U.S. Department of Transportation
Bureau of Transportation Statistics

Transportation Indicators

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Indicators

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December 2002

Introduction

This report is intended to provide timely, easily accessible information for the transportation community. It was developed by the Bureau of Transportation Statistics (BTS) of the U.S. Department of Transportation (DOT), and is updated each month on the BTS website (www.bts.gov).

Each indicator is placed under a heading corresponding to one of the five strategic goals of DOT — safety, security, mobility, economic growth, and environment. Some indicators are related to more than one strategic goal.

The indicators fall under two broad categories: those that provide context about the economy and society in which transportation functions, and those that convey information about an aspect of transportation. To the extent possible, these latter indicators are transportation-wide in scope; however, some apply to only part of the transportation system. Reference tables at the beginning of the document provide key statistics about U.S. social and economic characteristics, and about the extent of the transportation system.

For indicators that are highly seasonal, the current value of that indicator is compared to the value for the same time period in the previous year (e.g., April 2002 compared to April 2001). Otherwise, the tables show a comparison of the current value to a comparable preceding period of time (e.g., the data for the month of April 2002 compared to those of March 2002).

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Highlights 2002–The Year in Review

Highlights for this month's Transportation Indicator's report include those indicators that exhibited the most change during the year. However, only the most current data are provided in the actual report. To view the historical data related to the below listed items, please access the Transportation Indicators data via the BTS website, available at: http://www.bts.gov

COMMERCIAL AVIATION **Page**

The year 2002 has been one of hardship for the commercial aviation industry due to the combined effects of the September 11, 2001 terrorist attacks and on-going weakness in the economy. The negative impact is most evident in the traffic/capacity and financial indicators for the airlines, with both revenue passenger miles and real net income near historically low values. There have, however, been some positive indicators: traffic relative to year-ago values has partially rebounded, freight carrier financials have shown improvement, and passengers experienced more on-time flights.

- While passenger aviation continues to rebound from the lows reached in September 2001, domestic passenger miles on large U.S air carriers in June 2002 were still 6 percent below levels of June 2001. International passenger miles on U.S. air carriers were down 12 percent in June 2002 compared to June 2001. Spare capacity (measured in ton-miles) for domestic aviation increased nearly 8 percent in June 2002 compared to June of last year, while available ton-miles (I.e., capacity) increased 5 percent. 30,45 31,47

- Domestic flight stage length for large U.S. air carriers reached 709 miles in June 2002, breaking the 700 mile level for the first time in the 10 years tracked by this report. 35

- Air carrier's real return on assets was –5 percent for the four quarters ending in September 2002, the lowest annual yield in the 10 years tracked by this report. 91

- Eighty-eight percent of scheduled flights by major U.S. passenger carriers arrived on-time in September 2002 for the best on-time arrival rate in the 15 years of available data. One month later, large U.S. passenger carriers scheduled operations increased 2 percent compared to October 2001, the first 12-month increase since August 2001. 37

- The producer price of scheduled air freight transportation increased nearly 9 percent in September 2002 compared to September 2001—reaching the second highest level in the 10 years tracked by this report. In October, the producer price of scheduled air freight transportation continued to increase— nearly 12 percent compared to October 2001. 64

- Third-quarter air carrier real passenger revenue continued a sixth consecutive quarter of declines over the same quarter in the previous year, while real freight revenue increased for the second consecutive quarter. Between third-quarter 2001 and third-quarter 2002, real passenger revenue was down 7 percent while real freight revenue was up 8 percent. 90

- The cost of air travel to consumers was 2 percent lower in October 2002 compared to the previous month. 60

- Employment in for-hire air transportation decreased 0.35 percent in November 2002 compared to October—the lowest level since December 1997. 77

- Jet fuel prices for October 2002 reached 80 cents per gallon, the highest level since February 2001. 109

OTHER PRIVATE INDUSTRY

Page

- Business investment in transportation equipment dropped 12 percent in the third quarter of 2002 compared to the third quarter of 2001—the lowest level in five years. 99

- The 2 percent decline in producer prices for transportation equipment in the 12 months ending in September 2002 was the largest decline in the 10 years tracked by this report. However, producer prices for transportation equipment were unchanged in October 2002 compared to October 2001. 61

- The October 2002 high for railroad passenger transportation producer prices was first reached in May and has remained at the May level for six consecutive months. 65

- The 4 percent decline in producer prices for highway and street construction for the 12 months ending February 2002 was the largest decline in the 10 years tracked by this report and follows a similar decline for January 2002. 68

- Business inventory to sales ratio decreased almost one percent in July 2002 compared to the previous month—reaching the lowest level in the 10 years tracked by this report. This ratio remained flat in August, and increased almost one percent in September. 96

PERSONAL SPENDNG ON TRANSPORTATION

- Consumers spent 10 percent more on motor vehicles and parts in the third quarter of 2002 compared to the previous quarter. 58

- The monthly increase for September 2002 in consumer prices for new cars and trucks of 0.5 percent was the second highest in the 10 years tracked by this report. The impact on consumers of the price increase for new vehicles was mitigated by a decline of 0.8 percent in prices for used cars and trucks and flat prices for motor vehicle maintenance and repair. One month later, the third largest monthly decline in prices for used cars and trucks occurred as consumers spent nearly 2 percent less on used cars and trucks than in October 2001. 60

- Since the beginning of 2002, light trucks have outsold cars every month except for May. Retail sales of cars were down 5 percent, light trucks were down 12 percent, and medium/heavy trucks up 22 percent in November 2002 compared to November 2001. 94

- By the beginning of December, retail gasoline prices (average for all grades) were 1.40 dollars per gallon—a 30-cent increase over December 2001 prices. 106

PUBLIC SPENDING ON TRANSPORTATION

- Total federal expenditures on highway and street construction declined 11 percent in September 2002 (seasonally adjusted). However, public expenditures on land passenger transportation terminals jumped 33 percent in September (seasonally adjusted)— the highest level in the 9 years tracked by this report. 69,71

- Public expenditures on water transportation decreased almost 23 percent in October 2002 compared to October 2001—the lowest level since December 2000. 70

Highlights 2002–The Year in Review

SECURITY	Page
⚐ Net petroleum imports increased 2 percent in October 2002 compared to October 2001, while petroleum products supplied (a proxy for consumption) decreased 2 percent over the same period. Domestic production was also down 4 percent during the same time period.	19
MOBILITY	
⚐ Vehicle miles of travel increased 2 percent in July 2002 compared to July of last year— the highest level in the last 10 years tracked by this report.	29
⚐ Amtrak ridership reached its highest level in July 2002 since August of last year with nearly 2.1 million passengers. However, ridership was still down 2 percent compared to July 2001.	40
HUMAN AND NATURAL ENVIRONMENT	
⚐ Transportation energy consumption dropped 4 percent in February 2002 compared to the same month last year— the lowest level since February 1999.	121
⚐ Transportation energy use per dollar of GDP declined nearly 3 percent in the first quarter of 2002 compared to the first quarter of 2001— reaching the lowest level since the first quarter of 2000.	122

Sampling, as well as non-sampling, errors may exist in the reported data.

	1980	1985	1990	1995	1996	1997	1998	1999	2000
Total U.S. resident population (thousands)[a]	**227,225**	**237,924**	**248,791**	**262,803**	**265,229**	**267,784**	**270,248**	**272,691**	**276,059**
Age (thousands)[a]									
Under 18	63,754	62,623	63,949	68,555	69,109	69,603	69,903	70,199	70,484
18-24 years	30,022	28,902	26,961	25,112	24,843	24,980	25,476	26,011	26,748
25-34	37,082	41,696	43,174	40,730	40,246	39,559	38,743	37,936	37,189
35-44	25,634	31,691	37,444	42,555	43,365	44,014	44,498	44,813	44,813
45-54	22,800	22,460	25,062	31,100	32,358	33,625	34,575	35,804	37,685
55-64	21,703	22,135	21,116	21,132	21,353	21,813	22,666	23,389	24,209
65 and over	25,550	28,415	31,083	33,619	33,957	34,185	34,385	34,540	39,301
Sex (thousands) [b]									
Male	110,053	116,160	121,284	128,294	129,504	130,783	132,030	133,277	134,979
Female	116,493	122,576	127,507	134,510	135,724	137,001	138,212	139,414	141,080
Metropolitan areas (population in millions)									
Large (over 1 million)	119	U	139	147	149	151	153	156	U
Medium (250,000-999,999)	41	U	41	44	44	43	43	43	U
Small (less than 250,000)	17	U	18	19	19	20	20	20	U
Rural v. urban areas (population in thousands)									
Rural	59,495	U	61,656	U	U	U	U	U	U
Urban	167,051	U	187,053	U	U	U	U	U	U
Regions (population in millions) [c]									
Northeast	49.1	49.9	50.8	51.4	51.6	51.6	51.7	51.8	U
South	75.4	81.4	85.5	91.8	93.1	94.2	95.3	96.5	U
Midwest	58.9	58.8	59.7	61.8	62.1	62.5	63.0	63.2	U
West	43.2	47.8	52.8	57.7	58.5	59.4	60.3	61.2	U
Immigrants admitted	530,639	570,009	1,536,483	720,461	915,900	798,378	660,447	U	U
Total area (square miles)	3,618,770	U	3,717,796	U	U	U	U	U	U

-Table continued on next page-

Summary of Social and Economic Characteristics of the United States: 1980-2000 (continued)

	1980	1985	1990	1995	1996	1997	1998	1999	2000
Gross Domestic Product (GDP) (chained $ 1996 billions) [d]	4,901	5,717	6,708	7,544	7,813	8,160	8,516	8,876	9,319
Total civilian labor force (thousands) [e]	106,940	115,461	125,840	132,304	133,943	136,297	137,673	139,368	141,489
Participation rate of men	77.4%	76.3%	76.4%	75.0%	74.9%	75.0%	74.9%	74.7%	74.6%
Participation rate of women	51.5%	54.5%	57.5%	58.9%	59.3%	59.8%	59.8%	60.0%	60.2%
Unemployment rate	7.1%	7.2%	5.6%	5.6%	5.4%	4.9%	4.5%	4.2%	4.0%
Men	6.9%	7.0%	5.7%	5.6%	5.4%	4.9%	4.4%	4.1%	4.0%
Women	7.4%	7.4%	5.5%	5.6%	5.4%	5.0%	4.6%	4.3%	4.0%
Number of households (thousands)	80,776	86,789	93,347	98,990	99,627	101,018	102,528	U	U
Average size of households	2.76	2.69	2.63	2.65	2.65	2.64	2.62	U	U
Median household income (chained $ 1996)	33,722	34,439	35,945	35,082	35,492	36,175	37,430	U	U
Families below poverty level (thousands)	6,217	7,223	7,098	7,532	7,708	7,324	7,186	U	U
Average household expenditures (chained $ 1996)	U	34,253	34,070	33,217	33,797	34,038	34,205	U	U

KEY: U = Unavailable

[a] Estimates as of July 1 except 1980 and 1990, which are as of April 1, and 2000, which is as of November 1.

[b] 1995 through 2000 data are estimates.

[c] As of July 1 for all years except 1980 and 1990.

[d] For definition of chained dollars, see page 49.

[e] For 2000, as of December.

SOURCES: 1980-1998 data: Multiple sources as cited in U.S. Department of Transportation, Bureau of Transportation Statistics, National Transportation Statistics 1999, Table A, p. xix.

2000 Data: Population: U.S. Department of Commerce, Bureau of the Census, available at: http://www.census.gov.

Immigration: U.S. Department of Justice, Immigration and Naturalization Services, *Annual Report: Legal Immigration* FY 1998, available at: http://www.ins.usdoj.gov/graphics/aboutins/statistics/index.htm.

GDP, Average household expenditure, Median household income: U.S. Department of Commerce, Bureau of Economic Analysis.

Employment (1980-2000): U.S. Department of Labor, Bureau of Labor Statistics, available at: http://www.bls.gov/cps/home.htm.

Average Size of Households, Families below poverty level: U.S. Department of Commerce, Bureau of the Census, Statistical Abstract of the United States, 1999.

Transportation System Extent

Mode	Components (2000 data unless otherwise noted)
Highway	**Public Roads**
	46,675 miles of Interstate highway; 114,505 miles of other National Highway System roads
	3,951,098 miles of other roads
Air	**Public-use airports**
	5,317 airports
	Airports serving large certificated carriers
	29 large hubs[a] (72 airports), 479 million enplaned passengers
	31 medium hubs (53 airports), 102 million enplaned passengers
	54 small hubs (69 airports), 40 million enplaned passengers
	585 nonhubs (610 airports), 18 million enplaned passengers
Rail	**Miles of road operated**
	120,986 miles by Class 1 freight railroads[b]
	21,250 miles by regional freight railroads
	28,422 miles by local freight railroads
	22,741 miles by Amtrak (passenger), of which 750 miles are Amtrak owned
Urban transit	**Directional route-miles serviced (1998)**
	Bus: 157,823; Trolley bus: 424; Commuter rail: 5,172 Heavy rail: 1,527; Light rail: 676
	Stations
	Commuter rail: 972; Heavy rail: 987; Light rail: 555
Water	26,000 miles of navigable waterways
	276 locks; Ferry routes: 48
	Commercial Facilities
	Great Lakes: 611 deep; 143 shallow
	Inland: 2,367 shallow
	Coastal: 4,079 deep; 2,109 shallow
Pipeline (1999)	**Oil**
	Crude lines: 88,000 miles of pipe; Product lines: 91,000 miles of pipe
	Gas
	Transmission: 254,000 miles of pipe; Distribution: 981,000 miles of pipe

[a]As used here, a hub is defined as a geographic area based on the percentage of total enplaned passengers in that area. For example, a large hub is a geographical area serving 1 percent or more of all enplaned revenue passengers in U.S. certificated route carriers operating in U.S. areas. This definition should not be confused with airline usage of the term hub to describe "hub and spoke" route structures, or other definitions of hubs used by the Federal Aviation Administration focusing on traffic at individual airports.

[b] Includes 574 miles of road operated by U.S. Class 1 freight railroads in Canada.

SOURCES: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics 2000* (Washington DC: 2001); USDOT, Federal Aviation Administration, *Administrator's Fact Book 2000* (Washington, DC: 2001); USDOT, Bureau of Transportation Statistics, *National Transportation Statistics 2000* (Washington DC: 2001), various tables; National Ferry Database, as of 10/10/00; and U.S. Army Corps of Engineers, Navigation Data Center, *The U.S. Waterway System - Transportation Facts*, December 2000.

Safety

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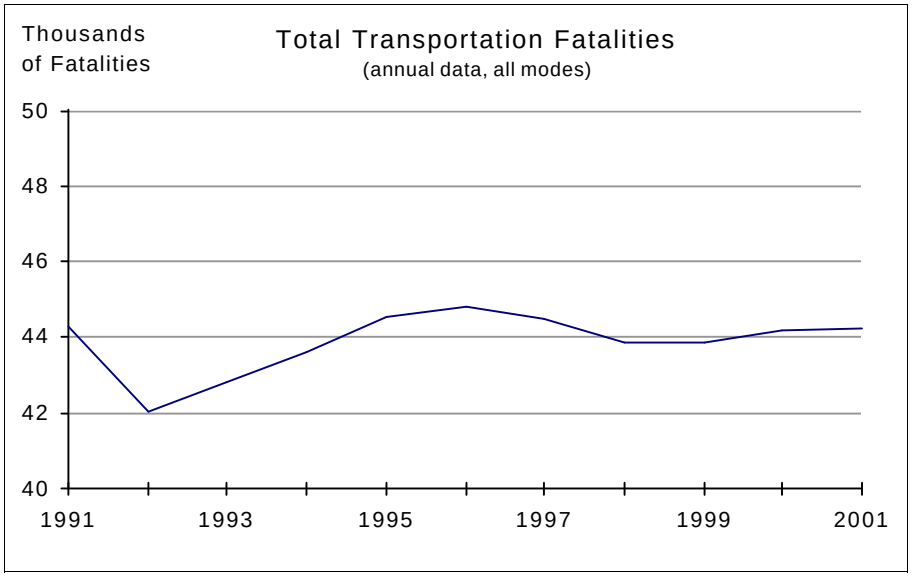
TRANSPORTATION FATALITIES: ALL MODES



Transportation Fatalities	2000	2001*
Total	44,190	44,208
Percent change from previous year	*0.74*	*0.04*

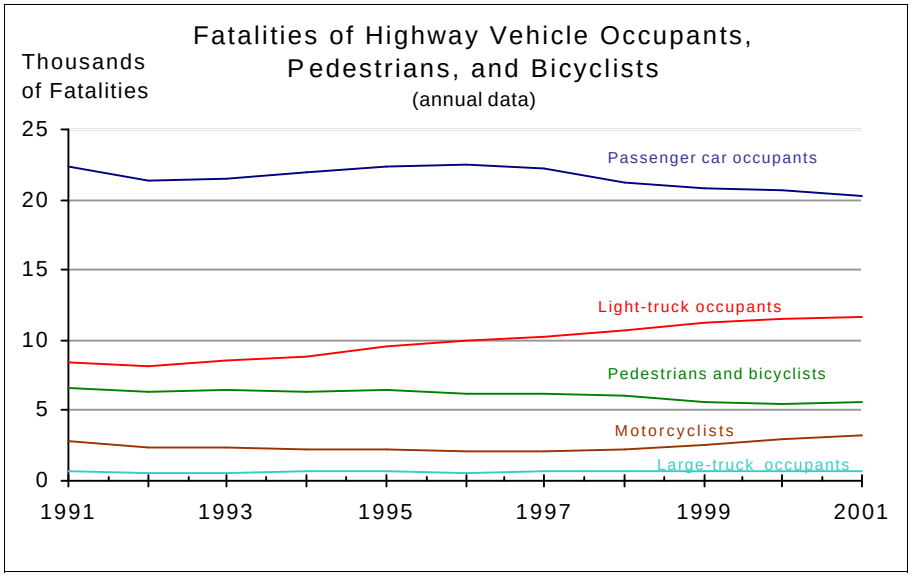
* Preliminary estimates

SOURCES: Data compiled from various government agencies as cited in the U.S. Department of Transportation (USDOT), Bureau of Transportation Statistics (BTS), *National Transportation Statistics 2000*. 2001 number from *U.S. DOT 2003 Performance Plan, 2001 Performance Report*, available at: http//www.dot.gov/performance/

Fatalities represent the most severe safety consequence for the transportation system. The overall number of transportation fatalities grew from 1992 to 1996, then trended downward in 1997 and 1998. Preliminary estimates for transportation-related fatalities in 2001 were 44,208, compared to 47,348 in 1990.

See U.S. Department of Transportation, Bureau of Transportation Statistics, *National Transportation Statistics 2000*, pp. 429-435, for detailed discussion of modal fatality data.

MOTOR VEHICLE-RELATED HIGHWAY FATALITIES



Highway crashes caused 94 percent of all transportation-related fatalities in 2001, and were the leading cause of death of people ages 4 through 23 (DOT Performance Plan FY 2003 and Performance Report FY 2001).

NOTES: Large trucks — trucks over 10,000 pounds gross vehicle weight rating, including single unit trucks and truck tractors.

Light trucks — trucks of 10,000 pounds gross vehicle weight rating or less, including pick-ups, vans, truck-based station wagons, and utility vehicles. The number of light trucks has increased greatly since 1990, affecting light truck occupant fatality numbers.

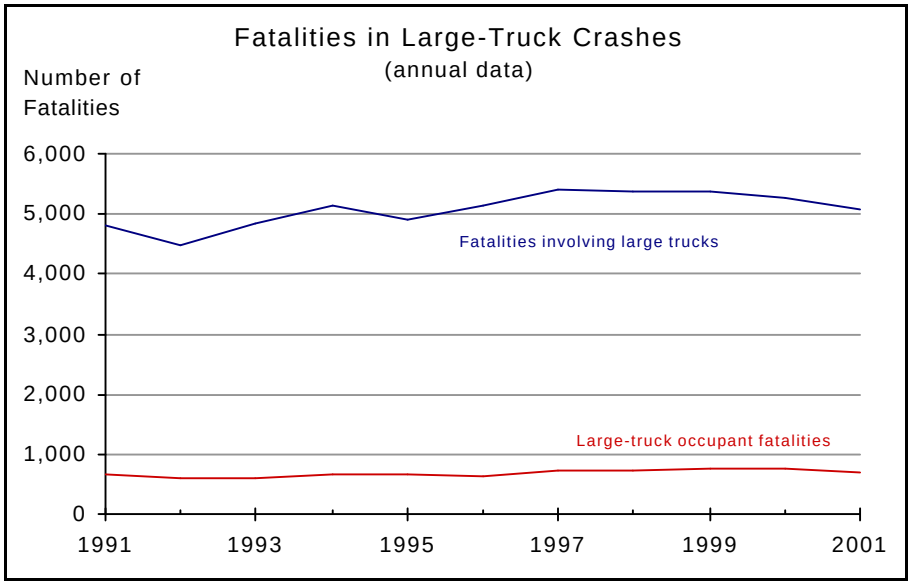
See U.S. Department of Transportation, Bureau of Transportation Statistics, *National Transportation Statistics 2000*, pp. 429-435, for detailed discussion of modal fatality data.

Fatalities by Type	2000	2001
Highway total	41,945	42,116
Percent change from previous year	*0.55*	*0.41*
Passenger car occupants	20,699	20,233
Percent change from previous year	*-0.78*	*-2.25*
Light-truck occupants	11,526	11,677
Percent change from previous year	*2.52*	*1.31*
Pedestrians	4,763	4,882
Percent change from previous year	*-3.56*	*2.50*
Motorcyclists	2,897	3,181
Percent change from previous year	*16.67*	*9.80*
Bicyclists	693	728
Percent change from previous year	*-8.09*	*5.05*
Other highway**	613	711
Percent change from previous year	*2.85*	*15.99*
Large-truck occupants	754	704
Percent change from previous year	*-0.66*	*-6.63*

** Other highway includes buses, construction equipment, farm equipment, etc, and other unknown vehicle types.

SOURCES: U.S. Department of Transportation, National Highway Traffic Safety Administration, 2000 Traffic Safety Facts, available at: http://www-nrd.nhtsa.dot.gov/pdf/nrd-30/ncsa/tsf2000/2000ovrfacts.pdf. 2001 numbers from NHTSA, 2001 Annual Assessment, available at: http://www-nrd.nhtsa.dot.gov/pdf/nrd-30/NCSA/Rpts/2002/Assess01.pdf

FATALITIES IN LARGE-TRUCK CRASHES



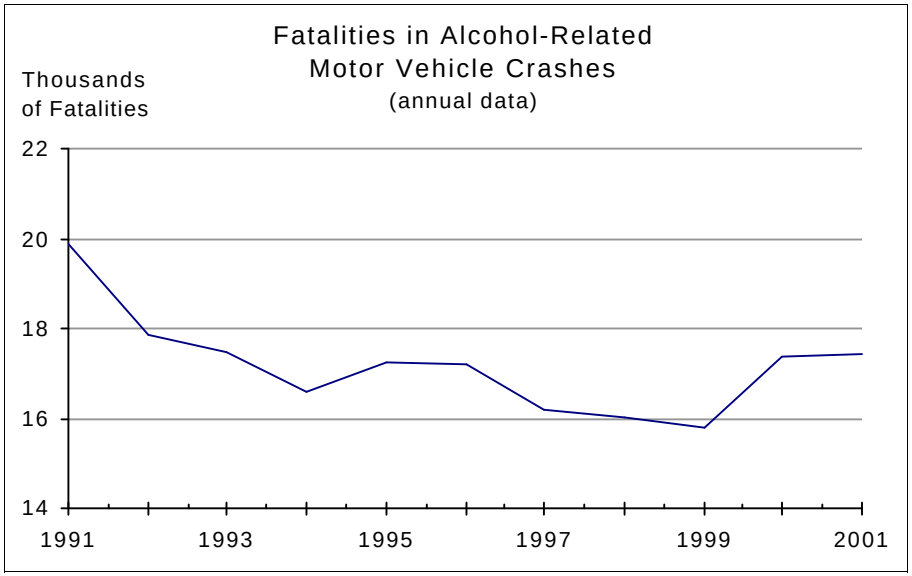
Large-Truck Crashes	2000	2001
Fatalities involving large trucks	5,282	5,082
Percent change from previous year	*-1.49*	*-3.79*
Large-truck occupant fatalities	754	704
Percent change from previous year	*-0.66*	*-6.63*

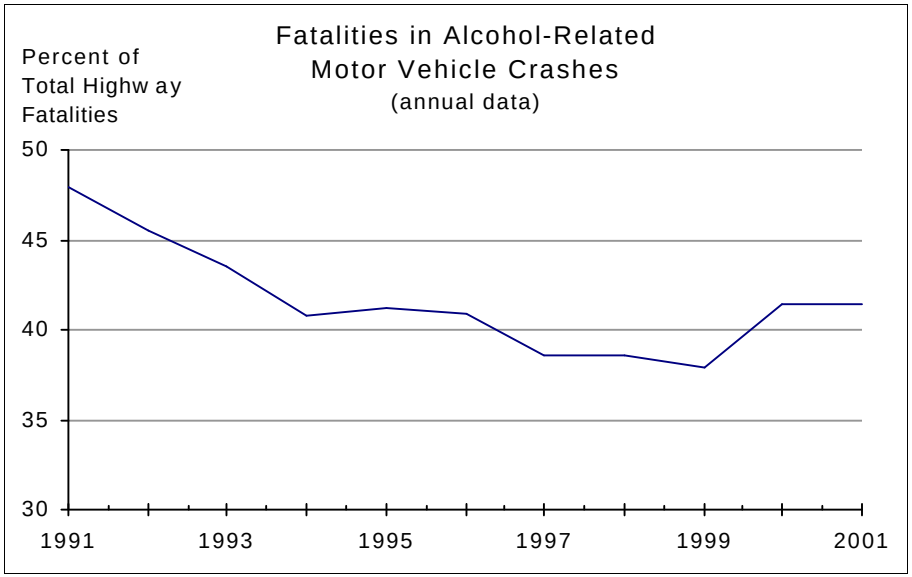
NOTE: Large trucks are over 10,000 pounds gross vehicle weight rating.

SOURCES: U.S. Department of Transportation, National Highway Traffic Safety Administration, National Center for Statistics and Analysis, *2000 Traffic Safety Facts*. Available at: http://www.nhtsa.dot.gov/people/ncsa/factshet.html. 2001 numbers from NHTSA, 2001 Annual Assessment, available at: http://www-nrd.nhtsa.dot.gov/pdf/nrd-30/NCSA/Rpts/2002/Assess01.pdf

Trucks represent 4 percent of registered highway vehicles and about 7 percent of vehicle miles of travel, but 12 percent of all people killed in motor vehicle incidents are involved in a crash with a large truck. Occupants of other vehicles or people outside the truck account for 86 percent of total fatalities involving large trucks for 2001.

ALCOHOL-RELATED HIGHWAY FATALITIES





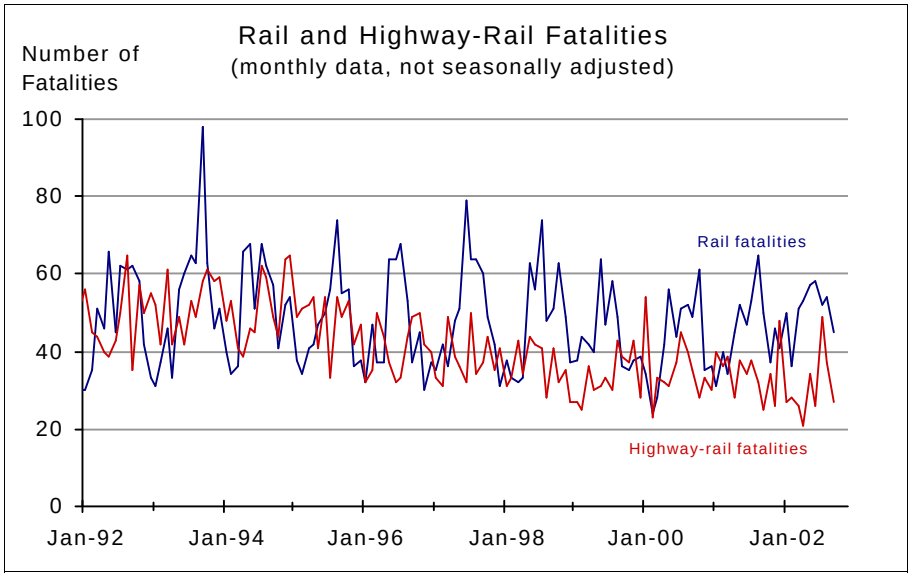
Alcohol-Related Highway Fatalities	2000	2001
Total	17,380	17,448
Percent change from previous year	*10.10*	*0.39*

SOURCE: U.S. Department of Transportation, National Highway Traffic Safety Administration, National Center for Statistics and Analysis, *Traffic Safety Facts 1998*, DOT HS 808 983 (Washington, DC: October 1999), table 13, and personal communication, Sept. 11, 2000. 2000 data: National Highway Traffic Safety Administration, National Center for Statistics and Analysis, *2000 Traffic Safety Facts*. Available at: http://www.nhtsa.dot.gov/people/ncsa/factshet.html. 2001 numbers from NHTSA, 2001 Annual Assessment, available at: http://www-nrd.nhtsa.dot.gov/pdf/nrd-30/NCSA/Rpts/2002/Assess01.pdf

Alcohol is the single largest cause of fatal crashes. Alcohol-related fatalities accounted for 41 percent of all highway fatalities in 2001.

Fatalities include those arising from motor vehicle related crashes in which the driver and/or a fatally injured pedestrian or other non-motorist had a measured or estimated blood alcohol content of 0.01 grams per deciliter or greater.

RAILROAD AND HIGHWAY-RAIL CROSSING FATALITIES

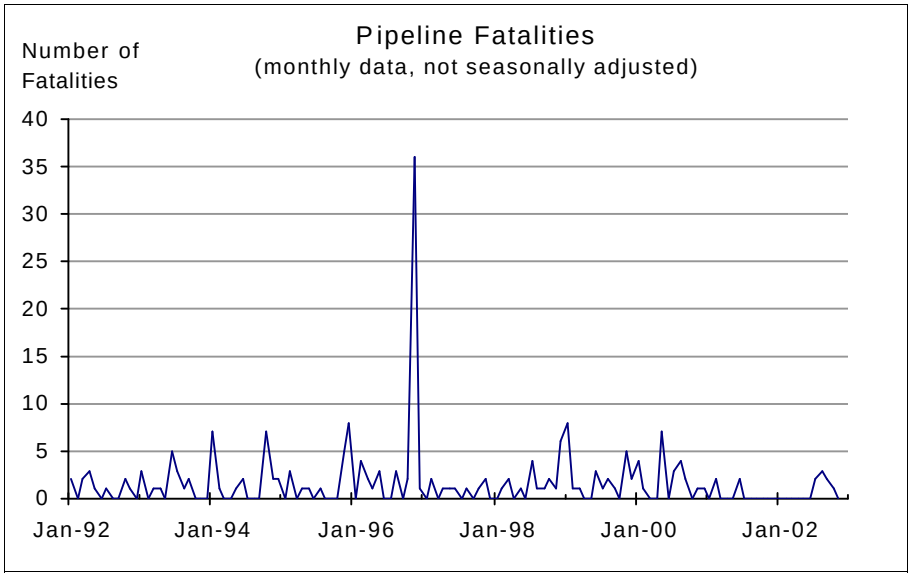


Railroad	Sep-01	Sep-02
Rail Fatalities	50	45
Percent change from same month previous year	*2.04*	*-10.00*
Highway-Rail Fatalities	25	27
Percent change from same month previous year	*-28.57*	*8.00*

SOURCE: U.S. Department of Transportation, Federal Railroad Administration, Office of Safety, available at: http://safetydata.fra.dot.gov/officeofsafety

In most years, the overwhelming majority of people killed in train accidents are outside the train. Many are occupants of highway vehicles, pedestrians, or bystanders at highway-rail grade crossings. Railroad workers and others on railroad property (including trespassers) account for most other rail-related fatalities.

HAZARDOUS LIQUID AND NATURAL GAS PIPELINE FATALITIES



Note: Spike in graph represents leak and explosion of gas in a residential and shopping district in San Juan, Puerto Rico, 11/21/96.

Fatalities have been zero since July 2001, according to pipeline accident and incident data.

Pipeline Fatalities	Nov-01	Nov-02
Total	0	0
Percent change from same month previous year	*0*	*0*

NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

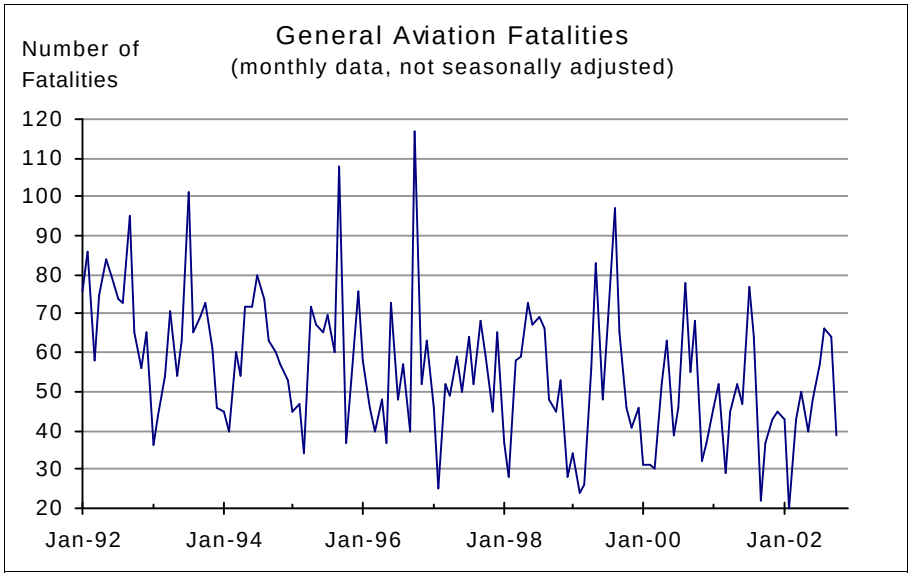
(-) Not Applicable.

All 2002 data are preliminary, and subject to change as incidents are reported.

SOURCE: U.S. Department of Transportation, Office of Pipeline Safety, Research and Special Programs Administration, Online Library Accident and Incident Data as of August 15, 2002, available at http://ops.dot.gov/IA98.htm

Pipeline failures are low-probability events that can result in fatalities, injuries, and property damage. Over time, gas pipeline fatalities tend to outnumber those involving hazardous liquid (e.g., petroleum) pipelines. Outside force damage (e.g., damage to a pipeline during excavation for construction) is the leading cause of pipeline failures, followed by corrosion (DOT Performance Plan FY 2001).

GENERAL AVIATION FATALITIES



General Aviation	Oct-01	Oct-02
Fatalities	37	39
Percent change from same month previous year	*-45.59*	*5.41*

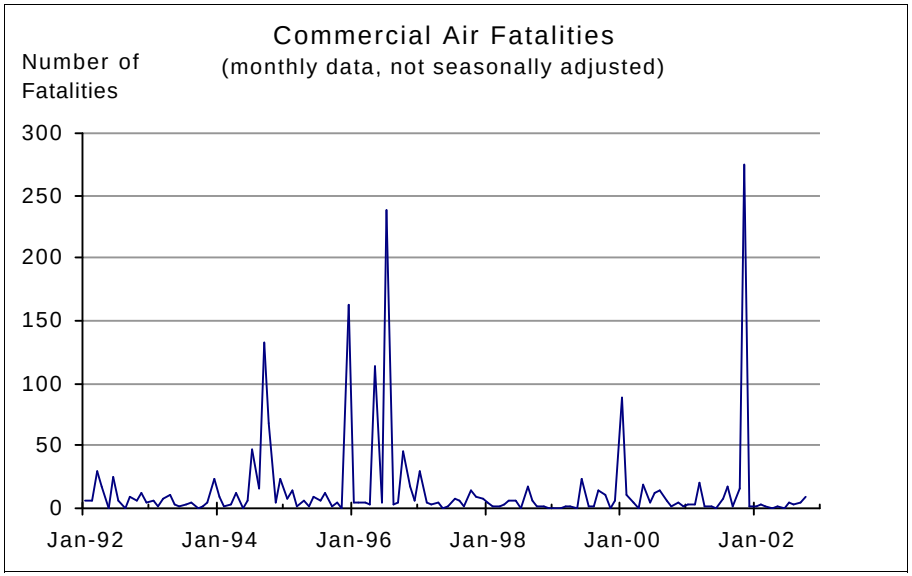
NOTE: The current value is compared to the value from the same period in the previous year to account for seasonality.

General Aviation – Movements of aircraft and helicopters belonging to individuals, companies not primarily in the aviation business, and flying clubs. Services provided by general aviation aircraft include firefighting, law enforcement, news coverage, and corporate in-house transportation.

SOURCE: National Transportation Safety Board, Office of Aviation Safety, available at: http://www.ntsb.gov/aviation/curr_mo.txt

General aviation fatalities comprise the majority of aviation fatalities in most years.

COMMERCIAL AVIATION FATALITIES



Commercial Air	Oct-01	Oct-02
Fatalities	16	9
Percent change from same month previous year	*700*	*-44*

NOTE: The current value is compared to the value from the same period in the previous year to account for seasonality.

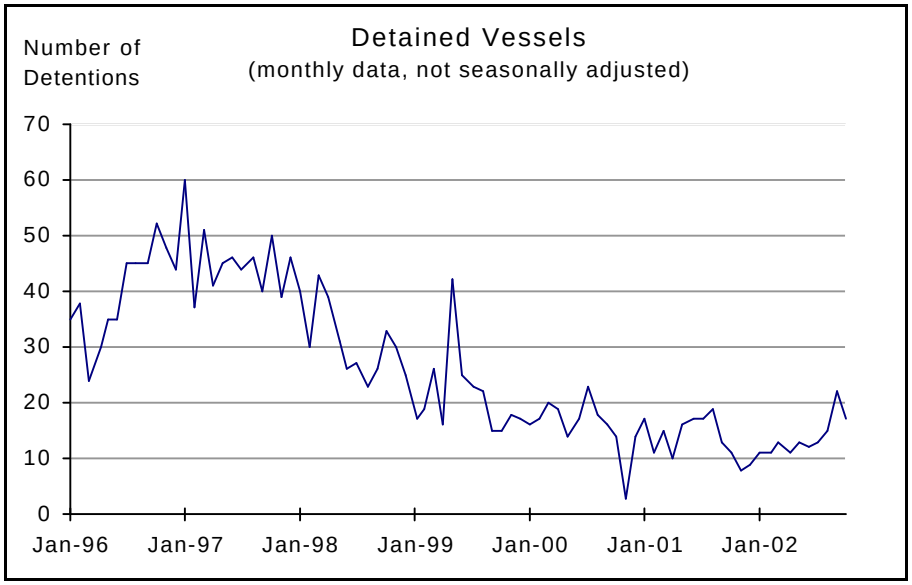
Fatalities from the four hijacked airplanes deliberately crashed in terrorist acts on September 11, 2001 are not included by the source in the September 2001 data. The number of people who perished on the four planes was 266. The total number of people confirmed dead are 2,947 (on ground and plane), 27 are reported dead, and 25 are reported missing (as of October 27, 2002).

The November 2001 fatalities are due to the November 12 crash of an American Airline plane in Belle Harbor, New York, and resulted in 275 fatalities (including 5 people on ground).

SOURCE: National Transportation Safety Board, Office of Aviation Safety, available at: http://www.ntsb.gov/aviation/curr_mo.txt

Commercial air fatalities include those arising from accidents of planes providing passenger and/or cargo services to the public, including large air carriers, commuter air, and air taxi. Commercial air includes scheduled and nonscheduled service by air carriers operating under 14 Code of Federal Regulations (CFR) 121 and 14 CFR 135.

VESSEL DETENTIONS



The U.S. Coast Guards 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.

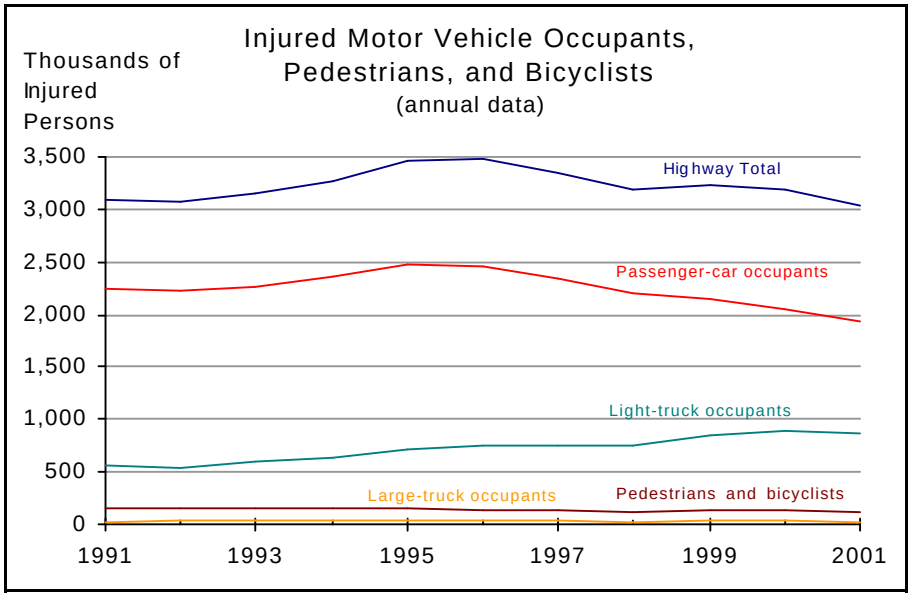
Vessel Detentions	Oct-01	Oct-02
Total	11	17
Percent change from same month previous year	*-21.43*	*54.55*

NOTE: The current value is compared to the value from the same period in the previous year to account for seasonality.

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 Transportation, U.S. Coast Guard, available at: http://www.uscg.mil/hq/gm/pscweb/detentions.htm

INJURED MOTOR VEHICLE OCCUPANTS, PEDESTRIANS, AND BICYCLISTS



The vast majority of transportation injuries involve motor vehicles.

Injured Persons by Mode	2000	2001
Highway total	3,190,000	3,033,000
Percent change from previous year	*-0.53*	*-4.92*
Passenger car occupants	2,052,000	1,927,000
Percent change from previous year	*-3.27*	*-6.09*
Light-truck occupants	887,000	861,000
Percent change from previous year	*5.43*	*-2.93*
Pedestrians and bicyclists	129,000	123,000
Percent change from previous year	*-5.15*	*-4.65*
Motorcyclists	58,000	60,000
Percent change from previous year	*16.00*	*3.45*
Large-truck occupants	31,000	29,000
Percent change from previous year	*-9.09*	*-6.45*
Other**	33,000	33,000
Percent change from previous year	*3.13*	*0*

** Other highway includes buses, construction equipment, farm equipment, etc, and other unknown vehicle types.

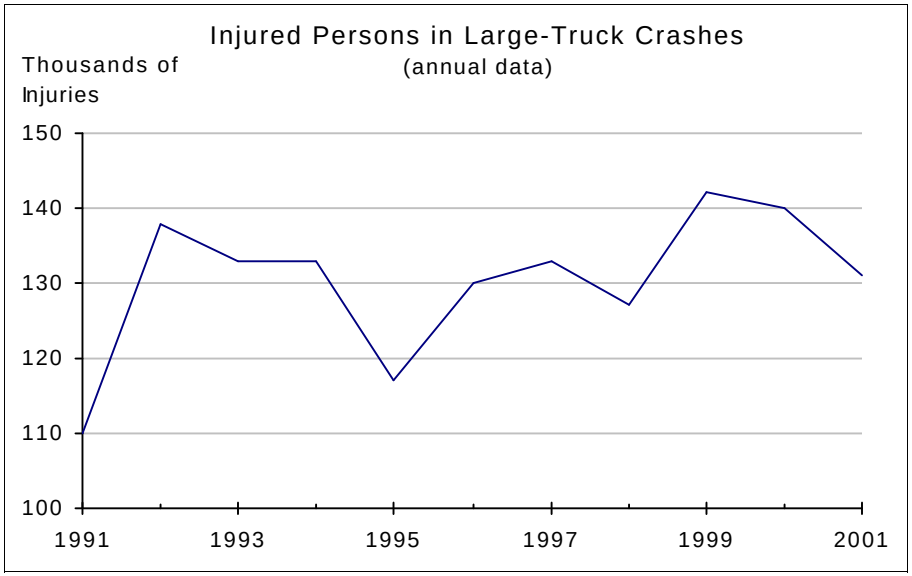
NOTES: National estimates of highway injuries are sampled and subject to sampling errors. Highway table includes categories not displayed in graph.

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

See U.S. Department of Transportation, Bureau of Transportation Statistics, pp. 429-435, *National Transportation Statistics 2000* for detailed discussion of modal injury data.

SOURCE: U.S. Department of Transportation, National Highway Traffic Safety Administration, *2000 Traffic Safety Facts*, available at http://www-nrd.nhtsa.dot.gov/pdf/nrd-30/ncsa/tsf2000/2000ovrfacts.pdf. 2001 numbers from NHTSA, 2001 Annual Assessment, available at: http://www-nrd.nhtsa.dot.gov/pdf/nrd-30/NCSA/Rpts/2002/Assess01.pdf

INJURED PERSONS IN LARGE-TRUCK CRASHES



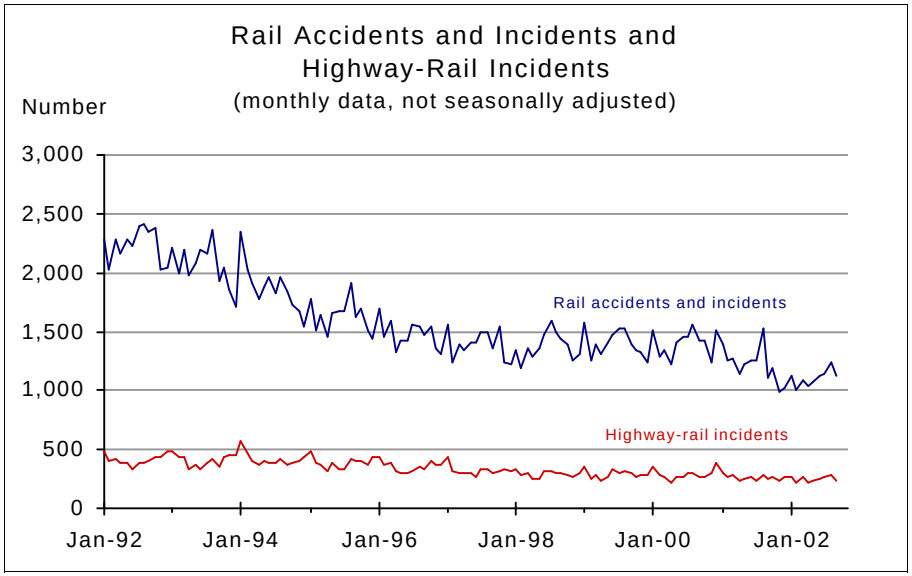
Large-Truck Crashes	2000	2001
Injured persons involving large trucks	140,000	131,000
Percent change from previous year	*-1.41*	*-6.43*

NOTE: Large trucks are trucks over 10,000 pounds gross vehicle weight rating.

SOURCES: U.S. Department of Transportation, National Highway Traffic Safety Administration, *2000 Traffic Safety Facts*, available at http://www-nrd.nhtsa.dot.gov/pdf/nrd-30/ncsa/tsf2000/2000ovrfacts.pdf. 2001 numbers from NHTSA, 2001 Annual Assessment, available at: http://www-nrd.nhtsa.dot.gov/pdf/nrd-30/NCSA/Rpts/2002/Assess01.pdf

For 2001, the data indicate that 76 percent of the total injuries involving large-truck crashes were occupants of other vehicles or outside the large truck.

RAIL ACCIDENTS AND INCIDENTS



Railroad	Sep-01	Sep-02
Rail accidents and incidents	1,112	1,121
Percent change from same month previous year	*-21.69*	*0.81*
Highway-Rail Incidents	251	235
Percent change from same month previous year	*-7.04*	*-6.37*

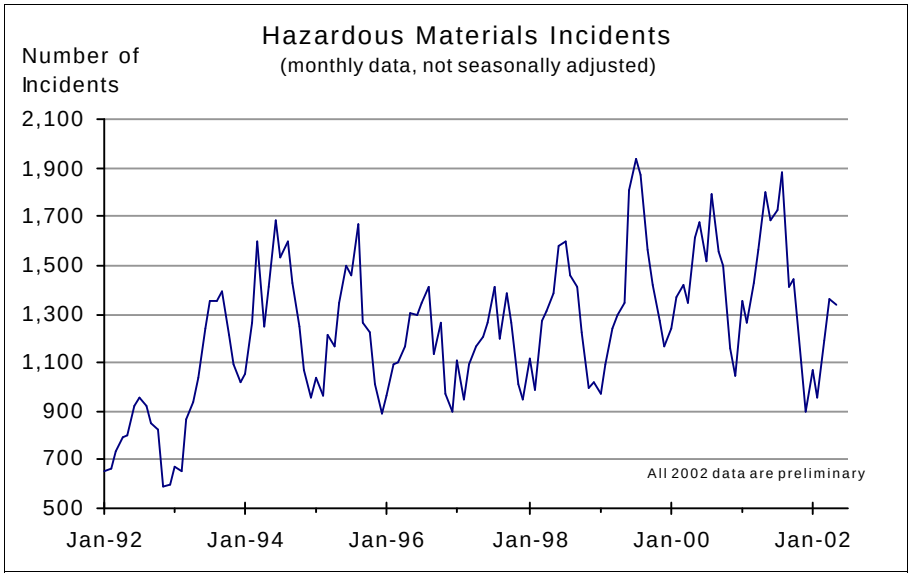
NOTE: The current value is compared to the value from the same period in the previous year to account for seasonality.

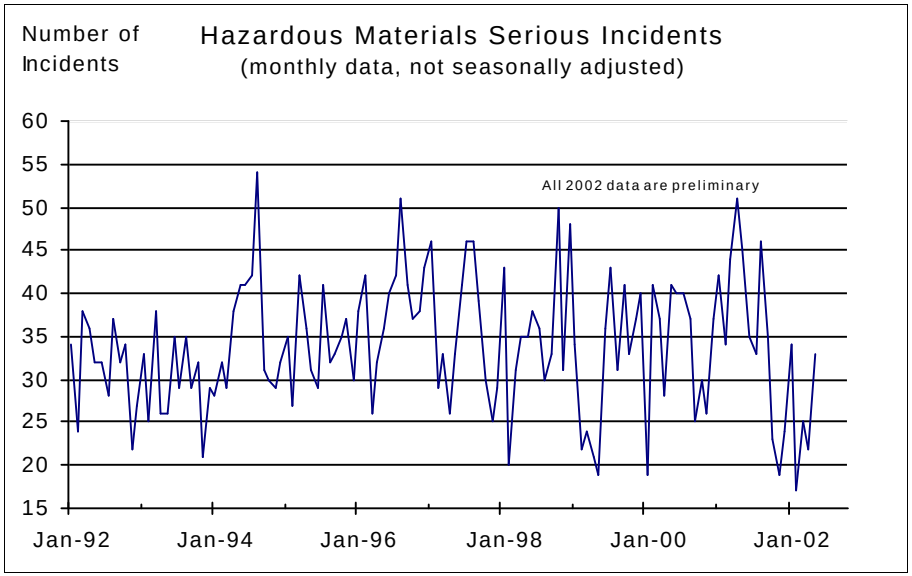
Accidents and incidents differ by the extent, in dollars, of the property damage resulting from the event.

SOURCE: U.S. Department of Transportation, Federal Railroad Administration, Office of Safety, available at: http://safetydata.fra.dot.gov/officeofsafety

Rail accidents and incidents include any collision between railroad on-track equipment and other vehicles or pedestrians at grade crossings; any event involving operation of railroad on-track equipment that results in damages to railroad property; and any event arising from railroad operations that results in death or injury, or, in the case of railroad employees, an occupational illness.

HAZARDOUS MATERIALS INCIDENTS





Hazmat Incidents	May-01	May-02*
Total	1,803	1,335
Percent change from same month previous year	*11.57*	*-25.96*

Hazmat Serious Incidents	May-01	May-02*
Total	45	33
Percent change from same month previous year	*9.76*	*-26.67*

*Preliminary estimates

NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

Incident reporting requirements were extended to intrastate motor carriers on Oct. 1, 1998. Beginning in April 1993, there was sharp improvement in reporting of incidents by small package carriers.

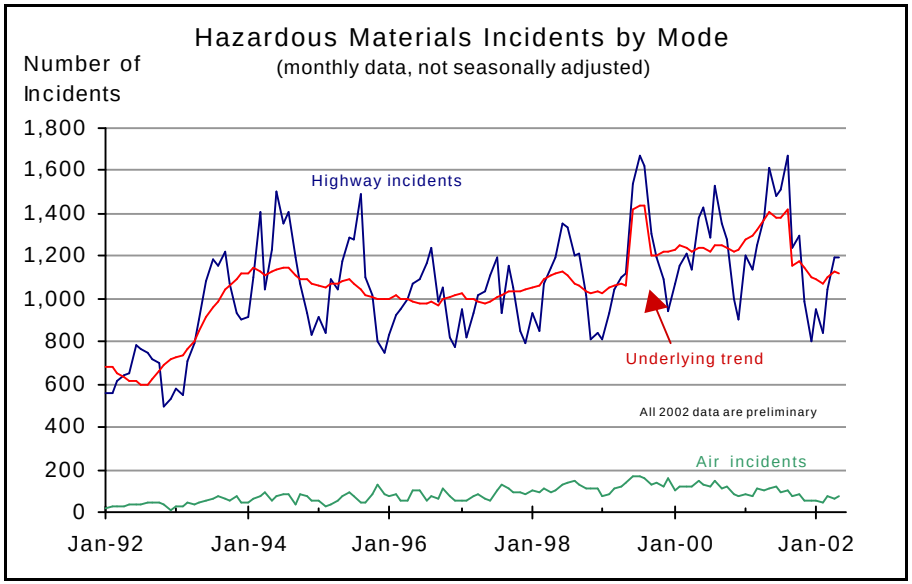
A reported incident is a report of any unintentional release of hazardous material while in transportation (including loading, unloading, and temporary storage). It excludes pipeline and bulk shipments by water, which are reported separately.

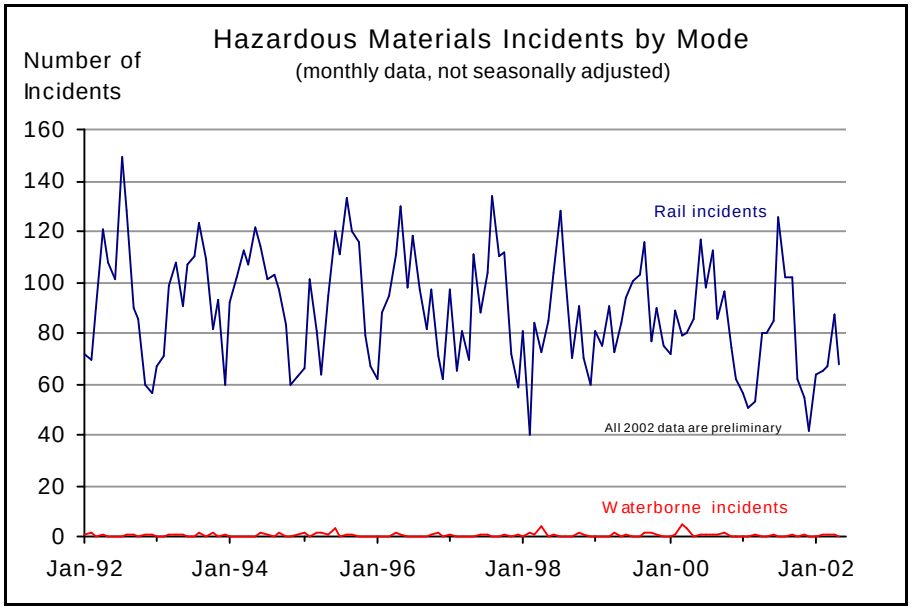
Research and Special Programs Administration (RSPA) defines serious incidents as incidents that involve a fatality or major injury due to a hazardous material, closure of a major transportation artery or facility or evacuation of six or more persons due to the presence of a hazardous material, or a vehicle accident or derailment resulting in the release of a hazardous material.

SOURCE: U. S. Department of Transportation, Research and Special Programs Administration (RSPA), Office of Hazardous Materials, Planning and Analysis, Hazardous Materials Information System data obtained through personal communication.

Flammable liquids (e.g., gasoline) comprise the most tonnage and ton-miles of hazardous material shipments. Gasoline usage peaks in the summer and accounts for the seasonality in hazardous materials incidents.

MODAL BREAKDOWN OF HAZARDOUS MATERIALS INCIDENTS





Hazardous Materials Incidents by Mode	May-01	May-02*
Highway	1,614	1,193
Percent change from same month previous year	*16.62*	*-26.08*
Air	109	74
Percent change from same month previous year	*-25.34*	*-32.11*
Rail	80	68
Percent change from same month previous year	*-6.98*	*-15.00*
Waterborne (not including bulk shipments)	0	0
Percent change from same month previous year	*(--)*	*(--)*

*Preliminary estimates

NOTE: The current value is compared to the value from the same period in the previous year to account for seasonality.

Incident reporting requirements were extended to intrastate motor carriers on October 1, 1998, which may partly explain the subsequent increased volume of reports. Beginning in April 1993, there was sharp improvement in reporting of incidents by small package carriers.

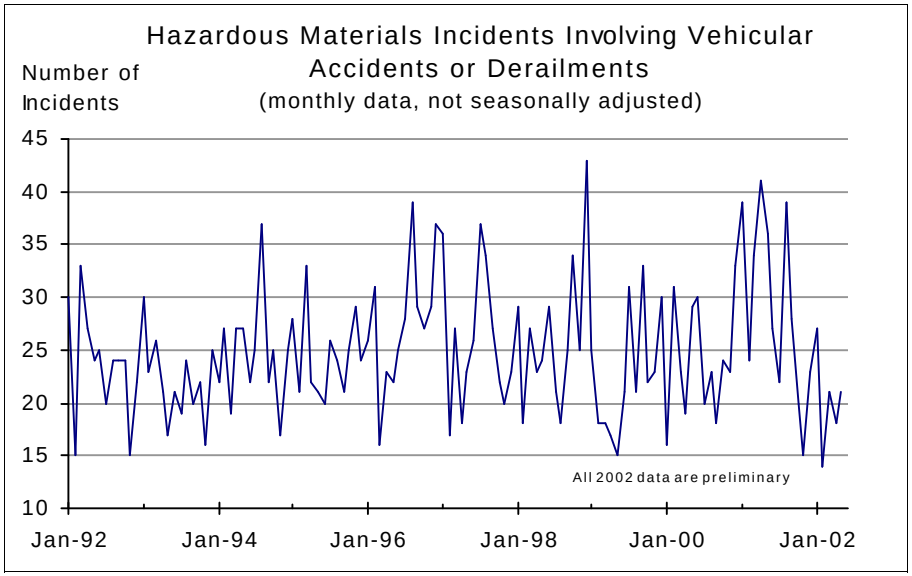
A reported incident is a report of any unintentional release of hazardous material while in transportation (including loading, unloading, and temporary storage). It excludes pipeline and bulk shipments by water, which are reported separately.

A trendline has been provided for highway incidents. The trend has been calculated through a statistical procedure called Structural Modeling, in which the time series under study is decomposed into seasonal, trend and irregular components. For further information on this statistical procedure, see: S.J. Koopman, et al., *Structural Time Series Analyser, Modeller and Predictor* (STAMP), London: Timberlake Consultants Ltd. , 2000

SOURCE: U. S. Department of Transportation, Research and Special Program Administration, Office of Hazardous Materials, Planning and Analysis, Hazardous Materials Information System data obtained through personal communication.

Most reported releases of hazardous materials occur on the highways.

HAZARDOUS MATERIALS INCIDENTS INVOLVING CRASHES OR TRAIN DERAILMENTS



Motor vehicle accidents or train derailments account for only a small portion of total number of hazardous materials incidents. However, their consequences are often the most severe.

Hazmat Incidents	May-01	May-02*
Total incidents involving vehicular accidents	36	21
Percent change from same month previous year	*24.14*	*-41.67*

*Preliminary estimate

NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

Reporting requirements were extended to intrastate motor carriers on Oct. 1, 1998, which may have affected data reported after this date.

Accident/derailment is a crash involving a motor vehicle or a derailment of a train.

SOURCE: U. S. Department of Transportation, Research and Special Programs Administration, Office of Hazardous Materials, Planning and Analysis, Hazardous Materials Information System data obtained through personal communication.

Security

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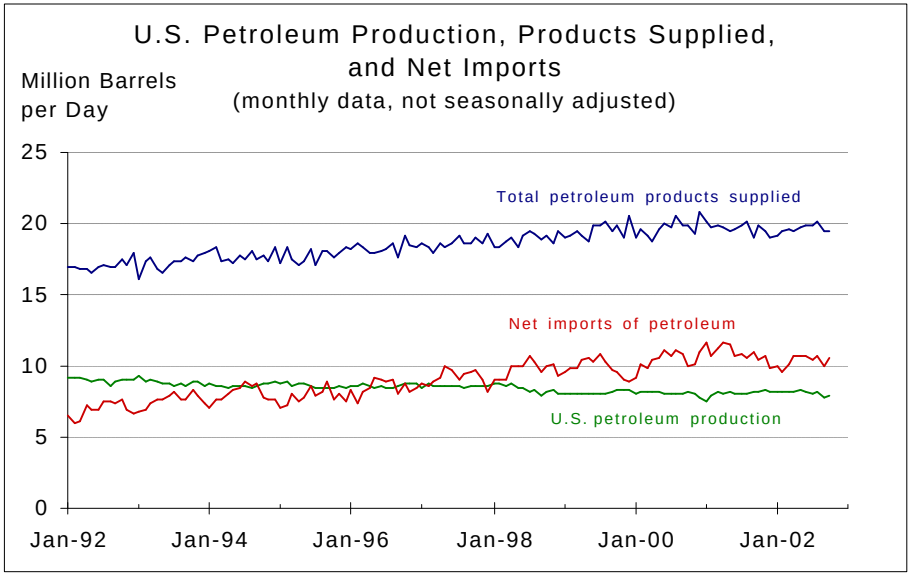
U.S. DEPENDENCE ON OIL IMPORTS



The United States now imports more petroleum than it produces domestically. U.S. dependence on foreign sources for a product of such critical importance to the U.S. economy and society has prompted national security concerns.

NOTE: Petroleum products supplied is a proxy for consumption.

Total Petroleum Products Supplied	Oct-01	Oct-02
Total (thousand barrels per day)	19,824	19,438
Percent change from same month previous year	*0.13*	*-1.95*

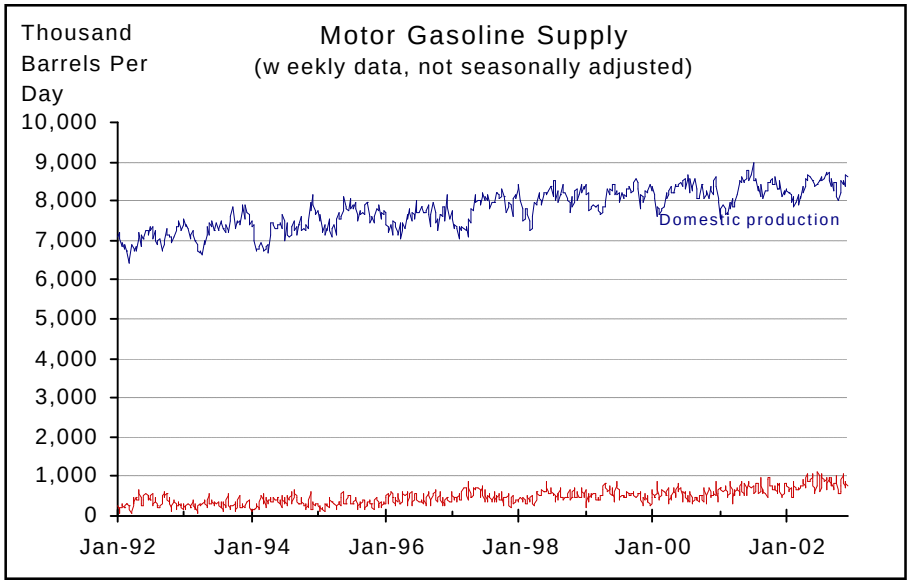
Net Petroleum Imports	Oct-01	Oct-02
Total (thousand barrels per day)	10,432	10,593
Percent change from same month previous year	*4.34*	*1.54*

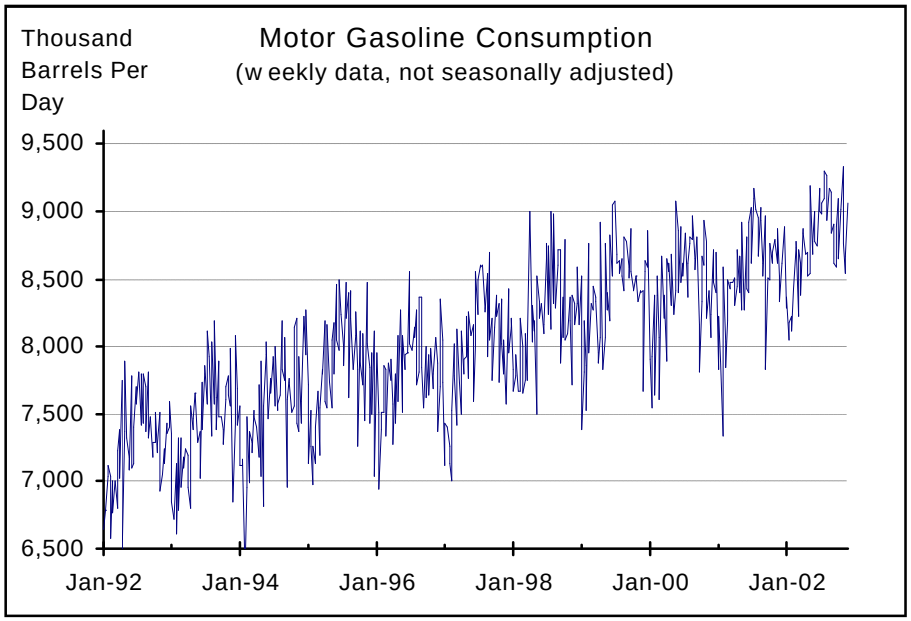
U.S. Petroleum Production	Oct-01	Oct-02
Total (thousand barrels per day)	8,164	7,858
Percent change from same month previous year	*0.16*	*-3.75*

NOTE: The current value is compared to the value from the same period in the previous year to account for seasonality.

SOURCE: U.S. Department of Energy, Energy Information Administration, *Monthly Energy Review*, November 2002, Available at: http://www.eia.doe.gov/mer.

U.S. MOTOR GASOLINE PRODUCTION AND CONSUMPTION





Motor Gasoline Supply (thousand barrels per day)	22-Nov-02	29-Nov-02
Production from domestic sources	8,654	8,647
Percent change from previous week	*3.55*	*-0.08*
Imports	888	780
Percent change from previous week	*20.33*	*-12.16*

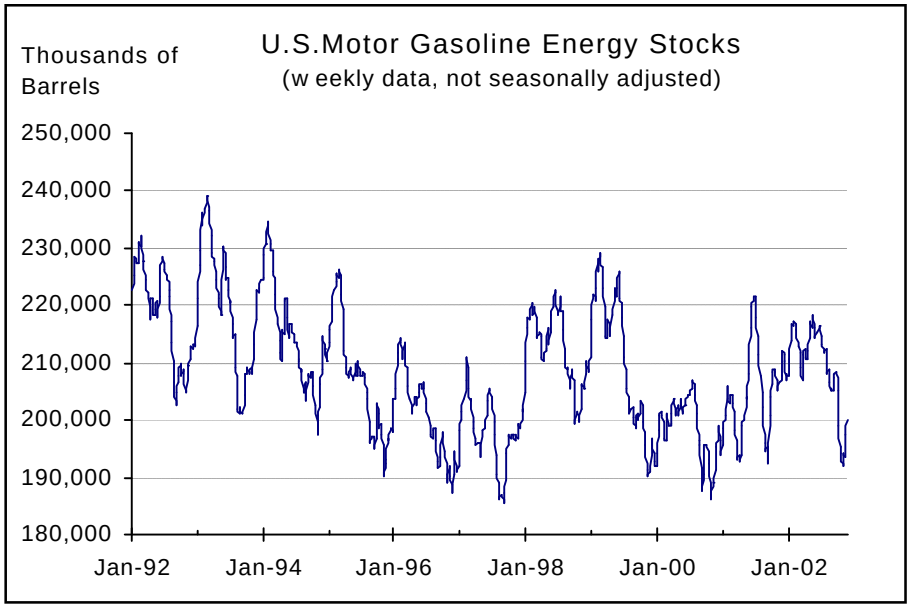
Motor Gasoline Consumption (thousand barrels per day)	22-Nov-02	29-Nov-02
Motor gasoline consumed	8,667	9,060
Percent change from previous week	*1.49*	*4.53*

The consumption of motor gasoline in the United States is strongly seasonal, with more consumed in the summer and less consumed in the winter. On a yearly basis, the consumption of motor gasoline in the United States has been steadily increasing as vehicle-miles increased. The consumption of motor gasoline reached a record high of 9.3 million barrels per day in November 1, 2002. In the most reporting week (November 29), consumption decreased 3 percent from the recent high.

Motor gasoline (more than 90 percent) is refined domestically. Anticipating the strong demand in summer, the motor gasoline supply reached its historical high in the week of June 29, 2001 with an average of 8.9 million barrels per day. By the end of November, motor gasoline supply declined to 8.6 million barrels per day, 3 percent lower than June of last year.

SOURCE: U.S. Department of Energy, Energy Information Administration, *Weekly Petroleum Status Report*, December 2002, Available at: http://www.eia.doe.gov/oil_gas/petroleum/info_glance/gasoline.html

MOTOR GASOLINE STOCKS

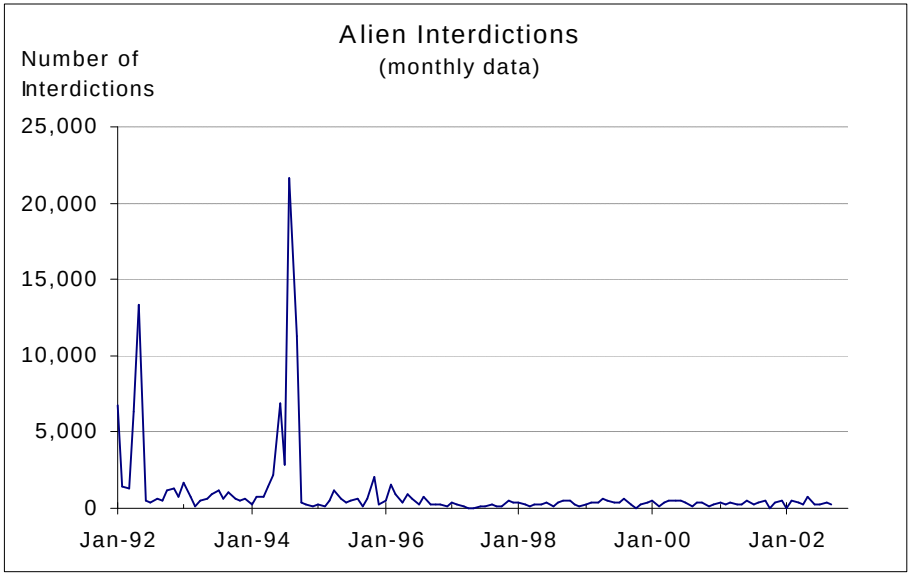


Motor Gasoline Stocks (thousands of barrels)	22-Nov-02	29-Nov-02
Stocks	197,419	199,962
Percent change from previous week	*2.03*	*1.29*

SOURCE: U.S. Department of Energy, Energy Information Administration, *Weekly Petroleum Status Report*, December 2002, Available at: http://www.eia.doe.gov/oil_gas/petroleum/info_glance/gasoline.html

Motor gasoline supply and consumption are balanced through changes in motor gasoline stocks. Motor gasoline stocks in the United States, average about 200 billion barrels. The recent high of motor gasoline stocks was in the week of June 29 of 2001, when the system prepared to meet higher demand in the summer. Since then the stocks have decreased. In the end of November, motor gasoline stocks decreased to 200 billion barrels.

INTERDICTIONS OF ILLEGAL ALIENS



Alien Interdictions	Sep-01	Sep-02
Total	469	231
Percent change from previous year	*40.84*	*-50.75*

NOTE: The current value is compared to the value from the same period in the previous year to account for seasonality.

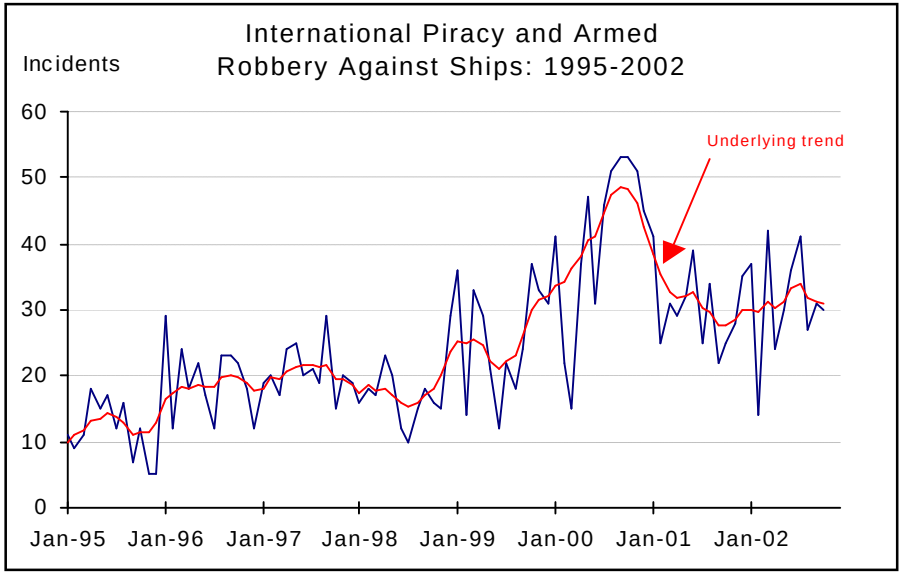
SOURCE: U.S. Department of Transportation, U.S. Coast Guard, Office of Law Enforcement; Oct. 17, 2002; available at: http://www.uscg.mil/hq/g-o/g-opl/mle/amiostats1.htm.

In recent years, most interdictions have involved people from Haiti, the People's Republic of China (PRC), the Dominican Republic, and Cuba. Recently, many interdictions have occurred in the Guam region. Guam is a gateway to the continental United States from the PRC.

NOTE: In May 1992, there were 13,103 interdictions of Haitians. In August 1994, there were 21,300 interdictions of Cubans.

Interdiction– the interception and stopping of illegal aliens attempting to enter the United States (in this case by water or air).

INTERNATIONAL PIRACY



NOTE: Data for 2002 are preliminary.

Piracy and Armed Robbery Against Ships	Oct-01	Oct-02
Number of Incidents	25	30
Percentage change from same month previous	*-52.83*	*20.00*

NOTE: The current value is compared to the value from the same period in the previous year to account for seasonality. Data for 2002 are preliminary.

A trendline has been provided for international piracy. The trend has been calculated through a statistical procedure called Structural Modeling, in which the time series under study is decomposed into seasonal, trend and irregular components. For further information on this statistical procedure, see: S.J. Koopman, et al., *Structural Time Series Analyser, Modeller and Predictor* (STAMP), London: Timberlake Consultants Ltd. , 2000

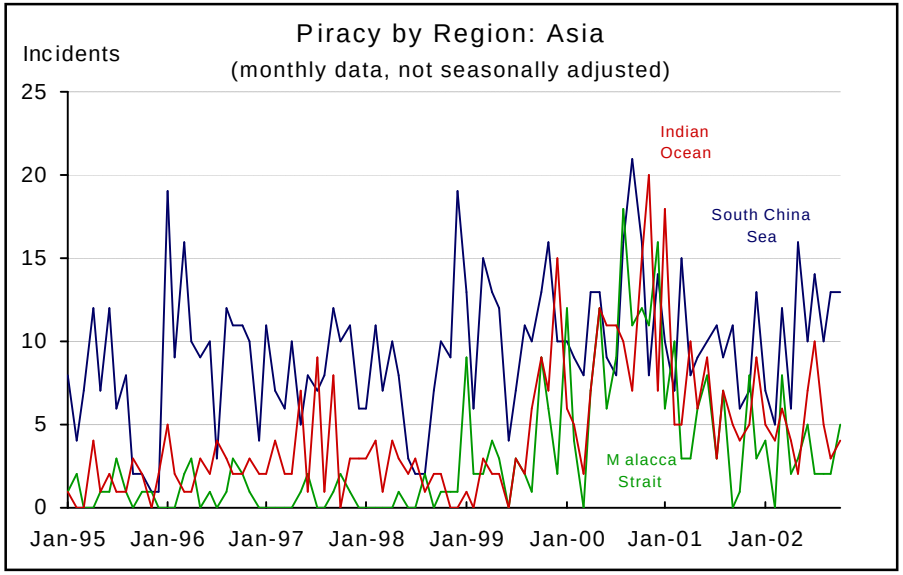
SOURCE: United Nations International Maritime Organization (IMO), Monthly Circulars and Annual Reports 1995-2002, available at http://www.imo.org.

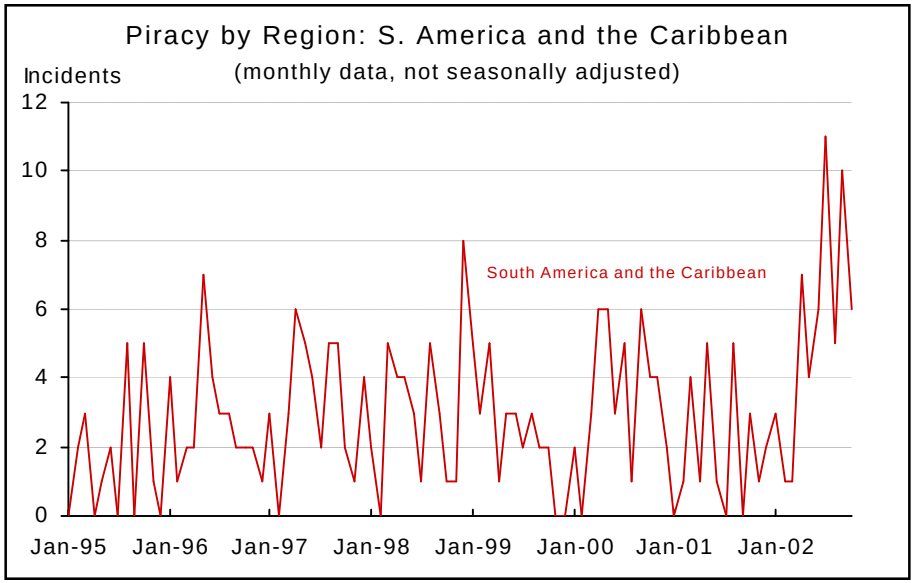
Piracy is any illegal act of violence, detention, or any act of depredation committed for private ends against a ship on the high seas or otherwise outside of the jurisdiction of a state. Incidents of armed robbery against ships, similar acts which happen while a ship is within the territorial waters of a state, have also been included.

Piracy affects the efficiency and security of the commercial shipping industry by increasing security costs, delaying shipments, and endangering the crew and cargo. In rare cases, entire ships are stolen, lost at sea, or intentionally destroyed.

The Maritime Administration of the U.S. Department of Transportation has released several alerts warning American ships of increased threat possibilities since September 11th. The most recent alert, published in July 2002, is directed to ships operating in or near the waters of Sudan, Yemen, Somalia, Indonesia, and the Strait of Malacca. Specific threat possibilities are not outlined by the alerts. However, piracy continues to be a major threat to maritime activity in those areas.

INTERNATIONAL PIRACY BY REGION





NOTE: Data for 2002 are preliminary.

Piracy and Armed Robbery Against Ships	Oct-01	Oct-02
South China Sea	6	13
Percent change from same month previous year	*-62.50*	*116.67*
Malacca Strait	1	5
Percent change from same month previous year	*-91.67*	*400.00*
Indian Ocean	0	4
Percent change from same month previous year	*-100.00*	*NA*
South America and the Caribbean	3	6
Percent change from same month previous year	*-25.00*	*100.00*

NOTE: Percentage changes may not be available (NA) because there were no incidents during the same month of the previous year. Data for 2002 are preliminary.

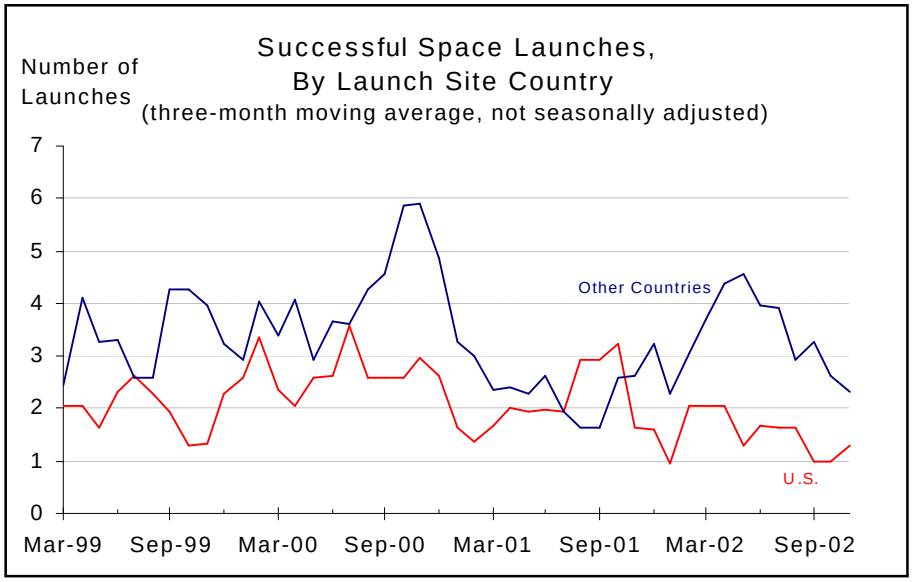
The International Maritime Organization (IMO) collects data from the International Maritime Bureau, the Baltic and International Maritime Council, the International Federation of Shippers, and maritime agencies of various countries. IMO data do not include piracy committed by government officials. Data also do not include incidents related directly to Taiwan.

Malacca Strait: The narrow body of water connecting the Indian Ocean with the Gulf of Thailand, South China Sea, and Pacific Ocean. The Malacca Strait is bordered by Malaysia and Singapore on the northeastern shore and by Indonesia on the southwestern shore. Includes the Singapore Strait.
South China Sea: For the purposes of this data, the South China Sea includes all Chinese, Indonesian, Filipino, and Malaysian coastal waters not included in the Malacca Strait. The Pacific Ocean is not included.
Indian Ocean: The Bay of Bengal and the Indian Ocean.
South America and the Caribbean: The Caribbean Sea and the Atlantic and Pacific Oceans surrounding South America, Latin America, and the Caribbean.

SOURCE: United Nations International Maritime Organization, Monthly Circulars and Annual Reports 1995-2002, available at http://www.imo.org.

These regions are most affected by acts of piracy.

INTERNATIONAL SPACE LAUNCHES



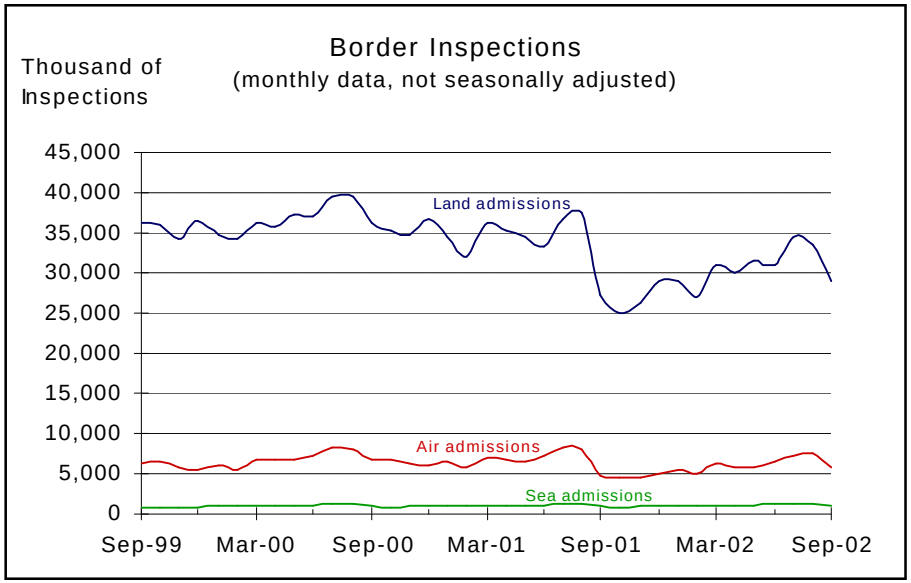
Successful space launches include all military, commercial, and government launches that deliver a payload to the proper orbit and location.

Successful Space Launches (three-month moving average)	Nov-01	Nov-02
United States of America	1.6	1.3
Percent change from same month previous year	*-44.73*	*-20.39*
Other Countries	2.6	2.3
Percent change from same month previous year	*-55.64*	*-11.89*

SOURCE: U.S. Department of Transportation, Federal Aviation Administration, Associate Administrator for Commercial Space Transportation, *Weekly Orbital Launch Update*, December 6, 2002.

NOTE: The three-month moving average is the average number of successful launches for the most recent month and two preceding months. Launches per month have been adjusted for a 30-day month. The actual number of launches during a month is multiplied by the ratio of 30 to the number of days in that month to yield the adjusted number of launches for that month.

ADMISSIBILITY OF PEOPLE AT U. S. BORDERS



Border Inspections (in thousand)	Sep-01	Sep-02
Total inspections	33,183	36,236
Percent change from same month previous year	*-25.16*	*9.20*
Land admissions	27,195	29,083
Percent change from same month previous year	*-25.05*	*6.94*
Air admissions	4,793	5,833
Percent change from same month previous year	*-29.35*	*21.70*
Sea admissions	925	1,014
Percent change from same month previous year	*-0.86*	*9.69*
Inadmissible	61	58
Percent change from same month previous year	*-4.72*	*-4.86*

NOTE: The current value is compared to the value from the same period in the previous year to account for seasonality.

Inspections are for individuals who seek entry into the United States, including U.S. citizens and non-U.S. citizens. Also includes individuals who make multiple entries, such as commuters.

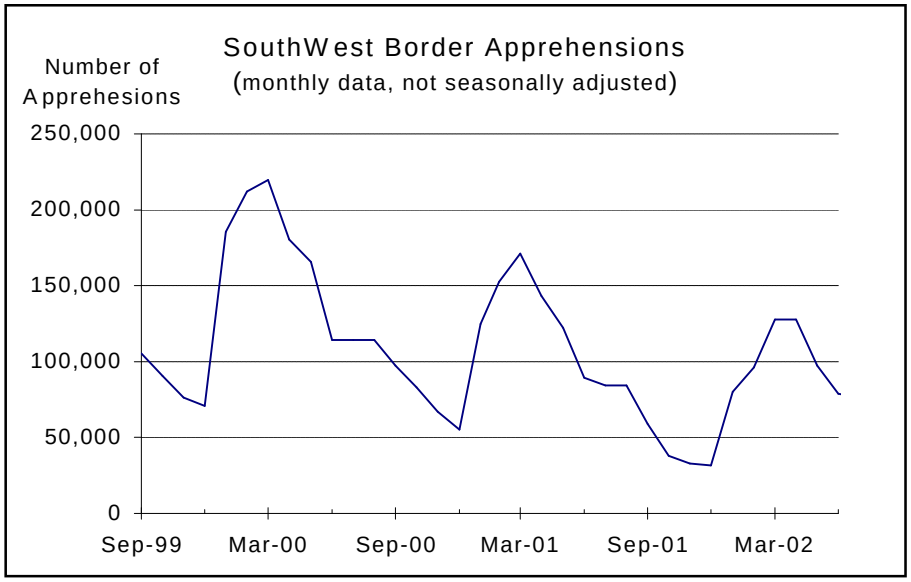
SOURCE: U.S. Immigration and Naturalization Service, available at: http://www.ins.gov/graphics/aboutins/statistics/index.htm.

The immigration of people is always associated with certain modes of transportation. Therefore, security at border crossings and ports of entry is not only a concern of immigration, but also a concern of transportation. Individuals seeking entry into the United States are inspected at ports-of-entry by immigration inspectors who determine their admissibility.

Admissions include individuals who make multiple entries. The inadmissible persons include aliens referred to secondary inspection who withdraw, are refused entry, are paroled in, or are referred to an Immigration Judge for a removal hearing. Generally, aliens present in the United States without having been admitted or paroled are considered inadmissible. Any alien who has incited terrorist activity, or is a representative/member of a group designated by the Secretary of State as a foreign terrorist organization is inadmissible.

Each year, the Immigration and Naturalization Service (INS) experiences a seasonal decline in total inspections in September when compared to the peak months of July and August. However, the September decline in 2001 is due to the drop in traffic at ports of entry following the terrorist attacks that occurred on September 11, 2001.

SOUTHWEST BORDER APPREHENSIONS



SouthWest Border Apprehensions	Sep-01	Sep-02
Southwest Border apprehensions	59,276	68,263
Percent change from same month previous year	*-39.36*	*15.16*
Southwest Border voluntary returns	55,907	63,614
Percent change from same month previous year	*-40.82*	*13.79*

NOTE: The current value is compared to the value from the same period in the previous year to account for seasonality.

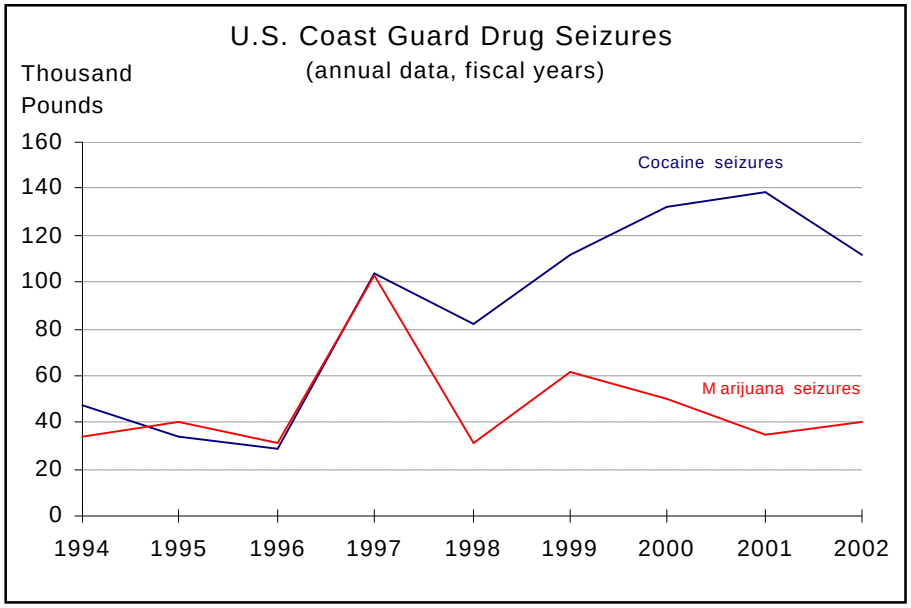
SOURCE: U.S. Immigration and Naturalization Service, available at: http://www.ins.gov/graphics/aboutins/statistics/index.htm.

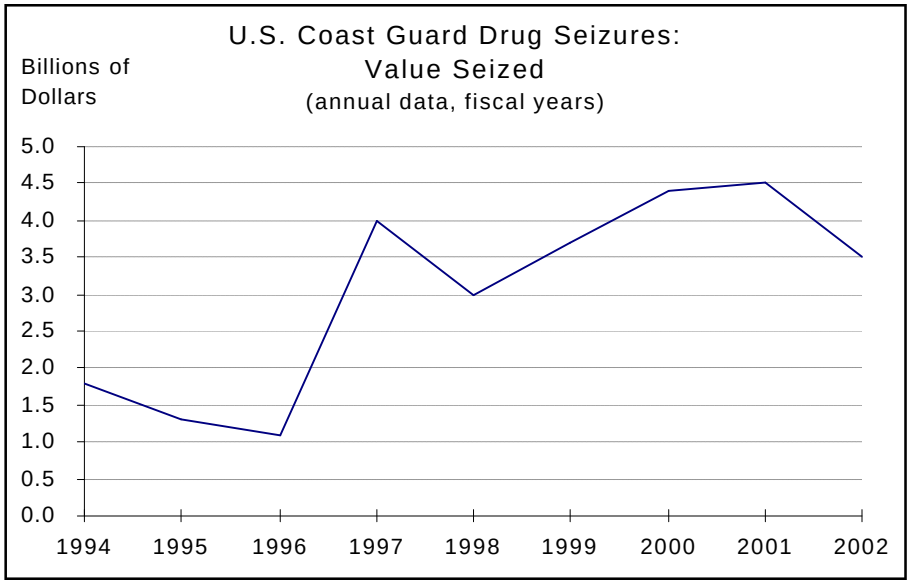
The U.S. Border Patrol seeks to prevent illegal entry into the United States along the 8,000 miles of land and water boundaries of the United States between ports-of-entry.

The southwest border covers four states: California, Arizona, New Mexico, and Texas.

The voluntary returns program allows aliens to enter an agreement to leave the United States of their own volition to avoid further consequences.

U.S. COAST GUARD DRUG SEIZURES





Coast Guard Drug Seizures	2001	2002*
Cocaine seized (thousand pounds)	138	112
Percent change from previous year	*4.46*	*-19.09*
Marijuana seized (thousand pounds)	35	40
Percent change from previous year	*-31.59*	*15.25*

Coast Guard Drug Seizures	2001	2002*
Value seized (billions of dollars)	4.50	3.50
Percent change from previous year	*2.27*	*-22.22*

* 2002 data is preliminary.

The U.S. Coast Guard is the key federal agency responsible for U.S. maritime drug interdictions. The Coast Guard's mission is to reduce the supply of drugs from the source by denying smugglers the use of air and maritime routes in the Transit Zone, a six million square mile area, including the Caribbean, Gulf of Mexico and Eastern Pacific. The Coast Guard is responsible for nearly 25 percent of all U.S. government seizures of cocaine and marijuana each year.

NOTE: During fiscal year 1997, additional Office of National Drug Control Policy (ONDCP) funding allowed the Coast Guard to commit more than 102,000 ship and aircraft resource hours to dedicated counter drug patrols—nearly 25 percent more than the previous year—accounting for the increase in seizures during that year.

SOURCE: U.S. Department of Transportation, U.S. Coast Guard, Office of Law Enforcement, at http://www.uscg.mil/hq/g-cp/comrel/factfile/.

Mobility

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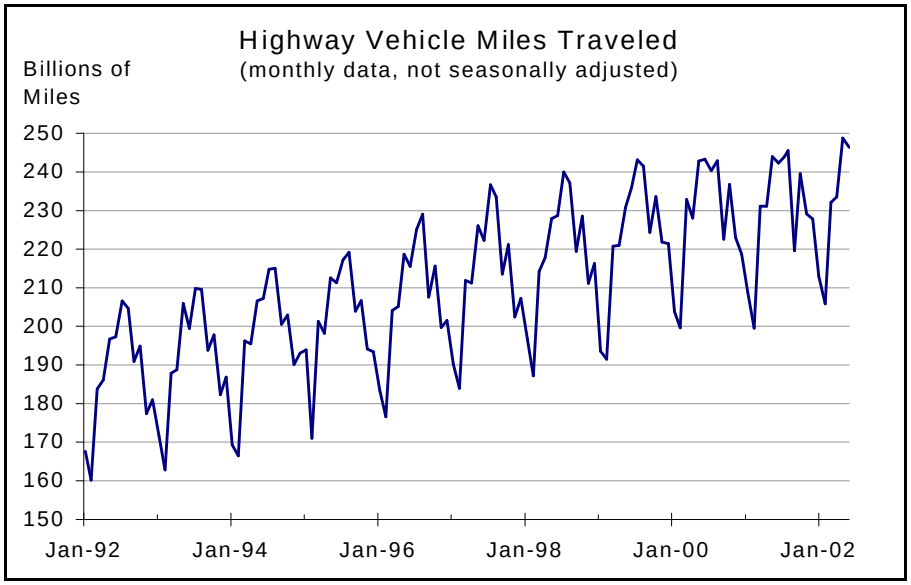
U.S. HIGHWAY VEHICLE MILES TRAVELED



Vehicle miles of travel (VMT) are key data for highway planning and management, and a common measure of roadway use. Along with other data, VMT are often used in estimating congestion, air quality, and potential gas-tax revenues, and can provide a general measure of the level of the nation's economic activity.

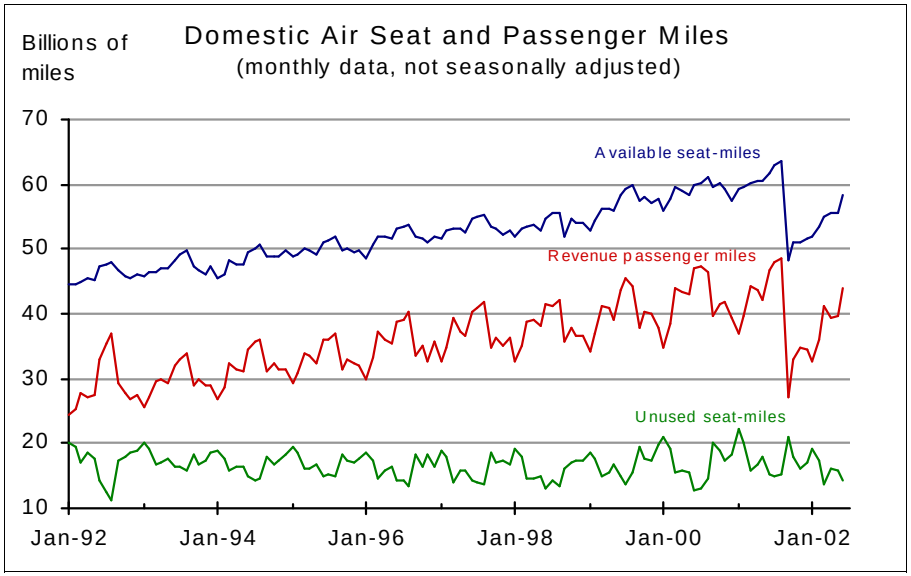
Vehicle Miles Traveled	Jun-01	Jun-02
Millions of highway miles	242,334	246,385
Percent change from same month previous year	*-0.38*	*1.67*

NOTE: The current value is compared to the value from the same period in the previous year to account for seasonality.

A trendline has been provided for vehicle miles traveled. The trend has been calculated through a statistical procedure called Structural Modeling, in which the time series under study is decomposed into seasonal, trend and irregular components. For further information on this statistical procedure, see: S.J. Koopman, et al., *Structural Time Series Analyser, Modeller and Predictor* (STAMP), London: Timberlake Consultants Ltd. , 2000

SOURCE: U.S. Department of Transportation, Federal Highway Administration, Office of Highway Policy Information, available at http://www.fhwa.dot.gov/ohim/tvtw/tvtpage.htm.

AVAILABILITY AND USE OF DOMESTIC FLIGHTS: AIR PASSENGERS



Revenue passenger-miles are a measure of the volume of air passenger transportation. Unused seat-miles (the difference between available seat-miles and revenue passenger miles) are used as a measure of airline capacity utilization. Another measure is the intensity of use of the equipment.

NOTE: A revenue passenger-mile is equal to one paying passenger carried one mile. Available seat-miles for an individual flight are the number of seats multiplied by the distance traveled. The data do not include international flights by U.S. domestic carriers or domestic flights by foreign carriers.

Domestic Passenger Aviation	Jun-01	Jun-02
Available seat-miles (billions)	61.88	58.34
Percent change from same month previous year	*3.28*	*-5.73*
Revenue passenger miles (billions)	46.65	44.06
Percent change from same month previous year	*-1.12*	*-5.57*
Unused seat-miles (billions)	15.23	14.28
Percent change from same month previous year	*19.58*	*-6.25*

NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality. The data have been adjusted to have a standard 30-day month by multiplying the data for each month by the ratio: 30/(actual days in month).

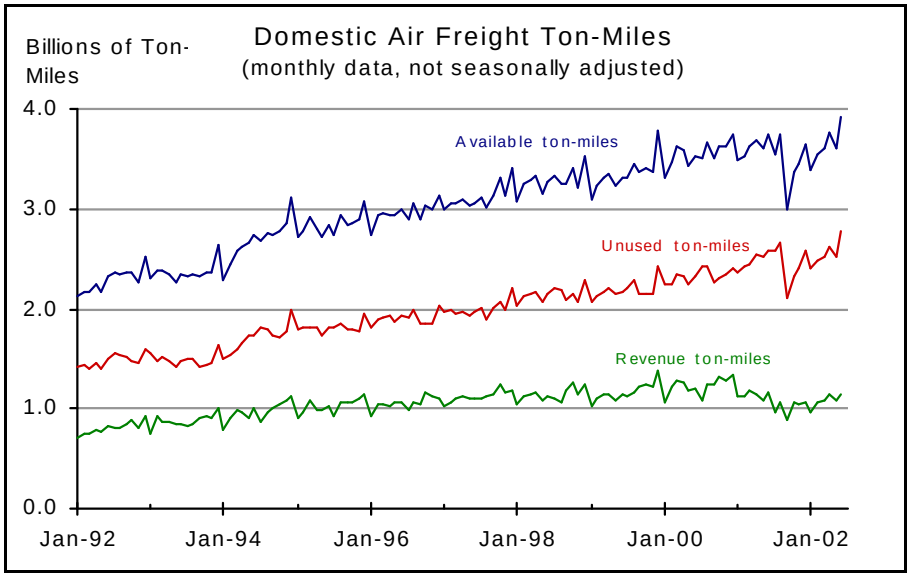
These indicators are components of the passenger and overall aircraft load factors displayed in "Aircraft Utilization—Passengers and Freight."

The dramatic changes in the September 2001 data reflect the impact of the terrorist attacks on Sept. 11, 2001, on aviation, including several days in which commercial air operations were suspended.

Alaskan carriers that began reporting T100 data in January 2002 are excluded from this report to retain comparability for comparisons with the previous year.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, *Air Carrier Traffic Statistics Monthly*, September 2002.

AVAILABILITY AND USE OF DOMESTIC FLIGHTS: AIR FREIGHT



Though still much smaller than air passenger transportation, air freight is an increasingly important revenue source for the air transportation industry. It includes both freight handled by dedicated air cargo handlers and air cargo shipped on combined passenger and air freight carriers (passenger luggage is not considered cargo for this purpose).

Unused ton-miles are the difference between available ton-miles and revenue ton-miles utilized. Changes in the level of spare capacity might be an indicator of the timely availability of air freight services. For example, a shipper with a sudden need for service will be more likely to obtain an appropriate flight when spare capacity is higher. Space limitations also affect the availability of air freight services.

Domestic Freight Aviation	Jun-01	Jun-02
Available ton-miles (billions)	3.73	3.91
Percent change from same month previous year	*5.59*	*4.80*
Unused ton-miles (billions)	2.58	2.78
Percent change from same month previous year	*10.90*	*7.71*
Revenue ton-miles (billions)	1.16	1.14
Percent change from same month previous year	*-4.59*	*-1.69*

NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

A revenue ton-mile is equal to one ton carried one mile and measures utilization of air-freight services. The data do not include international flights by U.S. domestic carriers or domestic flights by foreign carriers.

For those planes that carry both freight and passengers, available freight ton-miles are calculated by subtracting available seat-miles times 0.1 from total available ton-miles. The data have been adjusted to have a standard 30-day month by multiplying the data for each month by the ratio: 30/(actual days in month). These indicators are components of freight and overall aircraft load factors displayed in "Aircraft Capacity Utilization—Passengers and Freight."

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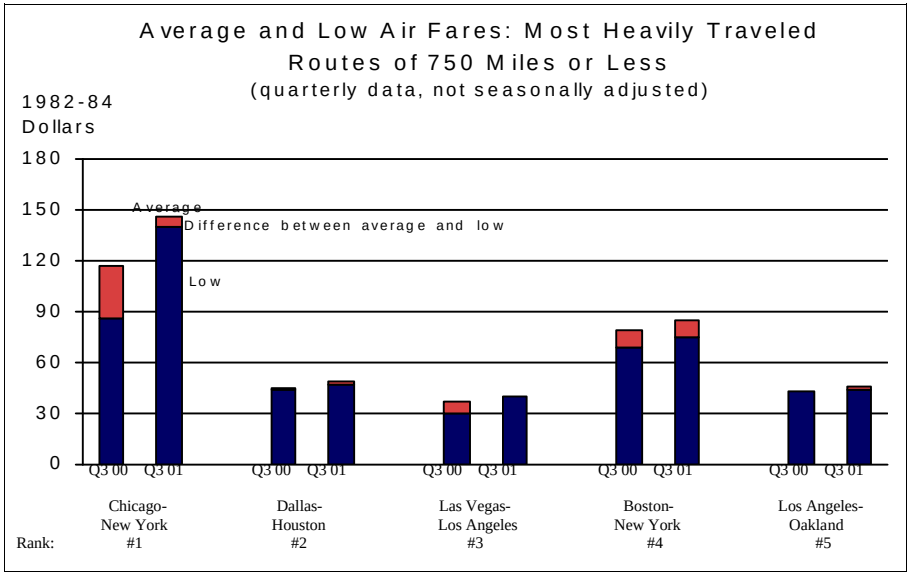
SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, *Air Carrier Traffic Statistics Monthly*, September 2002.

AIR FARES AND PASSENGER VOLUME FOR THE TOP FIVE MAJOR SHORT ROUTES



NOTE: Blue portion of bar = lowest average fare for an airline meeting the criteria in the text.
Red portion of bar = the difference between the average fare for all airlines, and the lowest average fare airline.
Blue + red portions of bar = the average fare for the market.

Passenger air fares are a measure of the price of air travel between cities. Major short routes consist of the top five routes of 750 miles and less by number of passengers for the most recent quarter. Large markets consist of the top 1,000 passenger markets at all distances, plus routes that have previously achieved this distinction. Low fares are the lowest average fare for an airline serving at least 10 percent of passengers in the market, or the airline with the lowest average fare, if there is only one airline with at least a 10 percent share.

In the third quarter of 2001, there were **543** large-market routes of 750 miles or less.

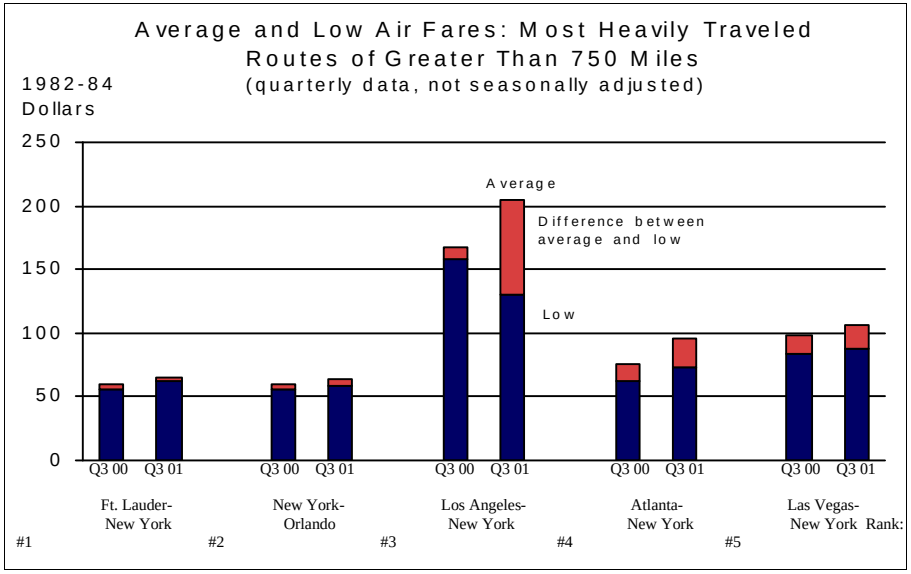
Consumer air fares (less than 750 miles)	Q3 00	Q3 01	% Change
Chicago-New York (728 miles)			
Average Fare (1982-84 $)	146	117	*-19.64*
Low Fare (1982-84 $)	140	86	*-38.70*
Daily Passengers	7,637	6,433	*-15.77*
Dallas-Houston (236 miles)			
Average Fare (1982-84 $)	49	45	*-8.37*
Low Fare (1982-84 $)	47	44	*-7.39*
Daily Passengers	5,652	4,654	*-17.66*
Las Vegas-L.A. (236 miles)			
Average Fare (1982-84 $)	40	37	*-8.21*
Low Fare (1982-84 $)	40	30	*-23.81*
Daily Passengers	5,324	4,527	*-14.97*
Boston-New York (186 miles)			
Average Fare (1982-84 $)	85	79	*-7.91*
Low Fare (1982-84 $)	75	69	*-7.17*
Daily Passengers	6,566	4,253	*-35.23*
L.A.-Oakland (337 miles)			
Average Fare (1982-84 $)	46	43	*-6.29*
Low Fare (1982-84 $)	44	43	*-3.91*
Daily Passengers	4,508	3,958	*-12.20*

NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

Average fares are based on the one-way cost for all paying customers and exclude passengers that fly for free such as those using a frequent flyer program. City-pairs include all airports in each city.

SOURCE: U.S. Department of Transportation: Bureau of Transportation Statistics, and Office of the Assistant Secretary for Aviation and International Affairs, and http://ostpxweb.ost.dot.gov/aviation/.

AIR FARES AND PASSENGER VOLUME FOR THE TOP FIVE MAJOR LONG ROUTES



NOTE: Blue portion of bar = lowest average fare for an airline meeting the criteria in the text.
Red portion of bar = the difference between the average fare for all airlines, and the lowest average fare airline.
Blue + red portions of bar = the average fare for the market.

Major long routes consist of the top five routes of more than 750 miles by number of passengers for the most recent quarter. In the third quarter of 2001, there were **769** large-market routes of more than 750 miles.

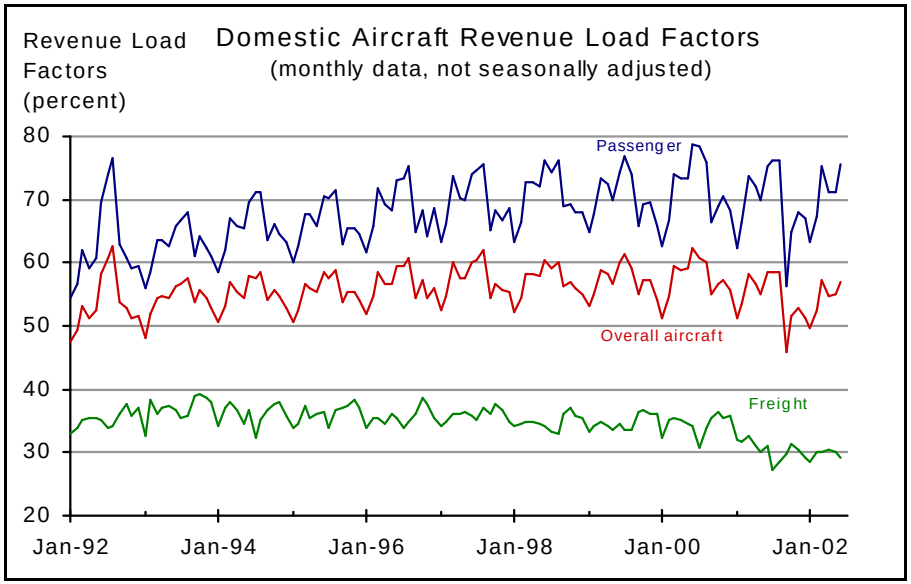
Consumer air fares (greater than 750 miles)	Q3 00	Q3 01	% Change
Ft Lauder-New York (1071 miles)			
Average Fare (1982-84 $)	65	60	*-7.83*
Low Fare (1982-84 $)	62	56	*-10.81*
Daily Passengers	7,675	8,084	*5.33*
New York-Orlando (945 miles)			
Average Fare (1982-84 $)	64	60	*-6.19*
Low Fare (1982-84 $)	59	56	*-4.76*
Daily Passengers	7,658	7,789	*1.71*
L.A.-New York (2469 miles)			
Average Fare (1982-84 $)	205	168	*-18.13*
Low Fare (1982-84 $)	130	159	*21.55*
Daily Passengers	7,324	6,592	*-9.99*
Atlanta-New York (756 miles)			
Average Fare (1982-84 $)	96	75	*-21.18*
Low Fare (1982-84 $)	73	62	*-14.62*
Daily Passengers	6,885	5,926	*-13.93*
Las Vegas-New York (2242 miles)			
Average Fare (1982-84 $)	106	98	*-7.45*
Low Fare (1982-84 $)	87	83	*-4.52*
Daily Passengers	4,414	4,492	*1.77*

NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

Average fares are based on the one-way cost for all paying customers and exclude passengers that fly for free such as those using a frequent flyer program. City-pairs include all airports in each city.

SOURCE: U.S. Department of Transportation: Bureau of Transportation Statistics, and Office of the Assistant Secretary for Aviation and International Affairs, and http://ostpxweb.ost.dot.gov/aviation/.

U.S. CARRIERS AIRCRAFT CAPACITY UTILIZATION – DOMESTIC PASSENGERS AND FREIGHT



Aircraft load factors are used to measure aircraft in-flight capacity utilization.

Domestic Revenue Load Factors (percent)	Jun-01	Jun-02
Passenger revenue load factor	75.39	75.52
Change from same month previous year	*-3.35*	*0.13*
Overall aircraft revenue load factor	58.66	56.85
Change from same month previous year	*-3.57*	*-1.81*
Freight revenue load factor	30.94	29.02
Change from same month previous year	*-3.30*	*-1.92*

NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

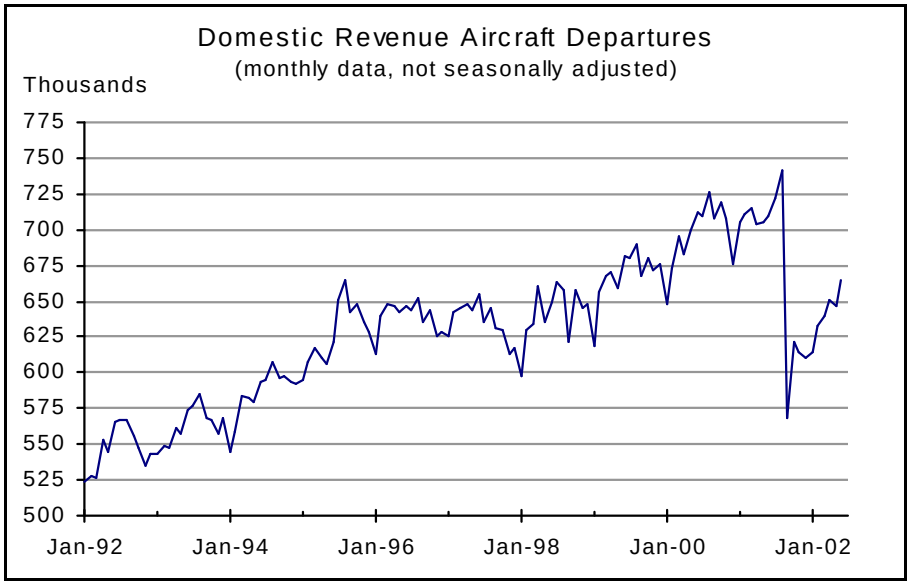
Load factor relates to the potential capacity of a system relative to its actual performance. In order to combine passenger and freight to calculate overall aircraft load factors, a common metric is needed: ton-miles. Thus, it is assumed that a passenger plus baggage weighs 200 pounds. The data do not include international flights by U.S. domestic carriers or domestic flights by foreign carriers.

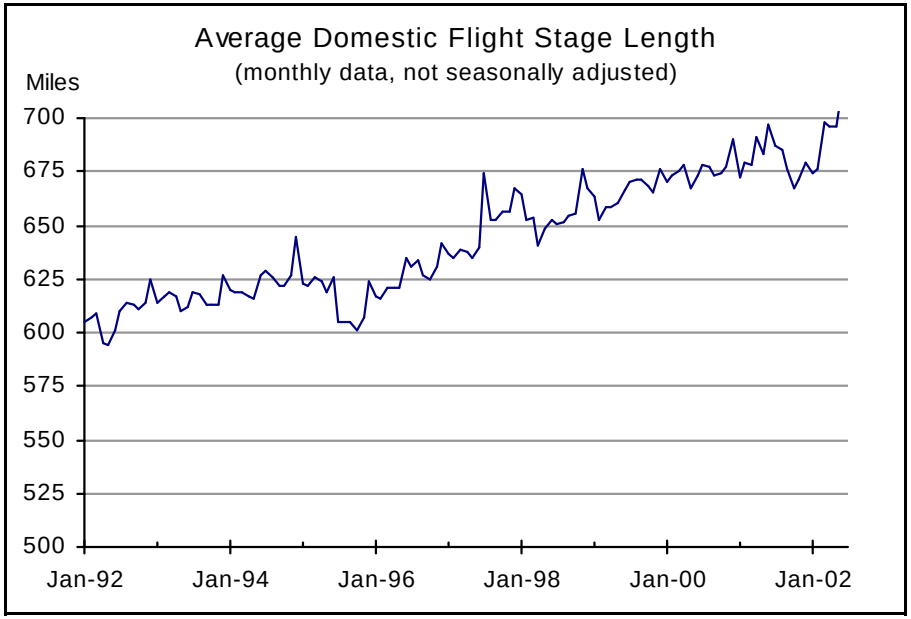
The dramatic changes in the September 2001 data reflect the impact of the terrorist attacks on Sept. 11, 2001, on aviation, including several days in which commercial air operations were suspended.

Alaskan carriers that began reporting T100 data in January 2002 are excluded from this report to retain comparability for comparisons with the previous year.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, *Air Carrier Traffic Statistics Monthly*, September 2002.

FLIGHT AVAILABILITY AND DISTANCE: DOMESTIC





Domestic Flight Availability	Jun-01	Jun-02
Revenue aircraft departures (thousands)	710	664
Percent change from same month previous year	*-0.26*	*-6.44*
Flight stage length (miles)	697	709
Percent change from same month previous year	*3.55*	*1.79*

NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

The data have been adjusted to have a standard 30-day month by multiplying the data for each month by the ratio: 30/(actual days in month).

The data do not include international flights by U.S. domestic carriers or domestic flights by foreign carriers.

The dramatic changes in the September 2001 data reflect the impact of the terrorist attacks on Sept. 11, 2001, on aviation, including several days in which commercial air operations were suspended.

Alaskan carriers that began reporting T100 data in January 2002 are excluded from this report to retain comparability for comparisons with the previous year.

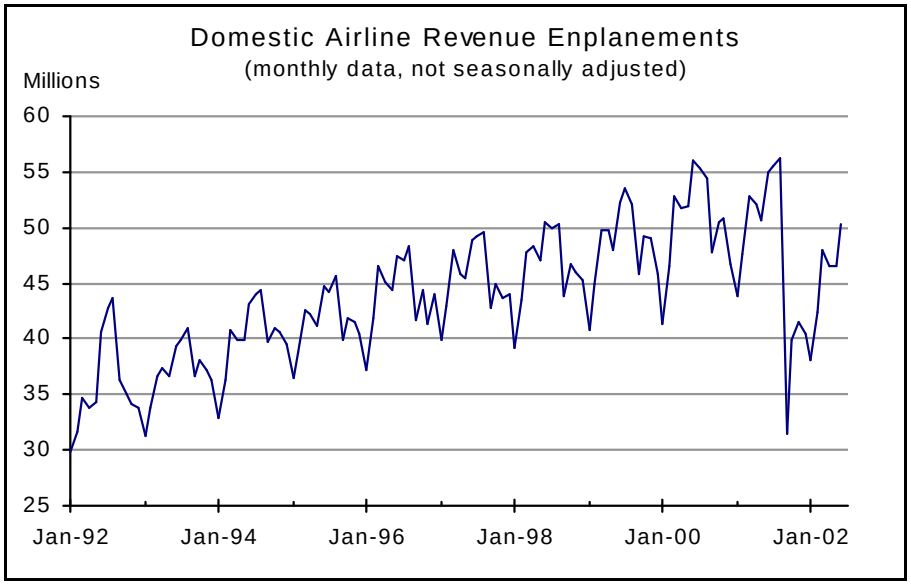
SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, *Air Carrier Traffic Statistics Monthly*, July 2002.

Frequency of aircraft departures, the number of connections required for a single trip, and the match between available flights and travelers' desired origin and destination points are all important determinants of scheduling convenience. Because data on connections are currently not available in a suitable format, flight stage length is used here to supplement the information on departures.

Flight stage length is the distance between take-off airport and landing airport. If the mix of origin and destination points are held constant, then an increase in flight stage length implies fewer connections are required for a trip and, therefore, higher quality of air passenger services.

The key relation is that departures and flight stage length will tend to move in opposite directions when changes are due to changes in the number of connections. For example, a trip from city A to city B with a connection in city C will have two departures, but generally a shorter average flight stage length, than the direct flight from A to B with a single departure.

ENPLANEMENTS ON DOMESTIC FLIGHTS



Revenue enplanements, the number of passengers boarding aircraft, indicate the demand for gate and luggage services. Enplanements differ from the number of trips because passengers may board more than one flight between their origination point and ultimate destination.

Domestic Passenger Aviation	Jun-01	Jun-02
Revenue aircraft enplanements (millions)	54.89	50.29
Percent change from same month previous year	*-2.19*	*-8.37*

NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

The data have been adjusted to have a standard 30-day month by multiplying the data for each month by the ratio: 30/(actual days in month).

The data do not include international flights by U.S. domestic carriers or domestic flights by foreign carriers.

The dramatic changes in the September 2001 data reflect the impact of the terrorist attacks on Sept. 11, 2001, on aviation, including several days in which commercial air operations were suspended.

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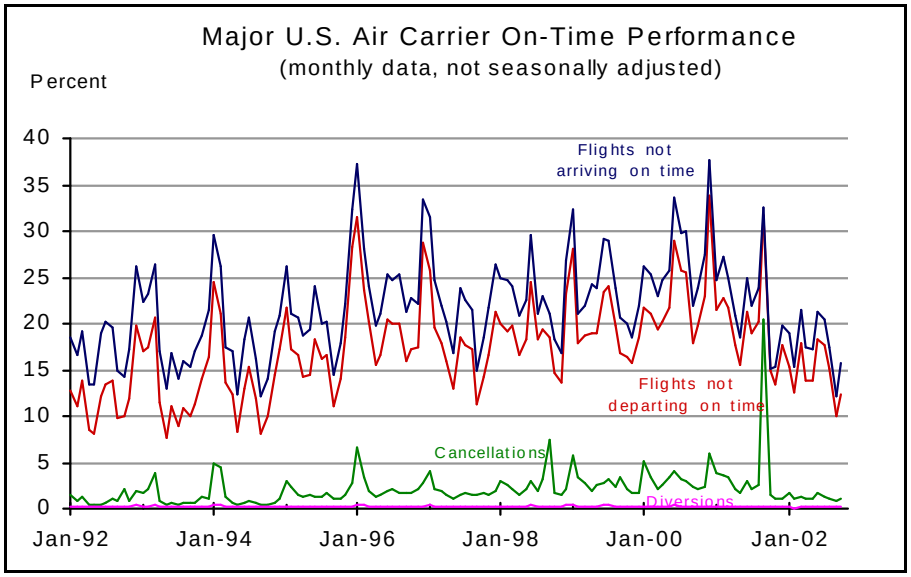
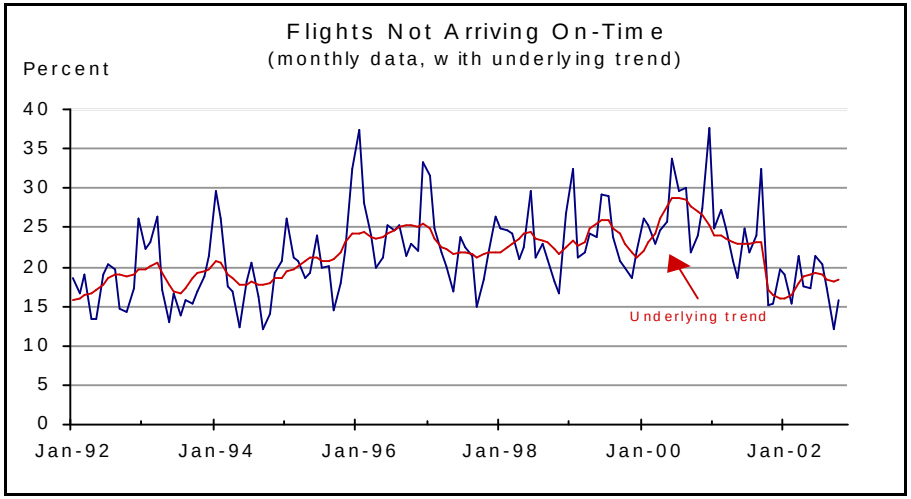
SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, *Air Carrier Traffic Statistics Monthly*, September 2002.

MAJOR U.S. AIR CARRIER ON-TIME PERFORMANCE





The number of flights not departing or arriving on time, cancellations, and diversions are measures of service quality. These indicators are strongly seasonal and are affected by weather and heavy demand in winter and summer months, respectively.

On-Time Performance	Oct-01	Oct-02
Number of scheduled flights	439,574	446,590
Percent change from same month previous year	*-17.52*	*1.60*
Percent of flights not arriving on time	15.18	15.82
Change from same month previous year	*-8.90*	*0.65*
Percent of flights not departing on time	14.82	12.43
Change from same month previous year	*-5.25*	*-2.39*
Percent of cancelled flights*	1.54	1.02
Change from same month previous year	*-1.09*	*-0.52*
Percent of diverted flights**	0.17	0.11
Change from same month previous year	*-0.02*	*-0.06*

* Also counted in flights not arriving or departing on time.
** Also counted in flights not arriving on time.
NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality. Data for American Eagle was included starting in January 2000. Percent changes from January 1999 to January 2000 were calculated based on data excluding American Eagle. Aloha Airlines, which reported on-time statistics for October 2000 through November 2001, has been excluded to retain comparability.

The data cover the 10 largest U.S. air carriers. A scheduled operation consists of any nonstop segment of a flight. The term "late" is defined as 15 minutes after the scheduled departure or arrival time. A cancelled flight is one that was not operated but was listed in a carrier's computer reservation system within seven calendar days of the scheduled departure. A diverted flight is one that left from the scheduled departure airport but flew to a destination point other than the scheduled destination point.

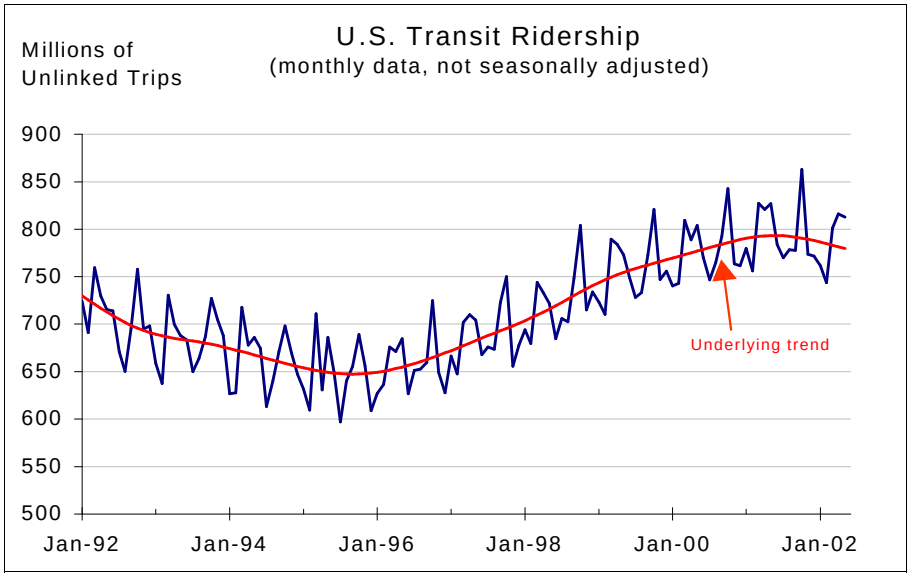
A trendline has been provided for flights not arriving on-time. The trend has been calculated through a statistical procedure called Structural Modeling, in which the time series under study is decomposed into seasonal, trend and irregular components. For further information on this statistical procedure, see: S.J. Koopman, et al., *Structural Time Series Analyser, Modeller and Predictor* (STAMP), London: Timberlake Consultants Ltd. , 2000

The dramatic changes in the September 2001 data reflect the impact of the terrorist attacks on September 11, 2001, on aviation, including several days in which commercial air operations were suspended.

Certain flights originating at O'Hare airport and operated by American Airlines (181 flights in April) and United Airlines (256 flights in April) between April 24, 2002 and May 8, 2002 are not included in the calculations due to the participation of these carriers in a pilot test program for enhanced baggage screening. A list of affected flights affected is available from BTS.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Airline Service Quality Performance data.

PUBLIC TRANSIT



Public transportation includes transit bus, transit rail, commuter rail, trolleys, and several demand-responsive services.

Transit Ridership	Jun-01	Jun-02
Unlinked trips (in thousands)	783,741	761,246
Percent change from same month previous year	*1.76*	*-2.87*

NOTE: The current value is compared to the value from the same period in the previous year to account for seasonality.

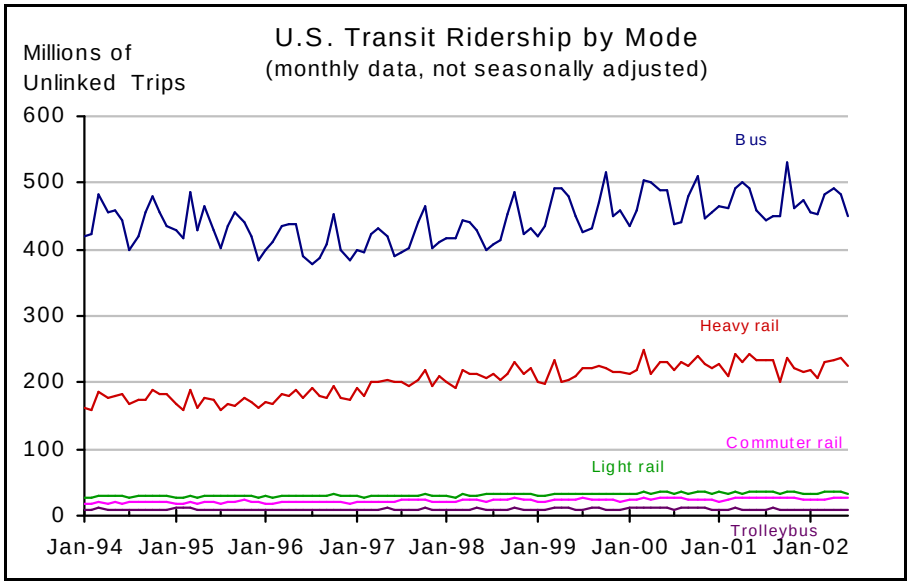
Data for the last three years are preliminary.

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.

A trendline has been provided for U.S. transit ridership. The trend has been calculated through a statistical procedure called Structural Modeling, in which the time series under study is decomposed into seasonal, trend and irregular components. For further information on this statistical procedure, see: S.J. Koopman, et al., *Structural Time Series Analyser, Modeller and Predictor* (STAMP), London: Timberlake Consultants Ltd. , 2000

SOURCE: American Public Transportation Association, *APTA Quarterly Transit Ridership Report*, available at: http://www.apta.com/stats/ridershp/index.htm.

PUBLIC TRANSPORTATION BY MODE



Ridership of heavy rail has been climbing faster than any other mode of public transportation. Bus ridership is almost 60 percent of total transit ridership.

Transit Ridership by Mode	Jun-01	Jun-02
Bus (thousands)	458,361	449,640
Percent change from same month previous year	*-6.42*	*-1.90*
Heavy rail (thousands)	235,447	223,809
Percent change from same month previous year	*1.81*	*-4.94*
Commuter rail (thousands)	35,036	33,440
Percent change from same month previous year	*-0.57*	*-4.56*
Light rail (thousands)	27,289	26,141
Percent change from same month previous year	*2.85*	*-4.21*
Trolleybus (thousands)	9,192	9,067
Percent change from same month previous year	*-18.92*	*-1.36*

NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

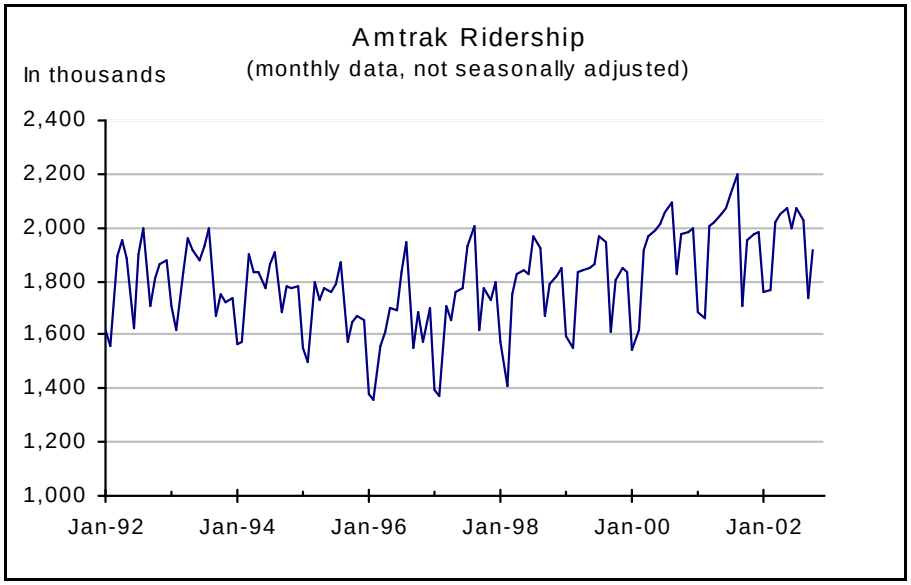
Numbers are estimates.

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.

Commuter Rail – Railroad local and regional passenger train operations between a central city, its suburbs, and/or another central city. It may either be locomotive-hauled or self-propelled, and is characterized by multitrip tickets, specific station-to-station fares, railroad employment practices, and usually only one or two stations in the central business district. Also known as "suburban rail."
Light Rail – An electric railway with a "light volume" traffic capacity compared to "heavy rail." Light rail may include multicar trains or single cars. Also known as "Streetcar," "Trolley car," and "Tramway."
Heavy Rail – An electric railway with the capacity of "heavy volume" of traffic and characterized by exclusive rights-of-way, multicar trains, high speed and rapid acceleration, sophisticated signaling, and high platform loading.
Trolleybus – Rubber-tired passenger vehicles operating singly on city streets. Trolleybuses are propelled by electricity drawn from an overhead electric line via trolleys.

SOURCE: American Public Transportation Association, *APTA Quarterly Transit Ridership Report*, available at: http://www.apta.com/stats

PASSENGER RAIL RIDERSHIP



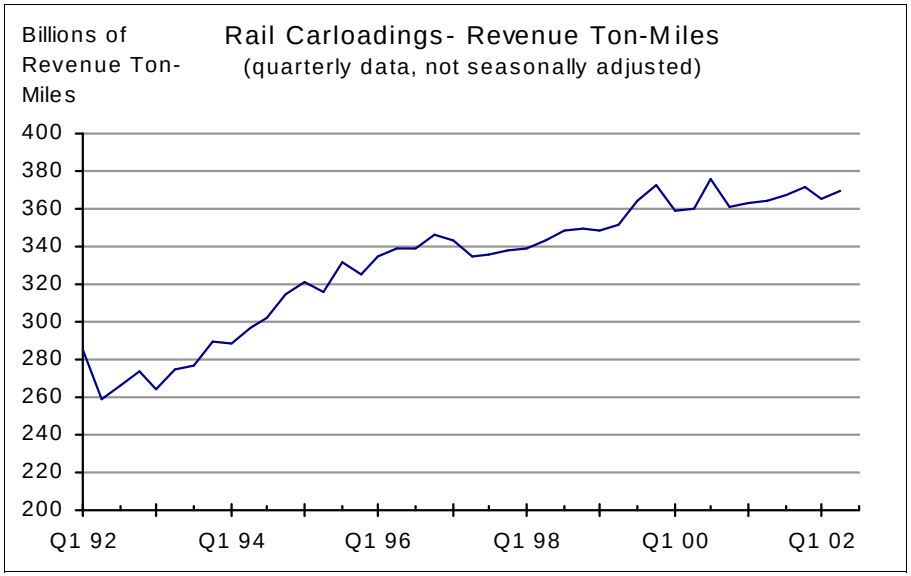
Amtrak officially began service in May 1971. Amtrak offers services in 46 states on a 22,000 mile route system. Ridership data are highly seasonal, with July and August being very high seasonal months. In 2000, Amtrak introduced a high-speed rail service in the northeast U.S., which helped increase ridership.

Amtrak Ridership	Oct-01	Oct-02
Ridership	1,950,716	1,916,769
Percent change from same month previous year	*-1.33*	*-1.74*

NOTE: The current value is compared to the value from the same period in the previous year to account for seasonality.

SOURCE: National Railroad Passenger Corporation, Amtrak, Personal Communication.

RAIL FREIGHT



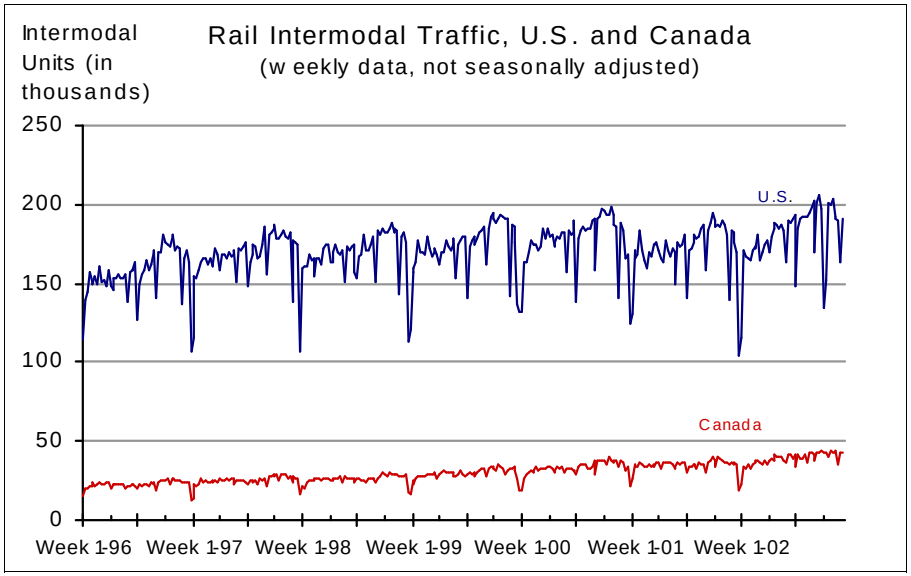
The top commodity in U.S. rail carloadings is coal. (Association of American Railroads, Weekly Railroad Traffic).

Rail Freight Revenue Ton Miles	Q2 01	Q2 02
Total (billions)	365	369
Percent change from same quarter previous year	*1.39*	*1.22*

NOTE: The current value is compared to the value from the same period in the previous year to account for seasonality.

SOURCES: 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 at: http://www.stb.dot.gov.

WEEKLY RAIL INTERMODAL TRAFFIC



Rail intermodal traffic consists of units of trailers and containers transferred to or from another transportation mode. Changes in rail intermodal traffic have been in the number of container units.

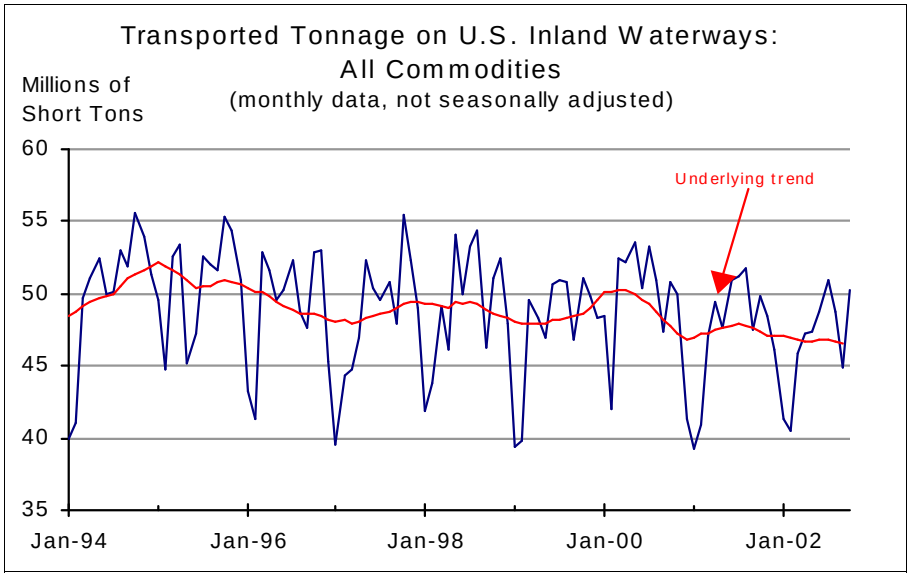
Rail Intermodal Traffic, U.S. and Canada	Week 49-01	Week 49-02
United States	181,706	190,352
Percent change from same week previous year	*-0.69*	*4.76*
Canada	35,571	42,144
Percent change from same week previous year	*-1.11*	*18.48*

NOTE: The current value is compared to the value from the same period in the previous year to account for seasonality.

Traffic of Canadian railroads reflect their Canadian and U.S. operations, and the operations of their subsidiaries. U.S. traffic reflects the U.S. and Canadian operations of U.S. railroads.

SOURCE: Association of American Railroads, Policy and Communication Department, Weekly Railroad Traffic, Intermodal Traffic, Washington, DC.

U.S. INLAND WATERWAYS TRADE



Almost 60 percent of the U.S. domestic waterborne trade tonnage is moved on the inland waterways. This market consists of carriers that transport freight between U. S. ports. At least 80 percent of the tonnage in this trade is carried by barge.

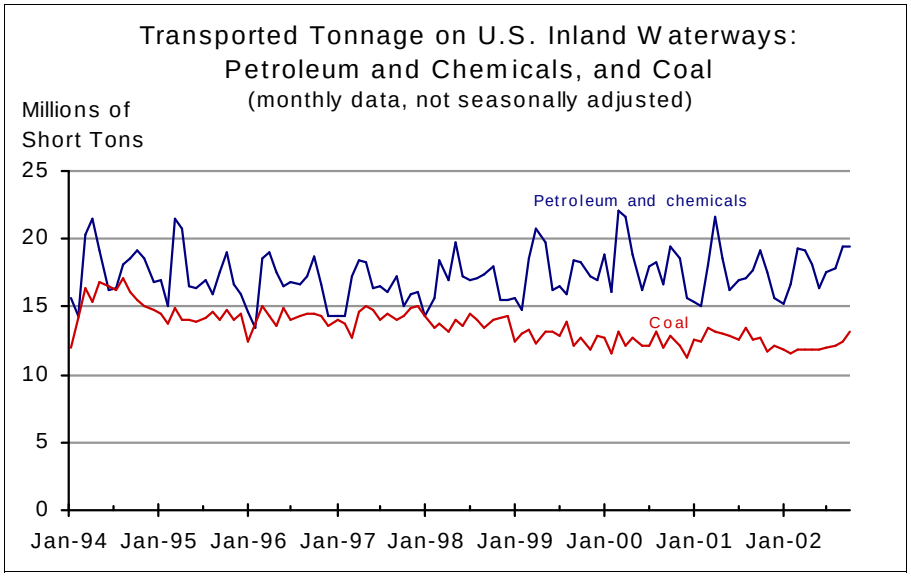
Inland Waterways Commercial Tonnage	Oct-01	Oct-02
All commodities (million short tons)	49.9	50.3
Percent change from same month previous year	*-1.77*	*0.80*

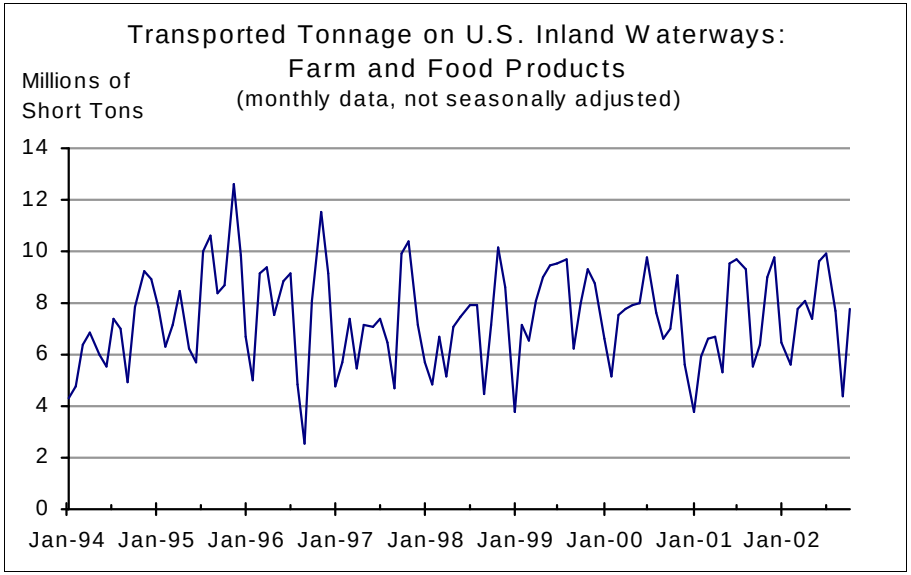
NOTE: The current value is compared to the value from the same period in the previous year to account for seasonality.

A trendline has been provided for Inland waterways commercial tonnage. The trend has been calculated through a statistical procedure called Structural Modeling, in which the time series under study is decomposed into seasonal, trend and irregular components. For further information on this statistical procedure, see: S.J. Koopman, et al., *Structural Time Series Analyser, Modeller and Predictor* (STAMP), London: Timberlake Consultants Ltd. , 2000

SOURCE: U.S. Army Corps of Engineers, Waterborne Commerce Statistics Center, Monthly Indicators, available at: http://www.iwr.usace.army.mil/ndc/wcsc.htm

BREAKDOWN OF U.S. INLAND WATERWAYS TRADE





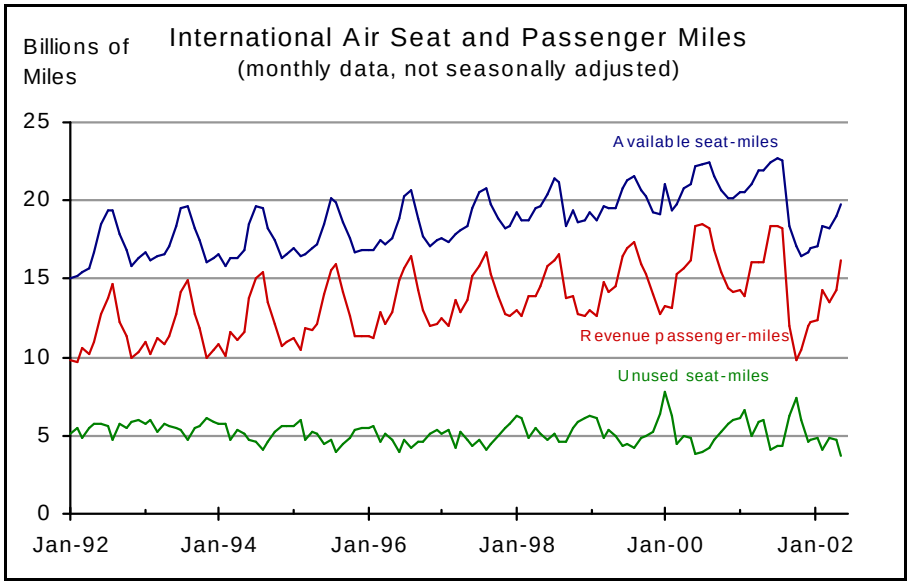
Inland Waterways Commercial Tonnage	Oct-01	Oct-02
Petroleum and chemicals (million short tons)	19.20	19.50
Percent change from same month previous year	*-1.54*	*1.56*
Coal (million short tons)	12.70	13.10
Percent change from same month previous year	*-1.55*	*3.15*
Farm and food products (million short tons)	6.37	7.79
Percent change from same month previous year	*-8.87*	*22.29*

NOTE: The current value is compared to the value from the same period in the previous year to account for seasonality.

SOURCE: U.S. Army Corps of Engineers, Waterborne Commerce Statistics Center, Monthly Indicators, available at: http://www.iwr.usace.army.mil/ndc/wcsc.htm.

Petroleum and chemicals, coal, and farm and food products make up the vast majority of U.S. inland waterways trade tonnage. In October 2002, these commodities constituted nearly 80 percent of total inland waterway trade.

AVAILABILITY AND USE OF INTERNATIONAL FLIGHTS BY U.S. AIR CARRIERS: AIR PASSENGERS



Revenue passenger-miles are a measure of the volume of air passenger transportation. Unused seat-miles (the difference between available seat-miles and revenue passenger miles) are used as a measure of airline capacity utilization. Another measure is the intensity of use of the equipment.

NOTE: A revenue passenger-mile is equal to one paying passenger carried one mile. Available seat-miles for an individual flight are the number of seats multiplied by the distance traveled. The data include both transborder and foreign flights by U.S. carriers, but do not include any flights by foreign carriers.

International Passenger Aviation	Jun-01	Jun-02
Available seat-miles (billions)	22.42	19.82
Percent change from same month previous year	*1.32*	*-11.62*
Revenue passenger-miles (billions)	18.33	16.16
Percent change from same month previous year	*-0.03*	*-11.83*
Unused seat-miles (billions)	4.09	3.65
Percent change from same month previous year	*7.87*	*-10.68*

NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality. The data have been adjusted to have a standard 30-day month by multiplying the data for each month by the ratio: 30/(actual days in month).

These indicators are components of the passenger and overall aircraft load factors displayed in "International Aircraft Utilization—Passengers and Freight."

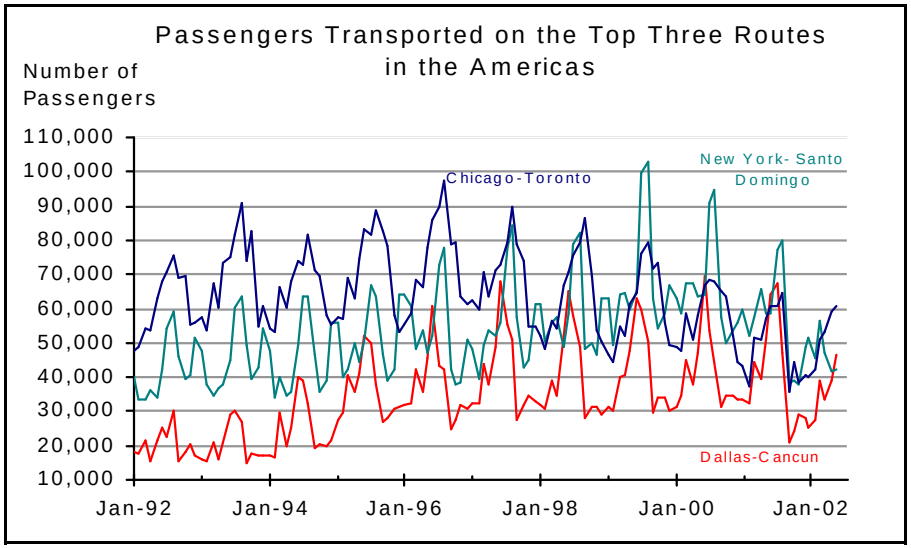
The data include both transborder and foreign flights by U.S. carriers, but do not include any flights by foreign carriers.

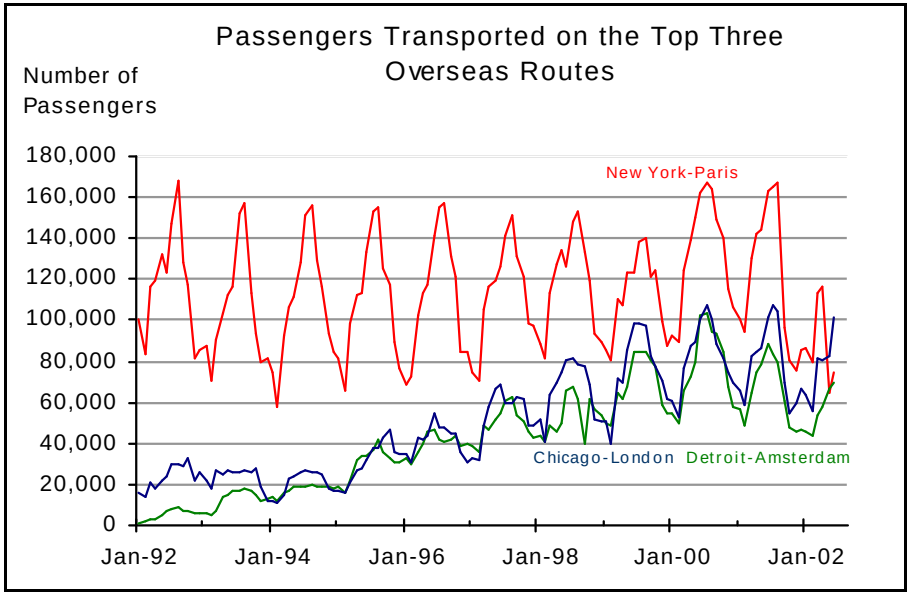
The dramatic changes in the September 2001 data reflect the impact of the terrorist attacks on Sept. 11, 2001, on aviation, including several days in which commercial air operations were suspended.

Alaskan carriers that began reporting T100 data in January 2002 are excluded from this report to retain comparability for comparisons with the previous year.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, *Air Carrier Traffic Statistics Monthly*, September 2002.

PASSENGERS TRANSPORTED ON THE TOP THREE INTERNATIONAL ROUTES





Passengers Transported on the Americas Routes	Jun-01	Jun-02
Chicago-Toronto	60,626	60,846
Percent change from same month previous year	*-9.01*	*0.36*
Dallas-Cancun	64,239	46,615
Percent change from same month previous year	*-7.30*	-27.44
New York-Santo Domingo	58,559	41,968
Percent change from same month previous year	*-8.74*	*-28.33*

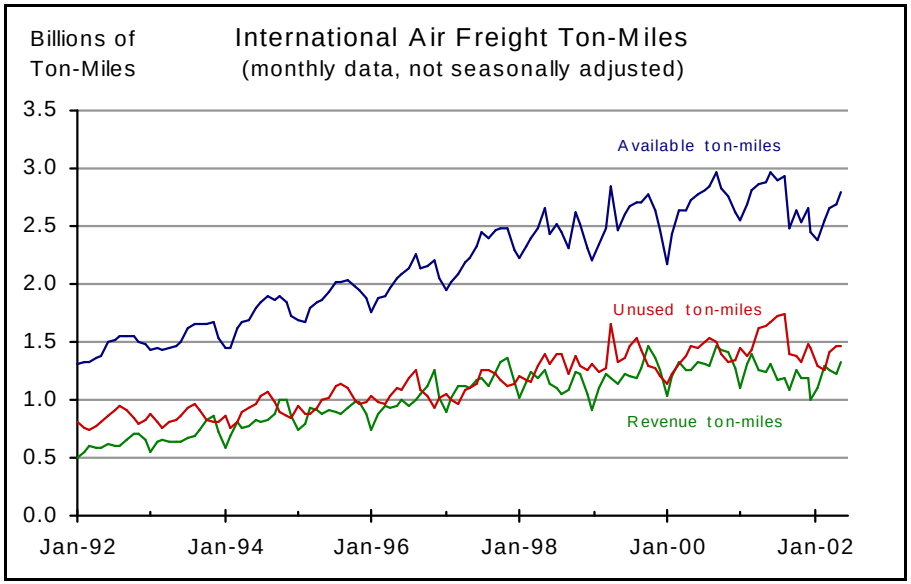
Passengers Transported on Overseas Routes	Jun-01	Jun-02
Chicago-London	101,760	101,128
Percent change from same month previous year	*0.89*	*-0.62*
New York-Paris	163,182	74,387
Percent change from same month previous year	*0.54*	*-54.41*
Detroit-Amsterdam	88,542	69,197
Percent change from same month previous year	-13.32	-21.85

NOTE: British Airways, Lufthansa, Air Canada, and Virgin Atlantic have been excluded for comparability because they did not provide data for June 2002. The New York-London and Miami-Caracas route has not been included in this route because non reporting carriers made up more than one-third of the 2001 passengers transported on this route.
SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, U.S. Air Carrier Traffic and Capacity Data by Nonstop Segment and On-Flight Market.

International passenger travel generates much revenue for transportation carriers, hotels, restaurants, and other travel-related businesses. Despite the terrorist attacks, international travel can be expected to place increased demands on the nation's transportation network and pose new challenges for the transportation sector. In particular, the key gateways– airports and land border crossing– that primarily service these travel flows will continue to be affected.

Passengers boarded on the top three international routes, both overseas and in the Americas, are highly seasonal, with more people traveling in July and August. International routes include only non-stop segments between an airport in the U.S. and an airport outside the U.S. Since September 2001, the number of passengers has decreased dramatically, not following the usual seasonal pattern.

AVAILABILITY AND USE OF INTERNATIONAL FLIGHTS BY U.S. AIR CARRIERS: AIR FREIGHT



Though still much smaller than air passenger transportation, air freight is an increasingly important revenue source for the air transportation industry. It includes both freight handled by dedicated air cargo handlers and air cargo shipped on combined passenger and air freight carriers (passenger luggage is not considered cargo for this purpose).

Unused ton-miles are the difference between available ton-miles and revenue ton-miles utilized. Changes in the level of spare capacity might be an indicator of the timely availability of air freight services. For example, a shipper with a sudden need for service will be more likely to obtain an appropriate flight when spare capacity is higher. Space limitations also affect the availability of air freight services.

International Freight Aviation	Jun-01	Jun-02
Available ton-miles (billions)	2.97	2.80
Percent change from same month previous year	*7.25*	*-5.94*
Unused ton-miles (billions)	1.67	1.47
Percent change from same month previous year	*15.38*	*-11.99*
Revenue ton-miles (billions)	1.30	1.33
Percent change from same month previous year	*-1.62*	*1.79*

NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

A revenue ton-mile is equal to one ton carried one mile and measures utilization of air-freight services.

For those planes that carry both freight and passengers, available freight ton-miles are calculated by subtracting available seat-miles times 0.1 from total available ton-miles. The data have been adjusted to have a standard 30-day month by multiplying the data for each month by the ratio: 30/(actual days in month). These indicators are components of freight and overall aircraft load factors displayed in "Aircraft Capacity Utilization—Passengers and Freight."

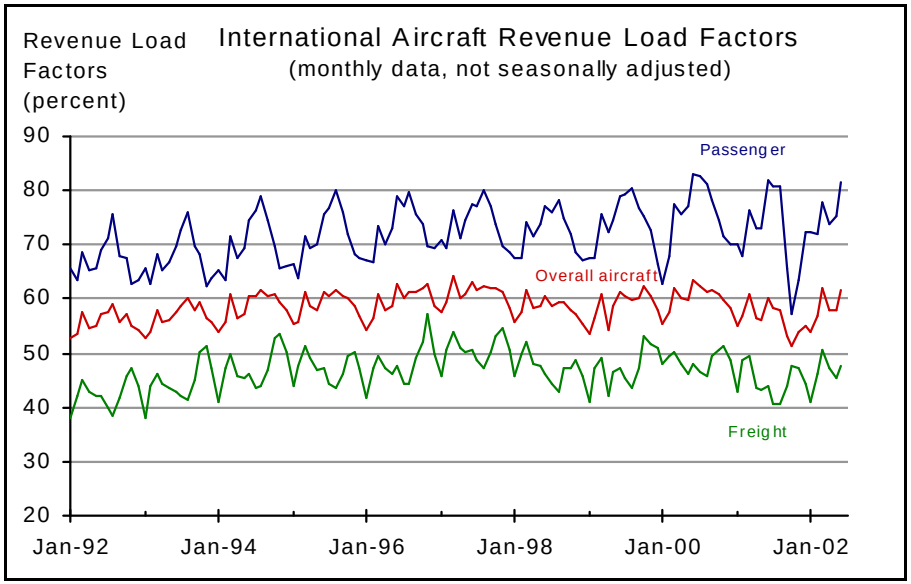
The data include both transborder and foreign flights by U.S. carriers, but do not include any flights by foreign carriers.

The dramatic changes in the September 2001 data reflect the impact of the terrorist attacks on Sept. 11, 2001, on aviation, including several days in which commercial air operations were suspended.

Alaskan carriers that began reporting T100 data in January 2002 are excluded from this report to retain comparability for comparisons with the previous year.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, *Air Carrier Traffic Statistics Monthly*, September 2002.

U.S. AIR CARRIERS AIRCRAFT CAPACITY UTILIZATION: INTERNATIONAL PASSENGERS AND FREIGHT



Aircraft load factors are used to measure aircraft in-flight capacity utilization.

International Revenue Load Factors (percent)	Jun-01	Jun-02
Passenger revenue load factor	81.76	81.56
Change from same month previous year	*-1.11*	*-0.19*
Overall aircraft revenue load factor	60.17	61.63
Change from same month previous year	*-3.22*	*1.46*
Freight revenue load factor	43.89	47.50
Change from same month previous year	*-3.96*	*3.61*

NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

Load factor relates to the potential capacity of a system relative to its actual performance. In order to combine passenger and freight to calculate overall aircraft load factors, a common metric is needed: ton-miles. Thus, it is assumed that a passenger plus baggage weighs 200 pounds.

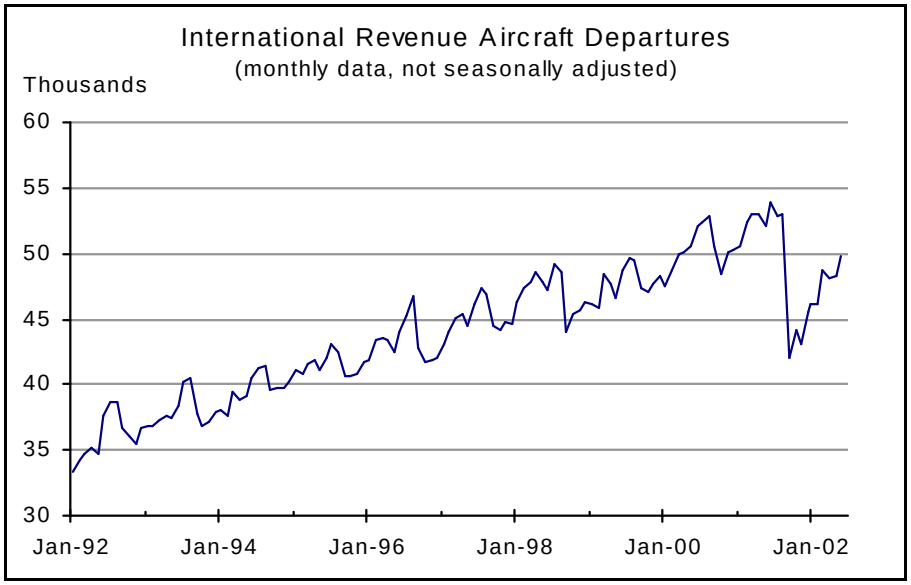
The data include both transborder and foreign flights by U.S. carriers, but do not include any flights by foreign carriers.

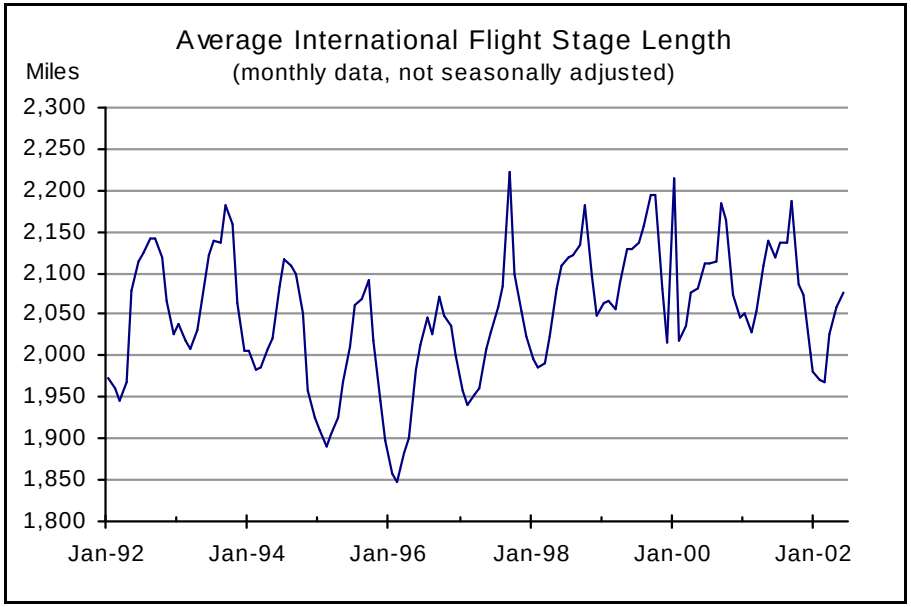
The dramatic changes in the September 2001 data reflect the impact of the terrorist attacks on Sept. 11, 2001, on aviation, including several days in which commercial air operations were suspended.

Alaskan carriers that began reporting T100 data in January 2002 are excluded from this report to retain comparability for comparisons with the previous year.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, *Air Carrier Traffic Statistics Monthly*, September 2002.

FLIGHT AVAILABILITY AND DISTANCE: INTERNATIONAL FLIGHTS OF U.S. CARRIERS





International Flight Availability- U.S. Air Carriers	Jun-01	Jun-02
Revenue aircraft departures (thousands)	54	50
Percent change from same month previous year	*3.52*	*-7.72*
Flight stage length (miles)	2,119	2,075
Percent change from same month previous year	*0.42*	*-2.07*

NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

The data have been adjusted to have a standard 30-day month by multiplying the data for each month by the ratio: 30/(actual days in month).

The data include both transborder and foreign flights by U.S. carriers, but do not include any flights by foreign carriers.

The dramatic changes in the September 2001 data reflect the impact of the terrorist attacks on Sept. 11, 2001, on aviation, including several days in which commercial air operations were suspended.

Alaskan carriers that began reporting T100 data in January 2002 are excluded from this report to retain comparability for comparisons with the previous year.

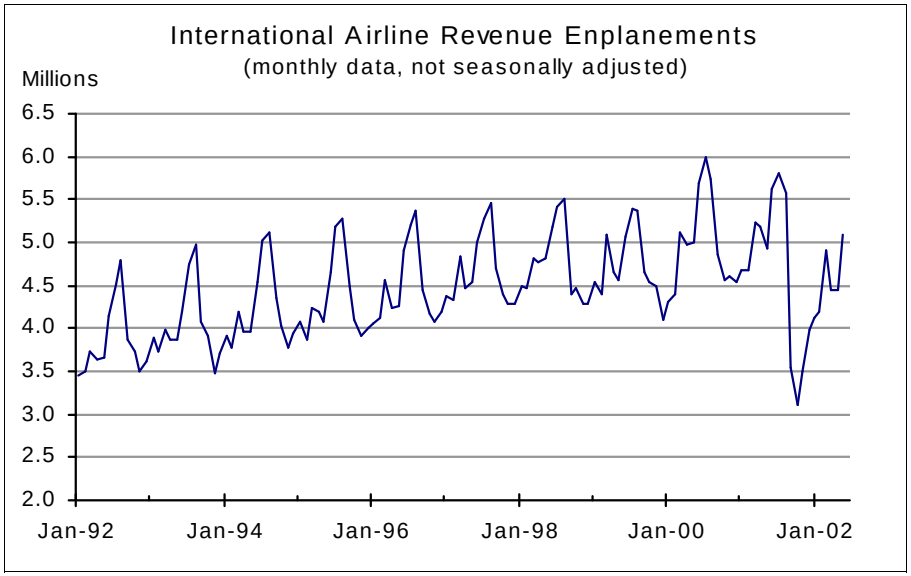
SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, *Air Carrier Traffic Statistics Monthly*, September 2002.

Frequency of aircraft departures, the number of connections required for a single trip, and the match between available flights and travelers' desired origin and destination points are all important determinants of scheduling convenience. Because data on connections are currently not available in a suitable format, flight stage length is used here to supplement the information on departures.

Flight stage length is the distance between take-off airport and landing airport. If the mix of origin and destination points are held constant, then an increase in flight stage length implies fewer connections are required for a trip and, therefore, higher quality of air passenger services.

The key relation is that departures and flight stage length will tend to move in opposite directions when changes are due to changes in the number of connections. For example, a trip from city A to city B with a connection in city C will have two departures, but generally a shorter average flight stage length, than the direct flight from A to B with a single departure.

ENPLANEMENTS ON INTERNATIONAL FLIGHTS OF U.S. CARRIERS



Revenue enplanements, the number of passengers boarding aircraft, indicate the demand for gate and luggage services. Enplanements differ from the number of trips because passengers may board more than one flight between their origination point and ultimate destination.

International Passenger Aviation	Jun-01	Jun-02
Revenue aircraft enplanements (millions)	5.62	5.08
Percent change from same month previous year	*-1.23*	*-9.56*

NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

The data have been adjusted to have a standard 30-day month by multiplying the data for each month by the ratio: 30/(actual days in month).

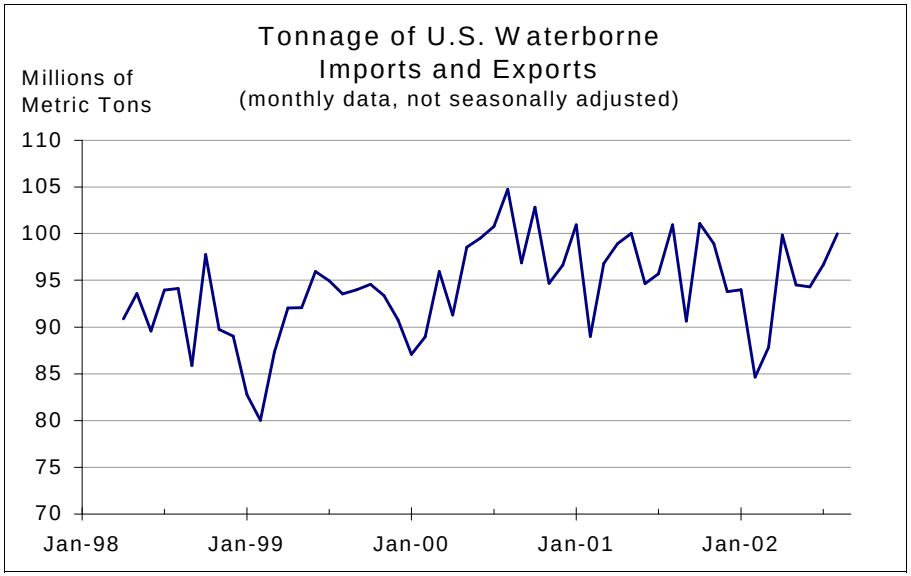
The data include both transborder and foreign flights by U.S. carriers, but do not include any flights by foreign carriers.

The dramatic changes in the September 2001 data reflect the impact of the terrorist attacks on Sept. 11, 2001, on aviation, including several days in which commercial air operations were suspended.

Alaskan carriers that began reporting T100 data in January 2002 are excluded from this report to retain comparability for comparisons with the previous year.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, *Air Carrier Traffic Statistics Monthly*, September 2002.

U.S. FOREIGN WATERBORNE FREIGHT



U.S. International Freight	Aug-01	Aug-02
Total waterborne metric tons (thousands)	100,947	99,991
Percent change from same month previous year	*-3.60*	*-0.95*

NOTE: The current value is compared to the value from the same period in the previous year to account for seasonality.

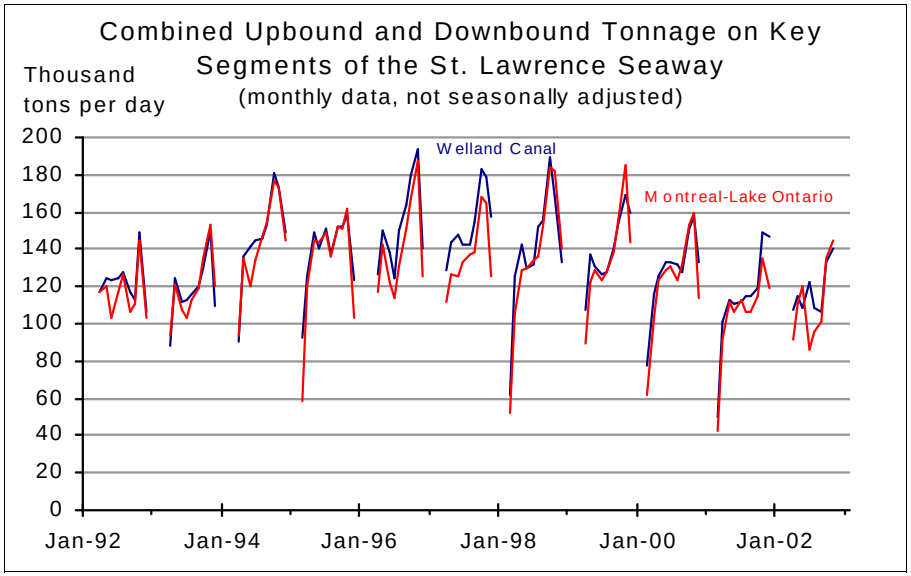
A metric ton is equal to 2,204.6 pounds.

SOURCE: U.S. Department of Transportation, Maritime Administration, Office of Statistical and Economic Analysis, U.S. Foreign Waterborne Transportation Statistics data, November 2002, available at: http://www.marad.dot.gov/statistics/usfwts/index.html.

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.

ST. LAWRENCE SEAWAY COMMERCIAL TRAFFIC



NOTE: Locks close in late December or early January and do not reopen until late March or early April.

St. Lawrence Seaway Commercial Traffic	Nov-01	Nov-02
Welland Canal (thousand tons per day)	149.14	140.30
Percent change from same month previous year	*-5.55*	*-5.92*
Montreal-Lake Ontario (thousand tons per day)	135.42	144.77
Percent change from same month previous year	-15.27	6.90

NOTES: All weights are in metric tons. One metric ton equals 1.1023 short tons.

Months which the respective segment is open fewer than five days are excluded.

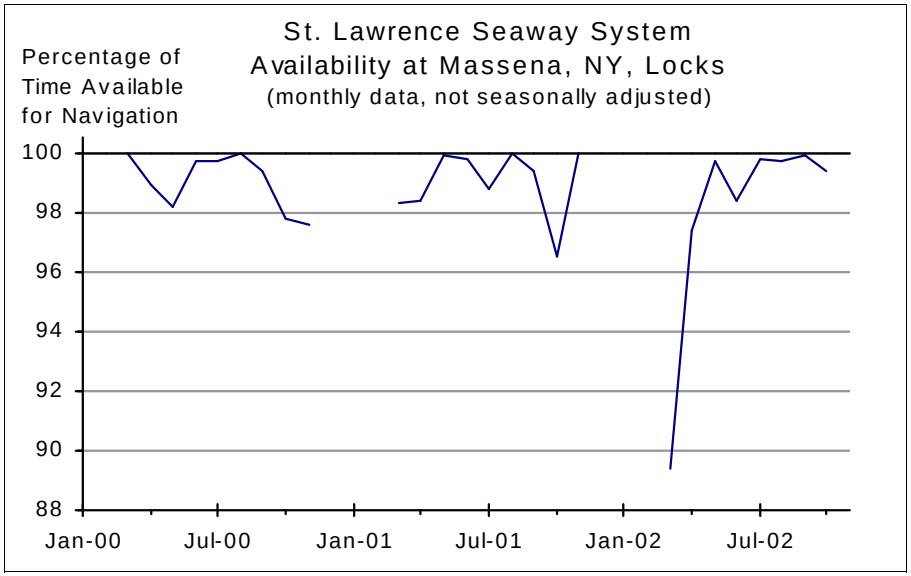
The St. Lawrence Seaway is co-managed by agencies from the United States and Canada. The Welland Canal has a series of eight locks which are operated by the St. Lawrence Seaway Management Corporation (SLSMC) of Canada. The Montreal-Lake Ontario section has a series of seven locks, five of which are operated by the SLSMC and two of which are operated by the St. Lawrence Seaway Development Corporation (SLSDC) of the U.S. Department of Transportation.

SOURCES: *St. Lawrence Seaway Traffic Report*, annual issues (through 2001); "Seaway Monthly Traffic Results," St. Lawrence Seaway Management Corporation (2002 navigation season)

The Welland Canal and Montreal-Lake Ontario segments are vital choke points of the St. Lawrence Seaway. The Welland Canal connects Lake Erie with Lake Ontario, linking the agricultural regions of the United States and Canada with major population centers to the east and providing an economical means of transporting coal via the Great Lakes. The Montreal-Lake Ontario segment connects Lake Ontario to the Atlantic Ocean, giving North American industries and agriculture access to Atlantic deep water terminals and trans-oceanic shipping.

Although total traffic is roughly equal for both segments, the relative directional flows are different. In 2001, the Montreal-Lake Ontario segment had 51% of total tons flowing upbound and 49% downbound. In contrast, the Welland Canal had 33% of total tons flowing upbound and 67% flowing downbound. Much of the difference comes from more than 4 million tons of coal flowing annually from ports in northern Ohio to Hamilton, Ontario, and other points mostly on the Canadian side of Lake Ontario.

ST. LAWRENCE SEAWAY SYSTEM AVAILABILITY



NOTE: Locks close in late December or early January and do not reopen until late March or early April.

St. Lawrence Seaway System Availability	Oct-01	Oct-02
Percentage of time available for navigation	96.5	99.4
Percent change from same month previous year	*-1.33*	*3.01*

NOTES: System availability is hours actually available for use divided by hours which the lock is intended to be in operation. The locks are intended to be open 24 hours per day during the navigation season; however, locks may be closed early or late in the season for daylight-only navigation. Closure due to daylight-only navigation is excluded from this data.

Downtime at one lock constitutes downtime for the system.

Months during which the Montreal-Lake Ontario segment is open fewer than five days are excluded.

Data for the five locks operated by the St. Lawrence Seaway Management Corporation (SLSMC) of Canada are not included.

SOURCE: "Availability Performance Report," monthly issues; St. Lawrence Seaway Development Corporation (SLSDC), U.S. Department of Transportation

The United States maintains and operates two of the seven locks on the Montreal-Lake Ontario section of the St. Lawrence Seaway. Keeping both locks running is critical because operability of the seaway segment is compromised by the closing of any of the locks.

Lock availability for the 2001 navigation season was approximately 99 percent if closure due to daylight-only navigation is excluded. Either or both of the locks was closed for the following times and reasons: structure-related (11 hours), vessel-related (46 hours), weather (13 hours), and other (4 hours).

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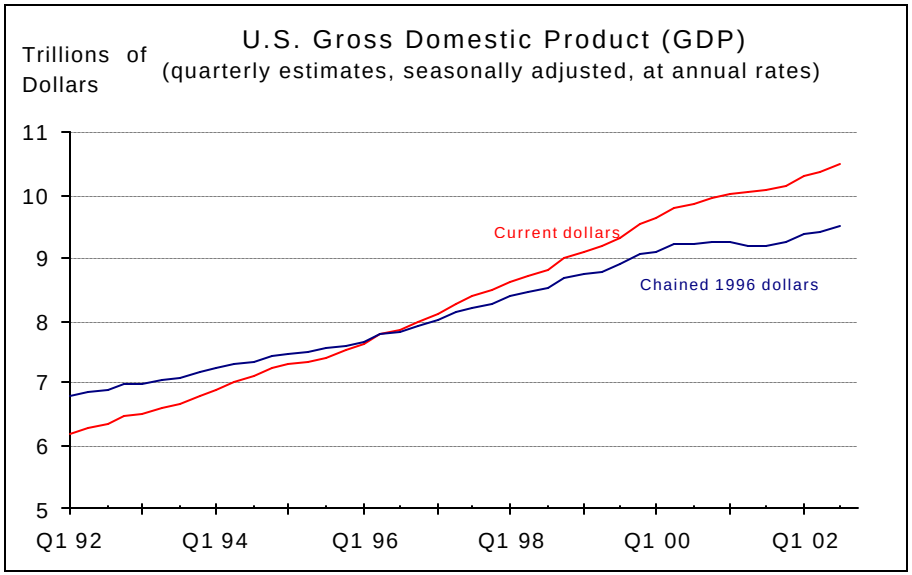
GROWTH IN GROSS DOMESTIC PRODUCT

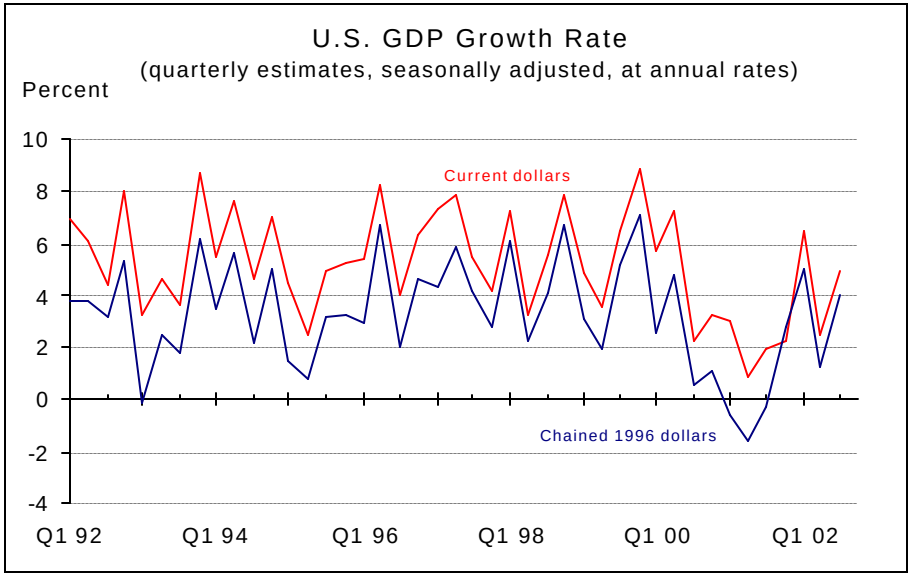


U.S. Gross Domestic Product	Q2 02	Q3 02
Billions of current dollars	10,377	10,504
Percent change from previous quarter	*0.62*	*1.22*
Billions of chained 1996 dollars	9,392	9,484
Percent change from previous quarter	*0.31*	*0.98*

NOTES: Quarterly GDP data are presented at an annual rate.

Chained 1996 dollars are calculated using chain-type indices, rather than constant dollars, to measure real GDP. The chain-type method first calculates the real changes between adjacent years. Annual rates of real changes are then chained (multiplied) together to obtain the rate of real changes between nonadjacent years. Chained dollars are preferable to constant dollars, which merely reflect overall price inflation, because chained dollars capture the effect of changes in the components of GDP.

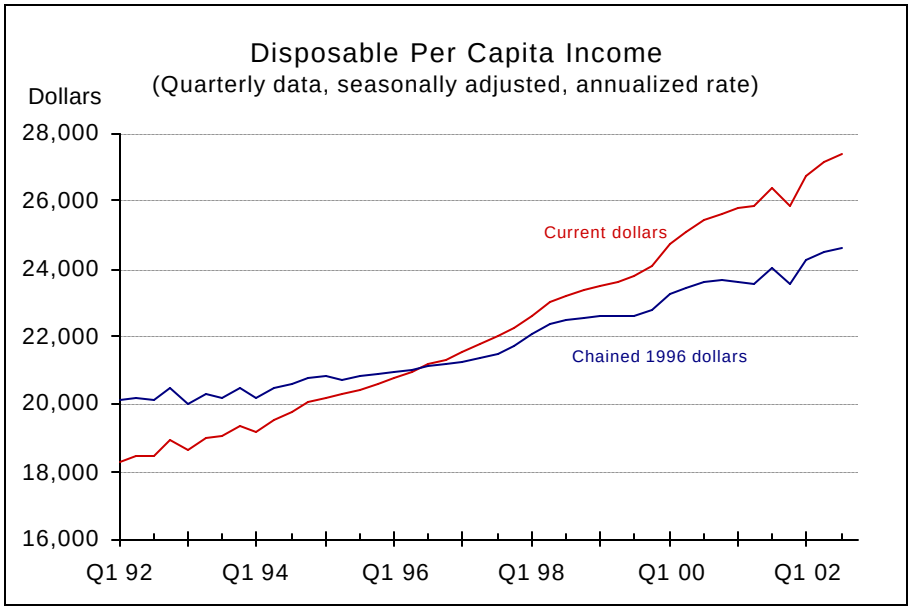
SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis; National Income and Product Accounts data, Tables 1.1 and 1.2; Nov. 26, 2002; available at: http://www.bea.doc.gov/bea/dn/nipaweb/AllTables.asp?Selected=N#S1 ; based on *Survey of Current Business*.



Gross Domestic Product (GDP) growth affects new demand for transportation services.

GDP is the net output of goods and services produced by labor and property located in the United States. Real GDP is expressed in chained 1996 dollars.

DISPOSABLE PERSONAL INCOME



Disposable personal income is a direct measure of how much out-of-pocket money people have available for personal consumption (of goods and services), interest payment, and savings. In recent years, Americans have spent a higher proportion of their disposable income on personal consumption. Between 1991 and 2001, the share of personal consumption in disposable income increased from 89% to 95%, while the share of personal savings decreased from 8.3% to 2.3%. Expenditures on transportation goods and services contributed to the increased share of consumption in total disposable income. Measured in current dollars, transportation expenditures grew 86% between 1991 and 2001, while total personal consumption expenditures grew 76%.

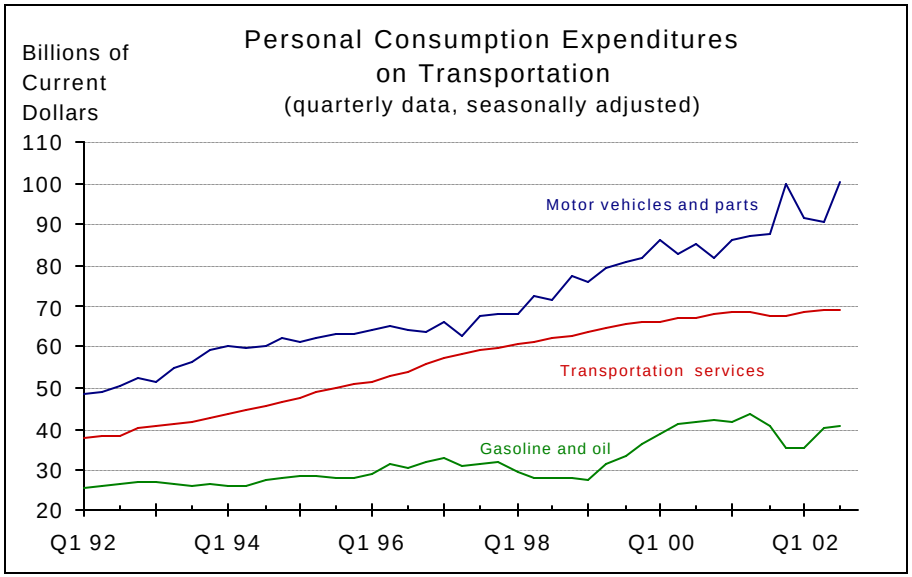
Per Capita Disposable Personal Income	Q2 02	Q3 02
Current dollars (annual rate)	27,124	27,373
Percent change from previous quarter	*1.36*	*0.92*
Chained 1996 dollars (annual rate)	24,461	24,579
Percent change from previous quarter	*0.68*	*0.48*

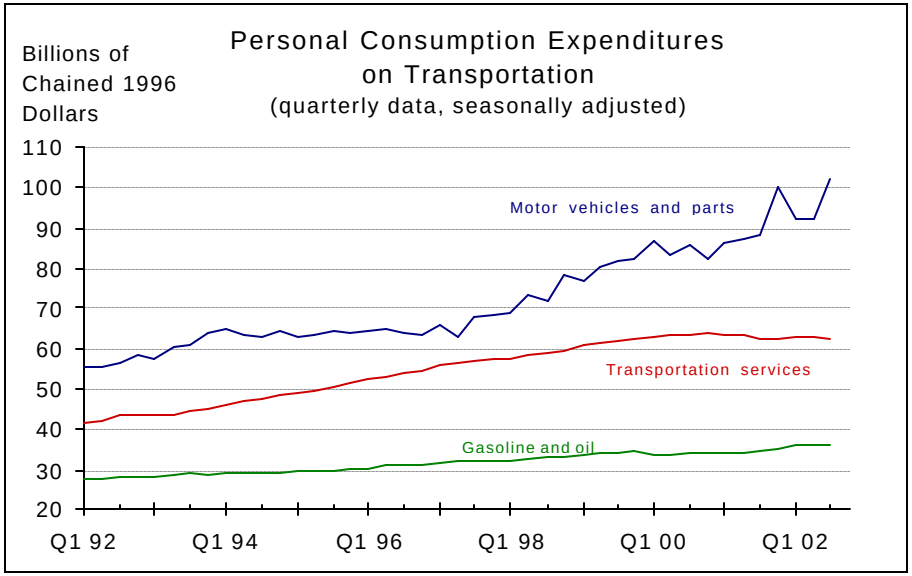
NOTES: Disposable personal income is personal income less personal tax and nontax payments.

Chained 1996 dollars are calculated using chain-type indices, rather than constant dollars, to measure real changes in personal income. The chain-type method first calculates the real changes between adjacent years. Annual rates of real changes between adjacent years are then chained (multiplied) together to obtain the rate of real changes between nonadjacent years. Chained dollars are preferable to constant dollars because it avoids the bias of base year associated with constant dollars.

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis; National Income and Product Accounts data, Table 2.1; Nov. 26, 2002; available at: http://www.bea.doc.gov/bea/dn/nipaweb/AllTables.asp?Selected=N#S2 ; based on *Survey of Current Business*.

PERSONAL SPENDING ON TRANSPORTATION





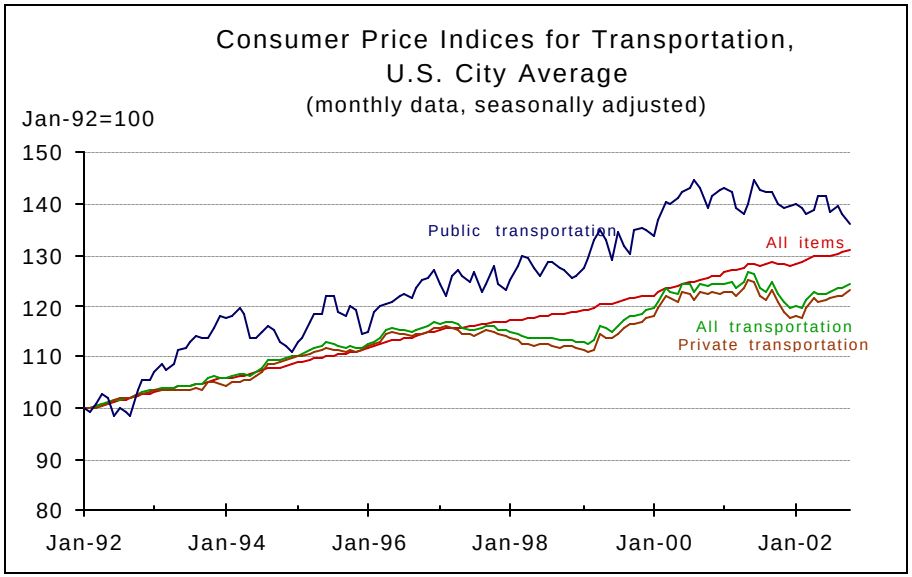
Personal Consumption Expenditures (billions of current dollars)	Q2 02	Q3 02
Motor vehicles and parts	90.53	100.23
Percent change from previous quarter	*-1.01*	*10.72*
Transportation services	68.90	69.03
Percent change from previous quarter	*0.84*	*0.18*
Gasoline and oil	40.18	40.90
Percent change from previous quarter	*12.93*	*1.80*

Personal Consumption Expenditures (billions of chained 1996 dollars)	Q2 02	Q3 02
Motor vehicles and parts	92.28	101.95
Percent change from previous quarter	*-0.24*	*10.48*
Transportation services	62.58	62.45
Percent change from previous quarter	*-0.24*	*-0.20*
Gasoline and oil	36.18	36.38
Percent change from previous quarter	*-0.28*	*0.55*

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis; National Income and Product Accounts data, Tables 2.2 and 2.3;Nov. 26, 2002; available at: http://www.bea.doc.gov/bea/dn/nipaweb/AllTables.asp?Selected=N#S2 ; based on *Survey of Current Business*.

Personal expenditures on transportation are a measure of consumer demand for transportation services. Since expenditures are the product of quantity and price, these expenditures are also influenced by changes in the prices of transportation-related goods and services. To show the "real" changes in demand for transportation services over time, the expenditures are also presented in chained 1996 dollars. The traditional constant dollar measure is different from the chained dollar measure in that chained dollars gets rid of the effects of short-term price shocks, in addition to general inflation effects. Therefore, expenditures measured in chained 1996 dollars reflect changes in quantities. For items with volatile prices, such as gasoline, changes in chained dollar expenditure over time can be very different from changes in current dollar expenditures.

PRICES OF TRANSPORTATION SERVICES PAID BY AMERICAN HOUSEHOLDS



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. For some items, the Bureau of Labor Statistics establishes weights using several years of consumer expenditure surveys in order to smooth out the effects of short-term price shocks and of the business cycle. Weights formed using several years will give a more accurate measure of typical consumer expenditure patterns.

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.

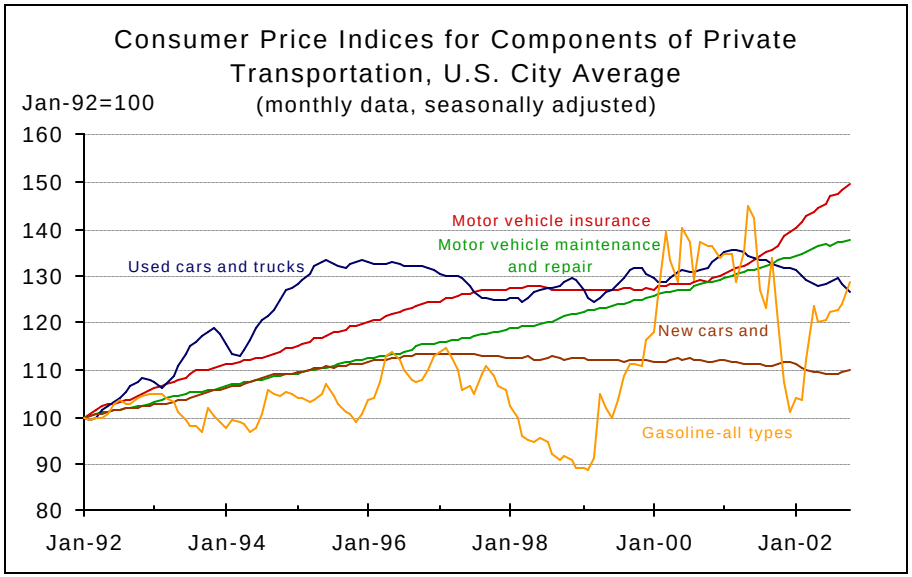
The Consumer Price Index (CPI) tracks the price of a market basket of goods and services purchased by U.S. households over time. Both monthly and annual changes are reported in the tables for the CPI in order to facilitate comparison with other series.

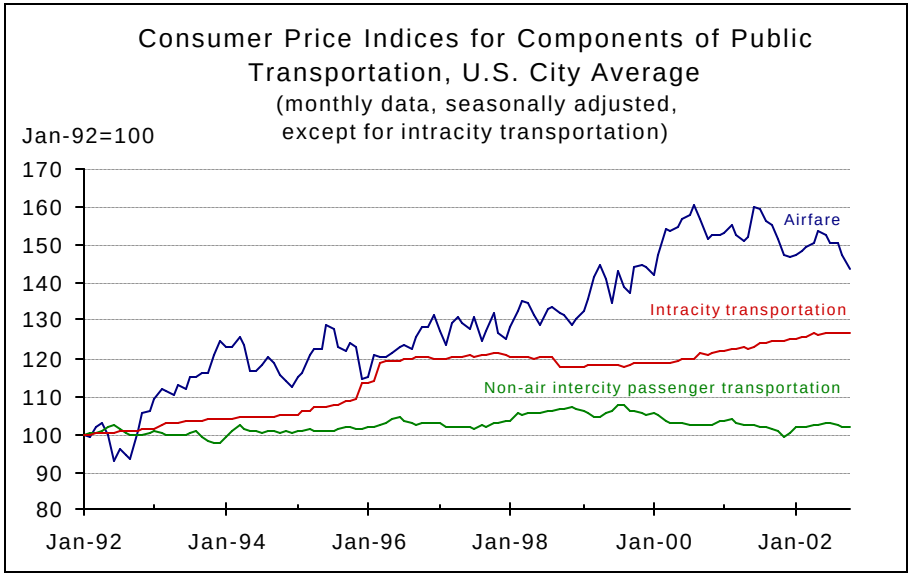
Price Index (Jan-92=100)	Sep-02	Oct-02
Public transportation	138.2	136.0
Percent change from previous month	*-0.91*	*-1.55*
All items	130.6	131.0
Percent change from previous month	*0.17*	*0.28*
All transportation	123.8	124.6
Percent change from previous month	*0.26*	*0.58*
Private transportation	122.3	123.2
Percent change from previous month	*0.33*	*0.73*

Price Index (Jan-92=100)	Oct-01	Oct-02
Public transportation	139.9	136.0
Percent change from same month previous year	*0.53*	*-2.78*
All items	128.3	131.0
Percent change from same month previous year	*2.13*	*2.08*
All transportation	122.4	124.6
Percent change from same month previous year	*-1.36*	*1.77*
Private transportation	120.7	123.2
Percent change from same month previous year	*-1.53*	*2.02*

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics; December 4, 2002; available at: http://www.bls.gov/cpi/.

CONSUMER PRICES FOR TRANSPORTATION





Price Index (Jan-92=100)	Sep-02	Oct-02
Motor vehicle insurance	148.4	149.5
Percent change from previous month	*0.71*	*0.78*
Motor vehicle maintenance and repair	137.4	137.5
Percent change from previous month	*0.00*	*0.10*
Used cars and trucks	128.5	126.4
Percent change from previous month	*-0.85*	*-1.64*
New cars and trucks	109.6	110.0
Percent change from previous month	*0.50*	*0.36*
Gasoline all types	123.9	128.7
Percent change from previous month	*1.01*	*3.83*
Airfare	147.4	143.8
Percent change from previous month	*-2.13*	*-2.43*
Intracity transportation (not seasonally adjusted)	126.5	126.6
Percent change from previous month	*0.00*	*0.05*
Non-air intercity passenger transportation	102.1	102.2
Percent change from previous month	*-0.32*	*0.06*

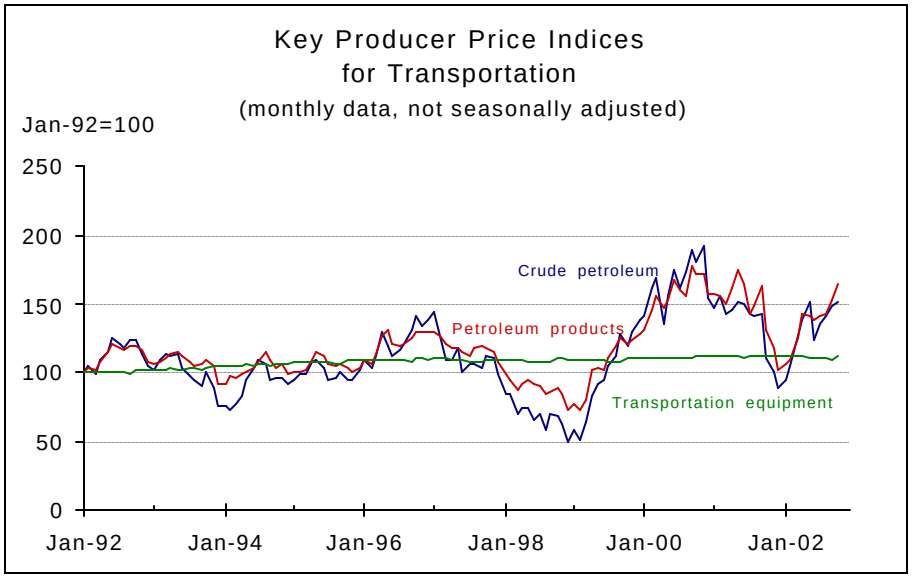
NOTES: Other intercity passenger transportation consists of Amtrak, commuter rail, buses, and other for-hire nonair modes of transportation between urban areas.

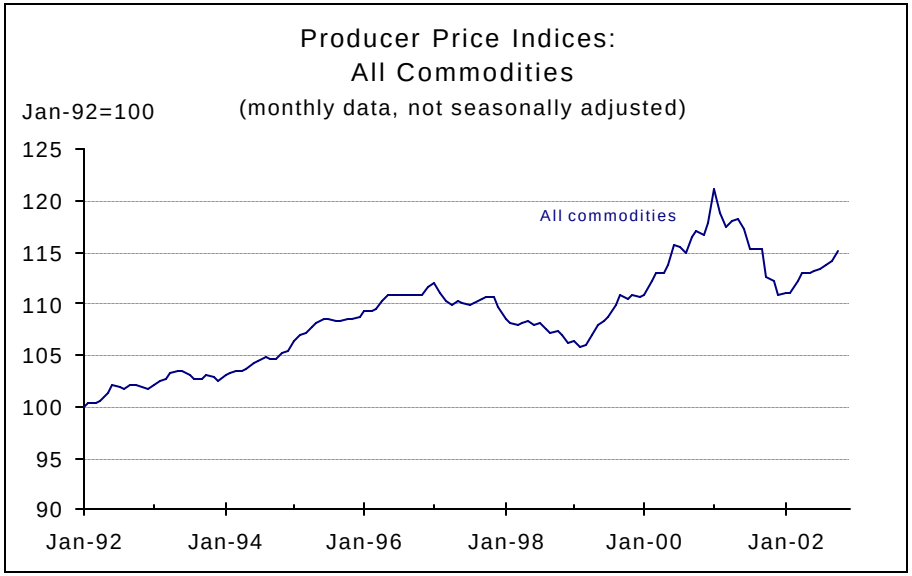
The base period of the original index is 1982-84. January 1992 is set to be the new reference point (=100) by dividing the values of the original index by the value of January 1992 in the original index. It is important to point out that this process changes only the reference point, and not the base period of the index because the weight structure of the index did not change.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics; December 4, 2002; available at: http://www.bls.gov/cpi/.

The transportation component index of the CPI shows changes in transportation prices for consumers, and includes motor vehicle insurance, maintenance and repair, used and new cars and trucks, gasoline (all types), air fare, and intercity transportation.

PRODUCER PRICES OF KEY TRANSPORTATION INPUTS





Price Index (Jan-92=100)	Oct-01	Oct-02
Petroleum products	131.0	165.9
Percent change from same month previous year	*-24.02*	*26.59*
Crude Petroleum	110.9	151.1
Percent change from same month previous year	*-38.88*	*36.20*
All commodities	112.7	115.1
Percent change from same month previous year	*-3.77*	*2.15*
Transportation equipment	112.5	112.5
Percent change from same month previous year	*0.41*	*0.00*

NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

The base period of the original index is 1982. 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 st ructure of the index did not change.

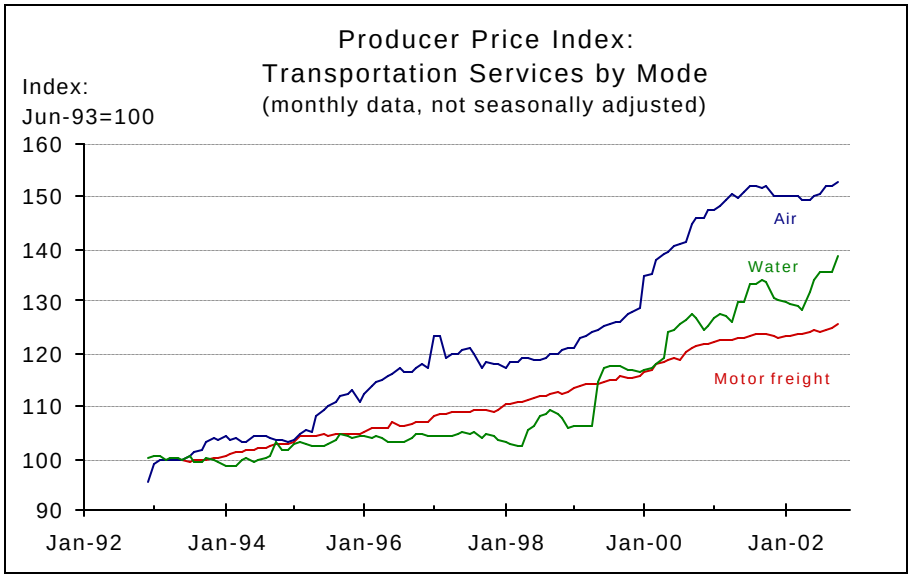
Data from July 2002 to October 2002 are preliminary. A more complete description of producer prices is given in Chapter 14 of the *BLS Handbook of Methods*, available at: http://www.bls.gov/opub/hom/homch14_e.htm.

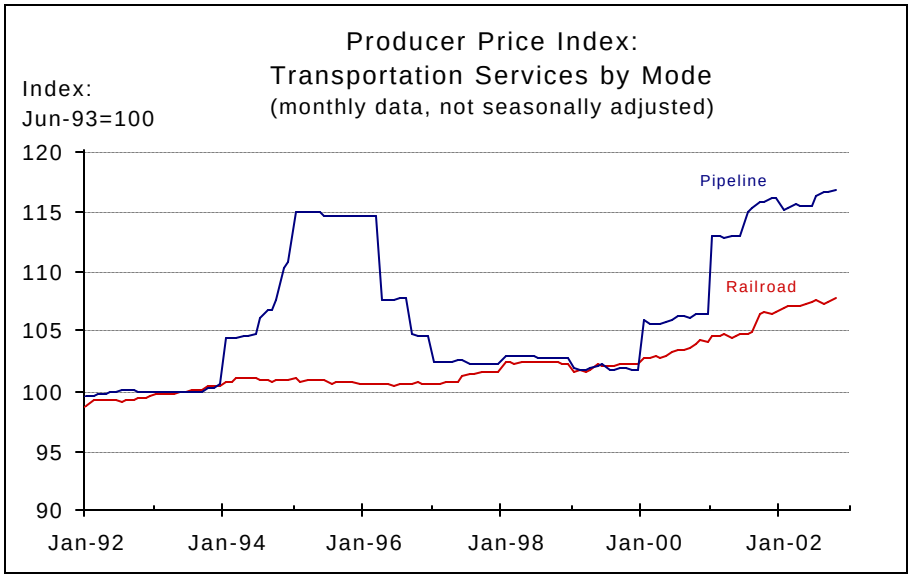
SOURCE: U.S. Department of Labor, Bureau of Labor Statistics; December 4, 2002; available at: http://www.bls.gov/ppi/.

Producer prices are those charged for the output of firms in a particular industry, or by all firms, regardless of industrial classification, for a particular commodity. These prices exclude markups at later stages of processing and the retail level. Producer prices reflect prices charged to anyone purchasing directly from the firm, including consumers, when the firm also serves as a retailer.

Changes in producer prices for transportation inputs suggest the direction of future costs for providing transportation services. Motor vehicle prices are strongly seasonal, declining as the model year culminates each September.

PRODUCER PRICES OF FOR-HIRE TRANSPORTATION SERVICES





Price Index (Jun-93=100)	Oct-01	Oct-02
Air transportation	152.1	152.7
Percent change from same month previous year	*4.20*	*0.44*
Water transportation	133.9	138.8
Percent change from same month previous year	*5.53*	*3.67*
Motor freight transportation and warehousing	123.6	125.4
Percent change from same month previous year	*1.81*	*1.46*
Pipelines, excluding natural gas	115.9	116.8
Percent change from same month previous year	*8.86*	*0.81*
Railroad transportation	106.5	107.7
Percent change from same month previous year	*2.52*	*1.10*

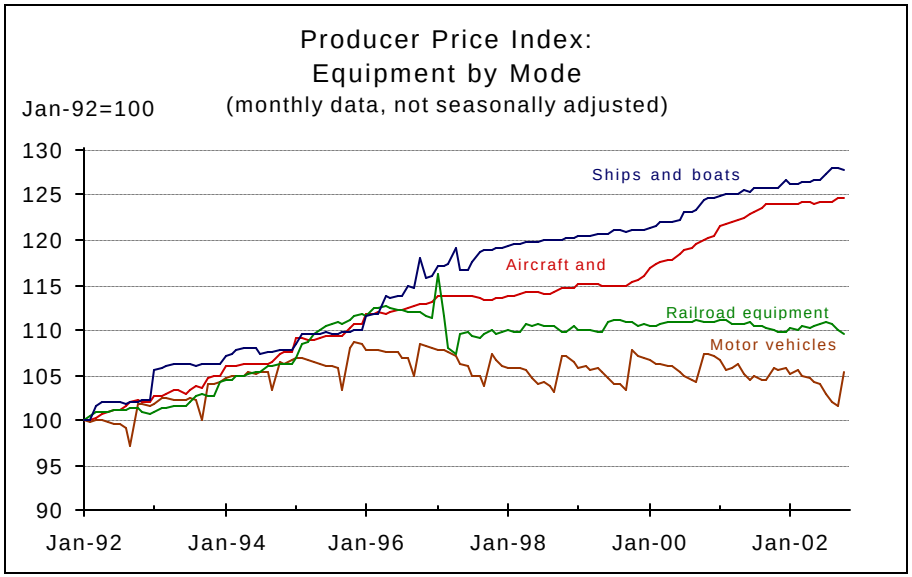
NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

Data from July 2002 to October 2002 are preliminary. The original data for the indices in this table have different base periods. For comparability, the indices have been adjusted to have a common reference point (Jun-93).

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics; December 4, 2002; available at: http://www.bls.gov/ppi/.

Producer prices reflect prices charged to anyone, including consumers when the firm also serves as a retailer. Actual prices to users of transportation services will differ due to substitution between domestic and foreign markets, and substitution between user-and market-provided services.

PRODUCER PRICES FOR TRANSPORTATION EQUIPMENT



Price Index (Jan-92=100)	Oct-01	Oct-02
Ships and boats	125.8	127.8
Percent change from same month previous year	*1.01*	*1.59*
Aircraft and parts	123.9	124.6
Percent change from same month previous year	*3.29*	*0.54*
Railroad equipment	109.9	109.6
Percent change from same month previous year	*-0.88*	*-0.30*
Motor vehicles and motor vehicle equipment	105.8	105.4
Percent change from same month previous year	*-1.35*	*-0.30*

NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

The base period of the original index is 1982. 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 st ructure of the index did not change.

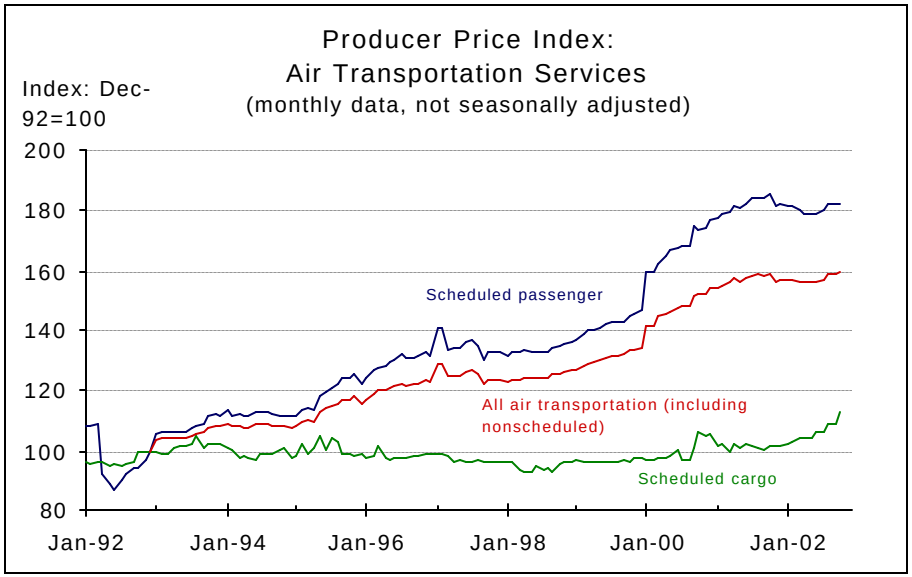
Data from July 2002 to October 2002 are preliminary.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics; December 4, 2002; available at: http://www.bls.gov/ppi/.

Equipment cost accounts for approximately 47 percent of the total cost of user-operated transportation services. In the past decade, producer prices for transportation equipment have undergone a gradual but consistent increase. Increases in the producer prices for aircraft and parts and for ships and boats contributed most significantly to the rise in overall producer prices for transportation equipment. The increase in producer prices for railroad equipment and motor vehicles has been much slower, remaining at nearly the same level since 1997.

Motor vehicle prices are strongly seasonal, declining as the model year culminates each September.

PRODUCER PRICES OF AIR TRANSPORTATION SERVICES



Price Index (Dec-92=100)	Oct-01	Oct-02
Scheduled air transportation - passenger	185.5	182.2
Percent change from same month previous year	*6.79*	*-1.77*
All air transportation (including nonscheduled)	158.9	159.6
Percent change from same month previous year	*4.20*	*0.44*
Scheduled air transportation - cargo	101.5	113.2
Percent change from same month previous year	*-4.27*	*11.51*

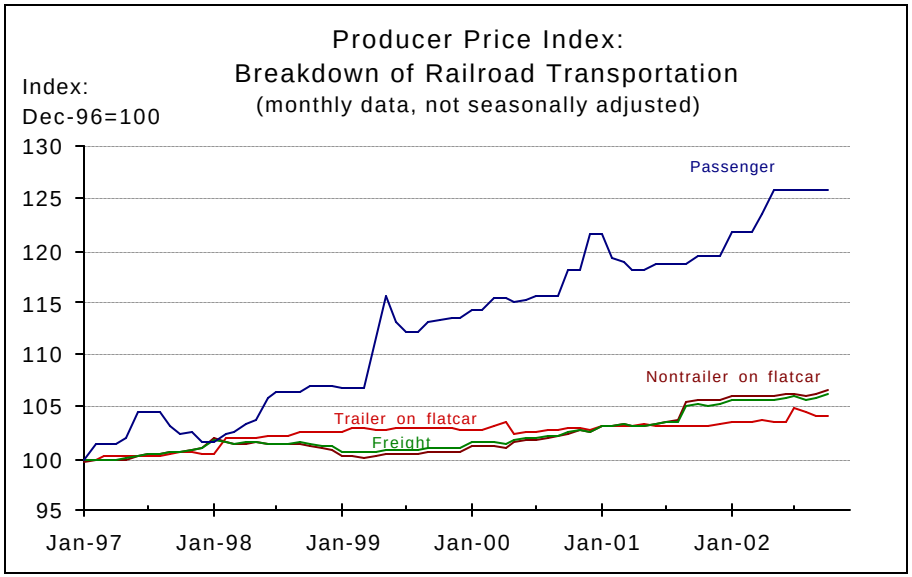
NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

Data from July 2002 to October 2002 are preliminary.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics; December 4, 2002; available at: http://www.bls.gov/ppi/.

Producer prices for scheduled air transportation services represent prices for business and personal travel, as well as shipment of high-value freight. Because producers also act as retailers, a change in prices charged by airlines is immediately passed on to consumers.

PRODUCER PRICES OF RAILROAD TRANSPORTATION SERVICES



NOTE: U.S Department of Labor, Bureau of Labor Statistics reports missing data for April 1999 for passenger transportation.

Price Index (Dec-96=100)	Oct-01	Oct-02
Passenger	119.5	125.8
Percent change from the same month previous year	*1.10*	*5.98*
Nontrailer on flatcar	105.6	106.6
Percent change from the same month previous year	*3.02*	*0.95*
Freight	105.2	106.2
Percent change from the same month previous year	*2.53*	*0.95*
Trailer on flatcar	103.2	104.1
Percent change from the same month previous year	*0.19*	*0.87*

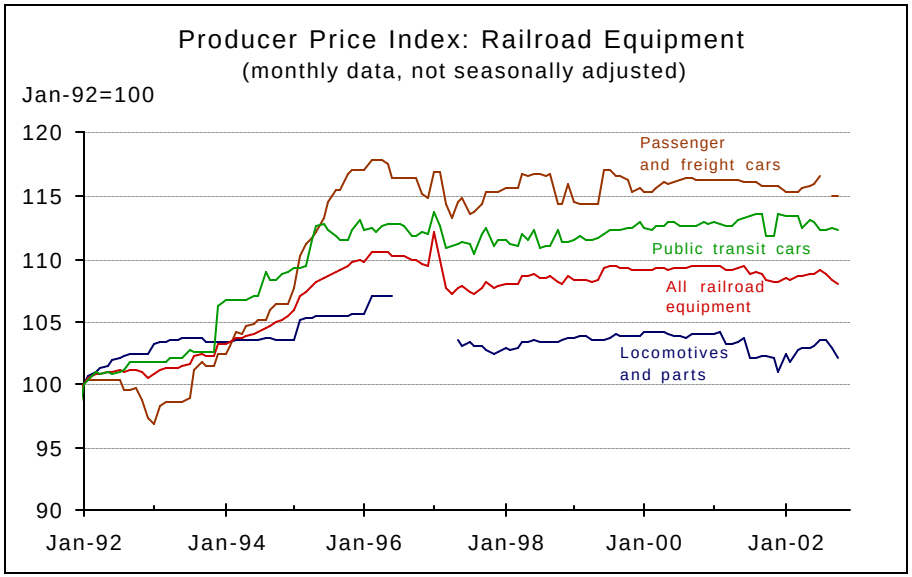
NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

Data from July 2002 to October 2002 are preliminary.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics; December 4, 2002; available at: http://www.bls.gov/ppi/.

Producer prices for rail transportation indicate prices to producers for freight and to passengers for intercity travel. Rail transportation of trailers is an important component of intermodal freight transportation. See indicator for prices of transportation services for the aggregated producer price index for rail transportation services.

PRODUCER PRICES OF RAILROAD EQUIPMENT



Rail equipment represents a major cost to rail service providers.

Price Index (Jan-92=100)	Oct-01	Oct-02
Passenger and freight cars, new (excluding parts)	111.8	112.3
Percent change from same month previous year	*-0.83*	*0.5*
Public transit cars, all rebuilt cars, and all car parts	115.8	114.9
Percent change from same month previous year	*-0.31*	*-0.77*
All railroad equipment	102.3	102.0
Percent change from same month previous year	*-1.71*	*-0.24*
Locomotives and parts	108.4	108.1
Percent change from same month previous year	*-0.93*	*-0.31*

NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

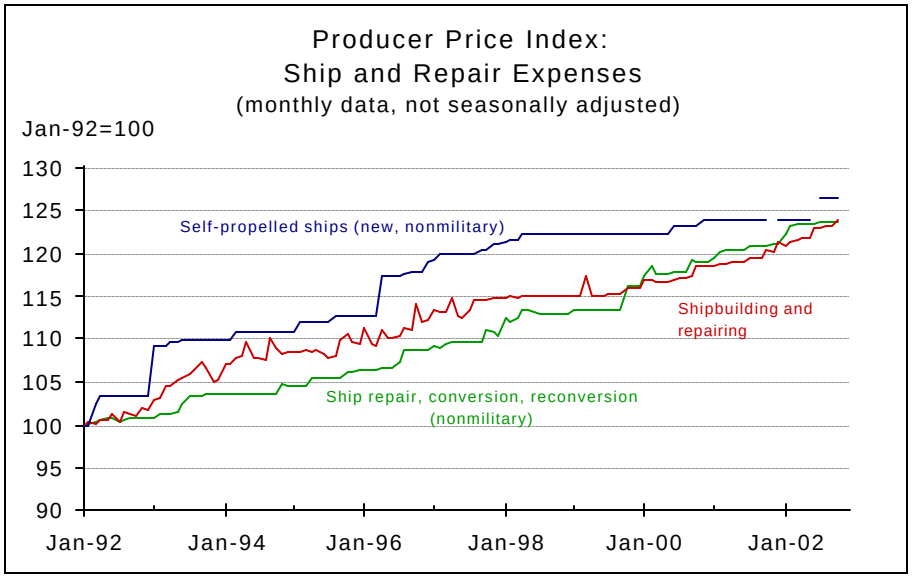
Data from July 2002 to October 2002 are preliminary. The series presented on this page use an industry-based PPI, rather than the commodity-based PPI used for "Producer Prices of Key Transportation Inputs," because the industry-based PPI was less affected by these events.

The base period of the original index is June 1984. 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.

Data for Passenger and Freight Cars was not available for August 2002. Data for July 1996 to April 1997 for locomotives were affected by a strike at GM, and a revision of the BLS weighting scheme. Data for this period are anomalous, and are not depicted in the graph.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics; December 4, 2002; available at: http://www.bls.gov/ppi/.

PRODUCER PRICES OF EQUIPMENT AND REPAIR SERVICES FOR WATER TRANSPORTATION



Shipbuilding and repair expenses are major costs in providing water transportation services.

Price Index (Jan-92=100)	Oct-01	Oct-02
Self-propelled ships (new, nonmilitary)	123.9	126.5
Percent change from same month previous year	*0.50*	*2.11*
Ship building and repairing	120.4	123.8
Percent change from same month previous year	*1.58*	*2.83*
Ship repair, conversion, reconversion (nonmilitary)	121.0	123.7
Percent change from same month previous year	*1.55*	*2.26*

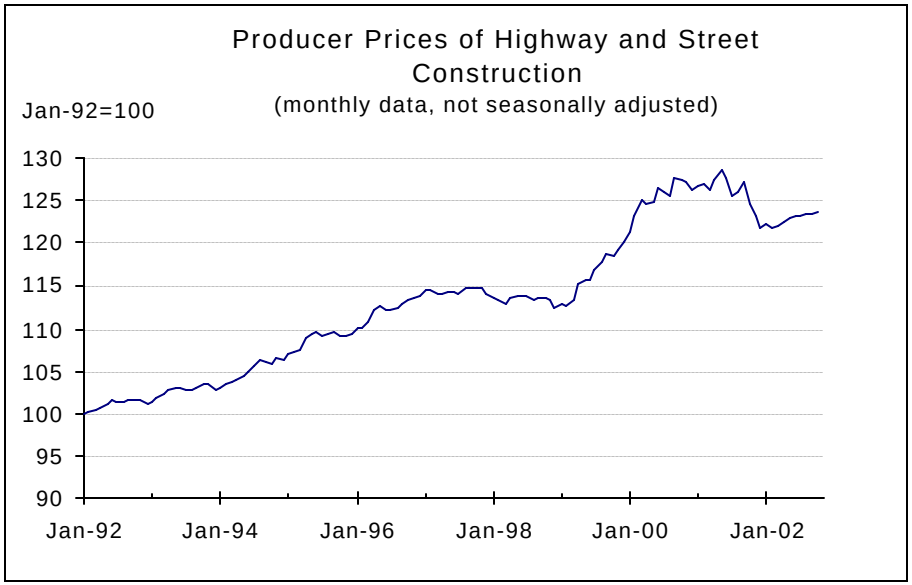
NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

The base period of the original index is December 1985. 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.

Data from July 2002 to October 2002 are preliminary. Data for new, nonmilitary self-propelled ships was not available for November 2001 or June 2002.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics; December 4, 2002; available at: http://www.bls.gov/ppi/.

PRODUCER PRICES OF HIGHWAY AND STREET CONSTRUCTION



Construction prices for highway and streets represent the price to government in providing a key component of transportation infrastructure.

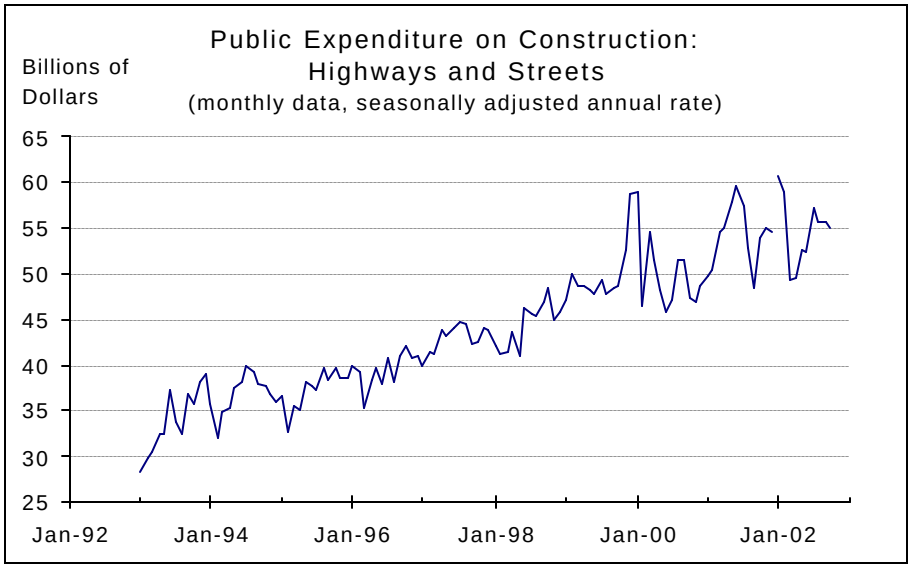
Producer Price Index (Jan-92=100)	Oct-01	Oct-02
Highways and Streets	124.4	123.6
Percent change from same month previous year	*-2.24*	*-0.66*

NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

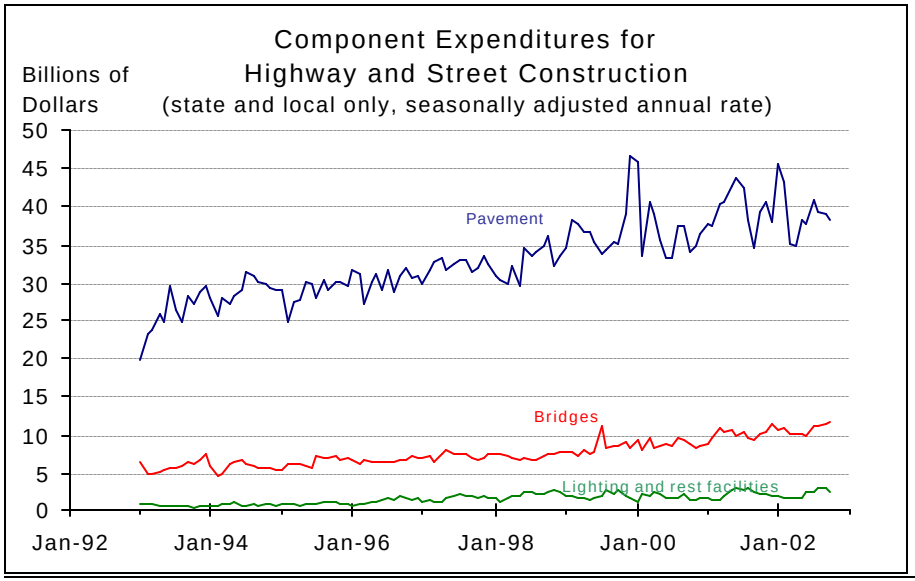
Data from July 2002 to October 2002 are preliminary. Data not available for June 2002. The base period of the original index is June 1986. January 1992 is set to be the new reference point (=100) by dividing the values of the original index by the value of January 1992 in the original index. It is important 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.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics; December 4, 2002; available at: http://www.bls.gov/ppi/.

PUBLIC EXPENDITURES ON CONSTRUCTION OF HIGHWAYS AND STREETS



NOTE: Data from 1993 to 2001 include state and local expenditures only. Data for the estimation of Federal expenditures were not published until January 2002. There is a break in the line to show where the change occurs. The resulting increase is less than 2 percent.



Public Expenditure on Construction	Sep-02	Oct-02
Total public expenditures on roadways (millions)	55,677	54,854
Percent change from previous month	*0.00*	*-1.48*
Total state and local expenditures (millions)	54,935	54,090
Percent change from previous month	*0.17*	*-1.54*
Total Federal expenditures (millions)	742	764
Percent change from previous month	*-10.92*	*2.96*

Component Expenditures for Highway and Street Construction (state and local only)	Sep-02	Oct-02
Pavement (millions)	39,138	38,213
Percent change from previous month	*-0.31*	*-2.36*
Bridges (millions)	11,429	11,794
Percent change from previous month	*1.99*	*3.19*
Lighting and rest facilities (millions)	2,777	2,358
Percent change from previous month	*-1.14*	*-15.09*

NOTES: The data have changed due to new Census Bureau estimating methodologies. The series used previously is still published; however, the series on this page are comparable to the series found on the following pages. More information is available at: http://www.census.gov/pub/const/C30/newtc.html.

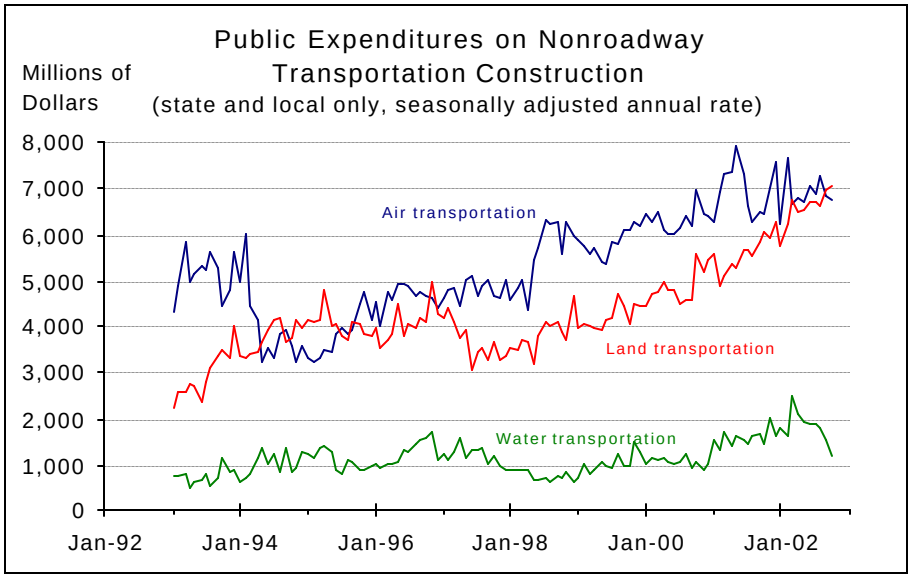
Construction includes new buildings, renovations, mechanical and electrical installations, site preparation, and other materials and structures incidental to construction. Maintenance is not included.

Federal data is not disaggregated at the monthly level, and no yearly data exists because data publication started in 2002. There are additional state and local 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; Dec. 2, 2002; available at: http://www.census.gov/pub/const/C30/newtc.html.

Highways and streets are the largest component of public transportation infrastructure spending. Pavement is by far the largest part of that spending, accounting for 73 percent of state and local roadway expenditures in 2001.

PUBLIC EXPENDITURES ON NONROADWAY TRANSPORTATION CONSTRUCTION



Public Expenditures on Nonroadway Transportation Construction	Sep-02	Oct-02
State and local transportation (millions)	15,343	14,993
Percent change from previous month	*-2.11*	*-2.28*
Land transportation (state and local, millions)	6,958	7,052
Percent change from previous month	*5.19*	*1.35*
Air transportation (state and local, millions)	6,841	6,746
Percent change from previous month	*-5.68*	*-1.39*
Water transportation (state and local, millions)	1,544	1,195
Percent change from previous month	*-14.51*	*-22.60*
Federal transportation (millions)	1,728	1,796
Percent change from previous month	*-4.05*	*3.94*

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.

NOTES: Federal data is not disaggregated at the monthly level, and no yearly data exists yet because data publication started in 2002. Federal transportation includes combined data for air, land, and water categories; however, the specific modal spending categories listed in the table are for state and local only.

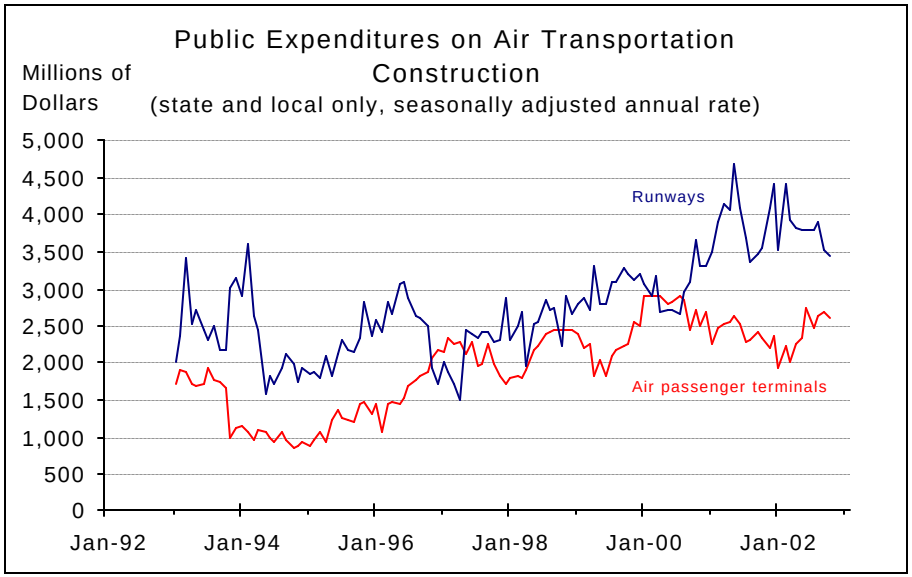
Air transportation includes passenger terminals, runways, air traffic control towers, hangars, and other related facilities and structures. Land transportation includes passenger terminals, mass transit, railroads, and other related facilities and structures. Water transportation includes wharves, dry docks, marine terminals, and other related facilities and structures.

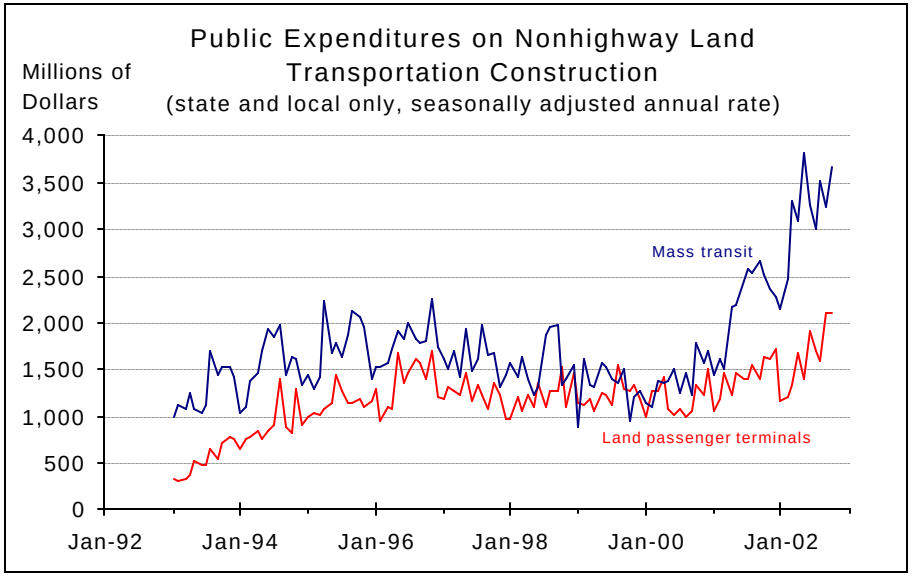
There are additional modal components that are published on the following page.

Information on the reliability of estimates is available at: http://www.census.gov/pub/const/AppendixC.pdf.

SOURCE: U.S. Department of Commerce, Bureau of the Census; Dec. 2, 2002; available at: http://www.census.gov/pub/const/C30/newtc.html.

PUBLIC EXPENDITURES FOR AIR AND LAND TRANSPORTATION CONSTRUCTION: SELECTED ITEMS





Public Expenditures on Transportation Construction (state and local only)	Sep-02	Oct-02
Runways (millions)	3,533	3,455
Percent change from previous month	*-9.20*	*-2.21*
Air passenger terminals (millions)	2,663	2,598
Percent change from previous month	*2.03*	*-2.44*
Mass transit (millions)	3,233	3,658
Percent change from previous month	*-7.79*	*13.15*
Land passenger terminals (millions)	2,101	2,089
Percent change from previous month	*32.56*	*-0.57*

NOTES: Data are for state and local expenditures only. Detailed monthly Federal expenditures are not available within modes.

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

Land passenger terminals include bus and railroad terminals. Mass transit includes light rail, monorail, streetcar, and subway facilities. Other categories that are included in the land transportation total (previous page) but do not have monthly state and local estimates are maintenance facilities, freight terminals, and railroads.

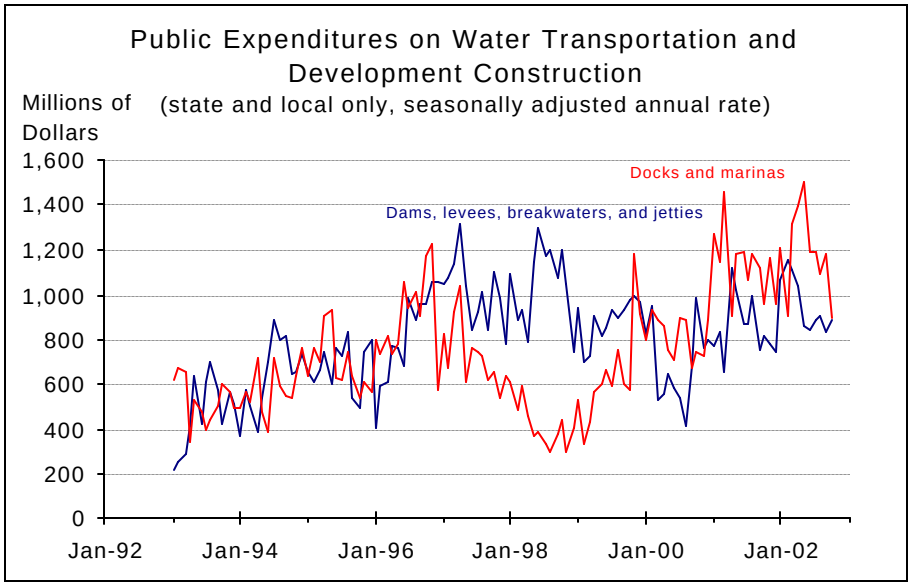
Information on the reliability of estimates is available at: http://www.census.gov/pub/const/AppendixC.pdf.

SOURCE: U.S. Department of Commerce, Bureau of the Census; Dec. 2, 2002; available at: http://www.census.gov/pub/const/C30/newtc.html.

It is estimated that state and local governments invested more than 41 billion dollars in runway and air passenger terminal construction between 1993 and 2001.

Public expenditures for mass transit construction increased rapidly between the beginning of 2001 and the middle of 2002, doubling the rate of expenditures.

PUBLIC EXPENDITURES ON WATER TRANSPORTATION AND DEVELOPMENT CONSTRUCTION



Dams and levees help to maintain navigability on inland waterways. Breakwaters and jetties are vital to navigability on coastal waterways and at ports. Dredging is another important category of expenditures, accounting for an estimated 134 million dollars of state and local expenditures in 2001.

Public Expenditures on Water Transportation and Development Construction (state and local only)	Sep-02	Oct-02
Docks and marinas (millions)	1,176	895
Percent change from previous month	*7.79*	*-23.89*
Dams, levees, breakwaters, and jetties (millions)	836	893
Percent change from previous month	*-8.23*	*6.82*

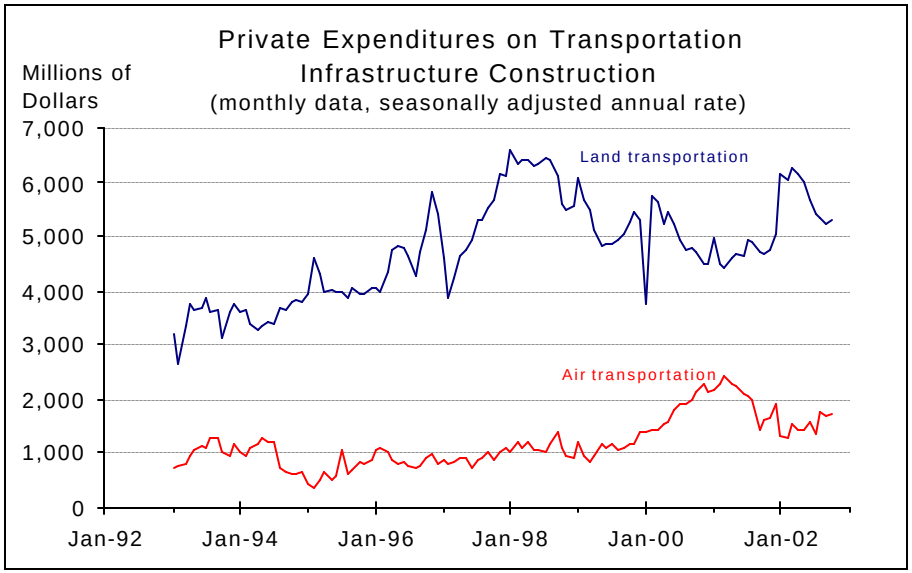
NOTES: Docks and marinas are a component of the Water transportation category in the indicator "Public Expenditures on Nonroadway Transportation Construction."

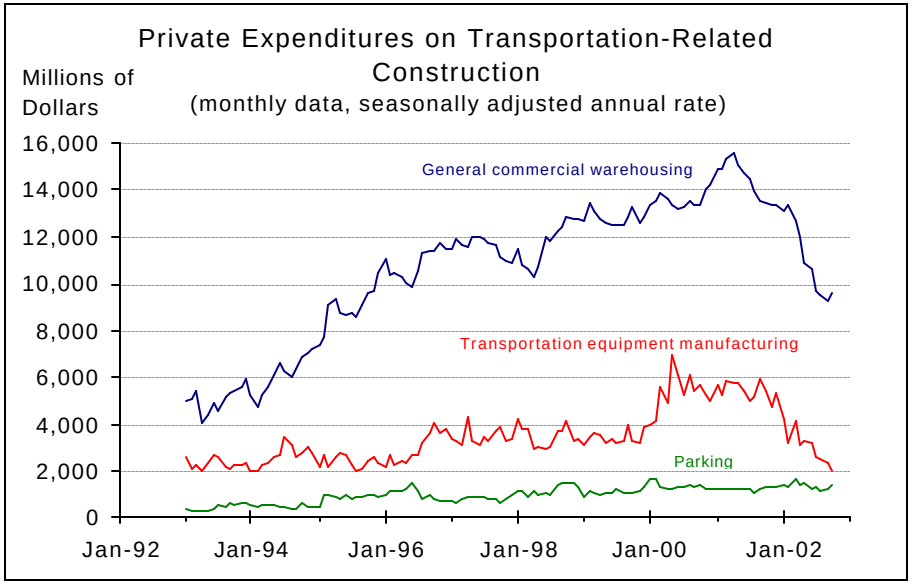
Dam/levee and breakwater/jetty are the two monthly published components of the Conservation and Development category from the Census Bureau data. Dam/levee includes non-power dams, dikes, locks, and lock gates. Breakwater/jetty includes bulkheads, erosion control, retaining walls, and other similar structures. In addition, annual estimates for nonirrigation related dredging are published.

Information on the reliability of estimates is available at: http://www.census.gov/pub/const/AppendixC.pdf.

SOURCE: U.S. Department of Commerce, Bureau of the Census; Dec. 2, 2002; available at: http://www.census.gov/pub/const/C30/newtc.html.

PRIVATE EXPENDITURES ON TRANSPORTATION AND RELATED CONSTRUCTION





Private Expenditures on Transportation Infrastructure Construction	Sep-02	Oct-02
Total private transportation (millions)	7,078	7,163
Percent change from previous month	*-2.06*	*1.20*
Land transportation (millions)	5,211	5,296
Percent change from previous month	*-2.07*	*1.63*
Air transportation (millions)	1,679	1,708
Percent change from previous month	*-4.22*	*1.73*

Private Expenditures on Transportation-Related Construction	Sep-02	Oct-02
General commercial warehousing (millions)	9,298	9,630
Percent change from previous month	*-2.89*	*3.57*
Transportation equipment manufacturing (millions)	2,336	1,955
Percent change from previous month	*-5.19*	*-16.31*
Parking (millions)	1,218	1,348
Percent change from previous month	*11.64*	*10.67*

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.

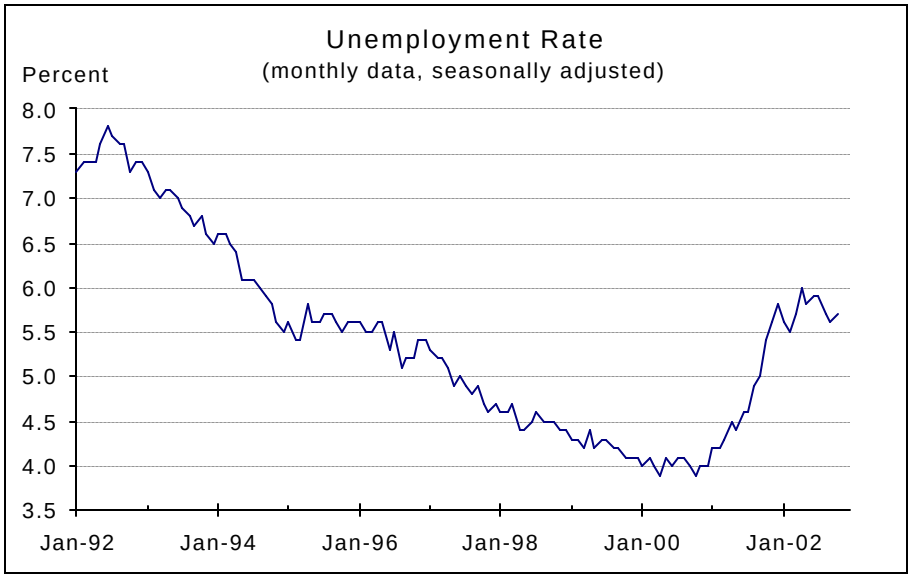
General commercial warehousing includes commercial warehouses, storage warehouses, and distribution buildings. Transportation equipment manufacturing includes construction related to transportation equipment-producing industries. Parking includes commercial parking lots and garages.

SOURCE: U.S. Department of Commerce, Bureau of the Census; Dec. 2, 2002; available at: http://www.census.gov/pub/const/C30/newtc.html.

Railroad construction accounted for 87 percent of private land transportation construction in 2001.

General commercial warehousing and parking construction expenditures both nearly tripled between 1993 and 2001.

UNEMPLOYMENT RATE



Civilian Labor Force	Sep-02	Oct-02
Unemployment rate (percent)	5.6	5.7
Number of unemployed (thousands)	*8,092*	*8,209*

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Overall BLS Most Requested Series; December 2002; available at : http://stats.bls.gov/data/home.htm.

The generally low unemployment rate in recent years suggests a tight labor market for industry in general, which includes transportation firms. It also suggests increased demand for transportation to and from work, as well as for leisure travel.

UNEMPLOYMENT RATES FOR SELECTED METROPOLITAN AREAS AND CITIES, OCTOBER 2001 AND 2002 (in percent)

Ranked by Metropolitan Area Unemployment, October 2002

City	October 2001		October 2002	
	Metropolitan Area	City	Metropolitan Area	City
Portland, OR-WA CMSA	6.9	7.8	6.8	8.0
Miami, FL CMSA	7.1	11.6	6.6	10.4
Seattle, WA CMSA	6.2	7.2	6.4	7.2
Chicago, IL-IN-WI CMSA	5.3	6.9	6.2	8.0
Dallas, TX CMSA	5.3	7.2	6.2	8.3
Fort Worth, TX		6.1		7.4
San Francisco, CA CMSA	5.3	6.6	6.1	6.7
Oakland, CA		9.2		10.1
San Jose, CA		8.1		9.3
Cleveland, OH CMSA	4.8	9.1	5.7	11.6
Houston, TX CMSA	4.5	5.4	5.7	6.8
New York, NY-NJ-CT-PA CMSA	5.1	6.9	5.7	7.9
Los Angeles, CA CMSA	5.5	7.0	5.7	6.9
Long Beach, CA		5.7		5.6
Phoenix, AZ MSA	4.8	5.3	5.4	5.9
Philadelphia, PA-NJ-DE-MD CMSA	4.5	6.7	5.2	7.7
Denver, CO CMSA	4.4	5.3	5.2	6.2
Detroit, MI CMSA	5.2	10.4	5.1	10.5
Boston, MA-NH-ME-CT CMSA	4.1	4.7	5.1	5.5
Atlanta, GA MSA	4.1	6.9	4.9	8.0
St. Louis, MO-IL MSA	5.0	8.3	4.8	8.2
Pittsburgh, PA MSA	4.1	3.9	4.7	4.9
Tampa, FL MSA	4.2	5.1	4.4	5.4
Cincinnati, OH-KY-IN CMSA	3.9	5.6	4.4	7.0
San Diego, CA MSA	3.7	3.8	4.2	4.3
Washington, DC-MD-VA-WV CMSA	4.1	6.6	3.7	6.0
Baltimore, MD		8.1		7.2
Minneapolis, MN-WI MSA	3.5	4.4	3.6	4.3

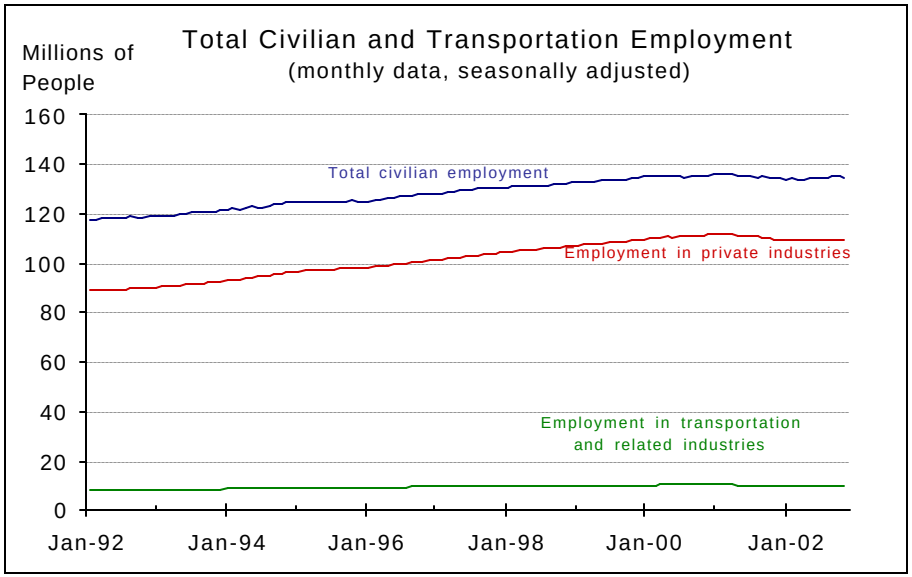
NOTES: Cities with population greater than 400,000 that are part of the CMSA, but not the city listed as the main city, have unemployment listed below that of the main city.

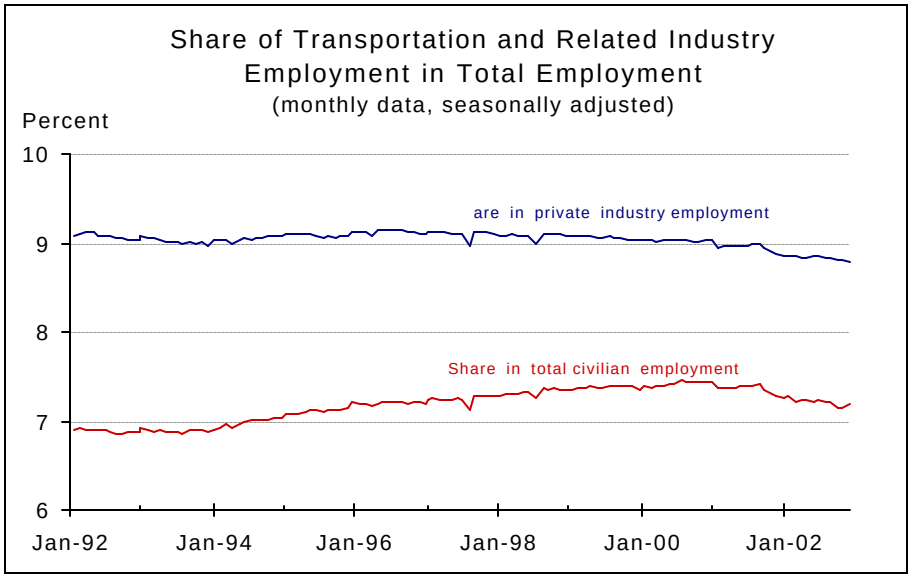
Definitions of Metropolitan Statistical Area (MSA) and Consolidated Metropolitan Statistical Area (CMSA) are available on the Census Bureau web site at: http://www.census.gov/population/www/estimates/aboutmetro.html.

In recent updates of local unemployment statistics, substate estimates back through 1999 were revised. All fifty states and the District of Columbia are affected. Additionally, there are historical revisions that go farther back for California, Delaware, Florida, Georgia, and Illinois. More information is available at: http://www.bls.gov/lau/launews1.htm.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics; Dec. 4, 2002; available at: http://www.bls.gov/data/home.htm.

TRANSPORTATION EMPLOYMENT





Employment (thousands)	Oct-02	Nov-02
Total civilian employment	134,914	134,225
Percent change from previous month	*-0.20*	*-0.51*
Employment in private industries	109,569	109,521
Percent change from previous month	*-0.04*	*-0.04*
Employment in transport and related industries	9,659	9,650
Percent change from previous month	*-0.03*	*-0.09*

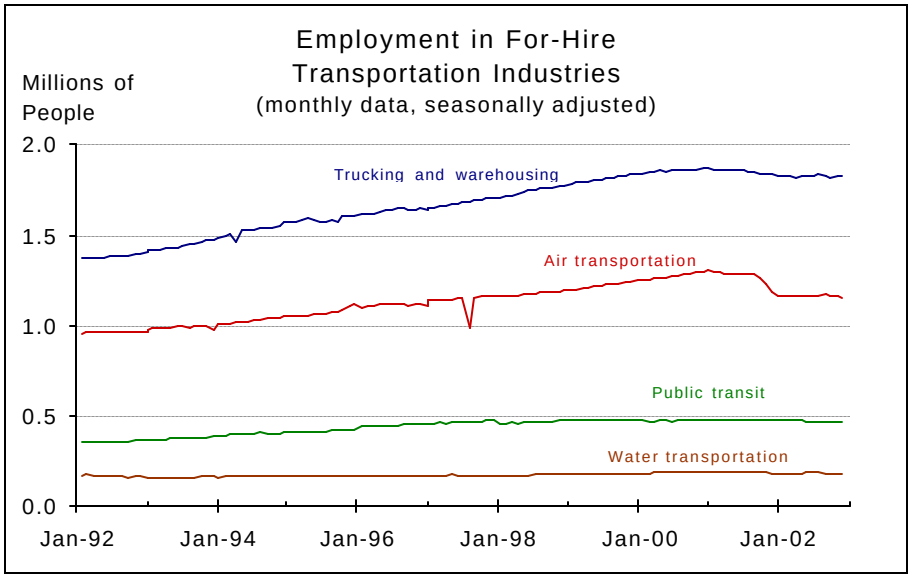
Share of Transportation and Related Industry Employment (percent)	Oct-02	Nov-02
As share of private industry employment	7.16	7.19
Change from previous month	*0.17*	*0.42*
As share of total civilian employment	8.82	8.81
Change from previous month	*0.01*	*-0.05*

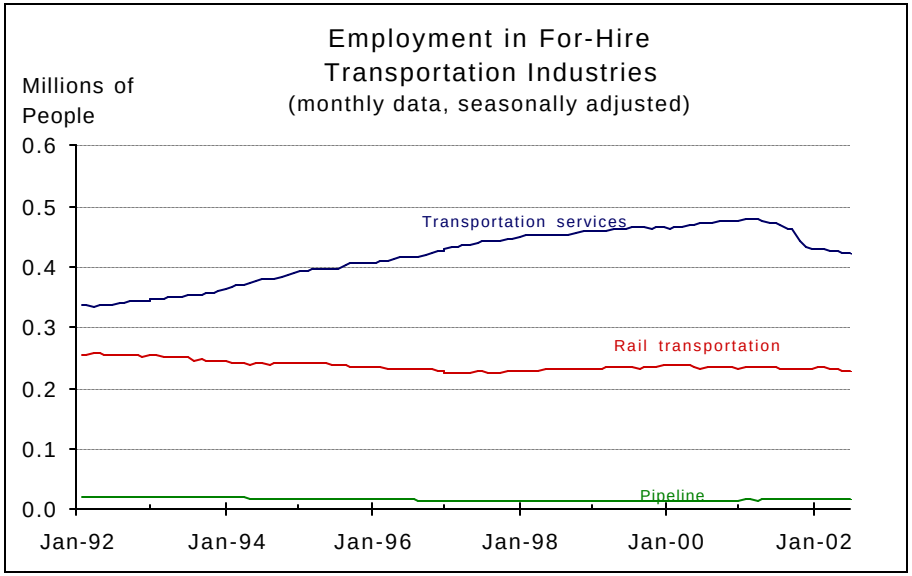
SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Employment Status of Civilian Population by Sex and Age ("A" Tables) and Employees on Nonfarm Payrolls by Industry ("B" Tables), available at: http://www.bls.gov/cps/home.htm.

One broad measure of transportation employment is employment in transportation-related industries, including for-hire transportation (railroad, trucking, air, water, pipeline, transit, and transportation services) and industries that support transportation directly (e.g., motor vehicle and equipment manufacturing, aircraft manufacturing, auto dealers and service stations, and auto repair and parking services).

Transportation-related industry employment does not include transportation occupations in nontransportation industries, such as truck drivers working for wholesale and retail stores. When employment in transportation occupations in nontransportation industries is included, total transportation-related employment accounts for about 13 percent of U.S. civilian jobs.

FOR-HIRE TRANSPORTATION EMPLOYMENT





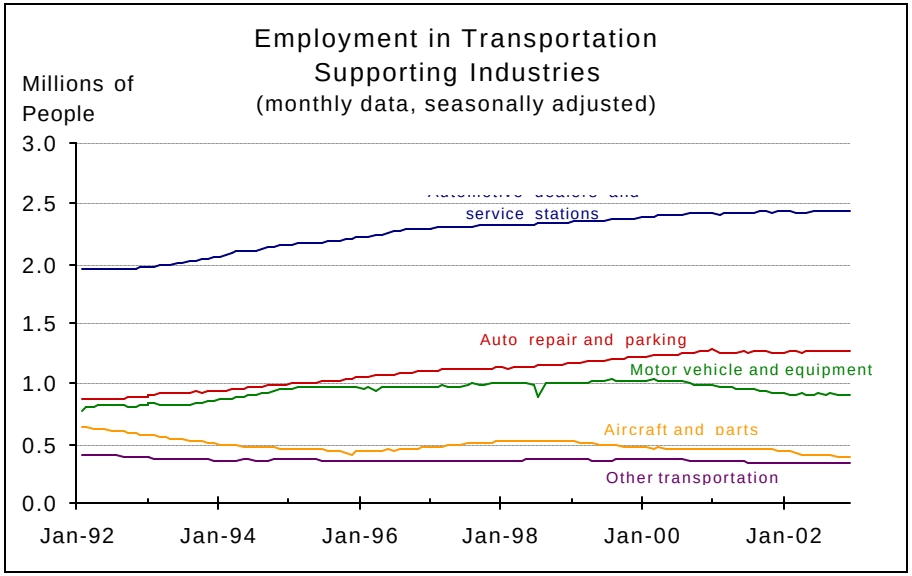
Employment in For-Hire Transportation Industries (thousands)	Oct-02	Nov-02
Trucking and warehousing	1,827	1,830
Percent change from previous month	*0.61*	*0.16*
Air transportation	1,156	1,152
Percent change from previous month	*-0.34*	*-0.35*
Public transit	471	467
Percent change from previous month	*0.43*	*-0.85*
Transportation services	418	421
Percent change from previous month	*0.00*	*0.72*
Rail transportation	225	224
Percent change from previous month	*-0.44*	*-0.44*
Water transportation	188	191
Percent change from previous month	*-0.53*	*1.60*
Pipeline	15	15
Percent change from previous month	*0.00*	*0.00*

NOTE: For-hire transportation includes establishments providing passenger and freight transportation and related services on a fee basis to the general public or other business enterprises. For-hire does not include in-house transportation establishments within nontransportation enterprises, which provide transportation services for the enterprises' own use. Transportation services includes establishments furnishing services incidental to transportation, such as forwarding and packing services, and the arrangement of passenger and freight transportation.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Employment Status of Civilian Population by Sex and Age ("A" Tables) and Employees on Nonfarm Payrolls by Industry ("B" Tables), available at: http://www.bls.gov/cps/home.htm.

Employment in for-hire transportation industries accounted for about 45 percent of total transportation-related industry employment in recent years. The trucking and warehousing industry and air transportation together accounted for about 70 percent of the employment in for-hire transportation in the last few years.

TRANSPORTATION SUPPORTING INDUSTRY EMPLOYMENT

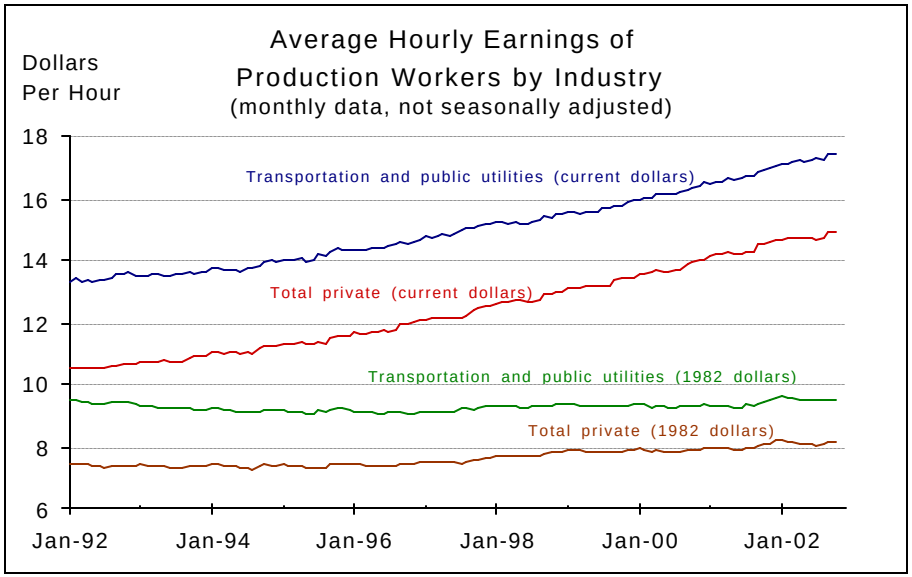


Employment in transportation supporting industries accounts for over half of total transportation-related industry employment. Automotive dealers and service stations employ the most people among transportation supporting industries. Employment of automotive dealers and service stations decreased 0.04 in October 2002. At the same time, employment of motor vehicle and equipment manufacturing decreased 0.44 percent.

Employment in Transportation Supporting Industries (thousands)	Oct-02	Nov-02
Auto dealers and service stations	2,438	2,433
Percent change from previous month	*-0.08*	*-0.21*
Auto repair and parking	1,261	1,268
Percent change from previous month	*-0.39*	*0.56*
Motor vehicle and equipment manufacturing	913	910
Percent change from previous month	*-0.11*	*-0.33*
Aircraft and parts manufacturing	396	390
Percent change from previous month	*-1.25*	*-1.52*
Other transportation equipment manufacturing	351	349
Percent change from previous month	*0.86*	*-0.57*

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Employment Status of Civilian Population by Sex and Age ("A" Tables) and Employees on Nonfarm Payrolls by Industry ("B" Tables), available at: http://www.bls.gov/cps/home.htm.

HOURLY EARNINGS OF PRODUCTION WORKERS IN TRANSPORTATION INDUSTRIES



Hourly earnings are the actual return to the worker for an hour worked. They are on a "gross" basis because they include not only basic hourly and incentive wage rates, but also such variable factors as premium pay for overtime and late-shift work. However, average hourly earnings are not average hourly labor costs to employers because they do not include irregular bonuses, retroactive items, payments of various welfare benefits, payroll taxes paid by employers, and earnings for those employees not covered under production worker, construction worker, or non-supervisory employee definitions.

Changes in average hourly earnings indicate the changes in the actual return to production workers. They also reflect shifts in the number of employees between relatively high-paid and low-paid work.

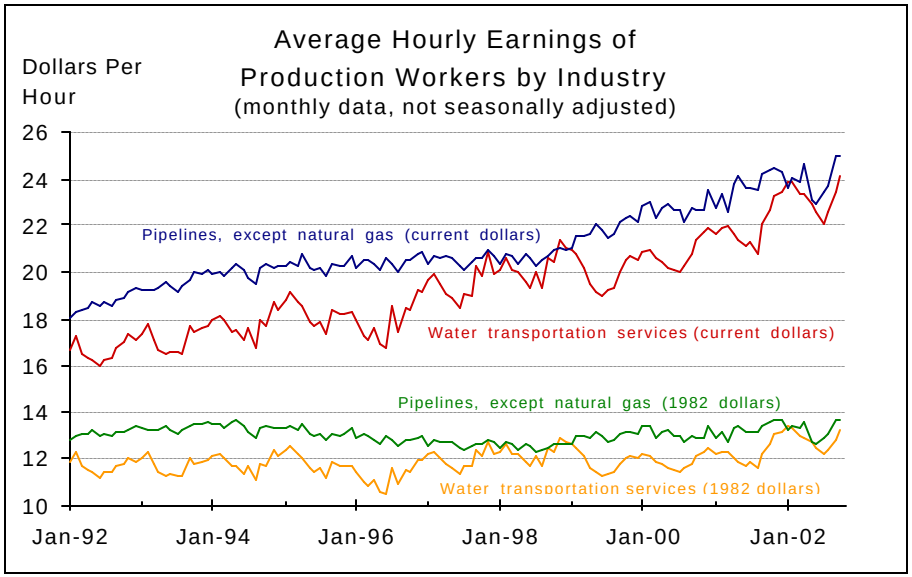
Average Hourly Earnings	Oct-01	Oct-02
Transportation and public utilities (current dollars)	16.93	17.43
Percent change from same month previous year	*3.36*	*2.95*
Total private (current dollars)	14.49	14.92
Percent change from same month previous year	*3.80*	*2.97*
Transportation and public utilities (1982 dollars)	9.43	9.52
Percent change from same month previous year	*1.40*	*0.95*
Total private (1982 dollars)	8.07	8.15
Percent change from same month previous year	*1.77*	*0.99*

NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

In the transportation industry, production workers include vehicle operators, vehicle maintenance and repair workers, transportation facility operators, and workers directly engaged in providing passenger and freight transportation services.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, National Employment, Hours, and Earnings, available at http://www.bls.gov/ncs/ect/.

HOURLY EARNINGS OF PIPELINE AND WATER TRANSPORTATION WORKERS



Transportation industry hourly earnings are the actual return to production workers in transportation industries for an hour worked. Changes in average transportation industry hourly earnings may be caused by either changes in production workers' hourly wage rates or shifts in the number of workers between relatively high-paid occupations and low-paid occupations.

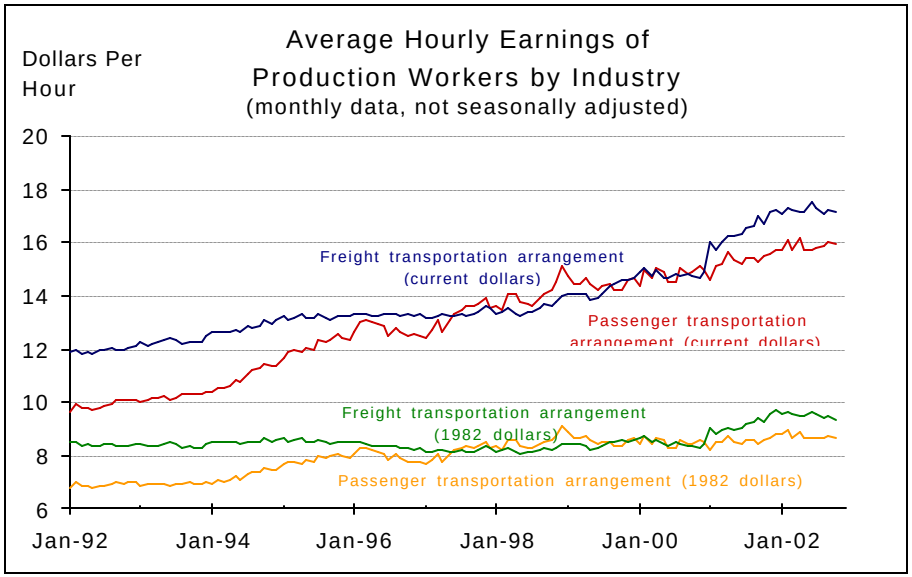
Average Hourly Earnings	Oct-01	Oct-02
Pipelines, except natural gas (current dollars)	24.37	25
Percent change from same month previous year	*7.45*	*2.59*
Water transportation services (current dollars)	22.71	24.14
Percent change from same month previous year	*6.37*	*6.30*
Pipelines, except natural gas (1982 dollars)	13.57	13.65
Percent change from same month previous year	*5.41*	*0.59*
Water transportation services (1982 dollars)	12.65	13.18
Percent change from same month previous year	*4.35*	*4.23*

NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

In the transportation industry, production workers include vehicle operators, vehicle maintenance and repair workers, transportation facility operators, and workers directly engaged in providing passenger and freight transportation services.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, National Employment, Hours, and Earnings, available at http://www.bls.gov/ncs/ect/.

HOURLY EARNINGS OF WORKERS IN TRANSPORTATION ARRANGEMENT SERVICES



Between October 2001 and October 2002, the average hourly earnings, measured in current dollars, increased in both passenger transportation arrangement and freight transportation arrangement.

Average Hourly Earnings	Oct-01	Oct-02
Freight transportation arrangement (current dollars)	15.45	15.91
Percent change from same month previous year	*3.76*	*2.98*
Passenger transportation arrangement (current dollars)	16.63	17.15
Percent change from same month previous year	*12.59*	*3.13*
Freight transportation arrangement (1982 dollars)	8.61	8.69
Percent change from same month previous year	*1.79*	*0.98*
Passenger transportation arrangement (1982 dollars)	9.26	9.37
Percent change from same month previous year	*10.46*	*1.12*

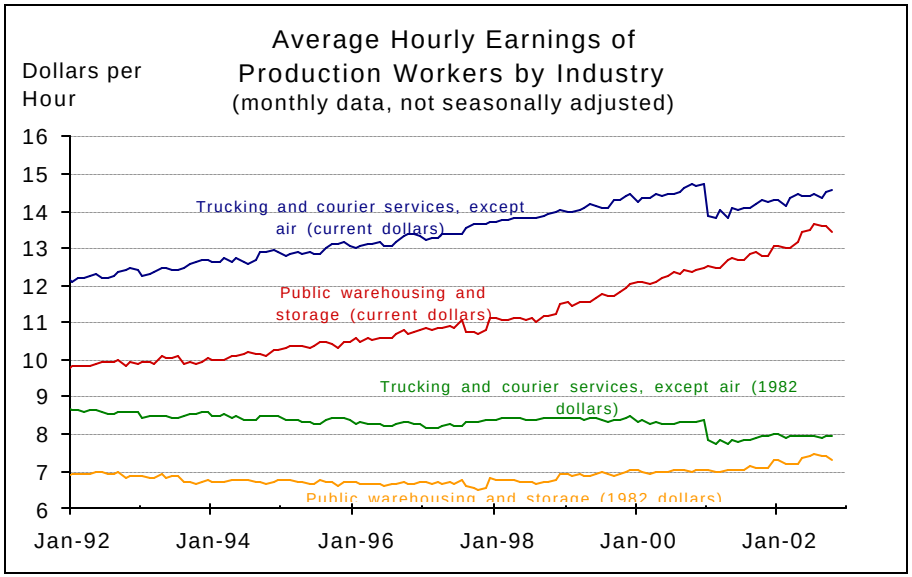
NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

Passenger transportation arrangement includes travel agencies, tour operators, and other establishments primarily engaged in arranging passenger transportation, such as ticket offices, not operated by transportation companies, for railroads, buses, ships, and airlines.

Freight transportation arrangement includes establishments primarily engaged in furnishing information and acting as agents in arranging transportation for freight and cargo, such as shipping agents, freight consolidators, shipping document preparation and tariff consultants.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, National Employment, Hours, and Earnings, available at http://www.bls.gov/ncs/ect/.

HOURLY EARNINGS OF WORKERS IN TRUCKING AND PUBLIC WAREHOUSING SERVICES



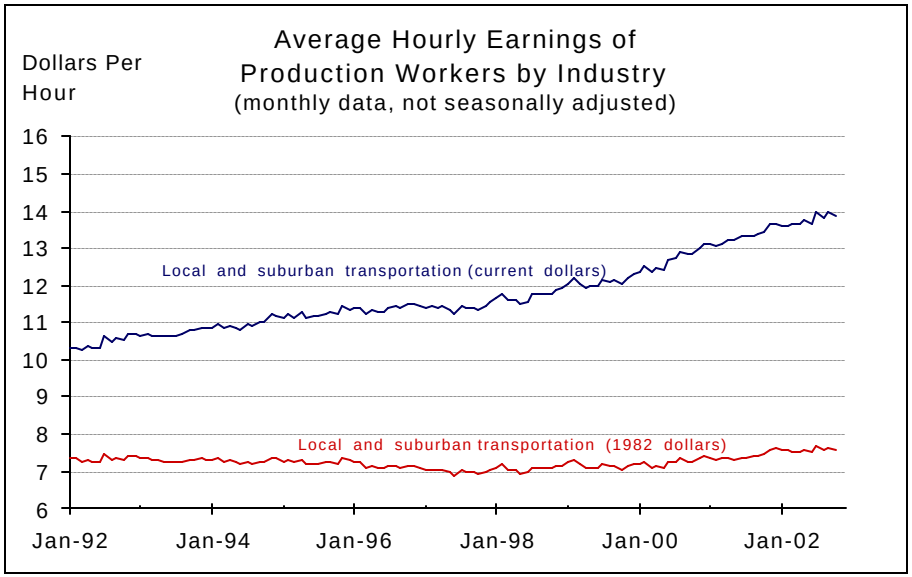
Measured in current dollars, the average hourly earnings of workers in trucking and courier services and workers in warehousing and storage services have increased in recent years. However, taking the effect of inflation into account, real hourly earnings of workers in the two industries have remained at about the same level since the early Nineties.

Average Hourly Earnings	Oct-01	Oct-02
Trucking and courier services, except air (current dollars)	14.29	14.55
Percent change from same month previous year	*-2.86*	*1.82*
Public warehousing and storage (current dollars)	12.75	13.42
Percent change from same month previous year	*3.24*	*5.25*
Trucking and courier services, except air (1982 dollars)	7.96	7.95
Percent change from same month previous year	*-4.70*	*-0.16*
Public warehousing and storage (1982 dollars)	7.10	7.33
Percent change from same month previous year	*1.28*	*3.21*

NOTE: The current value is compared to the value from the same period in the previous year to account for seasonality.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, National Employment, Hours, and Earnings, available at http://www.bls.gov/ncs/ect/.

HOURLY EARNINGS OF TRANSIT WORKERS



Average Hourly Earnings	Oct-01	Oct-02
Local and suburban transportation (current dollars)	13.42	13.88
Percent change from same month previous year	*4.52*	*3.43*
Local and suburban transportation (1982 dollars)	7.47	7.58
Percent change from same month previous year	*2.54*	*1.42*

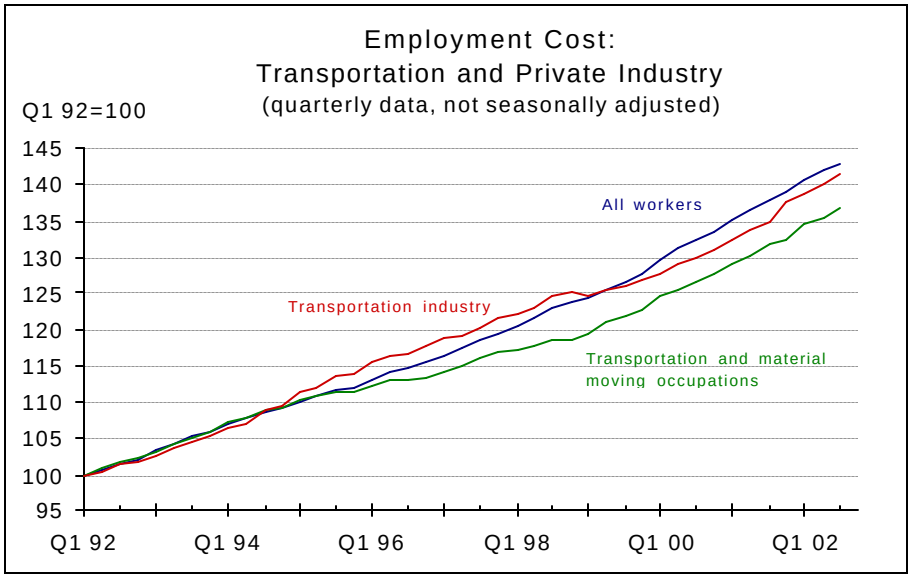
NOTE: The current value is compared to the value from the same period in the previous year to account for seasonality.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, National Employment, Hours, and Earnings, available at http://www.bls.gov/ncs/ect/.

Transportation industry hourly earnings are the actual return to production workers in transportation industries for an hour worked. Changes in average transportation industry hourly earnings may be caused by either changes in production workers' hourly wage rates or shifts in the number of workers between relatively high-paid occupations and low-paid occupations.

Between October 2001 and October 2002, the average hourly earnings in local and suburban transportation services increased 3.43 percent.

TRANSPORTATION AND PRIVATE INDUSTRY EMPLOYMENT COSTS



The Employment Cost Index (ECI) measures changes in the cost of labor to employers. Since the ECI is a fixed-employment-weighted index, it is free from the influence of employment shifts among occupations and industries.

Over the last decade, the rise of employment cost in the transportation industry was slower than in private industry as a whole and the rise of employment cost of transportation occupations was slower than the average of all workers. However, between the third quarter of 2001 and third quarter of 2002, employment cost of transportation occupations increased 4.86 percent, a slightly higher rate than the 3.66 percent for all workers. During the same period, the employment cost of transportation industry continued to increase at a rate faster than that of all workers.

Employment Cost: Total Compensation (Index)	Q3 01	Q3 02
All workers (private industry)	137.84	142.88
Percent change from same quarter previous year	*4.00*	*3.66*
Transportation industry (private)	131.88	136.78
Percent change from same quarter previous year	*4.07*	*3.71*
Transportation occupations (private)	134.85	141.40
Percent change from same quarter previous year	*3.78*	*4.86*

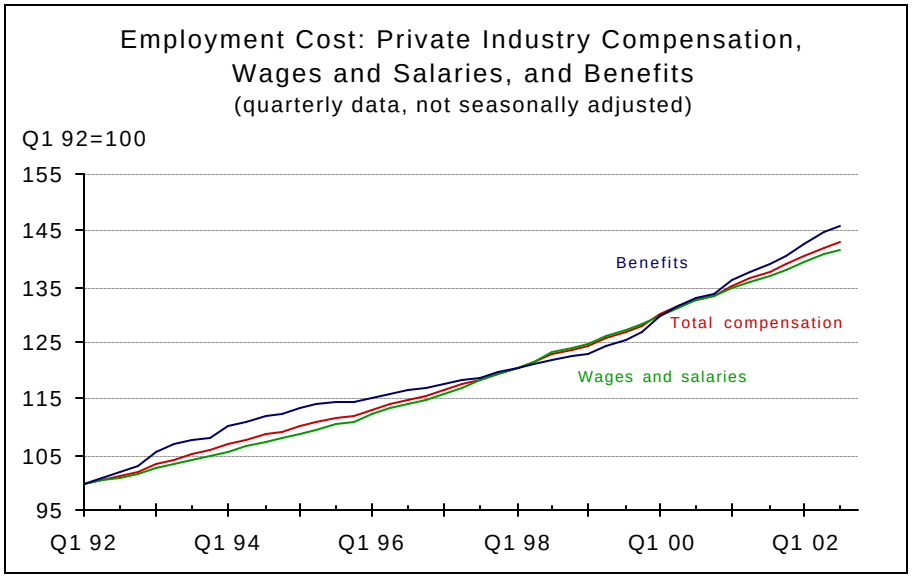
NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

Employment cost to employers is the total compensation cost incurred by employers in obtaining labor inputs. Compensation costs include wages, salaries, and employer costs for employee benefits. Employment costs of transportation industry is the weighted average of the employment costs of all occupations working in transportation industries, including nontransportation industries. Employment costs of transportation occupations is the weighted average of the employment costs of all transportation occupations, including those working in nontransportation industries, such as truck drivers working for retail stores.

The base period of the original index is Q2 1989. The first quarter of 1992 is set to be the new reference point (=100) by dividing the values of the original index by the value of Q1 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.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Employment Cost Trends, Public Query Data, available at http://www.bls.gov/ncs/ect/.

BREAKDOWN OF EMPLOYMENT COSTS FOR PRIVATE INDUSTRY



Employment cost can be broken down into two major components, wages and salaries, and benefits. Benefit costs increased faster than wages and salaries for most industries over the last decade. Between the third quarter of 2001 and the third quarter of 2002, the average benefit costs of all workers in private industry rose 4.78 percent, while their average wage and salary rose 3.22 percent.

All Workers (Index)	Q3 01	Q3 02
Benefits (private industries)	139.29	145.95
Percent change from same quarter previous year	*4.89*	*4.78*
Total compensation (private industries)	137.84	142.88
Percent change from same quarter previous year	*4.00*	*3.66*
Wages and salaries (private industries)	137.15	141.57
Percent change from same quarter previous year	*3.61*	*3.22*

NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

Employment cost to employers is the total compensation cost incurred by employers in obtaining labor inputs. Compensation costs include wages, salaries, and employer costs for employee benefits. Employment costs of transportation industry is the weighted average of the employment costs of all occupations working in transportation industries, including nontransportation industries. Employment costs of transportation occupations is the weighted average of the employment costs of all transportation occupations, including those working in nontransportation industries, such as truck drivers working for retail stores.

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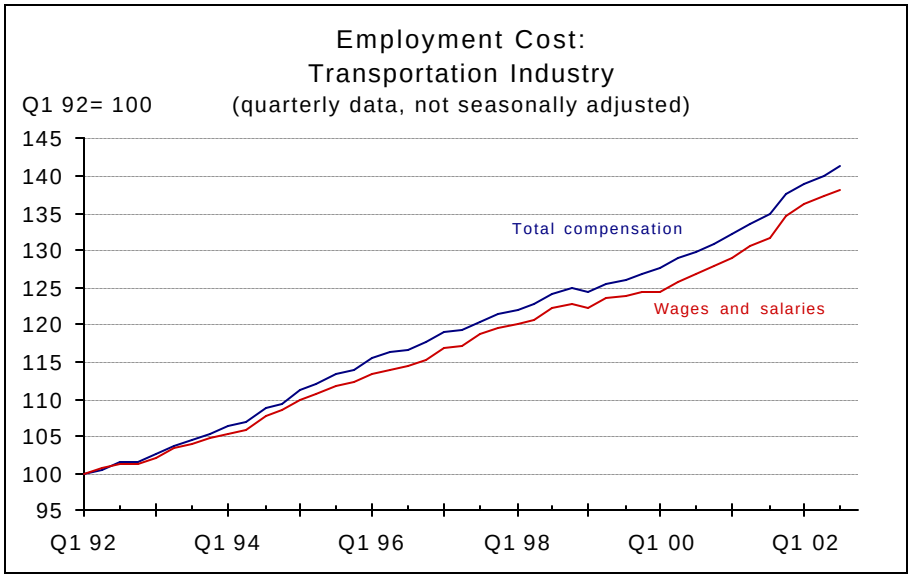
SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Employment Cost Trends, Public Query Data, available at http://www.bls.gov/ncs/ect/.

BREAKDOWN OF EMPLOYMENT COSTS FOR TRANSPORTATION INDUSTRIES



Labor cost is a significant portion of the production cost of every industry. This is particularly true for the transportation industries, which are much more labor intensive than industry as a whole. Changes in labor cost directly affect the price of transportation services, the profit margin, and competitiveness of the transportation industries.

As total compensation cost increases, the balance between wages and salaries and benefits also changes over time. These changes reflect changes in economic environment and labor management practices of employers.

Transportation Industry (Index)	Q3 01	Q3 02
Total compensation (private)	134.85	141.40
Percent change from same quarter previous year	*3.78*	*4.86*
Wages and salaries (private)	131.67	138.13
Percent change from same quarter previous year	*3.78*	*4.91*

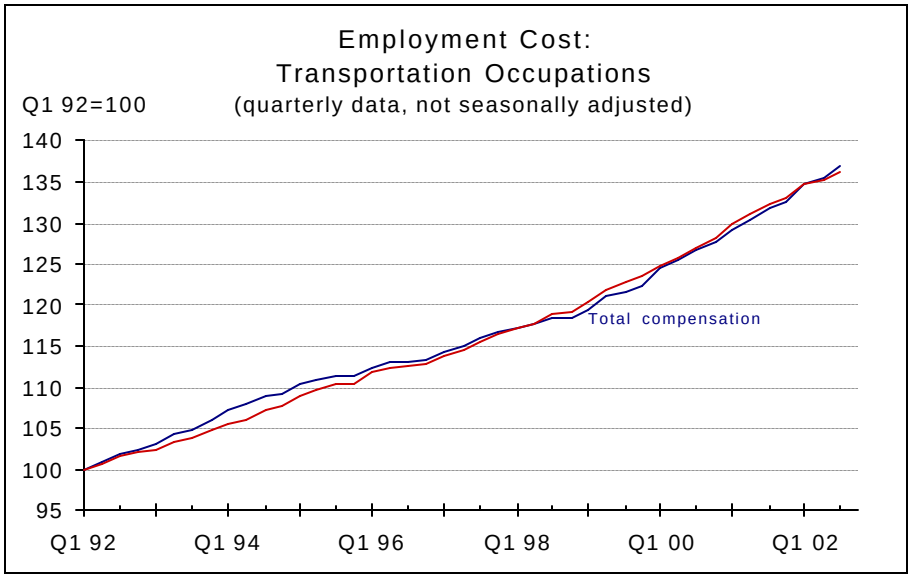
NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

Employment costs of transportation industry is the weighted average of the employment costs of all occupations working in transportation industries, including nontransportation industries. Employment costs of transportation occupations is the weighted average of the employment costs of all transportation occupations, including those working in non-transportation industries, such as truck drivers working for retail stores.

The base period of the original index is Q2 1989. The first quarter of 1992 is set to be the new reference point (=100) by dividing the values of the original index by the value of Q1 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.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Employment Cost Trends, available at http://www.bls.gov/ncs/ect/..

BREAKDOWN OF EMPLOYMENT COSTS IN TRANSPORTATION OCCUPATIONS



The increased share of wage and salary in total employment cost during the last year was also observed among transportation occupations. Between the third quarter of 2001 and the third quarter of 2002, total compensation of transportation occupations increased 2.96 percent, while wages and salaries of transportation occupations increased 3.71 percent, indicating benefits increased at a slightly slower rate during the same period.

Transportation Occupations (Index)	Q3 01	Q3 02
Wages and salaries (private)	131.88	136.78
Percent change from same quarter previous year	*4.07*	*3.71*
Total compensation (private)	132.31	136.22
Percent change from same quarter previous year	*4.10*	*2.96*

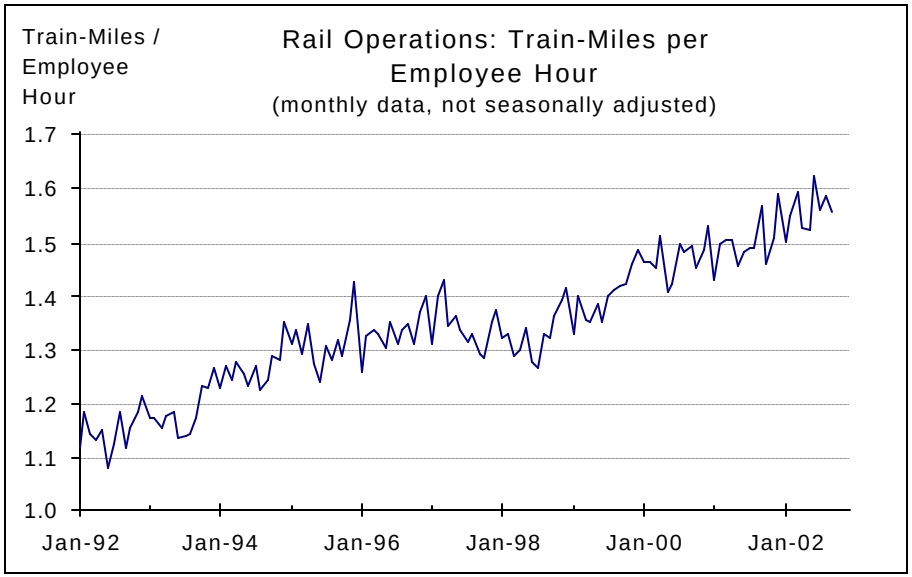
NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

Employment costs of transportation industry is the weighted average of the employment costs of all occupations working in transportation industries, including nontransportation industries. Employment costs of transportation occupations is the weighted average of the employment costs of all transportation occupations, including those working in non-transportation industries, such as truck drivers working for retail stores.

The base period of the original index is Q2 1989. The first quarter of 1992 is set to be the new reference point (=100) by dividing the values of the original index by the value of Q1 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.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Employment Cost Trends, available at http://www.bls.gov/ncs/ect/.

RAILROAD LABOR PRODUCTIVITY



Rail Operations	Sep-01	Sep-02
Train-Miles/Employee hour	1.57	1.56
Percent change from same month previous year	*4.91*	*-0.75*

NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

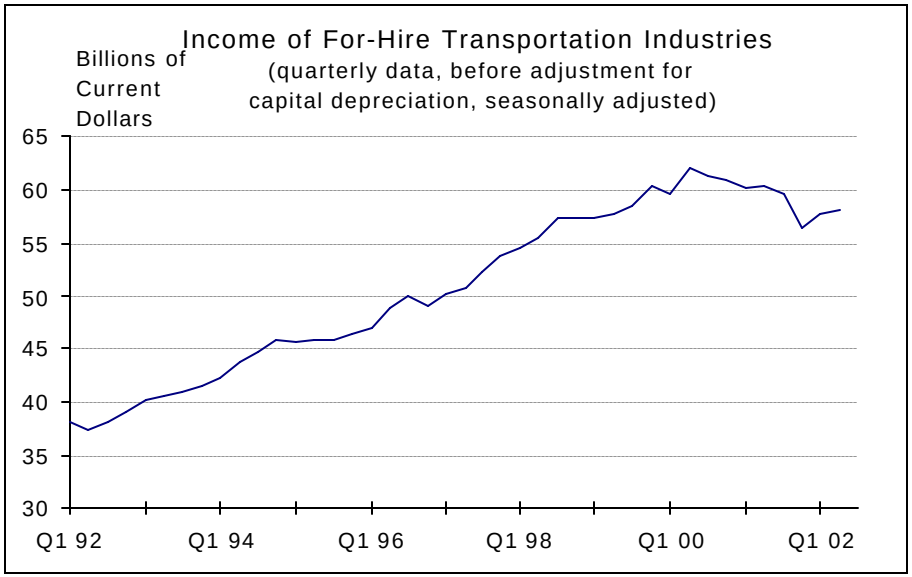
This indicator of rail productivity differs from the data in "Productivity Growth" (available online). The data sources are different, and this measure is based on train-miles while the other is based on ton-miles.

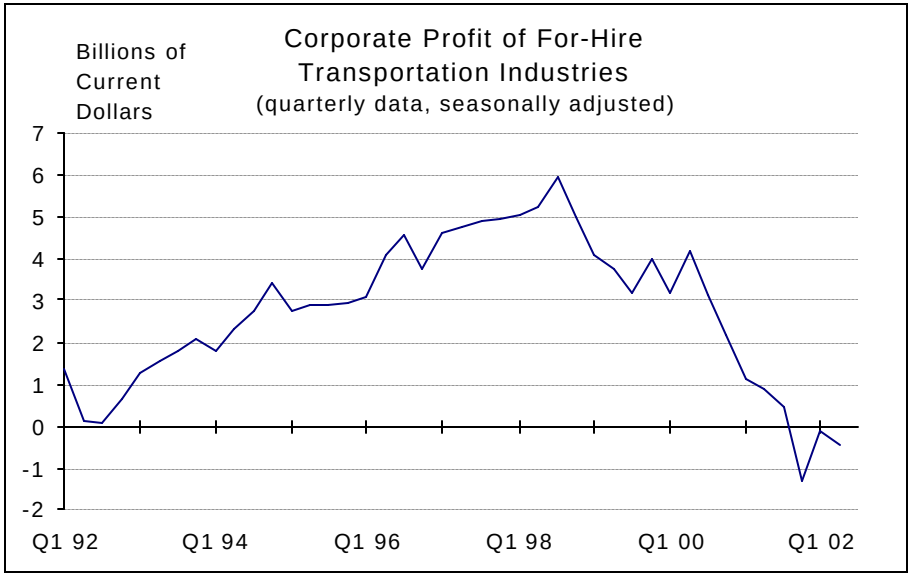
SOURCE: U.S. Department of Transportation, Federal Railroad Administration, Office of Safety Analysis; Dec. 10, 2002; available at: http://safetydata.fra.dot.gov/officeofsafety/.

Train-miles per employee hour are used as a measure for labor productivity in railroad transportation.

Total train miles includes yard-switching miles.

TRANSPORTATION INDUSTRY PROFIT AND INCOME





For-Hire Transportation Industries	Q1 02	Q2 02
Income (billions of dollars)	57.75	58.18
Percent change from previous quarter	*2.21*	*0.74*
Profit (billions of dollars)	-0.13	-0.43
Percent change from previous quarter	*(--)*	*(--)*

NOTES: (—) Not Applicable

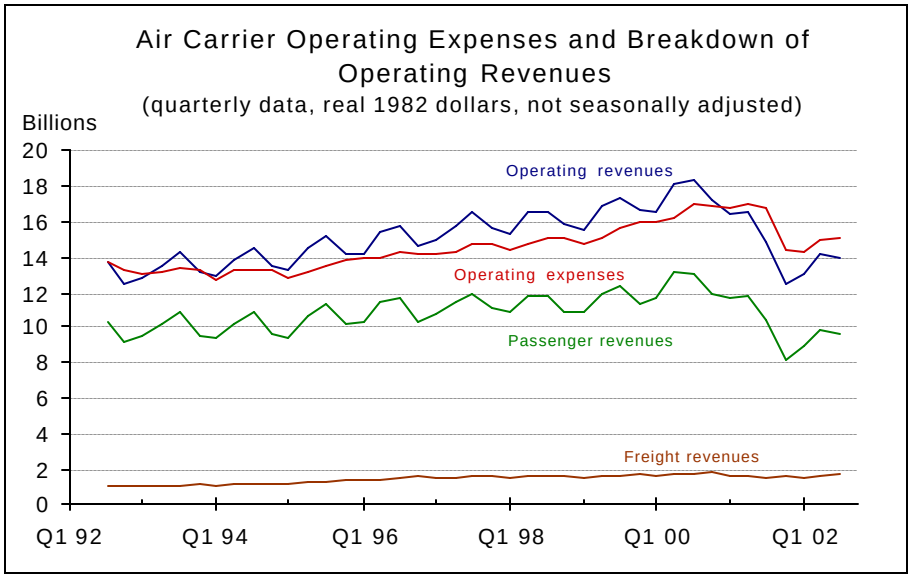
For-hire transportation includes establishments providing passenger and freight transportation and related services on a fee basis to the general public or other business enterprises. For-hire does not include in-house transportation establishments within nontransportation enterprises, which provide transportation services for the enterprises' own use.

Income of a for-hire transportation industry is the difference between its revenue and the cost of its intermediate inputs (or goods and services consumed in providing transportation services). If an industry has no operations in foreign countries and its income comes entirely from its production activities (e.g., in contrast to financial activities), its income would be the same as its contribution to Gross Domestic Product.

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis; National Income and Product Accounts data, Tables 6.1C and 6.16C; Sept. 27, 2002; available at: http://www.bea.doc.gov/bea/dn/nipaweb/AllTables.asp?Selected=N#S6 ; based on *Survey of Current Business*.

Income and profit are two measures of an industry's performance. Income of transportation industries declined 8.8 percent from the second quarter of 2000 through the fourth quarter of 2001 before a 3 percent increase over the first two quarters of 2002. Overall, the slowdown has caused transportation industries' profits to be negative (a loss) for three consecutive quarters for the first time since 1983.

AIR CARRIER REAL OPERATING EXPENSES AND BREAKDOWN OF OPERATING REVENUES



Air carriers' major source of revenue is passenger fares. Freight revenue has increased in importance for large air carriers in recent years, but is much smaller than passenger revenue. Air carrier asset returns are highly seasonal due to the seasonality of passenger revenues.

Billions of real 1982 dollars	Q3 01	Q3 02
Operating revenues	14.85	14.01
Percent change from same quarter previous year	*-18.93*	*-5.66*
Operating expenses	16.71	15.09
Percent change from same quarter previous year	*-1.33*	*-9.72*
Passenger revenues	10.39	9.66
Percent change from same quarter previous year	*-20.80*	*-7.00*
Freight revenues	1.60	1.74
Percent change from same quarter previous year	*-10.91*	*8.27*

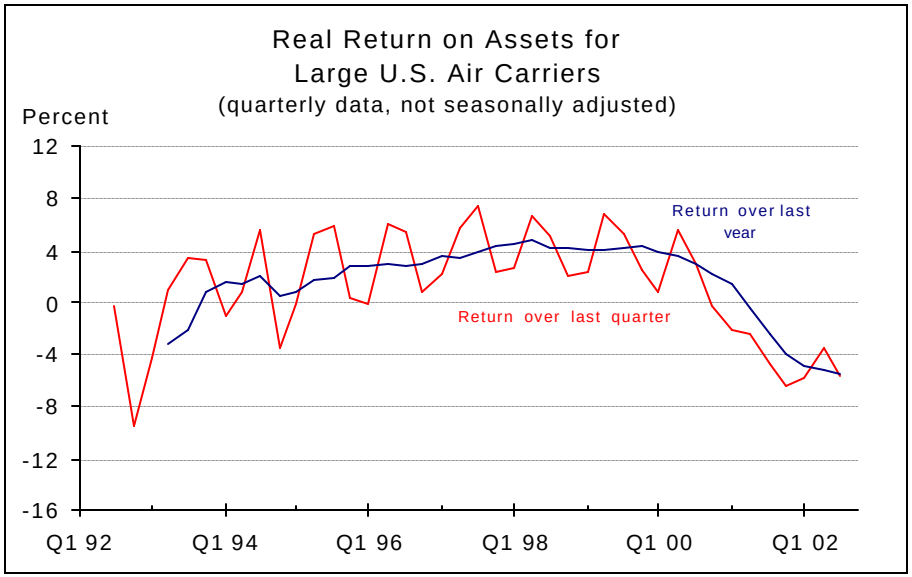
NOTES: Data for the last year are preliminary.

The current value is compared to the value from the same period in the previous year to account for seasonality.

The data include profits of both foreign and domestic operations for U.S. air carriers with more than 20 million dollars in annual operating revenue.

SOURCES: U.S. Department of Transportation, Bureau of Transportation Statistics, Air Carrier Financial Statistics data; and U.S. Department of Labor, Bureau of Labor Statistics; December 16, 2002; available at: http://www.bls.gov/cpi/.

AIR CARRIER REAL RETURN ON ASSETS



Return on assets is a measure of the profitability of investment adjusted for inflation. Improving profits depends on a combination of holding down costs while growing revenue.

Return on Assets for Large U.S. Air Carriers	Q3 01	Q3 02
Return over last quarter (percent)	-4.73	-5.72
Change from same quarter previous year	*-7.81*	*-0.99*
Return over last year (percent)	-2.42	-5.46
Change from same quarter previous year	*-5.44*	*-3.04*

NOTES: Data for the last year are preliminary.

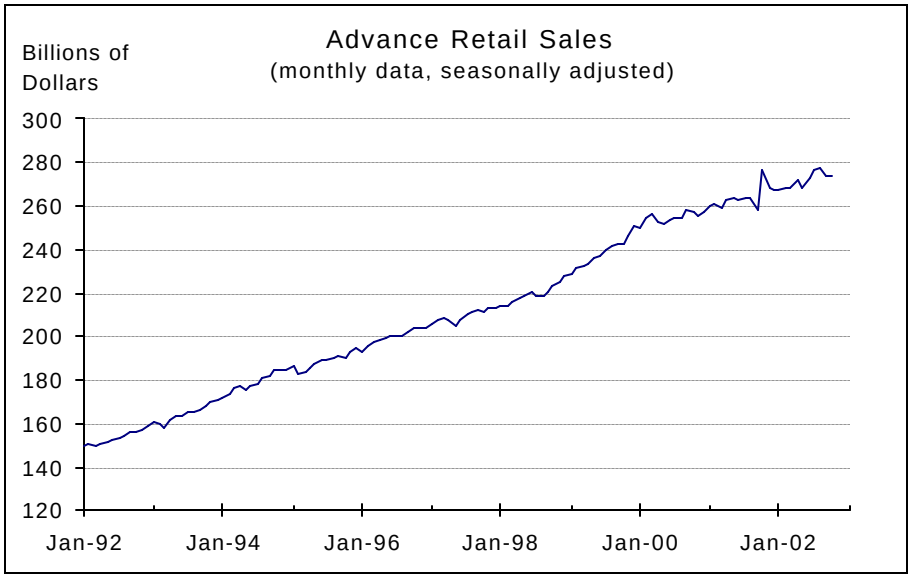
The current value is compared to the value from the same period in the previous year to account for seasonality.

Return on assets is the ratio of net income to the average of beginning- and end-of-period assets for large air carriers. When net income and assets are deflated using the average CPI, the nominal rate of return is converted into a real rate of return.

The data include profits of both foreign and domestic operations for U.S. air carriers with more than 20 million dollars in annual operating revenue.

SOURCES: U.S. Department of Transportation, Bureau of Transportation Statistics, Air Carrier Financial Statistics data; and U.S. Department of Labor, Bureau of Labor Statistics; December 16, 2002; available at: http://www.bls.gov/cpi/.

RETAIL SALES AND TRANSPORTATION DEMAND



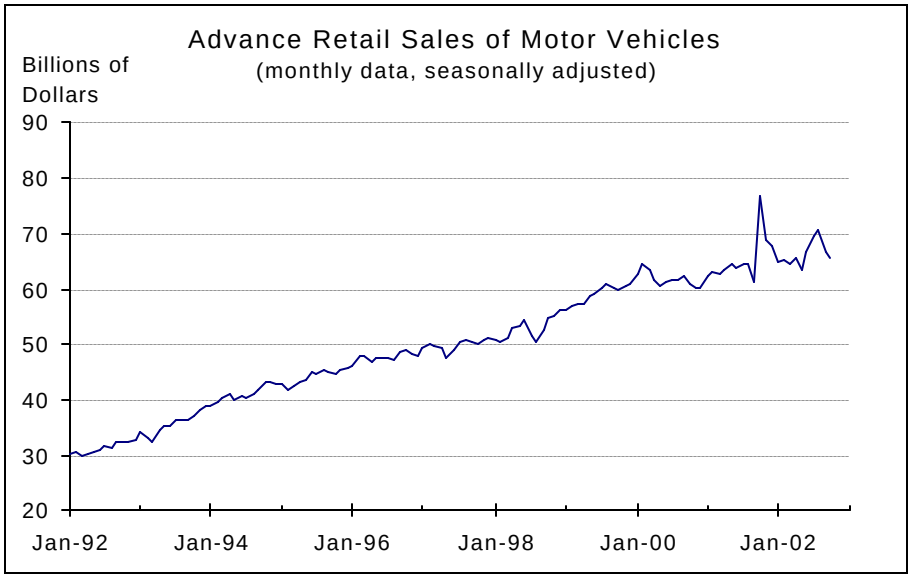
Advance retail sales are a leading indicator of retailers' sales expectations and may suggest future demand for commercial transportation services. Retail stores may require faster and more reliable delivery of shipments as consumer demand increases and inventories are maintained at lower levels.

Advance Retail Sales	Sep-02	Oct-02
Advance retail sales (millions of dollars)	273,479	273,819
Percent change from previous month	*-1.46*	*0.12*

NOTE: Advance retail sales are advance estimates of monthly retail trade produced by the Bureau of the Census. The advance estimates are based on a small subsample of the Census Bureau's full retail sales sample.

SOURCE: U.S. Census Bureau, Service Sector Statistics Division, as of Nov. 14, 2002, available at: http://www.census.gov/svsd/www/adseries.html.

ADVANCE RETAIL SALES OF MOTOR VEHICLES



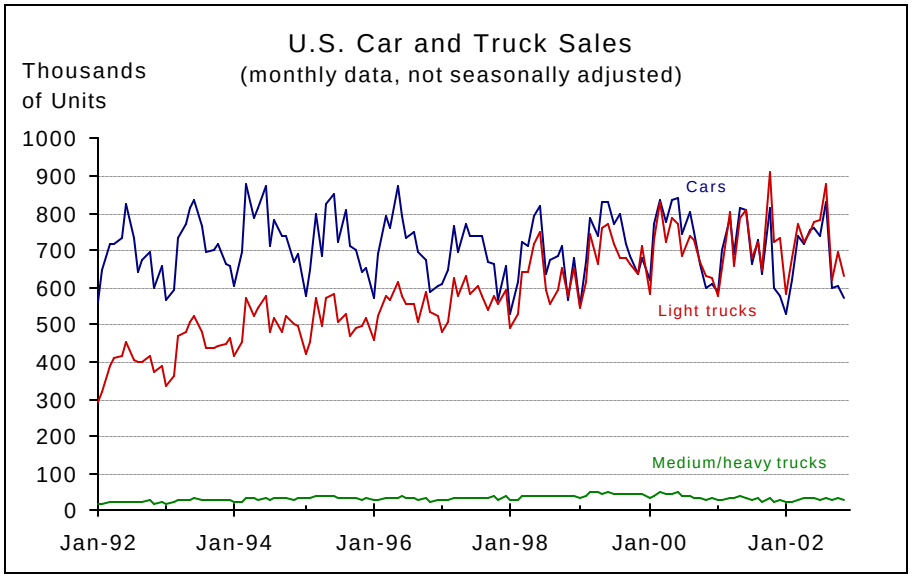
Motor vehicles are a major component of overall advance retail sales, accounting for twenty-four percent of the overall total for the month of October.

Advance Retail Sales of Motor Vehicles	Sep-02	Oct-02
Value of advance sales (millions of dollars)	66,942	65,558
Percent change from previous month	*-5.48*	*-2.07*

NOTE: Advance retail sales are advance estimates of monthly retail trade produced by the Bureau of the Census. The advance estimates are based on a small subsample of the Census Bureau's full retail sales sample.

SOURCE: U.S. Department of Commerce, Bureau of the Census, as of Nov. 14, 2002, available at: http://www.census.gov/svsd/www/adseries.html.

RETAIL SALES OF MOTOR VEHICLES



Car and truck sales can be seen as an indicator of future demands to be placed on transportation infrastructure. Trends in sales for particular types of vehicles may also have implications for safety, energy usage, air pollution, and other matters. For example, the sale of light trucks has grown to match and in certain months even exceed the level of car sales in recent years.

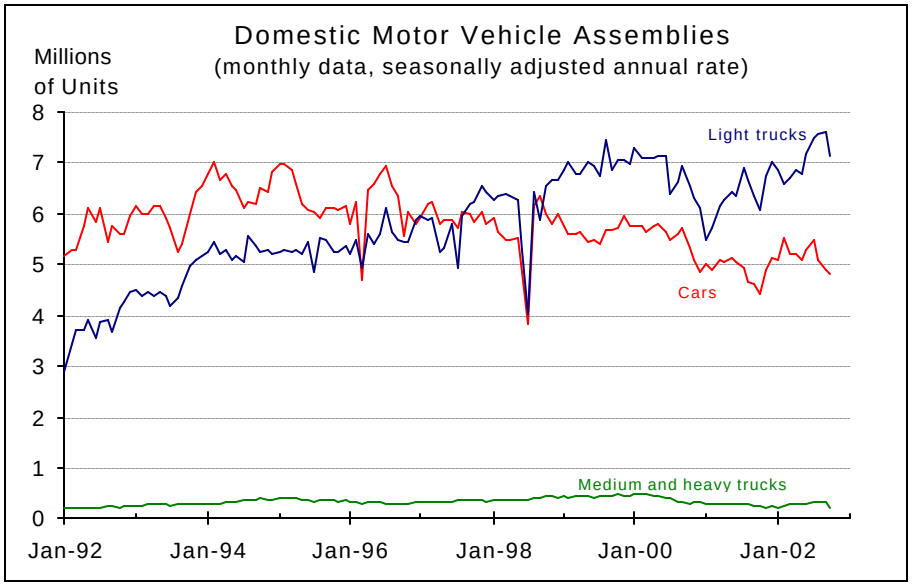
U.S. Car and Truck Sales	Nov-01	Nov-02
Light trucks	721,507	632,131
Percent change from same month previous year	*14.10*	*-12.39*
Cars	602,965	570,607
Percent change from same month previous year	*0.48*	*-5.37*
Medium/heavy trucks	23,875	29,101
Percent change from same month previous year	*-16.63*	*21.89*

NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

Light trucks include pickup trucks, sport utility vehicles, vans, and minivans.

SOURCE: Lisa Smith, Ward's AutoInfoBank, 3000 Town Center Drive, Southfield, Michigan 48075.

DOMESTIC PRODUCTION OF MOTOR VEHICLES



Motor Vehicle Assemblies	Sep-02	Oct-02
Light trucks (millions of units)	7.60	7.13
Percent change from previous month	*0.60*	*-6.20*
Cars (millions of units)	4.88	4.79
Percent change from previous month	*-3.79*	*-1.80*
Medium and heavy trucks (millions of units)	0.31	0.20
Percent change from previous month	*0.32*	*-34.95*

NOTES: The mid-1998 dip in assemblies was caused by a strike at General Motors in June and July.

An assembly is equal to the assembly of the entire vehicle.

Seasonal factors and underlying data for car, light truck, and medium and heavy truck production are available on the Board's web site: http://www.federalreserve.gov/releases/G17/mvsf.htm.

Data from July to October 2002 are preliminary.

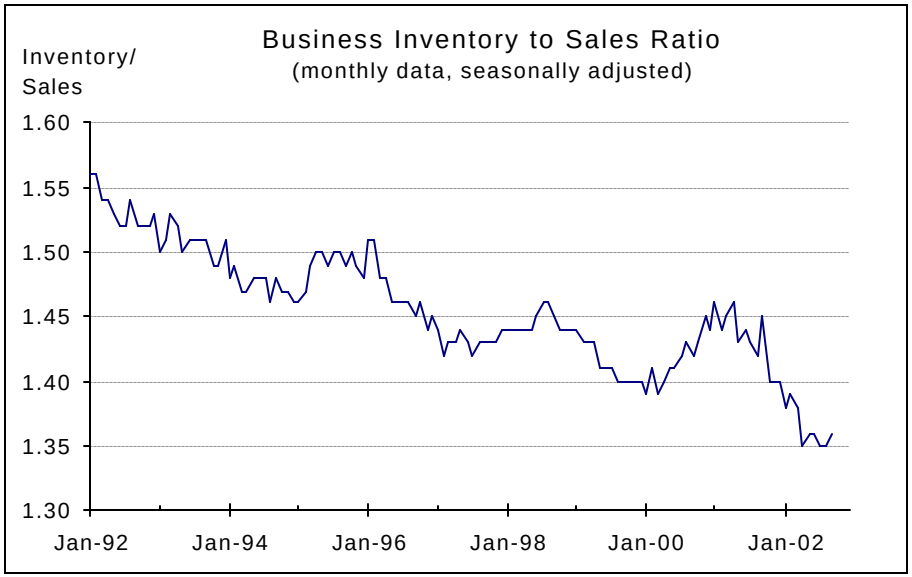
SOURCE: Federal Reserve, "Industrial Production and Capacity Utilization" Statistical Release; Nov. 15, 2002; available at: http://www.federalreserve.gov/releases/g17/download.htm.

The motor vehicle industry is an important component of the manufacturing output of the United States. In 2001, motor vehicle manufacturing accounted for 19.8 percent of all durable goods manufacturing in the United States. (NIPA table 1.3)

The domestic production level of motor vehicles is dependent on other factors beyond the domestic demand for motor vehicle transportation: Foreign trade is playing an increasingly important role in the domestic automotive market. The value in real terms (1996 dollars) of U.S. motor vehicle-related net imports increased from 50.7 billion dollars in 1992 to 114.0 billion dollars in 2001. (NIPA table 4.4)

The production of medium and heavy trucks can be used as a gauge of commercial expectations from the standpoint of shipping capacity. Shippers may buy more road freight handling vehicles to expand capacity to meet an expected increase in demand. Light trucks and cars are used primarily for personal transportation. The production of light trucks has grown the most since 1992. Income growth over the past decade has helped drive consumer demand for more expensive personal transportation like SUVs.

LEVEL OF BUSINESS INVENTORY



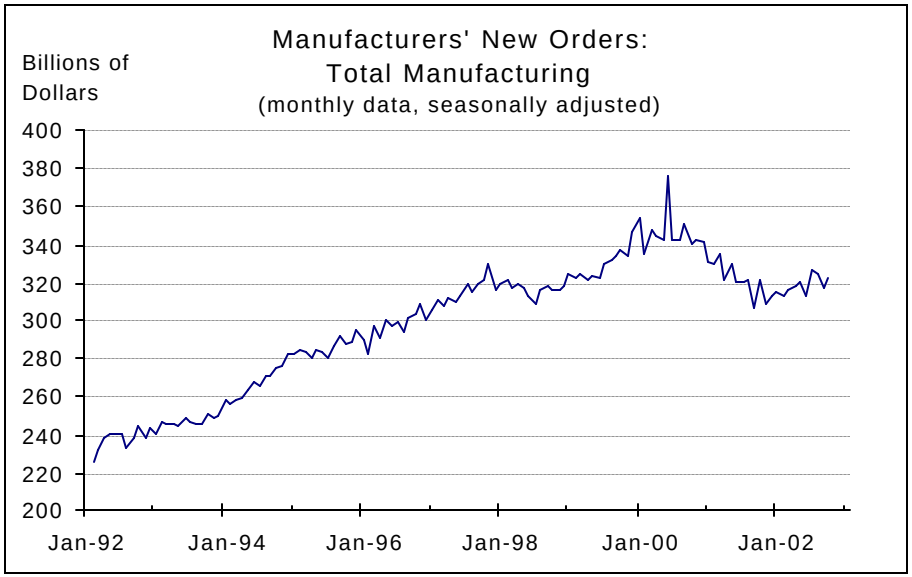
Business Inventory to Sales	Aug-02	Sep-02
Inventory/sales ratio	1.35	1.36
Percent change from previous month	*0.00*	*0.74*

NOTE: The Census Bureau released revised historical new orders data on July 15, 2002. This report reflects those revisions.

SOURCE: U.S. Department of Commerce, Bureau of the Census, as of Nov. 12, 2002, available at: http://www.census.gov/mtis/www/mtis.html.

Business inventory to sales ratio indicates the level of inventory that businesses currently maintain to meet a given sales volume. Over time, businesses have reduced inventory in relation to sales. Increased speed and reliability of transportation help businesses operate with smaller inventories.

NEW ORDERS—ALL MANUFACTURING

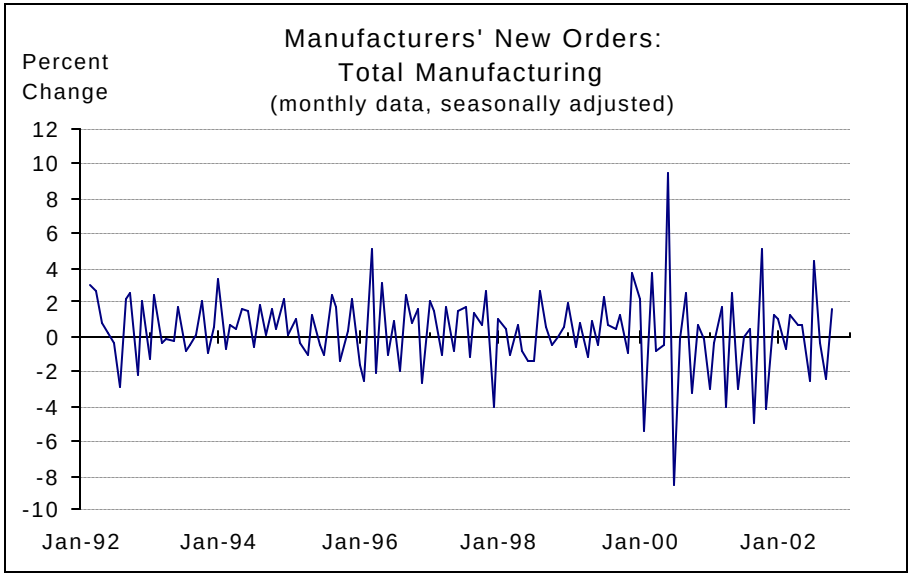


Manufacturers' New Orders	Sep-02	Oct-02
Total manufacturing (billions of dollars)	317.66	322.57
Percent change from previous month	*-2.40*	*1.55*

NOTES: New orders, as reported in the monthly Manufacturers' Shipments, Inventories, and Orders (M3) survey conducted by the U.S. Census Bureau, are net of order cancellations and include orders received and filled during the month as well as orders receiv ed for future delivery. Orders are defined to include those supported by binding legal documents such as signed contracts, letters of award, or letters of intent, although in some industries this definition may not be strictly applicable. See more details at http://www.census.gov/indicator/www/m3/m3desc.htm.

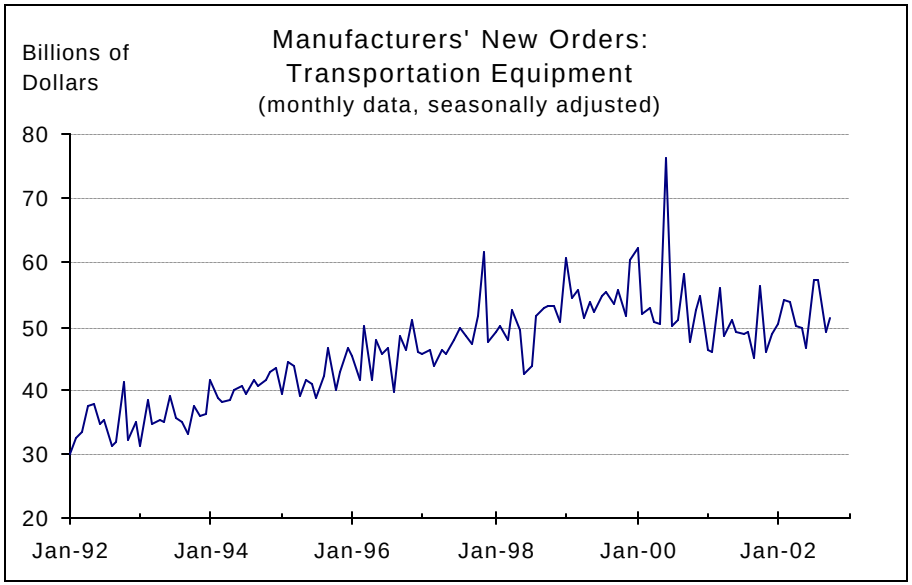
The Census Bureau released revised historical new orders data on July 3, 2002. This report reflects those revisions. A previous revision affecting the composition of the series occurred with the May 2, 2002, release. The currently published numbers do not include semiconductor manufacturers because the Census Bureau does not have an adequate sample in order to produce an estimate for that sector. For more information, see http://www.census.gov/indicator/www/m3/prel/marsemifaq.pdf.

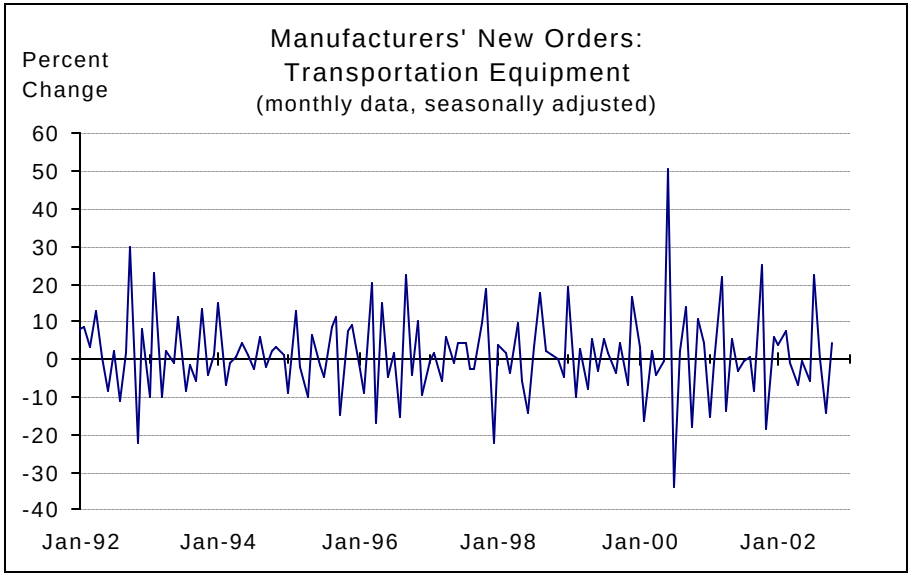
SOURCE: U.S. Department of Commerce, Bureau of the Census; Dec. 4, 2002; available at: http://www.census.gov/indicator/www/m3/prel/index.htm.



Month-to-month changes in factory orders may affect demand for transportation services, including both domestic and international transportation of parts and other manufacturing inputs.

NEW ORDERS—TRANSPORTATION EQUIPMENT





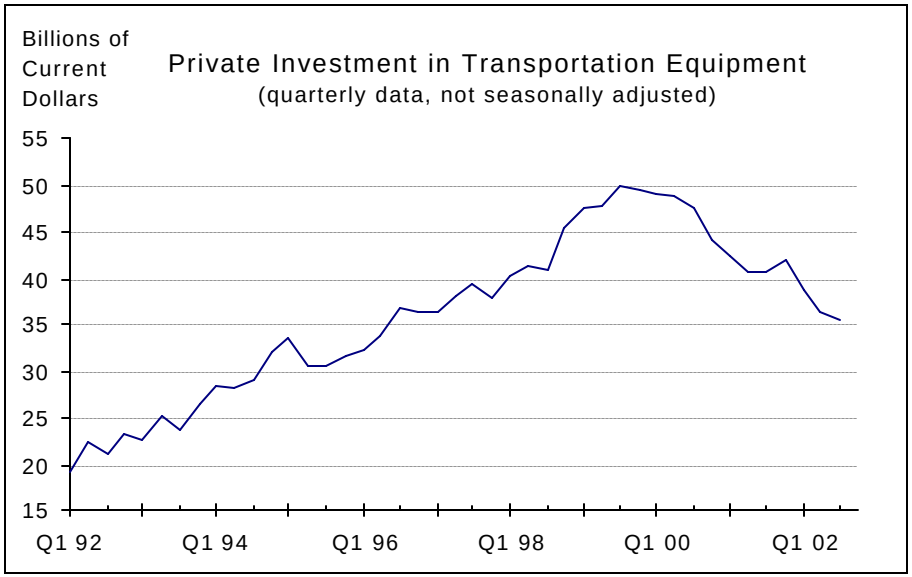
Manufacturers' New Orders	Sep-02	Oct-02
Transportation equipment (billions of dollars)	49.31	51.36
Percent change from previous month	*-14.30*	*4.17*

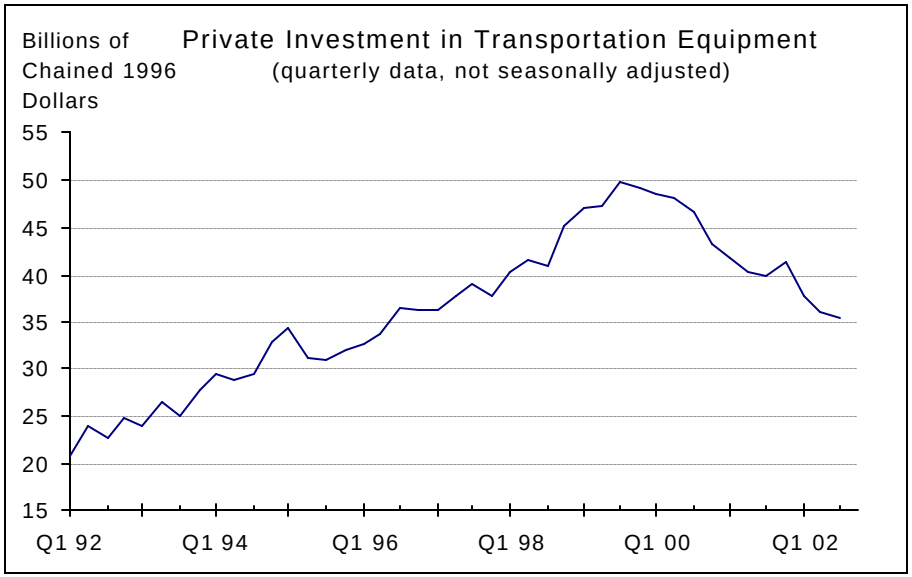
NOTE: The Census Bureau released revised historical new orders data on July 3, 2002. This report reflects those revisions.

SOURCE: U.S. Department of Commerce, Bureau of the Census; Dec. 4, 2002; available at: http://www.census.gov/indicator/www/m3/prel/index.htm.

Month-to-month changes in new orders for transportation equipment indicate the level of investment in transportation and may indicate the industry outlook for transportation services. There can be a substantial time lag between ordering and delivery of equipment such as commercial airplanes and ships. New orders refer to orders placed with domestic producers of equipment.

BUSINESS INVESTMENT IN TRANSPORTATION EQUIPMENT





Private Investment in Transportation	Q3 01	Q3 02
Current dollars (billions)	40.68	35.33
Percent change from same quarter previous year	*-14.50*	*-13.15*
Chained 1996 dollars (billions)	40.00	35.25
Percent change from same quarter previous year	*-14.39*	*-11.88*

NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

Private investment in transportation equipment (PITE) and manufacturers' new orders for transportation equipment (NOTE) both measure business demand for transportation equipment. However, they differ from each other in the following aspects.

(1) Actual vs. potential: PITE is the actual expenditures spent on transportation equipment by business in the concerned time period, while NOTE is the net of orders and cancellations and include orders received and filled during the concerned time period as well as orders received for future delivery, which are subject to cancellation.

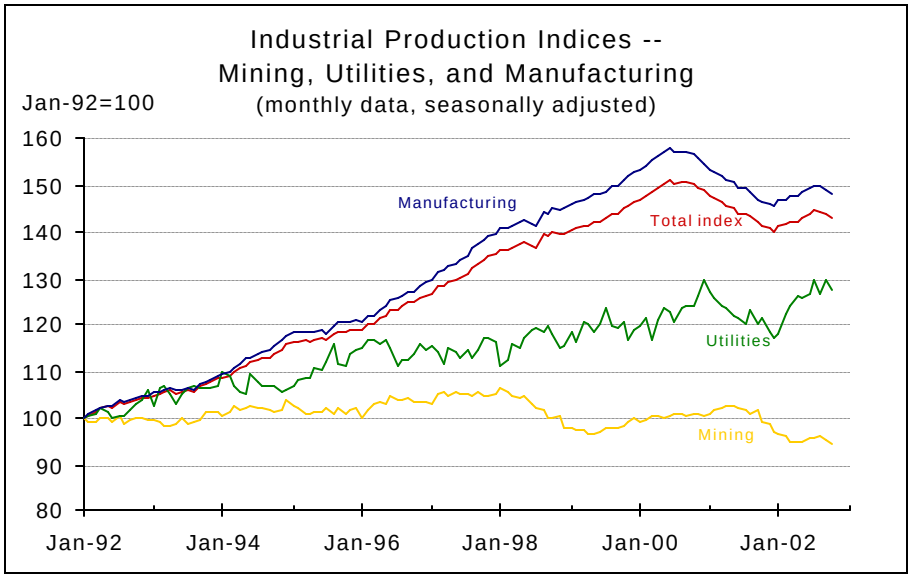
(2) Domestic vs. international: PITE is expenditures spent by domestic business on purchasing transportation equipment, while NOTE includes orders from other countries.

(3) Producer vs. purchaser: NOTE is orders to transportation equipment manufacturers and is measured in producer's price, while PITE is purchasers' expenditures on transportation equipment and is measured in purchaser's price, which includes transportation cost, trade margin, and excise tax, in addition to producer's price.

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis; National Income and Product Accounts data, Tables 5.4 and 5.5; Nov. 26, 2002; available at: http://www.bea.doc.gov/bea/dn/nipaweb/AllTables.asp?Selected=N#S5 ; based on *Survey of Current Business*.

Private investment indicates the level of demand anticipated by industry; therefore, it can be considered a leading indicator for transportation capacity and supply. The data cover both domestically produced and imported equipment.

INDUSTRIAL PRODUCTION INDICES — MINING, UTILITIES, AND MANUFACTURING



Industrial Production Index (Jan-92=100)	Sep-02	Oct-02
Manufacturing	149.13	148.03
Percent change from previous month	*-0.40*	*-0.73*
Total index	144.02	142.85
Percent change from previous month	*-0.21*	*-0.81*
Utilities	129.69	127.67
Percent change from previous month	*2.41*	*-1.55*
Mining	95.38	94.44
Percent change from previous month	*-0.60*	*-0.99*

NOTE: The three Major Industry Groups are manufacturing, utilities, and mining. Currently, industries are classified using the Standard Industrial Classification (SIC) groups, but will change to the North American Industrial System (NAICS) with the 2002 revision. There is more information at the Federal Reserve Board of New York's web site: http://www.federalreserve.gov/Releases/G17/sdtab1.pdf .

Data from July to October 2002 are preliminary.

The base period of the original index is the 1992 annual index. The month of 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.

SOURCE: Federal Reserve, "Industrial Production and Capacity Utilization" Statistical Release; Nov. 15, 2002; available at: http://www.federalreserve.gov/releases/g17/download.htm.

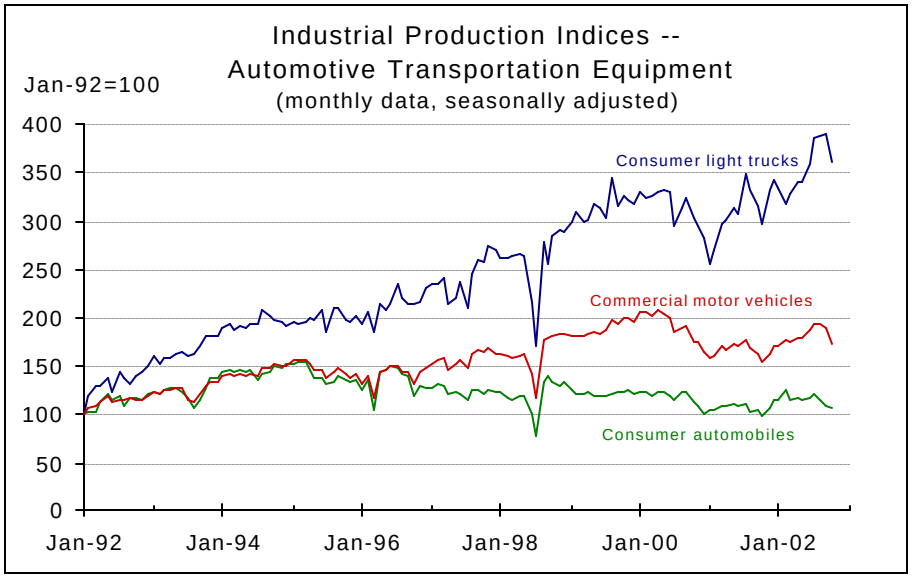
Industrial production (IP) indices measure the current output of the specified manufacturing, energy, or mining industry as a ratio to the output of the base year (which is set to be equal to 100).

The total index is most heavily influenced by manufacturing, reflecting the large share of manufacturing in the economy. In 1999, the latest year which data is available, manufacturing accounted for 88.8 percent of the total value added of the three industries, with 4.8 percent for mining, and 6.4 percent for utilities. Over the last 10 years, manufacturing's output grew twice the rate of utilities, while mining's output stayed around its base year level.

Changes in the output levels of manufacturing, mining, and the utility industries have direct impact on the demand for transportation, because their outputs have higher weight/value ratios than those of other sectors in the economy and hence it needs more transportation service to produce a unit of output in these three industries. According to the U.S. Transportation Satellite Accounts published by the Bureau of Transportation Statistics, it requires 3.5 cents of transportation service as input to produce a $1 worth of output in the manufacturing industry, 4.3 cents in the mining industry, and 2 cents in the utility industry.

In terms of modal distribution, more than three fifths of manufacturing industry's transportation demand are for trucking service, while the mining industry and the utility industry rely more on railroad service.

INDUSTRIAL PRODUCTION INDICES — AUTOMOTIVE TRANSPORTATION EQUIPMENT



Industries will expand or contract production to meet demand or expected demand. For example, the demand for consumer light trucks has risen dramatically over the past ten years relative to demand for consumer cars. The current level of consumer light truck production is more than twice the level in 1992.

Industrial Production Index (Jan-92=100)	Sep-02	Oct-02
Consumer light trucks	389.63	361.91
Percent change from previous month	*0.69*	*-7.12*
Commercial motor vehicles	189.28	172.56
Percent change from previous month	*-1.34*	*-8.84*
Consumer automobiles	107.85	105.99
Percent change from previous month	*-6.27*	*-1.73*

NOTES: These numbers represent three components of Standard Industrial Classification grouping for motor vehicles (371). The figures for selected nonautomotive industries (372-6,9) are on the page entitled "Industry Production Indices for Nonautomotive Transportation Equipment."

The dip in production in mid-1998 was caused by a strike at General Motors in June and July.

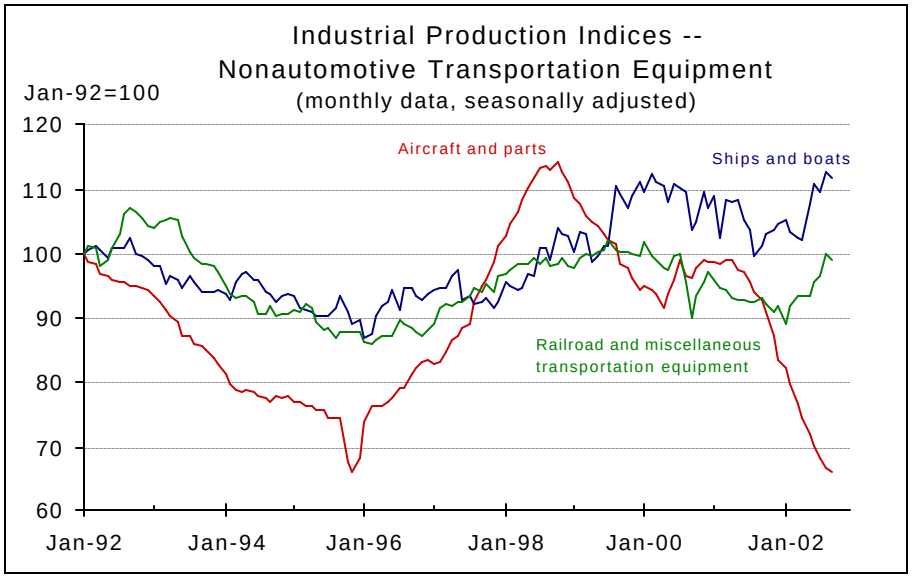
These indices are based on market group categories as opposed to the industrial group categories used for the capacity utilization estimates and the other industrial production index data from the Federal Reserve.

Data from July to October 2002 are preliminary.

The base period of the original index is the 1992 annual index. The month of 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.

SOURCE: Federal Reserve, "Industrial Production and Capacity Utilization" Statistical Release; Nov. 15, 2002; available at: http://www.federalreserve.gov/releases/g17/download.htm.

INDUSTRIAL PRODUCTION INDICES — NONAUTOMOTIVE TRANSPORTATION EQUIPMENT



Aircraft, commercial shipping watercraft, and rail equipment usually already have a buyer before fabrication starts. Buyers of high-cost transportation equipment generally base the amount of their order on the level of expected demand for transportation services.

Industrial Production Index (Jan-92=100)	Aug-02	Sep-02
Ships and boats	112.70	111.61
Percent change from previous month	*2.89*	*-0.96*
Railroad and other transportation equipment	100.07	99.06
Percent change from previous month	*3.71*	*-1.01*
Aircraft and parts	66.81	66.04
Percent change from previous month	*-2.01*	*-1.15*

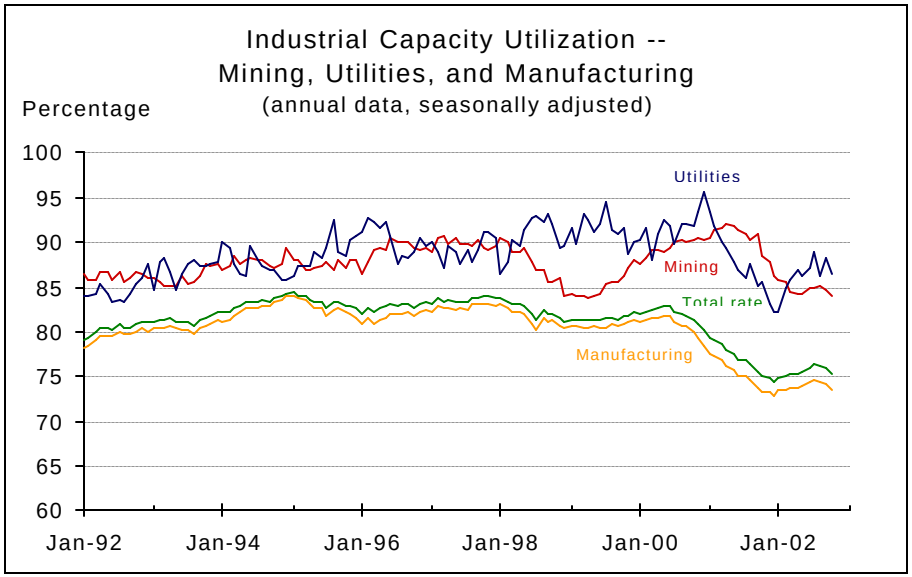
NOTES: These numbers represent the following Standard Industrial Classification groupings: Aircraft and parts (372), Ships and boats (373), and Rail and other transportation equipment (374-6,9). Automotive industries (371) are on the page entitled "Industry Production Indices for Automotive Transportation Equipment."

Data from June to September 2002 are preliminary.

The base period of the original index is the 1992 annual index. The month of 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.

SOURCE: Federal Reserve, "Industrial Production and Capacity Utilization" Statistical Release; Nov. 15, 2002; available at: http://www.federalreserve.gov/releases/g17/download.htm.

INDUSTRIAL CAPACITY UTILIZATION — MINING, UTILITIES, AND MANUFACTURING



Industry capacity utilization rates measure the intensity of production given current available capital and indicate the potential for short-term expansion. Changes in industry capacity utilization rates describe the changes in the relation between supply and demand. Since capacity changes much slower, short-term changes in utilization reflect primarily changes in demand and the availability of labor. In a period of fast growth, capacity utilization would be high, while in a period of slowdown, it would be low. In the long-run, firms may adjust the amount of capital to respond capacity shortages or capacity under utilization.

Industrial Capacity Utilization	Sep-02	Oct-02
Utilities (percentage)	88.19	86.59
Percent change from previous month	*2.13*	*-1.82*
Mining (percentage)	84.76	83.90
Percent change from previous month	*-0.62*	*-1.02*
Total rate (percentage)	75.84	75.17
Percent change from previous month	*-0.29*	*-0.89*
Manufacturing (percentage)	74.10	73.49
Percent change from previous month	*-0.49*	*-0.82*

NOTES: The three Major Industry Groups are manufacturing, utilities, and mining. There is more information at the Federal Reserve Board's web site: http://www.federalreserve.gov/Releases/G17/sdtab1.pdf .

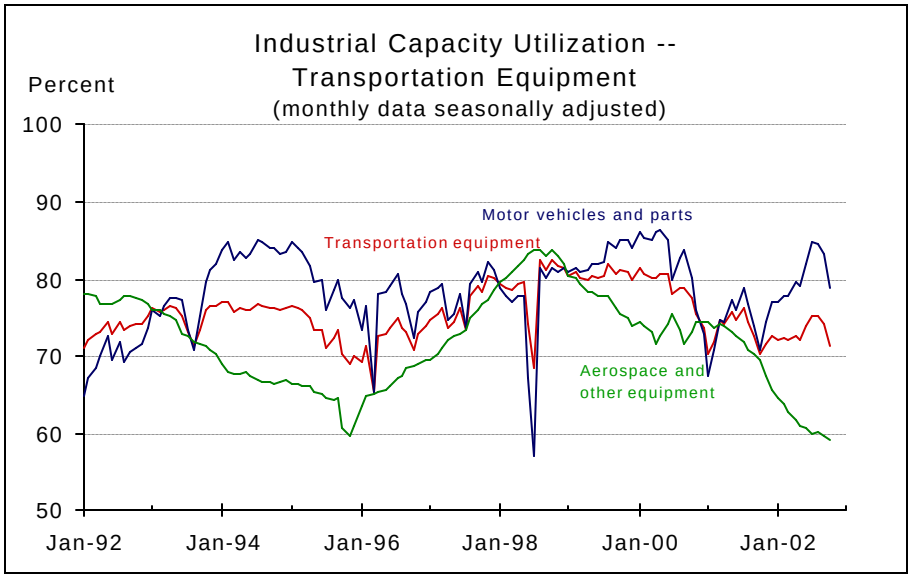
Mining includes components of two-digit (Standard Industrial Classification) SIC groups 10-14. Utilities includes parts of SIC group 49. Manufacturing is also available broken down between durable and nondurable. Durable manufacturing includes measurements from SIC groups 24, 25, and 32-39; nondurable manufacturing includes measurements from SIC groups 20-23 and 26-31. The North American Industrial System (NAICS) will be used starting with the 2002 revision. There is more information at the Federal Reserve Board's web site: http://www.federalreserve.gov/Releases/G17/sdtab1.pdf.

The Federal Reserve Board constructs estimates of capacity and capacity utilization for industries in manufacturing, mining, and energy. A capacity utilization rate is equal to a specified output index divided by the corresponding capacity index. The Federal Reserve Board's capacity indices are designed to quantify the concept of sustainable maximum output within a given industry. Sustainable maximum output is the highest level of output that a plant can maintain within the framework of a realistic work schedule, taking both into account normal downtime and assuming sufficient availability of inputs to operate the capital in place.

Data from July to October 2002 are preliminary.

SOURCE: Federal Reserve, "Industrial Production and Capacity Utilization" Statistical Release; Nov. 15, 2002; available at: http://www.federalreserve.gov/releases/g17/download.htm.

INDUSTRIAL CAPACITY UTILIZATION — TRANSPORTATION EQUIPMENT



Industrial capacity utilization rates measure the potential for short-term expansion and the intensity of current production given currently available capital. Short-term changes in utilization reflect changes in demand and the availability of labor. In the long-run, firms may adjust the amount of capital due to persistent changes in utilization rates.

Industrial Capacity Utilization	Sep-02	Oct-02
Motor vehicles and parts (percentage)	83.34	78.85
Percent change from previous month	*-1.54*	*-5.39*
Transportation equipment (percentage)	74.11	71.27
Percent change from previous month	*-1.35*	*-3.83*
Aerospace and other (percentage)	59.67	59.33
Percent change from previous month	*-1.01*	*-0.57*

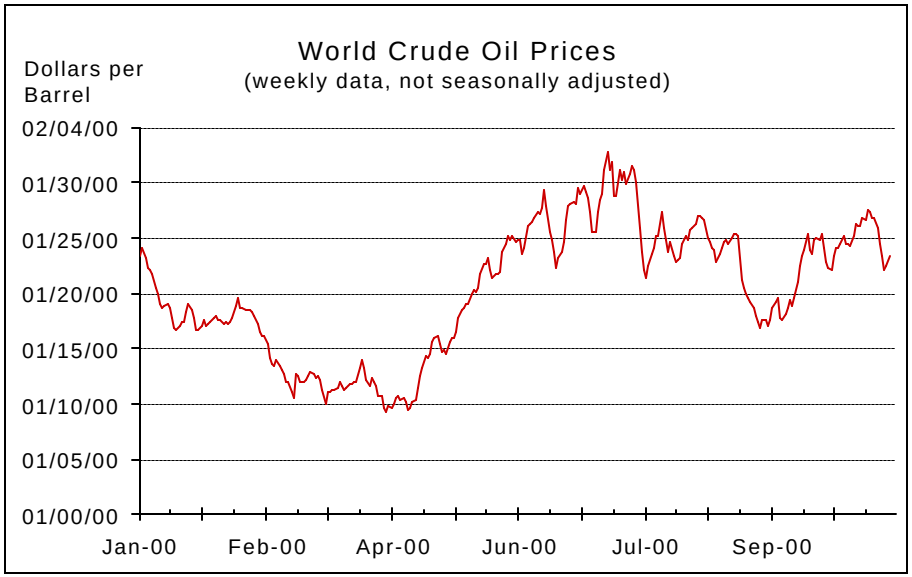
NOTES: These data are for the industries with the following Standard Industrial Classification codes: Transportation equipment (37), Motor vehicles and parts (371), and Aerospace and other transportation equipment (372-6,9). The latter two consist of three-digit industrial classifications which are components of the two-digit industry classification.

The Federal Reserve Board constructs estimates of capacity and capacity utilization for industries in manufacturing, mining, and energy. The Federal Reserve Board's capacity indices are designed to quantify the concept of sustainable maximum output within a given industry. Sustainable maximum output is the highest level of output that a plant can maintain within the framework of a realistic work schedule, taking both into account normal downtime and assuming sufficient availability of inputs to operate the capital in place. A more detailed description of the data is available at: http://www.federalreserve.gov/Releases/G17/.

Data from July to October 2002 are preliminary.

SOURCE: Federal Reserve, "Industrial Production and Capacity Utilization" Statistical Release; Nov. 15, 2002; available at: http://www.federalreserve.gov/releases/g17/download.htm.

WORLD CRUDE OIL PRICES

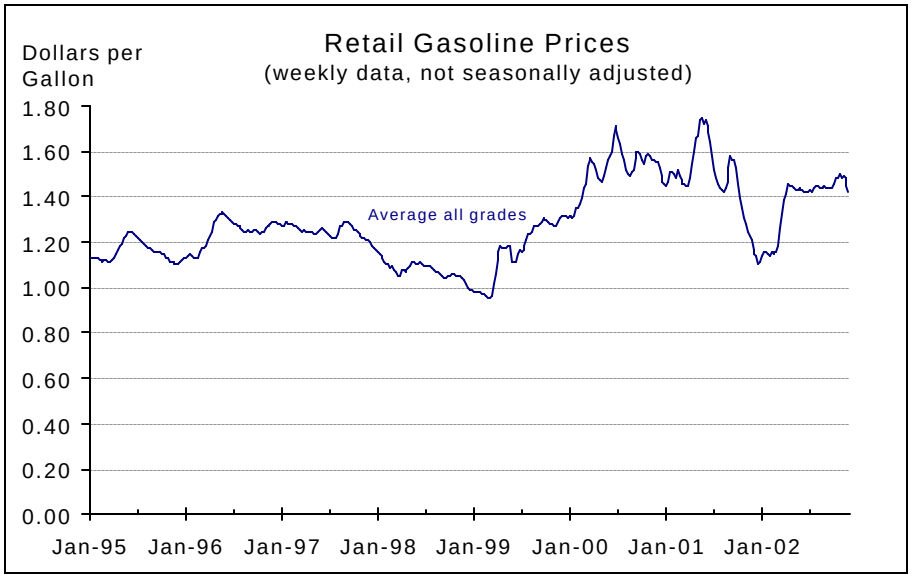


World Crude Oil	22-Nov-02	29-Nov-02
Price (dollars per barrel)	22.52	23.30
Percent change from the previous week	*1.90*	*3.46*

SOURCE: U.S. Department of Energy, Energy Information Administration, Crude Oil Watch, as of December 2002, available at: http://www.eia.doe.gov/oog/info/twip/twip_crude.html.

The world price of crude oil is the most important factor influencing domestic motor fuel prices, since oil imports make up more than half of the U.S. oil supply. Motor fuel prices, in turn, directly affect the cost of transportation. Increases in transportation costs caused by higher world crude oil prices are pure additional costs in the sense that U.S. citizens do not generally benefit.

MOTOR FUEL PRICES

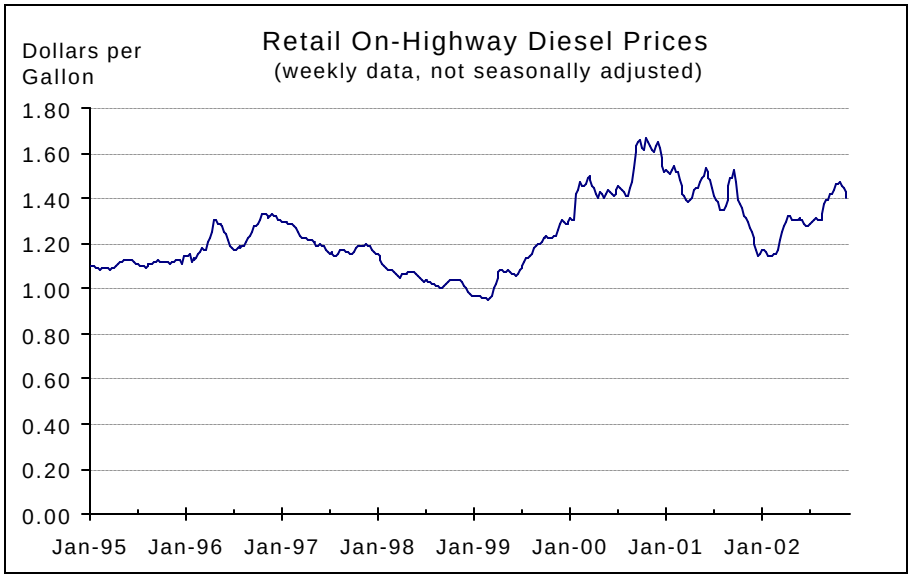


Retail Gas Prices	25-Nov-02	2-Dec-02
Average all grades (dollars/gallon)	1.423	1.408
Percent change from previous week	*-1.93*	*-1.05*

SOURCE: U.S. Department of Energy, Energy Information Administration, Weekly Retail Gasoline Prices, as of December 3, 2002, available at: http://tonto.edi.doe.gov/oog/info/gdu/gasdiesel.asp

Retail On-Highway Diesel Prices	25-Nov-02	2-Dec-02
Retail on-highway diesel prices (dollars/gallon)	1.405	1.407
Percent change from previous week	*0.00*	*0.14*

SOURCE: U.S. Department of Energy, Energy Information Administration, Weekly On-Highway Diesel Prices, as of December 3, 2002, available at: http://tonto.edi.doe.gov/oog/info/gdu/gasdiesel.asp

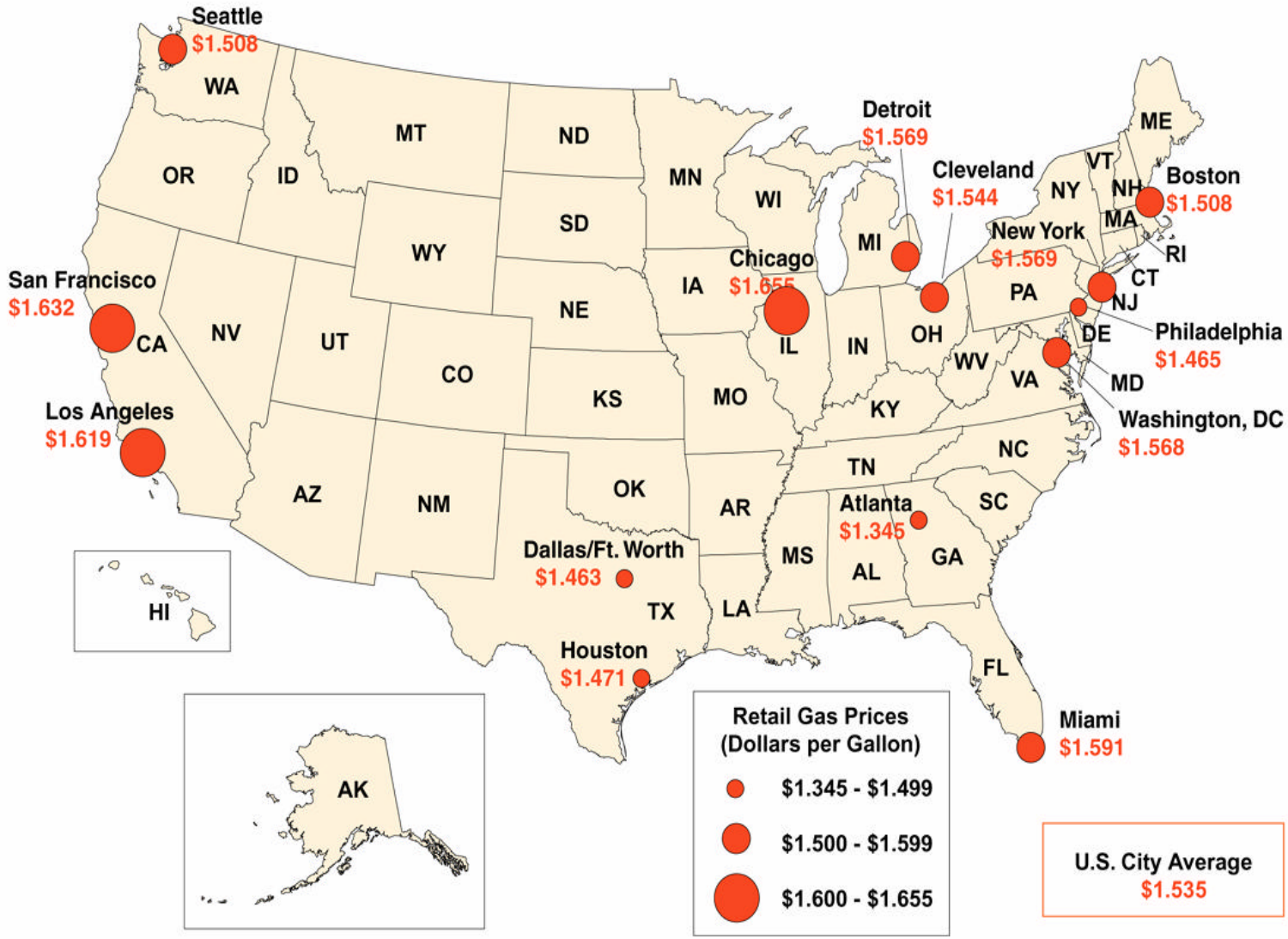


Motor fuel prices are an important cost component of highway transportation. Changes in motor fuel prices impact the behavior of both producers and consumers, and affect the demand for transportation in terms of level and modal mix.

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.

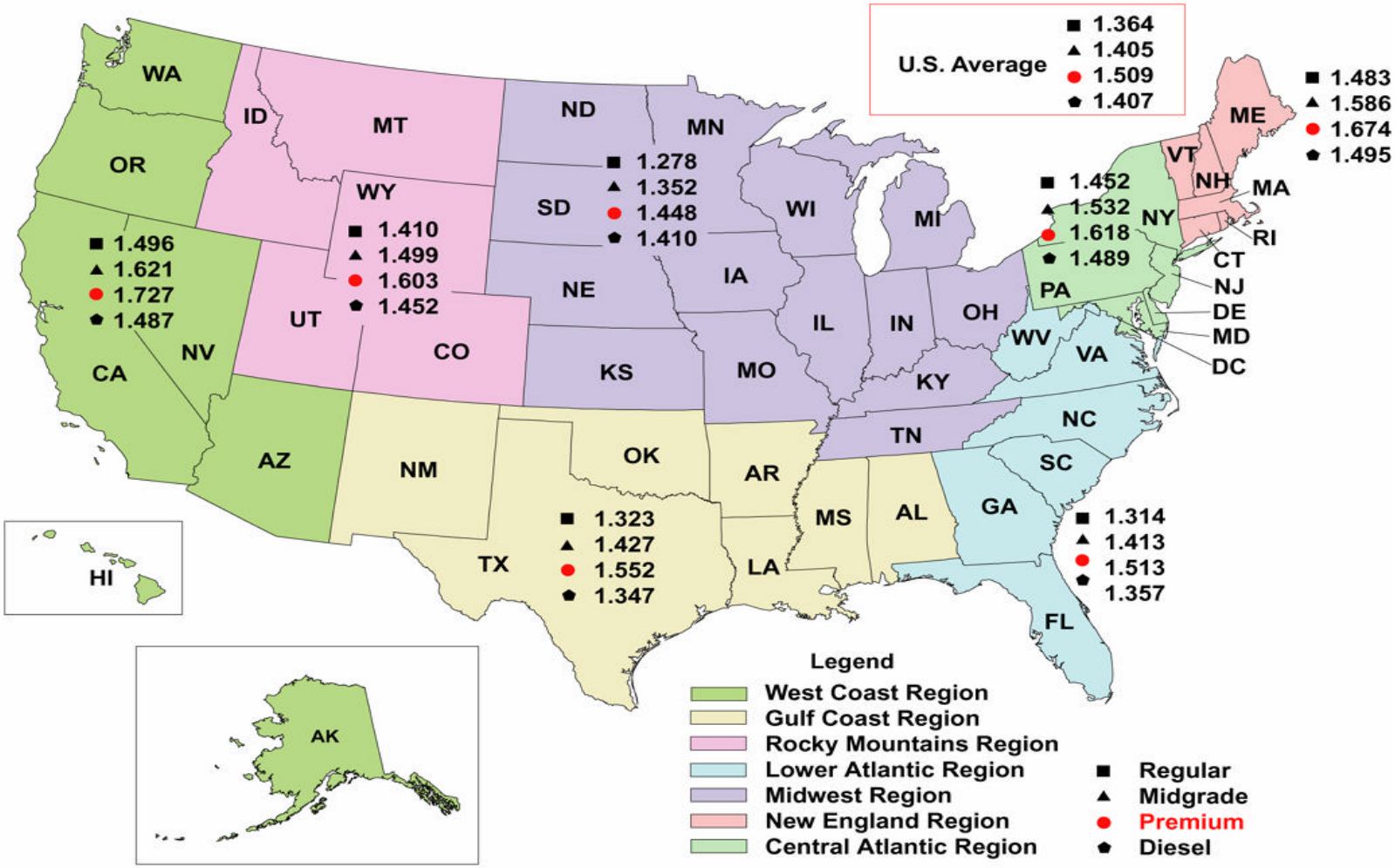
There are regional differences in motor fuel prices, as the following maps illustrate.

Retail Gasoline Prices of Selected Metropolitan Areas, October 2002



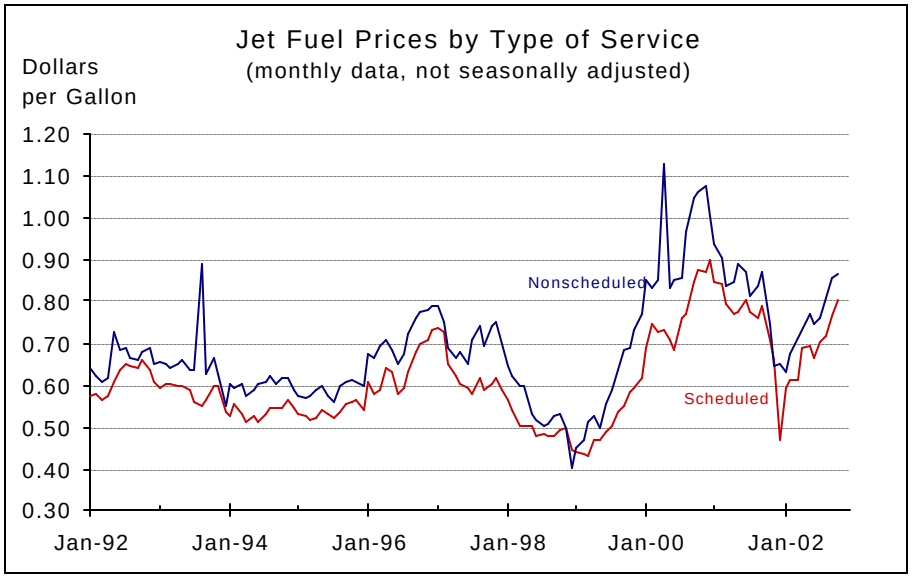
SOURCE: U.S Department of Labor, Bureau of Labor Statistics, "Price & Living Conditions: Average Price Data." http://www.bls.gov/data/home.htm.

Regional Retail Motor Fuel Prices as of December 2, 2002



SOURCE: U.S. Department of Energy, Energy Information Administration, "Retail Gasoline Prices" and "On-Highway Diesel Prices."
Internet site: http://www.eia.doe.gov/oil_gas/petroleum/special/gasoline_update/market_summary.html

DOMESTIC UNIT PRICES FOR AIRLINE JET FUEL



Current Dollars per Gallon	Oct-01	Oct-02
For nonscheduled airlines	0.75	0.87
Percent change from same month previous year	*-29.84*	*16.25*
For scheduled airlines	0.71	0.80
Percent change from same month previous year	*-19.45*	*13.60*

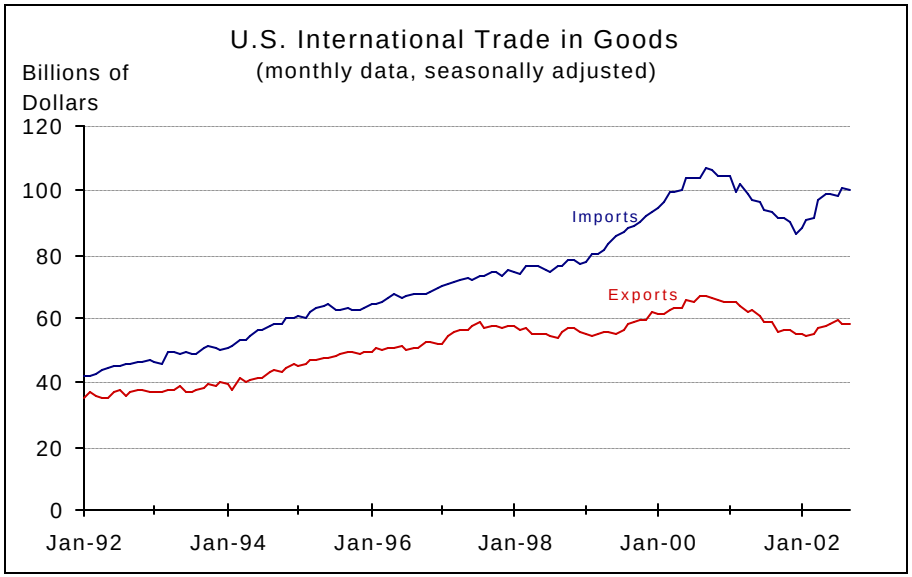
NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

Data for July 2002 to October 2002 are preliminary due to late reports by carriers.

SOURCE: Bureau of Transportation Statistics, Office of Airline Information; October 2002; available at: http://www.bts.gov/oai.

Jet fuel prices reported to the Bureau of Transportation Statistics differ from producer prices. Reports to BTS show the cost per gallon of fuel, excluding taxes, used by domestic large certificated carriers 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.

VALUE OF U.S. IMPORTS AND EXPORTS

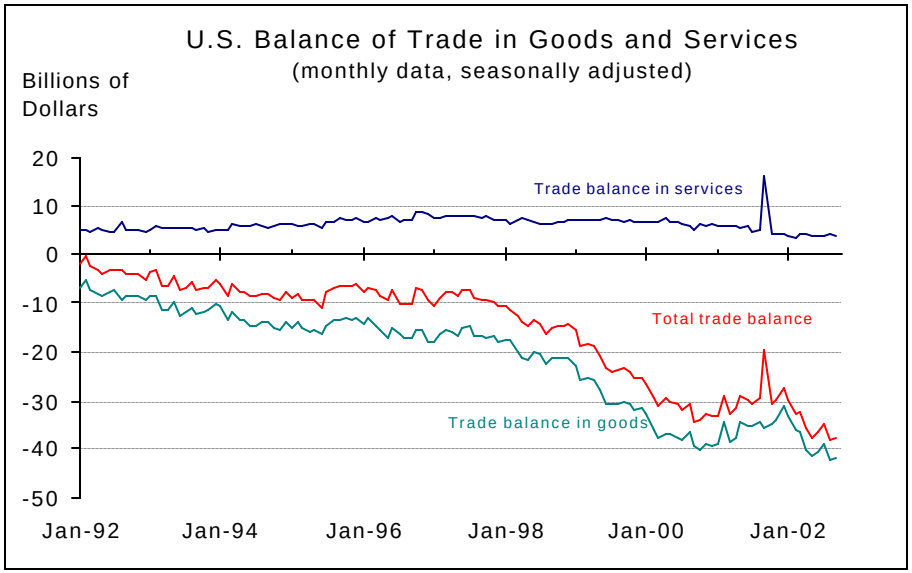


U.S. International Trade In Goods	Aug-02	Sep-02
Imports (millions of dollars)	100,615	100,145
Percent change from previous month	*2.52*	*-0.47*
Exports (millions of dollars)	58,278	58,344
Percent change from previous month	*-1.40*	*0.11*

SOURCE: U.S. Department of Commerce, Bureau of the Census, Foreign Trade Division data, available at: http://www.census.gov/foreign-trade/www/statistics.html.

International trade represents a growing share of the U.S. economy over the past three decades. Total trade value (exports plus imports) as a ratio to GDP increased from about 10 percent in 1970 to 24 percent in 2001. Changes in the level of both imports and exports affect the level of demand for transportation services. The value of U.S. imports historically have been higher than the value of U.S. exports, but the gap has widened in recent years.

U.S. BALANCE OF TRADE IN GOODS AND SERVICES



U.S. International Trade	Aug-02	Sep-02
Trade balance in services	4.06	3.78
Percent change from previous month	*2.24*	*-6.95*
Total trade balance	-38.28	-38.03
Percent change from previous month	*9.16*	*-0.66*
Trade balance in goods	-42.34	-41.80
Percent change from previous month	*8.45*	*-1.27*

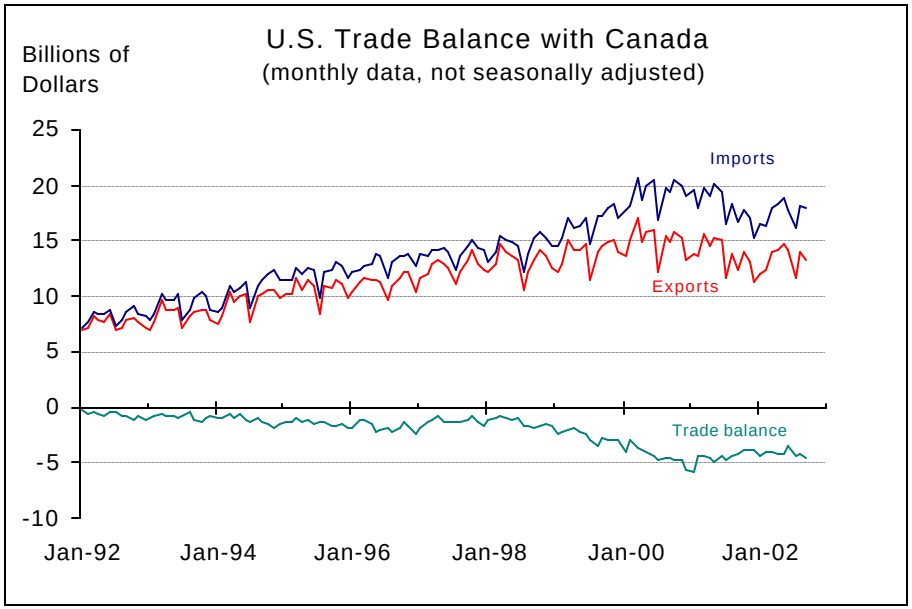
SOURCE: U.S. Department of Commerce, Bureau of the Census, Foreign Trade Division; December 4, 2002; available at: http://www.census.gov/foreign-trade/balance/index.html

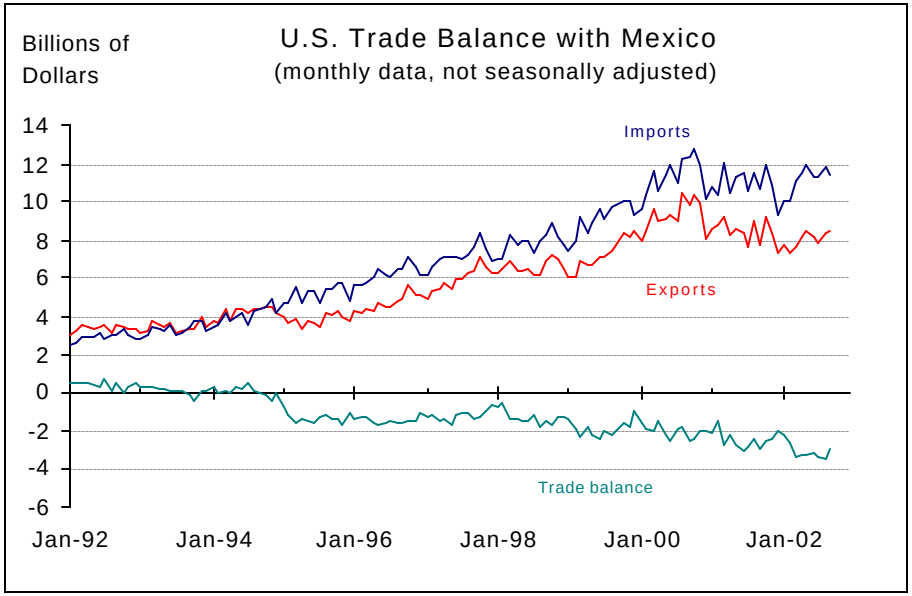
Trade generates demand for transportation and transportation makes trade possible by making local markets accessible and linking demand and supply that are separated in space. As transportation has become cheaper, faster, safer and more reliable, more goods and services — both variety and quantity — have been traded among regions and nations.

The commodity components of a country's international trade reflects the country's comparative advantages. The balance of trade of a country is an aggregate measure of its industries' comparative advantages at the industry level. The positive balance of trade, exporting more than importing, shows that an industry is relatively competitive, while a negative balance of trade shows that an industry is at a relative disadvantaged position in terms of competitiveness.

The U.S. balance of trade has been negative for many years. This has mainly been because of the negative balance in trade of goods. After reaching an all-time low at the end of 2000, the U.S. balance of trade in goods has been improving. The U.S. balance of trade in services has always been positive. In September 2001, there was an unusually large spike in the balance of services, which was primarily caused by a sharp drop in imports of services. Services imports decreased $13.5 billion from August to September, while services exports decreased only $3.2 billion. The sharp drop in imports of services was mainly caused by hefty cuts in U.S. payments for foreign insurance services. Decreases in foreigners' travel and passenger fares in the U.S. accounted for the large decrease in services exports.

U.S. BALANCE OF TRADE WITH CANADA AND MEXICO





U.S. Trade Balance with Canada	Sep-01	Sep-02
Imports (billions of dollars)	16.68	17.92
Percent change from same month previous year	*-13.94*	*7.46*
Exports (billions of dollars)	12.43	13.33
Percent change from same month previous year	-16.28	*7.21*
Trade balance (billions of dollars)	-4.25	-4.59
Percent change from same month previous year	*-6.26*	*8.18*

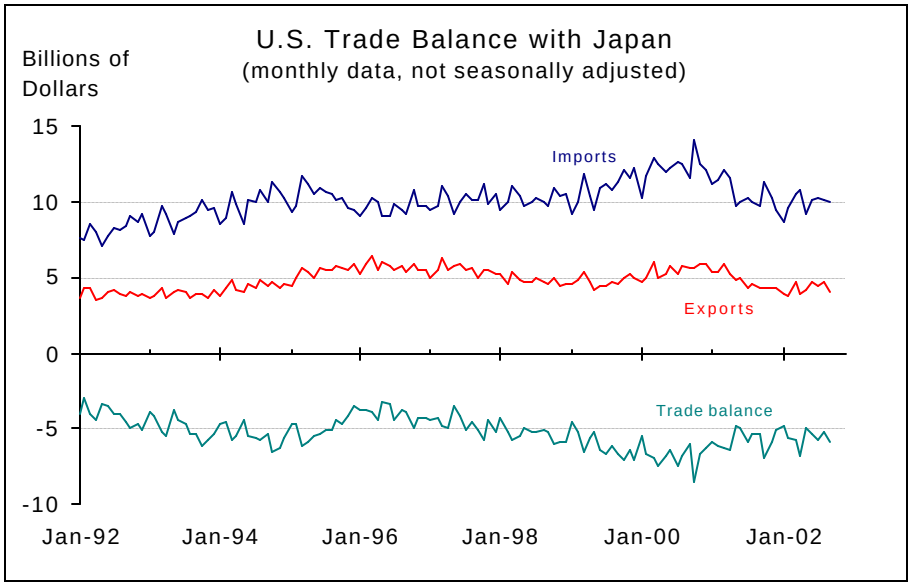
U.S. Trade Balance with Mexico	Sep-01	Sep-02
Imports (billions of dollars)	10.70	11.42
Percent change from same month previous year	*-13.35*	*6.80*
Exports (billions of dollars)	7.72	8.47
Percent change from same month previous year	*-20.85*	*9.70*
Trade balance (billions of dollars)	-2.97	-2.95
Percent change from same month previous year	*14.91*	*-0.73*

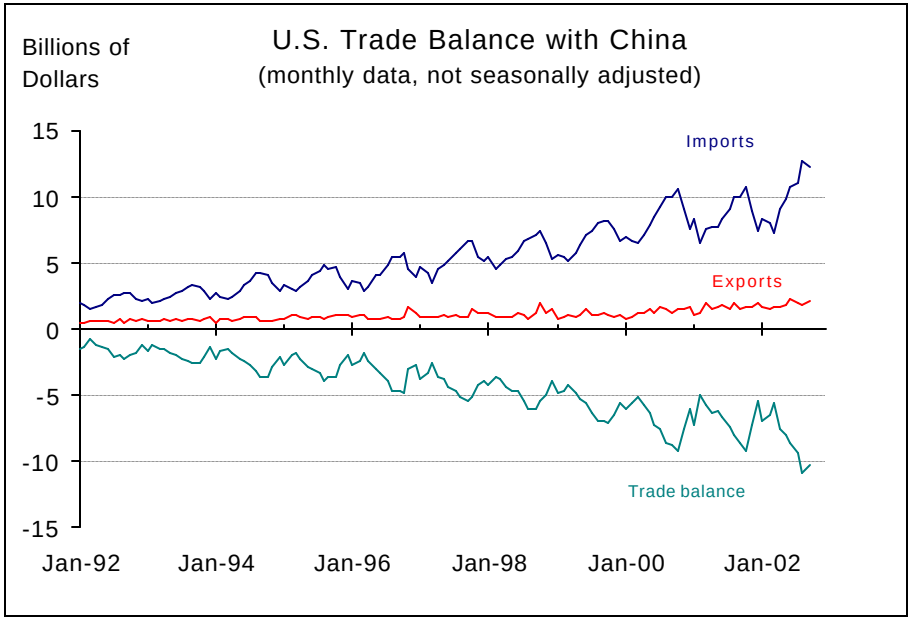
NOTE: The current value is compared to the value from the same period in the previous year to account for seasonality.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Foreign Trade Division; December 4, 2002; available at: http://www.census.gov/foreign-trade/balance/index.html

The U.S. trade balance with both Canada and Mexico is negative, with more imports from both countries than exports to them. In the last two years, while the total value of U.S. trade with the two countries increased, U.S. trade deficits with these two countries also increased.

U.S. BALANCE OF TRADE WITH ASIA





U.S. Trade Balance with Japan	Sep-01	Sep-02
Imports (billions of dollars)	9.68	10.01
Percent change from same month previous year	*-15.73*	*3.42*
Exports (billions of dollars)	4.32	4.15
Percent change from same month previous year	*-21.86*	*-3.79*
Trade balance (billions of dollars)	-5.36	-5.85
Percent change from same month previous year	*-10.05*	*9.22*

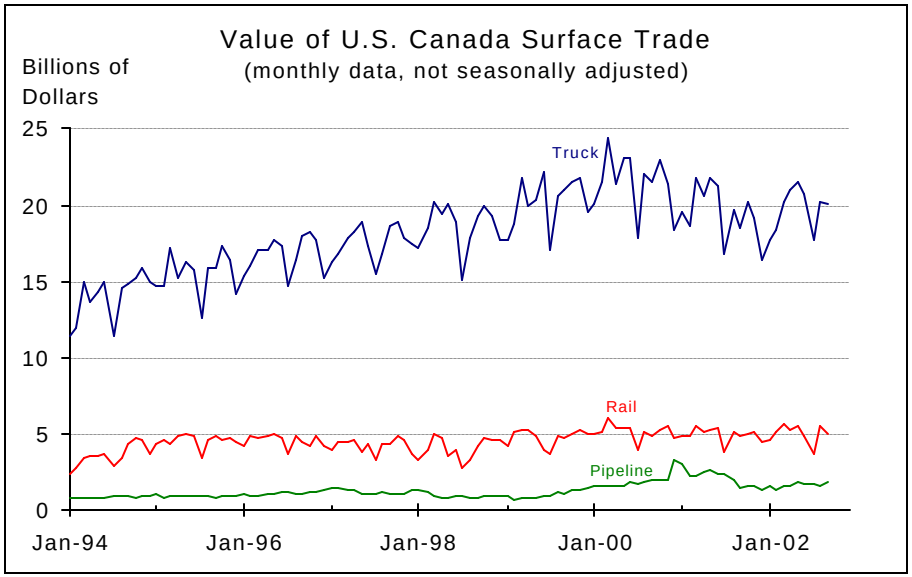
U.S. Trade Balance with China	Sep-01	Sep-02
Imports (billions of dollars)	9.95	12.27
Percent change from same month previous year	*-1.13*	*23.34*
Exports (billions of dollars)	1.44	2.03
Percent change from same month previous year	*8.36*	*40.49*
Trade balance (billions of dollars)	-8.50	-10.27
Percent change from same month previous year	*-2.58*	*20.74*

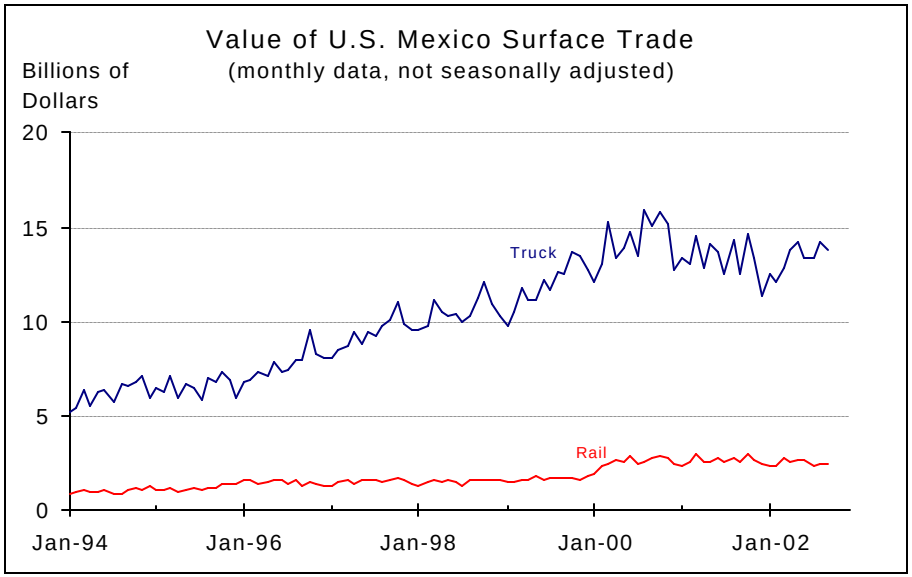
NOTE: The current value is compared to the value from the same period in the previous year to account for seasonality.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Foreign Trade Division; December 10, 2002; available at: http://www.census.gov/foreign-trade/balance/index.html

For many years, the United States has been importing more from Japan and China than it exported to these countries. While the trade volume with Japan declined in recent months, the U.S. trade volume with China continued to grow, and imports grew faster than exports. Imports from China into the United States are very seasonal compared to U.S. exports to China.

U.S. SURFACE TRADE WITH CANADA AND MEXICO





U.S. - Canada Trade	Sep-01	Sep-02
Truck (millions of dollars)	18,571	20,058
Percent change from same month previous year	*-13.81*	*8.01*
Rail (millions of dollars)	4,983	5,041
Percent change from same month previous year	*0.48*	*1.17*
Pipeline (millions of dollars)	1,435	1,891
Percent change from same month previous year	*-28.89*	*31.79*

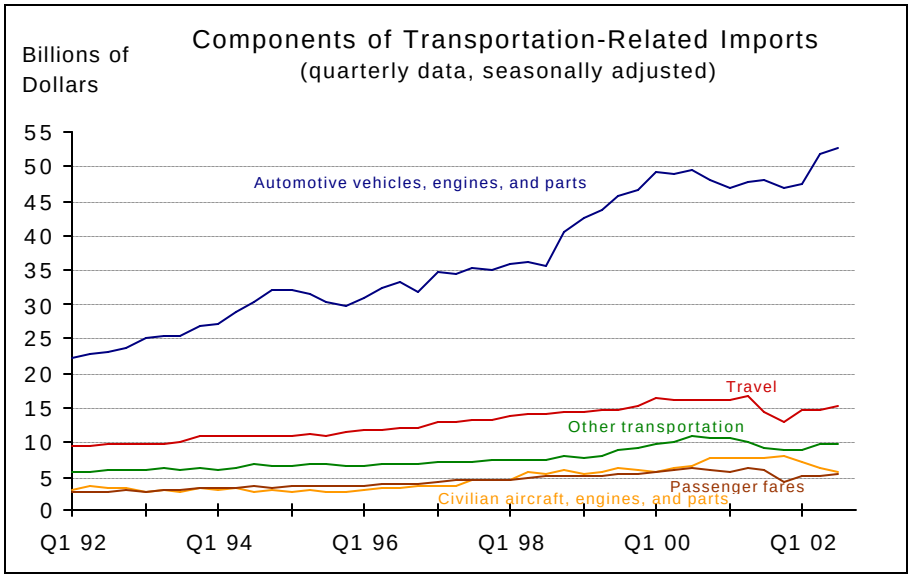
U.S. - Mexico Trade	Sep-01	Sep-02
Truck (millions of dollars)	12,514	13,846
Percent change from same month previous year	*-17.23*	*10.64*
Rail (millions of dollars)	2,659	2,552
Percent change from same month previous year	*-5.34*	*-4.05*
Pipeline (millions of dollars)	48	58
Percent change from same month previous year	*57.73*	*19.44*

NOTE: The current value is compared to the value from the same period in the previous year to account for seasonality.

SOURCE: Data obtained from the U.S. Department of Commerce, Census Bureau by the U.S. Department of Transportation Bureau of Transportation Statistics, Transborder Surface Freight Dataset; Dec. 10, 2002; available at : http://www.bts.gov/ntda/tbscd/prod.html.

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, while Mexico now ranks second. Surface modes include not only truck, rail, and pipeline (shown here), but also government mail and other miscellaneous modes.

VALUE OF TRANSPORTATION-RELATED IMPORTS



The largest item in U.S. transportation related imports has been automobile vehicles, engines, and parts, which accounted for 60 percent of U.S. total transportation-related imports. After a sharp increase during the period from mid-1998 to the beginning of 2000, the growth of U.S. imports of automobile vehicles decreased slightly in the last two years before a nine percent increase in the second quarter of 2002.

Imports (billions of dollars)	Q2 02	Q3 02
Transportation-related total	87.95	88.75
Percent change from previous quarter	*5.08*	*0.91*
Automotive and parts	51.88	52.73
Percent change from previous quarter	*8.98*	*1.64*
Travel	14.80	15.18
Percent change from previous quarter	*0.68*	*2.53*
Other	9.90	9.80
Percent change from previous quarter	*9.70*	*-1.01*
Civilian aircraft and parts	6.23	5.65
Percent change from previous quarter	*-14.14*	*-9.24*
Passenger fares	5.15	5.40
Percent change from previous quarter	*0.49*	*4.85*

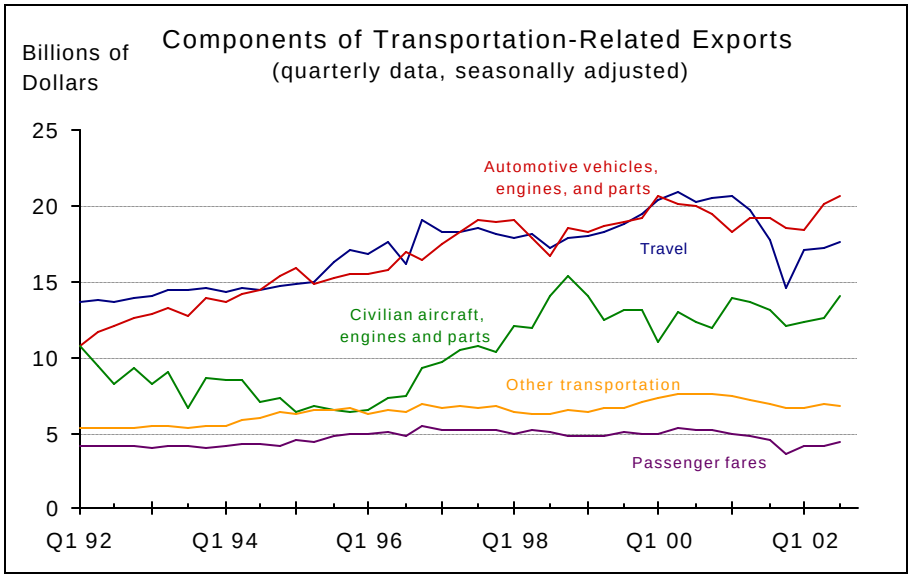
NOTES: "Other transportation" imports include payments for freight transportation services and port services.

Passenger fares include international transportation fares, particularly, air fares and ocean liner fares.

Travel includes intercity and local fares within a country, hotel and restaurant, admission fees, and souvenir expenditures.

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis; National Income and Product Accounts data, Table 4.3; Nov. 26, 2002; available at: http://www.bea.doc.gov/bea/dn/nipaweb/AllTables.asp?Selected=N#S4 ; based on *Survey of Current Business*.

VALUE OF TRANSPORTATION-RELATED EXPORTS



Automobiles vehicles (including engines and parts), and travel are the leading commodities in U.S. transportation related exports. Exports of civilian aircraft, engines and parts also contributed a significant portion to the U.S. total. In the fourth quarter of 2001, all U.S. transportation-related exports decreased. Out of these decreases, the drop in exports of travel services was particularly sharp, reflecting the impact of the September 11, 2001 terrorist attacks. However, travel services exports rebounded in the first two quarters of 2002, making up much of the decline.

Exports (billions of dollars)	Q2 02	Q3 02
Transportation-related total	61.10	63.70
Percent change from previous quarter	*3.78*	*4.26*
Automotive and parts	20.10	20.63
Percent change from previous quarter	*8.94*	*2.61*
Travel	17.33	17.68
Percent change from previous quarter	*0.87*	*2.02*
Civilian aircraft and parts	12.55	14.08
Percent change from previous quarter	*1.62*	*12.15*
Other	6.93	6.85
Percent change from previous quarter	*2.97*	*-1.08*
Passenger fares	4.20	4.48
Percent change from previous quarter	*0.60*	*6.55*

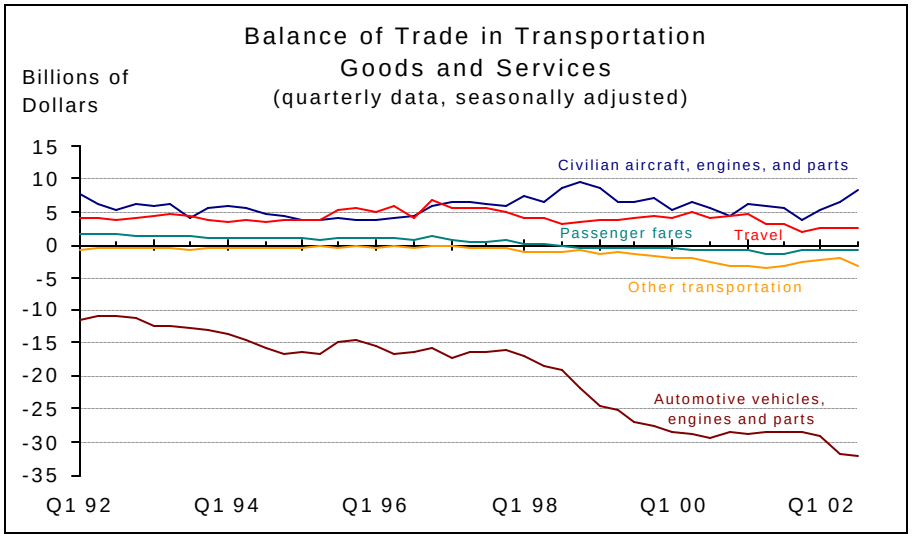
NOTES: "Other transportation" exports include payments for freight transportation services and port services.

Passenger fares include international transportation fares, particularly, air fares and ocean liner fares.

Travel includes intercity and local fares within a country, hotel and restaurant, admission fees, and souvenir expenditures.

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis; National Income and Product Accounts data, Table 4.3; Nov. 26, 2002; available at: http://www.bea.doc.gov/bea/dn/nipaweb/AllTables.asp?Selected=N#S4 ; based on *Survey of Current Business*.

U.S. BALANCE OF TRADE IN TRANSPORTATION GOODS AND SERVICES



U.S. international trade in transportation-related goods and services has run a deficit for many years, due to a deficit in automobile and parts trading. In contrast, civilian aircraft and parts trade has run a surplus, exports being about three times imports.

Travel is another area in which the U.S. has a trade surplus. However, this surplus has decreased in the past few months as travel into the U.S. dropped sharply after the September 11, 2001 terrorist attacks. Passenger fares were previously positive, but became negaative in 1999 and recovered slightly last quarter.

Balance of Trade (billions of dollars)	Q2 02	Q3 02
Transportation-related total	-26.85	-25.05
Percent change from previous quarter	*8.14*	*-6.7*
Civilian aircraft and parts	6.33	8.43
Percent change from previous quarter	*24.12*	*3.32*
Travel	2.53	2.50
Percent change from previous quarter	*2.02*	*-1.19*
Passenger fares	-0.95	-0.93
Percent change from previous quarter	*0.00*	*-2.11*
Other	-2.10	-3.05
Percent change from previous quarter	*-7.89*	*45.24*
Automotive and parts	-31.78	-32.10
Percent change from previous quarter	*9.02*	*1.01*

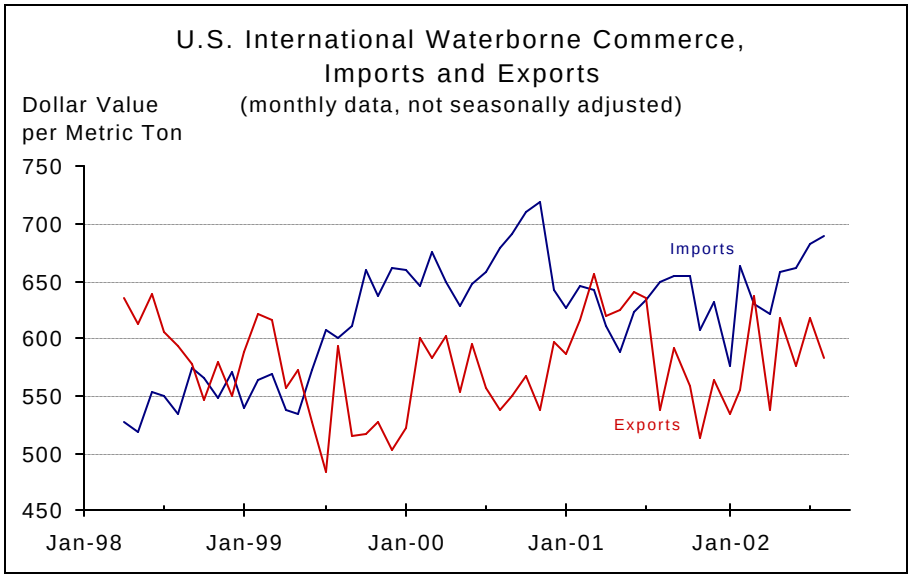
NOTES: "Other transportation" include payments for freight transportation services and port services.

Passenger fares include international transportation fares, particularly, air fares and ocean liner fares.

Travel includes intercity and local fares within a country, hotel and restaurant, admission fees, and souvenir expenditures.

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis; National Income and Product Accounts data, Table 4.3; Nov. 26, 2002; available at: http://www.bea.doc.gov/bea/dn/nipaweb/AllTables.asp?Selected=N#S4 ; based on *Survey of Current Business*.

VALUE PER METRIC TON OF U.S. WATERBORNE IMPORTS AND EXPORTS



Dollar Value Per Metric Ton	Aug-01	Aug-02
Imports	538	582
Percent change from same month previous year	*0.01*	*8.21*
Exports	650	689
Percent change from same month previous year	*-4.16*	*5.95*

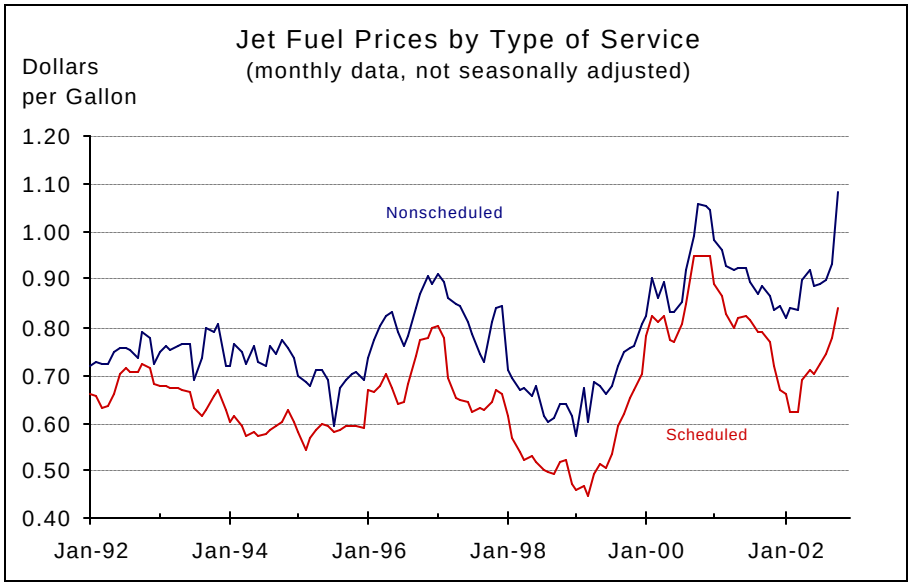
NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

Data reported prior to the 3rd quarter of 1998 were collected and reported by the U.S. Department of Commerce and may not be completely comparable to data reported by the Maritime Administration.

SOURCE: U.S. Department of Transportation, Maritime Administration, Waterborne Databank, and U. S. Department of Commerce, Bureau of Census, Foreign Trade Division, U.S. Waterborne Exports and General Imports, various issues, available at http://www.marad.dot.gov/statistics/usfwts/index.html.

Approximately 40 percent by value (75 percent in terms of tonnage) of cargo carried in U.S. foreign trade is carried on the water.

INTERNATIONAL UNIT PRICES FOR AIRLINE JET FUEL



Current Dollars per Gallon	Oct-01	Oct-02
For nonscheduled airlines	0.87	1.08
Percent change from same month previous year	*-17.78*	*24.44*
For scheduled airlines	0.77	0.84
Percent change from same month previous year	*-18.98*	*9.29*

NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

Data for July 2002 to October 2002 are preliminary due to late reports by carriers.

SOURCE: Bureau of Transportation Statistics, Office of Airline Information; October 2002; available at: http://www.bts.gov/oai.

International jet fuel prices reflect both domestic and foreign purchases consumed in international routes by U.S. carriers.

Jet fuel prices reported to the Bureau of Transportation Statistics differ from producer prices. Reports to BTS show the cost per gallon of fuel, excluding taxes, used by domestic large certificated carriers 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.

Human and Natural Environment

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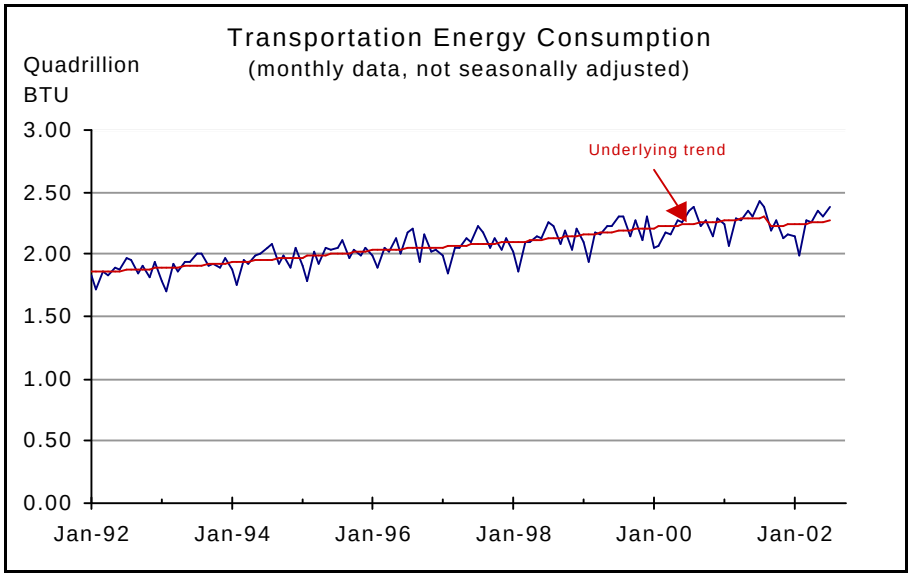
TRANSPORTATION ENERGY USE



Transportation Energy Consumption	Jul-01	Jul-02
Quadrillion BTU	2.44	2.39
Percent change from same month previous year	*3.79*	*-2.13*

NOTE: The current value is compared to the value from the same period in the previous year to account for seasonality.

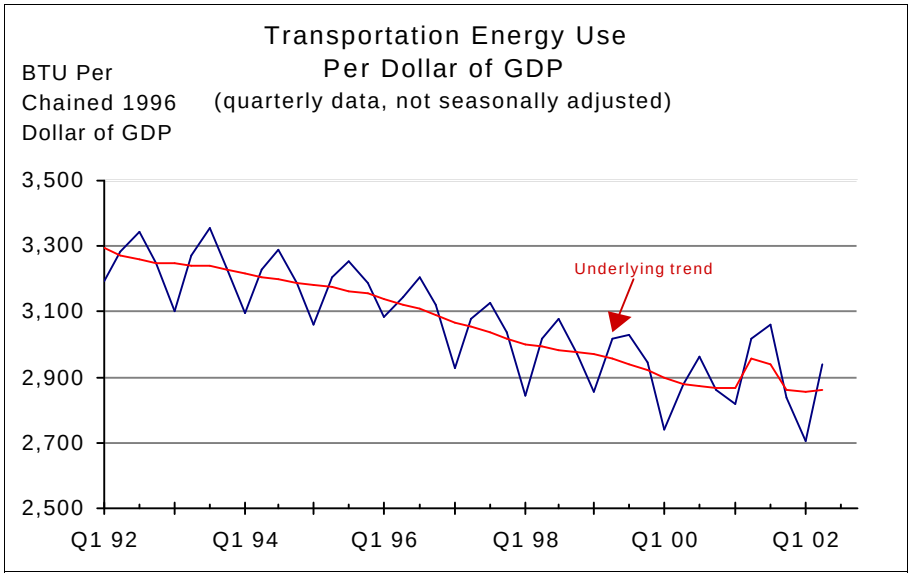
One quadrillion is equal to one billion million.

A trendline has been provided for transportation energy consumption. The trend has been calculated through a statistical procedure called Structural Modeling, in which the time series under study is decomposed into seasonal, trend and irregular components. For further information on this statistical procedure, see: S.J. Koopman, et al., *Structural Time Series Analyser, Modeller and Predictor* (STAMP), London: Timberlake Consultants Ltd. , 2000

SOURCE: U.S. Department of Energy, Energy Information Administration, *Monthly Energy Review*, October 2002, available at: http://www.eia.doe.gov/mer.

Transportation accounts for about 28 percent of U.S. energy consumption. Petroleum accounts for nearly all (about 97 percent) of the transportation sector's energy use. Petroleum is a major component of transportation costs, and its usage affects the environment. Because more than half of the U.S. petroleum supply is imported, there are also national security concerns for assuring petroleum supplies.

TRANSPORTATION ENERGY USE PER DOLLAR OF GDP



Transportation Energy Use Per $ of GDP	Q2 01	Q2 02
Thousand BTU per Dollar of GDP	3,018	2,942
Percent change from same quarter previous year	*4.86*	*-2.52*

NOTE: The current value is compared to the value from the same period in the previous year to account for seasonality.

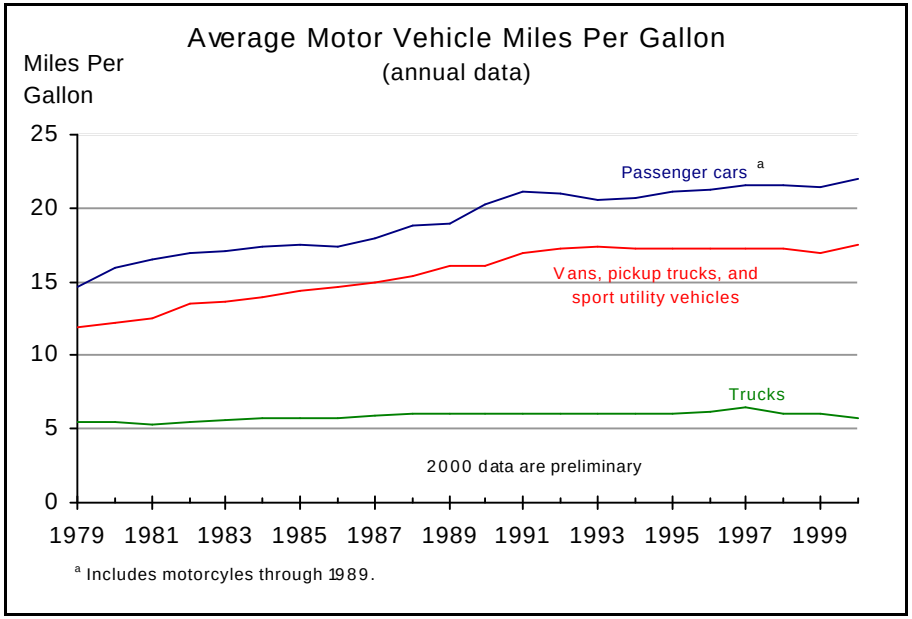
A trendline has been provided for transportation energy consumption. The trend has been calculated through a statistical procedure called Structural Modeling, in which the time series under study is decomposed into seasonal, trend and irregular components. For further information on this statistical procedure, see: S.J. Koopman, et al., *Structural Time Series Analyser, Modeller and Predictor* (STAMP), London: Timberlake Consultants Ltd., 2000

SOURCE: U.S. Department of Energy, Energy Information Administration, *Monthly Energy Review,* September 2002, available at: http://www.eia.doe.gov/mer.

BTU - British Thermal Unit
The average heat content of motor gasoline is 129,024 BTU per gallon. One quadrillion BTU is equivalent to 7.75 billion gallons of motor gasoline.

This indicator shows the level of energy use for transportation with respect to production of GDP and the levels of personal consumption in the United States over time. Transportation energy use reflects the seasonality of personal travel.

AVERAGE MOTOR VEHICLE MILES PER GALLON



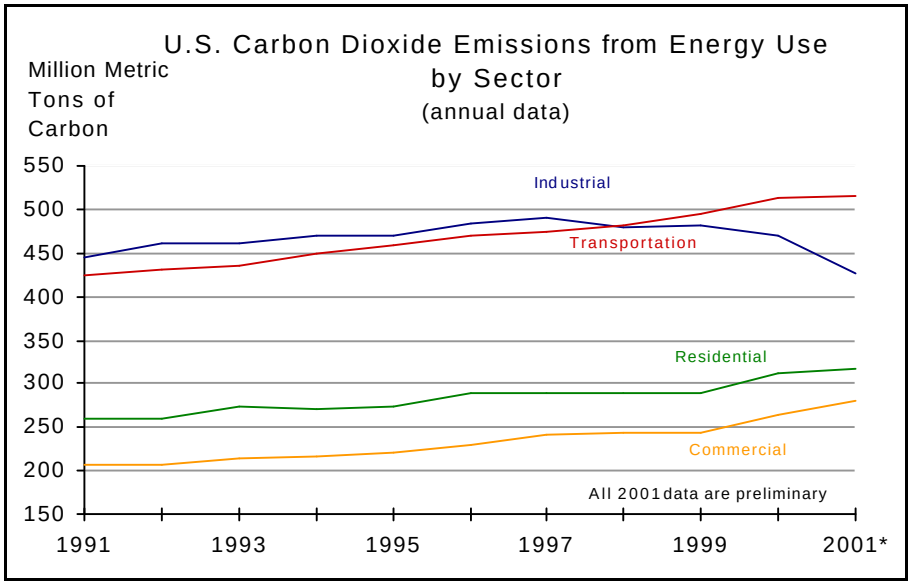
Average Motor Vehicle Miles Per Gallon	1999	2000*
Passenger cars	21.4	22.0
Percent change from previous year	*-0.93*	*2.80*
Vans, Pickup trucks, SUVs	17.0	17.5
Percent change from previous year	*-1.16*	*2.94*
Trucks	6.0	5.8
Percent change from previous year	*-1.64*	*-3.33*

* Preliminary estimates.

SOURCES: U.S. Department of Energy, Energy Information Administration, *Monthly Energy Review*. Available at http://www.eia.doe.gov/mer

Since 1979, the average fuel rate of passenger cars, vans, pickup trucks, and sport utility vehicles have had an upward trend. In the 1990s, the fuel rates reached a more stable trend, and are now better than a decade ago. In 2000, the fuel rate for passenger cars reached a historical efficiency of 22 miles per gallon. The fuel rates for trucks have not changed significantly. (The average fuel rate is calculated by dividing fuel consumption by mileage of a motor vehicle.)

U.S. CARBON DIOXIDE EMISSIONS



MMTC = million metric tons of carbon
Tons of carbon can be converted to tons of carbon dioxide by multiplying by 3.667.

Carbon dioxide is a major greenhouse gas emitted from the burning of fossil fuels.

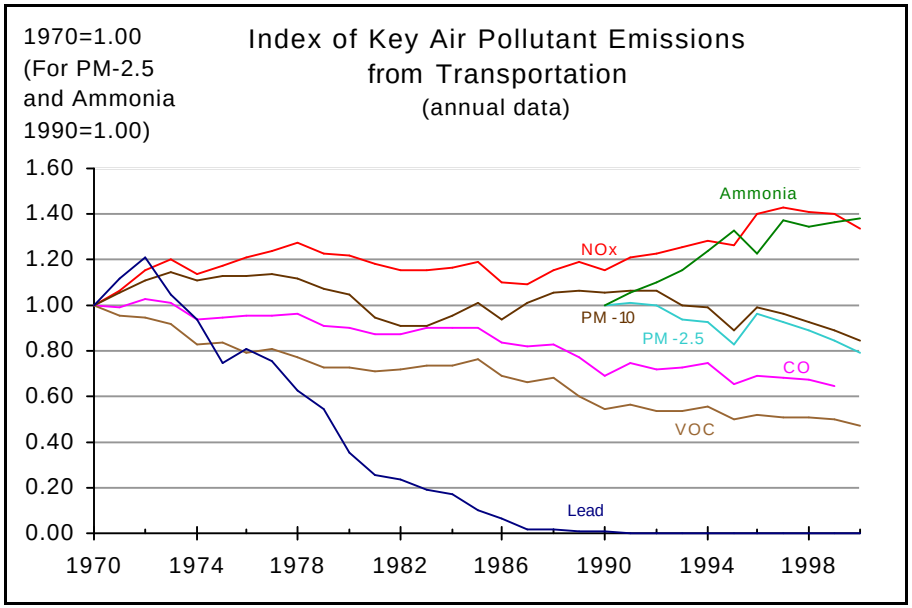
The transportation sector surpassed the industrial sector's carbon dioxide emissions for the first time in 1998. Historically, the industrial sector was the largest emitter of carbon dioxide.

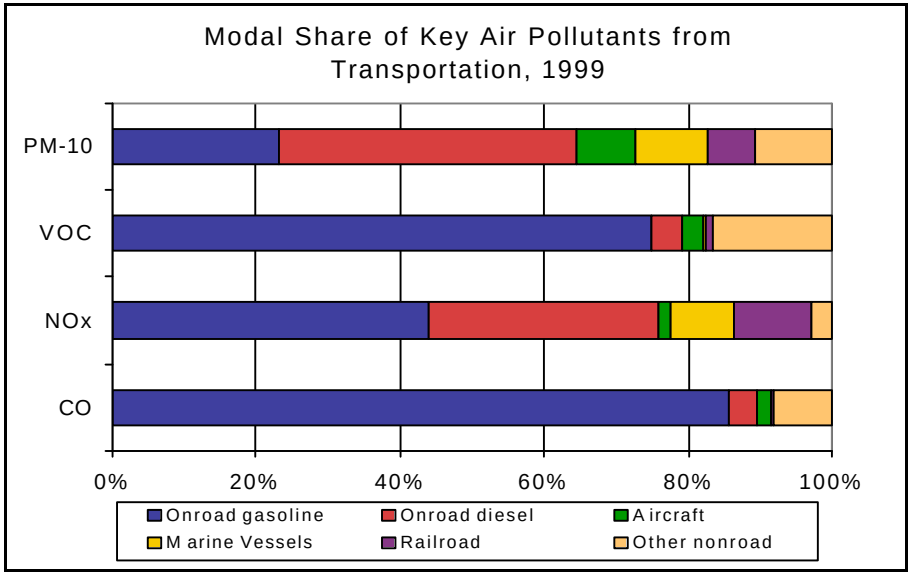
U.S. Carbon Dioxide Emissions	2000	2001*
Transportation (MMTC)	513	516
Percent change from previous year	*3.43*	*0.58*
Industrial (MMTC)	469	426
Percent change from previous year	*-2.49*	*-9.17*
Residential (MMTC)	312	318
Percent change from previous year	*7.59*	*1.92*
Commercial (MMTC)	264	280
Percent change from previous year	*8.20*	*6.06*

* Preliminary estimates.

SOURCES: U.S. Department of Energy, Energy Information Administration, *Emissions of Greenhouse Gases in the United States, 2000.* Available at: http://www.eia.doe.gov/oiaf/1605/ggrpt/index.html. 2001 numbers: U.S. Department of Energy, Energy Information Administration, Flash Estimate, available at: www.eia.doe.gov/oiaf/1605/flash/flash.html

AIR POLLUTANT EMISSIONS FROM TRANSPORTATION





Thousands of Short Tons of Transportation Air Emissions	1999	2000
Carbon monoxide (CO)	58,410	57,167
Oxides of nitrogen (NOx)	11,396	10,945
Volatile organic compounds (VOC)	6,951	6,640
Particulate matter < 10 microns (PM-10)	447	423
Particulate matter < 2.5 microns (PM-2.5)	367	344
Ammonia	265	268
Lead	0.5	0.6

SOURCE: U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards (OAQPS), National Emissions Inventory, available at: http//www.epa.gov/ttn/chief/index.html

Despite rapid growth in vehicle use over the past two decades, emissions of carbon monoxide (CO) and volatile organic compounds (VOC) have declined, and lead emissions have been almost eliminated, leading to improved air quality. There have been reductions in particulate emissions (PM) at the 10 micron classification. Only emissions of nitrogen oxides (NO_X) remain above 1970 levels. (Ammonia and PM-2.5 were added to the list of regulated pollutants recently.)

Onroad vehicles contribute the largest share of air pollutants among all modes.