21,194	20,862	20,699	20,320	20,569	19,725	19,192	18,512	17,800
Motorcyclists	2,227	2,161	2,116	2,294	2,483	2,897	3,197	3,270	3,714	4,028	4,576	4,810
Truck occupants, light	9,568	9,932	10,249	10,705	11,265	11,526	11,723	12,274	12,546	12,674	13,037	12,721
Truck occupants, large	648	621	723	742	759	754	708	689	726	766	804	805
Bus occupants	33	21	18	38	59	22	34	45	41	42	58	27
Pedestrians	5,584	5,449	5,321	5,228	4,939	4,763	4,901	4,851	4,774	4,675	4,892	4,784
Pedalcyclists	833	765	814	760	754	693	732	665	629	727	786	773
Other	501	609	573	540	596	591	581	642	729	732	845	922
Pipeline	**21**	**53**	**10**	**21**	**22**	**38**	**7**	**12**	**12**	**23**	**16**	**19**
Hazardous liquid pipeline	3	5	0	2	4	1	0	1	0	5	2	0
Gas pipeline	18	48	10	19	18	37	7	11	12	18	14	19
Railroad	**1,146**	**1,039**	**1,063**	**1,008**	**932**	**937**	**971**	**951**	**868**	**895**	**887**	**909**
Highway-rail grade crossing	579	488	461	431	402	425	421	357	334	372	358	369
Railroad*	567	551	602	577	530	512	550	594	534	523	529	540
Transit	**274**	**264**	**275**	**286**	**299**	**295**	**267**	**280**	**234**	**248**	**236**	**213**
Highway-rail grade crossing	17	7	12	26	21	20	13	24	21	29	23	21
Transit	257	257	263	260	278	275	254	256	213	219	213	192
Waterborne	**1,016**	**906**	**989**	**1,033**	**928**	**888**	**828**	**886**	**830**	**769**	**777**	**797**
Commercial vessel-related	53	55	48	69	58	53	53	62	53	36	45	48
Not related to vessel	134	142	120	149	136	134	94	74	74	57	35	39
Recreational boating	829	709	821	815	734	701	681	750	703	676	697	710

*** Mainly trespassor related.**

NOTES: The actual number of deaths for passengers on trains from 1996-2006 was: 1996 (12), 1997 (6), 1998 (4), 1999 (14), 2000 (4), 2001 (3), 2002 (7), 2003 (3), 2004 (3), 2005 (16), 2006 (2).

Caution is needed in comparing fatalities across modes because of different definitions. For example, rail and transit fatalities include incident-related (not just moving-vehicle related) fatalities, such as fatalities from falls in transit stations or railroad employee fatalities from a fire in a workshed, while fatalities at airports not caused by moving aircraft or fatalities from accidents in automobile repair shops are not counted.

The Federal Railroad Administration defines a grade crossing as a location where a public highway, road, street, or private roadway, including associated sidewalks and pathways, crosses one or more railroad tracks at grade. The Federal Transit Administration defines two types of grade crossings: (1) At grade, mixed, and cross traffic crossings, meaning railway right-of-way over which other traffic moving in the same direction or other cross directions may pass. This includes city street right-of-way; (2) At grade with cross traffic crossings, meaning railway right-of-way over which no other traffic may pass, except to cross at grade-level crossings. This can include median strip rights-of-way with grade level crossings at intersecting streets.

SOURCES: Various sources, as cited in U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *National Transportation Statistics*, table 2-1 and table 2-35, available at http://www.bts.gov/ as of September 2007.

TABLE B-2 Distribution of Transportation Fatalities: 2006

Category	Number	Percent
Passenger car occupants	17,800	39.6
Light-truck occupants	12,721	28.3
Motorcycle riders	4,810	10.7
Pedestrians struck by motor vehicles	4,784	10.7
Large-truck occupants	805	1.79
Pedalcyclists struck by motor vehicles	773	1.72
Other and unknown motor vehicle occupants	739	1.65
Recreational boating	710	1.58
General aviation[a]	698	1.55
Railroad trespassers (excl. grade crossings)[b]	520	1.16
Other nonoccupants struck by motor vehicles[c]	183	0.41
Grade crossings, not involving motor vehicles[b,d]	64	0.14
Air carriers	50	0.11
Waterborne transportation (vessel-related)	48	0.11
Waterborne transportation (nonvessel-related)	39	0.09
Private grade crossings, with motor vehicles[b]	38	0.08
Heavy-rail transit (e.g., rail subway)	32	0.07
Bus occupants (school, intercity, transit)	27	0.06
Rail employees on duty and contractors[b]	19	0.04
Air taxi	16	0.04
Gas distribution pipelines	16	0.04
Light-rail transit	13	0.03
Gas transmission pipelines	3	0.01
Passengers on railroad trains	2	0.004
Commuter air	2	0.004
Hazardous liquid pipelines	0	0.000
Total, all modes[e]	**44,912**	**100**
Other counts, redundant with above		
Crashes involving large trucks[f]	4,995	
Public grade crossings, with motor vehicles[b]	266	

[a] Includes 154 persons aboard a Brazilian air carrier killed in a crash with a U.S. registered corporate jet over Brazil. [b] Includes fatalities outside trains. [c] Includes all nonoccupant fatalities in motor vehicle (MV) crashes, except pedalcyclists and pedestrians. [d] Public grade crossing fatalities involving motor vehicles are included in MV counts. [e] Unless otherwise noted, includes fatalities outside vehicles. [f] Includes large truck occupants, other vehicle occupants, and nonoccupants.

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

TABLE B-3 Transportation-Related Occupational Fatalities: 1995–2006

	All occupational fatalities	Transportation-related fatalities, total	Highway	Nonhighway	Aircraft	Pedestrian struck by vehicle	Water vehicle	Railway
1995	6,275	2,587	1,346	387	283	388	87	82
1996	6,202	2,601	1,346	374	324	353	119	74
1997	6,238	2,605	1,393	377	261	367	109	93
1998	6,055	2,645	1,442	388	224	413	112	60
1999	6,054	2,618	1,496	352	228	377	102	56
2000	5,920	2,573	1,365	399	280	370	84	71
2001	5,915	2,524	1,409	326	247	383	90	62
2002	5,534	2,385	1,373	323	194	356	71	64
2003	5,575	2,364	1,353	347	211	337	69	43
2004	5,764	2,490	1,398	338	231	378	91	50
2005	5,734	2,493	1,437	340	149	391	88	83
2006	5,703	2,413	1,329	342	215	372	89	65

NOTES: Numbers may not add to totals because transportation categories may include subcategories not shown separately. *Highway* includes collisions between vehicles/mobile equipment moving in the same or opposite directions, such as in an intersection; between moving and standing vehicles/mobile equipment at the side of a roadway; or a vehicle striking a stationary object. Also includes noncollisions, e.g., jack-knifed or overturned vehicle/mobile equipment–no collision; ran off highway–no collision; struck by shifting load; sudden start or stop; not elsewhere classified. *Nonhighway* refers to farms and industrial premises. Includes collisions between vehicles/mobile equipment; vehicles/mobile equipment striking a stationary object. Also includes noncollisions such as a fall from a moving vehicle/mobile equipment, fall from and struck by vehicle/mobile equipment, overturned vehicle/mobile equipment, and loss of control of vehicle/mobile equipment. *Pedestrian struck by vehicle* includes worker struck by vehicle/mobile equipment in roadway, on side of road, in a parking lot, or nonroad area.

Water vehicle includes collisions, explosions, fires, fall from or on ship/boat, and sinking/capsized water vehicles involved in transportation. Does not include fishing boats. *Railway* includes collisions between railway vehicles, railway vehicle and other vehicle, railway vehicle and other object, and derailment.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries, Internet site http://www.bls.gov/ as of August 2007.

TABLE B-4 Injured Persons by Transportation Mode: 1995–2006

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Air	**452**	**467**	**417**	**369**	**406**	**357**	**368**	**335**	**365**	**304**	**302**	**287**
U.S. air carrier	25	77	43	30	67	29	19	22	29	21	13	9
Commuter carrier	17	2	1	2	2	7	4	0	1	0	0	1
On-demand air taxi	14	22	23	10	15	12	24	16	12	17	20	16
General aviation	396	366	350	327	322	309	321	297	323	266	269	261
Highway	**3,465,000**	**3,483,000**	**3,348,000**	**3,192,000**	**3,236,000**	**3,189,000**	**3,033,000**	**2,926,000**	**2,889,000**	**2,788,000**	**2,699,000**	**2,575,000**
Passenger car occupants	2,469,000	2,458,000	2,341,000	2,201,000	2,138,000	2,052,000	1,927,000	1,805,000	1,756,000	1,643,000	1,573,000	1,475,000
Motorcyclists	57,000	55,000	53,000	49,000	50,000	58,000	60,000	65,000	67,000	76,000	87,000	88,000
Truck occupants, light	722,000	761,000	755,000	763,000	847,000	887,000	861,000	879,000	889,000	900,000	872,000	857,000
Truck occupants, large	30,000	33,000	31,000	29,000	33,000	31,000	29,000	26,000	27,000	27,000	27,000	23,000
Bus occupants	19,000	20,000	17,000	16,000	22,000	18,000	15,000	19,000	18,000	16,000	11,000	10,000
Pedestrians	86,000	82,000	77,000	69,000	85,000	78,000	78,000	71,000	70,000	68,000	64,000	61,000
Pedalcyclists	67,000	58,000	58,000	53,000	51,000	51,000	45,000	48,000	46,000	41,000	45,000	44,000
Other	14,000	15,000	17,000	12,000	10,000	15,000	17,000	13,000	15,000	17,000	18,000	18,000
Pipeline	**64**	**127**	**77**	**81**	**108**	**81**	**61**	**49**	**71**	**60**	**47**	**32**
Hazardous liquid pipeline	11	13	5	6	20	4	10	0	5	16	2	2
Gas pipeline	53	114	72	75	88	77	51	49	66	44	45	30
Railroad	**14,440**	**12,558**	**11,767**	**11,459**	**11,700**	**11,643**	**10,985**	**11,103**	**9,245**	**9,157**	**9,402**	**8,189**
Highway-rail grade crossing	1,894	1,610	1,540	1,303	1,396	1,219	1,157	999	1,035	1,091	1,020	1,030
Railroad	12,546	10,948	10,227	10,156	10,304	10,424	9,828	10,104	8,210	8,066	8,406	7,168
Transit	57,196	55,288	56,132	55,990	55,325	56,697	53,945	19,260	18,235	18,982	18,131	18,327
Highway-rail grade crossing	195	184	126	58	159	123	74	108	117	153	194	172
Transit	57,001	55,104	56,006	55,932	55,166	56,574	53,871	19,152	18,118	18,829	17,937	18,155
Waterborne	**6,165**	**6,064**	**5,737**	**5,321**	**4,992**	**5,112**	**5,008**	**4,856**	**4,666**	**4,066**	**4,095**	**5,245**
Vessel-related	154	254	120	130	152	150	210	192	227	198	140	177
Not related to vessel casualties	1,870	1,368	1,062	579	525	607	524	602	551	505	504	594
Recreational boating	4,141	4,442	4,555	4,612	4,315	4,355	4,274	4,062	3,888	3,363	3,451	4,474

NOTES: *Air* injuries include all injuries classified as serious. *U.S. air carriers* includes all carriers who operate under 14 CFR 121, all scheduled and nonscheduled service. Since Mar. 20, 1997, 14 CFR 121 includes only aircraft with 10 or more seats formerly operated under 14 CFR 135. This change makes it difficult to compare pre-1997 data for 14 CFR 121 and 14 CFR 135 with more recent years' data. *Commuter carriers* include all scheduled service operating under 14 CFR 135. Since Mar. 20, 1997, 14 CFR 121 includes only aircraft with 10 or more seats formerly operated under 14 CFR 135. This change makes it difficult to compare pre-1997 data for 14 CFR 121 and 14 CFR 135 with more recent years' data. *On-demand air taxi* includes all nonscheduled service operating under 14 CFR 135. *General aviation* includes all operations other than those operating under 14 CFR 121 and 14 CFR 135.

(continued on next page)

TABLE B-4 Injured Persons by Transportation Mode: 1995–2006 *(continued)*

The motor vehicle injury data in this table come from the U.S. Department of Transportation, National Highway Traffic Safety Administration's General Estimates System (GES). The data from GES are obtained from a nationally representative probability sample selected from all police-reported crashes. The GES sample includes only crashes where a police accident report was completed and the crash resulted in property damage, injury, or death. The resulting figures do not take into account crashes that were not reported to the police or did not result in property damage.

Large trucks are defined as trucks over 10,000 pounds gross vehicle weight rating, including single-unit trucks and truck tractors. *Light trucks* are defined as trucks of 10,000 pounds gross vehicle weight rating or less, including pickups, vans, truck-based station wagons, and utility vehicles.

Other highway includes occupants of other unknown vehicle types and other nonmotorists.

Railroad includes Amtrak. Figures include those injuries resulting from train accidents, train incidents, and nontrain incidents. Injury figures also include occupational illness.

Injuries occurring at highway-rail crossings, listed under railroad, result from freight and passenger rail operations including commuter rail. Highway-rail grade crossing injuries, except train occupants, are counted under highway.

The Federal Railroad Administration defines a grade crossing as a location where a public highway, road, street, or private roadway, including associated sidewalks and pathways, crosses one or more railroad tracks at grade. The Federal Transit Administration defines two types of grade crossings: (1) At grade, mixed, and cross traffic crossings, meaning railway right-of-way over which other traffic moving in the same direction or other cross directions may pass. This includes city street right-of-way; (2) At grade with cross traffic crossings, meaning railway right-of-way over which no other traffic may pass, except to cross at grade-level crossings. This can include median strip rights-of-way with grade level crossings at intersecting streets.

Transit includes motor bus, commuter rail, heavy rail, light rail, demand response, van pool, and automated guideway. Transit injuries include those resulting from all reportable incidents, not just from accidents. Directly Operated (DO) modes only. The drop in the number of injuries in 2002 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.

Injuries occurring at *highway-rail crossings*, listed under transit, result from operations of public transit rail modes including commuter rail. Data for injuries at light rail crossings are: 1995 (179); 1996 (171); 1997 (92); 1998 (42); 1999 (148); 2000 (111); 2001 (54); 2002 (76); 2003 (68); 2004 (76); 2005 (80); 2006 (119).

Vessel-related injuries include those involving damage to vessels, such as collisions or groundings. Injuries *not related to vessel casualties* include those from falls overboard or from accidents involving onboard equipment.

Vessel-related and *Not related to vessel casualties* data for 1995-1997 come from the Marine Safety Management Information System. Between 1998 and 2001 the U.S. Coast Guard phased in a new computer system to track safety data, the Marine Information for Safety and Law Enforcement System. During that period data come from combining entries in the Marine Safety Management Information System with entries in the Marine Information for Safety and Law Enforcement System. Data for 2002 and later come from the Marine Information for Safety and Law Enforcement System. Data for prior years come from other sources and may not be directly comparable.

SOURCES: Various sources, as cited in U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *National Transportation Statistics 2006*, table 2-2, available at http://www.bts.gov/ as of September 2007.

TABLE B-5 Transportation Accidents by Mode: 1995–2006

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Air	**2,179**	**2,046**	**1,991**	**2,040**	**2,043**	**1,985**	**1,852**	**1,823**	**1,869**	**1,719**	**1,781**	**1,603**
U.S. air carrier	36	37	49	50	51	56	46	41	54	30	40	31
Commuter carrier	12	11	16	8	13	12	7	7	2	4	6	3
On-demand air taxi	75	90	82	77	74	80	72	60	74	66	66	54
General aviation	2,056	1,908	1,844	1,905	1,905	1,837	1,727	1,715	1,739	1,617	1,669	1,515
Highway	**6,699,000**	**6,770,000**	**6,624,000**	**6,335,000**	**6,279,000**	**6,394,000**	**6,323,000**	**6,316,000**	**6,328,000**	**6,181,000**	**6,159,000**	**5,973,000**
Passenger car	5,593,685	5,598,699	5,423,286	5,146,124	4,915,734	4,926,243	4,831,842	4,802,056	4,746,620	4,557,453	4,498,869	4,341,688
Motorcycle	66,354	66,224	61,451	54,477	57,322	68,783	73,342	76,004	79,131	85,557	100,686	101,474
Truck, light	2,749,596	2,880,782	2,900,896	2,866,729	3,079,617	3,207,738	3,254,105	3,272,326	3,345,367	3,370,062	3,381,985	3,355,291
Truck, large	362,883	378,335	421,377	391,807	452,444	437,861	409,372	416,477	436,161	399,156	423,016	367,920
Bus	58,847	57,185	53,376	53,385	62,591	55,594	54,264	57,958	57,674	52,148	50,427	51,554
Pipeline	**349**	**381**	**346**	**389**	**339**	**380**	**341**	**331**	**370**	**490**	**490**	**386**
Hazardous liquid pipeline	188	194	171	153	167	146	130	147	131	139	139	110
Gas pipeline	161	187	175	236	172	234	211	184	239	299	351	276
Railroad	**7,092**	**6,700**	**6,262**	**6,083**	**6,257**	**6,485**	**6,260**	**5,815**	**5,991**	**6,454**	**6,299**	**5,823**
Highway-rail grade crossing	4,633	4,257	3,865	3,508	3,489	3,502	3,237	3,077	2,977	3,076	3,053	2,920
Railroad	2,459	2,443	2,397	2,575	2,768	2,983	3,023	2,738	3,014	3,378	3,246	2,903
Transit	**25,683**	**25,166**	**24,924**	**23,937**	**23,310**	**24,261**	**23,891**	**13,968**	**7,793**	**7,842**	**8,151**	**8,851**
Highway-rail grade crossing	127	134	119	106	140	148	101	190	125	178	148	141
Transit	25,556	25,032	24,805	23,831	23,170	24,113	23,790	13,778	7,668	7,664	8,003	8,710
Waterborne	**13,368**	**13,286**	**13,551**	**13,828**	**13,457**	**13,143**	**11,377**	**11,713**	**10,601**	**9,866**	**9,946**	**10,367**
Vessel-related	5,349	5,260	5,504	5,767	5,526	5,403	4,958	6,008	5,163	4,962	4,977	5,400
Recreational boating	8,019	8,026	8,047	8,061	7,931	7,740	6,419	5,705	5,438	4,904	4,969	4,967

KEY: U = Data are unavailable.

NOTES: *U.S. air carriers* includes all carriers who operate under 14 CFR 121, all scheduled and nonscheduled service. Since Mar. 20, 1997, 14 CFR 121 includes only aircraft with 10 or more seats formerly operated under 14 CFR 135. This change makes it difficult to compare pre-1997 data for 14 CFR 121 and 14 CFR 135 with more recent years' data. *Commuter carriers* include all scheduled service operating under 14 CFR 135. Since Mar. 20, 1997, 14 CFR 121 includes only aircraft with 10 or more seats formerly operated under 14 CFR 135. This change makes it difficult to compare pre-1997 data for 14 CFR 121 and 14 CFR 135 with more recent years' data. *On-demand air taxi* includes all nonscheduled service operating under 14 CFR 135. *General aviation* includes all operations other than those operating under 14 CFR 121 and 14 CFR 135.

For *Highway* totals the U.S. Department of Transportation, National Highway Traffic Safety Administration uses the term "crash" instead of accident in its highway safety data. Highway crashes often involve more than one motor vehicle, hence "total highway crashes" is smaller than the sum of the components. Estimates of highway crashes are rounded to the nearest thousand in the source document.

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TABLE B-5 Transportation Accidents by Mode: 1995–2006 *(continued)*

The motor vehicle crash data in this table come from the U.S. Department of Transportation, National Highway Traffic Safety Administrations' General Estimates System (GES). GES data are obtained from a nationally representative probability sample selected from all police-reported crashes. The GES sample includes only crashes where a police accident report was completed and the crash resulted in property damage, injury, or death. The resulting figures do not take into account crashes that were not reported to the police or did not result in property damage.

Large trucks are defined as trucks over 10,000 pounds gross vehicle weight rating, including single-unit trucks and truck tractors. Light trucks are defined as trucks of 10,000 pounds gross vehicle weight rating or less, including pickups, vans, truck-based station wagons, and utility vehicles.

Railroad total includes Amtrak. Accidents and incidents resulting from freight and passenger rail operations including commuter rail. *Highway-rail* grade crossing total includes accidents and incidents occurring at highway-rail crossings resulting from freight and passenger rail operations including commuter rail. *Railroad* includes only train accidents.

The Federal Railroad Administration defines a grade crossing as a location where a public highway, road, street, or private roadway, including associated sidewalks and pathways, crosses one or more railroad tracks at grade. The Federal Transit Administration defines two types of grade crossings: (1) At grade, mixed, and cross traffic crossings, meaning railway right-of-way over which other traffic moving in the same direction or other cross directions may pass. This includes city street right-of-way; (2) At grade with cross traffic crossings, meaning railway right-of-way over which no other traffic may pass, except to cross at grade-level crossings. This can include median strip rights-of-way with grade level crossings at intersecting streets.

Transit accident figures include collisions with vehicles, objects, and people, derailments / vehicles going off the road. Accident figures do not include fires and personal casualties. The drop in the number of accidents in 2002 is due largely to a change in definitions by the Federal Transit Administration, particularly the definition of injuries. Only injuries requiring immediate medical treatment away from the scene now qualify as reportable. Previously, any injury was reportable. Directly Operated (DO) modes only. Highway-rail grade crossing for transit includes accidents occurring at highway-rail grade crossings resulting from operations of public transit rail modes including commuter rail. Data for light rail crossings are: 1995 (98); 1996 (97); 1997 (66); 1998 (66); 1999 (103); 2000 (106); 2001 (54); 2002 (112); 2003 (66); 2004 (107); 2005 (81); 2006 (74). *Transit only* includes accidents occurring at highway-rail grade crossings resulting from operations of public transit rail modes excluding commuter rail.

SOURCES: Various sources, as cited in U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, National Transportation Statistics 2007, table 2-3, available at http://www.bts.gov/ as of September 2007.

Congestion and Other Impediments to Use of the Transportation System

The Travel Time Index (TTI) is the ratio of peak period travel time to free-flow travel time. It expresses the average amount of extra time it takes to travel in the peak period relative to free-flow travel.

TABLE C-1 Travel Time Index by Metro Area: 1982–2005

	Travel time index			
Urban areas	**1982**	**1995**	**2004**	**2005**
Chicago, IL-IN	1.12	1.31	1.44	1.47
San Diego, CA	1.07	1.22	1.41	1.40
Riverside-San Bernardino, CA	1.03	1.19	1.35	1.35
Dallas-Fort Worth-Arlington, TX	1.05	1.16	1.31	1.35
New York-Newark, NY-NJ-CT	1.10	1.24	1.36	1.39
Miami, FL	1.11	1.26	1.37	1.38
Sacramento, CA	1.06	1.21	1.32	1.32
San Francisco-Oakland, CA	1.15	1.35	1.38	1.41
Los Angeles-Long Beach-Santa Ana, CA	1.25	1.44	1.48	1.50
Washington, DC-VA-MD	1.12	1.32	1.37	1.37
Atlanta, GA	1.10	1.25	1.32	1.34
Austin, TX	1.07	1.18	1.29	1.31
Denver-Aurora, CO	1.09	1.22	1.30	1.33
Las Vegas, NV	1.06	1.25	1.31	1.30
Baltimore, MD	1.07	1.20	1.29	1.30
Seattle, WA	1.07	1.30	1.28	1.30
Minneapolis-St. Paul, MN	1.04	1.18	1.24	1.26
Portland, OR-WA	1.07	1.20	1.27	1.29
Charlotte, NC-SC	1.07	1.13	1.25	1.23
Oxnard-Ventura, CA	1.03	1.12	1.22	1.24
San Jose, CA	1.13	1.25	1.32	1.34
Orlando, FL	1.10	1.27	1.30	1.30
Boston, MA-NH-RI	1.08	1.20	1.27	1.27
San Antonio, TX	1.04	1.10	1.23	1.23
Houston, TX	1.19	1.19	1.32	1.36
Bridgeport-Stamford, CT-NY	1.06	1.16	1.21	1.22
Columbus, OH	1.03	1.15	1.20	1.19
Detroit, MI	1.13	1.26	1.30	1.29
Philadelphia, PA-NJ-DE-MD	1.12	1.18	1.27	1.28
Phoenix, AZ	1.15	1.17	1.27	1.31

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TABLE C-1 Travel Time Index by Metro Area: 1982–2005 *(continued)*

	Travel time index			
Urban areas	**1982**	**1995**	**2004**	**2005**
El Paso, TX-NM	1.02	1.07	1.16	1.17
Cincinnati, OH-KY-IN	1.04	1.06	1.18	1.18
Indianapolis, IN	1.08	1.24	1.23	1.22
Jacksonville, FL	1.07	1.20	1.22	1.21
Raleigh-Durham, NC	1.01	1.11	1.17	1.18
Salt Lake City, UT	1.05	1.19	1.21	1.19
Providence, RI-MA	1.03	1.08	1.17	1.16
Tucson, AZ	1.10	1.13	1.22	1.23
Albuquerque, NM	1.05	1.16	1.16	1.17
Colorado Springs, CO	1.02	1.07	1.12	1.14
Louisville, KY-IN	1.11	1.17	1.23	1.23
Omaha, NE-IA	1.04	1.11	1.16	1.16
Birmingham, AL	1.04	1.09	1.15	1.15
Honolulu, HI	1.11	1.21	1.20	1.22
Virginia Beach, VA	1.07	1.16	1.18	1.18
Charleston-North Charleston, SC	1.08	1.14	1.18	1.17
Memphis, TN-MS-AR	1.04	1.11	1.14	1.13
Sarasota-Bradenton, FL	1.10	1.15	1.19	1.19
St. Louis, MO-IL	1.07	1.18	1.16	1.16
Allentown-Bethlehem, PA-NJ	1.06	1.14	1.14	1.14
Bakersfield, CA	1.01	1.04	1.08	1.09
Hartford, CT	1.03	1.08	1.11	1.11
Milwaukee, WI	1.05	1.13	1.13	1.13
Nashville-Davidson, TN	1.09	1.13	1.17	1.17
New Haven, CT	1.03	1.08	1.10	1.11
Pensacola, FL-AL	1.03	1.08	1.11	1.11
Tampa-St. Petersburg, FL	1.20	1.30	1.29	1.29
Fresno, CA	1.05	1.11	1.12	1.12
Grand Rapids, MI	1.03	1.09	1.11	1.10
Laredo, TX	1.02	1.06	1.09	1.09
Oklahoma City, OK	1.02	1.07	1.09	1.09
Salem, OR	1.02	1.07	1.09	1.19
Toledo, OH-MI	1.02	1.07	1.10	1.09
Albany-Schenectady, NY	1.02	1.04	1.08	1.08
Boulder, CO	1.04	1.09	1.09	1.10
Cleveland, OH	1.03	1.11	1.10	1.09
Eugene, OR	1.04	1.04	1.08	1.10

(continued on next page)

TABLE C-1 Travel Time Index by Metro Area: 1982–2005 *(continued)*

	Travel time index			
Urban areas	**1982**	**1995**	**2004**	**2005**
Kansas City, MO-KS	1.02	1.07	1.08	1.08
Tulsa, OK	1.03	1.07	1.09	1.09
Akron, OH	1.02	1.06	1.08	1.07
Buffalo, NY	1.03	1.04	1.08	1.08
Cape Coral, FL	1.07	1.15	1.12	1.12
Columbia, SC	1.02	1.04	1.07	1.07
Little Rock, AK	1.02	1.04	1.07	1.07
Richmond, VA	1.04	1.09	1.09	1.09
Rochester, NY	1.02	1.05	1.07	1.07
Brownsville, TX	1.02	1.04	1.07	1.06
New Orleans, LA	1.11	1.16	1.15	1.15
Beaumont, TX	1.02	1.03	1.05	1.05
Corpus Christi, TX	1.03	1.04	1.05	1.06
Dayton, OH	1.07	1.12	1.11	1.10
Pittsburgh, PA	1.06	1.10	1.10	1.09
Spokane, WA	1.02	1.05	1.05	1.04
Springfield, MA-CT	1.04	1.06	1.06	1.06
Anchorage, AK	1.06	1.06	1.07	1.07
85-Area average	**1.11**	**1.22**	**1.29**	**1.30**
Very large area average	**1.14**	**1.29**	**1.36**	**1.38**
Large area average	**1.07**	**1.18**	**1.24**	**1.24**
Medium area average	**1.05**	**1.12**	**1.16**	**1.16**
Small area average	**1.03**	**1.07**	**1.09**	**1.09**

NOTES: *Travel time index*—The ratio of travel time in the peak period to the travel time at free-flow conditions. A value of 1.35 indicates a 20 minute free-flow trip takes 27 minutes in the peak. Free-flow speeds (60 mph on freeways and 35 mph on principal arterials) are used as comparison thresholds.

Very large urban areas—over 3 million population. *Large urban areas*—over 1 million and less than 3 million population. *Medium urban areas*—over 500,000 and less than 1 million population. *Small urban areas*—less than 500,000 population.

Metropolitan Statistical Areas (MSAs) have changed from the previous releases.

SOURCE: Texas A&M University, Texas Transportation Institute, 2007 Urban Mobility Report (College Station, TX: 2005), also available at http://tti.tamu.edu/ as of September 2007.

TABLE C-2 Average Hours of Annual Delay per Traveler: 1982–2005

	Hours			
Urban areas	**1982**	**1995**	**2004**	**2005**
Dallas-Fort Worth-Arlington, TX	10	34	51	58
San Diego, CA	12	35	59	57
Riverside-San Bernardino, CA	5	28	47	49
Washington, DC-VA-MD	16	53	60	60
Austin, TX	12	32	44	49
Minneapolis-St. Paul, MN	6	34	40	43
Orlando, FL	18	54	56	54
San Francisco-Oakland, CA	24	56	56	60
Oxnard-Ventura, CA	4	21	35	39
Atlanta, GA	26	70	63	60
Boston, MA-NH-RI	12	30	45	46
Denver-Aurora, CO	16	37	46	50
Miami, FL	16	35	49	50
New York-Newark, NY-NJ-CT	46	42	30	12
Baltimore, MD	11	33	43	44
Charlotte, NC-SC	12	23	47	45
San Antonio, TX	6	19	38	39
Seattle, WA	13	52	42	45
Chicago, IL-IN	15	33	44	46
San Jose, CA	23	51	51	54
Columbus, OH	4	27	34	33
Detroit, MI	25	51	56	54
Las Vegas, NV	10	37	39	39
Los Angeles-Long Beach-Santa Ana, CA	45	71	70	72
Raleigh-Durham, NC	8	26	35	35
Sacramento, CA	41	40	35	14
Houston, TX	30	32	52	56
Providence, RI-MA	3	12	29	29
Birmingham, AL	8	21	33	33
Portland, OR-WA	13	33	37	38
Indianapolis, IN	19	53	46	43
Louisville, KY-IN	18	34	44	42
Memphis, TN-MS-AR	6	23	29	30
Colorado Springs, CO	4	12	22	27
Jacksonville, FL	16	40	41	39
Albuquerque, NM	11	30	30	33
Bridgeport-Stamford, CT-NY	9	22	28	31
Cincinnati, OH-KY-IN	5	26	27	27
Philadelphia, PA-NJ-DE-MD	16	27	37	38

(continued on next page)

TABLE C-2 Average Hours of Annual Delay per Traveler: 1982–2005 *(continued)*

	Hours			
Urban areas	**1982**	**1995**	**2004**	**2005**
El Paso, TX-NM	3	10	22	24
St. Louis, MO-IL	12	38	31	33
Nashville-Davidson, TN	20	35	40	40
Omaha, NE-IA	5	19	26	25
Pensacola, FL-AL	5	16	24	25
Salt Lake City, UT	8	32	29	27
Grand Rapids, MI	6	19	24	24
Tucson, AZ	24	23	39	42
Charleston-North Charleston, SC	15	28	32	31
Tampa-St. Petersburg, FL	24	27	30	30
Virginia Beach, VA	14	27	30	30
Cape Coral, FL	9	28	24	24
Hartford, CT	4	13	19	19
Oklahoma City, OK	5	17	22	20
Kansas City, MO-KS	3	17	16	17
New Haven, CT	5	13	18	19
Richmond, VA	6	22	20	20
Albany-Schenectady, NY	3	8	16	16
Allentown-Bethlehem, PA-NJ	9	21	22	22
Little Rock, AK	4	10	17	17
Phoenix, AZ	35	33	42	48
Toledo, OH-MI	2	12	17	15
Bakersfield, CA	2	7	12	14
Columbia, SC	7	11	16	16
Milwaukee, WI	7	22	20	19
Salem, OR	3	12	14	14
Tulsa, OK	8	14	19	19
Cleveland, OH	3	16	14	13
Honolulu, HI	14	26	22	24
Laredo, TX	2	7	11	12
Sarasota-Bradenton, FL	15	19	26	25
Boulder, CO	16	16	16	7
Akron, OH	2	9	11	10
Buffalo, NY	3	6	11	11
Eugene, OR	12	17	19	20
Fresno, CA	6	7	12	14
Beaumont, TX	4	6	11	11
Dayton, OH	10	22	19	17
Rochester, NY	3	7	10	40

(continued on next page)

TABLE C-2 Average Hours of Annual Delay per Traveler: 1982–2005 *(continued)*

	Hours			
Urban areas	**1982**	**1995**	**2004**	**2005**
Brownsville, TX	2	4	8	8
Corpus Christi, TX	5	7	10	10
Pittsburgh, PA	11	19	17	16
Spokane, WA	3	10	8	8
Springfield, MA-CT	7	10	10	11
New Orleans, LA	16	20	18	18
Anchorage, AK	10	9	10	10
85-Area average	**16**	**36**	**42**	**44**
Very large area average	**21**	**43**	**51**	**54**
Large area average	**11**	**30**	**36**	**37**
Medium area average	**9**	**21**	**27**	**28**
Small area average	**6**	**13**	**17**	**17**

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

Very large urban areas—over 3 million population. *Large urban areas*—over 1 million and less than 3 million population. *Medium urban areas*—over 500,000 and less than 1 million population. *Small urban areas*—less than 500,000 population.

Metropolitan Statistical Areas (MSAs) have changed from the previous releases.

SOURCE: Texas A&M University, Texas Transportation Institute, 2007 Urban Mobility Report (College Station, TX: 2005), also available at http://tti.tamu.edu/ as of September 2007.

FIGURE C-3 Major U.S. Air Carrier On-Time Performance: 1995–2007

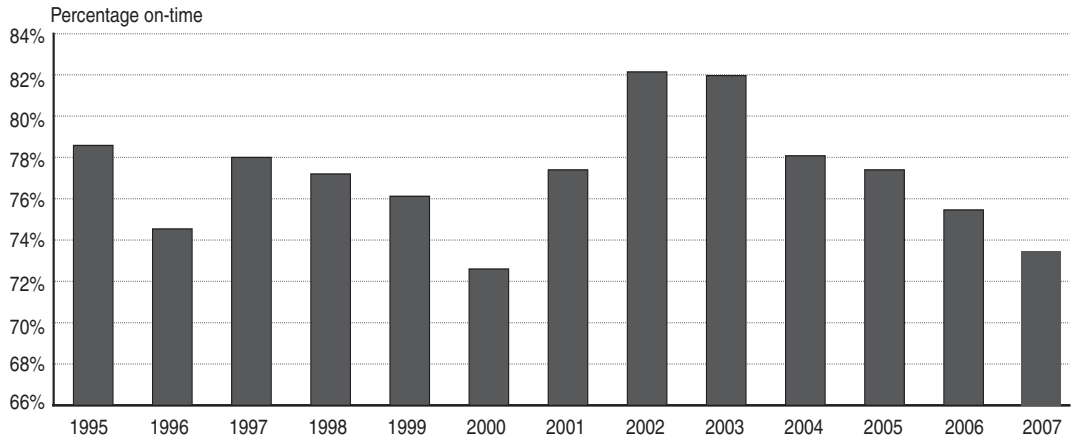


TABLE C-3 Major U.S. Air Carrier On-Time Performance: 1995–2007
Thousands of flights and operations

	Late departures	Late arrivals	Cancellations	Diversions	On-time arrivals (%)	Total flights
1995	828	1,039	92	10	79%	5,327
1996	974	1,220	129	14	75%	5,352
1997	847	1,084	98	12	78%	5,412
1998	870	1,070	145	13	77%	5,385
1999	937	1,153	154	14	76%	5,528
2000	1,132	1,356	187	14	73%	5,683
2001	954	1,104	231	13	77%	5,968
2002	717	868	65	8	82%	5,271
2003	834	1,058	101	11	82%	6,489
2004	1,188	1,421	128	14	78%	7,129
2005	1,279	1,466	134	14	77%	7,141
2006	1,425	1,616	122	16	75%	7,142
2007	1,572	1,803	161	17	73%	7,453

NOTES: *Late departures* are flights departing 15 minutes or more after the scheduled departure time. *Late arrivals* are flights arriving 15 minutes or more after the scheduled arrival time. Late departures and arrivals are strongly seasonal and are affected by weather and heavy demand in winter and summer months. *Cancellations* are flights that were not operated, but were listed in a carrier's computer reservation system within 7 calendar days of the scheduled departure. *Diversions* are flights that left from the scheduled departure airport, but flew to a destination point other than the scheduled destination point.

In 2007, 20 air carriers reported on-time performance data, including all major U.S. carriers (carriers with at least one percent of total domestic scheduled-service passenger revenues) and other carriers that reported voluntarily. The number of carriers reporting in previous years is as follows: 2006 (20); 2005 (20); 2004 (19); 2003 (18); 2002 (10); 2001 (12); 2000 (11); 1999 (10); 1998 (10); 1997 (10); 1996 (10); and 1995 (10).

SOURCES: U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, Airline On-Time Tables, Table 1 - *Summary of Airline On-Time Performance Year-to-date through December 2007*, available at http://www.bts.gov/ as of March 28, 2007.

Figure C-4 Amtrak Trains Arriving On Time: FY1995–2006

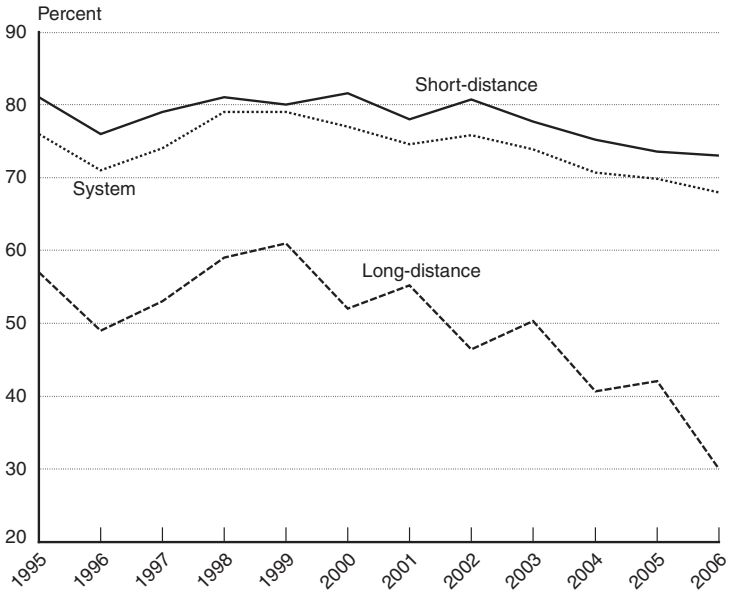


TABLE C-4 Amtrak Trains Arriving On Time: FY1995–2006

Percent

Fiscal years	System on-time performance	Short distance (<400 miles)	Long distance (≥400 miles)
1995	76	81	57
1996	71	76	49
1997	74	79	53
1998	79	81	59
1999	79	80	61
2000	77	82	52
2001	75	78	55
2002	76	81	46
2003	74	78	50
2004	71	75	41
2005	70	74	42
2006	68	73	30

NOTES: *Short distance* includes all Amtrak Northeast Corridor and Empire Service (New York State) trains. Amtrak provides on-time performance data in percentages. Amtrak revised its methodology for collecting and calculating on-time performance data in 2001. This resulted in minor changes in short-distance, long-distance, and system on-time performance percentages starting in 2001 compared with previous years.

SOURCES: 1995–1999: National Railroad Passenger Corp. (Amtrak), *Amtrak Annual Report* (Washington, DC: annual issues). **2000–2006:** Amtrak, personal communication, June 2007.

TABLE C-5 Amtrak Hours of Delay by Cause: 2000–2006

	Amtrak	Host railroad	Other	Total
2000	23,337	43,881	3,176	70,396
2001	27,822	52,273	3,741	83,837
2002	26,575	55,090	4,266	85,932
2003	25,711	57,346	5,355	88,413
2004	28,328	61,256	5,577	95,162
2005	25,549	64,097	5,613	95,259
2006	23,968	71,387	6,166	101,522

NOTES: Data may not add to total because of independent rounding. Data not collected prior to 2000. *Amtrak* 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.

Host railroad includes all operating delays not attributable to Amtrak when operating on tracks of a host railroad, such as track- and signal-related delays, power failures, freight and commuter train interference, and routing delays. Also includes delays for track repairs/track conditions, freight train interference, and signal delays.

Other includes delays not attributable to Amtrak or host railroads, such as customs and immigrations, law enforcement action, weather, or waiting for scheduled departure time.

SOURCE: 2000–2006—Amtrak, personal communication, June 2007.

Line-haul speed is a shipper-related indicator of the performance of the railroad industry. The average speed is the over-the-road train speed and does not include terminal dwell time, time for local pickup and delivery, and the time shipments spend in storage yards.

Table C-6 Rail Freight Average Speeds, Revenue Ton-Miles, and Terminal Dwell Times: Q3 1999–Q4 2006

Quarter	Average line-haul speed (mph)	Revenue ton-miles (billions)	Average terminal dwell time (hours)
1999 Q3	23.0	364.0	U
1999 Q4	23.3	372.8	U
2000 Q1	24.2	358.6	U
2000 Q2	23.9	359.7	U
2000 Q3	23.8	376.0	U
2000 Q4	24.0	361.3	U
2001 Q1	24.4	370.4	U
2001 Q2	24.0	364.6	U
2001 Q3	24.3	367.7	U
2001 Q4	24.8	371.3	U
2002 Q1	25.4	352.0	U
2002 Q2	25.6	369.1	U
2002 Q3	24.9	361.2	U
2002 Q4	25.2	364.2	U
2003 Q1	24.7	368.4	U
2003 Q2	24.3	379.2	U
2003 Q3	23.7	387.6	U
2003 Q4	23.6	396.0	U
2004 Q1	23.2	395.6	U
2004 Q2	22.3	409.8	27.0
2004 Q3	22.5	417.3	26.4
2004 Q4	22.1	429.3	27.3
2005 Q1	21.7	416.7	27.5
2005 Q2	21.6	417.8	26.3
2005 Q3	21.7	421.0	25.9
2005 Q4	20.8	420.6	27.2
2006 Q1	21.4	429.8	25.9
2006 Q2	21.4	442.7	24.6
2006 Q3	21.7	443.6	23.9
2006 Q4	22.1	437.2	24.0

U = Data are unavailable

SOURCES: Average line-haul speed and terminal dwell time—U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, calculations using data reported by Class I railroads to the Association of American Railroads for posting at http://www.railroadpm.org/, and Surface Transportation Board (STB), *Statistics of Class I Railroads in the United States*, table 8, available at http://www.stb.dot.gov/ as of August 2007. **Revenue ton-miles—**STB, *Quarterly Selected Earnings Report*, available at http://www.stb.dot.gov/ as of August 2007.

TABLE C-7 Average Daytime Wait Times for Commercial Vehicles at Selected U.S. Surface Border Gateways: 2003 and 2004
Minutes

	2003	2004
United States–Canada border		
Port Huron-Bluewater Bridge, MI	26.8	25.2
Blaine-Pacific Highway, WA	18.7	15.0
Detroit-Ambassador Bridge, MI	16.1	14.8
Buffalo/Niagara Falls-Peace Bridge, NY	10.0	12.5
Champlain, NY	3.7	11.6
Sumas, WA	11.0	7.6
Buffalo/Niagara Falls-Lewiston Bridge, NY	12.1	7.2
Sweetgrass, MT	4.8	6.8
Derby Line, VT	6.1	5.6
Pembina, ND	5.6	5.4
Houlton, ME	3.3	5.3
Sault Ste. Marie, MI	6.7	5.1
Highgate Springs, VT	4.5	4.6
Detroit-Windsor Tunnel, MI	3.6	4.0
Calais-Ferry Point, ME	14.7	3.9
Jackman, ME	1.3	1.3
Average	**9.3**	**8.5**
United States–Mexico border		
Laredo-World Trade Bridge, TX	17.2	20.5
Nogales-Mariposa, AZ	10.4	18.2
Otay Mesa, CA	15.9	15.5
El Paso-Ysleta, TX	8.3	11.0
Brownsville-Veterans International, TX	8.8	10.0
Hidalgo/Pharr, TX	7.8	8.8
Calexico-East, CA	7.9	6.6
Tecate, CA	5.0	6.1
El Paso-Bridge of the Americas (BOTA), TX	6.1	5.9
Laredo-Colombia Solidarity, TX	4.9	3.7
Del Rio, TX	3.0	2.6
Rio Grande City, TX	3.1	2.5
Brownsville-Los Indios, TX	1.5	1.3
Santa Teresa, NM	1.4	1.1
Progreso, TX	0.7	0.8
Presidio, TX	1.6	0.5
Eagle Pass–Bridge I, TX	1.6	U
Average	**6.2**	**7.3**

KEY: U = Data are unavailable.

NOTES: Wait times for commercial vehicles are recorded hourly. Daytime hours (between 8:00 a.m. and 6:00 p.m.) are generally the busiest portion of the day and are representative of typical delays encountered by the majority of vehicles. Wait times can, however, vary considerably by crossing, time of day, and day of the week, and the actual delays that occur on occasion may be substantially longer than the averages represented above.

SOURCE: U.S. Department of Homeland Security, U.S. Customs and Border Protection, personal communication, April 2005.

TABLE C-8 Average Daytime Wait Times for Passenger Vehicles at Selected U.S. Surface Border Gateways: 2003 and 2004
Minutes

	2003	2004
United States–Canada border		
Blaine-Peace Arch, WA	21.1	13.7
Buffalo/Niagara Falls-Lewiston Bridge, NY	7.8	10.0
Blaine-Pacific Highway, WA	11.5	9.1
Champlain, NY	4.1	7.5
Sumas, WA	6.4	7.0
Port Huron-Bluewater Bridge, MI	7.7	6.7
Buffalo/Niagara Falls-Rainbow Bridge, NY	3.6	6.2
Buffalo/Niagara Falls-Peace Bridge, NY	5.5	5.9
Sault Ste. Marie, MI	8.0	5.8
Sweetgrass, MT	8.1	4.9
Detroit-Windsor Tunnel, MI	6.8	4.9
Calais-Ferry Point, ME	14.9	3.9
Pembina, ND	2.9	3.9
Highgate Springs, VT	6.8	3.5
Detroit-Ambassador Bridge, MI	4.7	3.3
Jackman, ME	3.4	2.2
Derby Line, VT	3.4	1.3
Average	**7.5**	**5.9**
United States-Mexico border		
San Ysidro, CA	42.3	36.1
Nogales-Deconcini, AZ	27.0	33.0
Nogales-Mariposa, AZ	21.2	28.6
Calexico-West, CA	21.9	25.1
Otay Mesa, CA	27.8	24.1
El Paso-Bridge of the Americas (BOTA), TX	35.4	23.8
San Luis, AZ	23.9	21.3
Laredo-Bridge II, TX	16.6	19.4
Laredo-Bridge I, TX	12.8	18.4
Tecate, CA	17.2	17.5
Hidalgo/Pharr, TX	21.6	17.2
El Paso-Ysleta, TX	17.1	16.8
El Paso-Paso Del Norte (PDN), TX	17.2	16.0
Calexico-East, CA	9.1	14.0
Douglas, AZ	10.8	13.7
Hidalgo/Pharr, TX	12.6	12.3
Brownsville-Gateway, TX	12.8	11.0
Brownsville-B&M, TX	13.2	11.0
Del Rio, TX	11.1	10.9
Brownsville-Veterans International, TX	12.0	9.5
Eagle Pass-Bridge I, TX	7.7	7.7
Andrade, CA	3.9	7.1
Eagle Pass-Bridge II, TX	6.8	6.1
Progreso, TX	4.5	5.8
Brownsville-Los Indios, TX	6.0	4.7
Roma, TX	4.5	4.3
Rio Grande City, TX	3.9	3.9
Santa Teresa, NM	4.1	2.1
Presidio, TX	6.0	0.9
Average	**14.5**	**14.6**

NOTES: Wait times for private vehicles are recorded hourly. Daytime hours (between 8:00 a.m. and 6:00 p.m.) are generally the busiest portion of the day and are representative of typical delays encountered by the majority of vehicles. Wait times can, however, vary considerably by crossing, time of day, and day of the week, and the actual delays that occur on occasion may be substantially longer than the averages represented above.

SOURCE: U.S. Department of Homeland Security, U.S. Customs and Border Protection, personal communication, April 2005.

A roadside inspection is an examination of individual commercial motor vehicles and drivers to determine if they are in compliance with the Federal Motor Carrier Safety Regulations or Hazardous Materials Regulations. If a serious violation is detected, the driver is issued an out-of-service order. The violation must then be corrected before the driver or vehicle may return to service.

TABLE C-9 Roadside Truck Inspections: 1995–2006

Thousands

	Trucks inspected	Trucks taken out of service	Percent of inspected trucks taken out of service
1995	1,840	417	23
1996	2,039	437	21
1997	2,148	439	20
1998	1,763	448	25
1999	1,862	453	24
2000	1,928	457	24
2001	2,072	486	23
2002	2,173	498	23
2003	2,165	495	23
2004	2,253	532	24
2005	2,202	514	23
2006	2,410	552	23

NOTES: Trucks are taken out of service (OOS) when inspectors find serious violations that warrant the issuance of a vehicle OOS order. There may be data inconsistencies across the 1995-2006 time series. The Bureau of Transportation Statistics obtained the data at different times (see Sources) and was unable to verify the consistency of the entire data series prior to publication.

SOURCES: 1995-1998—U.S. Department of Transportation (USDOT), Federal Motor Carrier Safety Administration (FMCSA), Motor Carrier Management Information System, available at http://www.fmcsa.dot.gov/ as of June 2003. **1999-2000—**USDOT, FMCSA, personal communication, Aug. 11, 2003. **2001-2002—**USDOT, FMCSA, Roadside Inspection Activity Summary by Inspection Type, available at http://ai.volpe.dot.gov/ as of March 2005. **2003-2006—**USDOT, FMCSA, Roadside Inspection Activity Summary by Inspection Type, available at http://ai.volpe.dot.gov/ as of June 2007.

TABLE C-10 Rail Replaced or Added by U.S. Class I Railroads: 1995–2005
Thousands of tons

	Rail replaced	Rail added
1995	657.6	61.3
1996	803.3	68.7
1997	642.7	113.8
1998	679.0	204.8
1999	769.3	213.4
2000	726.1	196.3
2001	660.1	197.0
2002	635.5	125.2
2003	632.6	139.4
2004	591.4	45.1
2005	424.0	48.4

SOURCES: 1995-1999—Association of American Railroads, *Railroad Ten-Year Trends, 1990–2000* (Washington, DC: 2000); **2000–2005**—Association of American Railroads, *Analysis of Class I Railroads* (Washington, DC: 2001-2006).

TABLE C-11 Crossties Replaced or Added by U.S. Class I Railroads: 1995–2005
Millions of crossties

	Crossties replaced	Crossties added
1995	12.1	0.7
1996	13.4	0.8
1997	11.9	1.5
1998	10.4	1.8
1999	10.8	1.3
2000	10.8	0.7
2001	11.4	0.5
2002	13.1	0.3
2003	13.2	0.5
2004	13.3	0.5
2005	13.4	0.9

SOURCES: 1995–1999—Association of American *Railroads, Railroad Ten-Year Trends, 1990–2000* (Washington, DC: 2000); **2000–2005**—Association of American Railroads, *Analysis of Class I Railroads* (Washington, DC: 2001-2006).

TABLE C-12 New and Rebuilt Locomotives and Freight Cars: 1995–2005

	Locomotives	Percentage of fleet	Freight cars	Percentage of fleet
1995	1,129	6.0	66,052	5.4
1996	821	4.3	59,993	4.8
1997	811	4.1	51,963	4.1
1998	1,061	5.2	83,076	6.3
1999	865	4.3	77,901	5.7
2000	721	3.6	58,245	4.2
2001	755	3.8	35,475	2.7
2002	778	3.8	18,832	1.4
2003	621	3.0	33,155	2.6
2004	1,126	5.1	47,843	3.7
2005	911	4.0	70,154	5.3

NOTES: Locomotive data are for Class I railroads only. Freight car data cover Class I railroads, other railroads, and private car owners.

SOURCE: Association of American Railroads, *Railroad Facts 2006* (Washington, DC: 2006), pp. 49, 51, and 55.

TABLE C-13 Interruptions of Service by Type of Transit: 1995–2000 & 2001-2005
Number per 100,000 revenue vehicle-miles

	Motor bus	Light rail	Heavy rail	Commuter rail	Demand response
1995	38	33	4	4	4
1996	38	27	4	3	4
1997	37	21	3	3	5
1998	38	15	7	3	5
1999	38	17	7	3	5
2000	37	15	6	3	5
2001	27	14	3	2	4
2002	24	14	5	1	3
2003	22	14	3	1	4
2004	21	13	4	0	3
2005	22	15	5	1	3

NOTES: Data from 1995–2000 and 2001–2005 are not comparable due to a methodology change. *Interruptions of service* include major and minor mechanical failures. Since 2001, if the vehicle operator was able to fix the problem and return the vehicle to service without assistance, the incident has not been considered an interruption of service. For definitions of service types, see Glossary.

SOURCES: U.S. Department of Transportation (USDOT), Research and Innovative Technology Administration, Bureau of Transportation Statistics, calculations based on various data. **Revenue vehicle-miles—**USDOT, Federal Transit Administration (FTA), National Transit Database, *2005 National Transit Summaries and Trends*, available at http://www.ntdprogram.com/ as of February 2007. **1996-2005 interruptions of service—**USDOT, FTA, National Transit Database, 2005 Data Tables, Revenue Vehicle Maintenance Performance table, available at http://www.ntdprogram.com/ as of February 2007.

TABLE C-14 St. Lawrence Seaway U.S. Locks Downtime by Cause: 1995–2006
Hours of downtime, unless otherwise noted

	Weather related	Vessel incident	All other causes	Total downtime hours	Weather (percentage of total)	System availability (percentage)
1995	88.5	32.6	16.7	137.8	64	99.0
1996	143.4	38.3	5.9	187.6	76	97.0
1997	65.2	31.2	35.6	132.0	49	98.0
1998	43.2	43.3	12.1	98.6	44	98.5
1999	2.0	46.3	1.3	49.6	4	99.2
2000	53.7	27.8	2.6	84.1	64	98.7
2001	56.8	45.1	8.9	110.8	51	98.3
2002	41.1	16.9	5.1	63.1	65	99.1
2003	57.6	15.9	0.0	73.5	78	98.9
2004	43.8	15.0	7.2	66.0	66	99.0
2005	16.9	12.1	6.0	35.0	48	99.5
2006	19.1	34.5	8.8	62.4	31	99.1

NOTES: *Weather-related* causes includes poor visibility and high wind/ice; *All other causes* includes lock equipment malfunction, civil interference, pilotage, and water level/flow. These data pertain only to the two U.S. locks (Snell and Eisenhower) on the St. Lawrence Seaway between the Port of Montreal and Lake Ontario. Canada operates another five locks along this portion of the Seaway, as well as other Seaway locks at the Welland Canal.

SOURCES: 1995–2001—U.S. Department of Transportation, Saint Lawrence Seaway Development Corp. (SLSDC), *Annual Reports* (Washington, DC: Various years). Reports for 1997–2001 available at http://www.greatlakes-seaway.com/ as of March 2004. **2002, 2003, 2004, 2005, and 2006**—SLDC, personal communication, March and December 2004, February 2005, May 2006, and June 2007.

TABLE C-15 Airline Delays by Cause

				Percentage of delay minutes due to:				
Year at end of period	Number of scheduled operations	Number of delayed flights	Average minutes of delay	Carrier	Extreme weather	National aviation system	Security	Late aircraft
2004	7,129,270	1,421,391	51.4	25.8	6.9	33.5	0.2	33.6
2005	7,140,595	1,466,065	52.2	28.0	6.2	31.4	0.2	34.2
2006	7,141,922	1,615,537	54.0	27.8	5.6	29.4	0.3	37.0
2007	7,455,458	1,804,028	56.0	28.6	5.7	27.9	0.2	37.6

NOTES: On-time performance data is currently collected for 19 large carriers.

A flight is considered delayed when it arrived 15 or more minutes later than the schedule arrival (see definitions in Frequently Asked Questions). Average minutes of delay are calculated for delayed flights only. When multiple causes are assigned to one delayed flight, each cause is prorated based on delayed minutes it is responsible for. The diplayed numbers are rounded and may not add to the total.

SOURCE: U.S. Department of Transportation (USDOT), Research and Innovative Technology Administration, Bureau of Transportation Statistics, Airline Service Quality Performance 234. For more information, see http://www.transtats.bts.gov/OT_Delay/OT_DelayCause1.asp

TABLE C-16 Domestic Enplanements at U.S. Air Traffic Hubs: 1995–2007

Thousands of Passengers

	Total enplanements	Large hubs	Medium hubs	Small hubs	Nonhubs
1995	526,055	392,602	85,929	33,561	13,963
1996	558,184	417,340	89,019	37,123	14,702
1997	568,616	426,246	90,780	36,299	15,291
1998	588,335	442,402	91,756	37,675	16,502
1999	610,629	458,665	96,395	38,645	16,924
2000	639,754	479,570	102,082	40,121	17,980
2001	595,365	413,634	124,588	42,834	14,309
2002	575,059	401,697	119,734	40,054	13,574
2003	593,132	424,621	109,493	43,546	15,473
2004	652,413	447,501	135,364	51,812	17,736
2005	690,136	473,367	143,749	53,292	19,727
2006	690,766	475,208	142,139	55,008	18,410
(P) 2007	712,627	488,299	147,068	57,501	19,760

KEY: P = preliminary

NOTES: Data are for all scheduled and nonscheduled service by large certificated U.S. air carriers at all airports served within the 50 states, the District of Columbia, and other U.S. areas designated by the Federal Aviation Administration. Not all scheduled service is actually performed. Moreover, for several years, total performed departures exceed total scheduled departures because nonscheduled departures are included in the totals. Prior to 1993, all scheduled and some nonscheduled enplanements for certificated air carriers were included; no enplanements were included for air carriers offering charter service only.

Prior to 2000, air traffic hubs are designated as geographical areas based on the percentage of total passengers enplaned in the area. Under this designation, a hub may have more than one airport in it. (This definition of hub should not be confused with the definition used by the airlines in describing their "hub-and-spoke" route structures). Individual communities fall into four hub classifications as determined by each community's percentage of total enplaned revenue passengers in all services and all operations of U.S. certificated route carriers within the 50 states, the District of Columbia, and other U.S. areas. For 2000 and later, hub designation is based on passenger boardings at individual airports as designated by the FAA. Classifications are based on the percentage of total enplaned revenue passengers for each year according to the following: 1 percent or more = large, 0.25 to 0.9999 percent = medium, 0.05 to 0.249 percent = small, less than 0.05 = nonhub.

SOURCE: U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *National Transportation Statistics 2008*, table 1-34, available at http://www.bts.gov/ as of May 2008.

FIGURE C-17 Amtrak Ridership: 1995–2007

Number of passengers (monthly data, not seasonally adjusted)

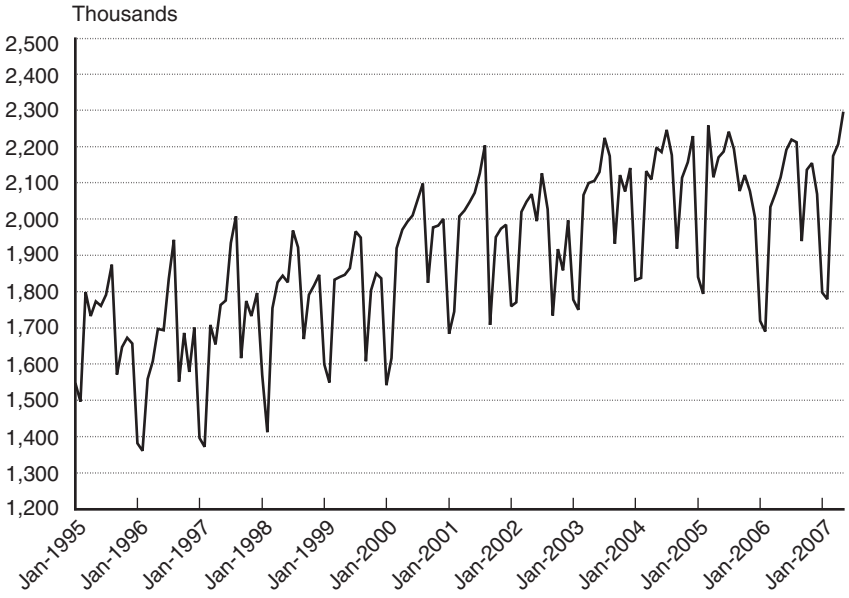


TABLE C-17 Amtrak Ridership: January 2006–May 2007

	Number of passengers (thousands)
Jan-06	1,719
Feb-06	1,690
Mar-06	2,034
Apr-06	2,072
May-06	2,116
Jun-06	2,191
Jul-06	2,219
Aug-06	2,212
Sep-06	1,939
Oct-06	2,136
Nov-06	2,154
Dec-06	2,069
Jan-07	1,797
Feb-07	1,779
Mar-07	2,174
Apr-07	2,207
May-07	2,296

NOTES: Amtrak officially began service in May 1971. Amtrak serves more than 500 stations in 46 states and operates over a network of more than 22,000 track miles. Ridership is highly seasonal, with July and August being very high ridership months. In 2000, Amtrak introduced a high-speed rail service in the northeast United States, which helped increase ridership.

SOURCE: U.S. Department of Transportation, Federal Railroad Administration, Office of Safety Analysis, available at http://safetydata.fra.dot.gov/OfficeofSafety/ as of August 2007.

TABLE C-18 Amtrak Ridership: 1995–2006
Thousands of revenue passengers

	Passengers
1995	20,349
1996	19,700
1997	20,200
1998	21,248
1999	21,544
2000	22,985
2001	23,444
2002	23,269
2003	24,595
2004	25,215
2005	25,076
2006	24,548

SOURCE: 1995-2002, 2004—Association of American Railroads, *Railroad Facts* (Washington, DC: annual issues). **2003, 2005, 2006—**U.S. Department of Transportation, Federal Railroad Administration, Office of Safety, Operational Data Tables, available at: http://safetydata.fra.dot.gov/officeofsafety/ as of June 2007.

TABLE C-19 Top 20 Transit Agencies by Unlinked Passenger Trips: FY 2005

Agency	Number of unlinked trips (thousands)
MTA New York City Transit (NYCT)	2,758,253
Chicago Transit Authority (CTA)	492,254
Los Angeles County Metropolitan Trip Authority (LACMTA)	451,511
Washington Metropolitan Area Transit Authority (WMATA)	414,076
Massachusetts Bay Transportation Authority (MBTA)	394,851
Southeastern Pennsylvania Transportation Authority (SEPTA)	334,546
New Jersey Transit Corp. (NJTransit)	244,084
San Francisco Municipal Railway (MUNI)	216,918
Metropolitan Atlanta Rapid Transit Authority (MARTA)	142,386
Tri-County Metropolitan Transportation District of Oregon (TriMet)	104,546
Maryland Transit Administration (MTA)	103,366
Miami-Dade Transit (MDT)	103,232
San Francisco Bay Area Rapid Transit District (BART)	99,296
King County Department of Transportation (King County Metro)	98,609
MTA Long Island Rail Road (MTA-LIRR)	95,519
Metropolitan Transit Authority of Harris County, Texas (Metro)	94,555
Denver Regional Transportation District (RTD)	86,261
Metro-North Commuter Railroad Co. (MTA-MNCR)	74,653
Dallas Area Rapid Transit (DART)	72,596
Port Authority Trans-Hudson Corp. (PATH)	71,305
Total, top 20 agencies	**6,452,817**
Total, all agencies	**9,814,683**
Top 20 agencies, percent of all agencies	**65.75**

NOTES: Data may not add to total because of independent rounding. According to the American Public Transportation Association (APTA), an unlinked transit trip is a trip on one transit vehicle. A person riding one vehicle from origin to destination takes one unlinked trip; a person who transfers to a second vehicle takes two unlinked trips; a person who transfers to a third vehicle takes three unlinked trips. A linked trip includes all segments on all vehicles used to travel from origin to destination.

SOURCE: American Public Transportation Association, *2007 Public Transportation Factbook*, tables 3 and 4, available at http://www.apta.com/ as of July 2007.

FIGURE C-20 Public Transit Ridership: 1995–2007

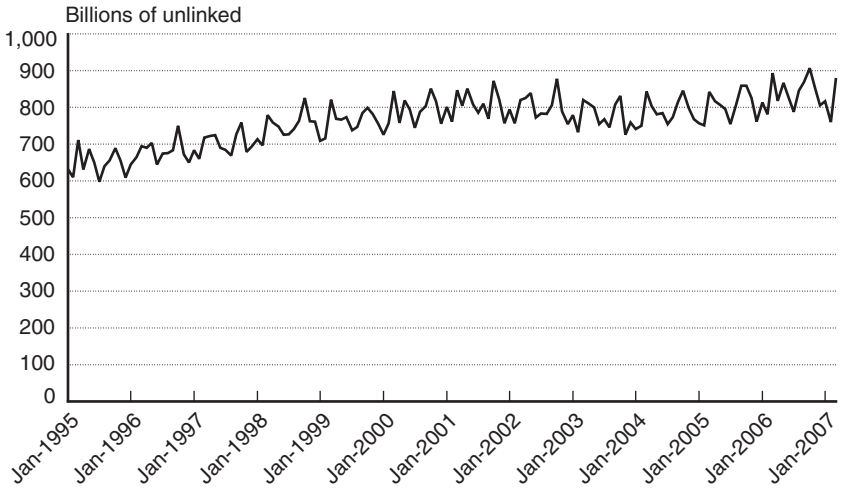


TABLE C-20 Public Transit Ridership: January 2006–March 2007

	Ridership (thousands, unlinked trips)
Jan-06	812,592
Feb-06	780,552
Mar-06	893,107
Apr-06	817,331
May-06	865,840
Jun-06	826,177
Jul-06	787,488
Aug-06	845,626
Sep-06	868,243
Oct-06	906,551
Nov-06	854,351
Dec-06	805,150
Jan-07	816,143
Feb-07	759,976
Mar-07	880,082

NOTES: Public transportation includes transit bus, transit rail, commuter rail, trolleys, and several demand-responsive services. According to the American Public Transportation Association (APTA), an unlinked transit trip is a trip on one transit vehicle. A person riding one vehicle from origin to destination takes one unlinked trip; a person who transfers to a second vehicle takes two unlinked trips; a person who transfers to a third vehicle takes three unlinked trips. A linked trip includes all segments on all vehicles used to travel from origin to destination. APTA estimates that the number of people riding transit on an average weekday is 45 percent of the number of unlinked transit passenger trips.

SOURCE: American Public Transportation Association, APTA Quarterly Transit Ridership Report, available at: http://www.apta.com/research/stats/ridership/ as of August 2007.

TABLE C-21 Transit Passenger-Miles by Type of Service: 1995–2005
Millions

		Transit rail					
	Bus	Heavy	Commuter	Light	Paratransit	Other	Total
1995	18,818	10,559	8,244	860	607	720	39,808
1996	19,096	11,530	8,351	957	656	788	41,378
1997	19,604	12,056	8,038	1,035	754	852	42,339
1998	20,360	12,284	8,704	1,128	735	917	44,128
1999	21,205	12,902	8,766	1,206	813	965	45,857
2000	21,241	13,844	9,402	1,356	839	984	47,666
2001	22,022	14,178	9,548	1,437	855	1,030	49,070
2002	21,841	13,663	9,504	1,432	853	1,031	48,324
2003	21,262	13,606	9,559	1,476	930	1,069	47,903
2004	21,377	14,354	9,719	1,576	962	1,084	49,073
2005[P]	21,825	14,418	9,473	1,700	1,058	1,033	49,678

P = Preliminary.

NOTES: *Paratransit* (also called demand response or dial-a-ride) is comprised of passenger cars, vans, or small buses operating in response to calls from passengers or their agents to the transit operator, who then dispatches a vehicle to pick up the passengers and transport them to their destinations. *Other* includes modes such as automated guideway, Alaska Railroad, cable car, ferryboat, inclined plane, monorail, trolleybus, and vanpool. Data may not add to total because of independent rounding.

SOURCE: American Public Transportation Association, *2007 Public Transportation Factbook*, Table 7, available at http://www.apta.com/ as of July 2007.

TABLE C-22 Transit Unlinked Trips by Type of Service: 1995–2005
Millions of unlinked trips

		Transit rail				
	Bus	Heavy	Commuter	Light	Other	Total
1995	4,579	2,034	344	249	298	7,504
1996	4,506	2,157	352	259	291	7,565
1997	4,602	2,430	357	259	306	7,954
1998	4,754	2,393	381	273	315	8,115
1999	4,992	2,521	396	289	326	8,523
2000	5,040	2,632	413	316	319	8,720
2001	5,215	2,728	418	334	312	9,008
2002	5,268	2,688	414	337	311	9,017
2003	5,147	2,667	410	338	315	8,876
2004	5,094	2,748	414	350	331	8,937
2005	5,226	2,808	423	381	330	9,175

NOTE: *Other* includes vanpool, demand response, ferryboats, inclined planes, monorail, jitney, publico, Alaska Railroad, aerial tramway, and trolley buses. Data may not add to total because of independent rounding.

SOURCE: U.S. Department of Transportation, Federal Transit Administration, *National Transit Summaries and Trends*, annual reports, available at http://www.ntdprogram.com/ as of June 2007.

TABLE C-23 ADA-Compliant Transit Rail Stations by Service Type: 1995–2005
Number

	Transit rail						
	Commuter	Heavy	Light	Other	ADA-compliant stations	Total number of stations	ADA-compliant stations (percent)
1995	322	237	168	2	729	2,573	28.3
1996	356	245	233	2	836	2,617	31.9
1997	388	256	265	2	911	2,643	34.5
1998	500	258	290	2	1,050	2,675	39.3
1999	533	284	351	2	1,170	2,728	42.9
2000	552	340	384	2	1,278	2,777	46.0
2001	583	359	408	5	1,355	2,807	48.3
2002	624	366	458	9	1,457	2,786	52.3
2003	643	416	466	12	1,537	2,799	54.9
2004	666	428	589	12	1,695	2,911	58.2
2005	686	459	596	12	1,753	2,948	59.5

KEY: ADA = Americans with Disabilities Act.

NOTES: *Other rail* includes monorail and (for 2001–2004 only) Alaska Railroad. Table does not include station data for automated guideway, jitney, and inclined plane transit services. Data may not add to total because of independent rounding. ADA-Compliant stations are those rail stations that are fully compliant with the ADA. Under the ADA Acts, many older stations have elevators. These older stations were given time, some to year 2020, to remodel or be replaced and given time to add ramps, the tile strips along the platform, and the communication equipment for full ADA compliant.

SOURCES: 1994-2001: U.S. Department of Transportation (USDOT), Federal Transit Administration (FTA), personal communication, May 2005. **2002–2005:** USDOT, FTA, National Transit Database Data Tables, Annual Reports, table 21, available at http://www.ntdprogram.com/ as of June 2007.

TABLE C-24 ADA-Compliant Buses: 1995–2006
Number

	Total number of buses	ADA-compliant buses	Percentage of compliant buses
1995	57,322	35,381	61.7
1996	57,369	38,316	66.8
1997	58,975	40,932	69.4
1998	60,830	46,278	76.1
1999	63,618	51,213	80.5
2000	63,322	52,873	83.5
2001	65,377	57,014	87.2
2002	66,382	60,000	90.4
2003	66,038	61,774	93.5
2004	66,198	63,357	95.7
2005	67,273	64,742	96.2
2006	66,668	65,326	98.0

KEY: ADA = Americans with Disabilities Act.

SOURCE: U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, National Transportation Statistics 2007, table 1-8, available at http://www.bts.gov/ as of November 2007.

TABLE C-25 Airport Passenger and Rail Facility Intermodal Connectivity

Number of connections

	48 contiguous states	Alaska & Hawaii	Total
Airports	**435**	**238**	**673**
With intermodal connections	150	9	159
Without intermodal connections	285	229	514
Percent with connections	34.5	3.8	23.6
Intercity rail stations	**505**	**22**	**527**
With intermodal connections	274	7	281
Without intermodal connections	231	15	246
Percent with connections	54.3	31.8	53.3
Airports and intercity rail stations	**940**	**260**	**1200**
With intermodal connections	424	16	440
Without intermodal connections	516	244	760
Percent with connections	45.1	6.2	36.7

NOTES: Data for airports and intercity rail stations was collected during 2006 and 2007. Updating and collection of data for other modes is ongoing.

The airports and intercity rail stations at Anchorage, Baltimore, Burbank, Newark, and Milwaukee are counted separately for purposes of total facilities.

SOURCE: U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, Intermodal Passenger Connectivity Database, September 2007.

FIGURE C-26 Index of U.S. Vehicle-Miles: 1995–2005

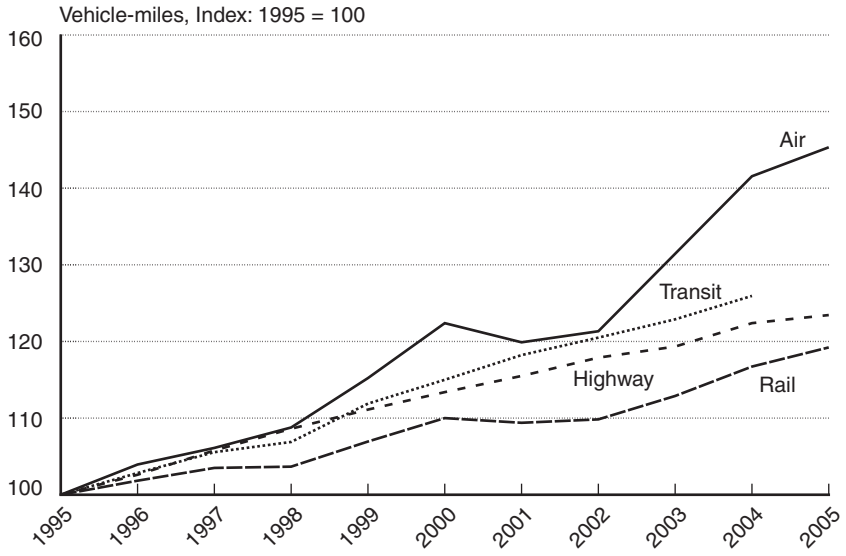


TABLE C-26 U.S. Vehicle-Miles: 1995–2005

Millions

	Air carrier, large certificated, domestic, all services	General aviation	Highway	Transit (car-miles)	Rail (train-miles)
1995	4,629	3,795	2,422,696	3,550	490
1996	4,811	3,524	2,485,848	3,650	499
1997	4,911	3,877	2,561,695	3,746	507
1998	5,035	N	2,631,522	3,794	508
1999	5,332	N	2,691,056	3,972	524
2000	5,664	N	2,746,925	4,081	539
2001	5,548	N	2,797,287	4,196	536
2002	5,616	N	2,855,508	4,277	538
2003	6,085	N	2,890,450	4,363	553
2004	6,552	N	2,964,788	4,471	572
2005	6,728	N	2,989,807	U	584

KEY: N = Data do not exist; U = Data are unavailable.

NOTES: *General aviation* data include all operations other than those operating under 14 CFR 121 and 14 CFR 135. Transit data for 2003 are preliminary. Data for 1996 are not comparable to earlier years. *Transit* rail modes are measured in car-miles. Car-miles measure individual vehicle-miles in a train. A train-mile is the movement of a train, which can consist of multiple vehicles (cars), over the distance of 1 mile. This differs from a vehicle-mile, which is the movement of 1 vehicle over the distance of 1 mile. Rail train-miles includes Class I freight train-miles and Amtrak /intercity train-miles.

SOURCE: Various sources, as cited in U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *National Transportation Statistics 2007*, table 1-32, available at http://www.bts.gov/ as of April 2007.

FIGURE C-27 Index of U.S. Passenger-Miles: 1995–2005

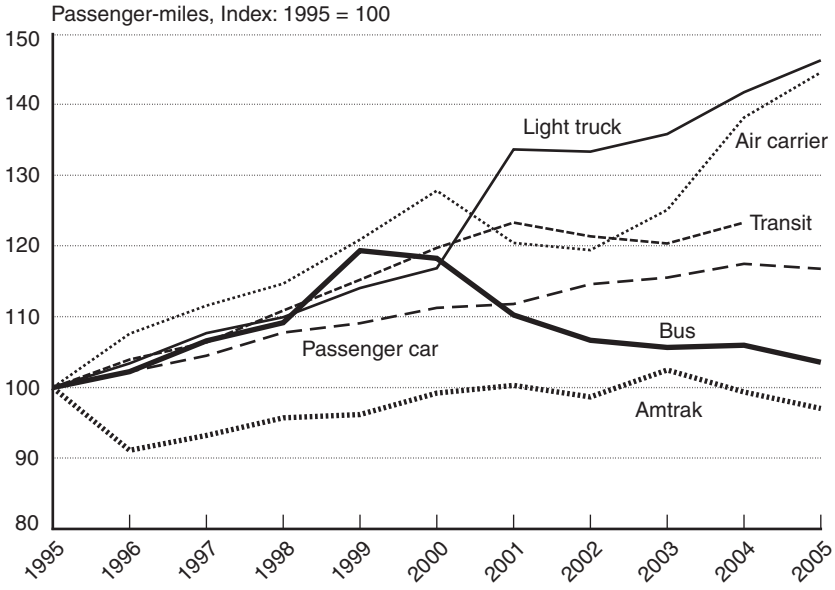


TABLE C-27 U.S. Passenger-Miles: 1995–2005

Millions

	Air, certificated, domestic, all services	Passenger car	Light truck	Bus	Transit (car-miles)	Amtrak
1995	403,888	2,286,887	1,256,146	136,104	39,808	5,545
1996	434,652	2,337,068	1,298,299	139,136	41,378	5,050
1997	450,612	2,389,065	1,352,675	145,060	42,339	5,166
1998	463,262	2,463,828	1,380,557	148,558	44,128	5,304
1999	488,357	2,494,870	1,432,625	162,445	45,857	5,330
2000	516,129	2,544,457	1,467,664	160,919	47,666	5,498
2001	486,506	2,556,481	1,678,853	150,042	49,070	5,559
2002	482,310	2,620,389	1,674,792	145,124	48,324	5,468
2003	505,158	2,641,885	1,706,103	143,801	47,903	5,503
2004	557,893	2,685,827	1,780,771	144,188	49,073	5,558
2005	583,689	2,670,145	1,836,988	140,910	U	5,391

KEY: U = Data are unavailable.

NOTES: *Passenger car* does not include motorcycle data. *Light truck* includes pickup trucks, sport utility vehicles, and vans. Motor bus and demand response are included in both *Bus* and *Transit*, resulting in some double counting. *Amtrak* does not include contract commuter passengers. The data presented here may not be consistent with other sources, particularly data that are revised on an irregular or frequent basis.

SOURCE: Various sources, as cited in U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *National Transportation Statistics 2007*, table 1-37, available at http://www.bts.gov/ as of April 2007.

FIGURE C-28 Ton-Miles of Freight: 1995–2005

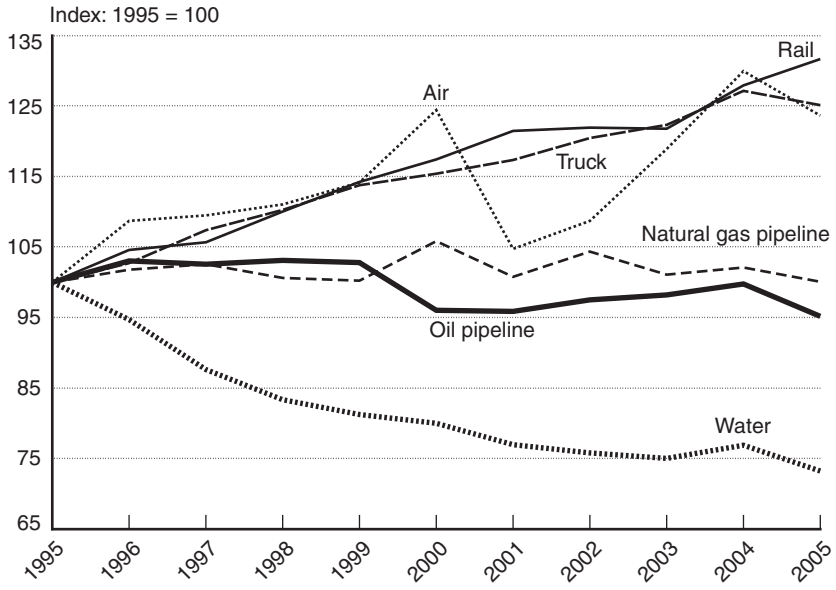


TABLE C-28 Ton-Miles of Freight: 1995–2005

Billions

	Air	Truck	Railroad	Water	Oil and oil products pipeline	Natural gas pipeline	Total
1995	13	1,034	1,317	808	601	332	4,104
1996	14	1,062	1,377	765	619	337	4,174
1997	14	1,111	1,391	707	617	340	4,179
1998	14	1,140	1,448	673	620	334	4,229
1999	15	1,176	1,504	656	618	332	4,301
2000	16	1,193	1,546	646	577	351	4,329
2001	13	1,213	1,599	622	576	334	4,357
2002	14	1,246	1,606	612	586	346	4,409
2003	15	1,265	1,604	606	590	335	4,415
2004	16	1,315	1,685	621	600	338	4,575
2005	16	1,293	1,734	591	572	332	4,538

NOTES: Data may not add to total because of independent rounding.

Railroad includes Class I revenue ton-miles.

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

FIGURE C-29 Rail Freight Revenue Ton-Miles: 1990–2007
Quarterly data, not seasonally adjusted

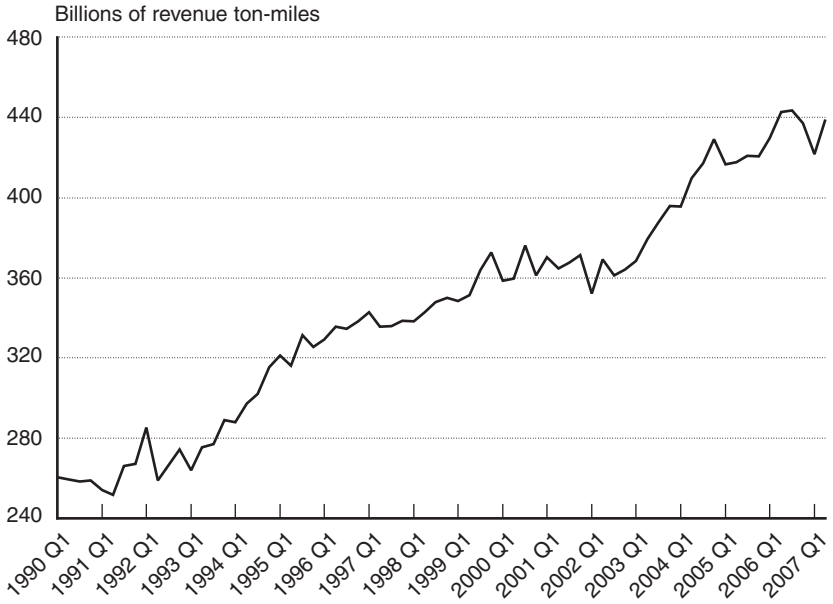


TABLE C-29 Rail Freight Revenue Ton-Miles: Q1 2006–Q2 2007
Billions

	Revenue ton-miles
2006 Q1	429.8
2006 Q2	442.7
2006 Q3	443.6
2006 Q4	437.2
2007 Q1	421.8
2007 Q2	439.1

SOURCE: Association of American Railroads, *Railroad Revenues, Expenses, and Income. Class 1 Railroads in the United States*, R&E Series, and Surface Transportation Board, Office of Economics, Environmental Analysis and Administration, Quarterly Selected Earnings Report, available at http://www.stb.dot.gov/ as of August 2007.

Global Connectivity

TABLE D-1 U.S.-International Trade in Transportation-Related Goods: 1995–2006
Millions of current dollars

	Imports	Exports	Total	Trade balance
1995	110,781	80,092	190,873	-30,689
1996	115,504	89,959	205,463	-25,545
1997	126,927	103,818	230,745	-23,109
1998	140,054	114,971	255,025	-25,083
1999	166,552	111,469	278,021	-55,083
2000	185,027	105,430	290,457	-79,597
2001	183,002	106,860	289,862	-76,142
2002	190,881	108,744	299,625	-82,137
2003	194,863	107,796	302,659	-87,067
2004	211,112	118,749	329,861	-92,363
2005	219,522	137,214	356,736	-82,308
2006	236,300	164,870	401,170	-71,430

NOTES: *Transportation-related goods* are motor vehicles and parts, aircraft and spacecraft and parts, railway vehicles and parts, and ships and boats. Data may not add to total because of independent rounding. *Trade balance* is equal to exports minus imports. All dollar amounts are in current dollars. These data have not been adjusted for inflation because there is no specific deflator available for transportation-related goods. In addition, it is difficult to control for trading partners' inflation rates as well as currency exchange fluctuations when adjusting the value of internationally traded goods and services for inflation.

SOURCE: U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, calculations 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 June 2007.

TABLE D-2 U.S.-International Trade in Transportation-Related Goods by Commodity: 2006
Millions of current dollars

	Overall (exports plus imports)	Balance (exports minus imports)
Vehicles other than railway	308,082	-122,676
Aircraft, spacecraft, and parts	84,345	49,161
Ships, boats, and floating structures	4,255	1,145
Railway locomotives and parts	4,488	940
Total, transportation-related goods	**401,170**	**-71,430**
Total, all commodities	**2,922,262**	**-817,976**

NOTES: These data have not been adjusted for inflation because there is no specific deflator available for transportation-related goods. In addition, it is difficult to control for trading partners' inflation rates as well as currency exchange fluctuations when adjusting the value of internationally traded goods and services for inflation.

SOURCE: U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, calculations 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 June 2007.

TABLE D-3 U.S.-International Trade in Transportation-Related Services: 1995–2006
Millions of current dollars

	Imports	Exports	Total	Trade balance
1995	41,697	44,990	86,687	3,293
1996	43,212	46,496	89,708	3,284
1997	47,097	47,874	94,971	777
1998	50,334	45,702	96,036	-4,632
1999	55,454	46,701	102,155	-8,753
2000	65,699	50,490	116,189	-15,209
2001	61,315	46,368	107,683	-14,947
2002	58,376	46,241	104,617	-12,135
2003	65,662	47,285	112,947	-18,377
2004	77,884	56,287	134,171	-21,597
2005	88,173	63,176	151,349	-24,997
2006	92,917	70,268	163,185	-22,649

NOTE: *Transportation-related services* include passenger fares and freight and port services. It excludes receipts and payments for travel services, which includes purchases of goods and services (e.g., food, lodging, recreation, gifts, entertainment, and any incidental expense on a foreign visit). *Trade balance* is equal to exports minus imports.
These data have not been adjusted for inflation because there is no specific deflator available for transportation-related services. In addition, it is difficult to control for trading partners' inflation rates as well as currency exchange fluctuations when adjusting the value of internationally traded goods and services for inflation.

SOURCE: U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, calculations based on data from U.S. Department of Commerce, Bureau of Economic Analysis, International Transactions Accounts data, available at http://www.bea.gov/ as of June 2007.

FIGURE D-4a Value of Surface U.S. - Canada Trade: 1995–2007

Monthly data, not seasonally adjusted

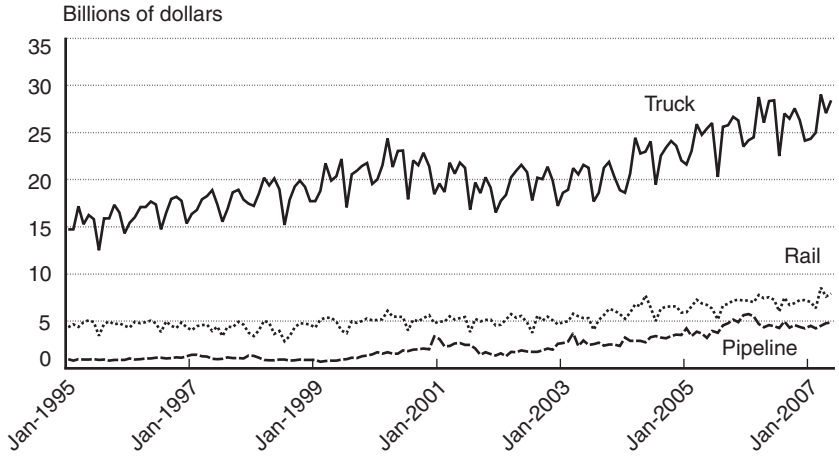


FIGURE D-4b Value of Surface U.S. - Mexico Trade: 1995–2007

Monthly data, not seasonally adjusted

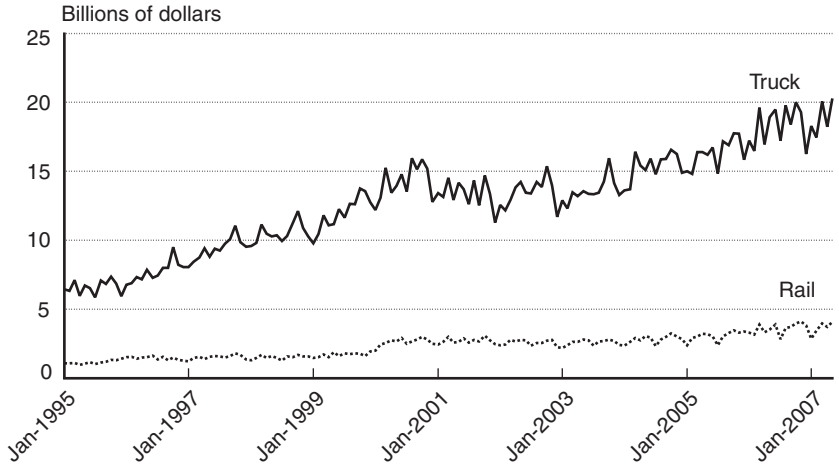


TABLE D-4 U.S. Surface Trade with Canada and Mexico: January 2006–May 2007

Millions of dollars	U.S.-Canada trade			U.S.-Mexico trade		
	Truck	Rail	Pipeline	Truck	Rail	Pipeline
January 2006	24,197	7,202	5,732	17,224	3,299	58
February 2006	24,495	6,990	5,505	16,463	3,163	59
March 2006	28,760	7,755	4,688	19,606	3,869	58
April 2006	26,028	7,407	4,345	16,945	3,319	69
May 2006	28,336	7,519	4,560	18,903	3,520	67
June 2006	28,410	7,265	4,474	19,462	3,881	56
July 2006	22,498	6,020	4,252	17,211	2,834	46
August 2006	26,998	7,479	4,986	19,775	3,639	70
September 2006	26,463	6,717	4,320	18,386	3,711	68
October 2006	27,549	6,920	4,579	19,990	3,957	70
November 2006	26,331	7,225	4,368	19,260	4,114	63
December 2006	24,138	7,238	4,237	16,231	3,827	78
January 2007	24,331	7,046	4,505	18,264	2,851	88
February 2007	24,990	6,349	4,214	17,441	3,437	39
March 2007	29,044	8,531	4,504	20,058	3,953	80
April 2007	27,069	7,624	4,770	18,213	3,702	59
May 2007	28,425	7,906	4,841	20,265	4,078	58

NOTES: Surface freight is useful in monitoring the value and modal patterns of trade with Canada and Mexico, our North American Free Trade Agreement (NAFTA) partners. Canada is our largest trading partner. Mexico now ranks third. Surface modes include not only truck, rail, and pipeline, but also government mail and other miscellaneous modes.

SOURCE: U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, Transborder Surface Freight Dataset; August 2007; available at http://www.bts.gov/ntda/tbscd/prod.html as of November 2007. The original data are from U.S. Department of Commerce, U.S. Census Bureau, U.S. Exports of Merchandise data and U.S. Imports of Merchandise data.

TABLE D-5 Top 10 U.S. Maritime Container Ports: 2001–2006

Thousands of TEUs

Port	2001	2002	2003	2004	2005	2006	Percent change, 2001-2006	Average annual growth rate, 2001-2006 (percent)
Los Angeles/Long Beach, CA	6,624	7,243	7,755	8,639	9,242	10,390	56.9	9.4
New York, NY	2,355	2,627	2,803	3,163	3,387	3,629	54.1	9.0
Seattle/Tacoma, WA	1,436	1,619	1,746	1,990	2,494	2,304	60.4	9.9
Savannah, GA	813	1,014	1,124	1,290	1,469	1,581	94.5	14.2
Charleston, SC	1,159	1,197	1,250	1,421	1,509	1,493	28.8	5.2
Norfolk, VA	885	982	1,093	1,206	1,319	1,410	59.3	9.8
Oakland, CA	963	979	1,064	1,197	1,374	1,400	45.4	7.8
Houston, TX	783	851	933	1,098	1,222	1,268	61.9	10.1
Miami, FL	717	752	764	795	772	743	3.6	0.7
Port Everglades, FL	417	370	423	500	578	634	52.0	8.7
Total, top 10 ports	16,152	17,634	18,955	21,299	23,366	24,852	53.9	9.0
Total, all ports[1]	18,117	19,729	21,289	23,851	25,868	27,473	51.6	8.7
Top 10, percent of total	89.2	89.4	89.0	89.3	90.3	90.5		

NOTES: TEU = Twenty-foot equivalent unit. One twenty-foot container equals one TEU while one forty-foot container equals two TEUs.

[1]Total includes ports for all container ports in all 50 states and Puerto Rico.
The data in this table include *only loaded containers* in U.S.-international maritime activity. It includes U.S. imports, exports, plus transshipments, therefore the trade levels will be greater than those reported from U.S.-international trade statistics, which excludes transshipments. The data also excludes military shipments.

SOURCE: U.S. Department of Transportation, Maritime Administration, U.S. Water Transportation Statistical Snapshot, and available at www.marad.dot.gov as of May 2007.

TABLE D-6 U.S.-International Maritime Container Volumes: 1995–2006

Millions of TEUs

	Export	Import	Container balance (exports minus imports)
1995	6.4	6.8	-0.34
1996	6.5	6.9	-0.41
1997	7.1	7.8	-0.71
1998	6.6	8.9	-2.28
1999	6.6	10.0	-3.36
2000	6.9	11.1	-4.24
2001	6.8	11.3	-4.42
2002	6.8	12.9	-6.10
2003	7.4	13.9	-6.51
2004	8.0	15.8	-7.76
2005	8.7	17.4	-8.68
2006	9.0	18.5	-9.48

KEY: TEU = Twenty-foot equivalent unit.

SOURCE: U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, based on data from U.S. Department of Transportation, Maritime Administration which are drawn from the *Journal of Commerce*, Port Import/Export Reporting Service (PIERS) data system, and available at www.marad.dot.gov as of August 2007.

TABLE D-7 U.S. v. World Maritime Container Volumes and Gross Domestic Product: 1995–2006

	Container volumes (total TEUs loaded and empty)				Gross Domestic Product (current U.S. dollars)			
	World (millions)	United States (millions)	U.S. share of World total (percent)	U.S. rank	World (billions)	United States (billions)	U.S. share of World GDP (percent)	U.S. rank
1995	137.2	22.3	16.3	1	29,391	7,398	25.2	1
1996	150.8	22.6	15.0	1	30,080	7,817	26.0	1
1997	160.7	24.5	15.3	1	29,928	8,304	27.7	1
1998	169.6	26.2	15.4	2	29,682	8,747	29.5	1
1999	184.6	28.0	15.2	2	30,786	9,268	30.1	1
2000	225.3	30.4	13.5	2	31,650	9,817	31.0	1
2001	236.7	30.7	13.0	2	31,456	10,128	32.2	1
2002	266.3	32.7	12.3	2	32,714	10,470	32.0	1
2003	305.0	36.3	11.9	2	36,751	10,961	29.8	1
2004	343.0	38.7	11.3	2	41,258	11,712	28.4	1
2005	378.0	42.0	11.1	2	44,455	12,456	28.0	1
2006[a]	417.0	46.3	11.1	2	48,245	13,194	27.3	1
Percent change, 1995-2006	**203.9**	**107.2**						
Average annual rate (percents), 1995-2007	**10.6**	**6.8**						

KEY: TEU = Twenty-foot equivalent unit.

[a] 2006 estimates are projections from the individual sources.

SOURCES: TEUs: World estimates—1995-1999 from Containerization International Yearbook (London, England: Informa Group, Inc., Various years, 1997–2001). **2000-2002** from United Nations Trade Commission, *Review of Maritime Transportation*, various years. **2003 - 2006** from Clarkson Research services, Container Intelligence Monthly, Vol. 8, No. 10, October 2006.
U.S. estimates—AAPA 2006, available at http://www.aapa-ports.org/home.cfm as of December 2006. **(GDP)**: From International Monetary Fund, available at www.imf.org as of January 2007.

FIGURE D-8 Incoming Truck Crossings to the United States from Mexico and Canada: 1996 and 2006

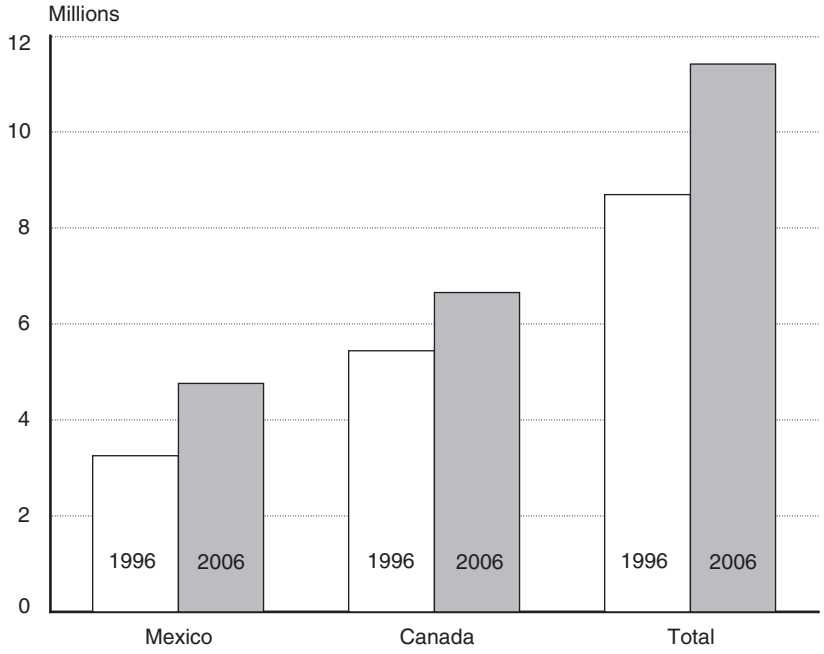


TABLE D-8 Incoming Truck Crossings to the United States from Mexico and Canada: 1996–2006
Number

	Mexico	Canada	Total
1996	3,254,084	5,431,096	8,685,180
1997	3,689,665	5,826,974	9,516,639
1998	3,946,543	6,270,934	10,217,477
1999	4,358,121	6,817,447	11,175,568
2000	4,525,579	7,048,128	11,573,707
2001	4,304,959	6,776,909	11,081,868
2002	4,426,593	6,915,973	11,342,566
2003	4,238,045	6,728,228	10,966,273
2004	4,503,688	6,901,820	11,405,508
2005	4,675,897	6,783,944	11,459,841
2006	4,758,915	6,649,249	11,408,164

NOTE: Data do not include privately owned pickup trucks.

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 June 2007.

TABLE D-9 Incoming Train Crossings to the United States from Mexico and Canada: 1995–2006
Number

	Mexico	Canada	Total
1995	9,432	31,021	40,453
1996	7,509	31,457	38,966
1997	7,678	32,863	40,541
1998	5,681	35,435	41,116
1999	6,019	32,930	38,949
2000	7,108	33,447	40,555
2001	7,469	33,577	41,046
2002	7,757	32,822	40,579
2003	7,774	34,137	41,911
2004	7,844	33,267	41,111
2005	9,458	32,807	42,265
2006	10,166	32,526	42,692

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 June 2007.

FIGURE D-10 U.S. Foreign Waterborne Freight: 1998–2007

Tonnage of U.S. Waterborne Imports and Exports
Monthly data, not seasonally adjusted

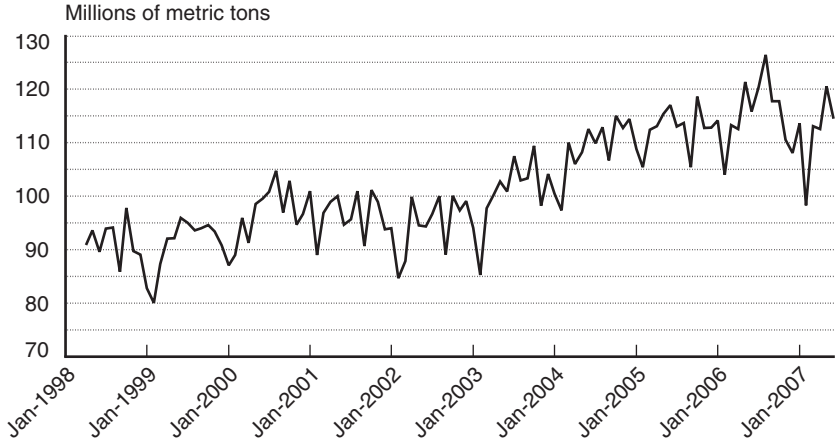


TABLE D-10 U.S.-Foreign Waterborne Freight: January 2006–June 2007
Monthly

	Metric tons (thousands)
January 2006	114,112
February 2006	104,011
March 2006	113,225
April 2006	112,543
May 2006	121,317
June 2006	115,788
July 2006	120,368
August 2006	126,377
September 2006	117,723
October 2006	117,708
November 2006	110,519
December 2006	108,033
January 2007	113,601
February 2007	98,219
March 2007	113,051
April 2007	112,550
May 2007	120,493
June 2007	114,422

NOTES: Import and export tonnage helps identify the volume of cargo flowing through U.S. ports and the resulting vessel traffic on U.S. coastal waters. It also helps identify needs for intermodal truck and rail traffic. Most U.S. coastal ports handle both foreign and domestic cargoes.

A metric ton is equal to 2,204.6 pounds.

SOURCE: April 1998–December 2005: U.S. Department of Transportation, Maritime Administration, U.S. Foreign Waterborne Transportation Statistics data, available at: http://www.iwr.usace.army.mil/ndc/usforeign/index.htm as of September 2006. **January 2006–present:** U.S. Department of Commerce, U.S. Census Bureau, Foreign Trade Statistics, available at: http://www.census.gov/foreign-trade/statistics/index.html as of August 2007.

FIGURE D-11 Incoming Full Rail Containers to the United States from Mexico and Canada: 1996 and 2006

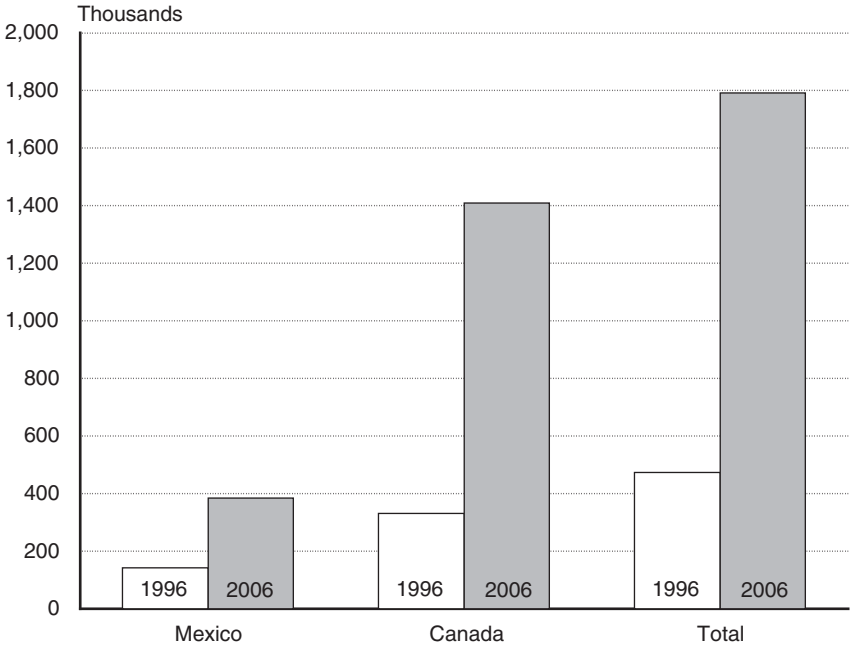


TABLE D-11 Incoming Full Rail Containers to the United States from Mexico and Canada: 1996–2006

	Mexico	Canada	Total
1996	142,236	329,983	472,219
1997	156,064	464,081	620,145
1998	175,490	903,584	1,079,074
1999	226,014	1,150,936	1,376,950
2000	266,235	1,215,439	1,481,674
2001	266,572	1,331,382	1,597,954
2002	269,550	1,386,143	1,655,693
2003	266,469	1,402,388	1,668,857
2004	305,748	1,484,634	1,790,382
2005	335,611	1,458,016	1,793,627
2006	383,253	1,408,391	1,791,644

KEY: U = Data are unavailable.

NOTE: A container is any conveyance entering the United States used for commercial purposes, full or empty. Data here apply only to the number of full rail containers arriving at a surface port and include containers moving as in-bond shipments.

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 June 2007.

FIGURE D-12 Passenger Crossings into the United States by Personal Vehicles from Mexico and Canada: 1995–2006

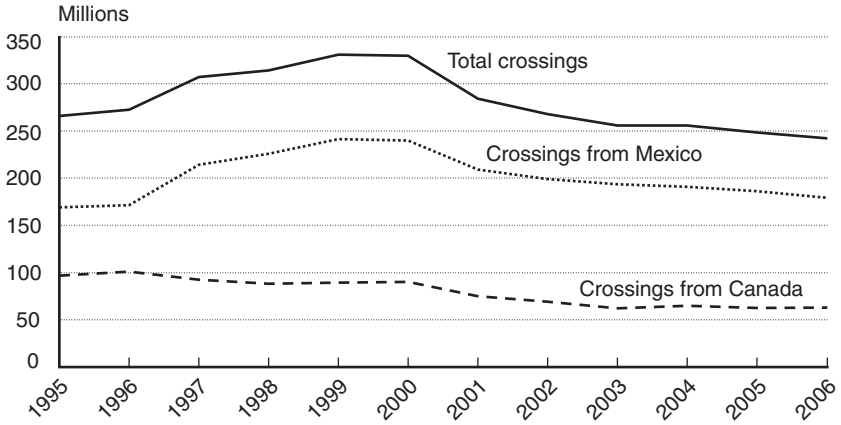


TABLE D-12 Passenger Crossings into the United States by Personal Vehicles from Mexico and Canada: 1995–2006

	Mexico	Canada	Total
1995	169,152,429	96,806,745	265,959,174
1996	171,522,486	101,070,734	272,593,220
1997	214,354,991	92,646,989	307,001,980
1998	226,012,670	88,283,187	314,295,857
1999	241,522,310	89,369,195	330,891,505
2000	239,794,552	90,046,948	329,841,500
2001	209,105,846	74,971,105	284,076,951
2002	199,020,692	68,986,616	268,007,308
2003	193,697,482	62,136,536	255,834,018
2004	190,936,607	64,848,466	255,785,073
2005	186,067,448	62,501,376	248,568,824
2006	179,255,014	62,986,037	242,241,051

NOTES: *Passengers in personal vehicles* (privately owned vehicles) include persons arriving by private automobile, pickup truck, motorcycle, recreational vehicle, taxi, ambulance, hearse, tractor, snowmobile, and other motorized private ground vehicles.

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 June 2007.

TABLE D-13 Passenger Crossings into the United States by Bus from Mexico and Canada: 1995–2006

	Mexico	Canada	Total
1995	1,571,320	3,530,042	5,101,362
1996	1,943,697	3,870,081	5,813,778
1997	2,772,666	4,124,253	6,896,919
1998	3,638,812	3,969,672	7,608,484
1999	3,358,118	4,367,472	7,725,590
2000	3,465,916	4,872,943	8,338,859
2001	3,366,795	4,456,436	7,823,231
2002	3,926,154	4,212,863	8,139,017
2003	3,747,337	3,779,970	7,527,307
2004	3,388,517	3,890,380	7,278,897
2005	3,169,779	3,854,858	7,024,637
2006	3,187,282	3,499,103	6,686,385

NOTE: *Passengers in buses* include both driver(s) and passengers arriving by bus requiring U.S. Customs processing.

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 June 2007.

TABLE D-14 Passenger Crossings into the United States by Train from Mexico and Canada: 1995–2006

	Mexico	Canada	Total
1995	13,222	226,796	240,018
1996	11,285	213,596	224,881
1997	11,504	249,106	260,610
1998	12,691	245,933	258,624
1999	16,169	249,172	265,341
2000	18,254	269,502	287,756
2001	18,895	253,652	272,547
2002	15,108	255,134	270,242
2003	12,101	234,796	246,897
2004	12,664	223,477	236,141
2005	17,833	235,758	253,591
2006	21,504	244,683	266,187

NOTE: *Passengers in trains* includes both passengers and crew arriving by train and requiring U.S. Customs processing.

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 June 2007.

TABLE D-15 Pedestrian Crossings into the United States from Mexico and Canada: 1995–2006

	Mexico	Canada	Total
1995	32,835,972	697,963	33,533,935
1996	34,109,364	607,987	34,717,351
1997	43,911,311	549,875	44,461,186
1998	44,461,554	598,469	45,060,023
1999	48,213,234	587,830	48,801,064
2000	47,089,642	585,191	47,674,833
2001	51,501,321	749,805	52,251,126
2002	50,278,281	1,081,679	51,359,960
2003	48,663,773	937,477	49,601,250
2004	48,084,235	826,017	48,910,252
2005	45,829,612	605,339	46,434,951
2006	46,251,414	533,739	46,785,153

NOTE: *Pedestrian crossings* include persons arriving on foot or by certain conveyances (e.g., bicycles, mopeds, or wheel chairs) requiring U.S. Customs processing.

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 June 2007.

TABLE D-16 North American Cruise Passengers by Destination: 2003–2006

Passengers in thousands

Destination	2003	2004	2005	2006
Alaska	776.2	880.2	929.7	938.8
Atlantic Coast	0.0	0.0	1.5	0.0
Bahamas	1,292.2	1,431.0	1,390.5	1,541.0
Bermuda	212.2	195.1	225.8	234.2
Canada/New England	173.0	213.6	178.9	164.6
Eastern Caribbean	1,036.9	1,214.9	1,315.3	1,386.1
Far East	0.0	0.0	0.0	0.5
Hawaii	222.0	231.9	306.6	401.7
Mexico (Pacific)	731.4	964.4	1,130.3	1,075.0
Nowhere	16.8	28.6	9.0	9.4
Pacific Coast	25.5	48.1	55.8	60.0
South America	11.7	9.9	6.7	18.5
South Pacific/Far East	7.0	7.5	8.9	11.7
Southern Caribbean	749.3	895.2	788.3	749.0
Transatlantic	75.7	96.1	146.4	138.0
Trans-Panama Canal	94.9	107.8	111.9	91.4
Western Caribbean	2,923.9	3,094.0	3,141.5	3,151.1
Total	**8,348.7**	**9,418.3**	**9,747.2**	**9,970.9**

NOTES: The cruise statistics cover seventeen major cruise lines that offer North American cruises with a U.S. port of call.

Destination Notes:

Eastern Caribbean: As far South as St. Maarten, as far west as Haiti.

Southern Caribbean: South of St. Maarten to northern coast of South America as far as Aruba.

Western Caribbean: West of Haiti, includes ports in Mexico, Central America, and Columbia.

Nowhere: Cruises that begin and end at the same port with no intervening calls.

Atlantic Coast: Any coast fronting the Atlantic Ocean.

Pacific Coast: Any coast fronting the Pacific Ocean.

SOURCE: U.S. Department of Transportation, Maritime Administration, Cruise Statistics, Summary Tables, available at: http://www.marad.dot.gov as, of November 2007.

TABLE D-17 Incoming Maritime Vessels by Region, Type: 2001–2005

	2001	2002	2003	2004	2005	Percent change 2001–2005
Tanker	**18,387**	**17,320**	**18,503**	**19,316**	**20,118**	**9.4**
North Atlantic	3,682	3,122	3,679	3,801	3,875	5.2
South Atlantic	1,437	1,297	1,303	1,455	1,622	12.9
Puerto Rico	212	241	273	312	261	23.1
U.S. Gulf	9,155	8,798	9,370	10,125	10,474	14.4
Pacific Northwest	1,805	1,793	1,900	1,538	1,690	-6.4
Pacific Southwest	2,096	2,069	1,978	2,085	2,196	4.8
Container	**17,076**	**17,138**	**17,287**	**18,279**	**18,542**	**8.6**
North Atlantic	3,196	3,043	3,036	3,115	3,291	3.0
South Atlantic	5,479	5,444	5,341	6,079	6,339	15.6
Puerto Rico	586	568	504	505	487	-16.9
U.S. Gulf	1,283	1,262	1,263	1,284	1,378	7.4
Pacific Northwest	1,705	1,787	1,875	1,855	1,890	10.9
Pacific Southwest	4,827	5,034	5,268	5,441	5,157	6.8
Dry Bulk	**11,628**	**11,112**	**10,271**	**11,631**	**11,406**	**1.9**
North Atlantic	1,588	1,388	1,351	1,566	1,609	1.3
South Atlantic	1,341	1,156	1,054	1,297	1,253	-6.6
Puerto Rico	91	85	126	72	73	-19.8
U.S. Gulf	4,793	4,983	4,837	4,959	4,575	-4.5
Pacific Northwest	2,420	2,111	1,479	2,267	2,364	-2.3
Pacific Southwest	1,395	1,389	1,424	1,470	1,532	9.8
Roll On/Roll Off	**5,712**	**5,632**	**5,191**	**5,317**	**5,663**	**-0.9**
North Atlantic	1,786	1,804	1,577	1,542	1,587	-11.1
South Atlantic	1,644	1,555	1,434	1,527	1,682	2.3
Puerto Rico	200	167	243	204	214	7.0
U.S. Gulf	449	431	398	370	337	-24.9
Pacific Northwest	773	792	679	593	609	-21.2
Pacific Southwest	860	883	860	1,081	1,234	43.5

(continued on next page)

TABLE D-17 Incoming Maritime Vessels by Region, Type: 2001–2005 *(continued)*

	2001	2002	2003	2004	2005	Percent change 2001-2005
Gas Carrier	**739**	**739**	**926**	**916**	**969**	**31.1**
North Atlantic	75	73	122	161	174	132.0
South Atlantic	33	26	45	71	69	109.1
Puerto Rico	28	33	35	41	24	-14.3
U.S. Gulf	493	514	624	548	558	13.2
Pacific Northwest	61	43	48	34	93	52.5
Pacific Southwest	49	50	52	61	51	4.1
Combination	**770**	**761**	**666**	**459**	**414**	**-46.2**
North Atlantic	251	234	216	108	129	-48.6
South Atlantic	71	69	48	73	58	-18.3
Puerto Rico	5	14	10	2	8	60.0
U.S. Gulf	406	418	375	258	201	-50.1
Pacific Northwest	3	0	2	3	5	66.7
Pacific Southwest	34	26	15	15	13	-61.8
General Cargo	**4,076**	**3,894**	**3,915**	**3,967**	**3,935**	**-3.5**
North Atlantic	846	789	852	925	833	-1.5
South Atlantic	800	828	703	802	686	-14.3
Puerto Rico	285	269	306	223	223	-21.8
U.S. Gulf	1,361	1,267	1,167	1,141	1,160	-14.8
Pacific Northwest	160	171	251	220	290	81.3
Pacific Southwest	624	570	636	656	743	19.1
All Types	**58,388**	**56,596**	**56,759**	**59,885**	**61,047**	**4.5**
North Atlantic	11,424	10,453	10,833	11,218	11,498	0.6
South Atlantic	10,805	10,375	9,928	11,304	11,709	8.4
Puerto Rico	1,407	1,377	1,497	1,359	1,290	-8.3
U.S. Gulf	17,940	17,673	18,034	18,685	18,683	4.1
Pacific Northwest	6,927	6,697	6,234	6,510	6,941	0.2
Pacific Southwest	9,885	10,021	10,233	10,809	10,926	10.5

NOTES: Data may not add to total because of independent rounding. **Vessel types** - *Tanker:* petroleum tankers, chemical tankers; *Container:* container carriers, refrigerated container carriers; *Dry bulk:* bulk vessels, bulk containersip, cement carriers, ore carriers, wood-chip carriers; *Roll On/Roll Off:* RO/RO Off vessels, RO/RO containerships, vehicle carriers; *Gas carriers:* LNG carriers, LNG/LPG carriers, LPG carriers; *Combination:* ore/bulk/oil carriers, bulk/oil carriers; *General cargo:* general cargo carriers, partial containerships, refrigerated ships, barge carriers, livestock carriers.

SOURCE: U.S. Department of Transportation Maritime Administration, *Vessel Calls and U.S. and World Ports 2005*, available at http://www.marad.dot.gov/MARAD_statistics/index.html as of November 2007.

Environmental Stewardship and Energy Use

TABLE E-1 Average Fuel Efficiency of U.S. Passenger Cars and Light Trucks: 1995–2006
Miles per gallon

	Average U.S. passenger car fuel efficiency (calendar year)		New vehicle fuel efficiency (model year)				CAFE standards (model year)	
	Passenger car	Other 2-axle 4-tire vehicle	Passenger car	Domestic	Imported	Light truck (<8,500 lbs GVWR)	Passenger car	Light truck
1995	21.1	17.3	28.6	27.7	30.3	20.5	27.5	20.6
1996	21.2	17.2	28.5	28.1	29.6	20.8	27.5	20.7
1997	21.5	17.2	28.7	27.8	30.1	20.6	27.5	20.7
1998	21.6	17.2	28.8	28.6	29.2	21.0	27.5	20.7
1999	21.4	17.0	28.3	28.0	29.0	20.9	27.5	20.7
2000	21.9	17.4	28.5	28.7	28.3	21.3	27.5	20.7
2001	22.1	17.6	28.8	28.7	29.0	20.9	27.5	20.7
2002	22.0	17.5	29.0	29.1	28.8	21.4	27.5	20.7
2003	22.2	16.2	29.5	29.1	29.9	21.8	27.5	20.7
2004	22.5	16.2	29.5	29.9	28.7	21.5	27.5	20.7
2005	22.9	16.2	30.3	30.4	29.8	22.1	27.5	21.0
2006	U	U	29.8	30.0	29.4	22.2	27.5	21.6

KEY: CAFE = Corporate Average Fuel Economy; GVWR = Gross vehicle weight rating; U = Data are unavailable.

NOTES: *New vehicle fuel efficiency* and *CAFE standards* assume 55% city and 45% highway-miles. The fuel efficiency figures for light duty vehicles represent the sales-weighted harmonic average of the combined passenger car and light truck fuel economies.

SOURCES: Average U.S. passenger car fuel efficiency: —USDOT, Federal Highway Administration, *Highway Statistics* (Washington, DC: annual issues), table VM-1.
New vehicle fuel efficiency (based on model year production) and CAFE standards: —USDOT, National Highway Traffic Safety Administration, *Summary of Fuel Economy Performance* (Washington, DC: annual issues).

TABLE E-2 Carbon Dioxide Emissions by Mode: 1995–2005
Millions of short tons

	Passenger cars	Light-duty trucks	All other trucks	Buses	Aircraft	Ships and boats	Loco-motives	Other	Total, all modes
1995	599.6	401.6	270.9	9.0	174.6	55.4	42.2	51.3	1,604.6
1996	604.6	414.1	279.8	9.3	183.0	53.0	43.0	51.6	1,638.4
1997	602.2	427.1	300.7	9.8	181.9	37.4	43.1	54.5	1,656.8
1998	621.3	437.7	310.1	10.0	184.3	30.6	43.5	49.0	1,686.4
1999	630.2	455.7	326.7	11.2	189.9	40.9	45.0	49.6	1,749.2
2000	632.0	459.2	343.2	11.0	196.4	63.8	45.1	49.1	1,799.9
2001	634.7	462.7	343.3	10.1	186.6	43.0	45.1	47.2	1,772.6
2002	649.6	476.6	358.1	9.7	178.0	60.6	44.9	49.2	1,826.7
2003	629.1	510.7	355.4	10.6	174.7	53.3	46.6	44.4	1,824.9
2004	628.7	533.6	368.5	14.9	179.7	61.1	49.2	43.5	1,879.1
2005	614.9	550.3	384.6	15.1	186.1	63.7	50.3	43.1	1,908.1

NOTES: Data may not add to total because of independant rounding. *Other* carbon dioxide emissions are from motorcycles, pipelines, and lubricants. *International bunker fuel* emissions (not included in the total) result from the combustion of fuels purchased in the United States but used for international aviation and maritime transportation. Thus, *aircraft* and *ships* and *boats* data included in U.S. total emissions involve only domestic activities of these modes as do all other data shown. *Aircraft* emissions consist of emissions from all jet fuel (less bunker fuels) and aviation gas consumption. Alternative-fuel vehicle emissions are allocated to the specific vehicle types in which they were classified (i.e., passenger cars, light-duty trucks, and other trucks and buses).

SOURCE: U.S. Environmental Protection Agency, *Inventory of U.S. Greenhouse Gas Emissions and Sinks* (Washington, DC: Annual Issues), table 2-17.

TABLE E-3 Transportation Air Pollutant Emissions from On-Road Mobile Sources: 1995–2006
Millions of short tons

	Carbon monoxide			Nitrogen oxides		
	All sources, total	Transportation, total	Transportation (percent of total)	All sources, total	Transportation, total	Transportation (percent of total)
1995	126.78	83.88	66	24.96	8.88	36
1996	128.86	78.61	61	24.79	8.73	35
1997	117.91	75.85	64	24.71	8.79	36
1998	115.38	73.24	63	24.35	8.62	35
1999	114.54	68.71	60	22.84	8.37	37
2000	114.47	68.06	59	22.60	8.39	37
2001	106.26	63.48	60	21.55	7.77	36
2002	109.24	62.96	58	21.28	8.13	38
2003	107.06	60.74	57	20.48	7.75	38
2004	104.89	58.53	56	19.56	7.37	38
2005	102.72	56.32	55	18.95	6.98	37
2006	100.55	54.10	54	18.23	6.60	36

	Volatile organic compounds			Sulfur dioxide		
	All sources, total	Transportation, total	Transportation (percent of total)	All sources, total	Transportation, total	Transportation (percent of total)
1995	22.04	6.75	31	18.62	0.34	2
1996	20.87	6.22	30	18.39	0.30	2
1997	19.53	5.99	31	18.84	0.30	2
1998	18.78	5.86	31	18.94	0.30	2
1999	18.27	5.68	31	17.54	0.30	2
2000	17.51	5.33	30	16.35	0.26	2
2001	17.11	4.95	29	15.93	0.25	2
2002	19.40	4.66	24	14.62	0.26	2
2003	18.89	4.46	24	15.02	0.24	2
2004	18.39	4.26	23	14.67	0.22	2
2005	17.89	4.05	23	14.63	0.21	1
2006	17.38	3.85	22	13.77	0.19	1

NOTES: Previous edition's data include all on-road mobile sources and some nonroad mobile sources, since EPA changed the methodology to estimate emissions, the details of the data are unavailable, this data set only contains the on-road mobile sources.

SOURCE: U.S. Environmental Protection Agency, Clearinghouse for Inventories and Emissions Factors (CHIEF), *Current Emission Trends Summaries*, Internet website http://www.epa.gov/ttn/chief/trends/index.html as of July 2007.

TABLE E-4 Miles of Highway Sound Walls Constructed: 1995–2004

Miles

	Type I barriers	Type II barriers	All other types
1995	95	32	6
1996	37	15	2
1997	70	31	1
1998	116	23	1
1999	31	18	5
2000	67	11	4
2001	95	18	19
2002	63	13	2
2003	78	4	7
2004	88	14	3

NOTES: Forty-five miles of barriers, while assigned a year of construction, cannot be assigned a cost. California did not provide data for the years 1999–2004 and, therefore, these years may not be comparable with previous years.

A Type I barrier is built on a new highway project or a physically altered existing highway.

A Type II barrier is built to abate noise along an existing highway (often referred to as retrofit abatement) and is not mandatory.

All other types of barriers are nonfederally funded.

SOURCE: U.S. Department of Transportation, Federal Highway Administration, Office of Environment and Planning, Highway Traffic Noise Barrier Construction Trends (Washington, DC: May 2006), tables 1 and 3.

TABLE E-5 Hazardous Materials Transportation Incidents: 1990–2006

	1990	1995	2000	2004	2005	2006
Highway	**7,297**	**12,869**	**15,063**	**13,071**	**13,460**	**17,128**
Accident related	261	257	329	283	322	303
Injuries	311	296	164	155	175	192
Fatalities	8	7	16	13	24	6
Rail	**1,279**	**1,155**	**1,058**	**765**	**745**	**704**
Accident related	48	50	62	46	51	44
Injuries	73	71	82	122	692	24
Fatalities	0	0	0	3	10	0
Air	**297**	**817**	**1,419**	**993**	**1,654**	**2,410**
Accident related	0	0	3	0	9	7
Injuries	39	33	5	11	78	2
Fatalities	0	0	0	0	0	0
Water	**7**	**12**	**17**	**17**	**69**	**68**
Accident related	0	0	0	0	0	0
Injuries	0	0	0	0	0	15
Fatalities	0	0	0	0	0	0
Pipeline						
Liquid	**180**	**188**	**146**	**144**	**138**	**111**
Injuries	7	11	4	16	2	2
Fatalities	3	3	1	5	2	0
Natural gas distribution	**109**	**97**	**154**	**176**	**170**	**134**
Injuries	52	43	59	41	38	25
Fatalities	6	16	22	18	14	16
Natural gas transmission	**89**	**64**	**80**	**123**	**181**	**143**
Injuries	17	10	18	3	7	5
Fatalities	0	2	15	0	0	3

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.

In previous years, carriers were exclusively responsible for reporting hazardous materials release incidents. In 2005, PHMSA expanding the requirement to report to include the person in physical possession of a hazardous material at the time an incident occurs during transport. Nonrelease incidents involving cargo tanking and undeclared shipments of hazardous materials.

SOURCES: USDOT, Pipeline and Hazardous Materials Safety Administration (PHMSA), Hazardous Materials Information System Database. **1990 data**—available at http://hazmat.dot.gov/pubs/biennial/ 96_97biennial.rpt.pdf as of December 2005. **1995–2006 data**—available at http://hazmat.dot.gov/pubs/inc/data/2006/2006frm.htm as of August 2007. **Pipeline data**—USDOT, PHMSA, Office of Pipeline Safety, available at http://ops.dot.gov/stats/stats.htm as of August 2007.

TABLE E-6 Top 20 Hazardous Material Incidents: 2006

Rank	Hazardous materials	Incidents
1	Paint (including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler, and liquid lacquer base) or paint-related material (including paint thinning or reducing compound)	3,411
2	Flammable liquids, N.O.S.	1,178
3	Diagnostic specimen	1,062
4	Isopropanol or isopropyl alcohol	761
5	Paint	742
6	Corrosive liquids, N.O.S.	638
7	Paint related material including paint thinning, drying, removing or reducing compound	592
8	Sodium hydroxide, solution	523
9	Resin solution, flammable	497
10	Corrosive liquid, acidic, inorganic, N.O.S	422
11	Printing ink, flammable	381
12	Corrosive liquid, acidic, inorganic, N.O.S.	351
13	Adhesives, containing a flammable liquid	302
14	Methanol or methyl alcohol	302
15	Fire extinguishers containing	300
16	Hydrochloric acid, solution	299
17	Potassium hydroxide, solution	270
18	Sulfuric acid	254
19	Gasoline	249
20	Acetone	211

KEY: N.O.S. = Not otherwise specified.

NOTES: Due to multiple commodities being involved in a single incident, the totals above may not correspond to the totals in other reports. Due to changes enacted Jan. 1, 2005, in reporting requirements and the 5800.1 form, reportable incidents now include all undeclared hazardous materials shipments and specification cargo tanks that receive damage to their lading retention systems while hauling hazardous materials.

SOURCE: U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration (PHMSA), Hazardous Materials Information System, available at http://hazmat.dot.gov/ as of August 2007.

TABLE E-7 Volume of Oil Spills from Facilities by Sources: 1995–2005

Thousands of gallons

	Airports/ aircraft	Offshore	Onshore	Pipelines	Railroads/ rails	Tank trucks	Other vehicles	Other facilities	Unknown	Total
1995	2	12	116	78	44	0	0	20	9	281
1996	2	227	192	988	1	3	1	24	11	1,449
1997	1	13	175	267	4	4	1	92	12	569
1998	1	25	106	204	0	11	1	16	32	396
1999	0	11	426	39	1	13	1	45	47	583
2000	2	11	256	99	0	11	1	13	8	401
2001	1	31	192	8	1	U	12	140	64	450
2002	0	63	142	0	0	U	4	0	79	288
2003	0	36	35	0	0	U	0	0	3	74
2004	0	10	62	0	0	U	0	0	1	74
2005	0	1	2	0	0	U	0	0	111	113

KEY: U = Data are unavailable.

NOTES: Other Vehicles include passenger cars, 4-wheel drives and ATVs. The drop in total spills from 2002 to 2005 reflects the implementation of a new database following a massive breakdown of the main Coast Guard Oil spill database (MSIS) in November 2001. The new system (MISLE) only counts the spill if it is investigated.

In 2005 facilities accounted for 66 percent of all spills, largely the result of an Unknown facility spill that occurred on the Kentucky River in January, spilling 110,000 gallons of crude oil.

SOURCE: American Petroleum Institute, *Oil Spills in U.S. Waters*, available at http://www.api.org/ as of November 2007.

TABLE E-8 Population Affected by High Decibel Noise at Airports: 1995–2005

	People affected (thousands)	Percent of U.S. resident population	U.S. resident population (millions)
1995	1,700	0.64	266.3
1996	1,500	0.56	269.4
1997	1,300	0.48	272.6
1998	1,100	0.40	275.9
1999	680	0.24	279.0
2000	440	0.16	282.2
2001	411	0.14	285.1
2002	294	0.10	287.9
2003	289	0.10	290.8
2004	208	0.07	293.7
2005	148	0.05	296.4

NOTES: Noise-level contours are graphical representations of noise levels on a map, similar to elevation contours on a topgraphic map. Noise-level contours are lines that join points of equal sound levels. Areas between given noise-level contour lines would have a noise level between the two contour values. The U.S. Department of Transportation, Federal Aviation Administration (FAA) has identified DNL 65 dB as the highest threshold of airport noise exposure that is normally compatible with indoor and outdoor activity associated with a variety of land uses, including residential, recreational, schools, and hospitals. Estimates are for areas surrounding airport property of 250 of the largest civil airports with jet operations in the United States. They exclude exposure to aircraft noise within an airport boundary.

SOURCES: Various sources, as cited in U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *National Transportation Statistics 2007*, table 4-53, available at http://www.bts.gov/ as of November 2007.

TABLE E-9 Wetlands Conversion to Transport with Federal-Aid Highway Projects and Acreage Mitigated: 2000–2006

	Acres impacted	Acres mitigated	Acres gained (net)	Mitigation ratio
2000	2,041	7,671	5,630	3.8:1
2001	1,905	4,017	2,112	2.1:1
2002	1,942	5,198	3,256	2.7:1
2003	1,278	3,431	2,153	2.7:1
2004	847	1,763	916	2.1:1
2005	1,139	3,741	2,602	3.3:1
2006	591	1,414	823	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.

SOURCES: 2000–2004—U.S. Department of Transportation, Federal Highway Administration, Federal Highway Administration Wetland Mitigation Performance Measure for Federal-Aid Highway Projects Fiscal Year (FY) 2004. **2005–2006**—USDOT, FHWA, personal communication, August 2007.

Security Preparedness and Response

TABLE F-1 Energy Consumption by the Transportation Sector: 1995–2006

Quadrillion Btu

	Energy consumption (all sectors)	Total transportation consumption	Transportation as percent of total energy consumption	Total primary consumption	Natural gas	Petroleum products	Electricity	Electrical system energy losses
1995	91.12	23.85	26.2	23.79	0.72	23.07	0.02	0.04
1996	94.23	24.44	25.9	24.38	0.74	23.65	0.02	0.04
1997	94.80	24.75	26.0	24.70	0.78	23.92	0.02	0.04
1998	95.20	25.26	26.5	25.20	0.67	24.54	0.02	0.04
1999	96.84	25.95	26.8	25.89	0.68	25.22	0.02	0.04
2000	98.98	26.55	26.8	26.49	0.67	25.82	0.02	0.04
2001	96.32	26.28	27.3	26.21	0.66	25.56	0.02	0.04
2002	97.81	26.85	27.4	26.79	0.70	26.08	0.02	0.04
2003	98.12	27.00	27.5	26.93	0.63	26.30	0.02	0.05
2004	100.22	27.90	27.8	27.82	0.60	27.21	0.03	0.06
2005	100.46	28.32	28.2	28.24	0.62	27.61	0.03	0.06
2006	99.66	28.40	28.5	28.31	0.62	27.70	0.03	0.06

KEY: Btu = British thermal unit.

NOTES: *Total transportation consumption* is the sum of primary consumption, electricity, and electrical system energy losses categories. *Total primary consumption* is the sum of natural gas and petroleum categories. *Natural gas* is consumed in the operation of pipelines, primarily in compressors, and small amounts as vehicle fuel.
Petroleum products includes most nonutility use of fossil fuels to produce electricity and small amounts (about 0.1 quadrillion Btu per year since 1990) of renewable energy in the form of ethanol blended into motor gasoline.
Electrical system energy losses are incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

SOURCE: Various sources, as cited in U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *National Transportation Statistics 2007*, table 4-4, available at http://www.bts.gov/ as of August 2007.

TABLE F-2 Energy Consumption by Mode of Transportation: 1995–2005

Trillion Btu

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Air											
Certificated carriers											
Jet fuel	1,711	1,784	1,831	1,800	1,944	2,004	1,892	1,735	1,749	1,839	1,861
General aviation											
Aviation gasoline	35	35	35	37	42	40	33	33	34	34	35
Jet fuel	76	82	87	110	131	131	129	133	127	130	136
Highway											
Gasoline, diesel and other fuels											
Passenger car and motorcycle	8,534	8,677	8,762	8,988	9,187	9,159	9,219	9,458	9,456	9,451	9,261
Other 2-axle 4-tire vehicle	5,701	5,919	6,173	6,308	6,607	6,617	6,690	6,903	7,595	7,927	8,177
Single-unit 2-axle 6-tire or more truck	1,278	1,305	1,328	946	1,300	1,326	1,341	1,290	1,110	1,120	1,130
Combination truck	2,743	2,801	2,816	3,489	3,403	3,560	3,538	3,673	3,303	3,355	3,386
Bus	134	137	142	144	159	154	142	139	134	189	184
Transit											
Electricity	17	17	17	17	18	19	19	19	19	20	20
Motor fuel											
Diesel	94	96	99	103	106	109	103	100	99	101	101
Gasoline and other nondiesel fuels	8	8	7	7	6	6	6	7	6	7	7
Compressed natural gas	1	2	3	5	6	8	9	11	14	16	17
Rail, Class I (in freight service)											
Distillate / diesel fuel	483	496	496	497	515	513	515	517	531	563	568
Amtrak											
Electricity	1	1	1	1	1	1	1	U	U	U	U
Distillate / diesel fuel	9	10	10	10	10	11	10	U	U	U	U
Water											
Residual fuel oil	881	853	750	841	874	960	810	726	580	702	702
Distillate / diesel fuel oil	324	345	357	360	336	314	284	288	307	297	278
Gasoline	133	124	123	120	137	141	124	135	138	126	158
Pipeline											
Natural gas	722	734	775	655	665	662	644	688	610	590	603

KEY: Btu = British thermal unit; U = Data are unavailable.

NOTES: *Certificated carriers* are domestic operations only. *General aviation* includes fuel used in air taxi operations, but not commuter operations.

The following conversion rates were used:

Jet fuel = 135,000 Btu/gallon
Automotive gasoline = 125,000 Btu/gallon
Compressed natural gas = 138,700 Btu/gallon
Residual fuel = 149,700 Btu/gallon
Aviation gasoline = 120,200 Btu/gallon
Diesel motor fuel = 138,700 Btu/gallon
Distillate fuel = 138,700 Btu/gallon
Natural gas = 1,031 Btu/ft^3

Electricity = kWh = 3,412 Btu, negating electrical system losses. To include approximate electrical system losses, multiply this conversion factor by 3.

SOURCE: Various sources, as cited in U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *National Transportation Statistics 2007*, table 4-6, available at http://www.bts.gov/ as of August 2007.

Figure F-3 U.S. Petroleum Use by Sector: 2006

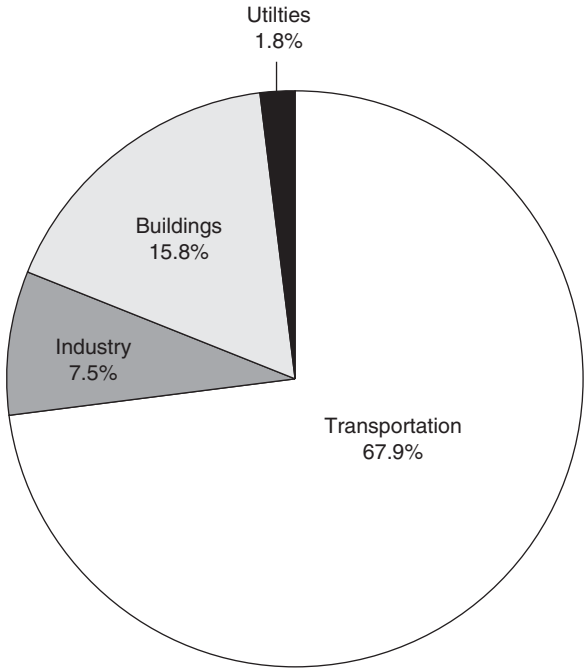


TABLE F-3 U.S. Petroleum Use by Sector: 1995–2006

Millions of barrels per day

	Transportation	Industry	Buildings	Utilities	Total	Transportation as a percentage of total
1995	11.7	4.6	1.1	0.3	17.7	65.8
1996	11.9	4.8	1.2	0.4	18.3	65.1
1997	12.1	5.0	1.2	0.4	18.6	65.0
1998	12.4	4.8	1.1	0.6	18.9	65.7
1999	12.8	5.0	1.2	0.5	19.5	65.4
2000	13.0	4.9	1.3	0.5	19.7	66.1
2001	12.9	4.9	1.3	0.6	19.6	65.8
2002	13.2	4.9	1.2	0.4	19.8	66.8
2003	13.3	4.9	1.3	0.5	20.0	66.5
2004	13.7	5.2	1.3	0.5	20.7	66.2
2005	13.9	5.1	1.2	0.5	20.8	67.0
2006	14.0	5.1	1.2	0.3	20.6	67.9

NOTES: 2003–2005 data are preliminary, except for utilities. Data may not add to total because of independent rounding.

SOURCE: U.S. Department of Energy, Energy Information Administration, *Annual Energy Review 2006*, table 5.13a-d, available at http://www.eia.doe.gov/ as of August 2007.

TABLE F-4 Energy Intensity by Passenger Mode: 1995–2005

Btu per passenger-mile

	Passenger cars	Light-duty trucks	Transit buses	Aircraft (domestic)	Amtrak
1995	3,721	4,538	4,155	4,382	1,838
1996	3,688	4,541	4,196	4,183	2,153
1997	3,657	4,564	4,228	4,166	2,200
1998	3,637	4,569	4,133	4,123	2,138
1999	3,672	4,612	4,044	4,049	2,107
2000	3,589	4,509	4,147	3,883	2,134
2001	3,597	3,985	3,698	3,890	2,100
2002	3,600	4,121	3,550	3,596	U
2003	3,570	4,452	3,514	3,463	U
2004	3,509	4,452	3,572	3,297	U
2005	3,458	4,452	U	3,182	U

KEY: Btu = British thermal unit; U = Data are unavailable.

SOURCE: Various sources, as cited in U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *National Transportation Statistics 2007*, table 4-20, available at http://www.bts.gov/ as of August 2007.

TABLE F-5 Prohibited Items Intercepted at Airport Screening Checkpoints: 2002–2005

	2002	2003	2004	2005
Total prohibited items	**3,775,345**	**6,114,612**	**7,089,599**	**15,909,141**
Firearms	927	683	650	2,217
Knives	1,036,697	1,961,849	2,058,652	1,822,888
Box cutters	32,788	20,991	22,350	21,319
Other cutting instruments	1,846,207	2,973,413	3,567,731	3,276,941
Clubs	11,131	25,139	28,813	20,531
Incendiaries	79,341	494,123	693,649	407,086
Other	768,254	638,414	717,754	10,358,159

NOTES: 2002 data are April through December.

The large increase in 2005 was primarily due to the prohibition of lighters on board beginning in April 2005

SOURCE: U.S. Department of Homeland Security, Transportation Security Administration, Office of Transportation Security Policy, personal communication, August 2007.

TABLE F-6 International Piracy and Armed Robbery at Sea: 1997–2006

Number of incidents

	Total
1997	252
1998	210
1999	309
2000	471
2001	370
2002	383
2003	452
2004	330
2005	266
2006	241

NOTES: Incidents include attempts and threatening actions.

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

Figure F-7 Vessel Detentions: 1996–2007
Monthly data, not seasonally adjusted

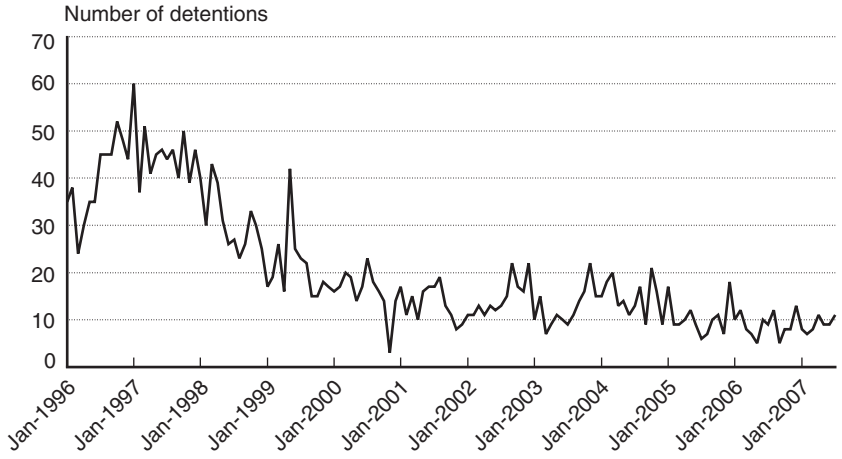


TABLE F-7 Vessel Detentions: January 2006–July 2007
Monthly

	Vessel detention
January 2006	10
February 2006	12
March 2006	8
April 2006	7
May 2006	5
June 2006	10
July 2006	9
August 2006	12
September 2006	5
October 2006	8
November 2006	8
December 2006	13
January 2007	8
February 2007	7
March 2007	8
April 2007	11
May 2007	9
June 2007	9
July 2007	11

NOTES: The U.S. Coast Guard identifies vessels not in compliance with International Conventions through examinations and boardings. If a vessel is not compliant, appropriate action is taken to eliminate any threat that vessels may pose to U.S. waters, ports, and citizens.

Examples of threats can include: oil leaks, improper repairs to lifeboats, inability to demonstrate proficiency in a fire drill, or failure to maintain document control.

SOURCE: U.S. Department of Homeland Security, U.S. Coast Guard, available at: http://homeport.uscg.mil/mycg/portal/ep/home.do as of October 2007.

Transportation and the Economy

Labor productivity, a measure of efficiency, is output resulting from labor input.

Figure G-1 Labor Productivity of the For-Hire Transportation Industries: 1995–2005

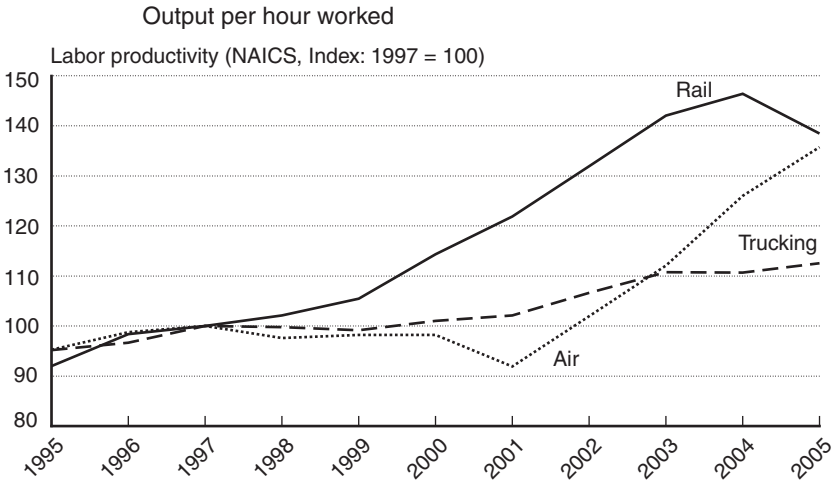


TABLE G-1 Labor Productivity of the For-Hire Transportation Industries: 1995–2005

	SIC categories Index: 1987 = 100			NAICS categories Index: 1997 = 100		
	Trucking, except local	Bus carriers, Class I	Petroleum pipeline	Railroad	Trucking, long-distance	Air
1995	125	110	116	92	95	95
1996	131	106	131	98	97	99
1997	132	125	134	100	100	100
1998	130	105	137	102	100	98
1999	132	135	145	106	99	98
2000	131	112	141	114	101	98
2001	U	U	U	122	102	92
2002	U	U	U	132	107	102
2003	U	U	U	142	111	112
2004	U	U	U	146	111	126
2005	U	U	U	138	113	136

KEY: U = Data are unavailable.

NOTES: Output per hour worked is based on the number of paid hours. Labor productivity measures quality-adjusted ton- and passenger-miles per hour. Quality adjustment corrects for differences in services and handling, e.g., the difference between flying first class and coach or differences in the handling requirements and revenue generation of high- and low-value commodities. Railroad includes line-haul railroads primarily engaged in transportation of passengers and cargo over a long distance within a rail network. Trucking comprises establishments engaged in providing long-distance general freight trucking, usually between metropolitan areas that may cross North American country borders. Air includes establishments that provide scheduled and nonscheduled air transportation of passengers and cargo using aircraft, e.g., airplanes and helicopters.

These productivity measures capture railroad, long-distance trucking, and air transportation as defined by the North American Industry Classification System (NAICS), whereas those for trucking except local, bus, and petroleum pipeline are defined by the Standard Industrial Classification (SIC) system. At the time this report was prepared, the Bureau of Labor Statistics did not have plans to continue estimating productivity measures for petroleum pipeline, trucking, and bus carriers because of a lack of reliable data.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Industry Productivity, available at http://www.bls.gov/lpc/ as of July 2007.

Multifactor productivity measures the changes in output per unit of combined input and is a measure of the efficiency with which inputs are utilized. Inputs include labor, capital services, and intermediate purchases. Examples of nonlabor inputs include rail cars and airplanes, as well as fuel.

TABLE G-2 Multifactor Productivity: 1995–2005

Index: 1995 = 100

	Railroad transportation	Air transportation	Business sector (all industries)
1995	100.0	100.0	100.0
1996	106.9	103.6	101.7
1997	108.7	104.9	102.7
1998	111.0	102.4	104.0
1999	114.7	103.1	105.4
2000	124.2	102.9	106.8
2001	132.5	96.4	106.9
2002	143.4	107.1	108.7
2003	154.4	118.2	111.6
2004	159.1	132.2	114.6
2005	150.5	142.4	116.6

NOTES: Source data are indexes with base years of 1997 (air), 2000 (business), and 1997 (rail). The Bureau of Transportation Statistics reindexed these data so that 1995 is the base year for all.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Productivity & Technology, available at http://www.bls.gov/ as of July 2007.

The Transportation Services Index (TSI) is a monthly measure of the volume of services performed by the for-hire transportation sector. The TSI tells us how the output of transportation services has increased or decreased from month to month.

Figure G-3 Transportation Services Index: 1995–2007
Monthly, seasonally adjusted

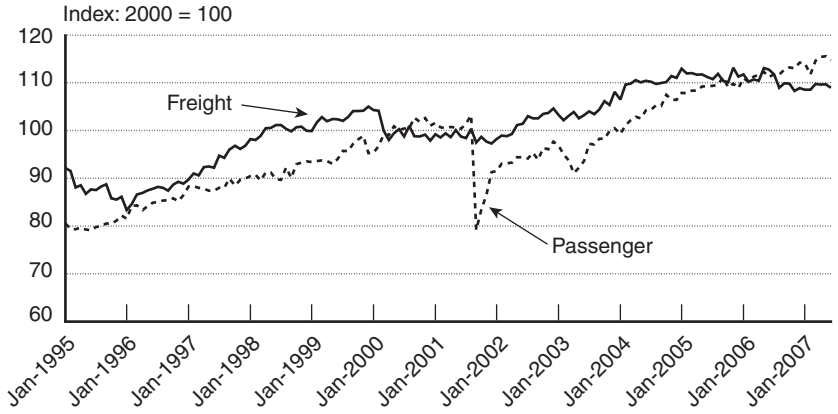


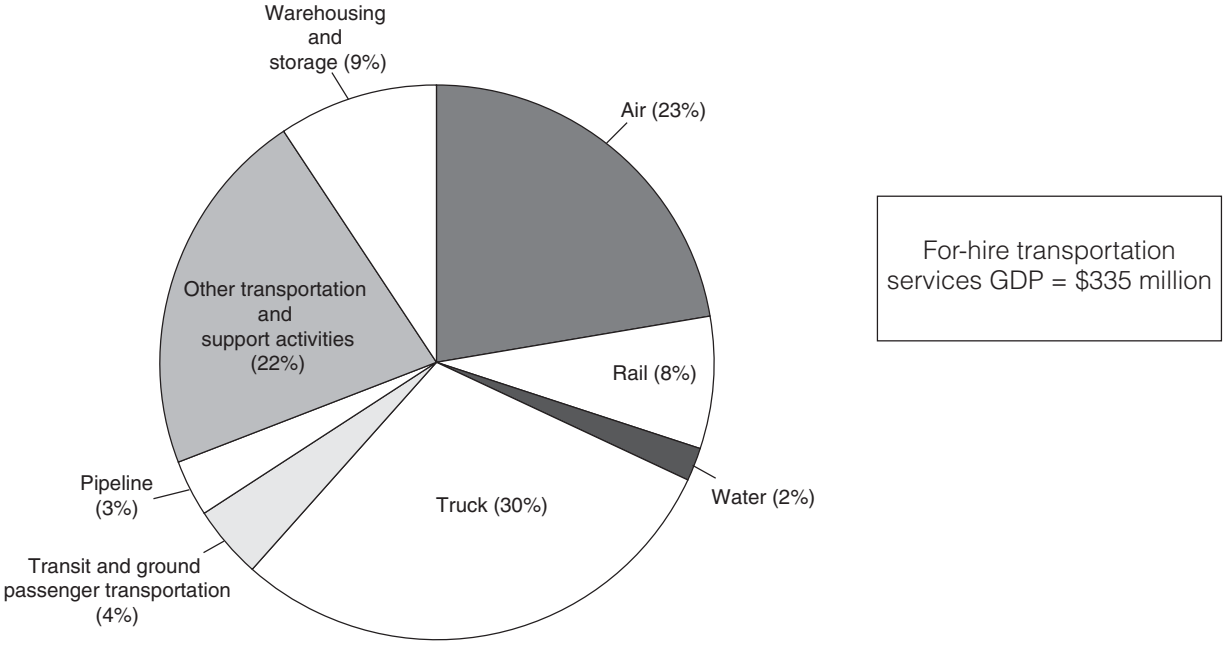
TABLE G-3 Transportation Services Index (TSI): January 2006–June 2007
Monthly, seasonally adjusted
Index: 2000 = 100

	TSI freight	TSI passenger
January-06	111.74	110.88
February-06	110.20	110.17
March-06	110.68	111.27
April-06	110.37	111.62
May-06	113.02	112.26
June-06	112.72	111.16
July-06	111.72	111.71
August-06	108.91	111.66
September-06	109.86	112.70
October-06	109.79	113.18
November-06	108.25	112.98
December-06	108.85	114.20
January-07	108.51	114.03
February-07	108.54	111.75
March-07	109.75	114.60
April-07	109.60	115.36
May-07	109.68	115.55
June-07	108.89	114.69
July-07	108.42	116.17
August-07	109.00	117.44
September-07	108.09	117.15
October-07	109.47	116.01
November-07	110.19	115.01
December-07	108.80	117.10

NOTES: September 2007–December 2007 data are preliminary. See source for balance of data.

SOURCE: U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *Transportation Services Index*, available at http://www.bts.gov/ as of April 2008.

FIGURE G-4 U.S. Gross Domestic Product Attributed to For-Hire Transportation Services: 2005



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

TABLE G-4 U.S. Gross Domestic Product Attributed to For-Hire Transportation Services: 1995–2005

Chained 2000 dollars (billions)

	U.S. Gross Domestic Product (GDP), total	For-hire transportation services GDP, total	Air	Rail	Water	Truck	Transit and ground passenger transportation	Pipeline	Other transportation and support activities	Warehousing and storage
1995	8,032	242.7	38.1	25.3	6.0	80.8	12.0	7.4	55.8	18.0
1996	8,329	255.1	45.1	25.2	6.7	83.8	12.0	7.4	56.4	18.8
1997	8,704	266.6	47.5	23.6	7.3	87.7	13.9	6.9	59.7	20.8
1998	9,067	275.8	48.7	24.4	7.0	91.0	14.3	6.9	62.6	22.0
1999	9,470	287.4	52.9	24.8	6.4	91.9	14.7	7.7	66.2	23.4
2000	9,817	301.6	57.7	25.5	7.2	92.8	14.5	8.7	70.2	25.0
2001	9,891	293.6	57.0	24.8	6.8	87.9	14.5	8.3	69.4	24.4
2002	10,049	300.2	62.8	24.4	5.6	87.5	14.6	9.6	70.6	25.6
2003	10,301	306.2	67.2	25.7	5.4	88.9	14.3	9.3	70.3	26.9
2004	10,704	322.3	71.1	26.9	5.9	95.8	14.3	9.3	72.1	28.7
2005	11,049	335.2	75.6	26.0	6.6	100.1	14.4	11.1	73.0	31.5

NOTES: For-hire transportation numbers may not equal total due to the nature of the chained dollar calculations. Numbers may not add to totals due to rounding.

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Industry Economic Accounts, available at http://www.bea.gov/ as of May 2007.

TABLE G-5 U.S. Gross Domestic Product Attributed to Transportation-Related Final Demand: 1995–2005
Chained 2000 dollars (billions)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
U.S. Gross Domestic Product (GDP), total	**8,031.7**	**8,328.9**	**8,703.5**	**9,066.9**	**9,470.3**	**9,817.0**	**9,890.7**	**10,048.8**	**10,301.0**	**10,703.5**	**11,048.6**
Domestic transportation-related final demand, total	**U**	**U**	**991.1**	**1,048.3**	**1,095.9**	**1,089.5**	**1,098.7**	**1,100.7**	**1,098.8**	**1,118.2**	**1,139.0**
Total transportation in GDP (percent)	U	U	11.4	11.6	11.6	11.1	11.1	11.0	10.7	10.4	10.3
Personal consumption of transportation, total	**658.6**	**690.8**	**730.7**	**781.3**	**832.1**	**853.5**	**872.1**	**891.1**	**905.9**	**920.4**	**923.2**
Motor vehicles and parts	272.3	285.4	304.7	339	372.4	386.5	405.8	429	442.1	450.4	452.9
Gasoline and oil	154.5	157.9	162.8	170.3	176.3	175.7	178.3	181.9	183.2	186	185.9
Transportation services	231.8	247.5	263.2	272	283.4	291.3	288	280.2	280.6	284	284.4
Gross private domestic investment, total	**U**	**U**	**142.5**	**152.9**	**174.2**	**167.4**	**149.4**	**132.1**	**119.4**	**134.6**	**151.3**
Transportation structures	U	U	6.6	7.5	6.5	6.6	6.6	6.1	5.6	5.8	5.9
Transportation equipment	120.6	125.4	135.9	145.4	167.7	160.8	142.8	126	113.8	128.8	145.4
Exports (+), total	**142.1**	**149.4**	**170.7**	**181.2**	**181**	**179**	**171.6**	**170.7**	**164.6**	**178.9**	**194.1**
Imports (-), total	**189.0**	**195.5**	**214.0**	**232.5**	**264.5**	**288.0**	**280.1**	**285.2**	**290.7**	**311.5**	**324**
Government transportation-related purchases, total	156.5	157.6	161.2	165.4	173.1	177.6	185.7	192.0	199.6	195.8	194.4
Federal purchases	18	18.5	18.8	19.6	19.4	19.2	20.6	25	27.1	25.4	25.5
State and local purchases	128.8	129.4	133.7	137	144.3	149.4	155.8	157.3	158.5	156.3	154.2
Defense-related purchases	9.7	9.7	8.7	8.8	9.4	9.0	9.3	9.7	14.0	14.1	14.7

KEY: U = Data are unavailable.

NOTES: Data may not equal total due to the nature of the chained dollar calculations. Data may not add to totals due to independent rounding.
Total domestic transportation-related final demand is the sum of total personal consumption of transportation, total gross private domestic investment, net exports of transportation-related goods and services, and total government-related purchases. *Federal purchases* and *state and local purchases* are the sum of consumption expenditures and gross investments. *Defense-related purchases* are the sum of the transportation of material and travel.

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, National Income Product Accounts Tables, tables 1.1.6, 2.3.6, 3.11.6, 3.15.6, 4.2.6, 5.4.6B, and 5.5.6, available at http://www.bea.gov as of July 2007.

TABLE G-6 Employment in For-Hire Transportation and Selected Transportation-Related Industries: 1995–2006
Thousands (NAICS basis)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
U.S. labor force, total	**117,298**	**119,708**	**122,776**	**125,930**	**128,993**	**131,785**	**131,826**	**130,341**	**129,999**	**131,435**	**133,703**	**136,174**
Transportation related labor force, total	**12,448**	**12,191**	**12,997**	**13,267**	**13,545**	**13,678**	**13,514**	**13,192**	**12,933**	**12,970**	**13,108**	**13,198**
Transportation and warehousing (48-49)	**3,838**	**3,935**	**4,027**	**4,168**	**4,300**	**4,410**	**4,372**	**4,224**	**4,185**	**4,249**	**4,346**	**4,466**
Air transportation (481)	511	526	542	563	586	614	615	564	528	515	501	487
Rail transportation (482)	233	225	221	225	229	232	227	218	218	226	228	225
Water transportation (483)	51	51	51	51	52	56	54	53	55	56	61	64
Truck transportation (484)	1,249	1,282	1,308	1,354	1,392	1,406	1,387	1,339	1,326	1,352	1,398	1,437
Transit and ground passenger transportation (485)	328	339	350	363	371	372	375	381	382	385	389	394
Pipeline transportation (486)	54	51	50	48	47	46	45	42	40	38	38	39
Scenic and sightseeing transportation (487)	22	23	25	25	26	28	29	26	27	27	29	27
Support activities for transportation (488)	430	446	473	497	518	537	539	525	520	535	552	571
Postal service (491)	850	867	866	881	890	880	873	842	809	782	774	770
Couriers and messengers (492)	517	540	546	568	586	605	587	561	562	557	571	585
Warehousing and storage (493)	444	452	462	474	494	514	514	517	528	558	595	636
Transportation related manufacturing												
Petroleum and coal products manufacturing (324)	140	137	136	135	128	123	121	118	114	112	112	114
Tire manufacturing (32621)	87	86	84	87	87	87	82	76	72	70	67	61
Rubber and plastic hoses and belting manufacturing (32622)	27	27	28	29	30	30	29	28	28	28	29	29
Search, detection, navigation, guidance, aeronautical, and nautical system and instrument manufacturing (334511)	158	158	159	163	161	149	150	148	145	151	157	158
Transportation equipment manufacturing (336)	1,977	1,974	2,026	2,077	2,087	2,056	1,938	1,829	1,774	1,766	1,771	1,765
Other transportation related industries												
Highway, street, and bridge construction (2373)	278	288	294	308	336	340	346	346	340	347	351	349
Motor vehicle and motor vehicle parts and supplies merchant wholesalers (4231)	335	343	350	354	360	356	347	346	342	341	344	349
Transportation equipment and supplies merchant wholesalers (42386)	32	33	35	37	40	39	36	34	32	32	33	34

(continued on next page)

TABLE G-6 Employment in For-Hire Transportation and Selected Transportation-Related Industries: 1995–2006 *(continued)*

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Petroleum and petroleum products merchant wholesalers (4247)	126	124	123	122	123	119	114	111	106	101	100	101
Motor vehicle parts dealers (441)	1,627	1,686	1,723	1,741	1,797	1,847	1,855	1,879	1,883	1,902	1,919	1,908
Gasoline stations (447)	922	946	956	961	944	936	925	896	882	876	871	861
Automotive equipment rental and leasing (5321)	171	180	184	189	199	208	208	195	193	197	199	200
Travel arrangement and reservation services (5615)	281	294	302	304	297	299	285	252	235	226	224	227
Other ambulatory health care services (6219)	143	154	164	171	173	173	180	187	195	200	206	216
Automotive repair and maintenance (8111)	738	781	811	828	864	888	904	900	894	891	886	887
Parking lots and garages (81293)	75	78	82	85	89	93	96	96	100	102	103	105
Government employment, total	**644**	**99**	**647**	**629**	**642**	**646**	**654**	**686**	**605**	**600**	**602**	**599**
U.S. Department of Transportation (U.S. DOT)	101	99	98	99	100	100	102	141	59	57	56	54
State and Local Highway	543	N	548	530	543	546	552	545	546	543	546	545

NOTES: *Total U.S. labor force* excludes farm empolyment. *Transportation and warehousing* total does not include postal service. *Tire manufacturing* includes tire retreading. *Transportation equipment and supplies merchant wholesalers* does not include motor vehicle wholesalers. *Government employment* does not include all government agencies (e.g., the National Transportation Safety Board). *The U.S. Department of Transportation* was created in 1966. Data are for fiscal year and include permanent civilians as well as temporary employees and military. The United States Coast Guard (USCG) and the Transportation Security Administration (TSA) were transferred to the Department of Homeland Security in 2003. State and Local Highway is full-time equivalent employment. Due to a change in the reference period, from October to March, the October 1996 Annual Survey of Government Employment and Payroll was not conducted.

SOURCES: 1995–2006: U.S. Department of Labor, Bureau of Labor Statistics, Current Employment Statistics, available at http://www.bls.gov as of July 2007. U.S. DOT Employment: U.S. DOT, Office of the Secretary of Transportation, DOT Workforce Demographics, Demographics by Year, available at: http://dothr.ost.dot.gov/ as of July 2007. **State and Local Highway Employment:** U.S. Department of Commerce, Bureau of the Census, "Federal, State, and Local Governments Public Employment and Payroll Data." Available at http://www.census.gov as of July 2007.

FIGURE G-7 Index of Prices Paid by American Households for Transportation Services: 1995–2007
Monthly data, seasonally adjusted

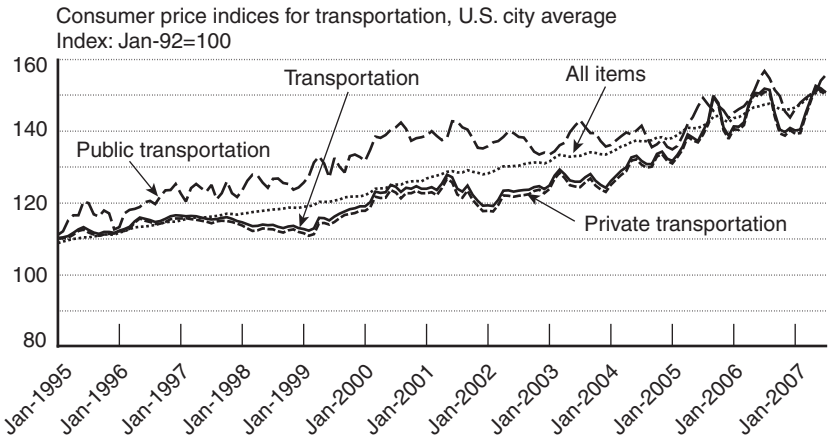


TABLE G-7 Index of Prices Paid by American Households for Transportation Services: January 2006–July 2007
Monthly data, seasonally adjusted

Index: Jan 92 = 100	All Items	Transportation	Private transportation	Public transportation
January 2006	143.6	141.3	140.5	145.1
February 2006	143.9	141.2	140.3	146.1
March 2006	144.7	142.5	141.6	146.9
April 2006	145.9	147.9	147.3	148.7
May 2006	146.6	150.7	150.1	151.3
June 2006	146.9	150.4	149.6	154.7
July 2006	147.4	151.8	150.9	156.7
August 2006	147.6	151.4	150.6	154.7
September 2006	146.9	145.1	144.1	151.5
October 2006	146.1	140.4	139.3	149.8
November 2006	145.9	139.7	138.8	145.5
December 2006	146.1	140.9	140.2	143.8
January 2007	146.6	140.1	139.2	146.1
February 2007	147.4	140.4	139.4	147.9
March 2007	148.7	144.9	144.1	149.1
April 2007	149.7	148.8	148.1	150.2
May 2007	150.6	152.6	152.1	150.7
June 2007	150.9	151.9	151.2	154.1
July 2007	150.8	150.8	149.9	155.6

NOTES: The consumer price index for a specific item is a weighted average of the prices for the individual components of the item. The weights are determined by the expenditure shares of the individual components based on a survey of consumer expenditure during the base year(s). The base year price is then normalized to 100.
Private transportation is a weighted average of the prices for new and used motor vehicles, motor fuels, motor vehicle parts and equipments, motor vehicle maintenance and repair, motor vehicle insurance, and motor vehicle fees (state and local registration and license fees, parking and other fees).
Public transportation is a weighted average of the prices for airline fares, intercity bus fares, intercity train fares, ship fares, intracity transportation (intracity mass transit, taxi fares, and car and van pools), and other public transportation.
The base period of the original index is 1982–84. January 1992 is set to be the new reference point (=100) by dividing the values of the original index by the value of January 1992 in the original index. It is important to point out that this process changes only the reference point, and not the base period of the index because the weight structure of the index did not change.
The Consumer Price Index (CPI) tracks the price of a market basket of goods and services purchased by U.S. households over time. Both monthly and annual changes are reported in the tables for the CPI in order to facilitate comparison with other series.
SOURCE: U.S. Department of Labor, Bureau of Labor Statistics; available at: http://www.bls.gov/cpi/ as of September 2007.

FIGURE G-8 Public Expenditures on Construction of Highways and Streets: 1995–2007

Monthly data, seasonally adjusted

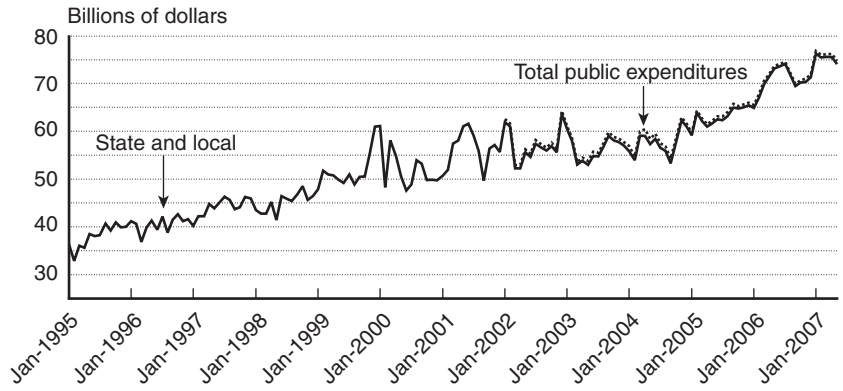


TABLE G-8 Public Expenditures on Construction of Highways and Streets: January 2006–May 2007

Monthly data, seasonally adjusted (millions of dollars)

	Total public expenditures	Direct Federal	State and local
January 2006	65,515	622	64,893
February 2006	67,766	732	67,034
March 2006	70,572	727	69,845
April 2006	71,957	462	71,495
May 2006	73,708	554	73,154
June 2006	74,143	534	73,609
July 2006	74,516	426	74,090
August 2006	72,242	464	71,778
September 2006	69,895	394	69,501
October 2006	70,723	530	70,193
November 2006	71,025	668	70,357
December 2006	71,917	618	71,299
January 2007	76,832	560	76,272
February 2007	76,038	554	75,484
March 2007	76,123	541	75,582
April 2007	76,185	676	75,509
May 2007	74,722	693	74,029

NOTES: Data from 1995 to 2001 include state and local expenditures only. Data from the estimation of federal expenditures were not published until January 2002.

Construction includes new buildings, renovations, mechanical and electrical installations, site preparation, and other materials and structures incidental to construction. Maintenance is not included.

Highways and streets are the largest component of public transportation infrastructure spending. Pavement is by far the largest part of that spending, accounting for about 70 percent of state and local roadway expenditures.

There are additional highway and street components that are published on an annual basis: retaining walls, tunnels, toll/weight stations, and maintenance facilities.

SOURCE: U.S. Department of Commerce, Bureau of the Census; available at: http://www.census.gov/const/www/c30index.html as of September 2007.

FIGURE G-9 Public Expenditures on Non-roadway Transportation Construction: 1995–2007

Monthly data, seasonally adjusted

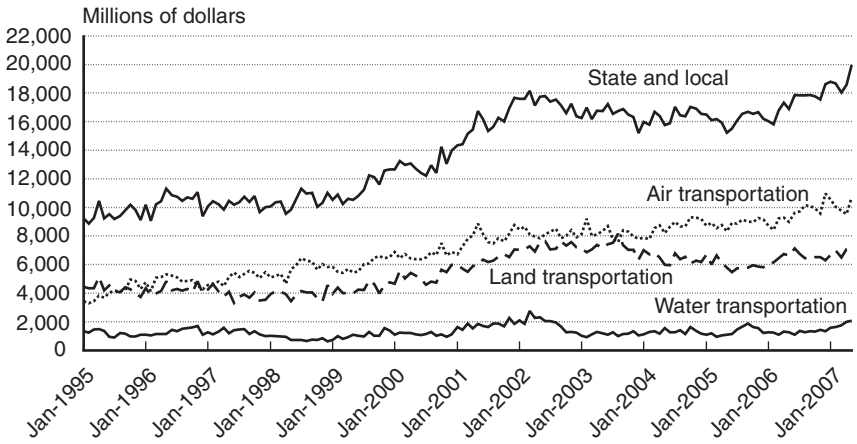


TABLE G-9 Public Expenditures on Non-roadway Transportation Construction: January 2006–May 2007

Monthly data, seasonally adjusted (millions of dollars)

	State and local only	Air transportation	Land transportation	Water transportation
January 2006	16,019	8,725	6,040	1,255
February 2006	15,817	8,432	6,148	1,236
March 2006	16,779	9,240	6,449	1,090
April 2006	17,325	9,273	6,734	1,319
May 2006	16,884	8,985	6,638	1,261
June 2006	17,861	9,617	7,137	1,106
July 2006	17,837	9,727	6,750	1,361
August 2006	17,837	10,134	6,435	1,268
September 2006	17,871	10,105	6,426	1,340
October 2006	17,756	9,919	6,529	1,309
November 2006	17,536	9,577	6,510	1,448
December 2006	18,622	10,978	6,306	1,338
January 2007	18,783	10,553	6,656	1,573
February 2007	18,667	10,048	6,992	1,626
March 2007	18,040	9,781	6,493	1,766
April 2007	18,583	9,518	7,071	1,994
May 2007	19,953	10,700	7,185	2,068

NOTES: Public expenditures on transportation construction is a measurement of growth of system capacity. Construction includes new buildings, infrastructure, renovations, site preparation, and other materials and structures involved in construction. Maintenance of existing facilities and structures is not included.

Construction expenditures on completely new routes and terminals are direct additions to system capacity. Construction expenditures (like renovations, expansions, conversions, etc.) on existing transportation infrastructure may result in improved maintenance and management capabilities, improved safety, and other attributes that increase capacity.

SOURCE: U.S. Department of Commerce, Bureau of the Census; available at: http://www.census.gov/const/www/c30index.html as of September 2007.

FIGURE G-10 Public Expenditures on Air Transportation Construction: 1995–2007

Monthly data, seasonally adjusted

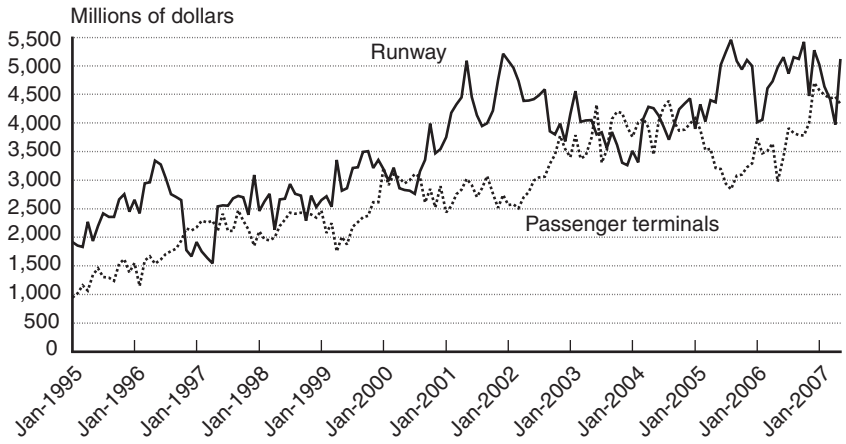


TABLE G-10 Public Expenditures on Air Transportation Construction

Monthly data, seasonally adjusted (millions of dollars)

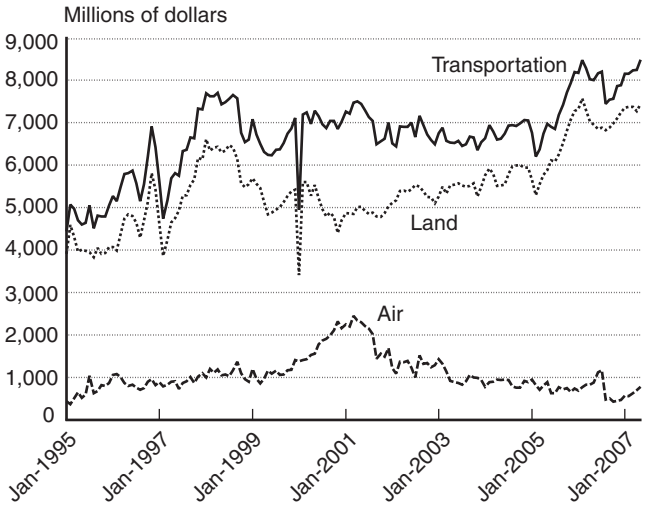
	Runway	Passenger terminal
January 2006	4,014	3,733
February 2006	4,056	3,467
March 2006	4,607	3,514
April 2006	4,727	3,643
May 2006	4,970	2,974
June 2006	5,150	3,407
July 2006	4,861	3,907
August 2006	5,149	3,821
September 2006	5,122	3,788
October 2006	5,421	3,784
November 2006	4,473	3,993
December 2006	5,274	4,703
January 2007	5,021	4,576
February 2007	4,639	4,488
March 2007	4,410	4,428
April 2007	3,972	4,458
May 2007	5,120	4,330

NOTES: Runways include pavement and lighting. Other categories that are included for the air transportation total but do not have monthly state and local estimates are air freight terminals, air traffic towers, hangars, and other related facilities and structures.

SOURCE: U.S. Department of Commerce, Bureau of the Census; available at http://www.census.gov/const/www/c30index.html as of September 2007.

FIGURE G-11 Private Expenditures on Transportation-Related Construction: 1995–2007

Private Expenditures on Transportation Infrastructure Construction
Monthly data, seasonally adjusted annual rate



Private Expenditures on Transportation-Related Construction
Monthly data, seasonally adjusted annual rate

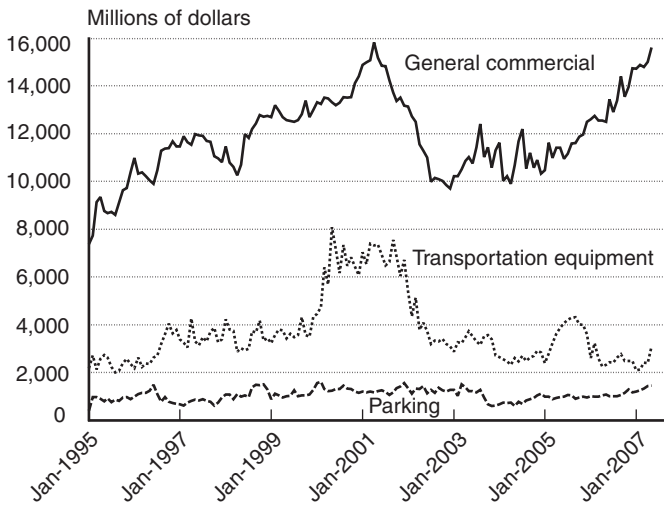


TABLE G-11 Private Expenditures on Transportation-Related Construction: January 2006–May 2007
Monthly data, seasonally adjusted annual rate (millions of dollars)

	Private expenditures on transportation infrastructure construction			Private expenditures on transportation-related construction		
	Transportation	Air	Land	Transportation equipment	Parking	General commercial
January 2006	8,167	688	7,314	2,600	1,003	12,604
February 2006	8,471	770	7,568	3,233	988	12,740
March 2006	8,278	829	7,287	2,586	985	12,547
April 2006	8,014	829	7,032	2,249	1,040	12,540
May 2006	8,000	878	6,944	2,328	1,074	12,491
June 2006	8,162	1,117	6,844	2,432	1,008	13,431
July 2006	8,196	1,167	6,878	2,416	1,015	12,907
August 2006	7,442	481	6,815	2,627	1,011	13,379
September 2006	7,536	509	6,876	2,761	1,064	14,394
October 2006	7,560	426	6,978	2,492	1,155	13,541
November 2006	7,855	449	7,097	2,486	1,302	13,949
December 2006	7,874	467	7,237	2,478	1,172	14,731
January 2007	8,152	571	7,345	2,096	1,211	14,711
February 2007	8,150	556	7,371	2,130	1,264	14,873
March 2007	8,226	625	7,363	2,405	1,327	14,786
April 2007	8,234	695	7,269	2,400	1,432	15,002
May 2007	8,481	780	7,435	3,088	1,456	15,609

NOTES: Total private transportation also includes water transportation, although no monthly estimate is published for water. Air and land transportation are defined the same as for state and local public expenditures.
General commercial warehousing includes commercial warehouses, storage warehouses, and distribution buildings. Transportation equipment manufacturing includes construction related to transportation equipment-producing industries. Parking includes commercial parking lots and garages.
SOURCE: U.S. Department of Commerce, Bureau of the Census; available at http://www.census.gov/pub/const/C30/newtc.html as of September 2007.

TABLE G-12 Passenger and Freight Expenditures: 1995–2004
Millions (in current dollars)

	Total passenger and freight transportation expenditures	Passenger transportation expenditures, total	Highway	Intercity bus	Air	Rail	Water
1995	945,316	693,889	602,089	1,800	83,681	4,132	3,988
1996	1,010,079	747,346	650,609	1,900	87,929	4,576	4,231
1997	1,071,632	798,216	693,762	2,200	95,312	4,701	4,440
1998	1,098,126	837,566	724,725	2,200	102,819	4,786	5,237
1999	1,188,252	914,032	792,738	2,200	110,110	4,954	6,230
2000	1,287,038	995,747	861,747	2,400	120,987	5,316	7,697
2001	1,296,037	1,010,043	887,422	2,400	108,791	5,560	8,270
2002	1,300,203	1,013,152	898,294	2,400	100,573	5,634	8,652
2003	1,362,963	1,064,204	944,894	2,300	104,422	5,833	9,055
2004	1,448,699	1,117,709	997,717	2,100	104,354	6,199	9,438

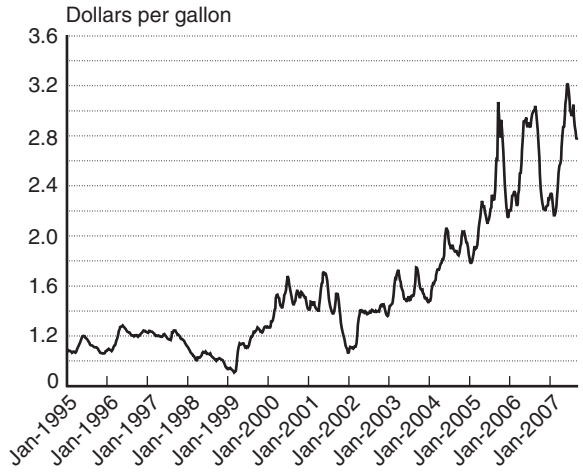
	Freight transportation expenditures, total	Highway	Air	Rail	Water	Oil pipeline	Other
1995	251,427	140,774	10,901	34,342	25,162	27,346	12,902
1996	262,733	149,784	11,843	34,903	23,980	28,774	13,449
1997	273,416	159,798	12,984	35,349	23,761	27,093	14,431
1998	260,560	148,222	13,259	35,295	24,767	23,750	15,267
1999	274,220	155,982	14,374	35,893	26,667	25,329	15,975
2000	291,291	165,539	15,838	36,282	30,925	26,057	16,651
2001	285,994	162,985	15,107	36,579	29,574	25,678	16,072
2002	287,051	164,332	15,749	36,921	28,643	25,318	16,088
2003	298,759	168,596	16,325	38,268	34,191	25,194	16,184
2004	330,990	186,045	17,707	42,160	40,612	27,622	16,844

NOTES: The numbers in this table are not comparable with the previous issue because the Upper Great Plains Transportation Institute changed its methodology. Air passenger includes aircraft and operating costs, plus domestic and international air passenger federal excise taxes. Rail passenger include federal operating subsidies and capital grants for Amtrak and the Northeast Corridor. Water passenger includes international. Air freight includes domestic and international. Other includes shipping, receiving, and traffic clerks.

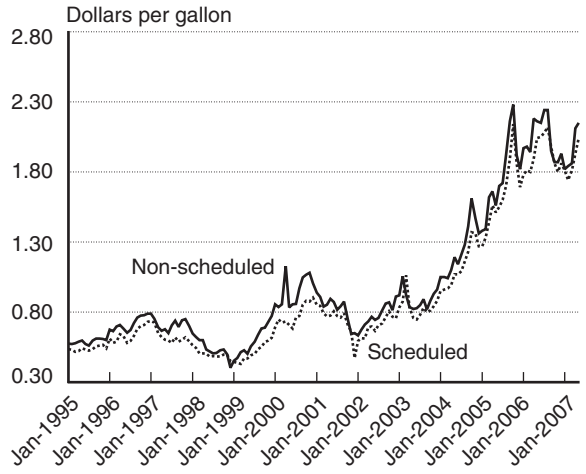
SOURCE: Eno Transportation Foundation Inc., *Transportation in America,* 20th ed. (Washington, DC: 2006), pp. 32-34.

FIGURE G-13 Fuel Prices

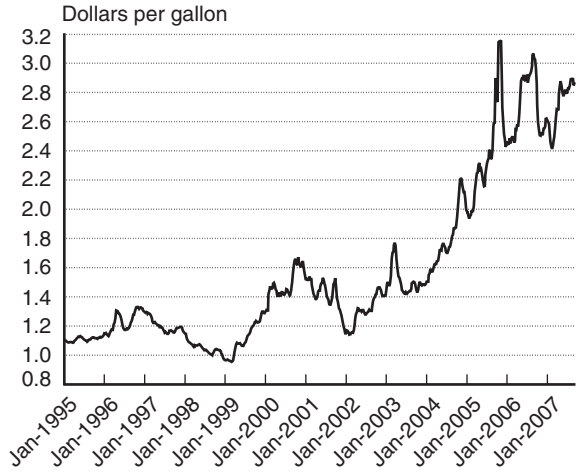
Retail Gasoline Prices
Weekly data, not seasonally adjusted



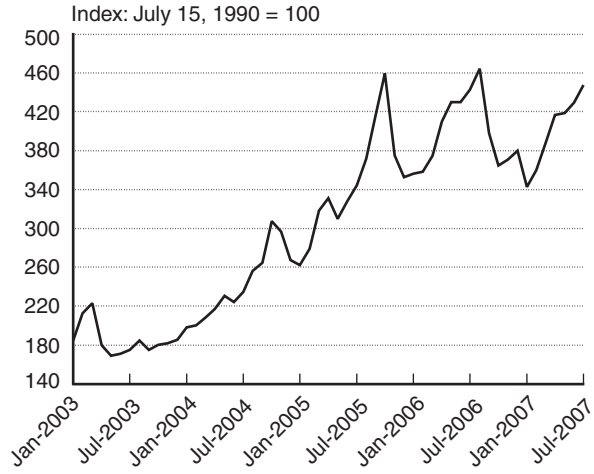
Jet Fuel Prices
Monthly data, not seasonally adjusted



Retail On-Highway Diesel Prices
Weekly data, not seasonally adjusted



Railroad Fuel Prices
Monthly data, not seasonally adjusted



NOTES: Motor fuel prices are an important cost component of highway transportation. Changes in motor fuel prices impact the behavior of both producers and consumers, and affect the demand for transportation in terms of level and modal mix. In the United States, motor gasoline prices follow world crude oil prices more closely than motor diesel prices. Changes in motor fuel prices affect the profit margin of transportation firms, particularly trucking firms.

Jet fuel prices reported to the Bureau of Transportation Statistics differ from producer prices. Reports to BTS show the cost per gallon of fuel used by an airline during the month rather than the price charged by a producer on a single day. Fuel costs for scheduled airline services reflect contractual and storage advantages available to large buyers, while fuel costs for nonscheduled airline services reflect economic conditions for smaller buyers. Jet fuel prices also reflect seasonality due to both the seasonality of aviation and because jet fuel has similar refining requirements to heating oil.

The railroad fuel price, which include federal excise taxes, transportation, and handling expenses, represent the average monthly price for fuels purchased by freight railroads during each month.

SOURCES: Retail gasoline and on-highway diesel prices—U.S. Department of Energy, Energy Information Administration, available at http://eia.doe.gov/ as of Aug. 21, 2007. **Jet Fuel prices**—U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, Office of Airline Information, August, 2007; available at: http://www.bts.gov/oai. **Railroad Fuel prices**—Association of American Railroads, Monthly Railroad Fuel Price Indexes, available at http://www.aar.org/ as of August 2007.

TABLE G-14 Sales Price of Transportation Fuel to End-Users: 1995–2006
Dollar/gallon (in current dollars)

	Aviation fuel (excluding taxes)		Highway fuel (including taxes)				Railroad fuel
	Aviation gasoline	Jet fuel kerosene	Gasoline, premium	Gasoline, regular	Gasoline, all types	Diesel no. 2 (excluding taxes)	Diesel
1995	1.01	0.54	1.34	1.15	1.21	0.56	0.60
1996	1.12	0.65	1.41	1.23	1.29	0.68	0.68
1997	1.13	0.61	1.42	1.23	1.29	0.64	0.68
1998	0.98	0.45	1.25	1.06	1.12	0.49	0.57
1999	1.06	0.54	1.36	1.17	1.22	0.58	0.55
2000	1.31	0.90	1.69	1.51	1.56	0.94	0.87
2001	1.32	0.78	1.66	1.46	1.53	0.84	0.86
2002	1.29	0.72	1.56	1.36	1.44	0.76	0.73
2003	1.49	0.87	1.78	1.59	1.64	0.94	0.89
2004	1.82	1.21	2.07	1.88	1.92	1.24	1.07
2005	2.23	1.74	2.49	2.30	2.34	1.79	1.51
2006	2.68	2.00	2.81	2.59	2.64	2.08	1.92
2007	2.85	2.17	3.03	2.80	2.85	2.27	U

KEY: U = Data are unavailable.

NOTES: All costs are yearly average. *Aviation gasoline, jet fuel kerosene, and diesel no. 2* include sales to end-users (those sales made directly to the ultimate consumer, including bulk customers in agriculture, industry, and utility). *Gasoline, premium, and regular* are average retail price.

SOURCE: All data except railroad fuel—U.S. Department of Energy, Energy Information Administration, *Monthly Energy Review* (Washington, DC: July 2007), tables 9.4 and 9.7. **Railroad fuel—**Association of American Railroads, *Railroad Facts* (Washington, DC: annual issues), fuel consumption and cost.

TABLE G-15 Average Household Transportation Expenditures: 1995–2005
Current dollars

	Vehicle purchases	Gasoline and motor oil	Other vehicle expenses	Other transportation	Total
1995	2,693	1,293	1,979	396	6,361
1996	2,820	1,310	2,025	467	6,621
1997	2,732	1,330	2,206	421	6,689
1998	2,989	1,415	2,202	450	7,056
1999	3,320	1,349	2,262	407	7,337
2000	3,418	1,291	2,281	427	7,417
2001	3,561	1,328	2,317	393	7,600
2002	3,665	1,366	2,370	378	7,779
2003	3,732	1,333	2,331	385	7,781
2004	3,397	1,598	2,365	441	7,801
2005	3,544	2,013	2,339	448	8,344

NOTES: Data may not add to total because of independent rounding. Data are based on survey results. Other transportation includes fares for mass transit, buses, trains, airlines, taxis, school buses, and boats for which a fee is charged.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, *Consumer Expenditure Survey*, available at http://www.bls.gov/ as of February 2007.

TABLE G-16 Average Passenger Fares: 1995–2006
Current dollars

	Air carrier, domestic, scheduled service	Class I bus, intercity	Transit, all modes (unlinked)	Commuter rail	Intercity rail/ Amtrak
1995	105.50	20.10	0.88	3.13	39.92
1996	109.22	22.85	0.93	3.25	43.31
1997	111.92	20.83	0.90	3.30	45.26
1998	113.10	23.14	0.91	3.29	44.75
1999	113.87	26.16	0.90	3.30	46.85
2000	120.19	29.46	0.93	3.32	49.61
2001	110.75	30.27	0.92	3.44	51.58
2002	103.14	30.11	0.89	3.49	55.15
2003	107.66	U	0.97	3.79	50.68
2004	105.77	U	1.02	3.90	50.71
2005	107.63	U	1.02	4.08	51.17
2006	114.97	U	U	U	56.45

KEY: U = Data are unavailable.

NOTE: *Class I bus* includes regular route intercity service.

SOURCE: Various sources, as cited in U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *National Transportation Statistics 2007*, table 3-15a, available at http://www.bts.gov/ as of September 2007.

The Air Travel Price Index (ATPI) is a measure of the change over time in the prices paid by air travelers, based on actual fares paid by travelers, not published fares.

FIGURE G-17 Comparison of Air Travel Price Indexes (ATPI): 1995–2007

Quarterly data, not seasonally adjusted

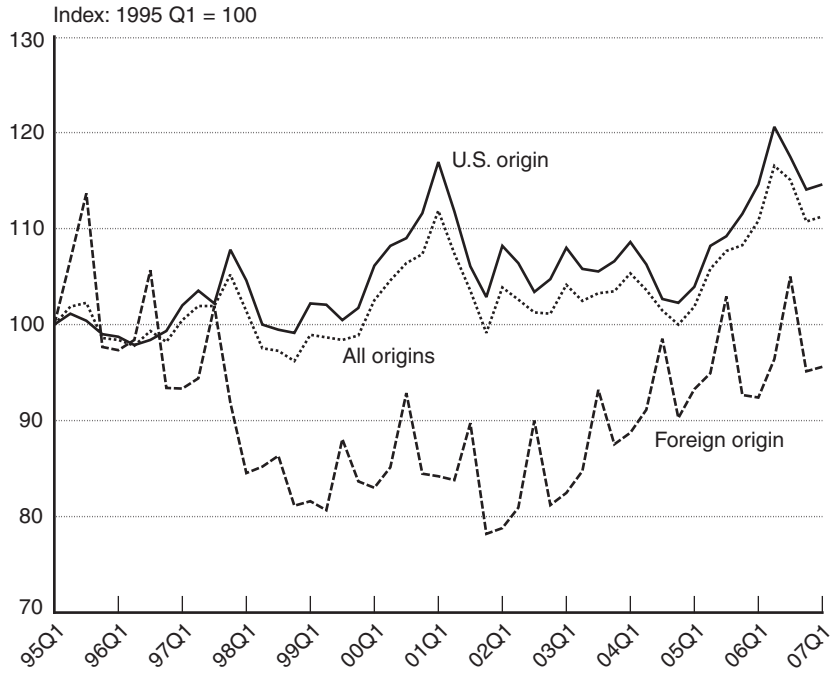


TABLE G-17 Comparison of Air Travel Price Indexes (ATPI): 1Q06–1Q07

Not seasonally adjusted, domestic carriers only

Index: 1995 Q1 = 100

Quarter	All-origins, combined	U.S.-origin	Foreign-origin
2006 Q1	110.80	114.57	92.37
2006 Q2	116.53	120.61	96.41
2006 Q3	115.04	117.43	104.96
2006 Q4	110.72	114.03	95.11
2007 Q1	111.23	114.55	95.60

NOTES: The Bureau of Transportation Statistics computes the *Air Travel Price Index* values using the Fisher Index formula. *U.S. origin only* measures change in the cost of itineraries originating in the United States, whether the destinations are domestic or international. *Foreign origin only* measures change in the cost of itineraries with a foreign origin and a U.S. destination. *All origins* (Full-scope ATPI) combines the U.S.- and foreign-origin itineraries. See source for balance of data.

SOURCE: U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *Air Travel Price Index*, available at http://www.bts.gov/ as of June 2007.

TABLE G-18 Average Cost per Mile of Owning and Operating an Automobile: 1995–2006
Current dollars

	Variable costs	Fixed costs	Total costs
1995	0.10	0.32	0.42
1996	0.10	0.33	0.43
1997	0.11	0.34	0.45
1998	0.11	0.35	0.46
1999	0.11	0.36	0.47
2000	0.12	0.37	0.49
2001	0.14	0.37	0.51
2002	0.12	0.38	0.50
2003	0.13	0.39	0.52
2004	0.13	0.44	0.56
2005	0.15	0.37	0.52
2006	0.15	0.38	0.52

NOTE: Data may not add to total because of independant rounding. Data are the cost per mile based on 15,000 miles per year and a composite of three current model American automobiles. *Variable costs* include fuel, maintenance, and tires. Fuel costs are based on a late year average price per gallon of regular unleaded gasoline. *Fixed costs* (ownership costs) include insurance, license, registration, taxes, depreciation, and finance charges.

SOURCE: U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics calculations based on USDOT, RITA, BTS, *National Transportation Statistics 2007*, table 3-14, available at http://www.bts.gov/ as of August 2007.

Government Transportation Revenues consist 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 nontransportation purposes, 2) nontransportation general fund revenues that are used to finance transportation programs and 3) proceeds from borrowing.

TABLE G-19 Federal, State, and Local Government Transportation Revenues: FY 1995–2003

	Chained 2000 dollars (billions)		
Fiscal years	Federal	State and local	Total
1995	35.7	78.5	114.2
1996	35.3	78.7	114.1
1997	35.1	76.6	111.8
1998	42.5	79.5	122.1
1999	54.9	81.5	136.5
2000	47.1	81.5	128.6
2001	41.9	80.7	122.6
2002	43.2	84.4	127.6
2003	42.6	81.3	123.9

	Current dollars (billions)		
Fiscal years	Federal	State and local	Total
1995	30.5	67.1	97.6
1996	31.2	69.5	100.7
1997	32.0	69.7	101.6
1998	39.4	73.8	113.2
1999	52.6	78.0	130.6
2000	47.1	81.5	128.6
2001	43.1	83.0	126.1
2002	45.7	89.3	135.0
2003	46.2	88.1	134.3

NOTE: Data may not add to total because of independent rounding. To eliminate the effects of inflation over time, the Bureau of Transportation Statistics converted current dollars to chained 2000 dollars.

SOURCE: U. S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *Government Transportation Financial Statistics 2007* as of August 2007.

Government Transportation Revenues consist 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 nontransportation purposes, 2) nontransportation general fund revenues that are used to finance transportation programs and 3) proceeds from borrowing.

TABLE G-20 Federal Government Transportation Revenues by Mode: FY 2003

	Chained 2000 dollars (billions)	Percent of total
Highway	31.5	74.00
Air	9.8	22.94
Water	1.2	2.92
Pipeline	0.1	0.12
General support	0.0	0.02

NOTES: Data may not add to total and percentages may not add to 100 because of independent rounding. To eliminate the effects of inflation over time, the Bureau of Transportation Statistics converted current dollars to chained 2000 dollars. Revenue is attributed to the mode from which it is collected, so money dedicated to transit from the highway trust fund is considered highway revenue.

SOURCE: U. S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *Government Transportation Financial Statistics 2007* as of August 2007.

Federal transportation expenditures consist of outlays of the federal government including only direct spending, not including grants to state and local governments. State and local expenditures are from all fund sources.

TABLE G-21 Federal, State, and Local Government Transportation Expenditures: FY 1995–2003

	Chained 2000 dollars (billions)		
	Federal	**State and local**	**Total**
1995	23.3	144.4	167.6
1996	22.6	146.4	169.0
1997	21.9	149.5	171.5
1998	22.8	153.5	176.3
1999	21.9	168.6	190.5
2000	21.0	165.3	186.3
2001	29.4	175.8	205.2
2002	33.7	177.7	211.4
2003	39.3	180.3	219.7

	Current dollars (billions)		
	Federal	**State and local**	**Total**
1995	19.9	123.4	143.3
1996	20.0	129.2	149.1
1997	19.9	136.0	155.9
1998	21.2	142.3	163.5
1999	21.0	161.3	182.3
2000	21.0	165.3	186.3
2001	30.2	180.9	211.1
2002	35.7	188.0	223.7
2003	42.6	195.4	238.1

NOTES: Data may not add to total and percentages may not add to 100 because of independent rounding. To eliminate the effects of inflation over time, the Bureau of Transportation Statistics converted current dollars to chained 2000 dollars. To avoid double counting, federal expenditures exclude grants to state and local governments.

SOURCE: U. S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *Government Transportation Financial Statistics 2007* as of August 2007.

Federal transportation expenditures consist of outlays of the federal government including only direct spending, not including grants to state and local governments.

TABLE G-22 Federal Government Transportation Expenditures by Mode: FY 2003

	Chained 2000 dollars (billions)	Percentage of total
Total	**39.2**	**100.00**
Highway	2.9	7.43
Transit	4.2	10.69
Railroads	1.1	2.86
Air	15.7	39.92
Water	5.4	13.84
Pipeline	0.0	0.10
General Support	9.9	25.16

NOTES: Data may not add to total and percentages may not add to 100 because of independent rounding. To eliminate the effects of inflation over time, the Bureau of Transportation Statistics converted current dollars to chained 2000 dollars

SOURCE: U. S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *Government Transportation Financial Statistics 2007* as of August 2007.

Chapter 3

State of Transportation Statistics

State of Transportation Statistics

The legislative mandate for the Bureau of Transportation Statistics (BTS) requires annual submission of this *Transportation Statistics Annual Report* to the President and Congress. The report includes information on the topics covered in chapter 2 of this report, documentation of methods used to obtain and ensure the quality of information presented in the report, and recommendations for improving transportation statistical information. The last two items are the subject of this chapter.

Information Quality

BTS obtained the data in this report from many sources, including federal government agencies, private industry, and trade associations. Some of the data are based on samples and are subject to sampling variability. Data from all sources may be subject to omissions and errors in reporting, recording, and processing. Documents cited as table sources often provide detailed information about definitions, methodologies, and statistical reliability.

Federal data are subject to guidelines, policies, and information practices that pertain to all federal agencies disseminating information to the public under Office of Management Budget (OMB) directives.

Because federal agencies are subject to these guidelines, BTS relies on federal sources for the data used in this report where possible. A large number of federal agencies, both within the Department of Transportation and in other agencies, collect, compile, analyze, and publish transportation data. A partial list of these organizations is included in table 1. In some cases, these agencies compile and disseminate data submitted or reported by states or private parties on transportation operations, planning, financing, or management. Some agencies also conduct surveys or otherwise directly collect data on particular matters, either through their own auspices or through partnerships with other entities. Still other agencies produce data or information relevant to transportation, even though transportation is not the primary purpose.

OMB chairs an interagency statistical policy committee, comprised of the heads of 13 statistical agencies in the federal government, including BTS. Statistical policies and guidelines for best practices are developed by this group and distributed to these and other agencies engaged in statistics.

BTS has developed guidelines for good statistical practices in the transportation field in response to its legislative mandate. Specific topics covered include planning data systems, collection of data, processing data, dissemination of information, and evaluation of information quality. These guidelines apply to all information, including

compilations containing data from other sources, appearing in BTS publications. Box A outlines various federal statistical quality manual and guidelines pertinent to transportation data.

Agencies also often have their own specific requirements and guidelines that may be in addition to government-wide guidance. For example, they may issue guidelines for data reporting by state agencies, localities, and transportation providers. Such guidance may contribute to greater uniformity, comparability, and quality of the resulting data even though it comes from multiple providers.

In many, but by no means all cases, source agencies document the methods used in collecting, compiling, and assuring the quality of the data they produce. Source and accuracy statements in many cases are published by the source agency. The BTS website for *National Transportation Statistics*, a web based companion document to this report, summarizes much of this information with respect to a particular data series (*National Transportation Statistics*, Appendix E—Data Source and Accuracy Statements, http://www.bts.gov/publications/national_transportation_statistics/).

Table 1

Selected Federal Agencies that Collect or Compile Transportation Data

Multimodal Data (including economic data)
Bureau of Economic Analysis, USDOC
Bureau of Labor Statistics, USDOL
Bureau of Transportation Statistics (Research and Innovative Technology Administration), USDOT
Customs and Border Protection, USDHS
Census Bureau, USDOC
Aviation Data
Bureau of Transportation Statistics (Research and Innovative Technology Administration), USDOT
Federal Aviation Administration, USDOT
Office of Aviation and International Affairs, USDOT
National Transportation Safety Board (independent)
Hazardous Materials Data
Pipeline and Hazardous Materials Administration, USDOT
U.S. Census Bureau; RITA/BTS, USDOT
Highway Data
Federal Highway Administration, USDOT
Federal Motor Carrier Safety Administration, USDOT
Federal Transit Administration, USDOT
National Highway Traffic Safety Administration, USDOT
Maritime and Inland Waterways Data
Maritime Administration, USDOT
Federal Maritime Commission
St. Lawrence Seaway Development Corporation, USDOT
U.S. Army Corps of Engineers, USACE
U.S. Coast Guard, USDHS
Pipeline Data
Pipeline and Hazardous Materials Administration, USDOT
Railroad Data
Federal Railroad Administration, USDOT
Surface Transportation Board, USDOT
Transit Data
Federal Transit Administration, USDOT
Other Agencies Collecting Data Related to Transportation
Agricultural Marketing Service, USDA
Environmental Protection Agency
Energy Information Administration, USDOE

KEY: USDHS—U.S. Department of Homeland Security; **USDA—**U.S. Department of Agriculture; **USDOC**—U.S. Department of Commerce; **USDOE**—U.S. Department of Energy; **USDOL**—U.S. Department of Labor; **USDOT**—U.S. Department of Transportation.

Box A

Information Quality Guidelines for Federal Transportation Data

As a Federal statistical agency, BTS has its own statistical standards and participates with other Federal statistical agencies to improve the quality of statistical information. The practices of other transportation agencies that collect, compile, and disseminate statistical data are conducted under various guidelines. Here are some key information and statistical quality documents and guidelines:

- *BTS Statistical Standards Manual*—Covers all aspects of RITA/BTS statistical practice (http://www.bts.gov/programs/statistical_policy_and_research/bts_statistical_standards_manual/index.html).
- *Guide to Good Statistical Practice in the Transportation Field*—Includes the DOT guidelines for statistical information and additional BTS guidance for good statistical practice (http://www.bts.gov/publications/guide_to_good_statistical_practice_in_the_transportation_field/).
- *Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies*—Federal Register Notice, Volume 67, Number 36, February 22, 2002, Part IX – Office of Management and Budget (http://www.bts.gov/publications/federal_register_notice/pdf/volume_67_number_36.pdf).
- *Guidelines of the Federal Statistical Organizations*—An approach to guidelines for statistical information adopted by the Interagency Council on Statistical Policy (ICSP) (http://www.bts.gov/publications/federal_register_notice/pdf/volume_67_number_107.pdf).
- *DOT Report for Implementing OMB's Information Dissemination Quality Guidelines*—The DOT implementation of the Office of Management and Budget (OMB) information quality guidelines and correction procedures. The DOT guidelines permit the operating administrations to issue their own guidelines, provided that these guidelines are consistent with the overall DOT guidelines (http://dms.dot.gov/ombfinal092502.pdf).

In August 2007, OMB issued a notice in the Federal Register seeking public comments on a proposed directive for release and dissemination of statistical products by federal statistical agencies. Comments will be reviewed by OMB before issuing the final directive. (http://www.whitehouse.gov/omb/inforeg/ssp/dissemination/index.html)

Data Gaps

In the future, there will be data gaps in several areas of transportation due to continuing resource constraints. Federal agencies have reduced in scope, postponed, delayed and in some cases discontinued several long term data series important to understanding changes in the field of transportation. The Bureau of Transportation Statistics (BTS), for example, has not undertaken a previously planned long distance travel survey in 2007 due to resource constraints. This survey was conducted most recently in 2001/2002 as part of the National Household Travel Survey (NHTS) conducted jointly by BTS and the Federal Highway Administration (FHWA), in 1995 as the standalone American Travel Survey, and in 1977 by the U.S. Census Bureau. These long distance travel surveys provided data on the number, length, origins and destinations, modes of transportation, purpose, and traveler characteristics of U.S. residents making long-distance trips.

Also, due to resource constraints, the Census Bureau is not undertaking the previously planned repeat of the Vehicle Inventory and Use Survey (VIUS) as part of the 2007 Economic Census. The VIUS is the most indepth inventory of the characteristics of the nation's highway truck fleet, covering all categories from lightweight pickups and utility vehicles through large trucks. Previous editions of this survey, and its earlier counterpart, the Truck Inventory and Use Survey, were conducted at twice a decade intervals as part of the Economic Census extending back to 1963.

In addition, the U.S. Army Corps of Engineers (USACE) has discontinued one of its international maritime statistics data sets—the U.S. foreign trade-based data series. Updated preliminary and monthly cargo summary reports are no longer available on the Navigation Data Center and U.S. Department of Transportation, Maritime Administration web sites (type of service, dollar value, weight) and the monthly and annual waterborne databanks were discontinued. Monthly foreign trade and transportation data will no longer be publicly available from the USACE.

Transportation data needs continue to be discussed by the transportation community. The Transportation Research Board (TRB), part of the National Academy of Sciences, has sought input from its numerous committees of transportation experts and officials to identify key needs. Two circulars have resulted from this process to date.[1] The first, issued in December 2006, suggested that TRB committees annually review data needs, priorities, and costs. The second, issued in August 2007, details the results of discussions by State transportation officials.

[1] Transportation Research Board, Data and Information Systems Section, Transportation Research Circular E-C109: *Transportation Information Assets and Impacts* (Washington, DC: Transportation Research Board of the National Academy of Sciences) December 2006, and Transportation Research Board Circular, E-C121, Information Assets to Support Transportation Decision-Making (Washington, DC: TRB of the NAS), August 2007.

The discussion focused on actions to ensure availability of data for effective transportation decision-making and opportunities for national efforts to advance transportation data systems. A summary of the findings is shown in box B.

The Bureau of Transportation Statistics, in partnership with the U.S. Census Bureau, is conducting the 2007 Commodity Flow Survey (CFS). As a result of meetings and other consultations with stakeholders, BTS worked with Census to improve coverage of the CFS, publish industry data for the first time, and improve geography. The 2007 CFS data collection is nearly complete. BTS and Census work jointly to evaluate and monitor the progress of this effort and monitor overall data quality.

The FHWA in cooperation with its modal partners, including BTS, produced the Freight Analysis Framework, version 2, (FAF^2). The 2002 CFS data form the basis of FAF^2. The FAF integrates data from a variety of sources to estimate commodity flows and related freight transportation activity among states, regions, and major international gateways. The original version, FAF^1, provided estimates for 1998 and forecasts for 2010 and 2020. The new version, FAF^2, provides estimates for 2002, annual provisional estimates beginning with 2005, and forecasts through 2035. All of the products listed here are available at www.ops.fhwa.dot.gov/freight/freight_analysis/faf.

Box B

Data Needs Findings From the Transportation Research Board's Peer Exchange With State Transportation Officials

In April 2007, the Transportation Research Board held a peer exchange discussion with representatives from 10 state transportation departments, 2 metropolitan planning organizations, and several federal agencies on actions to ensure the availability of data for transportation decision-making. Discussion included opportunities for national efforts to advance transportation data systems through:

- "Conducting synthesis studies to document innovative data practices, including data business plan development; protocols and management systems for sharing data within and between agencies; data reporting strategies and technologies; and studies of the uses and importance of national data bases…".
- "Development of new data tools, such as analysis and forecasting methods to support transportation decisions; practical methods to calculate return on investments (ROI) for all transportation investments; techniques to identify and quantify the risks and benefits of alternative investment scenarios; and advanced tools for integrating real-time traffic data with transportation management and planning functions."
- "Identification of effective designs for cooperative and collaborative interagency decisions on selection, sharing, and application of multiple data sources for decision making."

Appendices

Appendix A: List of Acronyms and Glossary

AAR	Association of American Railroads
ADA	Americans with Disabilities Act
APTA	American Public Transportation Association
ATPI	Air Travel Price Index
ATTI	Air Travel Time Index
ATTVI	Air Travel Time Variability Index
BEA	Bureau of Economic Analysis
BLS	Bureau of Labor Statistics
BTS	Bureau of Transportation Statistics
Btu	British thermal unit
CBP	U.S. Customs and Border Protection
CFS	Commodity Flow Survey
CO	carbon monoxide
CO_2	carbon dioxide
CPI	Consumer Price Index
CPSC	Consumer Product Safety Commission
DHS	U.S. Department of Homeland Security
DOC	U.S. Department of Commerce
DOE	U.S. Department of Energy
DOL	U.S. Department of Labor
DOT	U.S. Department of Transportation
dwt	deadweight tons
EIA	Energy Information Administration
EPA	U.S. Environmental Protection Agency
FAA	Federal Aviation Administration
FHWA	Federal Highway Administration
FMCSA	Federal Motor Carrier Safety Administration
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
FY	fiscal year
GDP	Gross Domestic Product
GHG	greenhouse gas
GIS	geographic information systems
GVWR	gross vehicle weight rating
HMIS	Hazardous Materials Information System

ISTEA	Intermodal Surface Transportation Efficiency Act
ITS	intelligent transportation system
MARAD	Maritime Administration
MFP	multifactor productivity
MISLE	Marine Information and Safety Law Enforcement
mmtc	million metric tons of carbon
mpg	miles per gallon
mph	miles per hour
MPO	metropolitan planning organization
MSA	metropolitan statistical area
NAICS	North American Industry Classification System
NEI	National Emissions Inventory
NEISS	National Electronic Injury Surveillance System
NHTS	National Household Travel Survey
NHTSA	National Highway Traffic Safety Administration
NO_X	nitrogen oxides
NPIAS	National Plan of Integrated Airport Systems
NTAD	National Transportation Atlas Database
NTD	National Transit Database
NTS	*National Transportation Statistics* report
NTSB	National Transportation Safety Board
O&D	origin and destination
OECD	Organization for Economic Cooperation and Development
OOS	out of service
OPEC	Organization of Petroleum Exporting Countries
PM-2.5	particulate matter of 2.5 microns in diameter or smaller
PM-10	particulate matter of 10 microns in diameter or smaller
pmt	passenger-miles of travel
quads	quadrillions
RITA	Research and Innovative Technology Administration
rpm	revenue passenger-mile
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act—A Legacy for Users
SCTG	Standard Classification of Transported Goods
SE	standard error
SIC	Standard Industrial Classification
STOL	short take-off and landing
SUV	sport utility vehicle
TEA-21	Transportation Equity Act for the 21st Century
TEU	20-foot equivalent container unit
$TgCO_2Eq$	teragrams of carbon dioxide equivalent
TSAR	*Transportation Statistics Annual Report*
TSI	Transportation Services Index

TTI	Texas Transportation Institute
TTI	Travel Time Index
USACE	U.S. Army Corps of Engineers
USCG	U.S. Coast Guard
USDOT	U.S. Department of Transportation
VIUS	Vehicle Inventory and Use Survey
vmt	vehicle-miles of travel
VOC	volatile organic compounds

Glossary

14 CFR 121 (air): *Code of Federal Regulations*, Title 14, part 121. Prescribes rules governing the operation of domestic, flag, and supplemental air carriers and commercial operators of large aircraft.

14 CFR 135 (air): *Code of Federal Regulations*, Title 14, part 135. Prescribes rules governing the operations of commuter air carriers (scheduled) and on-demand air taxi (unscheduled).

ACCIDENT (aircraft): As defined by the National Transportation Safety Board, an occurrence incidental to flight in which, as a result of the operation of an aircraft, any person (occupant or nonoccupant) receives fatal or serious injury or any aircraft receives substantial damage.

ACCIDENT (automobile): See Crash (highway).

ACCIDENT (gas): 1) An event that involves the release of gas from a pipeline or of liquefied natural gas (LNG) or other gas from an LNG facility resulting in personal injury necessitating in-patient hospitalization or a death; or estimated property damage of $50,000 or more to the operator or others, or both, including the value of the gas that escaped during the accident; 2) an event that results in an emergency shutdown of an LNG facility; or 3) an event that is significant in the judgment of the operator even though it did not meet the criteria of (1) or (2).

ACCIDENT (hazardous liquid or gas): Release of hazardous liquid or carbon dioxide while being transported, resulting in any of the following: 1) an explosion or fire not intentionally set by the operator; 2) loss of 50 or more barrels of hazardous liquid or carbon dioxide; 3) release to the atmosphere of more than 5 barrels a day of highly volatile liquids; 4) death of any person; 5) bodily harm resulting in one or more of the following—a) the loss of consciousness, b) the necessity of carrying a person from the scene, c) the necessity for medical treatment, d) disability that prevents the discharge of normal duties; and 6) estimated damage to the property of the operators and/or others exceeding $50,000.

ACCIDENT (highway-rail grade-crossing): An impact between on-track railroad equipment and an automobile, bus, truck, motorcycle, bicycle, farm vehicle, or pedestrian or other highway user at a designated crossing site. Sidewalks, pathways, shoulders, and ditches associated with the crossing are considered to be part of the crossing site.

ACCIDENT (rail): A collision, derailment, fire, explosion, act of God, or other event involving operation of railroad on-track equipment (standing or moving) that results in railroad damage exceeding an established dollar threshold.

ACCIDENT (recreational boating): An occurrence involving a vessel or its equipment that results in 1) a death; 2) an injury that requires medical treatment beyond first aid; 3) damage to a vessel and other property, totaling more than $500 or resulting in the complete loss of a vessel; or 4) the disappearance of the vessel under circumstances that indicate death or injury. Federal regulations (33 CFR 173–4) require the operator of any vessel that is numbered or used for recreational purposes to submit an accident report.

ACCIDENT (transit): An incident involving a moving vehicle, including another vehicle, an object, person (except suicides), or a derailment/left roadway.

AIR CARRIER: The commercial system of air transportation comprising large certificated air carriers, small certificated air carriers, commuter air carriers, on-demand air taxis, supplemental air carriers, and air travel clubs.

AIR TAXI: An aircraft operator who conducts operations for hire or compensation in accordance with 14 CFR 135 (for safety purposes) or FAR Part 135 (for economic regulations or reporting purposes) in an aircraft with 30 or fewer passenger seats and a payload capacity of 7,500 pounds or less. An air taxi operates on an on-demand basis and does not meet the flight schedule qualifications of a commuter air carrier (see below).

AIRPORT: A landing area regularly used by aircraft for receiving or discharging passengers or cargo.

ALTERNATIVE FUELS: The Energy Policy Act of 1992 defines alternative fuels as methanol, denatured ethanol, and other alcohol; mixtures containing 85 percent or more (but not less than 70 percent as determined by the Secretary of Energy by rule to provide for requirements relating to cold start, safety, or vehicle functions) by volume of methanol, denatured ethanol, and other alcohols with gasoline or other fuels. Includes compressed natural gas, liquid petroleum gas, hydrogen, coal-derived liquid fuels, fuels other than alcohols derived from biological materials, electricity, or any other fuel the Secretary of Energy determines by rule is substantially not petroleum and would yield substantial energy security and environmental benefits.

AMTRAK: Operated by the National Railroad Passenger Corporation, this rail system was created by the Rail Passenger Service Act of 1970 (Public Law 91-518, 84 Stat. 1327) and given the responsibility for the operation of intercity, as distinct from suburban, passenger trains between points designated by the Secretary of Transportation.

ARTERIAL HIGHWAY: A major highway used primarily for through traffic.

ASPHALT: A dark brown to black cement-like material containing bitumen as the predominant constituent. The definition includes crude asphalt and finished products such as cements, fluxes, the asphalt content of emulsions, and petroleum distillates blended with asphalt to make cutback asphalt. Asphalt is obtained by petroleum processing.

AVAILABLE SEAT-MILES (air carrier): The aircraft-miles flown in each interairport hop multiplied by the number of seats available on that hop for revenue passenger service.

AVERAGE HAUL: The average distance, in miles, one ton is carried. It is computed by dividing ton-miles by tons of freight originated.

AVERAGE PASSENGER TRIP LENGTH (bus/rail): Calculated by dividing revenue passenger-miles by the number of revenue passengers.

AVIATION GASOLINE (general aviation): All special grades of gasoline used in aviation reciprocating engines, as specified by American Society of Testing Materials Specification D910 and Military Specification MIL-G5572. Includes refinery products within the gasoline range marketed as or blended to constitute aviation gasoline.

BARREL (oil): A unit of volume equal to 42 U.S. gallons.

BRITISH THERMAL UNIT (Btu): The quantity of heat needed to raise the temperature of 1 pound (approximately 1 pint) of water by 1 °F at or near 39.2 °F.

BULK CARRIER (water): A ship with specialized holds for carrying dry or liquid commodities, such as oil, grain, ore, and coal, in unpackaged bulk form. Bulk carriers may be designed to carry a single bulk product (crude oil tanker) or accommodate several bulk product types (ore/

bulk/oil carrier) on the same voyage or on a subsequent voyage after holds are cleaned.

BUS: Large motor vehicle used to carry more than 10 passengers, including school buses, intercity buses, and transit buses.

CAR-MILE (rail): The movement of a railroad car a distance of one mile. An empty or loaded car-mile refers to a mile run by a freight car with or without a load. In the case of intermodal movements, the designation of empty or loaded refers to whether the trailers or containers are moved with or without a waybill.

CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY (air carrier): A certificate issued by the U.S. Department of Transportation to an air carrier under Section 401 of the Federal Aviation Act authorizing the carrier to engage in air transportation.

CERTIFICATED AIR CARRIER: An air carrier holding a Certificate of Public Convenience and Necessity issued by the U.S. Department of Transportation to conduct scheduled services interstate. These carriers may also conduct nonscheduled or charter operations. Certificated air carriers operate large aircraft (30 seats or more or a maximum load of 7,500 pounds or more) in accordance with FAR Part 121. See also Large Certificated Air Carrier.

CERTIFICATED AIRPORTS: Airports that service air carrier operations with aircraft seating more than 30 passengers.

CHAINED DOLLARS: A measure used to express real prices, defined as prices that are adjusted to remove the effect of changes in the purchasing power of the dollar. Real prices usually reflect buying power relative to a reference year. The "chained-dollar" measure is based on the average weights of goods and services in successive pairs of years. It is "chained" because the second year in each pair, with its weights, becomes the first year of the next pair. Prior to 1996, real prices were expressed in constant dollars, a weighted measure of goods and services in a single year. See also Constant Dollars and Current Dollars.

CLASS I RAILROAD: A carrier that has an annual operating revenue of $250 million or more after applying the railroad revenue deflator formula, which is based on the Railroad Freight Price Index developed by the U.S. Department of Labor, Bureau of Labor Statistics. The formula is the current year's revenues multiplied by the 1991 average index or current year's average index.

COASTWISE TRAFFIC (water): Domestic traffic receiving a carriage over the ocean or the Gulf of Mexico (e.g., between New Orleans and Baltimore, New York and Puerto Rico, San Francisco and Hawaii, Alaska and Hawaii). Traffic between Great Lakes ports and seacoast ports, when having a carriage over the ocean, is also considered coastwise.

COLLECTOR (highway): In rural areas, routes that serve intracounty rather than statewide travel. In urban areas, streets that provide direct access to neighborhoods and arterials.

COMBINATION TRUCK: A power unit (truck tractor) and one or more trailing units (a semitrailer or trailer).

COMMERCIAL BUS: Any bus used to carry passengers at rates specified in tariffs; charges may be computed per passenger (as in regular route service) or per vehicle (as in charter service).

COMMERCIAL SERVICE AIRPORT: Airport receiving scheduled passenger service and having 2,500 or more enplaned passengers per year.

COMMUTER AIR CARRIER: Different definitions are used for safety purposes and for economic regulations and reporting. For safety

analysis, commuter carriers are defined as air carriers operating under 14 CFR 135 that carry passengers for hire or compensation on at least five round trips per week on at least one route between two or more points according to published flight schedules, which specify the times, days of the week, and points of service. On March 20, 1997, the size of the aircraft subject to 14 CFR 135 was reduced from 30 to fewer than 10 passenger seats. (Larger aircraft are subject to the more stringent regulations of 14 CFR 121.) Helicopters carrying passengers or cargo for hire, however, are regulated under CFR 135 whatever their size. Although, in practice, most commuter air carriers operate aircraft that are regulated for safety purposes under 14 CFR 135 and most aircraft that are regulated under 14 CFR 135 are operated by commuter air carriers, this is not necessarily the case.

For economic regulations and reporting requirements, commuter air carriers are those carriers that operate aircraft of 60 or fewer seats or a maximum payload capacity of 18,000 pounds or less. These carriers hold a certificate issued under section 298C of the Federal Aviation Act of 1958, as amended.

COMMUTER RAIL (transit): Urban passenger train service for short-distance travel between a central city and adjacent suburb. Does not include rapid rail transit or light rail service.

CONSTANT DOLLARS: Dollar value adjusted for changes in the average price level by dividing a current dollar amount by a price index. See also Chained Dollars and Current Dollars.

CRASH (highway): An event that produces injury and/or property damage, involves a motor vehicle in transport, and occurs on a trafficway or while the vehicle is still in motion after running off the trafficway.

CRUDE OIL: A mixture of hydrocarbons that exists in the liquid phase in natural underground reservoirs and remains liquid at atmospheric pressure after passing through surface-separating facilities.

CURRENT DOLLARS: Dollar value of a good or service in terms of prices current at the time the good or service is sold. See also Chained Dollars and Constant Dollars.

DEADWEIGHT TONNAGE (water): The carrying capacity of a vessel in long tons (2,240 pounds). It is the difference between the number of tons of water a vessel displaces "light" and the number of tons it displaces when submerged to the "load line."

DEMAND-RESPONSE VEHICLE (transit): A nonfixed-route, nonfixed-schedule vehicle that operates in response to calls from passengers or their agents to the transit operator or dispatcher.

DIESEL FUEL: A complex mixture of hydrocarbons with a boiling range between approximately 350 and 650 °F. Diesel fuel is composed primarily of paraffins and naphthenic compounds that auto-ignite from the heat of compression in a diesel engine. Diesel is used primarily by heavy-duty road vehicles, construction equipment, locomotives, and by marine and stationary engines.

DOMESTIC FREIGHT (water): All waterborne commercial movement between points in the United States, Puerto Rico, and the Virgin Islands, excluding traffic with the Panama Canal Zone. Cargo moved for the military in commercial vessels is reported as ordinary commercial cargo; military cargo moved in military vessels is omitted.

DOMESTIC OPERATIONS (air carrier): All air carrier operations having destinations within the 50 United States, the District of Columbia, the Commonwealth of Puerto Rico, and the U.S. Virgin Islands.

DOMESTIC PASSENGER (water): Any person traveling on a public conveyance by water between points in the United States, Puerto Rico, and the Virgin Islands.

DRY CARGO BARGES (water): Large flat-bottomed, nonself-propelled vessels used to transport dry-bulk materials such as coal and ore.

ENERGY EFFICIENCY: The ratio of energy inputs to outputs from a process, for example, miles traveled per gallon of fuel (mpg).

ENPLANED PASSENGERS (air carrier): See Revenue Passenger Enplanements.

FATAL CRASH (highway): A police-reported crash involving a motor vehicle in transport on a trafficway in which at least 1 person dies within 30 days of the crash as a result of that crash.

FATAL INJURY (air): Any injury that results in death within 30 days of the accident.

FATALITY: For purposes of statistical reporting on transportation safety, a fatality is considered a death due to injuries in a transportation crash, accident, or incident that occurs within 30 days of that occurrence.

FATALITY (rail): 1) Death of any person from an injury within 30 days of the accident or incident (may include nontrain accidents or incidents); or 2) death of a railroad employee from an occupational illness within 365 days after the occupational illness was diagnosed by a physician.

FATALITY (recreational boating): All deaths (other than deaths by natural causes) and missing persons resulting from an occurrence that involves a vessel or its equipment.

FATALITY (transit): A transit-caused death confirmed within 30 days of a transit incident. Incidents include collisions, derailments, personal casualties, and fires associated with transit agency revenue vehicles, transit facilities on transit property, service vehicles, maintenance areas, and rights-of-way.

FATALITY (water): All deaths and missing persons resulting from a vessel casualty.

FERRYBOAT (transit): Vessels that carry passengers and/or vehicles over a body of water. Generally steam or diesel-powered, ferryboats may also be hovercraft, hydrofoil, and other high-speed vessels. The vessel is limited in its use to the carriage of deck passengers or vehicles or both, operates on a short run on a frequent schedule between two points over the most direct water routes other than in ocean or coastwise service, and is offered as a public service of a type normally attributed to a bridge or tunnel.

FOSSIL FUELS: Any naturally occurring organic fuel formed in the Earth's crust, such as petroleum, coal, and natural gas.

FREIGHT REVENUE (rail): Revenue from the transportation of freight and from the exercise of transit, stopoff, diversion, and reconsignment privileges as provided for in tariffs.

FREIGHTERS (water): General cargo carriers, full containerships, partial containerships, roll on/roll off ships, and barge carriers.

GAS TRANSMISSION PIPELINES: Pipelines installed for the purpose of transmitting gas from a source or sources of supply to one or more distribution centers, or to one or more large volume customers; or a pipeline installed to interconnect sources of supply. Typically, transmission lines differ from gas mains in that they operate at higher pressures and the distance between connections is greater.

GASOLINE: A complex mixture of relatively volatile hydrocarbons, with or without small quantities of additives, that have been blended to produce a fuel suitable for use in spark ignition

engines. Motor gasoline includes both leaded or unleaded grades of finished motor gasoline, blending components, and gasohol. Leaded gasoline is no longer used in highway motor vehicles in the United States.

GENERAL AVIATION: 1) All civil aviation operations other than scheduled air services and nonscheduled air transport operations for taxis, commuter air carriers, and air travel clubs that do not hold Certificates of Public Convenience and Necessity. 2) All civil aviation activity except that of air carriers certificated in accordance with Federal Aviation Regulations, Parts 121, 123, 127, and 135. The types of aircraft used in general aviation range from corporate multiengine jet aircraft piloted by professional crews to amateur-built single-engine piston-driven acrobatic planes to balloons and dirigibles.

GENERAL ESTIMATES SYSTEM (highway): A data-collection system that uses a nationally representative probability sample selected from all police-reported highway crashes. It began operation in 1988.

GROSS DOMESTIC PRODUCT (U.S.): The total output of goods and services produced by labor and property located in the United States, valued at market prices. As long as the labor and property are located in the United States, the suppliers (workers and owners) may be either U.S. residents or residents of foreign countries.

GROSS VEHICLE WEIGHT RATING (truck): The maximum rated capacity of a vehicle, including the weight of the base vehicle, all added equipment, driver and passengers, and all cargo.

HAZARDOUS MATERIAL: Any toxic substance or explosive, corrosive, combustible, poisonous, or radioactive material that poses a risk to the public's health, safety, or property, particularly when transported in commerce.

HEAVY RAIL (transit): An electric railway with the capacity to transport a heavy volume of passenger traffic and characterized by exclusive rights-of-way, multicar trains, high speed, rapid acceleration, sophisticated signaling, and high-platform loading. Also known as "subway," "elevated (railway)," or "metropolitan railway (metro)."

HIGHWAY-RAIL GRADE CROSSING (rail): A location where one or more railroad tracks are crossed by a public highway, road, street, or a private roadway at grade, including sidewalks and pathways at or associated with the crossing.

HIGHWAY TRUST FUND: A grant-in-aid type fund administered by the U.S. Department of Transportation, Federal Highway Administration. Most funds for highway improvements are apportioned to states according to formulas that give weight to population, area, and mileage.

HIGHWAY-USER TAX: A charge levied on persons or organizations based on their use of public roads. Funds collected are usually applied toward highway construction, reconstruction, and maintenance.

INCIDENT (hazardous materials): Any unintentional release of hazardous material while in transit or storage.

INCIDENT (train): Any event involving the movement of a train or railcars on track equipment that results in a death, a reportable injury, or illness, but in which railroad property damage does not exceed the reporting threshold.

INCIDENT (transit): Collisions, derailments, personal casualties, fires, and property damage in excess of $1,000 associated with transit agency revenue vehicles; all other facilities on the transit property; and service vehicles, maintenance areas, and rights-of-way.

INJURY (air): See Serious Injury (air carrier/general aviation).

INJURY (gas): Described in U.S. Department of Transportation Forms 7100.1 or 7100.2 as an injury requiring "in-patient hospitalization" (admission and confinement in a hospital beyond treatment administered in an emergency room or out-patient clinic in which confinement does not occur).

INJURY (hazardous liquid pipeline): An injury resulting from a hazardous liquid pipeline accident that results in one or more of the following: 1) loss of consciousness, 2) a need to be carried from the scene, 3) a need for medical treatment, and/or 4) a disability that prevents the discharge of normal duties or the pursuit of normal duties beyond the day of the accident.

INJURY (highway): Police-reported highway injuries are classified as follows:

Incapacitating Injury: Any injury, other than a fatal injury, that prevents the injured person from walking, driving, or normally continuing the activities the person was capable of performing before the injury occurred. Includes severe lacerations, broken or distorted limbs, skull or chest injuries, abdominal injuries, unconsciousness at or when taken from the accident scene, and inability to leave the accident scene without assistance. Exclusions include momentary unconsciousness.

Nonincapacitating Evident Injury: Any injury, other than a fatal injury or an incapacitating injury, evident to observers at the scene of the accident. Includes lumps on head, abrasions, bruises, minor lacerations, and others. Excludes limping.

Possible Injury: Any injury reported or claimed that is not evident. Includes, among others, momentary unconsciousness, claim of injuries not obvious, limping, complaint of pain, nausea, and hysteria.

INJURY (highway-rail grade crossing): 1) An injury to one or more persons other than railroad employees that requires medical treatment; 2) an injury to one or more employees that requires medical treatment or that results in restriction of work or motion for one or more days, or one or more lost work days, transfer to another job, termination of employment, or loss of consciousness; 3) any occupational illness affecting one or more railroad employees that is diagnosed by a physician.

INJURY (rail): 1) Injury to any person other than a railroad employee that requires medical treatment, or 2) injury to a railroad employee that requires medical treatment or results in restriction of work or motion for one or more workdays, one or more lost workdays, termination of employment, transfer to another job, loss of consciousness, or any occupational illness of a railroad employee diagnosed by a physician.

INJURY (recreational boating): Injury requiring medical treatment beyond first aid as a result of an occurrence that involves a vessel or its equipment.

INJURY (transit): Any physical damage or harm to a person requiring medical treatment or any physical damage or harm to a person reported at the time and place of occurrence. For employees, an injury includes incidents resulting in time lost from duty or any definition consistent with a transit agency's current employee injury reporting practice.

INJURY (water): All personal injuries resulting from a vessel casualty that require medical treatment beyond first aid.

INLAND AND COASTAL CHANNELS: Includes the Atlantic Coast Waterways, the Atlantic Intracoastal Waterway, the New York State

Barge Canal System, the Gulf Coast Waterways, the Gulf Intracoastal Waterway, the Mississippi River System (including the Illinois Waterway), the Pacific Coast Waterways, the Great Lakes, and all other channels (waterways) of the United States, exclusive of Alaska, that are usable for commercial navigation.

INTERCITY CLASS I BUS: As defined by the Bureau of Transportation Statistics, an interstate motor carrier of passengers with an average annual gross revenue of at least $1 million.

INTERCITY TRUCK: A truck that carries freight beyond local areas and commercial zones.

INTERNAL TRAFFIC (water): Vessel movements (origin and destination) that take place solely on inland waterways located within the boundaries of the contiguous 48 states or within the state of Alaska. Internal traffic also applies to carriage on both inland waterways and the water on the Great Lakes; carriage between offshore areas and inland waterways; and carriage occurring within the Delaware Bay, Chesapeake Bay, Puget Sound, and the San Francisco Bay, which are considered internal bodies of water rather than arms of the ocean.

INTERSTATE HIGHWAY: Limited access, divided highway of at least four lanes designated by the Federal Highway Administration as part of the Interstate System.

JET FUEL: Includes kerosene-type jet fuel (used primarily for commercial turbojet and turboprop aircraft engines) and naphtha-type jet fuel (used primarily for military turbojet and turboprop aircraft engines).

LAKEWISE OR GREAT LAKES TRAFFIC: Waterborne traffic between U.S. ports on the Great Lakes system. The Great Lakes system is treated as a separate waterways system rather than as a part of the inland system.

LARGE CERTIFICATED AIR CARRIER: An air carrier holding a certificate issued under section 401 of the Federal Aviation Act of 1958, as amended, that: 1) operates aircraft designed to have a maximum passenger capacity of more than 60 seats or a maximum payload capacity of more than 18,000 pounds, or 2) conducts operations where one or both terminals of a flight stage are outside the 50 states of the United States, the District of Columbia, the Commonwealth of Puerto Rico, and the U.S. Virgin Islands. Large certificated air carriers are grouped by annual operating revenues: 1) majors (more than $1 billion in annual operating revenues), 2) nationals (between $100 million and $1 billion in annual operating revenues), 3) large regionals (between $20 million and $99,999,999 in annual operating revenues), and 4) medium regionals (less than $20 million in annual operating revenues).

LARGE REGIONALS (air): Air carrier groups with annual operating revenues between $20 million and $99,999,999.

LARGE TRUCK: Trucks over 10,000 pounds gross vehicle weight rating, including single-unit trucks and truck tractors.

LIGHT-DUTY VEHICLE: A vehicle category that combines light automobiles and trucks.

LIGHT RAIL: A streetcar-type vehicle operated on city streets, semi-exclusive rights-of-way, or exclusive rights-of-way. Service may be provided by step-entry vehicles or by level boarding.

LIGHT TRUCK: Trucks of 10,000 pounds gross vehicle weight rating or less, including pickups, vans, truck-based station wagons, and sport utility vehicles.

LOCOMOTIVE: Railroad vehicle equipped with flanged wheels for use on railroad tracks, powered directly by electricity, steam, or fossil fuel, and used to move other railroad rolling equipment.

MAJORS (air): Air carrier groups with annual operating revenues exceeding $1 billion.

MEDIUM REGIONALS (air): Air carrier groups with annual operating revenues less than $20 million.

MERCHANDISE TRADE EXPORTS: Merchandise transported out of the United States to foreign countries whether such merchandise is exported from within the U.S. Customs Service territory, from a U.S. Customs bonded warehouse, or from a U.S. Foreign Trade Zone. (Foreign Trade Zones are areas, operated as public utilities, under the control of U.S. Customs with facilities for handling, storing, manipulating, manufacturing, and exhibiting goods.)

MERCHANDISE TRADE IMPORTS: Commodities of foreign origin entering the United States, as well as goods of domestic origin returned to the United States with no change in condition or after having been processed and/or assembled in other countries. Puerto Rico is a Customs district within the U.S. Customs territory, and its trade with foreign countries is included in U.S. import statistics. U.S. import statistics also include merchandise trade between the U.S. Virgin Islands and foreign countries even though the Islands are not officially a part of the U.S. Customs territory.

METHYL-TERTIARY-BUTYL-ETHER (MTBE): A colorless, flammable, liquid oxygenated hydrocarbon that contains 18.15 percent oxygen. It is a fuel oxygenate produced by reacting methanol with isobutylene.

MINOR ARTERIALS (highway): Roads linking cities and larger towns in rural areas. In urban areas, roads that link but do not penetrate neighborhoods within a community.

MOTORBUS (transit): A rubber-tired, self-propelled, manually steered bus with a fuel supply onboard the vehicle. Motorbus types include intercity, school, and transit.

MOTORCYCLE: A two- or three-wheeled motor vehicle designed to transport one or two people, including motor scooters, minibikes, and mopeds.

NATIONALS (air): Air carrier groups with annual operating revenues between $100 million and $1 billion.

NATURAL GAS: A naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in porous geologic formations beneath the Earth's surface, often in association with petroleum. The principal constituent is methane.

NONOCCUPANT (Automobile): Any person who is not an occupant of a motor vehicle in transport (e.g., bystanders, pedestrians, pedalcyclists, or an occupant of a parked motor vehicle).

NONSCHEDULED SERVICE (air): Revenue flights not operated as regular scheduled service, such as charter flights, and all nonrevenue flights incident to such flights.

NONSELF-PROPELLED VESSEL (water): A vessel without the means for self-propulsion. Includes dry cargo barges and tanker barges.

NONTRAIN INCIDENT: An event that results in a reportable casualty, but does not involve the movement of ontrack equipment and does not cause reportable damage above the threshold established for train accidents.

NONTRESPASSERS (rail): A person lawfully on any part of railroad property used in railroad operations or a person adjacent to railroad premises when injured as the result of railroad operations.

NONVESSEL-CASUALTY-RELATED DEATH (water): A death that occurs onboard a commer-

cial vessel but not as a result of a vessel casualty, such as a collision, fire, or explosion.

OCCUPANT (highway): Any person in or on a motor vehicle in transport. Includes the driver, passengers, and persons riding on the exterior of a motor vehicle (e.g., a skateboard rider holding onto a moving vehicle). Excludes occupants of parked cars unless they are double parked or motionless on the roadway.

OCCUPATIONAL FATALITY: Death resulting from a job-related injury.

OPERATING EXPENSES (air): Expenses incurred in the performance of air transportation, based on overall operating revenues and expenses. Does not include nonoperating income and expenses, nonrecurring items, or income taxes.

OPERATING EXPENSES (rail): Expenses of furnishing transportation services, including maintenance and depreciation of the plant used in the service.

OPERATING EXPENSES (transit): The total of all expenses associated with operation of an individual mode by a given operator. Includes distributions of "joint expenses" to individual modes and excludes "reconciling items," such as interest expenses and depreciation. Should not be confused with "vehicle operating expenses."

OPERATING EXPENSES (truck): Includes expenditures for equipment maintenance, supervision, wages, fuel, equipment rental, terminal operations, insurance, safety, and administrative and general functions.

OPERATING REVENUES (air): Revenues from the performance of air transportation and related incidental services. Includes 1) transportation revenues from the carriage of all classes of traffic in scheduled and nonscheduled services, and 2) nontransportation revenues consisting of federal subsidies (where applicable) and services related to air transportation.

OTHER FREEWAYS AND EXPRESSWAYS (highway): All urban principal arterials with limited access but not part of the Interstate system.

OTHER PRINCIPAL ARTERIALS (highway): Major streets or highways, many of multi-lane or freeway design, serving high-volume traffic corridor movements that connect major generators of travel.

OTHER RAIL REVENUE: Includes revenues from miscellaneous operations (i.e., dining- and bar-car services), income from the lease of road and equipment, miscellaneous rental income, income from nonoperating property, profit from separately operated properties, dividend income, interest income, income from sinking and other reserve funds, release or premium on funded debt, contributions from other companies, and other miscellaneous income.

OTHER REVENUE VEHICLES (transit): Other revenue-generating modes of transit service, such as cable cars, personal rapid transit systems, monorail vehicles, inclined and railway cars, not covered otherwise.

OTHER 2-AXLE 4-TIRE VEHICLES (truck): Includes vans, pickup trucks, and sport utility vehicles.

PASSENGER CAR: A motor vehicle designed primarily for carrying passengers on ordinary roads, includes convertibles, sedans, and stations wagons.

PASSENGER-MILE: 1) Air: One passenger transported 1 mile; passenger-miles for 1 interairport flight are calculated by multiplying aircraft-miles flown by the number of passengers carried on the flight. The total passenger-miles for all flights is the sum of passenger-miles for all interairport flights. 2) Auto: One passenger

traveling 1 mile; e.g., 1 car transporting 2 passengers 4 miles results in 8 passenger-miles. 3) Transit: The total number of miles traveled by transit passengers; e.g., 1 bus transporting 5 passengers 3 miles results in 15 passenger-miles.

PASSENGER REVENUE: 1) Rail: Revenue from the sale of tickets. 2) Air: Revenues from the transport of passengers by air. 3) Transit: Fares, transfer, zone, and park-and-ride parking charges paid by transit passengers. Prior to 1984, fare revenues collected by contractors operating transit services were not included.

PASSENGER VESSELS (water): A vessel designed for the commercial transport of passengers.

PEDALCYCLIST: A person on a vehicle that is powered solely by pedals.

PEDESTRIAN: Any person not in or on a motor vehicle or other vehicle. Excludes people in buildings or sitting at a sidewalk cafe. The National Highway Traffic Safety Administration also uses an "other pedestrian" category to refer to pedestrians using conveyances and people in buildings. Examples of pedestrian conveyances include skateboards, nonmotorized wheelchairs, rollerskates, sleds, and transport devices used as equipment.

PERSON-MILES: An estimate of the aggregate distances traveled by all persons on a given trip based on the estimated transportation-network-miles traveled on that trip.

PERSON TRIP: A trip taken by an individual. For example, if three persons from the same household travel together, the trip is counted as one household trip and three person trips.

PERSONAL CASUALTY (transit): 1) An incident in which a person is hurt while getting on or off a transit vehicle (e.g., falls or door incidents), but not as a result of a collision, derailment/left roadway, or fire. 2) An incident in which a person is hurt while using a lift to get on or off a transit vehicle, but not as a result of a collision, derailment/left roadway, or fire. 3) An incident in which a person is injured on a transit vehicle, but not as a result of a collision, derailment/left roadway, or fire. 4) An incident in which a person is hurt while using a transit facility. This includes anyone on transit property (e.g., patrons, transit employees, trespassers), but does not include incidents resulting from illness or criminal activity.

PETROLEUM (oil): A generic term applied to oil and oil products in all forms, such as crude oil, lease condensate, unfinished oils, petroleum products, natural gas plant liquids, and non-hydrocarbon compounds blended into finished petroleum products.

PROPERTY DAMAGE (transit): The dollar amount required to repair or replace transit property (including stations, right-of-way, bus stops, and maintenance facilities) damaged during an incident.

PUBLIC ROAD: Any road under the jurisdiction of and maintained by a public authority (federal, state, county, town or township, local government, or instrumentality thereof) and open to public travel.

RAPID RAIL TRANSIT: Transit service using railcars driven by electricity usually drawn from a third rail, configured for passenger traffic, and usually operated on exclusive rights-of-way. It generally uses longer trains and has longer station spacing than light rail.

REVENUE: Remuneration received by carriers for transportation activities.

REVENUE PASSENGER: 1) Air: Person receiving air transportation from an air carrier for which remuneration is received by the carrier. Air carrier employees or others, except ministers of religion, elderly individuals, and handicapped

individuals, receiving reduced rate charges (less than the applicable tariff) are considered nonrevenue passengers. Infants, for whom a token fare is charged, are not counted as passengers. 2) Transit: Single-vehicle transit rides by initial-board (first-ride) transit passengers only. Excludes all transfer rides and all nonrevenue rides. 3) Rail: Number of one-way trips made by persons holding tickets.

REVENUE PASSENGER ENPLANEMENTS (air): The total number of passengers boarding aircraft. Includes both originating and connecting passengers.

REVENUE PASSENGER LOAD FACTOR (air): Revenue passenger-miles as a percentage of available seat-miles in revenue passenger services. The term is used to represent the proportion of aircraft seating capacity that is actually sold and utilized.

REVENUE PASSENGER-MILE: One revenue passenger transported one mile.

REVENUE PASSENGER TON-MILE (air): One ton of revenue passenger weight (including all baggage) transported one mile. The passenger weight standard for both domestic and international operations is 200 pounds.

REVENUE TON-MILE: One short ton of freight transported one mile.

REVENUE VEHICLE-MILES (transit): One vehicle (bus, trolley bus, or streetcar) traveling one mile, while revenue passengers are on board, generates one revenue vehicle-mile. Revenue vehicle-miles reported represent the total mileage traveled by vehicles in scheduled or unscheduled revenue-producing services.

ROLL ON/ROLL OFF VESSEL (water): Ships that are designed to carry wheeled containers or other wheeled cargo and use the roll on/roll off method for loading and unloading.

RURAL HIGHWAY: Any highway, road, or street that is not an urban highway.

RURAL MILEAGE (highway): Roads outside city, municipal district, or urban boundaries.

SCHEDULED SERVICE (air): Transport service operated on published flight schedules.

SCHOOL BUS: A passenger motor vehicle that is designed or used to carry more than 10 passengers, in addition to the driver, and, as determined by the Secretary of Transportation, is likely to be significantly used for the purpose of transporting pre-primary, primary, or secondary school students between home and school.

SCHOOL BUS-RELATED CRASH: Any crash in which a vehicle, regardless of body design and used as a school bus, is directly or indirectly involved, such as a crash involving school children alighting from a vehicle.

SELF-PROPELLED VESSEL: A vessel that has its own means of propulsion. Includes tankers, containerships, dry bulk cargo ships, and general cargo vessels.

SERIOUS INJURY (air carrier/general aviation): An injury that requires hospitalization for more than 48 hours, commencing within 7 days from the date when the injury was received; results in a bone fracture (except simple fractures of fingers, toes, or nose); involves lacerations that cause severe hemorrhages, or nerve, muscle, or tendon damage; involves injury to any internal organ; or involves second- or third-degree burns or any burns affecting more than 5 percent of the body surface.

SMALL CERTIFICATED AIR CARRIER: An air carrier holding a certificate issued under section 401 of the Federal Aviation Act of 1958, as amended, that operates aircraft designed to have a maximum seating capacity of 60 seats or

fewer or a maximum payload of 18,000 pounds or less.

STATE AND LOCAL HIGHWAY EXPENDITURES: Disbursements for capital outlays, maintenance and traffic surfaces, administration and research, highway law enforcement and safety, and interest on debt.

SUPPLEMENTAL AIR CARRIER: An air carrier authorized to perform passenger and cargo charter services.

TANKER: An oceangoing ship designed to haul liquid bulk cargo in world trade.

TON-MILE (truck): The movement of one ton of cargo the distance of one mile. Ton-miles are calculated by multiplying the weight in tons of each shipment transported by the miles hauled.

TON-MILE (water): The movement of one ton of cargo the distance of one statute mile. Domestic ton-miles are calculated by multiplying tons moved by the number of statute miles moved on the water (e.g., 50 short tons moving 200 miles on a waterway would yield 10,000 ton-miles for that waterway). Ton-miles are not computed for ports. For coastwise traffic, the shortest route that safe navigation permits between the port of origin and destination is used to calculate ton-miles.

TRAIN LINE MILEAGE: The aggregate length of all line-haul railroads. It does not include the mileage of yard tracks or sidings, nor does it reflect the fact that a mile of railroad may include two or more parallel tracks. Jointly-used track is counted only once.

TRAIN-MILE: The movement of a train, which can consist of many cars, the distance of one mile. A train-mile differs from a vehicle-mile, which is the movement of one car (vehicle) the distance of one mile. A 10-car (vehicle) train traveling 1 mile is measured as 1 train-mile and 10 vehicle-miles. Caution should be used when comparing train-miles to vehicle-miles.

TRANSIT VEHICLE: Includes light, heavy, and commuter rail; motorbus; trolley bus; van pools; automated guideway; and demand responsive vehicles.

TRANSSHIPMENTS: Shipments that enter or exit the United States by way of a U.S. Customs port on the northern or southern border, but whose origin or destination is a country other than Canada or Mexico.

TRESPASSER (rail): Any person whose presence on railroad property used in railroad operations is prohibited, forbidden, or unlawful.

TROLLEY BUS: Rubber-tired electric transit vehicle, manually steered and propelled by a motor drawing current, normally through overhead wires, from a central power source.

TRUST FUNDS: Accounts that are designated by law to carry out specific purposes and programs. Trust Funds are usually financed with earmarked tax collections.

TUG BOAT: A powered vessel designed for towing or pushing ships, dumb barges, pushed-towed barges, and rafts, but not for the carriage of goods.

U.S.-FLAG CARRIER OR AMERICAN FLAG CARRIER (air): One of a class of air carriers holding a Certificate of Public Convenience and Necessity, issued by the U.S. Department of Transportation and approved by the President, authorizing scheduled operations over specified routes between the United States (and/or its territories) and one or more foreign countries.

UNLEADED GASOLINE: See Gasoline.

UNLINKED PASSENGER TRIPS (transit): The number of passengers boarding public transportation vehicles. A passenger is counted each

time he/she boards a vehicle even if the boarding is part of the same journey from origin to destination.

URBAN HIGHWAY: Any road or street within the boundaries of an urban area. An urban area is an area including and adjacent to a municipality or urban place with a population of 5,000 or more. The boundaries of urban areas are fixed by state highway departments, subject to the approval of the Federal Highway Administration, for purposes of the Federal-Aid Highway Program.

VANPOOL (transit): Public-sponsored commuter service operating under prearranged schedules for previously formed groups of riders in 8- to 18-seat vehicles. Drivers are also commuters who receive little or no compensation besides the free ride.

VEHICLE MAINTENANCE (transit): All activities associated with revenue and nonrevenue (service) vehicle maintenance, including administration, inspection and maintenance, and servicing (e.g., cleaning and fueling) vehicles. In addition, it includes repairs due to vandalism or to revenue vehicle accidents.

VEHICLE-MILES (highway): Miles of travel by all types of motor vehicles as determined by the states on the basis of actual traffic counts and established estimating procedures.

VEHICLE-MILES (transit): The total number of miles traveled by transit vehicles. Commuter rail, heavy rail, and light rail report individual car-miles, rather than train-miles for vehicle-miles.

VEHICLE OPERATIONS (transit): All activities associated with transportation administration, including the control of revenue vehicle movements, scheduling, ticketing and fare collection, system security, and revenue vehicle operation.

VESSEL CASUALTY (water): An occurrence involving commercial vessels that results in 1) actual physical damage to property in excess of $25,000; 2) material damage affecting the seaworthiness or efficiency of a vessel; 3) stranding or grounding; 4) loss of life; or 5) injury causing any person to remain incapacitated for a period in excess of 72 hours, except injury to harbor workers not resulting in death and not resulting from vessel casualty or vessel equipment casualty.

VESSEL-CASUALTY-RELATED DEATH (water): Fatality that occurs as a result of an incident that involves a vessel or its equipment, such as a collision, fire, or explosion. Includes drowning deaths.

WATERBORNE TRANSPORTATION: Transport of freight and/or people by commercial vessels under U.S. Coast Guard jurisdiction.

Maps

U.S. Department of Transportation
Research and Innovative Technology Administration
Bureau of Transportation Statistics
Geospatial Information Program

Safety Belt Laws by State: As of 2006

SOURCE: 1998-2005: U.S. Department of Transportation, National Highway Traffic Safety Administration, Traffic Safety Facts.

U.S. Department of Transportation
Research and Innovative Technology Administration
Bureau of Transportation Statistics
Geospatial Information Program

Safety Belt Use Rates: 2006

SOURCE: U.S. Department of Transportation, National Highway Traffic Safety Administration, Traffic Safety Facts.

U.S. Department of Transportation
Research and Innovative Technology Administration
Bureau of Transportation Statistics
Geospatial Information Program

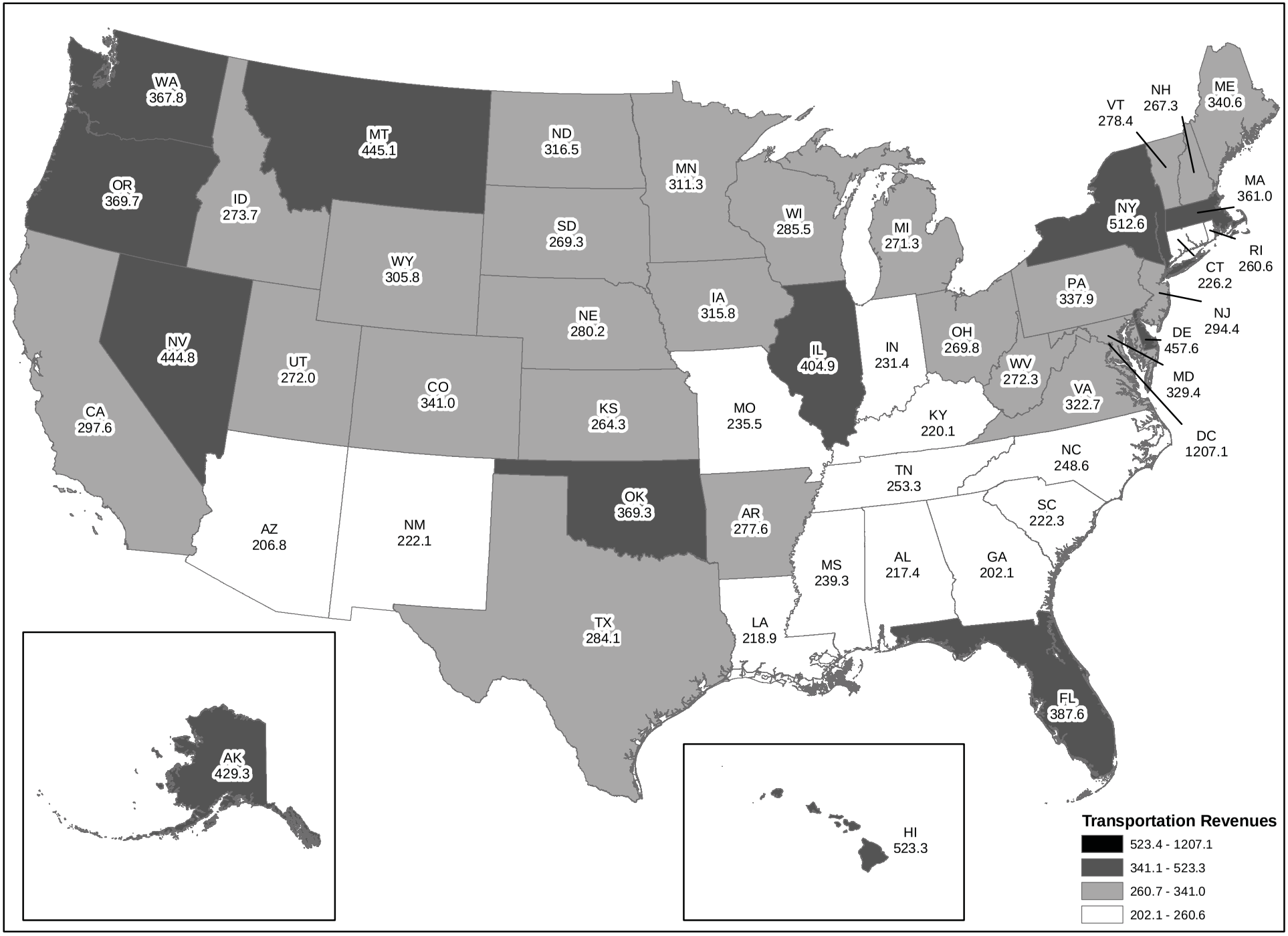
Per Capita State & Local Total Transporation Expenditures: FY 2004

NOTE: Expenditures are in current dollars.

SOURCE: Calculated based on data from the U.S. Department of Commerce, Bureau of the Census, State and Local Government Finance Estimates, and State Population Estimates.

U.S. Department of Transportation
Research and Innovative Technology Administration
Bureau of Transportation Statistics
Geospatial Information Program

Per Capita State & Local Total Transporation Revenues: FY 2004

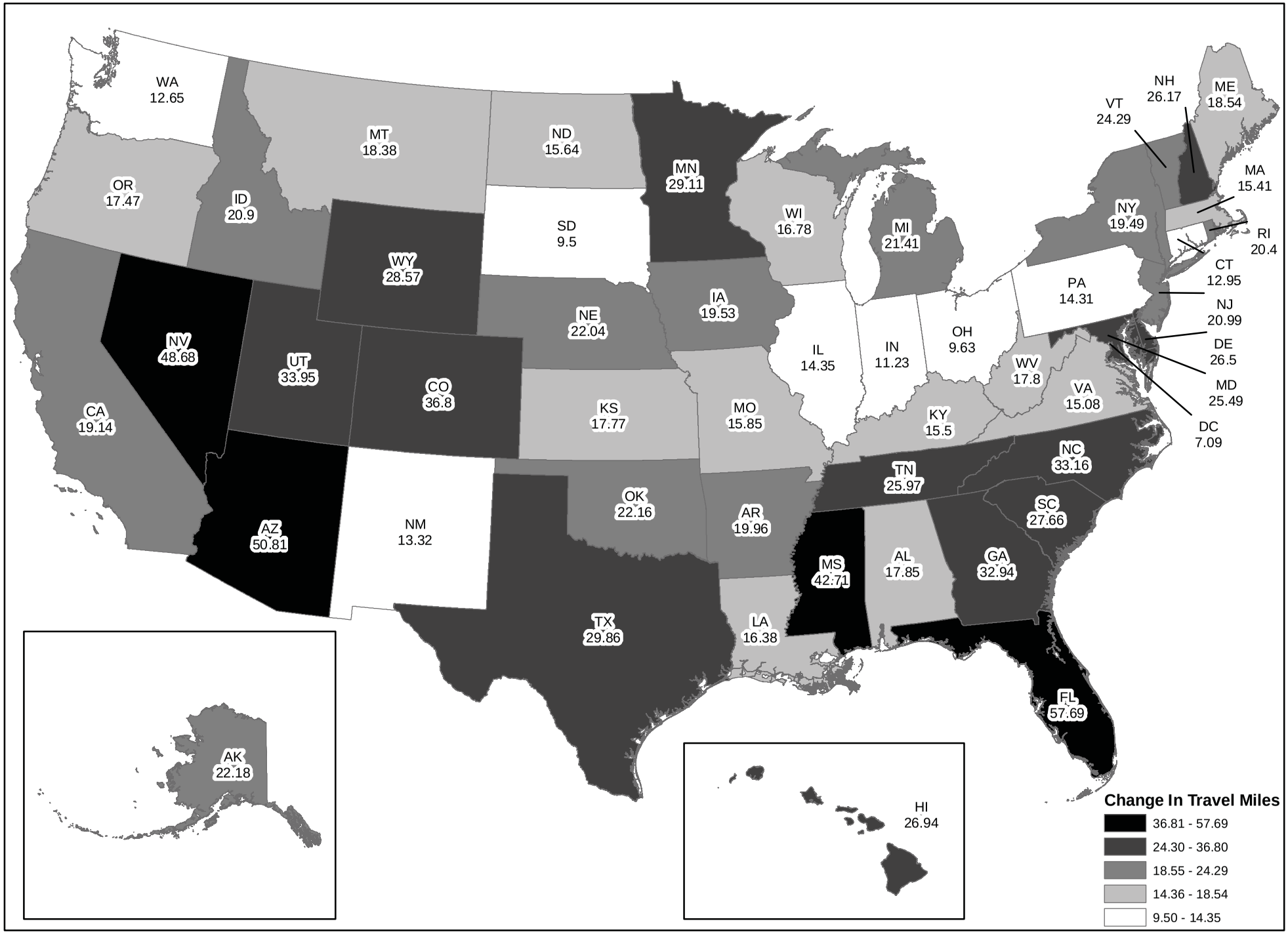


NOTE: Expenditures are in current dollars.

SOURCE: Calculated based on data from the U.S. Department of Commerce, Bureau of the Census, State and Local Government Finance Estimates, and State Population Estimates.

U.S. Department of Transportation
Research and Innovative Technology Administration
Bureau of Transportation Statistics
Geospatial Information Program

Percent Change in Vehicle Miles of Travel: 1995 - 2005



SOURCE: U.S. Department of Transportation, Federal Highway Administration, Highway Statistics (Washington, DC: Annual issues).

Appendix B: Social and Economic Characteristics of the United States

	1980	1985	1990	1995	2000	2005	2006
Total U.S. Resident Population (thousands)	**227,225**	**237,924**	**249,623**	**266,278**	**282,193**	**296,410**	**299,398**
Population by age (thousands)							
Under 18	63,754	62,623	63,949	69,465	72,307	73,470	73,736
18-24 years	30,022	28,902	26,961	25,482	27,141	29,307	29,455
25-34 years	37,082	41,696	43,174	45,052	39,895	40,143	40,416
35-44 years	25,634	31,691	37,444	42,711	45,150	43,863	43,667
45-54 years	22,800	22,460	25,062	31,480	37,674	42,483	43,278
55-64 years	21,703	22,135	21,116	21,320	24,273	30,356	31,587
65 and over	25,550	28,415	31,084	33,769	34,992	36,790	37,260
Population by sex (thousands)							
Male	110,053	115,730	121,284	130,215	138,056	146,000	147,512
Female	116,493	122,194	127,507	136,063	143,368	150,411	151,886
Population in Metropolitan areas (millions)							
Large (over 1 million)	119	U	139	147	149	160	161
Medium (250,000-999,999)	41	U	41	44	56	59	60
Small (less than 250,000)	17	U	18	19	28	28	28
Population in Regions (millions)							
Northeast	49.1	49.9	50.8	52.3	53.6	54.6	54.7
South	75.4	81.4	85.5	93.2	100.2	107.5	109.1
Midwest	58.9	58.8	59.7	62.5	64.4	66.0	66.2
West	43.2	47.8	52.8	58.3	63.2	68.3	69.4
Immigrants admitted (thousands)	**531**	**570**	**1,536**	**720**	**841**	**1,122**	**1,204**
Gross domestic product (billions of chained $ 2000)	**5,162**	**6,054**	**7,113**	**8,032**	**9,817**	**11,003**	**11,319**
Civilian labor force (thousands)	**106,940**	**115,461**	**125,840**	**132,304**	**142,583**	**149,320**	**151,428**
Participation rate of men (%)	77.4	76.3	76.4	75.0	74.8	73.3	73.5
Participation rate of women (%)	51.5	54.5	57.5	58.9	59.9	59.3	59.4
Unemployment rate (% of labor force)	7.1	7.2	5.6	5.6	4.0	5.1	4.6
Households (thousands)	**80,776**	**86,789**	**93,347**	**98,990**	**104,705**	**114,384**	**116,011**
Average size of households	**2.76**	**2.69**	**2.63**	**2.65**	**2.62**	**2.57**	**2.57**
Median household income (constant $ 2006)	**41,258**	**42,205**	**44,778**	**44,764**	**49,163**	**47,845**	**48,201**
Average household expenditures (constant $ 2004)	**U**	**44,011**	**43,777**	**42,680**	**44,540**	**47,906**	**48,398**

Appendix B Social and Economic Characteristics of the United States *(continued)*

KEY: U = Data are unavailable.

NOTES: *Resident population* estimates are as of July 1 except 1980, 1990, and 2000, which are as of April 1. New *metropolitan* area definitions were published by the Office of Budget and Management (OMB) in 2003. These definitions were applied to population data by the Census Bureau beginning with the data from the 2000 Census. A new term, core based statistical areas (CBSAs), collectively refers to metropolitan and micropolitan statistical areas. A metropolitan statistical area is defined as having at least one urbanized area of 50,000 or more inhabitants. A micropolitan statistical area is defined as having at least one urban cluster of more than 10,000 but less than 50,000 inhabitants.
Number of immigrants is based on fiscal year data ending September 30.
Median household income and *average household expenditures* were converted to constant 2006 dollars using the consumer price index.

SOURCES:1980-2006: U.S. resident population—U.S. Census Bureau, Statistical Abstract of the United States 2007 (Washington, DC: 2007), table 2. **Population by age, Population by sex—**U.S. Census Bureau, Statistical Abstract of the United States (Washington, DC: various years), table 11. **Population by metropolitan area—**U.S. Census Bureau, Population Division, Annual Estimates of the Population of Metropolitan and Micropolitan Statistical Areas (Washington, DC: April 2007), table 1, available at http://www.census.gov/population/www/estimates/CBSA-est2006-annual.html as of April 4, 2007. **Population in regions—** U.S. Census Bureau, Statistical Abstract of the United States 2007 (Washington, DC: 2007), table 17. **Number of immigrants admitted—**U.S. Census Bureau, Statistical Abstract of the United States (Washington, DC: various years), table 5.

2006: U.S. resident population; population by age, sex, region, and metropolitan area; and number of immigrants admitted: U.S. Census Bureau, Population Estimates, National, available at http://www.census.gov/popest/estimates.php as of Nov. 2007.

Gross Domestic Product— U.S. Department of Commerce, Bureau of Economic Analysis, NIPA Tables. table 1.1.6, available at http://www.bea.gov/national/nipaweb/SelectTable.asp?Selected=N as of Nov. 2007.
Civilian Labor Force, Unemployment Rate, Participation of Men and Women— U.S. Department of Labor, Bureau of Labor Statistics, Current Population Survey, Historical Data, Table A-1 and Table AA-7, available at http://www.bls.gov/cps/cpsatabs.htm as of Nov. 2007.

Number of households, Average size of households—U.S. Department of Commerce, Bureau of the Census, Families and Living Arrangements, Detailed Tables, Table AVG-1, available at http://www.census.gov/population/www/socdemo/hh-fam.html as of Nov. 2007.

Median household income— U.S. Department of Labor, Bureau of the Census, *Historical Income Data*, Table H-5, available at http://www.census.gov/hhes/www/income/income.html as of Nov., 2007.
Average household expenditures— U.S Department of Labor, Bureau of Labor Statistics, *Consumer Expenditure Survey*, Average Annual Expenditures, All Consumer Units, available at http://www.bls.gov/data/home.htm as of Nov. 2007.