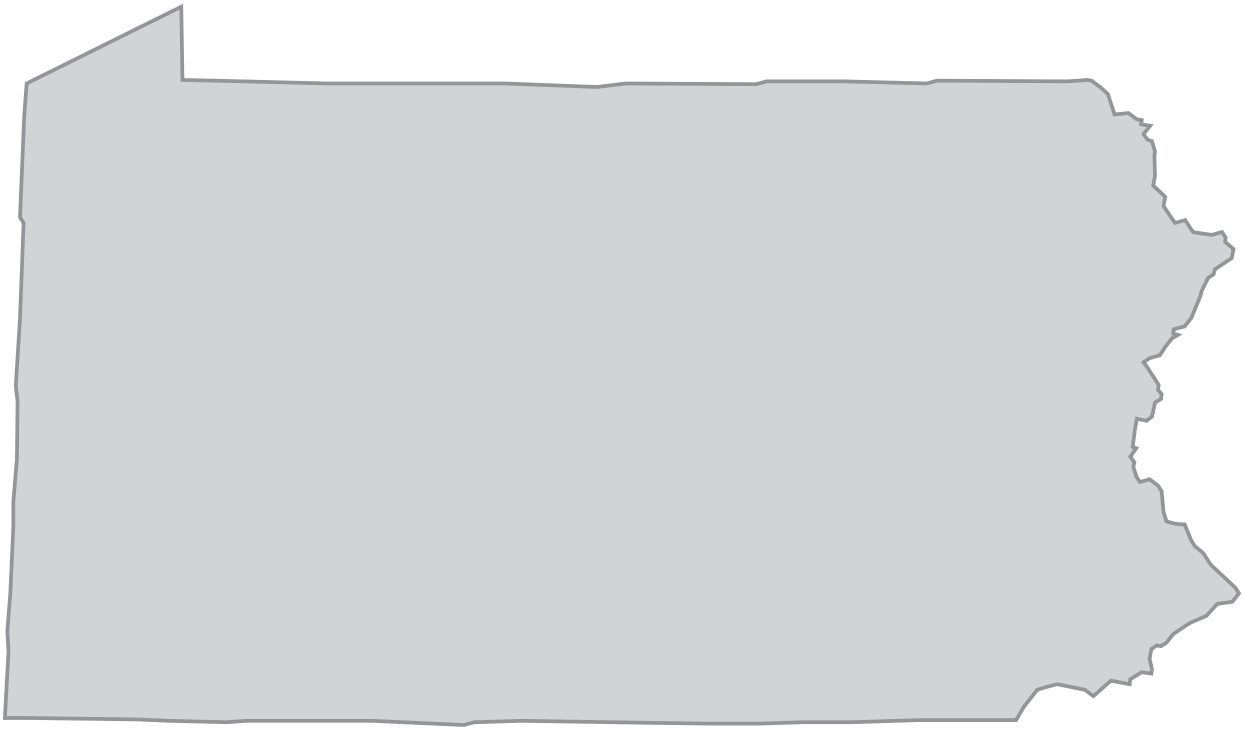
Pennsylvania

◆ ◆ ◆

Transportation
Profile



U.S. Department of Transportation

Bureau of Transportation Statistics

Acknowledgments

U.S. Department of Transportation

Norman Y. Mineta
Secretary

Michael P. Jackson
Deputy Secretary

Bureau of Transportation Statistics

Rick Kowalewski
Deputy Director

William J. Chang
Associate Director for Information Technology

John V. Wells
Chief Economist

Wendell Fletcher
Assistant Director for Transportation Analysis

Project Manager

Ron Duych

Major Contributors

Martha Courtney
Derald Dudley
Torrance Gloss
Darcy Herman
Pamela LaFontaine
Matt Sheppard

Other Contributors

Alpha Glass
Steve Lewis
Chip Moore
Lorisa Smith

Data Collection and Production—Battelle

William Mallett
Mary Field
Alexa Getting
Leonard Hughes
David Kall
Melody Liu
Laurie Scovell

Bureau of Transportation Statistics

Our mission: To lead in developing transportation data and information of high quality and to advance their effective use in both public and private transportation decisionmaking.

Our vision for the future: Data and information of high quality supporting every significant transportation policy decision, thus advancing the quality of life and the economic well-being of all Americans.

To obtain this and other BTS publications:

Internet: www.bts.gov
Phone: 202/366-DATA [press 1]
Fax: 202/366-3640

Mail: Product Orders
Bureau of Transportation Statistics
U.S. Department of Transportation
400 7th Street, SW, Room 7412
Washington, DC 20590

Your comments for improving State Transportation Profile reports are welcome.

Contact the BTS Information Service:

E-mail: answers@bts.gov
Phone: 800/853-1351

Pennsylvania Fast Facts 2000

Transportation System Extent

All public roads: 119,642 miles

Interstate: 1,757 miles

Road bridges: 22,052

Class I railroad trackage: 3,654 miles

Inland waterways: 259 miles

Public use airports: 128 (17 certificated for air carrier operations)[1]

Vehicles and Conveyances

Automobiles registered: 6.0 million

Light trucks registered: 2.7 million

Heavy trucks registered: 71,000

Buses registered: 36,000

Motorcycles registered: 216,000

Rail transit systems: 2 commuter rail, 2 heavy rail (subway), 2 light rail, 2 inclined plane

Numbered boats: 359,000

Geographic

Land area: 44,817 sq. miles (rank: 32)

Percent of land area owned by federal government: 2.3[4] (rank: 37)

Persons per square mile: 274.0 (rank: 10)

Highest point: Mount Davis (3,213 ft.)

Lowest point: Delaware River (0 ft.)

Political Subdivisions

County governments: 66[3]

Municipal governments: 1,023[3]

Congressional districts: 19

Demographic

Population: 12,281,054 (rank: 6)

Percent urban population: 69[2] (rank: 25)

Socioeconomic

Gross state product: $383 billion[4] (rank: 6)

Civilian labor force: 6.0 million[4] (rank: 6)

Median household income: $43,742 (rank: 20)

Commuting (percent of workers)

Car, truck, or van—drove alone: 76.7

Car, truck, or van—carpooled: 9.6

Public transportation (including taxi): 5.8

Walked: 4.1

Other means: 1.0

Worked at home: 2.7

State Transportation Department

Pennsylvania Department of Transportation (PennDOT)

400 North Street, Harrisburg, PA 17120

(717) 787-2838

http://www.dot.state.pa.us/

---

[1] 2002
[2] 1990
[3] 1997
[4] 1999

The Bureau of Transportation Statistics (BTS) presents a profile of transportation in Pennsylvania—part of a series covering the 50 states and the District of Columbia. This collection of transportation information from BTS, other federal government agencies, and other national sources provides a picture of the state's infrastructure, freight movement and passenger travel, safety, vehicles, economy and finance, and energy and environment.

All tables do not necessarily appear in every state profile report due to geographic and other characteristics. For example, border-crossing data are given only for states bordering Canada and Mexico. Data source and accuracy profiles are provided at the end of the report.

Table of Contents

A Infrastructure

TABLES *PAGE*

Pennsylvania Public Road Length, Miles by Functional System: 1995-2000 ..... A-1
Pennsylvania Public Road Length, Miles by Ownership: 2000 ..... A-1
Pennsylvania Toll Roads: 2001 ..... A-2
Pennsylvania Toll Bridges and Ferries: 2001 ..... A-3
Pennsylvania Road Condition by Functional System – Rural: 1995-2000 ..... A-4
Pennsylvania Road Condition by Functional System – Urban: 1995-2000 ..... A-5
Highway Bridge Condition: 2001 ..... A-6
Characteristics of Directly Operated Motor Bus Transit in Pennsylvania: 2000 ..... A-8
Characteristics of Rail Transit in Pennsylvania: 2000 ..... A-9
Civil and Joint-Use Airports, Heliports, STOLports, and Seaplane Bases in Pennsylvania: 2002 ..... A-10
Pennsylvania Commercial Service Airport Enplanements: 2000 ..... A-11
Freight Railroads in Pennsylvania and the United States: 2000 ..... A-12
Freight Railroads Operating in Pennsylvania by Class: 2000 ..... A-13
Pennsylvania Water Ports Ranked in Top 150 U.S. Ports by Tonnage: 2000 ..... A-14
Inland Waterway Mileage: 2000 ..... A-14

FIGURES

Rural Road Conditions in Pennsylvania: 2000 ..... A-4
Urban Road Conditions in Pennsylvania: 2000 ..... A-5
Highway Bridge Condition in Pennsylvania and the United States: 1996-2001 ..... A-7

B Safety

TABLES

Highway Traffic Fatalities and Fatality Rates: 2000 ..... B-1
Passenger Car Occupants Killed and Restraint Use: 2000 ..... B-2
Key Provisions of Safety Belt Use Laws: 2000 ..... B-3
Shoulder Belt Use: 2000 ..... B-4
Pedestrian Fatalities Involving Motor Vehicles: 2000 ..... B-5
Motor Vehicle Fatalities Involving High Blood Alcohol Concentration: 1995 and 2000 ..... B-6
Impaired Driving Laws: 2000 ..... B-7
Maximum Posted Speed Limits by System: 2001 ..... B-8
Total Rail Accidents/Incidents: 2000 ..... B-9
Highway-Rail Grade Crossing Incidents: 2000 ..... B-10
Highway-Rail Grade Crossings by Type: 2000 ..... B-11
Warning Devices at Public Highway-Rail Grade Crossings: 2000 ..... B-11
Types of People Injured in Pennsylvania Train Accidents/Incidents: 2000 ..... B-12
Pennsylvania Transit Safety Data: 2000 ..... B-13

PAGE

U.S. Transit Safety Data: 2000 ..... B-13
Recreational Boating Accidents: 2000 ..... B-14
Alcohol Involvement in Recreational Boating Accidents: 1999 and 2000 ..... B-15
Hazardous Materials Incidents: 2000 ..... B-16
Pennsylvania Hazardous Materials Incidents by Mode: 2000 ..... B-17
Natural Gas Distribution Pipeline Incidents: 1995-2000 ..... B-18
Natural Gas Transmission Pipeline Incidents: 1995-2000 ..... B-18
Hazardous Liquid Pipeline Incidents: 1995-2000 ..... B-19

FIGURES

Shoulder Belt Use: 1998-2000 ..... B-4
Pennsylvania Train Accidents: 1995-2000 ..... B-9
Pennsylvania Highway-Rail Grade Crossing Fatalities and Injuries: 1995-2000 ..... B-10
Railroad Trespasser Deaths and Injuries in Pennsylvania: 1995-2000 ..... B-12
Pennsylvania Recreational Boating Accidents: 1995-2000 ..... B-14
Pennsylvania Recreational Boating Accidents Involving Alcohol: 1996-2000 ..... B-15
Pennsylvania Hazardous Materials Incidents: 1995-2000 ..... B-16
Pennsylvania Hazardous Materials Incidents by Mode: 1995-2000 ..... B-17

C Freight Transportation

TABLES

Domestic Shipments to Pennsylvania by State: 1997 ..... C-1
Domestic Shipments from Pennsylvania by State: 1997 ..... C-2
Shipments Originating in Pennsylvania by Mode of Transportation: 1997 ..... C-3
Domestic Shipments from Pennsylvania by Truck: 1997 ..... C-4
Domestic Shipments to Pennsylvania by Truck: 1997 ..... C-4
Truck Shipments from Pennsylvania by Commodity: 1997 ..... C-7
Rail Shipments Terminating in Pennsylvania: 1999 and 2000 ..... C-8
Rail Shipments Originating in Pennsylvania: 1999 and 2000 ..... C-8
Foreign and Domestic Waterborne Shipments Originating in Pennsylvania by Destination: 2000 ..... C-11
Foreign and Domestic Waterborne Shipments to Pennsylvania by Origin: 2000 ..... C-11
Foreign and Domestic Waterborne Shipments Originating in Pennsylvania by Commodity: 2000 ..... C-12
Domestic Waterborne Shipments Originating in Pennsylvania by Commodity: 2000 ..... C-12
Foreign and Domestic Waterborne Shipments to Pennsylvania by Commodity: 2000 ..... C-13
Domestic Waterborne Shipments to Pennsylvania by Commodity: 2000 ..... C-13
U.S. Waterborne Imports by State and Vessel Type: 1999 ..... C-14
U.S. Waterborne Exports by State and Vessel Type: 1999 ..... C-15
Scheduled and Nonscheduled Air Freight and Mail Enplaned: 2000 ..... C-16
Surface Merchandise Trade with Canada and Mexico: 2000 ..... C-17
Top 50 U.S. Foreign Trade Freight Gateways: 2000 ..... C-19

PAGE

FIGURES

Pennsylvania Surface Merchandise Trade with Canada and Mexico: 1997-2000 ..... C-17
Truck and Rail Imports from Mexico to Pennsylvania by Weight: 1997-2000 ..... C-18
Truck and Rail Imports from Canada to Pennsylvania by Weight: 1997-2000 ..... C-18

MAPS

Pennsylvania Network Truck Flows: 1998 ..... C-5
Pennsylvania Total Rail Flows: 1998 ..... C-9

D Passenger Travel

TABLES

Commuting to Work: 2000 ..... D-1
Licensed Drivers: 2000 ..... D-1
Urban Transit Agencies in Pennsylvania: 2000 ..... D-2
Pennsylvania Airports in Top 50 by Passengers Enplaned: 2000 ..... D-3
Overseas Visitors to the United States: Top 20 Destination States and Territories: 1995 and 2000 ..... D-4

FIGURES

Licensed Drivers in Pennsylvania by Age and Sex: 2000 ..... D-1
Overseas Visitors to Pennsylvania: 1995-2000 ..... D-4

E Registered Vehicles and Vehicle-Miles Traveled

TABLES

Pennsylvania and U.S. Motor-Vehicle Registrations: 2000 ..... E-1
Pennsylvania and U.S. Trailer and Semi-Trailer Registrations: 2000 ..... E-1
Pennsylvania Truck Characteristics and Use: 1997 ..... E-2
Highway Vehicle-Miles Traveled (VMT): 2000 ..... E-3
Highway, Demographic, and Geographic Characteristics of Urbanized Areas in Pennsylvania: 2000 ..... E-4
Pennsylvania and U.S. Recreational Boat Registrations by Propulsion Type: 1999 and 2000 ..... E-5
General Aviation and Air Taxi Aircraft and Hours Flown: 2000 ..... E-6
Active Aviation Pilots and Flight Instructors: 2000 ..... E-7

FIGURES

Highway Vehicle-Miles Traveled, United States and Pennsylvania: 1995-2000 ..... E-3
Pennsylvania Recreational Boat Registrations: 1996-2000 ..... E-5

PAGE

F Economy and Finance

TABLES

Transportation and Warehousing Establishments and Employment in Pennsylvania: 1999 ..... F-1
Transportation and Warehousing Establishments and Employment in the United States: 1999 ..... F-1
Transportation Revenues Collected by State and Local Governments in Pennsylvania: 1995-1999 ..... F-2
Transportation Expenditures by State and Local Government in Pennsylvania: 1995-1999 ..... F-2
State Motor-Fuel Tax Rates: 2000 ..... F-3

G Energy and Environment

TABLES

Transportation Energy Consumption: 1999 ..... G-1
Energy Consumption by End-Use Sector: 1999 ..... G-2
Transportation Energy Consumption per Capita: 1999 ..... G-5
Pennsylvania and U.S. Motor-Fuel Use: 2000 ..... G-6
Pennsylvania Air Quality Nonattainment Areas for Carbon Monoxide (CO) G-7
Pennsylvania Air Quality Nonattainment Areas for Ozone (O_3) G-8
Pennsylvania Air Quality Nonattainment Areas for Particulate Matter (PM-10) G-9
Highway Noise Barriers: 1999 ..... G-10

FIGURES

Energy Consumption by End-Use Sector: 1999 ..... G-3
Pennsylvania Transportation Energy Consumption: 1995-1999 ..... G-4

H Information on Data Sources H-1

I Glossary I-1

Map: Pennsylvania Major Transportation Facilities

A Infrastructure

Table 1-1: Pennsylvania Public Road Length, Miles by Functional System

	1995	1996	1997	1998	1999	2000
Total rural and urban	118,648	118,952	119,129	119,281	119,384	119,642
Rural	85,376	85,750	85,402	85,143	85,097	85,392
Interstate	1,081	1,207	1,201	1,201	1,207	1,207
Other principal arterial	2,613	2,479	2,484	2,494	2,484	2,481
Minor arterial	5,094	5,116	5,107	5,106	5,105	5,107
Major arterial	8,046	8,058	8,063	8,064	8,066	8,069
Minor collector	7,958	7,960	7,956	7,960	7,968	7,966
Local	60,584	60,930	60,591	60,318	60,267	60,562
Urban	33,272	33,202	33,727	34,138	34,287	34,250
Interstate	507	543	549	550	551	550
Other freeways and expressways	499	473	484	486	485	486
Other principal arterial	2,279	2,271	2,268	2,267	2,269	2,268
Minor arterial	3,298	3,282	3,297	3,299	3,303	3,306
Collector	3,743	3,754	3,744	3,743	3,745	3,749
Local	22,946	22,879	23,385	23,793	23,934	23,891

SOURCE: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics,* Washington, DC: annual editions, table HM-20, available at http://www.fhwa.dot.gov/ohim/hs00/hm20.htm as of Feb. 1, 2002.

Table 1-2: Pennsylvania Public Road Length, Miles by Ownership: 2000

	National Highway System	Other federal-aid highway	Nonfederal-aid highway	Total
Total	5,446	21,778	92,418	119,642
State highway agency	4,871	18,653	16,526	40,050
County	4	278	Z	282
Town, township, municipal	57	2,826	71,767	74,650
Other jurisdiction[1]	514	Z	3,201	3,715
Federal agency[2]	Z	21	924	945

[1] Includes state park, state toll, other state agency, other local agency, and roadways not identified by ownership.
[2] Roadways in federal parks, forests, and reservations that are not part of the state and local highway systems.

KEY: Z = zero or less than 1 unit of measurement.

SOURCE: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics,* Washington, DC: annual editions, table HM-14, available at http://www.fhwa.dot.gov/ohim/hs00/hm14.htm as of Feb. 1, 2002.

Table 1-3: Pennsylvania Toll Roads: 2001

Facility	Financing or operating authority	Location	Length in miles	Toll collection direction	Electronic collection system
Interstate					
Pennsylvania Turnpike (Interstate 76)	PA Turnpike Commission	From Irwin to Carlisle	159.5	Both ways	No
Eastern Extension (Interstate 76)	PA Turnpike Commission	From Carlisle to Valley Forge	100.5	Both ways	No
Northeastern Extension	PA Turnpike Commission	From Interstate 76 to Interstate 276	110.3	Both ways	No
Western Extension (Interstate 76)	PA Turnpike Commission	From Irwin to Ohio Line	67.1	Both ways	No
Delaware River Exit (Interstate 276)	PA Turnpike Commission	From Valley Forge to Delaware River Bridge	31.9	Both ways	No
Noninterstate					
Mosey Wood Toll Road	Vacation Charters Limited	From Lake Harmony to PA Route 940	2.5	Both ways	No
Greensburg Bypass	PA Turnpike Commission	From US 22 to New Stanton	13.5	Both ways	No
Beaver Valley Expressway	PA Turnpike Commission	From State Route 51 to New Castle Bypass	17.3	Both ways	No
Monvalley Expressway	PA Turnpike Commission	From US 40 to Interstate 70	5.6	Both ways	No

KEY: PA = Pennsylvania.

SOURCE: U.S. Department of Transportation, Federal Highway Administration, *Toll Facilities in the United States: Bridges-Roads-Tunnels-Ferries,* Washington, DC: June 2001, available at http://www.fhwa.dot.gov/ohim/tollpage.htm as of Feb. 18, 2002.

Table 1-4: Pennsylvania Toll Bridges and Ferries: 2001

Facility	Financing or operating authority	Location	Length in miles	Toll collection direction	Electronic collection system
Interstate					
Interstate 78 Toll Bridge	DE River Port Authority	From Pohatcong Township, NJ (across Delaware River) to Williams Township, PA	6.3	West	No
Delaware Water Gap (Interstate 80)	DE River Port Authority	From Pahaquarry, NJ (across Delaware River) to Delaware River Gap,	0.9	West	No
Ben Franklin (Interstate 676)	DE River Port Authority	From Camden, NJ (across Delaware River) to Philadelphia, PA	1.4	West	No
Walt Whitman (Interstate 76)	DE River Port Authority	From Gloucester, NJ (across Delaware River) to Philadelphia, PA	4.0	West	No
NJ and PA Turnpike (Interstate 276)	NJ and PA Turnpike Authority	From NJ Turnpike (across Delaware River) to PA Turnpike	1.2	Both ways	No
Noninterstate					
Dingman's Ferry	Dingman's Choice and DE Bridge Co.	From Sandyston Township, NJ (across Delaware River) to Dingman's Ferry, PA	0.4	Both ways	No
Tacony-Palmyra	Burlington County Bridge Commission	From Palmyra, NJ (across Delaware River) to Philadelphia, PA	0.9	West	No
Burlington-Bristol	Burlington County Bridge Commission	From Burlington, NJ (across Delaware River) to Bristol, PA	0.7	West	No
Trenton-Morrisville	DE River Joint Toll Bridge Commission	From Trenton, NJ (across Delaware River) to Morrisville, PA	1.2	West	No
Easton-Phillipsburg	DE River Joint Toll Bridge Commission	From Phillipsburg, NJ (across Delaware River) to Easton, PA	1.0	West	No
Portland-Columbia	DE River Joint Toll Bridge Commission	From Columbia, NJ (across Delaware River) to Portland, PA	0.6	West	No
Milford-Montague	DE River Joint Toll Bridge Commission	From Montague, NJ (across Delaware River) to Milford, PA	0.9	West	No
New Hope-Lambertville	DE River Joint Toll Bridge Commission	From Lambertville, NJ (across Delaware River) to New Hope, PA	0.9	Both ways	No
Betsy Ross	DE River Port Authority	From Pennsauken, NJ (across Delaware River) to Philadelphia, PA	2.1	West	E-ZPass
Commodore John Barry	DE River Port Authority	From Bridge Port, NJ (across Delaware River) to Chester, PA	2.7	West	E-ZPass
Vehicular toll ferries					
Fredericktown	Fayette/Washington County, Joint Ferry Service	From Fredericktown (across Monongahela River) to Labelle	U	Both ways	No
Millersburg	Ferryboat Campsites, Inc.	From Millersburg (across Susquehanna River) to Liverpool	U	Both ways	No

KEY: U = data are unavailable; PA = Pennsylvania; NJ = New Jersey; DE = Delaware.

SOURCE: U.S. Department of Transportation, Federal Highway Administration, *Toll Facilities in the United States: Bridges-Roads-Tunnels-Ferries,* Washington, DC: June 2001, available at http://www.fhwa.dot.gov/ohim/tollpage.htm as of Feb. 18, 2002.

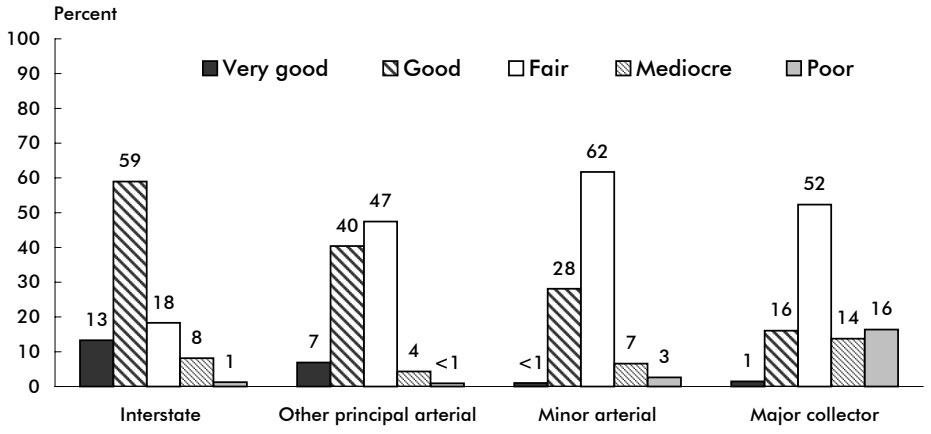
Table 1-5: Pennsylvania Road Condition by Functional System -- Rural (Miles)

	1995	1996	1997	1998	1999	2000
Interstate (total reported)	1,081	1,202	1,202	1,201	1,207	1,201
Very good	24	63	78	42	127	160
Good	506	456	476	713	733	708
Fair	224	308	307	297	216	220
Mediocre	212	270	259	142	100	98
Poor	115	105	82	7	31	15
Not reported	0	5	0	0	1	5
Other principal arterial (total reported)	2,613	2,472	2,483	2,493	2,483	2,473
Very good	8	30	68	107	138	171
Good	544	637	799	908	983	999
Fair	1,767	1,517	1,384	1,314	1,215	1,173
Mediocre	237	222	184	136	126	107
Poor	57	66	48	28	21	23
Not reported	0	7	2	1	2	8
Minor arterial (total reported)	N	N	N	5,105	5,105	5,106
Very good	N	N	N	334	79	51
Good	N	N	N	2,488	1,865	1,435
Fair	N	N	N	2,218	2,714	3,150
Mediocre	N	N	N	65	342	335
Poor	N	N	N	0	105	135
Not reported	5,094	5,116	5,107	0	0	0
Major collector (total reported)	N	N	N	N	N	8,069
Very good	N	N	N	N	N	117
Good	N	N	N	N	N	1,297
Fair	N	N	N	N	N	4,223
Mediocre	N	N	N	N	N	1,109
Poor	N	N	N	N	N	1,323
Not reported	N	N	N	N	N	0

KEY: N = data do not exist.

NOTE: In 2000, the Federal Highway Administration began reporting road condition for rural major collectors using the International Roughness Index, if available. In prior years, data were only available using the Present Serviceability Rating.

Figure 1-1: Rural Road Conditions in Pennsylvania: 2000



NOTE FOR DATA ON THIS PAGE: Road condition is based on measured pavement roughness using the International Roughness Index (IRI). IRI is a measure of surface condition. A comprehensive measure of pavement condition would require data on other pavement distresses such as rutting, cracking, and faulting.

SOURCE FOR DATA ON THIS PAGE: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics,* Washington, DC: annual editions, tables HM-63 and HM-64, available at http://www.fhwa.dot.gov/ as of Feb. 1, 2002.

Data for Figure 1-1: Rural Road Conditions in Pennsylvania: 2000

(Miles)

	Interstate	Other Principal Arterial	Minor Arterial	Major Collector
Total	1,201	2,473	5,106	8,069
Very good	160	171	51	117
Good	708	999	1,435	1,297
Fair	220	1,173	3,150	4,223
Mediocre	98	107	335	1,109
Poor	15	23	135	1,323

(Percent)

	Interstate	Other principal arterial	Minor arterial	Major collector
Total	100	100	100	100
Very good	13	7	1	1
Good	59	40	28	16
Fair	18	47	62	52
Mediocre	8	4	7	14
Poor	1	1	3	16

SOURCE FOR DATA ON THIS PAGE: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics,* Washington, DC: annual editions, tables HM-63 and HM-64, available at http://www.fhwa.dot.gov/ as of Feb. 1, 2002.

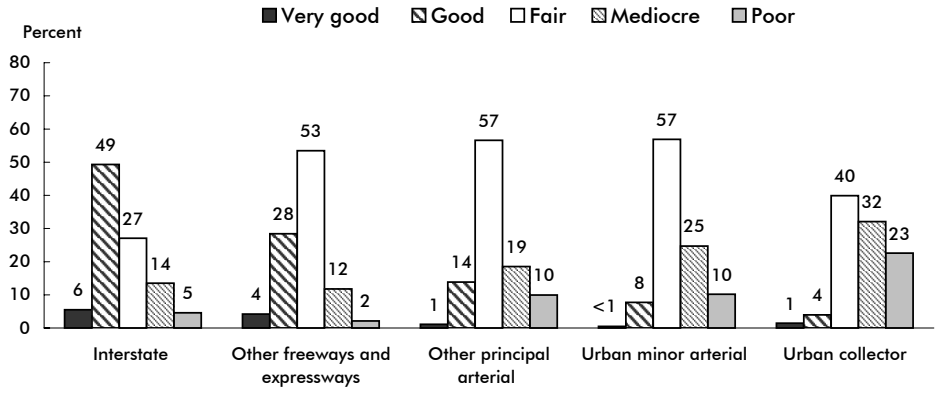
Table 1-6: Pennsylvania Road Condition by Functional System -- Urban
(Miles)

	1995	1996	1997	1998	1999	2000
Interstate (total reported)	507	521	547	547	548	525
Very good	2	3	3	7	16	29
Good	130	126	146	247	254	259
Fair	148	162	170	156	150	142
Mediocre	152	178	180	118	97	71
Poor	75	52	48	19	31	24
Not reported	0	22	3	3	3	24
Other freeways and expressways (total reported)	499	462	469	486	483	475
Very good	0	7	7	6	14	20
Good	73	58	66	116	132	135
Fair	306	281	298	271	266	254
Mediocre	100	89	80	75	59	56
Poor	20	27	18	18	12	10
Not reported	0	11	16	1	2	12
Other principal arterial (total reported)	2,279	2,240	2,246	2,264	2,252	2,236
Very good	7	11	13	17	17	25
Good	167	146	189	213	505	310
Fair	1,262	1,106	1,159	1,197	1,147	1,265
Mediocre	507	509	499	502	379	414
Poor	336	468	386	335	204	222
Not reported	0	31	23	4	17	32
Urban minor arterial (total reported)	N	N	N	N	N	3,306
Very good	N	N	N	N	N	16
Good	N	N	N	N	N	256
Fair	N	N	N	N	N	1,881
Mediocre	N	N	N	N	N	817
Poor	N	N	N	N	N	336
Not reported	N	N	N	N	N	0
Urban collector (total reported)	N	N	N	N	N	3,748
Very good	N	N	N	N	N	55
Good	N	N	N	N	N	149
Fair	N	N	N	N	N	1,495
Mediocre	N	N	N	N	N	1,203
Poor	N	N	N	N	N	846
Not reported	N	N	N	N	N	0

KEY: N = data do not exist.

NOTE: In 2000, the Federal Highway Administration began reporting road condition for urban minor arterials and urban collectors using the International Roughness Index, if available. In prior years, data were only available using the Present Serviceability Rating.

Figure 1-2: Urban Road Conditions in Pennsylvania: 2000



NOTE FOR DATA ON THIS PAGE: Road condition is based on measured pavement roughness using the International Roughness Index (IRI). IRI is a measure of surface condition. A comprehensive measure of pavement condition would require data on other pavement distresses such as rutting, cracking, and faulting.

SOURCE FOR DATA ON THIS PAGE: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics,* Washington, DC: annual editions, tables HM-63 and HM-64, available at http://www.fhwa.dot.gov/ as of Feb. 1, 2002.

Data for Figure 1-2: Urban Road Conditions in Pennsylvania: 2000

(Miles)

	Interstate	Other Freeways & Expressways	Other Principal Arterial	Urban Minor Arterial	Urban Collector
Total	525	475	2,236	3,306	3,748
Very good	29	20	25	16	55
Good	259	135	310	256	149
Fair	142	254	1,265	1,881	1,495
Mediocre	71	56	414	817	1,203
Poor	24	10	222	336	846

(Percent)

	Interstate	Other freeways and expressways	Other principal arterial	Urban minor arterial	Urban collector
Total	100	100	100	100	100
Very good	6	4	1	0	1
Good	49	28	14	8	4
Fair	27	53	57	57	40
Mediocre	14	12	19	25	32
Poor	5	2	10	10	23

SOURCE FOR DATA ON THIS PAGE: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics,* Washington, DC: annual editions, tables HM-63 and HM-64, available at http://www.fhwa.dot.gov/ as of Feb. 1, 2002.

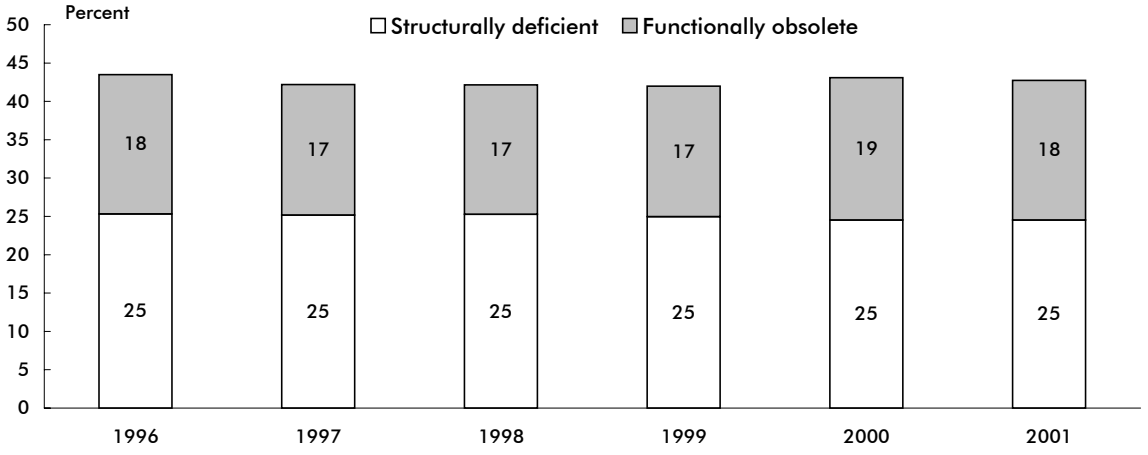
Table 1-7: Highway Bridge Condition: 2001

State	All bridges (number)	Structurally deficient (number)	Functionally obsolete (number)	Total of both (number)	Total of both (percent)
Alabama	15,641	2,677	2,245	4,922	31.5
Alaska	1,433	169	243	412	28.8
Arizona	6,918	194	541	735	10.6
Arkansas	12,434	1,479	1,996	3,475	27.9
California	23,770	2,636	4,204	6,840	28.8
Colorado	8,082	596	847	1,443	17.9
Connecticut	4,171	362	943	1,305	31.3
Delaware	829	47	82	129	15.6
District of Columbia	243	25	136	161	66.3
Florida	11,303	300	1,814	2,114	18.7
Georgia	14,394	1,578	1,924	3,502	24.3
Hawaii	1,071	193	344	537	50.1
Idaho	4,069	320	436	756	18.6
Illinois	25,529	2,725	2,099	4,824	18.9
Indiana	18,067	2,257	2,161	4,418	24.5
Iowa	25,030	5,036	2,060	7,096	28.3
Kansas	25,638	3,465	2,959	6,424	25.1
Kentucky	13,442	1,189	2,864	4,053	30.2
Louisiana	13,426	2,425	2,166	4,591	34.2
Maine	2,367	354	512	866	36.6
Maryland	4,957	436	1,010	1,446	29.2
Massachusetts	4,986	696	1,792	2,488	49.9
Michigan	10,631	2,012	1,354	3,366	31.7
Minnesota	12,830	1,221	563	1,784	13.9
Mississippi	16,825	3,694	1,308	5,002	29.7
Missouri	23,604	6,083	2,747	8,830	37.4
Montana	5,009	570	560	1,130	22.6
Nebraska	15,493	2,676	1,661	4,337	28.0
Nevada	1,510	67	154	221	14.6
New Hampshire	2,354	387	415	802	34.1
New Jersey	6,366	930	1,420	2,350	36.9
New Mexico	3,790	348	355	703	18.5
New York	17,378	2,406	4,182	6,588	37.9
North Carolina	16,991	2,513	2,794	5,307	31.2
North Dakota	4,517	871	266	1,137	25.2
Ohio	27,952	3,304	3,862	7,166	25.6
Oklahoma	22,708	7,605	1,518	9,123	40.2
Oregon	7,309	362	1,291	1,653	22.6
Pennsylvania	**22,092**	**5,418**	**4,022**	**9,440**	**42.7**
Rhode Island	749	187	192	379	50.6
South Carolina	9,064	1,187	869	2,056	22.7
South Dakota	6,001	1,398	346	1,744	29.1
Tennessee	19,362	1,761	2,940	4,701	24.3
Texas	48,085	3,182	7,373	10,555	22.0
Utah	2,743	389	245	634	23.1
Vermont	2,714	452	503	955	35.2
Virginia	12,789	1,222	2,243	3,465	27.1
Washington	7,939	551	1,591	2,142	27.0
West Virginia	6,767	1,172	1,495	2,667	39.4
Wisconsin	13,516	1,862	795	2,657	19.7
Wyoming	3,076	389	253	642	20.9
United States	590,066	83,630	81,469	165,099	28.0

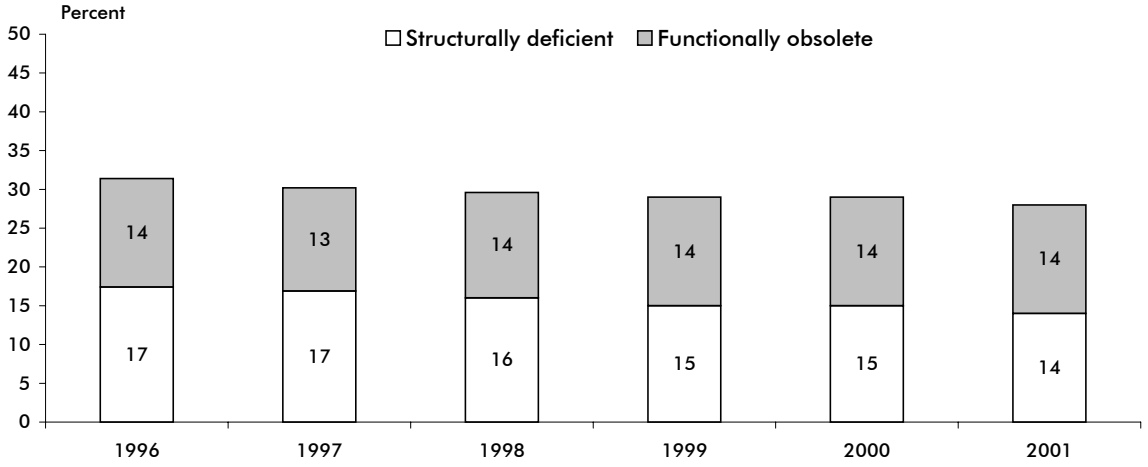
SOURCE: U.S. Department of Transportation, Federal Highway Administration, *National Bridge Inventory: Deficient Bridges by State and Highway System,* Washington, DC: 2001, available at http://www.fhwa.dot.gov/bridge/britab.htm as of Jan. 31, 2002.

Figure 1-3: Highway Bridge Condition

Pennsylvania



United States



SOURCE: U.S. Department of Transportation, Federal Highway Administration, *National Bridge Inventory: Deficient Bridges by State and Highway System,* Washington, DC: 2001, available at http://www.fhwa.dot.gov/bridge/britab.htm as of Jan. 31, 2002.

Table 1-8: Characteristics of Directly Operated Motor Bus Transit in Pennsylvania: 2000

	Directional route-miles		
Transit agency	**Exclusive right-of-way**	**Controlled right-of-way**	**Mixed right-of-way**
Altoona Metro Transit	0.0	0.0	172.0
Berks Area Reading Transportation Authority	0.0	0.0	453.7
Cambria County Transit Authority	0.0	0.0	365.5
Central Area Transportation Authority	0.0	0.0	89.8
Erie Metropolitan Transit	0.0	0.0	328.0
G G and C Bus Company	0.0	0.0	128.0
Harrisburg-Capital Area (Capital Area Transit)	0.0	0.0	467.0
Lackawanna Transit System	0.0	0.0	339.4
Lehigh and Northampton Transportation Authority	0.0	0.0	435.0
Luzerne County Transportation Authority	0.0	0.0	262.0
Port Authority of Allegheny County	39.8	0.0	2,546.4
Red Rose Transit Authority	0.0	0.0	407.0
Southeastern Pennsylvania Transit Authority (SEPTA)	2.5	0.0	2,583.0
Williamsport Bureau of Transportation	0.2	0.0	170.3
York County Transportation Authority	0.0	0.0	183.6
Total	42.5	0.0	8,930.7

NOTES: Directional route-miles is the mileage in each direction over which public transportation vehicles travel while in revenue service. Directional route-miles are a measure of the facility or roadway, not the service carried on the facility such as the number of routes or vehicle-miles. Directional route-miles are computed with regard to direction of service, but without regard to the number of traffic lanes or rail tracks existing in the right-of-way. Exclusive right-of-way refers to lanes reserved at all times for transit use and other high occupancy vehicles (HOVs). Controlled right-of-way refers to lanes restricted for at least a portion of the day for use by transit vehicles and other HOVs. Mixed right-of-way refers to lanes used for general automobile traffic.

Directly operated transit is service provided by a public transit agency using its own employees to operate transit vehicles. Transit service purchased under contract by a public transit agency is not considered directly operated transit.

SOURCE: U.S. Department of Transportation, Federal Transit Administration, National Transit Database, Data Tables, available at http://www.ntdprogram.com/ as of Feb. 19, 2002.

Table 1-9: Characteristics of Rail Transit in Pennsylvania: 2000[1]

Transit agency	Directional route-miles	Miles of track	Number of crossings	Number of stations	Number of ADA accessible stations
Heavy rail					
Southeastern Pennsylvania Transit Authority (SEPTA) (Philadephia)	76.1	102.3	0	76	4
Port Authority Transit Corp. of PA and NJ (PATCO) (Philadelphia) [2]	31.5	38.4	0	13	5
Light rail					
Southeastern Pennsylvania Transit Authority (SEPTA) (Philadephia)	69.3	171.0	1,702	64	0
Port Authority of Allegheny County (Pittsburgh)	34.8	44.8	39	13	13
Commuter rail					
Southeastern Pennsylvania Transit Authority (SEPTA) (Philadephia)[2]	449.2	695.4	116	177	30
Pennsylvania DOT (Philadelphia)	144.4	144.4	7	14	4
Inclined Plane					
Cambria County Transit Authority (Johnstown)	0.2	0.2	0	2	0
Port Authority of Allegheny County (Pittsburgh)	0.5	0.5	0	4	3

[1]Not listed here is the New Jersey Transit Corporation (NJ Transit). NJ Transit provides commuter rail service between Atlantic City, NJ and Philadelphia, PA.

[2]Parts of the system detailed here also serve New Jersey.

KEY: ADA = Americans with Disabilities Act of 1990; DOT = Department of Transportation.

NOTE: Directional route-miles is the mileage in each direction over which public transportation vehicles travel while in revenue service. Directional route-miles are a measure of the facility or roadway, not the service carried on the facility such as the number of routes or vehicle-miles. Directional route-miles are computed with regard to direction of service, but without regard to the number of traffic lanes or rail tracks existing in the right-of-way.

SOURCE: American Public Transportation Association, *Public Transportation Fact Book, 2001* . Washington, DC: 2001, available at http://www.apta.com/stats/ as of June 27, 2002.

Table 1-10: Civil and Joint-Use Airports, Heliports, STOLports, and Seaplane Bases in Pennsylvania: 2002[1]

Ownership and usage	Airports	Heliports	STOLports	Seaplane bases	Total
Publicly owned	**65**	**9**	**0**	**0**	**74**
Open to public	63	1	0	0	64
Closed to public	2	8	0	0	10
Privately owned	**396**	**298**	**3**	**10**	**707**
Open to public	65	7	0	2	74
Closed to public	331	291	3	8	633
Total	**461**	**307**	**3**	**10**	**781**

[1] Data are current as of Jan. 31, 2002.

KEY: STOLport = Short take-off and landing airport.

NOTE: Publicly owned facilities are open for public use with no prior authorization or permission. Publicly owned facilities closed to the public include medical, law enforcement, and other such facilities.

SOURCE: U.S. Department of Transportation, Federal Aviation Administration, Office of Airports, Airport Safety Data Branch.

Table 1-11: Pennsylvania Commercial Service Airport Enplanements: 2000
(For airports with scheduled service and 2,500 or more passengers enplaned)

Airport	Large certificated air carriers	Commuter and small certificated air carriers	Air taxi commuter operators	Foreign air carriers	Total enplanements
Philadelphia International	10,974,417	915,935	2,779	400,920	12,294,051
Pittsburgh International	8,654,063	1,212,608	251	5,073	9,871,995
Harrisburg International	488,857	146,320	314	8,689	644,180
Lehigh Valley International	409,150	83,621	2,044	0	494,815
Wilkes-Barre/Scranton International	128,327	90,015	402	162	218,906
Erie International	135,248	20,195	175	0	155,618
University Park	21,658	103,653	347	0	125,658
Williamsport Regional	33	41,410	131	0	41,574
Reading Regional/Carl A. Spaatz Field	2,453	35,588	3,071	0	41,112
Arnold Palmer Regional	7,300	21,261	101	0	28,662
Johnstown-Cambria County	639	19,962	219	0	20,820
Altoona-Blair County	0	15,485	193	0	15,678
Du Bois-Jefferson County	0	15,360	79	0	15,439
Lancaster	0	13,692	285	0	13,977
Bradford Regional	0	12,754	31	0	12,785
Venango Regional	0	5,454	0	0	5,454

NOTE: Rank order by total enplaned passengers on air carriers of all types, including foreign air carriers. Data differ from those in table 4-4, which includes only enplanements on large certificated carriers.

SOURCE: U.S. Department of Transportation, Federal Aviation Administration, Office of the Associate Administrator for Airports, *CY 2000 Enplanement Activity at U.S. Commercial Service Airports* , available at http://www.faa.gov/arp /Planning/v3.htm as of Mar. 26, 2002.

Table 1-12: Freight Railroads in Pennsylvania and the United States: 2000

	Number of railroads		Miles operated[2]			
				Pennsylvania		
Type of railroad	United States	Pennsylvania	United States	Excluding trackage rights	Including trackage rights	Percent of U.S. total
Total	562	60	172,101	5,103	6,795	3.9
Class I	8	2	120,597	2,486	3,654	3.0
Regional	35	4	20,978	538	650	3.1
Local	304	24	21,512	1,550	1,576	7.3
Switching and terminal	213	29	7,425	402	412	5.5
Canadian[1]	2	1	1,589	127	503	31.7

[1] Refers to non-Class I, Canadian-owned lines.

[2] Miles operated is in terms of railroad so that a mile of single track is counted the same as a mile of double track. Sidings, turnouts, yard switching mileage, and mileage not operated are excluded. Miles operated under trackage rights provided by another (owning) railroad are included.

NOTES:

1. As defined by the Surface Transportation Board in 2000, a Class I Railroad is a railroad with operating revenues of at least $261.9 million.
2. A Regional Railroad is a non-Class I, line-haul railroad operating 350 or more miles of road or with revenues of at least $40 million or both.
3. A Local Railroad is a railroad which is neither a Class I nor a Regional Railroad, and is engaged primarily in line-haul service.
4. A Switching and Terminal Railroad is a non-Class I Railroad engaged primarily in switching and/or terminal services for other railroads.

SOURCE: Association of American Railroads, *Railroads and States - 2000,* Washington, DC: 2002, available at http://www.aar.org/AboutTheIndustry/StateInformation.asp as of Mar. 19, 2002.

Table 1-13: Freight Railroads Operating in Pennsylvania by Class: 2000

Railroad	Miles operated in Pennsylvania[1]
Class I railroads	**3,654**
CSX Transportation	1,147
Norfolk Southern Corp.	2,507
Regional railroads	**650**
Bessemer and Lake Erie Railroad	183
Buffalo and Pittsburgh Railroad, Inc.	240
New York, Susquehanna, and Western Railway	42
Wheeling and Lake Erie Railway Co.	185
Local railroads	**1,576**
Allegheny and Eastern Railroad	154
Delaware-Lackawanna Railroad Co., Inc.	73
Everett Railroad	25
Gettysburg Railway Company, Inc.	23
Hollidaysburg and Roaring Spring Railroad	10
Juniata Valley Railroad Co.	12
Knox and Kane Railroad Co.	74
Lycoming Valley Railroad Co.	37
Maryland Midland Railway	0
Middletown and Hummelstown Railroad Co.	7
New Hope and Ivyland Railroad	18
Nittany and Bald Eagle Railroad	63
North Shore Railroad	43
Oil Creek and Titusville Lines, Inc.	59
Penn Eastern Rail Lines, Inc.	40
Pittsburgh and Shawmut Railroad, Inc.	237
R.J. Corman Railroad, Pennsylvania Line	245
Reading Blue Mountain and Northern Railroad (	327
Shamokin Valley Railroad Co.	27
Stourbridge Railroad Co.	25
Tyburn Railroad Co.	2
Union County Industrial Railroad Co.	12
Wellsboro and Corning Railroad	23
York Railway Company	40

Railroad	Miles operated in Pennsylvania[1]
Switching and terminal railroads	**412**
Aliquippa and Southern Railroad	5
Allegheny Valley Railroad Co.	29
Brandywine Valley Railroad Company	6
C and S Railroad Corp.	18
Chestnut Ridge Railway	6
Conemaugh and Black Lick Railroad	9
Conrail, Inc.	46
East Erie Commercial Railroad	9
East Penn Railways, Inc.	15
ISS Rail, Inc.	12
Kiski Junction Railroad	5
Landisville Railroad	1
Luzerne and Susquehanna Railway Co.	55
McKeesport Connecting Railroad Co.	2
Midland Terminal Company, The	4
Monongahela Connecting Railroad Co.	2
N.D.C. Railroad Company	1
Penn-Jersey Rail Lines, Inc.	2
Philadelphia, Bethlehem, and New England Railroad	8
Pittsburgh Industrial Railroad	42
Pittsburgh, Allegheny, and McKees Rocks Railroad	5
R.J. Corman Railroad, Allentown Lines	10
Southwest Pennsylvania Railroad	65
Steelton and Highspire Railroad	5
Strasburg Railroad Co.	5
Towanda-Monroeton Shipper Lifeline	6
Turtle Creek Industrial Railroad	11
Union Railroad	22
Upper Merion and Plymouth Railroad Company	6
Canadian railroads	**503**
Canadian Pacific Railway	503

[1] Miles operated is in terms of railroad so that a mile of single track is counted the same as a mile of double track. Sidings, turnouts, yard switching mileage, and mileage not operated are excluded. Miles operated under trackage rights provided by another (owning) railroad are included.

NOTE: For definition of railroad types see previous table.

SOURCE: Association of American Railroads, *Railroads and States - 2000* , Washington, DC: 2002, available at http://www.aar.org/AboutTheIndustry/StateInformation.asp as of Mar. 19, 2002.

Table 1-14: Pennsylvania Water Ports Ranked in Top 150 U.S. Ports by Tonnage: 2000

Port	U.S. rank	Millions of short tons		
		Total	Foreign	Domestic
Pittsburgh	14	53.9	0.0	53.9
Philadelphia	18	43.9	29.8	14.1
Marcus Hook	30	22.6	13.7	8.9
Penn Manor	96	3.5	3.4	0.0
Chester	116	2.2	1.9	0.3
Erie	136	1.5	0.2	1.3

SOURCE: U.S. Army Corps of Engineers, *Waterborne Commerce of the United States, Calendar Year 2000, Part 5 National Summaries,* Alexandria, VA: 2001, available at http://www.wrsc.usace.army.mil/ndc/wcusnatl00.pdf as of Apr. 15, 2002.

Table 1-15: Inland Waterway Mileage: 2000
(Includes 39 states and the District of Columbia)

State	Miles	State	Miles
Alabama	1,270	Mississippi	873
Alaska	5,497	Missouri	1,033
Arkansas	1,860	Nebraska	318
California	286	New Hampshire	8
Connecticut	117	New Jersey	360
Delaware	99	New York	394
District of Columbia	7	North Carolina	1,152
Florida	1,540	Ohio	444
Georgia	721	Oklahoma	150
Idaho	111	Oregon	681
Illinois	1,095	**Pennsylvania**	**259**
Indiana	353	Rhode Island	39
Iowa	492	South Carolina	482
Kansas	120	South Dakota	75
Kentucky	1,591	Tennessee	946
Louisiana	2,823	Texas	834
Maine	73	Virginia	674
Maryland	532	Washington	1,057
Massachusetts	90	West Virginia	682
Minnesota	258	Wisconsin	231

NOTES: Waterway mileages were determined by including the length of channels 1) with a controlling draft of nine feet or greater, 2) with commercial cargo traffic reported for 1998 and 1999, but 3) were not offshore (i.e., channels in coastal areas included only the miles from the entrance channel inward). Channels within major bays are included (e.g., Chesapeake Bay, San Francisco Bay, Puget Sound, Long Island Sound, major sounds and straits in southeastern Alaska). Channels in the Great Lakes are not included, but waterways connecting lakes and the St. Lawrence Seaway inside the United States are included.

SOURCE: U.S. Army Corps of Engineers, Navigation Data Center, Alexandria, VA, January 2002.

B Safety

Table 2-1: Highway Traffic Fatalities and Fatality Rates: 2000

State	Traffic fatalities	Licensed drivers (thousands)	Registered vehicles (thousands)	Vehicle-miles traveled (millions)	Fatality rate per 100,000 licensed drivers	Fatality rate per 100,000 registered vehicles	Fatality rate per 100 million vehicle-miles traveled
Alabama	995	3,521	4,015	56,534	28.3	24.8	1.8
Alaska	103	465	611	4,613	22.2	16.9	2.2
Arizona	1,036	3,434	3,960	49,768	30.2	26.2	2.1
Arkansas	652	1,948	1,865	29,167	33.5	35.0	2.2
California	3,753	21,244	28,146	306,649	17.7	13.3	1.2
Colorado	681	3,107	3,724	41,771	21.9	18.3	1.6
Connecticut	342	2,653	2,907	30,756	12.9	11.8	1.1
Delaware	123	557	641	8,240	22.1	19.2	1.5
District of Columbia	49	348	244	3,498	14.1	20.1	1.4
Florida	2,999	12,853	12,036	152,136	23.3	24.9	2.0
Georgia	1,541	5,550	7,243	105,010	27.8	21.3	1.5
Hawaii	131	769	758	8,543	17.0	17.3	1.5
Idaho	276	884	1,220	13,534	31.2	22.6	2.0
Illinois	1,418	7,961	9,168	102,866	17.8	15.5	1.4
Indiana	875	3,976	5,689	70,862	22.0	15.4	1.2
Iowa	445	1,953	3,233	29,433	22.8	13.8	1.5
Kansas	461	1,908	2,346	28,130	24.2	19.7	1.6
Kentucky	820	2,694	2,870	46,803	30.4	28.6	1.8
Louisiana	937	2,759	3,605	40,849	34.0	26.0	2.3
Maine	169	920	1,053	14,190	18.4	16.1	1.2
Maryland	588	3,382	3,897	50,174	17.4	15.1	1.2
Massachusetts	433	4,490	5,372	52,796	9.6	8.1	0.8
Michigan	1,382	6,925	8,619	97,792	20.0	16.0	1.4
Minnesota	625	2,941	4,773	52,601	21.3	13.1	1.2
Mississippi	949	2,008	2,321	35,536	47.3	40.9	2.7
Missouri	1,157	3,856	4,641	67,083	30.0	24.9	1.7
Montana	237	679	1,053	9,882	34.9	22.5	2.4
Nebraska	276	1,195	1,640	18,081	23.1	16.8	1.5
Nevada	323	1,371	1,245	17,639	23.6	25.9	1.8
New Hampshire	126	930	1,100	12,021	13.6	11.5	1.0
New Jersey	731	5,655	6,502	67,446	12.9	11.2	1.1
New Mexico	430	1,239	1,557	22,760	34.7	27.6	1.9
New York	1,458	10,871	10,342	129,057	13.4	14.1	1.1
North Carolina	1,472	5,690	6,305	89,504	25.9	23.3	1.6
North Dakota	86	459	711	7,217	18.7	12.1	1.2
Ohio	1,351	8,206	10,722	105,898	16.5	12.6	1.3
Oklahoma	652	2,295	3,072	43,355	28.4	21.2	1.5
Oregon	451	2,495	3,091	35,010	18.1	14.6	1.3
Pennsylvania	**1,520**	**8,229**	**9,476**	**102,337**	**18.5**	**16.0**	**1.5**
Rhode Island	80	654	779	8,359	12.2	10.3	1.0
South Carolina	1,065	2,843	3,146	45,538	37.5	33.9	2.3
South Dakota	173	544	822	8,432	31.8	21.0	2.1
Tennessee	1,306	4,251	4,891	65,732	30.7	26.7	2.0
Texas	3,769	13,462	14,257	220,064	28.0	26.4	1.7
Utah	373	1,463	1,656	22,597	25.5	22.5	1.7
Vermont	79	506	537	6,811	15.6	14.7	1.2
Virginia	930	4,837	6,107	74,801	19.2	15.2	1.2
Washington	632	4,155	5,235	53,330	15.2	12.1	1.2
West Virginia	410	1,347	1,468	19,242	30.4	27.9	2.1
Wisconsin	799	3,770	4,545	57,266	21.2	17.6	1.4
Wyoming	152	371	605	8,090	41.0	25.1	1.9
United States	41,821	190,625	217,028	2,749,803	21.9	19.3	1.5

SOURCES: U.S. Department of Transportation, National Highway Traffic Safety Administration, *Traffic Safety Facts 2000*, Washington, DC: 2002, available at http://www-nrd.nhtsa.dot.gov/pdf/nrd-30/NCSA/TSFAnn/TSF2000.pdf as of Jan. 4, 2002; U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics 2000*, Washington, DC: 2001, available at http://www.fhwa.dot.gov/ohim/ohimstat.htm as of Dec. 6, 2001.

Table 2-2: Passenger Car Occupants Killed and Restraint Use: 2000

	Restraint used		No restraint used		Restraint use unknown		Total occupants killed	
State	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Alabama	204	38.2	308	57.7	22	4.1	534	100.0
Alaska	11	39.3	17	60.7	0	0.0	28	100.0
Arizona	131	36.0	183	50.3	50	13.7	364	100.0
Arkansas	95	32.3	160	54.4	39	13.3	294	100.0
California	917	53.5	499	29.1	298	17.4	1,714	100.0
Colorado	129	47.1	142	51.8	3	1.1	274	100.0
Connecticut	69	38.1	90	49.7	22	12.2	181	100.0
Delaware	20	29.0	47	68.1	2	2.9	69	100.0
District of Columbia	4	22.2	7	38.9	7	38.9	18	100.0
Florida	523	37.7	836	60.3	27	1.9	1,386	100.0
Georgia	337	42.9	351	44.7	98	12.5	786	100.0
Hawaii	23	37.7	29	47.5	9	14.8	61	100.0
Idaho	42	35.9	69	59.0	6	5.1	117	100.0
Illinois	234	34.3	311	45.6	137	20.1	682	100.0
Indiana	203	43.0	222	47.0	47	10.0	472	100.0
Iowa	107	41.6	98	38.1	52	20.2	257	100.0
Kansas	77	33.2	127	54.7	28	12.1	232	100.0
Kentucky	156	36.3	269	62.6	5	1.2	430	100.0
Louisiana	127	30.1	232	55.0	63	14.9	422	100.0
Maine	37	36.6	58	57.4	6	5.9	101	100.0
Maryland	167	55.3	117	38.7	18	6.0	302	100.0
Massachusetts	63	25.9	128	52.7	52	21.4	243	100.0
Michigan	364	51.3	260	36.6	86	12.1	710	100.0
Minnesota	129	37.5	174	50.6	41	11.9	344	100.0
Mississippi	144	28.3	354	69.5	11	2.2	509	100.0
Missouri	198	33.4	326	55.0	69	11.6	593	100.0
Montana	38	37.3	56	54.9	8	7.8	102	100.0
Nebraska	35	27.1	76	58.9	18	14.0	129	100.0
Nevada	52	38.2	81	59.6	3	2.2	136	100.0
New Hampshire	13	21.0	43	69.4	6	9.7	62	100.0
New Jersey	161	42.4	197	51.8	22	5.8	380	100.0
New Mexico	72	41.9	90	52.3	10	5.8	172	100.0
New York	360	50.8	290	40.9	59	8.3	709	100.0
North Carolina	369	45.0	354	43.2	97	11.8	820	100.0
North Dakota	8	19.0	33	78.6	1	2.4	42	100.0
Ohio	319	41.5	396	51.6	53	6.9	768	100.0
Oklahoma	128	40.4	187	59.0	2	0.6	317	100.0
Oregon	147	67.1	60	27.4	12	5.5	219	100.0
Pennsylvania	**265**	**31.7**	**443**	**53.1**	**127**	**15.2**	**835**	**100.0**
Rhode Island	8	18.6	33	76.7	2	4.7	43	100.0
South Carolina	158	38.3	246	59.7	8	1.9	412	100.0
South Dakota	11	15.3	58	80.6	3	4.2	72	100.0
Tennessee	207	28.6	479	66.1	39	5.4	725	100.0
Texas	914	54.7	723	43.2	35	2.1	1,672	100.0
Utah	66	39.3	97	57.7	5	3.0	168	100.0
Vermont	23	57.5	15	37.5	2	5.0	40	100.0
Virginia	199	40.4	264	53.7	29	5.9	492	100.0
Washington	153	44.5	185	53.8	6	1.7	344	100.0
West Virginia	71	31.1	151	66.2	6	2.6	228	100.0
Wisconsin	161	37.3	231	53.5	40	9.3	432	100.0
Wyoming	23	46.0	27	54.0	0	0.0	50	100.0
United States	8,472	41.3	10,229	49.9	1,791	8.7	20,492	100.0

NOTE: Fatalities in this table include passenger car occupants only. Occupants of other vehicle types - light trucks, heavy trucks, motorcycles, and buses - are excluded as are other types of highway related fatalities such as pedestrian fatalities. Hence, the fatalities represented here are lower then those in table 2-1. Percents may not add to totals due to rounding.

SOURCE: U.S. Department of Transportation, National Highway Traffic Safety Administration, *Traffic Safety Facts 2000* , Washington, DC: 2002, available at http://www-nrd.nhtsa.dot.gov/pdf/nrd-30/NCSA/TSFAnn/TSF2000.pdf as of Jan. 4, 2002.

Table 2-3. Key Provisions of Safety Belt Use Laws: 2000

State	Effective[1]	Enforcement[2]	Fine	Seats	Vehicles exempted[3]
Alabama	7/18/1992	Primary	$25	Front	Designed for more than 10 passengers
Alaska	9/12/1990	Secondary	$15	All	School bus
Arizona	1/1/1991	Secondary	$10	Front	Designed for more than 10 passengers; model year before 1972
Arkansas	7/15/1991	Secondary	$25 [4]	Front	School bus, church bus, public bus
California	1/1/1986	Primary	$20 [5]	All	None
Colorado	7/1/1987	Secondary	$15	Front	Passenger bus, school bus
Connecticut	1/1/1986	Primary	$15	Front	Truck or bus over 15,000 lbs.
Delaware	1/1/1992	Secondary	$20	Front	None
District of Columbia	12/12/1985	Primary	$50 [6]	All	Seating more than 8 people
Florida	7/1/1986	Secondary	$30	Front	School bus, public bus, truck over 5,000 lbs.
Georgia	9/1/1988	Primary	$15	Front	Designed for more than 10 passengers, pickup
Hawaii	2/16/1985	Primary	$45	Front	Bus or school bus over 10,000 lbs.
Idaho	7/1/1986	Secondary	$5	Front	Over 8,000 lbs.
Illinois	7/1/1985	Secondary	$25	Front	None
Indiana	7/1/1987	Primary	$25	Front	Truck, tractor, RV
Iowa	7/1/1986	Primary	$10	Front	None
Kansas	7/1/1986	Secondary	$10	Front	Designed for more than 10 people, truck over 12,000 lbs.
Kentucky	7/13/1994	Secondary	$25	All	Designed for more than 10 people
Louisiana	7/1/1986	Primary	$25 [7]	Front	Manufactured before 1/1/81
Maine	12/27/1995	Secondary	$50	All	None
Maryland	7/1/1986	Primary	$25	Front	Historic vehicle
Massachusetts	2/1/1994	Secondary	$25	All	Truck over 18,000 lbs., bus, taxi
Michigan	7/1/1985	Primary	$25	Front	Bus
Minnesota	8/1/1986	Secondary	$25	Front	Farm pickup truck
Mississippi	3/20/1990	Secondary	$25	Front	Farm vehicle, bus
Missouri	9/28/1985	Secondary	$10	Front	Designed for more than 10 people, truck over 12,000 lbs.
Montana	10/1/1987	Secondary	$20	All	None
Nebraska	1/1/1993	Secondary	$25	Front	Manufactured before 1973
Nevada	7/1/1987	Secondary	$25	All	Taxi, bus, school bus
New Hampshire	None	NA	NA	NA	NA
New Jersey	3/1/1985	Secondary	$20	Front	None
New Mexico	1/1/1986	Primary	$25	Front	Vehicle over 10,000 lbs.
New York	12/1/1984	Primary	$50	Front	Bus, school bus, taxi
North Carolina	10/1/1985	Primary	$25	Front	Designed for more than 10 people
North Dakota	7/14/1994	Secondary	$20	Front	Designed for more than 10 people
Ohio	5/6/1986	Secondary	$25	Front	None
Oklahoma	2/1/1987	Primary	$20	Front	Farm vehicle, truck, truck tractor, RV
Oregon	12/7/1990	Primary	$75	All	None
Pennsylvania	**11/23/1987**	**Secondary**	**$10**	**Front**	**Truck over 7,000 lbs.**
Rhode Island	6/18/1991	Secondary	$50	All	None
South Carolina	7/1/1989	Secondary	$10	All	School bus, public bus
South Dakota	1/1/1995	Secondary	$20	Front	Bus, school bus
Tennessee	4/21/1986	Secondary	$50	Front	Vehicle over 8,500 lbs.
Texas	9/1/1985	Primary	$50	Front	Designed for more than 10 people, truck over 15,000 lbs.
Utah	4/28/1986	Secondary	$45	Front	Vehicle over 10,000 lbs., school/public bus, taxi
Vermont	1/1/1994	Secondary	$10	All	Bus, taxi
Virginia	1/1/1988	Secondary	$25	Front	Designed for more than 10 people, taxi
Washington	6/11/1986	Secondary	$35	All	Designed for more than 10 people
West Virginia	9/1/1993	Secondary	$25	Front	Designed for more than 10 people
Wisconsin	12/1/1987	Secondary	$10	All	Taxi, farm truck
Wyoming	6/8/1989	Secondary	$25	Front	Designed for more than 10 people, bus

[1] Effective date of first belt law in the state; [2] Primary enforcement enables police officers to stop vehicles and write citations whenever they observe a violation of the seat belt law. Secondary enforcement allows police officers to write a citation for seat belt infractions only after stopping a vehicle for some other traffic infraction; [3] Most states exempt vehicles not manufactured with seat belts; [4] Plus 3 points on license; [5] Fine for first offense; [6] Plus 2 points on license; [7] Penalty could include 30 days in jail.

KEY: NA = not applicable; RV = recreational vehicle.

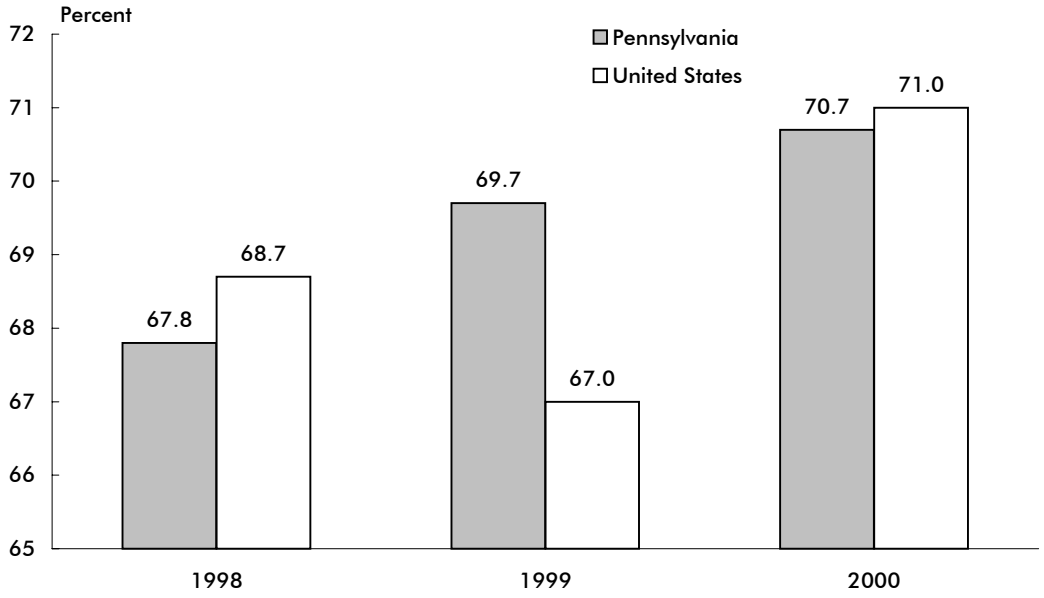
SOURCE: U.S. Department of Transportation, National Highway Traffic Safety Administration, *Traffic Safety Facts 2000,* Washington, DC: 2001, available at http://www-nrd.nhtsa.dot.gov/pdf/nrd-30/NCSA/TSFAnn/TSF2000.pdf as of Jan. 4, 2002.

Table 2-4: Shoulder Belt Use: 2000

State	Percent
Alabama	70.6
Alaska	61.0
Arizona	75.2
Arkansas	52.4
California	88.9
Colorado	65.1
Connecticut	76.3
Delaware	66.1
District of Columbia	82.6
Florida	64.8
Georgia	73.6
Hawaii	80.4
Idaho	58.6
Illinois	70.2
Indiana	62.1
Iowa	78.0
Kansas	61.6
Kentucky	60.0
Louisiana	68.2
Maine	N
Maryland	85.0
Massachusetts	50.0
Michigan	83.5
Minnesota	73.4
Mississippi	50.4
Missouri	67.7
Montana	75.6
Nebraska	70.5
Nevada	78.5
New Hampshire	N
New Jersey	74.2
New Mexico	86.6
New York	77.3
North Carolina	80.5
North Dakota	47.7
Ohio	65.3
Oklahoma	67.5
Oregon	83.6
Pennsylvania	**70.7**
Rhode Island	64.4
South Carolina	73.9
South Dakota	53.4
Tennessee	59.0
Texas	76.6
Utah	75.7
Vermont	61.6
Virginia	69.6
Washington	81.6
West Virginia	49.5
Wisconsin	65.4
Wyoming	66.8

KEY: N = data do not exist.

Figure 2-1: Shoulder Belt Use



SOURCE FOR DATA ON THIS PAGE: U.S. Department of Transportation, National Highway Traffic Safety Administration, *1998-2000 State Shoulder Belt Use Survey Results* , Research Note, Washington, DC: May 2001, available at http://www-nrd.nhtsa.dot.gov/departments/nrd-30/ncsa/availinf.html as of Mar. 20, 2002.

Table 2-5: Pedestrian Fatalities Involving Motor Vehicles: 2000

State	Total traffic fatalities	Pedestrians killed	Pedestrian fatalities as percent of total	State population (thousands)	Pedestrian fatality rate per 100,000 population
Alabama	995	61	6.1	4,451	1.4
Alaska	103	8	7.8	653	1.2
Arizona	1,036	130	12.5	4,798	2.7
Arkansas	652	38	5.8	2,631	1.4
California	3,753	670	17.9	32,521	2.1
Colorado	681	80	11.7	4,168	1.9
Connecticut	342	49	14.3	3,284	1.5
Delaware	123	22	17.9	768	2.9
District of Columbia	49	18	36.7	523	3.4
Florida	2,999	492	16.4	15,233	3.2
Georgia	1,541	137	8.9	7,875	1.7
Hawaii	131	29	22.1	1,257	2.3
Idaho	276	6	2.2	1,347	0.4
Illinois	1,418	187	13.2	12,051	1.6
Indiana	875	51	5.8	6,045	0.8
Iowa	445	25	5.6	2,900	0.9
Kansas	461	19	4.1	2,668	0.7
Kentucky	820	53	6.5	3,995	1.3
Louisiana	937	100	10.7	4,425	2.3
Maine	169	15	8.9	1,259	1.2
Maryland	588	91	15.5	5,275	1.7
Massachusetts	433	82	18.9	6,199	1.3
Michigan	1,382	170	12.3	9,679	1.8
Minnesota	625	38	6.1	4,830	0.8
Mississippi	949	64	6.7	2,816	2.3
Missouri	1,157	88	7.6	5,540	1.6
Montana	237	11	4.6	950	1.2
Nebraska	276	20	7.2	1,705	1.2
Nevada	323	43	13.3	1,871	2.3
New Hampshire	126	7	5.6	1,224	0.6
New Jersey	731	145	19.8	8,178	1.8
New Mexico	430	47	10.9	1,860	2.5
New York	1,458	335	23.0	18,146	1.8
North Carolina	1,472	144	9.8	7,777	1.9
North Dakota	86	5	5.8	662	0.8
Ohio	1,351	96	7.1	11,319	0.8
Oklahoma	652	43	6.6	3,373	1.3
Oregon	451	50	11.1	3,397	1.5
Pennsylvania	**1,520**	**170**	**11.2**	**12,202**	**1.4**
Rhode Island	80	6	7.5	998	0.6
South Carolina	1,065	84	7.9	3,858	2.2
South Dakota	173	13	7.5	777	1.7
Tennessee	1,306	99	7.6	5,657	1.7
Texas	3,769	412	10.9	20,119	2.0
Utah	373	33	8.8	2,207	1.5
Vermont	79	7	8.9	617	1.1
Virginia	930	92	9.9	6,997	1.3
Washington	632	66	10.4	5,858	1.1
West Virginia	410	25	6.1	1,841	1.4
Wisconsin	799	51	6.4	5,326	1.0
Wyoming	152	12	7.9	525	2.3
United States	41,821	4,739	11.3	274,634	1.7

SOURCE: U.S. Department of Transportation, National Highway Traffic Safety Administration, National Center for Statistics and Analysis, *Traffic Safety Facts 2000: Pedestrians,* Washington, DC: 2001, available at http://www.nhtsa.dot.gov/people/ncsa/factshet.html as of Dec. 5, 2001.

Table 2-6: Motor Vehicle Fatalities Involving High Blood Alcohol Concentration (BAC ≥ 0.10 grams per deciliter)

	1995			2000		
State	Total fatalities	Fatalities involving high blood alcohol	Percent	Total fatalities	Fatalities involving high blood alcohol	Percent
Alabama	1,113	381	34	995	326	33
Alaska	87	37	42	103	44	43
Arizona	1,031	347	34	1,036	354	34
Arkansas	631	148	23	652	139	21
California	4,192	1,308	31	3,753	1,061	28
Colorado	645	226	35	681	198	29
Connecticut	317	130	41	342	119	35
Delaware	121	38	31	123	49	40
District of Columbia	58	25	44	49	14	29
Florida	2,805	873	31	2,999	930	31
Georgia	1,488	400	27	1,541	438	28
Hawaii	130	41	32	131	37	28
Idaho	262	69	27	276	81	29
Illinois	1,586	551	35	1,418	489	34
Indiana	960	263	27	875	214	24
Iowa	527	159	30	445	100	22
Kansas	442	152	34	461	118	26
Kentucky	849	227	27	820	203	25
Louisiana	883	353	40	937	352	38
Maine	187	44	24	169	38	22
Maryland	671	176	26	588	161	27
Massachusetts	444	148	33	433	153	35
Michigan	1,530	483	32	1,382	397	29
Minnesota	597	215	36	625	207	33
Mississippi	868	306	35	949	289	30
Missouri	1,109	450	41	1,157	387	33
Montana	215	79	37	237	92	39
Nebraska	254	64	25	276	70	25
Nevada	313	127	41	323	112	35
New Hampshire	118	30	25	126	40	31
New Jersey	773	243	32	731	231	32
New Mexico	485	202	42	430	159	37
New York	1,674	405	24	1,458	293	20
North Carolina	1,448	399	28	1,472	419	28
North Dakota	74	32	44	86	36	42
Ohio	1,366	344	25	1,351	411	30
Oklahoma	669	205	31	652	169	26
Oregon	572	176	31	451	132	29
Pennsylvania	**1,480**	**485**	**33**	**1,520**	**511**	**34**
Rhode Island	69	22	32	80	31	38
South Carolina	881	229	26	1,065	329	31
South Dakota	158	63	40	173	66	38
Tennessee	1,259	420	33	1,306	399	31
Texas	3,181	1,407	44	3,769	1,450	38
Utah	326	69	21	373	68	18
Vermont	106	33	31	79	27	34
Virginia	900	272	30	930	257	28
Washington	653	248	38	632	217	34
West Virginia	376	132	35	410	149	36
Wisconsin	745	263	35	799	288	36
Wyoming	170	63	37	152	40	26
United States	41,798	13,564	32	41,821	12,892	31

SOURCE: U.S. Department of Transportation, National Highway Traffic Safety Administration, National Center for Statistics and Analysis, *Traffic Safety Facts 2000: State Alcohol Estimates,* Washington, DC: 2001, available at http://www.nhtsa.dot.gov/people/ncsa/factshet.html as of Dec. 5, 2001.

Table 2-7: Impaired Driving Laws: 2000

State	Administrative per se (BAC level)	Illegal per se (BAC level)	Lower BAC for youthful DWI offenders (BAC level and age)	License sanction (Mandatory minimum for a DWI conviction) First offense	Second offense	Third offense
Alabama	Y-0.08	0.08	Y-0.02 (<21)	S-90 days	R-1 yr	R-3 yrs
Alaska	Y-0.10	0.10	Y-0.00 (<21)	R-30 days	R-1 yr	R-10 yrs
Arizona	Y-0.10	0.10	Y-0.00 (<21)	S-90 days	R-1 yr	R-3 yrs
Arkansas	Y-0.10	0.10	Y-0.02 (<21)	Nms	Nms	Nms
California	Y-0.08	0.08	Y-0.01 (<21)	Nms	Nms	R-18 mos
Colorado	Y-0.10	0.10	Y-0.02 (<21)	Nms	R-1 yr	R-1 yr
Connecticut	Y-0.10	0.10	Y-0.02 (<21)	Nms	Nms	Nms
Delaware	Y-0.10	0.10	Y-0.02 (<21)	Nms	R-6 mos	R-6 mos
District of Columbia	Y-0.05	0.08	Y-0.00 (<21)	R-6 mos	R-1 yr	R-2 yrs
Florida	Y-0.08	0.08	Y-0.02 (<21)	Nms	R-12 mos	R-24 mos
Georgia	Y-0.10	0.10	Y-0.02 (<21)	Nms	S-120 days	R-5 yrs
Hawaii	Y-0.08	0.08	Y-0.02 (<21)	S-30 days	S-1 yr	R-1 yr
Idaho	Y-0.08	0.08	Y-0.02 (<21)	S-30 days	S-1 yr	S-1 yr
Illinois	Y-0.08	0.08	Y-0.02 (<21)	Nms	Nms	Nms
Indiana	Y-0.10	0.10	Y-0.02 (<21)	S-30 days	S-1 yr	S-1 yr
Iowa	Y-0.10	0.10	Y-0.02 (<21)	R-30 days	R-1 yr	R-1 yr
Kansas	Y-0.08	0.08	Y-0.02 (<21)	S-30 days	S-1 yr	S-1 yr
Kentucky	A	0.08	Y-0.02 (<21)	S-30 days	R-12 mos	R-24 mos
Louisiana	Y-0.10	0.10	Y-0.02 (<21)	Nms	Nms	Nms
Maine	Y-0.08	0.08	Y-0.00 (<21)	S-60 days	S-18 mos	S-4 yrs
Maryland	Y-0.10	0.10	Y-0.02 (<21)	Nms	Nms	Nms
Massachusetts	Y-0.08	N	Y-0.02 (<21)	S-45 days	R-6 mos	R-2 yrs
Michigan	N	0.10	Y-0.02 (<21)	Nms	R-1 yr	S-5 yrs
Minnesota	Y-0.10	0.10	Y-0.00 (<21)	R-15 days	R-90 days	R-90 days
Mississippi	Y-0.10	0.10	Y-0.02 (<21)	S-30 days	S-1 yr	S-3 yrs
Missouri	Y-0.10	0.10	Y-0.02 (<21)	S-30 days	R-2 yrs	R-3 yrs
Montana	N	0.10	Y-0.02 (<21)	Nms	R-3 mos	R-3 mos
Nebraska	Y-0.10	0.10	Y-0.02 (<21)	R-60 days	R-1 yr	R-1 yr
Nevada	Y-0.10	0.10	Y-0.02 (<21)	R-45 days	R-1 yr	R-1.5 yrs
New Hampshire	Y-0.08	0.08	Y-0.02 (<21)	R-90 days	R-3 yrs	R-3 yrs
New Jersey	N	0.10	Y-0.01 (<21)	R-6 mos	R-2 yrs	R-10 yrs
New Mexico	Y-0.08	0.08	Y-0.02 (<21)	Nms	R-30 days	R-30 days
New York	A	0.10	Y-0.02 (<21)	Nms	R-I yr	R-1 yr
North Carolina	Y-0.08	0.08	Y-0.00 (<21)	Nms	R-2 yrs	R-3 yrs
North Dakota	Y-0.10	0.10	Y-0.02 (<21)	S-30 days	S-365 days	S-2 yrs
Ohio	Y-0.10	0.10	Y-0.02 (<21)	S-15 days	S-30 days	S-180 days
Oklahoma	Y-0.10	0.10	Y-0.00 (<21)	Nms	R-1 yr	R-1 yr
Oregon	Y-0.08	0.08	Y-0.00 (<21)	Nms	S-90 days	S-1 yr
Pennsylvania	**N**	**0.10**	**Y-0.02 (<21)**	**S-1 mo**	**S-12 mos**	**S-12 mos**
Rhode Island	N	0.08	Y-0.02 (<21)	S-3 mos	S-1 yr	S-2 yrs
South Carolina	Y-0.15	0.10	Y-0.02 (<21)	Nms	S-1 yr	S-4 yrs
South Dakota	N	0.10	Y-0.02 (<21)	Nms	R-1 yr	R-1 yr
Tennessee	N	0.10	Y-0.02 (<21)	Nms	R-2 yrs	R-3 yrs
Texas	Y-0.08	0.08	Y-0.00 (<21)	Nms	Nms	Nms
Utah	Y-0.08	0.08	Y-0.00 (<21)	S-90 days	R-1 yrs	R-1 yrs
Vermont	Y-0.08	0.08	Y-0.02 (<21)	S-90 days	S-18 mos	R-2 yrs
Virginia	Y-0.08	0.08	Y-0.02 (<21)	Nms	R-1 yr	R-3 yrs
Washington	Y-0.08	0.08	Y-0.02 (<21)	S-30 days	R-1 yr	R-2 yrs
West Virginia	Y-0.10	0.10	Y-0.02 (<21)	R-30 days	R-1 yr	R-1 yr
Wisconsin	Y-0.10	0.10	Y-0.02 (<21)	Nms	R-60 days	R-90 days
Wyoming	Y-0.10	0.10	Y-0.02 (<21)	Nms	S-1 yr	R-3 yrs

KEY: BAC = blood alcohol concentration; DWI = driving while intoxicated; Y = yes; N = no; A = alternative; S = suspension; R = revocation; Nms = no mandatory sanction.

NOTES: An "administrative per se law" allows a state's driver licensing agency to either suspend or revoke a driver's license based on a specific alcohol (or drug) concentration or on some other criterion related to alcohol or drug use and driving. Such action is independent of any licensing action related to a DWI criminal offense. The term "illegal per se" refers to state laws that make it a criminal offense to operate a motor vehicle at or above a specified alcohol (or drug) concentration in the blood, breath, or urine. In those columns showing mandatory sanctions, "nms" does not mean that a state does not have a sanction. It only means that the state does not have a mandatory sanction for that offense or violation.

SOURCE: U.S. Department of Transportation, National Highway Traffic Safety Administration, *Traffic Safety Facts 2000* , Washington, DC: 2001, available at http://www-nrd.nhtsa.dot.gov/pdf/nrd-30/NCSA/TSFAnn/TSF2000.pdf as of Jan. 4, 2002.

Table 2-8: Maximum Posted Speed Limits by System: 2001 (Speed limit in miles per hour)[1]

State	Interstate Rural	Interstate Urban	Other limited-access roads[2]	Other roads
Alabama	70	70	65	65
Alaska	65	55	65	55
Arizona	75	55	55	55
Arkansas	70, Trucks: 65	55	60	55
California	70, Trucks: 55	65	70	55
Colorado	75	65	65	55
Connecticut	65	55	65	55
Delaware	65	55	65	55
District of Columbia	NA	55	NA	25
Florida	70	65	70	65
Georgia	70	65	65	65
Hawaii	55	50	45	45
Idaho	75, Trucks: 65	65	65	65
Illinois	65, Trucks: 55	55	65	55
Indiana	65, Trucks: 60	55	55	55
Iowa	65	55	65	55
Kansas	70	70	70	65
Kentucky	65	55	55	55
Louisiana	70	55	70	65
Maine	65	55	55	55
Maryland	65	65	65	55
Massachusetts	65	65	65	55
Michigan	70, Trucks: 55	65	70	55
Minnesota	70	65	65	55
Mississippi	70	70	70	65
Missouri	70	60	70	65
Montana	75, Trucks: 65	65	Day: 70, Night: 65	Day: 70, Night: 65
Nebraska	75	65	65	60
Nevada	75	65	70	70
New Hampshire	65	65	55	55
New Jersey	65	55	65	55
New Mexico	75	55	65	55
New York	65	65	65	55
North Carolina	70	65	65	55
North Dakota	70	55	65	Day: 65, Night: 55
Ohio	65, Trucks: 55	65	55	55
Oklahoma	75	70	70	70
Oregon	65, Trucks: 55	55	55	55
Pennsylvania	**65**	**55**	**65**	**55**
Rhode Island	65	55	55	55
South Carolina	70	70	60	55
South Dakota	75	65	65	65
Tennessee	70	70	70	55
Texas	70	70	70	70
Utah	75	65	55	55
Vermont	65	55	50	50
Virginia	65	55	65	55
Washington	70, Trucks: 60	60	55	55
West Virginia	70	55	65	55
Wisconsin	65	65	65	55
Wyoming	75	60	65	65

[1] Many roads, particularly urban interstates, often have a lower posted speed limit than the maximum allowable shown in this table.

[2] Limited-access roads are multi-laned roads with restricted access using exit and entrance ramps rather than intersections.

KEY: NA = not applicable.

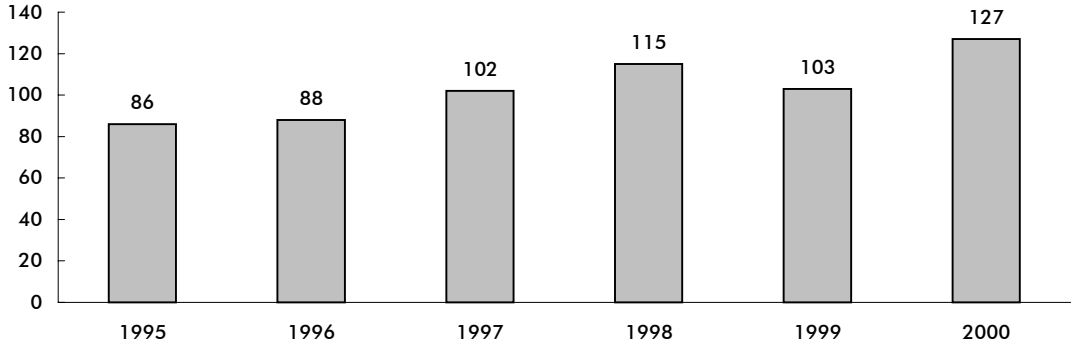
NOTE: Interstates are divided into urban and rural sections based primarily on population size and population density.

SOURCE: Insurance Institute for Highway Safety, Highway Loss Data Institute, available at http://www.hwysafety.org/safety_facts/state_laws/speed_limit_laws.htm as of Oct. 1, 2001.

Table 2-9: Total Rail Accidents/Incidents: 2000

State	Accidents/ Incidents	Fatalities	Injuries	State	Accidents/ Incidents	Fatalities	Injuries
Alabama	257	20	143	Montana	156	4	108
Alaska	89	2	82	Nevada	40	1	25
Arizona	222	27	147	New Hampshire	18	0	15
Arkansas	371	30	225	New Jersey	528	28	432
California	1,133	101	808	Nebraska	362	8	247
Colorado	199	10	112	New Mexico	138	4	106
Connecticut	203	6	159	New York	1,330	32	1,168
Delaware	59	2	47	North Carolina	243	24	121
District of Columbia	107	0	90	North Dakota	122	9	82
Florida	405	45	303	Ohio	575	28	339
Georgia	395	23	231	Oklahoma	231	22	124
Hawaii	0	0	0	Oregon	214	9	152
Idaho	109	11	53	**Pennsylvania**	**752**	**23**	**583**
Illinois	1,484	69	1,109	Rhode Island	21	1	19
Indiana	540	36	317	South Carolina	192	20	141
Iowa	367	9	211	South Dakota	64	3	43
Kansas	337	21	226	Tennessee	296	15	163
Kentucky	272	14	170	Texas	1,260	90	777
Louisiana	465	16	310	Utah	129	5	88
Maine	79	2	58	Vermont	29	1	22
Maryland	173	9	103	Virginia	252	13	169
Massachusetts	228	17	183	Washington	317	16	230
Michigan	434	23	300	West Virginia	128	9	93
Minnesota	431	11	303	Wisconsin	390	20	258
Mississippi	250	17	120	Wyoming	156	2	107
Missouri	367	29	221	United States	16,919	937	11,643

Figure 2-2: Pennsylvania Train Accidents (Excludes highway-grade crossing incidents and other incidents)



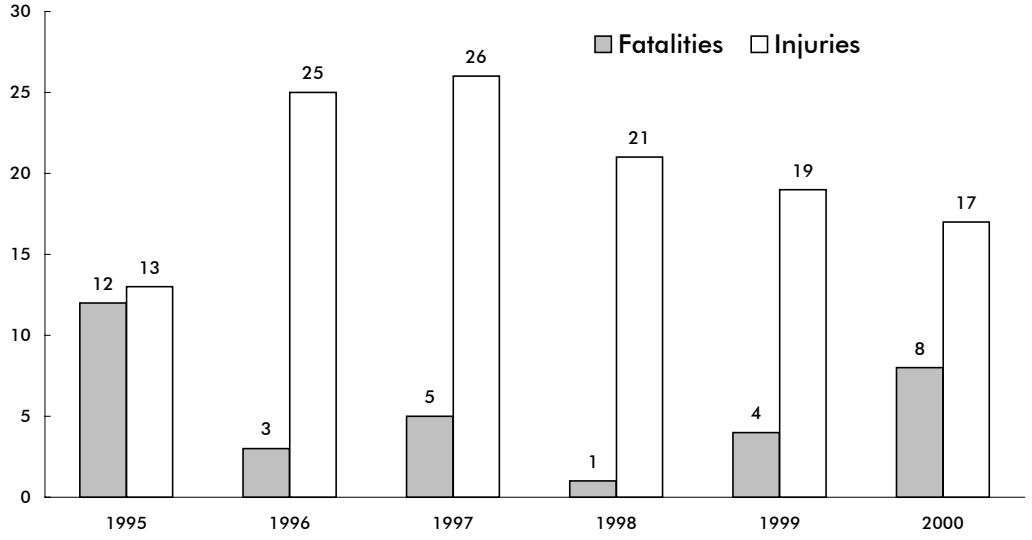
NOTE FOR DATA ON THIS PAGE: "Accidents/incidents" includes all events reportable to the U.S. Department of Transportation, Federal Railroad Administration under applicable regulations. These include: train accidents, reported on Form F 6180.54, comprised of collisions, derailments, and other events involving the operation of on-track equipment and causing reportable damage above an established threshold ($6,600 in 1998); highway-rail grade crossing incidents, reported on Form F 6180.57, involving impact between railroad on-track equipment and highway users at crossings; and other incidents, reported on Form F 6180.55a, involving all other reportable incidents or exposures that cause a fatality or injury to any person, or an occupational illness to a railroad employee.

SOURCE FOR DATA ON THIS PAGE: U.S. Department of Transportation, Federal Railroad Administration, *Railroad Safety Statistics Annual Report 2000,* Washington, DC: 2001, table 2-11, available at http://safetydata.fra.dot.gov/officeofsafety/ as of Oct. 22, 2001.

Table 2-10: Highway-Rail Grade Crossing Incidents: 2000

State	Number of grade crossings	Incidents	Fatalities	Injuries
Alabama	5,418	95	10	39
Alaska	336	7	0	0
Arizona	1,628	29	8	13
Arkansas	4,655	115	27	36
California	12,775	174	27	54
Colorado	3,271	36	6	8
Connecticut	624	8	2	0
Delaware	456	10	0	7
District of Columbia	42	2	0	0
Florida	5,324	86	15	67
Georgia	8,453	128	10	38
Hawaii	8	0	0	0
Idaho	2,645	33	11	1
Illinois	13,916	217	31	68
Indiana	9,129	194	23	55
Iowa	9,317	109	6	31
Kansas	10,756	67	11	18
Kentucky	5,037	69	5	20
Louisiana	6,726	181	14	88
Maine	1,680	8	1	1
Maryland	1,390	19	1	2
Massachusetts	1,679	12	1	4
Michigan	8,028	134	13	51
Minnesota	8,219	91	6	40
Mississippi	4,850	113	15	44
Missouri	8,001	88	17	27
Montana	3,514	24	1	2
Nebraska	6,575	55	7	14
Nevada	571	2	0	0
New Hampshire	637	3	0	0
New Jersey	2,493	36	5	10
New Mexico	1,355	17	0	11
New York	6,216	41	5	14
North Carolina	7,813	113	14	25
North Dakota	6,343	17	6	2
Ohio	9,633	148	15	38
Oklahoma	5,913	89	12	47
Oregon	5,213	30	0	13
Pennsylvania	**8,946**	**69**	**8**	**17**
Rhode Island	189	0	0	0
South Carolina	4,270	80	10	24
South Dakota	3,495	11	0	5
Tennessee	5,062	90	8	26
Texas	18,289	388	52	164
Utah	1,755	18	2	7
Vermont	1,192	2	0	0
Virginia	4,829	54	3	21
Washington	5,749	45	1	10
West Virginia	3,632	20	1	8
Wisconsin	7,043	122	15	49
Wyoming	1,151	3	0	0
United States	256,241	3,502	425	1,219

Figure 2-3: Pennsylvania Highway-Rail Grade Crossing Fatalities and Injuries



NOTE FOR DATA ON THIS PAGE: Any impact, regardless of severity, between railroad on-track equipment and any user of a public or private crossing site must be reported to the U.S. Department of Transportation, Federal Railroad Administration on Form F 6180.57. The crossing site includes sidewalks and pathways at, or associated with, the crossing. Counts of fatalities and injuries include motor vehicle occupants, people not in vehicles or on the trains, as well as people on the train or railroad equipment.

SOURCE FOR DATA ON THIS PAGE: U.S. Department of Transportation, Federal Railroad Administration, *Railroad Safety Statistics Annual Report 2000,* Washington, DC: 2001, available at http://safetydata.fra.dot.gov/officeofsafety/ as of Oct. 22, 2001.

Table 2-11: Highway-Rail Grade Crossings by Type: 2000

	Pennsylvania		United States	
	Number	Percent	Number	Percent
Total	8,946	100.0	256,241	100.0
Public, motor vehicle	5,505	61.5	155,370	60.6
Private, motor vehicle	3,322	37.1	98,918	38.6
Pedestrian	119	1.3	1,953	0.8

SOURCE: U.S. Department of Transportation, Federal Railway Administration, Office of Railway Safety, *Railroad Safety Statistics Annual Report 2000,* table 9-2, available at http://safetydata.fra.dot.gov/officeofsafety as of Nov. 21, 2001.

Table 2-12: Warning Devices at Public Highway-Rail Grade Crossings: 2000

	Pennsylvania		United States	
	Number	Percent	Number	Percent
Total	5,505	100.0	155,370	100.0
Cross bucks	1,881	34.2	71,468	46.0
Gates	743	13.5	34,296	22.1
Flashing lights	1,303	23.7	27,100	17.4
Stop signs	144	2.6	11,630	7.5
Unknown	447	8.1	5,253	3.4
Special warning	620	11.3	3,723	2.4
HWTS, WW, bells	110	2.0	1,417	0.9
Other	257	4.7	483	0.3

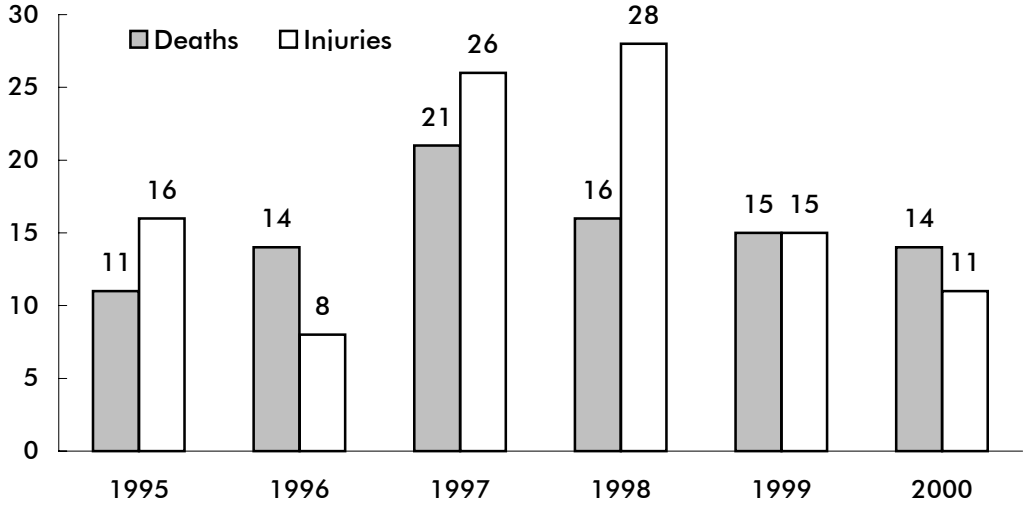
KEY: HWTS = highway traffic signals; WW = wigwags.

SOURCE: U.S. Department of Transportation, Federal Railway Administration, Office of Railway Safety, *Railroad Safety Statistics Annual Report 2000* , Washington, DC: 2001, table 9-4, available at http://safetydata.fra.dot.gov/officeofsafety as of Nov. 21, 2001.

Table 2-13: Types of People Injured in Pennsylvania Train Accidents/Incidents: 2000 (Includes highway-rail crossing)

Type of person	Fatalities	Injuries
Worker on duty (railroad employee)	0	403
Employee not on duty	0	10
Passenger on train	0	96
Nontrespasser	4	55
Trespasser	19	12
Worker on duty (contractor)	0	4
Contractor (other)	0	2
Worker on duty (volunteer)	0	0
Volunteer (other)	0	0
Nontrespasser (off railroad property)	0	1

Figure 2-4: Railroad Trespasser Deaths and Injuries in Pennsylvania (Excludes highway-rail crossing)



NOTE FOR DATA ON THIS PAGE: As defined by the U.S. Department of Transportation, Federal Railroad Administration, a trespasser is any person on a part of railroad property used in railroad operations whose presence is prohibited, forbidden, or unlawful. Employees who are trespassing on railroad property are reported as trespassers.

SOURCE FOR DATA ON THIS PAGE: U.S. Department of Transportation, Federal Railroad Administration, *Railroad Safety Statistics Annual Report 2000,* Washington, DC: 2001, available at http://safetydata.fra.dot.gov/officeofsafety/ as of Oct. 22, 2001.

Table 2-14: Pennsylvania Transit Safety Data: 2000

	Collision			Noncollision			Total property damage ($ thousands)
	Number of incidents	Fatalities	Injuries	Number of incidents	Fatalities	Injuries	
Automated guideway	0	0	0	0	0	0	0
Cable car	0	0	0	0	0	0	0
Commuter rail	10	0	11	260	0	306	212
Demand responsive	466	0	217	226	3	212	966
Ferry boat	0	0	0	0	0	0	0
Heavy rail	2	2	0	440	0	440	8
Light rail	44	2	44	163	0	174	379
Motor bus	626	3	776	2,208	0	2,274	767
Trolley bus	4	0	9	28	0	34	1
Van pool	8	0	5	1	0	1	14

Table 2-15: U.S. Transit Safety Data: 2000

	Collision			Noncollision			Total property damage ($ thousands)
	Number of incidents	Fatalities	Injuries	Number of incidents	Fatalities	Injuries	
Automated guideway	1	0	0	16	0	15	34
Cable car	10	0	15	10	0	11	10
Commuter rail	267	104	95	1,981	2	1,865	8,047
Demand responsive	3,055	6	1,603	1,510	11	1,494	6,910
Ferry boat	7	0	6	719	0	730	106
Heavy rail	389	55	316	12,388	22	10,530	5,034
Light rail	343	30	361	979	0	978	3,062
Motor bus	23,184	93	20,800	19,847	8	20,967	43,717
Trolley bus	122	0	103	257	0	265	103
Van pool	186	1	65	5	0	5	563

NOTES FOR DATA ON THIS PAGE: Collision includes at-grade crossings and suicides. Noncollision includes: 1) derailments/buses going off road; 2) personal casualties in parking facilities, inside vehicles, on right of way, boarding/alighting, and in station/bus stops; and 3) nonarson fires.

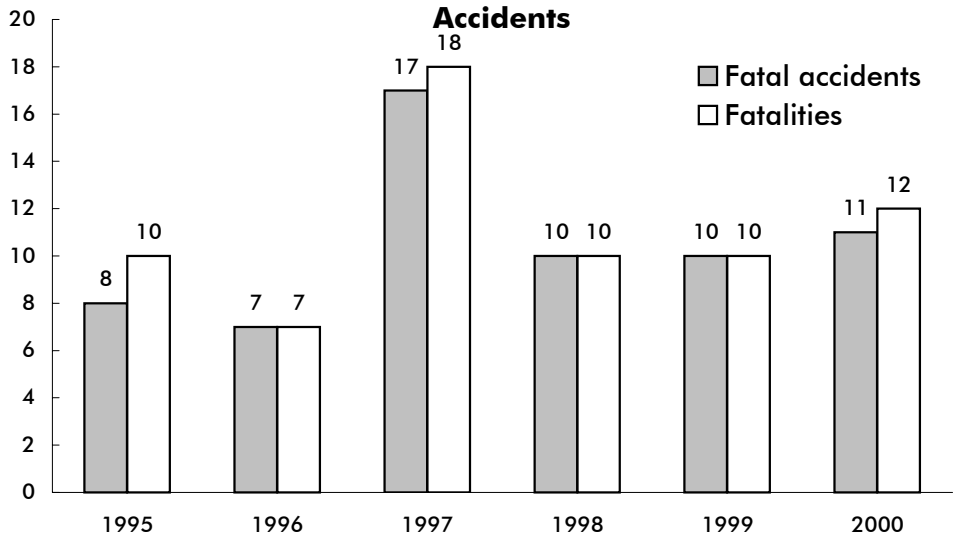
SOURCE FOR DATA ON THIS PAGE: U.S. Department of Transportation, Federal Transit Administration, 2000 National Transit Database, available at http://www.ntdprogram.com as of Dec. 5, 2001.

Table 2-16: Recreational Boating Accidents: 2000

	Pennsylvania	United States
Number of accidents		
Total	88	7,740
Fatal	11	616
Nonfatal injury	52	3,292
Property damage	25	3,832
Number of persons		
Killed	12	701
Injured	67	4,355

NOTE: Guam, Puerto Rico, and the Virgin Islands are included in the U.S. total.

Figure 2-5: Pennsylvania Recreational Boating Accidents



NOTES FOR DATA ON THIS PAGE: An accident is listed under one category only, with fatal being the highest priority, followed by nonfatal injury, followed by property damage. For example, if two vessels are in an accident resulting in a fatality and a nonfatal injury, the accident is counted as a fatal accident involving two vessels.

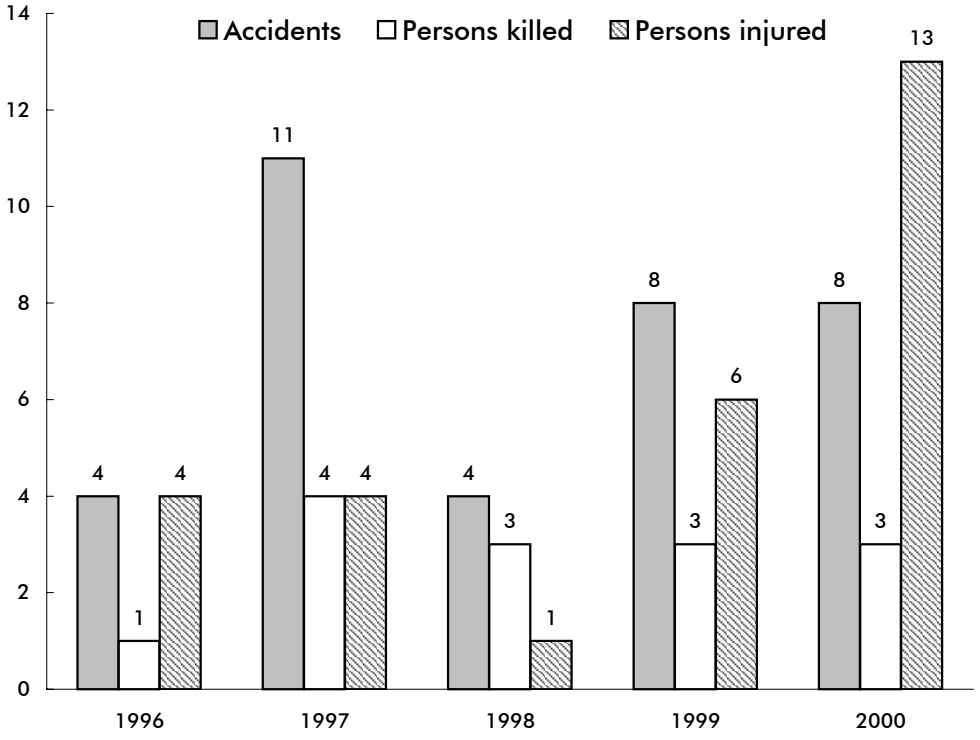
These data do not include: 1) accidents involving only slight injury not requiring medical treatment beyond first-aid; 2) accidents involving property damage of $500 or less; 3) accidents not caused or contributed to by a vessel, its equipment, or its appendages; and 4) accidents in which the boat was used solely as a platform for other activities, such as swimming or skin diving. Such cases are not included because the victims freely left the safety of a boat. However, the data do include accidents involving people in the water who are struck by their boat or another boat.

SOURCE FOR DATA ON THIS PAGE: U.S. Department of Transportation, U.S. Coast Guard, *Boating Statistics, 2000,* Washington, DC: 2001, available at http://www.uscgboating.org/Saf/pdf/Boating_Statistics_2000.pdf as of Nov. 14, 2001.

Table 2-17: Alcohol Involvement in Recreational Boating

	1999		2000	
	Pennsylvania	United States	Pennsylvania	United States
Number of accidents				
Total	8	633	8	696
Number of persons				
Killed	3	191	3	215
Injured	6	476	13	542

Figure 2-6: Pennsylvania Recreational Boating Accidents Involving Alcohol



NOTE FOR DATA ON THIS PAGE: Alcohol involvement in a boating accident includes any accident in which alcoholic beverages are consumed in the boat and the investigating official has determined that the operator was impaired or affected while operating the boat.

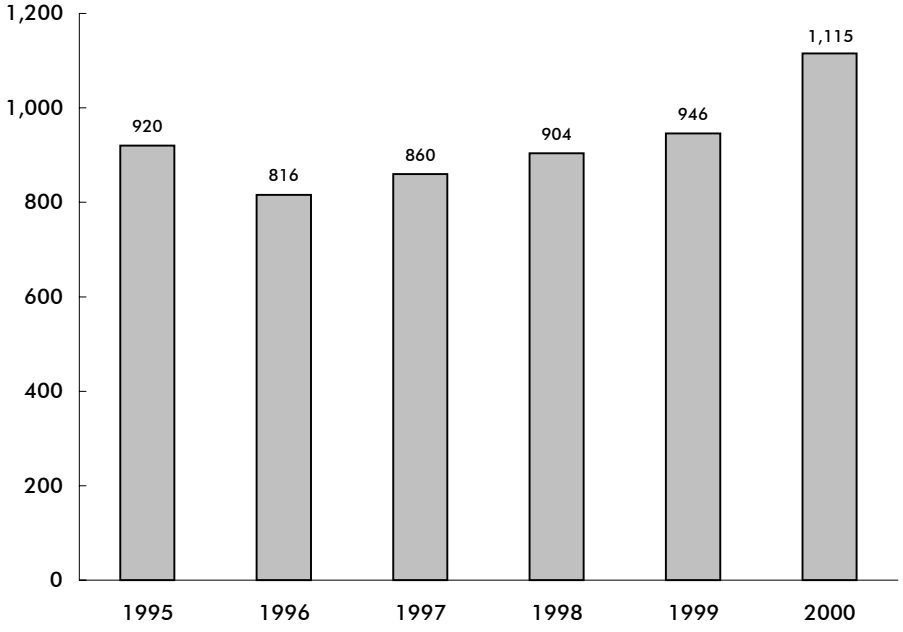
SOURCES FOR DATA ON THIS PAGE: U.S. Department of Transportation, U.S. Coast Guard, *Boating Statistics 2000*, Washington, DC: 2001; U.S. Department of Transportation, U.S. Coast Guard, *Boating Statistics 1999,* Washington, DC: 2000, available at http://www.uscgboating.org/Saf/pdf/Boating_Statistics_2000.pdf and http://www.uscgboating.org/Saf/pdf/Boating_Statistics_1999.pdf as of Nov. 14, 2001.

Table 2-18: Hazardous Materials Incidents: 2000 (Not including pipelines)

	Incidents	Deaths	Injuries Total	Injuries Major	Injuries Minor	Damages ($ thousands)
Pennsylvania	1,115	0	11	0	11	2,939
United States	17,514	13	246	18	228	72,728

NOTES: U.S. total includes U.S. territories or foreign locations.
Hazardous material incident locations are often listed as the terminals or sorting centers where they are discovered. Therefore, states with this type of a facility may show a disproportionate number of incidents.
Hazardous materials transportation incidents required to be reported are defined in the Code of Federal Regulations (CFR), 49 CFR Part 171.15, 171.16 (Form F 5800.1).
Hazardous materials deaths and injuries are caused by the hazardous material in commerce.

Figure 2-7: Pennsylvania Hazardous Materials Incidents (Not including pipelines)



NOTE FOR DATA ON THIS PAGE: Hazardous materials incident data are subject to revision and correction by the Office of Hazardous Materials Safety.

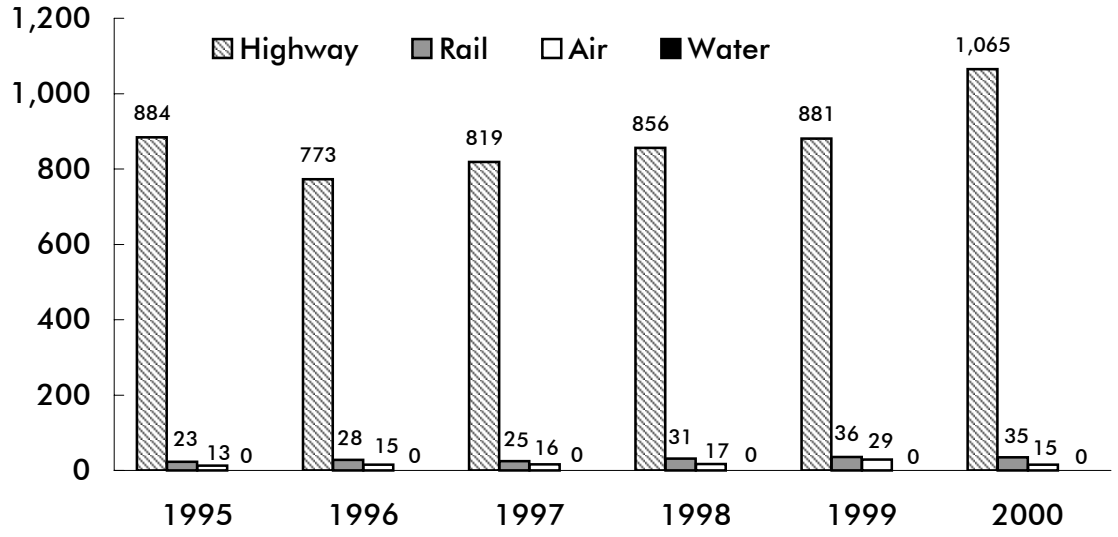
SOURCE FOR DATA ON THIS PAGE: U.S. Department of Transportation, Research and Special Programs Administration, Office of Hazardous Materials Safety, *Hazmat Summary by State for Calendar Year 2000* , and earlier years, Washington, DC: 2002, available at http://hazmat.dot.gov as of Apr. 24, 2002.

Table 2-19: Pennsylvania Hazardous Materials Incidents by Mode: 2000 (Not including pipelines)

Mode	Total incidents	Deaths	Injuries		Damages ($ thousands)
			Major	Minor	
Highway	1,065	0	0	11	2,437
Rail	35	0	0	0	502
Air	15	0	0	0	0
Water[1]	0	0	0	0	0
Total	1,115	0	0	11	2,939

[1]Includes only packaged shipments (i.e., nonbulk shipments).

Figure 2-8: Pennsylvania Hazardous Materials Incidents by Mode (Not including pipelines)



NOTE FOR DATA ON THIS PAGE: Hazardous materials incident data are subject to revision and correction by the Office of Hazardous Materials Safety.

SOURCE FOR DATA ON THIS PAGE: U.S. Department of Transportation, Research and Special Programs Administration, Office of Hazardous Materials Safety, *Hazmat Summary by State for Calendar Year 2000* , and earlier years, Washington, DC: 2002, available at http://hazmat.dot.gov/ as of Apr. 24, 2002.

Table 2-20: Natural Gas Distribution Pipeline Incidents

	1995	1996	1997	1998	1999	2000
Pennsylvania						
Number of incidents	9	10	8	5	10	10
Number of fatalities	3	0	0	1	1	0
Number of injuries	2	6	1	0	21	4
Property damage ($ thousands)	885	1,430	1,095	556	2,645	2,896
United States, total						
Number of incidents	97	110	102	137	119	154
Number of fatalities	16	47[1]	9	17	19	22
Number of injuries	43	109[1]	67	65	85	59
Property damage ($ thousands)	10,951	16,253[1]	12,493	19,055	25,914	23,399

[1] Includes 33 fatalities, 42 injuries, and $5,000,000 property damage associated with an incident in San Juan, Puerto Rico that was attributed to natural gas at the time. The cause of the incident is currently in dispute and subject to litigation.

NOTE: Incidents are reported on Form RSPA F 7100.1.

Table 2-21: Natural Gas Transmission Pipeline Incidents

	1995	1996	1997	1998	1999	2000
Pennsylvania						
Number of incidents	2	2	1	2	1	4
Number of fatalities	0	0	0	0	0	0
Number of injuries	0	0	0	0	0	0
Property damage ($ thousands)	0	81	62	560	5,000	567
United States, total						
Number of incidents	64	77	73	99	54	80
Number of fatalities	2	1	1	1	2	15
Number of injuries	10	5	5	11	8	18
Property damage ($ thousands)	9,958	13,078	12,078	29,749	17,696	17,868

NOTE: Incidents are reported on Form RSPA F 7100.2.

NOTES FOR DATA ON THIS PAGE: Incident means any of the following events:
I. An event that involves a release of gas from a pipeline or of liquefied natural gas (LNG) facility and a) a death or personal injury necessitating in-patient hospitalization or b) estimated property damage, including cost of gas lost, of the operator or others, or both, of $50,000 or more.
II. An event that results in an emergency shutdown of an LNG facility.
III. An event that is significant, in the judgment of the operator, even though it did not meet the criteria of I or II.
Historical totals may change as the Office of Pipeline Safety receives supplemental information on incidents.

SOURCE FOR DATA ON THIS PAGE: U.S. Department of Transportation, Research and Special Programs Administration, Office of Pipeline Safety, available at http://ops.dot.gov as of Jan. 7, 2002.

Table 2-22: Hazardous Liquid Pipeline Incidents

	1995	1996	1997	1998	1999	2000
Pennsylvania						
Number of incidents	1	5	1	1	3	3
Number of fatalities	0	0	0	0	0	0
Number of injuries	0	0	0	0	1	0
Property damage ($ thousands)	50	275	150	102	74	6,200
United States, total						
Number of incidents	188	193	171	153	168	147
Number of fatalities	3	5	0	2	4	1
Number of injuries	11	13	5	6	20	4
Property damage ($ thousands)	32,519	81,083	42,811	62,865	43,109	115,704

NOTES: Historical totals may change as the Office of Pipeline Safety receives supplemental information on incidents. Incidents are reported on Form RSPA F 7100.1. An accident report is required for each failure in a pipeline system in which there is a release of the hazardous liquid or carbon dioxide transported resulting in any of the following:

1. Explosion or fire not intentionally set by the operator;
2. Loss of 50 or more barrels (8 or more cubic meters) of hazardous liquid or carbon dioxide;
3. Escape to the atmosphere of more than 5 barrels (0.8 cubic meters) a day of highly volatile liquids;
4. Death of any person;
5. Bodily harm to any person resulting in: a. loss of consciousness; or b. necessity to carry the person from the scene; or c. necessity for medical treatment; or d. disability which prevents the discharge of normal duties or the pursuit of normal activities beyond the day of the accident;
6. Estimated property damage, including cost of clean-up and recovery, value of lost product, and damage to the property of the operator or others, or both, exceeding $50,000.

SOURCE: U.S. Department of Transportation, Research and Special Programs Administration, Office of Pipeline Safety, available at http://ops.dot.gov as of Jan. 7, 2002.

C Freight Transportation

Table 3-1: Domestic Shipments to Pennsylvania by State: 1997 (Descending order by weight)

State of origin	Rank	Value ($ millions)	Weight (thousand short tons)	State of origin	Rank	Value ($ millions)	Weight (thousand short tons)
Pennsylvania	**1**	**102,859**	**404,315**	Florida	27	2,709	988
Ohio	2	17,320	19,961	Arkansas	28	1,288	912
West Virginia	3	2,396	19,346	Maine	29	919	633
New Jersey	4	25,107	17,519	Mississippi	30	845	519
New York	5	16,439	11,582	Kansas	31	1,345	514
Virginia	6	6,272	8,593	Nebraska	32	1,294	503
Kentucky	7	3,660	8,356	Wyoming	33	69	494
Maryland	8	7,918	8,275	North Dakota	34	167	423
Minnesota	9	2,974	5,899	Washington	35	1,673	276
Illinois	10	9,169	4,683	Oklahoma	36	499	253
Michigan	11	6,422	4,452	New Hampshire	37	1,084	242
Delaware	12	1,839	3,964	Idaho	38	473	235
Texas	13	6,733	3,877	Oregon	39	785	228
Indiana	14	5,199	3,127	Vermont	40	301	153
North Carolina	15	8,218	2,704	Rhode Island	41	654	144
Louisiana	16	1,123	2,409	South Dakota	42	S	129
Georgia	17	5,135	2,267	Utah	43	459	64
Alabama	18	1,793	2,174	Montana	44	100	58
Wisconsin	19	6,292	2,092	Nevada	45	185	51
Missouri	20	3,905	1,956	Arizona	46	S	42
Connecticut	21	3,813	1,846	Alaska	47	5	S
Tennessee	22	4,331	1,732	Colorado	47	727	S
South Carolina	23	2,535	1,527	District of Columbia	47	S	S
California	24	9,913	1,481	Hawaii	47	S	S
Iowa	25	2,120	1,294	New Mexico	47	226	S
Massachusetts	26	3,882	999	From all states		285,107	553,646

KEY: S = data do not meet publication standards because of high sampling variability or other reasons.

NOTES: The Commodity Flow Survey covers business establishments in mining, manufacturing, wholesale trade, and selected retail industries. The survey also covers selected auxiliary establishments (e.g., warehouses) of in-scope multiunit and retail companies. The survey excludes establishments classified as farms, forestry, fisheries, governments, construction, transportation, foreign establishments, services, and most establishments in retail. Due to industry-wide reporting problems, shipments by oil and gas extraction establishments are also excluded. "From all states" total includes all domestic shipments to the destination state, including intrastate shipments.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics and U.S. Department of Commerce, U.S. Census Bureau, *1997 Commodity Flow Survey* , Washington, DC: 1999, available at http://www.bts.gov/ntda/cfs/cfs97od.html as of Nov. 2, 2001.

Table 3-2: Domestic Shipments from Pennsylvania by State: 1997 (Descending order by weight)

State of destination	Rank	Value ($ millions)	Weight (thousand short tons)	State of destination	Rank	Value ($ millions)	Weight (thousand short tons)
Pennsylvania	**1**	**102,859**	**404,315**	Maine	27	1,144	490
New Jersey	2	24,370	21,538	Kansas	28	1,101	426
New York	3	22,890	21,365	Vermont	29	568	347
Ohio	4	14,595	20,576	Rhode Island	30	777	291
Maryland	5	11,147	17,412	Oregon	31	1,334	275
Delaware	6	3,296	6,410	Mississippi	32	825	269
West Virginia	7	3,727	6,027	Washington	33	1,579	268
Michigan	8	5,830	4,613	Arizona	34	1,257	219
Texas	9	9,649	3,674	Nebraska	35	582	207
Illinois	10	7,863	3,641	Colorado	36	1,113	206
Virginia	11	6,087	3,536	Utah	37	1,090	198
Indiana	12	4,908	3,294	District of Columbia	38	409	152
North Carolina	13	6,348	3,060	Oklahoma	39	813	148
Tennessee	14	4,616	2,574	Nevada	40	S	124
Massachusetts	15	5,485	2,323	North Dakota	41	162	56
Wisconsin	16	2,257	2,238	Idaho	42	128	45
California	17	10,459	1,965	Montana	43	129	34
Georgia	18	6,268	1,765	New Mexico	44	321	21
Kentucky	19	3,039	1,681	South Dakota	45	125	19
Connecticut	20	4,555	1,462	Hawaii	46	54	4
New Hampshire	21	867	1,071	Alaska	47	44	3
South Carolina	22	2,571	881	Florida	48	6,831	S
Alabama	23	2,239	766	Wyoming	48	S	S
Missouri	24	2,882	751	Louisiana	48	1,530	S
Minnesota	25	2,213	601	Arkansas	48	1,174	S
Iowa	26	1,428	541	To all states		297,308	548,166

KEY: S = data do not meet publication standards because of high sampling variability or other reasons.

NOTES: The Commodity Flow Survey covers business establishments in mining, manufacturing, wholesale trade, and selected retail industries. The survey also covers selected auxiliary establishments (e.g., warehouses) of in-scope multiunit and retail companies. The survey excludes establishments classified as farms, forestry, fisheries, governments, construction, transportation, foreign establishments, services, and most establishments in retail. Due to industry-wide reporting problems, shipments by oil and gas extraction establishments are also excluded. "To all states" total includes all domestic shipments from the state of origin, including intrastate shipments.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics and U.S. Department of Commerce, U.S. Census Bureau, *1997 Commodity Flow Survey*, Washington, DC: 1999, available at http://www.bts.gov/ntda/cfs/cfs97od.html as of Nov. 2, 2001.

Table 3-3: Shipments Originating in Pennsylvania by Mode of Transportation: 1997

	Value		Short tons		Ton-miles	
	Number ($ millions)	Percent	Number (thousands)	Percent	Number (millions)	Percent
All modes	297,308	100.0	548,166	100.0	75,869	100.0
Single modes	242,127	81.4	514,371	93.8	67,578	89.1
Truck	220,639	74.2	428,616	78.2	41,741	55.0
For-hire	129,877	43.7	230,072	42.0	31,606	41.7
Private truck	89,144	30.0	186,983	34.1	9,370	12.3
Rail	6,525	2.2	45,926	8.4	20,653	27.2
Water	S	S	S	S	S	S
Shallow draft	S	S	S	S	S	S
Great Lakes	Z	Z	Z	Z	Z	Z
Deep draft	Z	Z	Z	Z	Z	Z
Air (including truck and air)	9,605	3.2	215	Z	223	0.3
Pipeline	4,021	1.4	20,779	3.8	S	S
Multiple modes	44,168	14.9	11,066	2.0	5,606	7.4
Parcel, U.S. Postal Service, or courier service	42,762	14.4	1,298	0.2	945	1.2
Truck and rail intermodal combination	735	0.2	S	S	842	1.1
Truck and water	S	S	S	S	S	S
Rail and water	65	Z	2,625	0.5	918	1.2
Other multiple modes	320	0.1	1,262	0.2	S	S
Other and unknown modes	11,013	3.7	22,729	4.1	2,684	3.5

KEY: S = data do not meet publication standards because of high sampling variability or other reasons; Z = zero or less than 1 unit of measure.

NOTE: The Commodity Flow Survey covers business establishments in mining, manufacturing, wholesale trade, and selected retail industries. The survey also covers selected auxiliary establishments (e.g., warehouses) of in-scope multiunit and retail companies. The survey excludes establishments classified as farms, forestry, fisheries, governments, construction, transportation, foreign establishments, services, and most establishments in retail. Due to industry-wide reporting problems, shipments by oil and gas extraction establishments are also excluded.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics and U.S. Department of Commerce, U.S. Census Bureau, *1997 Commodity Flow Survey:* Washington, DC: 1999, available at http://www.bts.gov/ntda/cfs/cfs97od.html as of Nov. 2, 2001.

Table 3-4: Domestic Shipments from Pennsylvania by Truck: 1997

State of destination	Value ($ millions)	Weight (thousand short tons)
Pennsylvania	**84,216**	**336,493**
New Jersey	17,564	19,438
New York	16,104	13,142
Ohio	11,215	10,351
Maryland	9,310	9,525
California	5,917	1,214
Illinois	5,562	2,954
North Carolina	5,292	2,122
Georgia	4,700	1,559
Texas	4,698	1,372
All other states	56,061	30,446
Total, all states	220,639	428,616

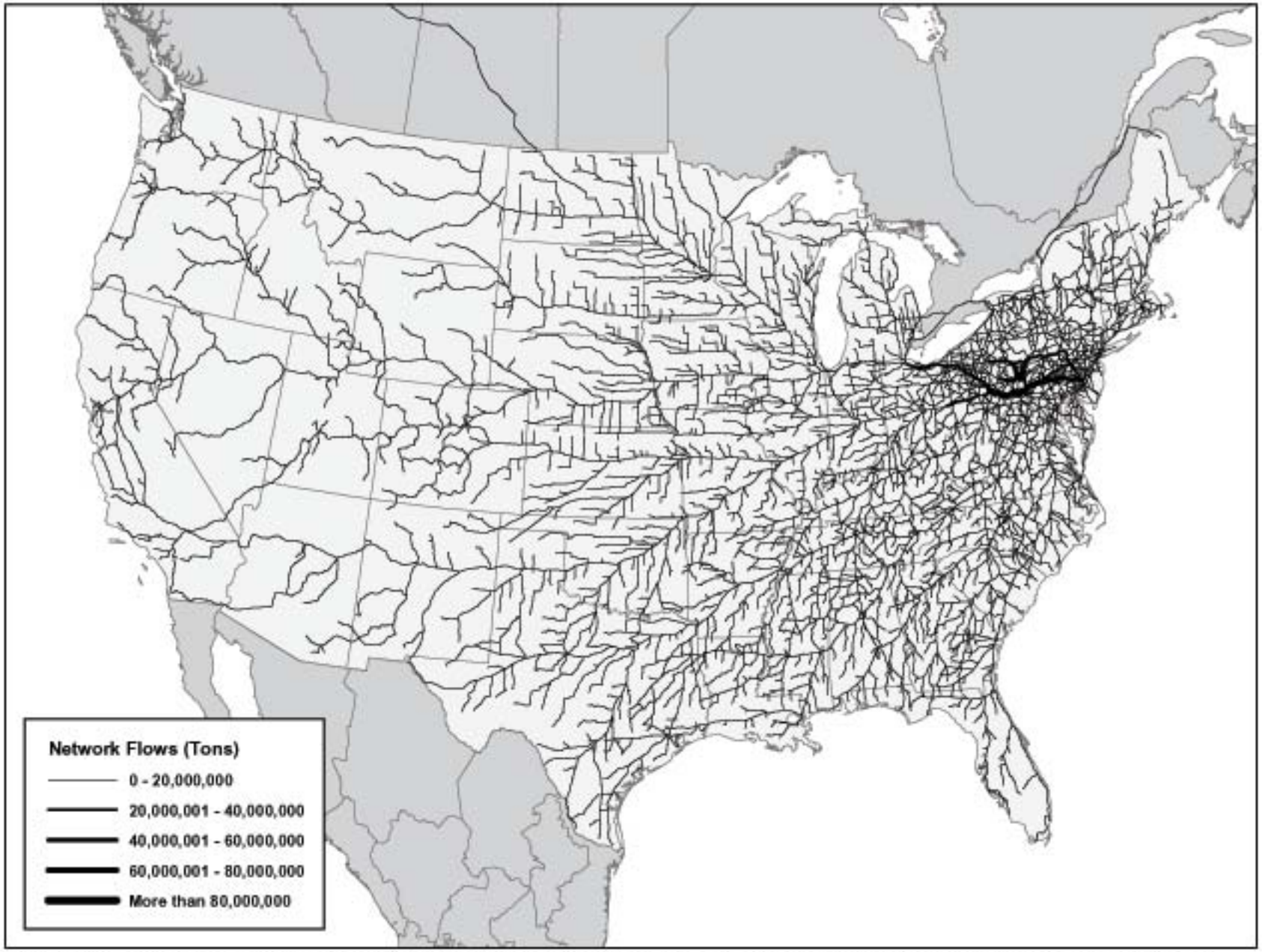
Table 3-5: Domestic Shipments to Pennsylvania by Truck: 1997

State of origin	Value ($ millions)	Weight (thousand short tons)
Pennsylvania	**84,216**	**336,493**
New Jersey	20,154	13,876
Ohio	13,754	15,219
New York	13,211	10,695
North Carolina	7,058	2,389
Maryland	6,849	7,772
Illinois	6,751	3,335
Virginia	5,422	3,216
California	5,188	679
Wisconsin	4,905	1,785
All other states	48,422	27,889
Total, all states	215,930	423,348

NOTE FOR DATA ON THIS PAGE: Some unpublished estimates can be derived from other data published on this table. However, figures obtained in this manner are subject to these same limitations.

SOURCE FOR DATA ON THIS PAGE: U.S. Department of Transportation, Bureau of Transportation Statistics and U.S. Department of Commerce, U.S. Census Bureau, *1997 Commodity Flow Survey*, Washington, DC: 2000, data from CD-ROM, CD-EC97-CFS.

Map 3-1: Pennsylvania Network Truck Flows: 1998



SOURCE: U.S. Department of Transportation, Federal Highway Administration, Operations Core Business Unit, Office of Freight Management and Operations

Table 3-6 : Truck Shipments from Pennsylvania by Commodity: 1997 (Descending order by weight)

Commodity (2-digit commodity code)	Value ($ millions)	Weight (thousand short tons)
Gravel and crushed stone (12)	766	108,566
Nonmetallic mineral products (31)	6,747	59,786
Coal (15)	1,033	43,845
Coal and petroleum products, n.e.c. (19)	2,635	21,211
Other prepared foodstuffs and fats and oils (07)	21,768	17,690
Gasoline and aviation turbine fuel (17)	4,480	16,159
Base metal in primary or semifinished forms and in finished basic shapes (32)	17,988	14,706
Fuel oils (18)	3,090	14,228
Natural sands (11)	94	10,677
Waste and scrap (41)	1,850	8,399
Articles of base metal (33)	10,826	6,097
Wood products (26)	3,796	7,255
Other agricultural products (03)	4,580	7,247
Paper or paperboard articles (28)	6,512	4,697
Printed products (29)	18,123	4,694
Mixed freight (43)	8,198	4,560
Pulp, newsprint, paper, and paperboard (27)	5,474	4,536
Plastics and rubber (24)	11,035	4,108
Basic chemicals (20)	4,097	4,041
All other commodities	87,547	66,114
Total, all commodities	220,639	428,616

KEY: n.e.c. = not elsewhere classified.

NOTE: There are 41 two-digit Standard Classification of Transported Goods (SCTG) commodity codes.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics and U.S. Department of Commerce, U.S. Census Bureau, *1997 Commodity Flow Survey* , Washington, DC: 2000, data from CD-ROM, CD-EC97-CFS.

Table 3-7: Rail Shipments Terminating in Pennsylvania (Short tons)

Commodity	1999	Percent of total	2000	Percent of total
Coal	19,747,458	33.3	19,178,217	32.4
Primary metal products	5,749,724	9.7	6,267,985	10.6
Food products	4,477,512	7.5	4,578,116	7.7
Chemicals	4,178,828	7.0	4,704,124	7.9
Metallic ores	3,582,628	6.0	U	U
Pulp and paper products	U	U	3,844,220	6.5
All other commodities	21,643,370	36.4	20,641,672	34.9
Pennsylvania, total	59,379,520	100.0	59,214,334	100.0

KEY: U = data are unavailable.

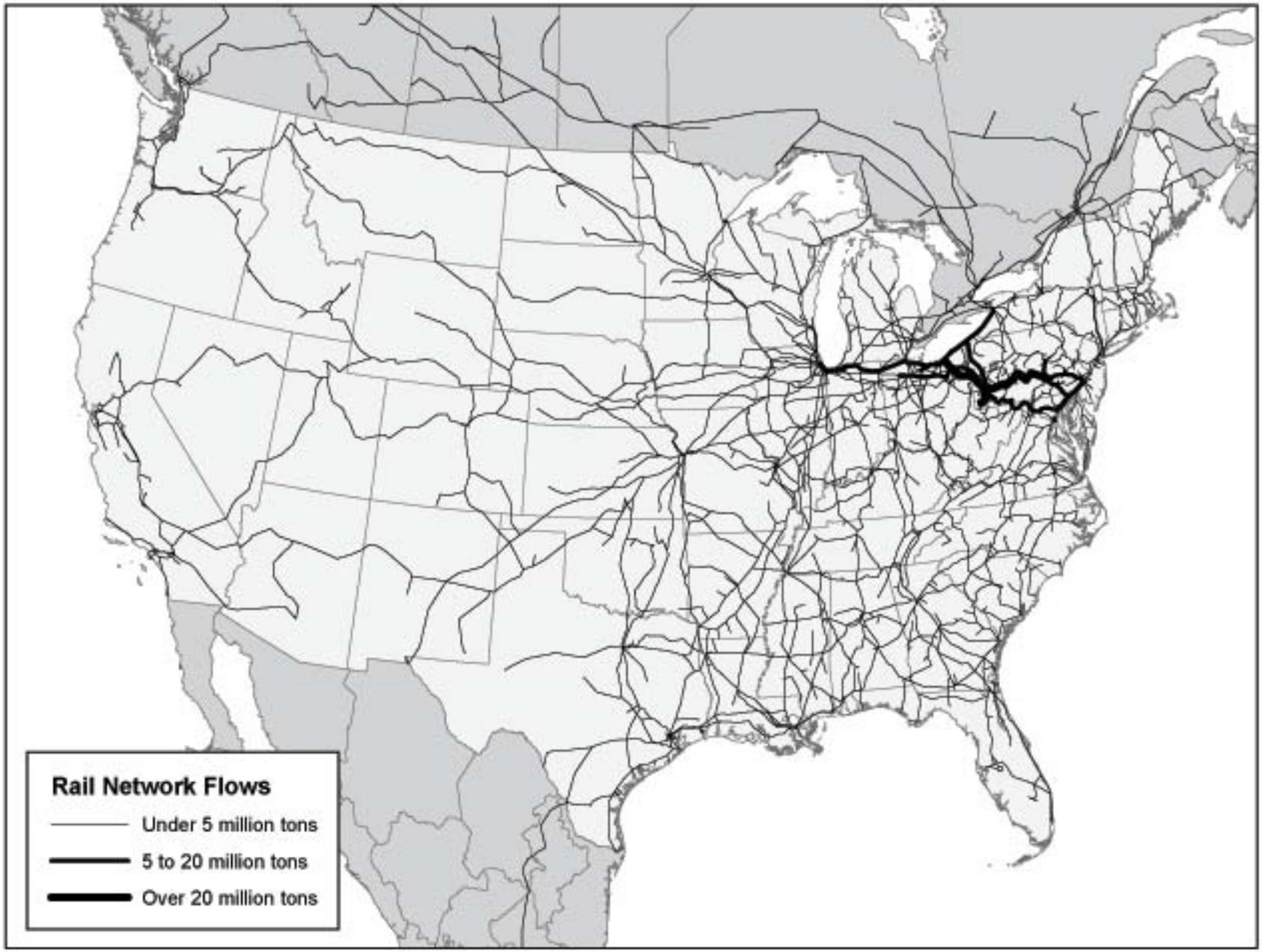
Table 3-8: Rail Shipments Originating in Pennsylvania (Short tons)

Commodity	1999	Percent of total	2000	Percent of total
Coal	36,154,477	59.3	35,503,213	57.5
Primary metal products	7,346,847	12.0	6,984,608	11.3
Petroleum	4,885,179	8.0	5,362,734	8.7
Nonmetallic minerals	3,341,144	5.5	3,378,100	5.5
Mixed freight	2,025,360	3.3	2,452,800	4.0
All other commodities	7,239,874	11.9	8,082,560	13.1
Pennsylvania, total	60,992,881	100.0	61,764,015	100.0

NOTE FOR DATA ON THIS PAGE: Includes the five largest commodities (by tonnage terminated or originated) of the 38 two-digit Standard Transportation Commodity Code groupings plus all others for state total. Includes intrastate shipments.

SOURCE FOR DATA ON THIS PAGE: Association of American Railroads, *Railroads and States-2000,* Washington, DC: January 2002, available at http://www.aar.org/abouttheindustry/stateinformation.asp as of Mar. 18, 2002; and *Railroads and States -1999* , Washington, DC: January 2002, available at http://www.aar.org/abouttheindustry/stateinformation.asp as of Mar. 18, 2002.

Map 3-2: Pennsylvania Total Rail Flows: 1999



SOURCE: U.S. Department of Transportation, Federal Railroad Administration, Office of Policy

Table 3-9: Foreign and Domestic Waterborne Shipments Originating in Pennsylvania by Destination: 2000

Destination	Short tons	Percent of total
Total originating in Pennsylvania	42,277,568	100.0
Pennsylvania (intrastate)	**22,249,514**	**52.6**
West Virginia	5,203,033	12.3
Ohio	3,044,424	7.2
New York	2,459,237	5.8
New Jersey	2,434,808	5.8
Indiana	1,551,798	3.7
Kentucky	1,177,514	2.8
Foreign (excluding Canada)	750,499	1.8
Other	3,406,741	8.1

Table 3-10: Foreign and Domestic Waterborne Shipments to Pennsylvania by Origin: 2000

Origin	Short tons	Percent of total
Total shipped to Pennsylvania	106,054,163	100.0
Foreign (excluding Canada)	44,392,473	41.9
Pennsylvania (intrastate)	**22,249,514**	**21.0**
West Virginia	9,403,477	8.9
Delaware	8,245,261	7.8
Ohio	5,728,074	5.4
Canada	3,492,354	3.3
Louisiana	3,483,546	3.3
New Jersey	2,940,037	2.8
Kentucky	1,944,883	1.8
Other	4,174,544	3.9

SOURCE FOR DATA ON THIS PAGE: U.S. Army Corps of Engineers, Waterborne Commerce Statistics Center, *Origin and Destination of Waterborne Commerce of the United States, 2000* , available at http://www.wrsc.usace.army.mil as of Feb. 12, 2002.

Table 3-11: Foreign and Domestic Waterborne Shipments Originating in Pennsylvania by Commodity: 2000[1]

Commodity	Short tons	Percent of total
Total	42,277,568	100.0
Coal, lignite, and coal coke	26,056,307	61.6
Petroleum products	7,665,227	18.1
Sand, gravel, shells, clay, salt, and slag	3,524,425	8.3
Chemicals excluding fertilizers	2,165,408	5.1
Primary metal products	480,018	1.1
Primary nonmetal products	338,393	0.8
Manufactured goods	81,712	0.2
Non-ferrous ores and scrap	51,708	0.1
Food and food products	40,641	<0.1
Iron ore, iron, and steel waste and scrap	34,962	<0.1
Lumber, logs, wood chips, and pulp	24,634	<0.1
Chemical fertilizers	211	<0.1
Unknown and not elsewhere classified products[2]	1,813,922	4.3

Table 3-12: Domestic Waterborne Shipments Originating in Pennsylvania by Commodity: 2000[1]

Commodity	Short tons	Percent of total
Total	41,492,102	100.0
Coal, lignite, and coal coke	26,018,209	62.7
Petroleum products	7,560,581	18.2
Sand, gravel, shells, clay, salt, and slag	3,516,756	8.5
Chemicals excluding fertilizers	1,909,850	4.6
Primary metal products	373,969	0.9
Primary nonmetal products	284,266	0.7
Iron ore, iron, and steel waste and scrap	34,930	<0.1
Unknown and not elsewhere classified products[2]	1,793,541	4.3

[1] "Domestic" includes intrastate shipments.
[2] To protect confidentiality, if three or more vessel operating companies do not carry a particular commodity from a state of origin to a state of destination, then that commodity is reclassified to "unknown and not elsewhere classified products."

SOURCE FOR DATA ON THIS PAGE: U.S. Army Corps of Engineers, Waterborne Commerce Statistics Center, State to State and Region to Region Commodity Tonnages, Public Domain database, available at http://www.wrsc.usace.army.mil/ndc/datapdom.htm as of Oct. 30, 2001.

Table 3-13: Foreign and Domestic Waterborne Shipments to Pennsylvania by Commodity: 2000[1]

Commodity	Short tons	Percent of total
Total	106,054,163	100.0
Crude petroleum	37,951,375	35.8
Coal, lignite, and coal coke	28,732,946	27.1
Sand, gravel, shells, clay, salt, and slag	8,438,944	8.0
Petroleum products	5,874,118	5.5
Primary metal products	5,637,564	5.3
Chemicals excluding fertilizers	2,885,222	2.7
Primary nonmetal products	2,024,384	1.9
Food and food products	1,370,805	1.3
Manufactured goods	301,480	0.3
Non-ferrous ores and scrap	257,085	0.2
Iron ore, iron, and steel waste and scrap	213,873	0.2
Lumber, logs, wood chips, and pulp	186,188	0.2
Chemical fertilizers	109,786	0.1
Unknown and not elsewhere classified products[2]	12,070,393	11.4

Table 3-14: Domestic Waterborne Shipments to Pennsylvania by Commodity: 2000[1]

Commodity	Short tons	Percent of total
Total	58,169,336	100.0
Coal, lignite, and coal coke	28,675,055	49.3
Sand, gravel, shells, clay, salt, and slag	7,337,268	12.6
Petroleum products	5,198,518	8.9
Chemicals excluding fertilizers	2,070,319	3.6
Primary metal products	1,762,780	3.0
Primary nonmetal products	655,211	1.1
Non-ferrous ores and scrap	248,030	0.4
Iron ore, iron, and steel waste and scrap	140,109	0.2
Lumber, logs, wood chips, and pulp	32,679	<0.1
Chemical fertilizers	17,307	<0.1
Unknown and not elsewhere classified products[2]	12,032,060	20.7

[1] "Domestic" includes intrastate shipments.
[2] To protect confidentiality, if three or more vessel operating companies do not carry a particular commodity from a state of origin to a state of destination, then that commodity is reclassified to "unknown and not elsewhere classified products."

SOURCE FOR DATA ON THIS PAGE: U.S. Army Corps of Engineers, Waterborne Commerce Statistics Center, State to State and Region to Region Commodity Tonnages, Public Domain database, available at http://www.wrsc.usace.army.mil/ndc/datapdom.htm as of Oct. 30, 2001.

Table 3-15: U.S. Waterborne Imports by State and Vessel Type: 1999
(Thousands of metric tons)

		Vessel type			
Cargo discharged in	**Total**	**Tanker**	**Dry-bulk carrier**	**Full container**	**Other freighter[1]**
Texas	215,154	177,950	31,448	3,442	2,314
Louisiana	140,682	98,723	37,092	1,101	3,766
California	75,162	31,143	10,345	29,169	4,505
New York	55,174	30,575	11,814	10,701	2,084
Pennsylvania	**37,381**	**25,980**	**8,319**	**1,140**	**1,943**
Florida	28,509	10,565	10,166	3,656	4,112
Virgin Islands	21,954	19,634	2,294	16	10
Maine	20,795	19,616	1,521	29	629
Mississippi	18,719	16,446	1,435	556	282
Washington	18,311	2,585	6,708	5,915	3,093
New Jersey	17,842	14,230	2,916	41	655
Alabama	14,211	5,620	8,046	53	492
Maryland	14,090	1,448	8,948	1,462	2,232
Puerto Rico	14,058	8,863	3,096	1,049	1,050
Massachusetts	12,588	9,538	2,347	501	202
Virginia	10,705	4,032	1,903	4,064	706
Georgia	9,614	2,353	3,845	2,403	1,013
South Carolina	8,755	384	3,455	4,257	659
Delaware	7,957	4,656	1,474	1,275	552
Michigan	6,771	173	6,302	81	215
Hawaii	5,955	4,832	957	82	84
Ohio	5,257	69	4,930	20	238
Illinois	4,883	231	4,489	25	138
Oregon	4,369	1,215	1,776	421	957
Rhode Island	3,650	2,662	919	23	46
North Carolina	3,256	1,575	1,077	320	284
New Hampshire	3,212	1,505	1,691	4	12
Connecticut	2,930	1,534	786	78	532
Wisconsin	1,383	Z	1,280	5	98
Alaska	1,241	967	224	19	31
Minnesota	629	23	399	4	203
District of Columbia	53	Z	48	Z	5
Indiana	Z	Z	Z	Z	Z
United States, total	785,243	498,124	182,050	71,914	33,155

[1] Roll-on/roll-off, breakbulk ships, partial containerships, refrigerated cargo ships, barge carriers, and specialized cargo ships.

KEY: Z = zero or less than one unit of measurement.

SOURCE: U.S. Department of Transportation, Maritime Administration, Office of Statistical and Economic Analysis, Waterborne Databank 1999, May 2002.

Table 3-16: U.S. Waterborne Exports by State and Vessel Type: 1999 (Thousands of metric tons)

		Vessel type			
Cargo loaded in	**Total**	**Tanker**	**Dry-bulk carrier**	**Full container**	**Other freighter[1]**
Louisiana	97,093	9,842	77,773	3,669	5,809
Texas	50,331	23,279	18,917	4,769	3,366
California	34,585	4,778	11,074	17,011	1,722
Washington	30,810	2,459	19,189	6,897	2,265
Virginia	27,374	269	22,106	4,018	981
Florida	17,797	692	9,332	2,773	5,000
Ohio	12,936	74	12,505	130	227
Oregon	12,712	501	8,535	2,181	1,495
Alaska	10,122	5,794	3,300	319	709
New York	9,644	508	2,992	5,476	668
Michigan	8,392	190	7,673	348	181
Maryland	7,834	129	6,257	734	714
Alabama	7,724	126	4,656	366	2,576
Wisconsin	7,492	117	7,007	142	226
Georgia	6,291	173	1,323	3,246	1,549
South Carolina	5,929	39	222	5,157	511
Minnesota	3,994	45	3,721	125	103
North Carolina	2,614	305	1,212	323	774
Mississippi	2,456	421	1,095	329	611
Puerto Rico	1,054	593	33	238	190
Virgin Islands	772	699	35	14	24
Illinois	624	1	521	90	12
Pennsylvania	**616**	**89**	**116**	**276**	**135**
Massachusetts	576	19	226	297	34
Hawaii	509	328	63	57	61
Delaware	513	17	173	189	134
Maine	329	57	61	44	167
New Jersey	285	113	63	47	62
Connecticut	126	8	81	19	18
Rhode Island	111	9	98	2	2
New Hampshire	23	20	Z	1	2
Indiana	18	Z	18	Z	Z
District of Columbia	Z	Z	Z	Z	Z
United States, total	360,697	51,696	219,382	59,289	30,330

[1] Roll-on/roll-off, breakbulk ships, partial containerships, refrigerated cargo ships, barge carriers, and specialized cargo ships.

KEY: Z = zero or less than one unit of measurement.

SOURCE: U.S. Department of Transportation, Maritime Administration, Office of Statistical and Economic Analysis, Waterborne Databank 1999, May 2002.

Table 3-17: Scheduled and Nonscheduled Air Freight and Mail Enplaned: 2000 (Short tons)

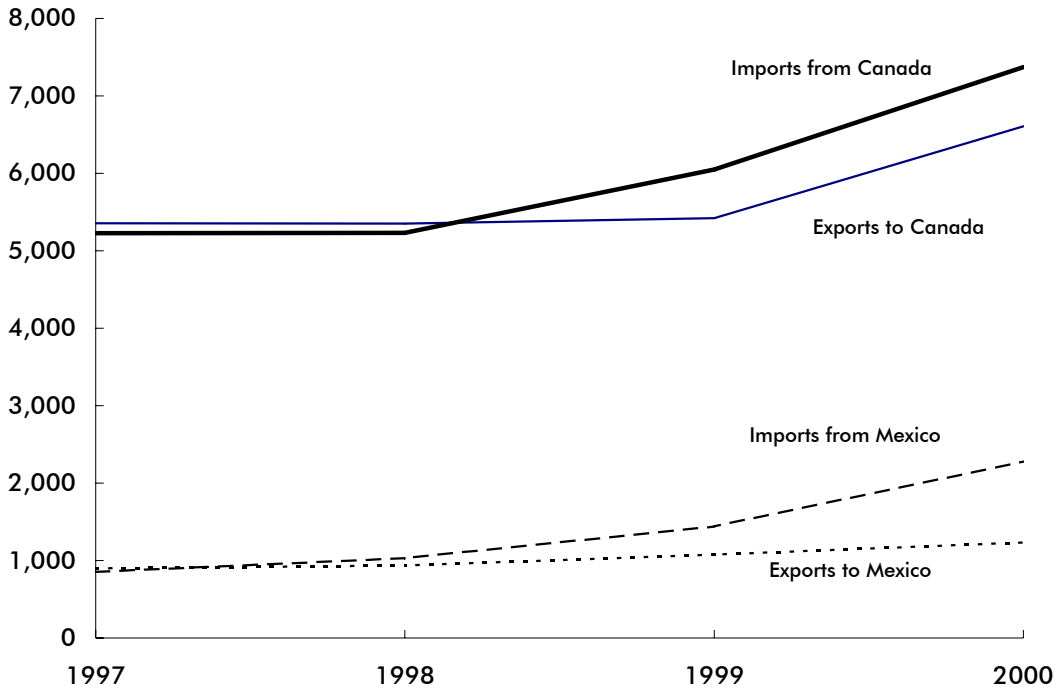
	Freight		Mail	
State	**Scheduled**	**Nonscheduled**	**Scheduled**	**Nonscheduled**
Alabama	17,233	139,250	6,796	25
Alaska	467,057	141,482	52,354	10,232
Arizona	70,430	66,143	36,115	27,465
Arkansas	1,886	12,578	6,534	2,955
California	1,176,476	504,757	237,537	87,278
Colorado	106,816	61,503	55,370	31,711
Connecticut	14,802	54,627	10,260	1,575
Delaware	0	3,251	0	0
District of Columbia	92,526	6,208	46,511	6,615
Florida	461,831	334,177	85,818	14,182
Georgia	204,986	66,293	116,174	3,961
Hawaii	208,048	52,473	33,768	476
Idaho	11,231	5,064	3,065	1,307
Illinois	318,957	202,867	112,959	9,111
Indiana	408,262	85,326	24,814	134,145
Iowa	15,346	53,766	7,429	3,984
Kansas	6,200	20,199	2,597	18
Kentucky	16,427	823,924	5,093	0
Louisiana	29,577	21,753	11,399	1,758
Maine	8,428	11,368	185	91
Maryland	25,723	24,781	19,850	3,573
Massachusetts	114,243	422,158	31,133	9,384
Michigan	87,127	68,108	41,678	4,848
Minnesota	85,691	51,285	59,550	9,192
Mississippi	398	11,338	2,198	0
Missouri	71,317	67,157	67,876	4,120
Montana	16,261	7,917	1,987	3,341
Nebraska	12,188	26,366	10,825	6,546
Nevada	45,636	12,641	30,407	1,373
New Hampshire	17,995	30,439	740	11
New Jersey	352,556	115,712	54,837	4,550
New Mexico	12,845	29,355	9,327	3,379
New York	317,258	167,388	113,892	5,622
North Carolina	85,996	85,765	35,985	3,498
North Dakota	5,424	383	222	2,820
Ohio	283,292	292,529	48,750	6,442
Oklahoma	25,773	16,804	9,022	9
Oregon	73,035	59,101	12,655	22,729
Pennsylvania	**156,043**	**312,359**	**45,377**	**9,035**
Puerto Rico	78,117	44,530	4,319	3,312
Rhode Island	3,883	2,753	2,543	0
South Carolina	17,237	76,688	3,234	6
South Dakota	8,114	12,298	1,040	4,583
Tennessee	1,324,829	60,779	31,342	6,417
Texas	440,864	482,724	138,548	47,644
Utah	66,549	133,609	30,908	25,073
Vermont	3,257	19	122	0
Virginia	20,961	35,881	5,189	3,492
Washington	152,299	84,367	34,449	55,975
West Virginia	4,306	128	4	0
Wisconsin	30,060	19,618	11,558	1,088
Wyoming	6,786	11	5	0
United States, total	7,582,577	5,422,002	1,714,348	584,950

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, *Airport Activity Statistics of Certificated Air Carriers: Summary Tables, Twelve Months Ending December 31, 2000,* Washington, DC: 2001, available at www.bts.gov/publications/airactstats2000/ as of Oct. 29, 2001.

Table 3-18: Surface Merchandise Trade with Canada and Mexico: 2000 (Millions of current dollars)

	Exports to		Imports from	
	Canada	Mexico	Canada	Mexico
Pennsylvania	6,609	1,234	7,371	2,281
United States, total	154,847	97,159	210,270	113,437

Figure 3-1: Pennsylvania Surface Merchandise Trade with Canada and Mexico (Millions of current dollars)



SOURCE FOR DATA ON THIS PAGE: U.S. Department of Transportation, Bureau of Transportation Statistics, *Transborder Surface Freight Data* , available at http://www.bts.gov/ntda/tbscd/reports.html as of August 2002.

Figure 3-2: Truck and Rail Imports from Mexico to Pennsylvania by Weight

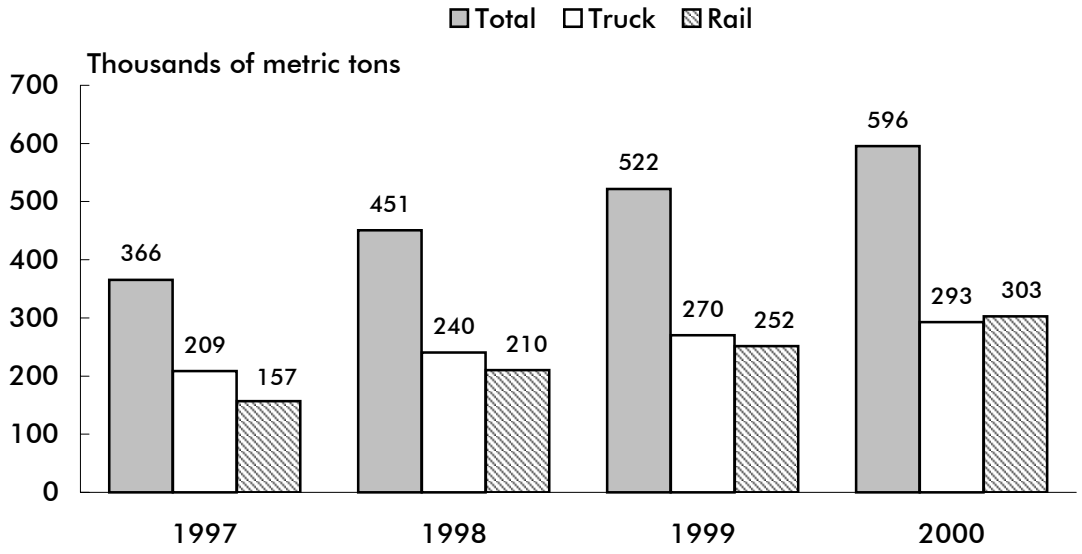
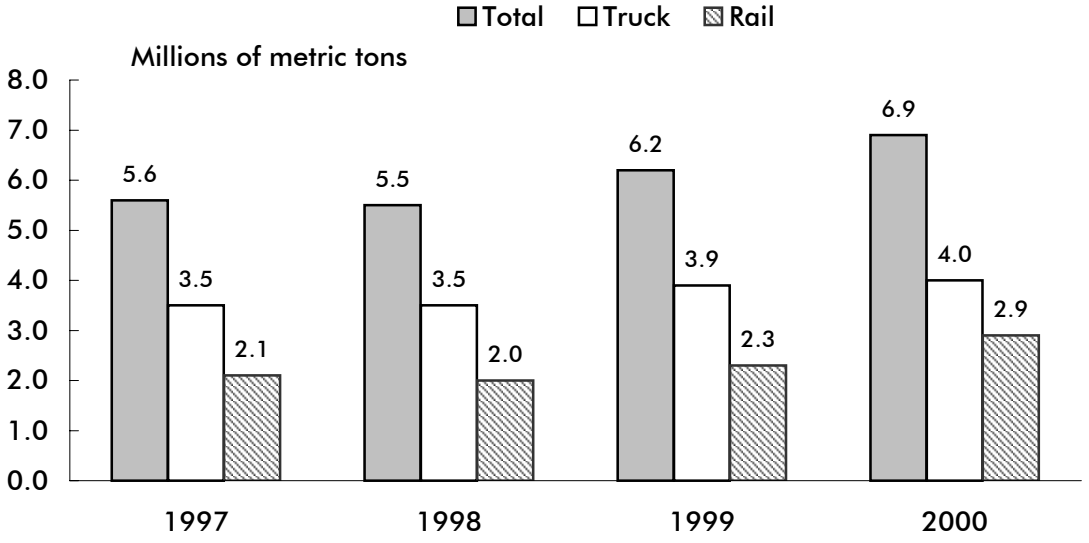


Figure 3-3: Truck and Rail Imports from Canada to Pennsylvania by Weight



NOTES FOR DATA ON THIS PAGE: Data do not include transshipment activity. Transshipments are shipments that enter or exit the United States by way of a U.S. Customs port on the northern or southern border, but whose origin or destination is a country other than Canada or Mexico. All figures are based on the declared gross shipment weight and include packaging. Shipping weight for imports may be underestimated because U.S. Customs Service does not require weight to be reported at the individual commodity level for surface trade.

SOURCE FOR DATA ON THIS PAGE: U.S. Department of Transportation, Bureau of Transportation Statistics, *Transborder Surface Freight Data,* available at http://www.bts.gov/ntda/tbscd/reports.html as of August 2002.

Table 3-19: Top 50 U.S. Foreign Trade Freight Gateways: 2000
(Ranked by value of shipments in $ billions)

	Mode	U.S. rank	Exports	Imports	Total
Pennsylvania gateways[1] in top 50					
Port of Philadelphia	Water	45	0.5	9.5	10.0
U.S. gateways[1] in top 50					
JFK International Airport, NY	Air	1	56.0	75.5	131.6
Port of Los Angeles, CA	Water	2	16.7	85.1	101.8
Port of Long Beach, CA	Water	3	16.9	81.3	98.2
Port of Detroit, MI	Land	4	49.5	44.9	94.4
San Francisco Airport, CA	Air	5	41.8	46.9	88.7
Port of Laredo, TX	Land	6	39.2	44.4	83.7
Port of New York, NY and NJ	Water	7	19.7	61.2	80.9
Los Angeles International Airport, CA	Air	8	41.7	35.6	77.3
Port of Buffalo-Niagra Falls, NY	Land	9	36.2	33.9	70.1
Port of Huron, MI	Land	10	18.8	40.9	59.7
Chicago, IL	Air	11	20.4	25.4	45.7
Port of Houston, TX	Water	12	18.7	24.6	43.4
Port of El Paso, TX	Land	13	17.5	21.9	39.4
Port of Seattle, WA	Water	14	5.4	26.9	32.3
New Orleans, LA	Air	15	16.2	15.9	32.0
Port of Charleston, SC	Water	16	11.3	20.2	31.5
Port of Norfolk Harbor, VA	Water	17	11.1	14.1	25.2
Port of Oakland, CA	Water	18	9.6	15.5	25.1
Cleveland, OH	Air	19	11.8	12.7	24.5
Miami International Airport, FL	Air	20	15.9	7.7	23.6
Anchorage, AK	Air	21	3.5	19.7	23.2
Port of Baltimore, MD	Water	22	5.3	15.3	20.6
Dallas-Fort Worth, TX	Air	23	10.1	10.2	20.4
Port of Tacoma, WA	Water	24	4.4	15.5	19.8
Port of Otay Mesa, CA	Land	25	8.1	10.7	18.8
Port of New Orleans, LA	Water	26	7.6	11.2	18.8
Port of Miami, FL	Water	27	8.4	9.1	17.5
Port of Champlain-Rouses Pt., NY	Land	28	6.0	11.3	17.3
Atlanta, GA	Air	29	8.4	8.7	17.2
Port of Savannah, GA	Water	30	5.9	10.5	16.3
Port of Nogales, AZ	Land	31	5.3	8.3	13.6
Port of Hidalgo, TX	Land	32	6.2	6.4	12.6
Port of Blaine, WA	Land	33	5.6	6.7	12.3
Port of Brownsville-Cameron, TX	Land	34	6.2	5.9	12.1
Port of Alexandria Bay, NY	Land	35	4.6	7.4	12.0
Port of South Louisiana, LA	Water	36	7.1	4.0	11.1
Port of Beaumont, TX	Water	37	1.0	9.6	10.6
Newark, NJ	Air	38	3.9	6.7	10.6
Port of Pembina, ND	Land	39	5.3	5.2	10.6
Port of Port Everglades, FL	Water	40	4.7	5.8	10.5
Port of Portland, OR	Water	41	3.0	7.5	10.5
Port of Corpus Christi, TX	Water	42	1.6	8.7	10.3
Port of Jacksonville, FL	Water	43	1.9	8.4	10.3
Boston Logan Airport, MA	Air	44	5.9	4.4	10.0
Port of Morgan City, LA	Water	46	0.1	9.3	9.4
Seattle-Tacoma International Airport, WA	Air	47	3.7	4.8	8.5
Port of Calexico-East, CA	Land	48	3.5	4.8	8.3
Port of Sweetgrass, MT	Land	49	3.4	4.4	7.8
Port of Highgate Springs-Alburg, VT	Land	50	3.0	4.6	7.6
Total, top 50	**NA**	**NA**	**619**	**989**	**1,608**

[1] Gateway means any port, airport, or border crossing that provides access for the import or export of goods.

KEY: NA = not applicable.

NOTES: Mode of transportation is the type of transportation as a shipment enters or exits at a border port. Flows through individual ports are based on reported data collected from U.S. trade documents. Low-value shipments, generally imports valued at less than $1,250 and exports valued at less than $2,500, are not included. Data for air gateways include some shipments (generally less than 3% of the total value) from small user-fee airports located in the same region. Air gateways not identified by airport name include major airport(s) in that geographic area in addition to small regional airports. In addition, due to U.S. Census Bureau confidentiality regulations, data for courier operations are included in the airport totals for JFK International Airport, New Orleans, Los Angeles, Cleveland, Chicago, Miami, and Anchorage.

SOURCES:

Air: U.S. Department of Commerce, U.S. Census Bureau, Foreign Trade Division, special tabulation, August 2001.

Water: U.S. Department of Transportation, Maritime Administration, Office of Statistical and Economic Analysis, Waterborne Databank 2000, September 2001.

Land: U.S. Department of Transportation, Bureau of Transportation Statistics, Transborder Surface Freight Data, 2001.

D Passenger Travel

Table 4-1: Commuting to Work: 2000

	Pennsylvania		United States	
Mode	**Number**	**Percent**	**Number**	**Percent**
Total	5,471,959	100.0	127,448,586	100.0
Car, truck, or van -- drove alone	4,197,892	76.7	97,243,457	76.3
Car, truck, or van -- carpooled	524,932	9.6	14,290,090	11.2
Public transportation (including taxi)	318,684	5.8	6,592,685	5.2
Walked	225,446	4.1	3,417,546	2.7
Other means	54,901	1.0	1,820,578	1.4
Worked at home	150,104	2.7	4,075,230	3.2
Mean travel time to work (minutes)	23.8		24.3	

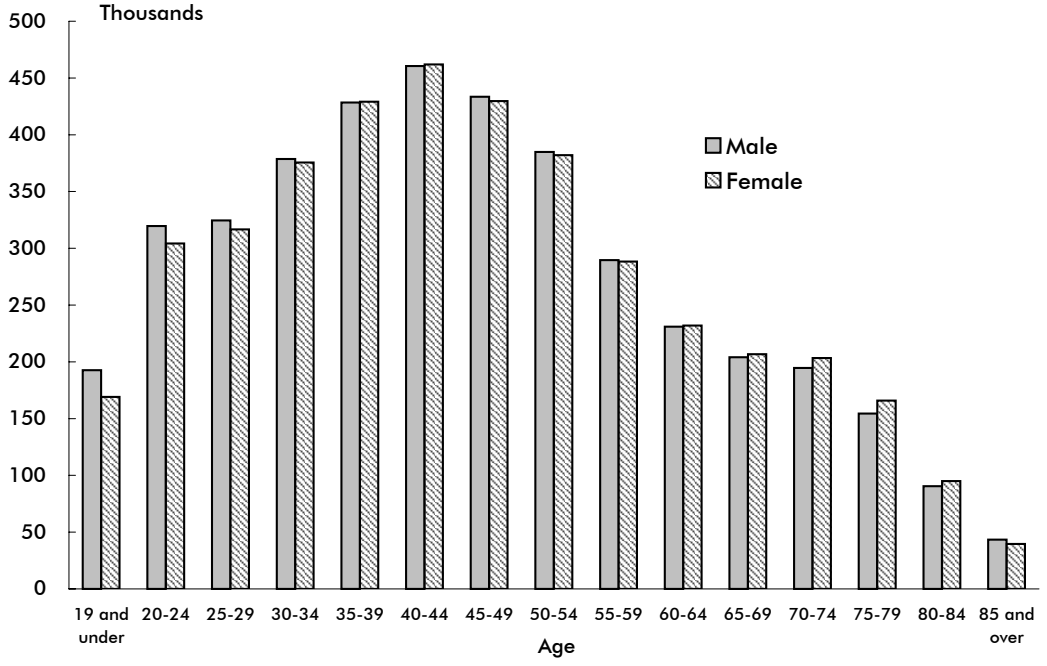
NOTE: Data are for workers 16 years and over.

SOURCE: U.S. Department of Commerce, U.S. Census Bureau, *Census 2000 Supplementary Survey, Profile of Selected Economic Characteristics,* available at http://www.census.gov/c2ss/www/ as of Oct. 16, 2001.

Table 4-2: Licensed Drivers: 2000

	Pennsylvania		United States	
Licensed drivers	**Number**	**Percent**	**Number**	**Percent**
Licensed drivers	8,229,490	100.0	190,625,023	100.0
Male	4,130,274	50.2	95,796,069	50.3
Female	4,099,216	49.8	94,828,953	49.7

Figure 4-1: Licensed Drivers in Pennsylvania by Age and Sex: 2000



SOURCE FOR TABLE 4-2 and FIGURE 4-1: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics 2000* , Washington, DC: 2001.

Table 4-3: Urban Transit Agencies in Pennsylvania: 2000

Transit agencies	Modes provided	Urbanized area	Annual unlinked passenger trips (thousands)	Average weekday unlinked trips (thousands)	Operating funds expended ($ millions)	Capital funds expended ($ millions)	Vehicles available for maximum service
Southeastern Pennsylvania Transportation Authority (SEPTA)	Bus, heavy rail, commuter rail, light rail	Philadelphia, PA-NJ	317,254	1,040	721	333	2,562
Port Authority of Allegheny County	Bus, light rail, inclined plane	Pittsburgh	75,131	250	224	124	1,079
Centre Area Transportation Authority (CATA)	Bus, demand responsive	State College	5,362	19	5	<1	57
Lehigh and Northhampton Transportation Authority (LANTA)	Bus, demand responsive	Allentown-Bethlehem-Easton, PA-NJ	4,097	14	15	2	182
Luzerne County Transportation Authority (LCTA)	Bus, demand responsive	Scranton-Wilkes-Barre	3,305	12	4	<1	63
Berks Area Reading Transportation Authority (BARTA)	Bus, demand responsive	Reading	3,173	11	7	2	121
Erie Metropolitan Transit Authority (EMTA)	Bus, demand responsive	Erie	2,864	10	8	4	102
Red Rose Transit Authority (RRTA)	Bus, demand responsive	Lancaster	2,387	8	8	2	121
Cumberland-Dauphin-Harrisburg Transit Authority (CAT)	Bus, demand responsive	Harrisburg	2,308	8	9	3	123
ACCESS Transportation Systems, Inc.	Demand responsive	Pittsburgh	2,083	7	29	0	470
County of Lackawanna Transit System (COLTS)	Bus, demand responsive	Scranton-Wilkes-Barre	1,578	5	4	3	44
Cambria County Transit Authority (CAMTran)	Bus, inclined plane, demand responsive	Johnstown	1,540	5	5	4	33
Williamsport Bureau of Transportation (WBT)	Bus, demand responsive	Williamsport	1,181	4	2	5	25
York County Authority (Rabbittransit)	Bus, demand responsive	York	1,152	4	5	<1	79
Altoona Metro Transit (AMTRAN)	Bus, demand responsive	Altoona	735	2	3	1	69
Atlantic Paratrans of PA, Inc.	Demand responsive	Philadelphia, PA-NJ	657	2	13	0	228
Beaver County Transit Authority	Bus, demand responsive	Pittsburgh	568	2	4	5	42
Mid Mon Valley Authority (MMVTA)	Bus	Monessen	449	2	2	3	24
Westmoreland County Transit Authority	Bus, demand responsive	Pittsburgh	299	1	2	<1	128
Southwestern Pennsylvania Commission (SPC)	Vanpool	Pittsburgh	203	1	1	0	47
Pennsylvania Department of Transportation (PennDOT)	Commuter rail	Philadelphia, PA-NJ	203	1	5	3	12
G G and C Bus Company, Inc.	Bus, demand responsive	Pittsburgh	180	1	2	<1	31
University of Pittsburgh	Vanpool	Pittsburgh	95	0	<1	0	22

SOURCE: U.S. Department of Transportation, Federal Transit Administration, National Transit Database, available at http://www.ntdprogram.com/NTD/Profiles.nsf/ProfileInformation?OpenForm&2000&All as of Dec. 6, 2001.

Table 4-4: Pennsylvania Airports in Top 50 by Passengers Enplaned: 2000

Airport	Rank	Passenger enplanements
Pennyslvania, all airports		20,817,271
Philadelphia, PA (Philadelphia International)	19	10,973,074
Pittsburgh, PA (Greater Pittsburgh)	26	8,650,976
Other top 50 airports		
Atlanta, GA (Hartsfield International)	1	38,255,778
Chicago, IL (O'Hare International)	2	30,888,464
Dallas/Fort Worth, TX (Dallas/Fort Worth International)	3	27,841,040
Los Angeles, CA (Los Angeles International)	4	25,109,993
Denver, CO (Denver International)	5	17,643,261
Phoenix, AZ (Phoenix Sky Harbor International)	6	17,239,215
Detroit, MI (Wayne County)	7	16,929,968
Las Vegas, NV (McCarran International)	8	16,738,909
Minneapolis, MN (Minneapolis-St. Paul International)	9	16,710,197
San Francisco, CA (San Francisco International)	10	16,664,399
Houston, TX (George Bush Intercontinental)	11	15,814,709
Newark, NJ (Newark)	12	15,205,447
St. Louis, MO (Lambert-St.Louis Municipal)	13	15,101,246
Orlando, FL (Orlando International)	14	13,465,706
Seattle, WA (Seattle-Tacoma International)	15	13,308,253
Miami, FL (Miami International)	16	12,654,506
Boston, MA (Logan International)	17	11,505,983
New York, NY (La Guardia)	18	11,425,705
New York, NY (John F. Kennedy International)	20	10,648,410
Charlotte, NC (Douglas Municipal)	21	10,377,837
Cincinnati, OH (Greater Cincinnati)	22	9,962,765
Baltimore, MD (Baltimore-Washington International)	23	8,979,425
Salt Lake City, UT (Salt Lake City International)	24	8,700,973
Honolulu, HI (Honolulu International)	25	8,684,893
San Diego, CA (San Diego International-Lindbergh)	27	7,624,519
Tampa, FL (Tampa International)	28	7,430,829
Fort Lauderdale, FL (Fort Lauderdale-Hollywood International)	29	7,140,518
Washington, DC (Reagan National)	30	6,983,212
Chicago, IL (Midway)	31	6,972,213
Washington, DC (Dulles International)	32	6,649,323
Portland, OR (Portland International)	33	6,558,859
Cleveland, OH (Hopkins International)	34	6,154,094
San Jose, CA (Norman Y. Mineta San Jose International)	35	6,044,278
Kansas City, MO (Kansas City International)	36	5,748,758
Oakland, CA (Oakland Metropolitan International)	37	5,126,648
Memphis, TN (Memphis International)	38	4,977,238
Raleigh-Durham, NC (Raleigh-Durham)	39	4,838,779
San Juan, PR (Luis Munoz Marin International)	40	4,834,298
New Orleans, LA (New Orleans International)	41	4,822,265
Nashville, TN (Metropolitan)	42	4,365,127
Houston, TX (William P. Hobby)	43	4,322,108
Sacramento, CA (Sacramento International)	44	3,873,003
Los Angeles, CA (John Wayne Orange County)	45	3,828,324
Austin, TX (Robert Muller Municipal)	46	3,635,209
Indianapolis, IN (Indianapolis International)	47	3,629,716
Dallas, TX (Love Field)	48	3,594,539
Hartford/Springfield/Westfield, CT (Bradley International)	49	3,508,023
San Antonio, TX (San Antonio International)	50	3,466,266
United States, all airports		638,902,993
Top 50 as a % of all enplanements		84%

NOTE: Rank order by total enplaned passengers on large certificated U.S. air carriers, scheduled and nonscheduled operations, at all airports served within the 50 states, the District of Columbia, and other U.S. areas designated by the Federal Aviation Administration. These air carriers operate aircraft with more than 60 seats or a payload capacity of more than 18,000 pounds. Data for commuter, intrastate, and foreign-flag air carriers are not included. Data differ from those in table 1-11 which include enplaned passengers on air carriers of all types, including foreign-flag carriers.

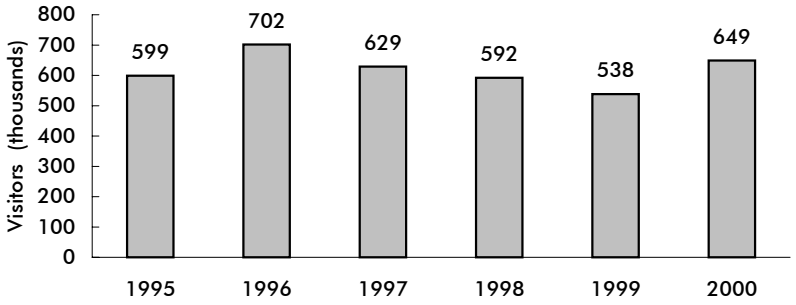
SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, *Airport Activity Statistics of Certificated Air Carriers: Summary Tables, Twelve Months Ending December 31, 2000,* Washington, DC: 2001, available at http://www.bts.gov/publications/airactstats2000/ as of Dec. 28, 2001.

Table 4-5: Overseas Visitors to the United States: Top 20 Destination States and Territories[1]

	1995			2000		
	Rank	Visitors (thousands)	Share of U.S. total	Rank	Visitors (thousands)	Share of U.S. total
California	2	5,304	25.7	1	6,364	24.5
Florida	1	5,345	25.9	2	6,026	23.2
New York	3	4,479	21.7	3	5,922	22.8
Hawaii	4	2,910	14.1	4	2,727	10.5
Nevada	5	1,858	9.0	5	2,364	9.1
Massachusetts	8	1,053	5.1	6	1,429	5.5
Illinois	7	1,115	5.4	7	1,377	5.3
Guam	6	1,238	6.0	8	1,325	5.1
Texas	10	867	4.2	9	1,169	4.5
New Jersey	11	599	2.9	10	909	3.5
Arizona	9	887	4.3	11	883	3.4
Georgia	11	599	2.9	12	805	3.1
Pennsylvania	**11**	**599**	**2.9**	**13**	**649**	**2.5**
Colorado	15	433	2.1	14	519	2.0
Michigan	18	372	1.8	15	494	1.9
Washington	11	599	2.9	16	468	1.8
Utah	15	433	2.1	17	416	1.6
North Carolina	21	310	1.5	17	416	1.6
Louisiana	17	413	2.0	19	390	1.5
Ohio	19	351	1.7	19	390	1.5
United States, total		20,639			25,975	

NOTE: A visitor may visit more than one state. "Share of U.S. total" represents the percent of overseas visitors visiting the state. These columns, therefore, do not sum to 100.

Figure 4-2: Overseas Visitors to Pennsylvania[1]



[1] International travelers to the United States from Canada and Mexico are not included.

SOURCES FOR DATA ON THIS PAGE: U.S. Department of Commerce, International Trade Administration, Office of Tourism Industries, *Overseas Visitors to Select U.S. States and Territories 2000-1999 (Ranked by 2000 Market Share)*, Washington, DC: 2001, available at http://tinet.ita.doc.gov/ as of Oct. 19, 2001; U.S. Department of Commerce, International Trade Administration, Office of Tourism Industries, *Overseas Visitors to Select U.S. States and Territories 1996-1995* , Washington, DC: 2001, available at http://tinet.ita.doc.gov/ as of Nov. 13, 2001.

E Registered Vehicles and Vehicle-Miles Traveled

Table 5-1: Pennsylvania and U.S. Motor-Vehicle Registrations: 2000

Motor vehicle type	Private and commercial	Publicly owned	Pennsylvania total	United States total
All motor vehicles	9,357,449	118,255	9,475,704	225,821,241
Automobiles	5,986,757	45,301	6,032,058	133,621,420
Buses	27,923	7,776	35,699	746,125
Trucks[1]	3,128,139	64,071	3,192,210	87,107,628
Light trucks	2,711,532	U	2,711,532	77,796,827
Farm trucks	0	U	0	1,885,170
Truck tractors	70,883	U	70,883	1,587,611
Motorcycles	214,630	1,107	215,737	4,346,068

[1] Includes light trucks (pickups, vans, sport utility vehicles, and other light trucks) as well as medium and large trucks.

KEY: U = data are unavailable.

SOURCE: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics 2000* , Washington, DC: 2001, tables MV-1 and MV-9.

Table 5-2: Pennsylvania and U.S. Trailer and Semi-Trailer Registrations: 2000[1]

Type	Pennsylvania	United States
Total	817,004	21,541,490
Private and commercial	812,620	21,283,681
Commercial trailers[2]	145,272	4,685,606
Light farm trailers, car trailers, etc.[3]	443,877	14,113,392
House trailers	223,471	2,484,683
Publicly owned	4,384	257,809
Federal government	209	4,277
State, county, municipal government	4,175	253,532

[1] The completeness of data on trailer registrations varies greatly among states. Data are reported to the extent available and, in some cases, are supplemented by estimates of the Federal Highway Administration.

[2] This row includes all commercial type vehicles and semi-trailers that are in private or for-hire use.

[3] Several states do not require the registration of light farm or automobile trailers.

NOTE: Mobile homes and house trailers are shown for states that require registration and are able to segregate them from other trailers. In states where this classification is not available, house trailers are included with light car trailers.

SOURCE: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics 2000* , Washington, DC: 2001, table MV-11.

Table 5-3: Pennsylvania Truck Characteristics and Use: 1997 (Percent unless otherwise specified)

Vehicular and operational characteristics	All trucks	Trucks, excluding pickups, panels, vans, sport utilities, and station wagons
Total, number (thousands)	2,605.9	223.4
Major use	100.0	100.0
Agriculture	2.2	8.7
Forestry and lumbering	0.1	1.7
Mining and quarrying	0.5	1.9
Construction	8.4	26.6
Manufacturing	1.4	7.3
Wholesale and retail trade	6.6	22.5
For-hire transportation	1.3	13.7
Utilities and service	4.3	11.1
Personal transportation	74.0	2.9
Other and not reported	1.3	3.7
Body type	100.0	100.0
Pickup, panel, minivan, and sport utility	91.4	NA
Platform and cattlerack	2.4	28.5
Van	1.9	21.7
Public utility	0.3	3.4
Multistop or stepvans	0.8	9.2
Dump	1.7	19.6
Tank for liquids or dry bulk	0.5	6.3
Other or not reported	1.0	11.2
Vehicle size	100.0	100.0
Light	93.4	24.6
Medium	2.0	21.7
Light-heavy	1.0	11.2
Heavy-heavy	3.6	42.4
Annual miles driven	100.0	100.0
Less than 5,000	18.0	30.2
5,000 to 9,999	22.0	13.3
10,000 to 19,999	43.6	20.3
20,000 to 29,999	11.2	9.0
30,000 or more	5.2	27.2
Year model	100.0	100.0
1 to 2 years old	12.2	7.4
3 to 4 years old	18.2	12.1
Over 4 years old	69.6	80.6
Vehicle acquisition	100.0	100.0
Purchased new	44.7	41.7
Purchased used	47.9	48.3
Leased from someone or not reported	7.5	10.0
Truck type	100.0	100.0
Single-unit trucks	96.6	72.5
2 axles	95.7	61.0
3 axles or more	1.0	11.5
Combination	3.4	27.5
3 axles	0.4	1.1
4 axles	1.2	6.2
5 axles or more	1.7	20.3
Trailer not specified	V	V
Range of operation	100.0	100.0
Local	77.7	56.7
Short-range	14.2	24.1
Long-range	4.5	12.1
Off-the-road or not reported	3.6	7.1
Fuel type	100.0	100.0
Gasoline	93.2	40.1
Diesel, liquefied gas, and other	6.7	59.3
Not reported	0.1	0.6

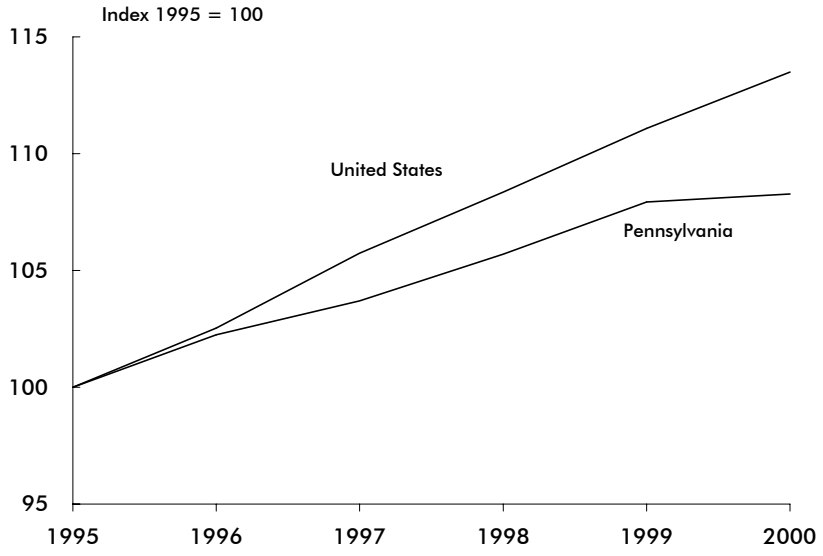
KEY: NA = not applicable; V = less than 0.05 percent.

SOURCE: U.S. Department of Commerce, U.S. Census Bureau, *Vehicle Inventory and Use Survey*, state-specific reports, Washington, DC: 1999, available at http://www.census.gov/econ/www/viusmain.html as of Dec. 27, 2001.

Table 5-4: Highway Vehicle-Miles Traveled (VMT): 2000

State	Total VMT (millions)	VMT per capita
Alabama	56,534	12,716
Alaska	4,613	7,501
Arizona	49,768	11,428
Arkansas	29,167	11,107
California	306,649	9,053
Colorado	41,771	9,712
Connecticut	30,756	9,057
Delaware	8,240	10,510
Dist. of Columbia	3,498	6,115
Florida	152,136	9,609
Georgia	105,010	12,969
Hawaii	8,543	7,014
Idaho	13,534	10,467
Illinois	102,866	8,225
Indiana	70,862	12,779
Iowa	29,433	10,059
Kansas	28,130	10,599
Kentucky	46,803	11,579
Louisiana	40,849	9,430
Maine	14,190	11,129
Maryland	50,174	9,809
Massachusetts	52,796	8,513
Michigan	97,792	9,839
Minnesota	52,601	10,693
Mississippi	35,536	12,187
Missouri	67,083	11,990
Montana	9,882	10,812
Nebraska	18,081	10,568
Nevada	17,639	9,504
New Hampshire	12,021	9,687
New Jersey	67,446	8,015
New Mexico	22,760	13,580
New York	129,057	6,801
North Carolina	89,504	11,120
North Dakota	7,217	11,241
Ohio	105,898	9,328
Oklahoma	43,355	12,563
Oregon	35,010	11,175
Pennsylvania	**102,337**	**8,316**
Rhode Island	8,359	8,326
South Carolina	45,538	7,971
South Dakota	8,432	11,168
Tennessee	65,732	11,698
Texas	220,064	10,613
Utah	22,597	11,226
Vermont	6,811	11,184
Virginia	74,801	10,564
Washington	53,330	9,251
West Virginia	19,242	10,684
Wisconsin	57,266	10,261
Wyoming	8,090	16,410
United States	2,749,803	9,811

Figure 5-1: Highway Vehicle-Miles Traveled, United States and Pennsylvania



SOURCE FOR DATA ON THIS PAGE: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics*, annual editions, available at http://www.fhwa.dot. gov/ohim/ohimstat.htm as of Dec. 6, 2001.

Table 5-5: Highway, Demographic, and Geographic Characteristics of Urbanized Areas in Pennsylvania: 2000

Federal-aid urbanized area[1]	Total roadway miles	Total DVMT (thousands)	Estimated population (thousands)	Net land area (square miles)	Persons per square mile	Miles of roadway per person	Total DVMT per capita	Total estimated freeway lane miles[2]	Average daily traffic per freeway lane mile
Philadelphia, PA-NJ	13,417	77,005	4,068	1,347	3,020	3.3	18.9	1,743	14,049
Pittsburgh	8,441	35,632	1,569	1,086	1,445	5.4	22.7	1,188	9,365
Allentown-Bethlehem-Easton, PA-NJ	1,872	9,443	447	179	2,497	4.2	21.1	283	11,962
Scranton-Wilkes-Barre	1,689	7,042	349	255	1,369	4.8	20.2	319	7,952
Trenton, NJ-PA	1,600	8,373	340	192	1,771	4.7	24.6	296	10,099
Harrisburg	1,685	9,740	310	207	1,498	5.4	31.4	382	11,367
Lancaster	908	4,386	190	101	1,881	4.8	23.1	119	11,791
Reading	798	3,648	186	81	2,296	4.3	19.6	97	9,779
Erie	734	2,707	184	81	2,272	4.0	14.7	33	10,398
York	774	3,246	150	74	2,027	5.2	21.6	92	10,176
Steubenville-Weirton, OH-WV-PA	482	U	101	80	1,263	4.8	U	138	4,621
Hagerstown, MD-PA-WV	411	1,954	79	50	1,580	5.2	24.7	67	11,539
Johnstown	464	1,250	76	54	1,407	6.1	16.4	33	5,914
Altoona	414	1,359	75	35	2,143	5.5	18.1	48	6,352
State College	257	1,104	72	41	1,756	3.6	15.3	38	4,630
Williamsport	373	1,390	65	49	1,327	5.7	21.4	69	7,349
Pottstown	338	1,006	63	35	1,800	5.4	16.0	28	9,189
Monessen	475	1,201	55	69	797	8.6	21.8	71	5,816
Sharon	330	868	49	50	980	6.7	17.7	30	4,336

[1]A "federal-aid urbanized area" is an area with 50,000 or more persons that, at a minimum, encompasses the land area delineated as the urbanized area by the U.S. Census Bureau. Areas are ranked by population. [2]Lane miles estimated by the Federal Highway Administration (FHWA).

KEY: DVMT = daily vehicle-miles of travel; U = data are unavailable.

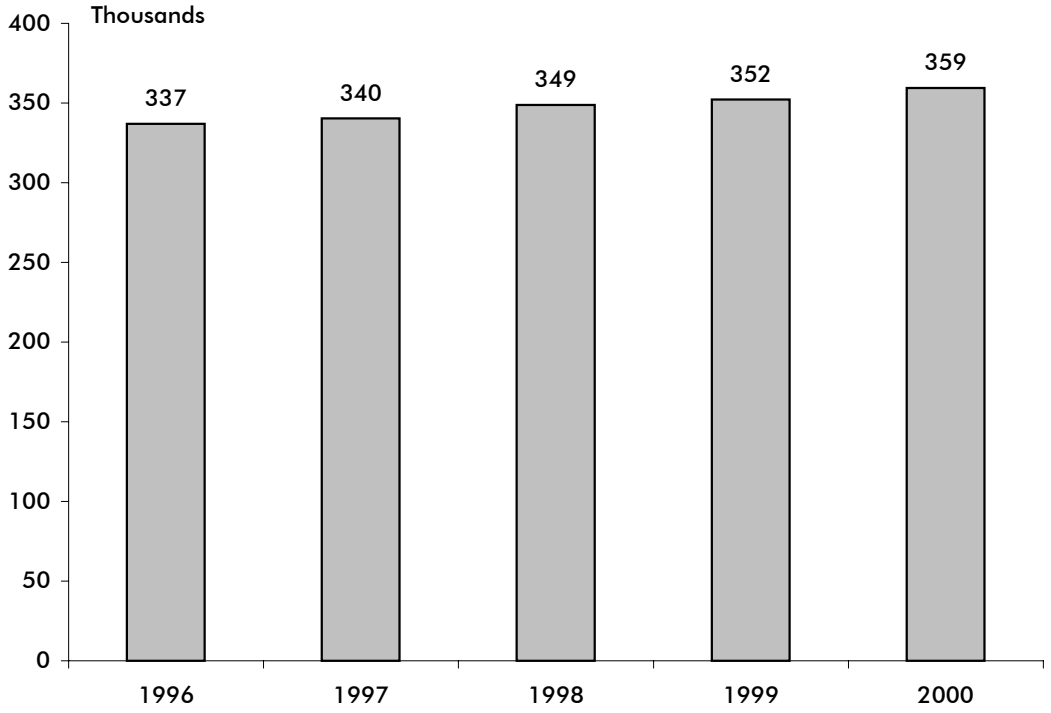
SOURCE: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics, 2000,* Washington, DC: 2001, available at http://www.fhwa.dot.gov/ohim/ohimstat.htm as of Dec. 6, 2001.

Table 5-6: Pennsylvania and U.S. Recreational Boat Registrations by Propulsion Type

	Pennsylvania		United States	
	1999	2000	1999	2000
Total	352,231	359,360	12,738,271	12,782,143
Powered	322,013	325,010	11,811,562	11,648,769
Nonpowered	25,536	27,814	481,191	547,271
Other	4,682	6,536	445,518	590,103

NOTE: Data are derived from reports of states and other jurisdictions with varying registration categories. "Other" includes boats not elsewhere classified by the reporting jurisdiction.

Figure 5-2: Pennsylvania Recreational Boat Registrations



NOTES FOR DATA ON THIS PAGE: U.S. totals include Guam, Puerto Rico, the Virgin Islands, American Samoa, and the Northern Mariana Islands. Pennsylvania statistics include all motorboats and certain non-powered crafts. U.S. total does not include sailboards, which are numbered in some states.

SOURCES FOR DATA ON THIS PAGE: U.S. Department of Transportation, U.S. Coast Guard, *Boating Statistics, 2000* and *Boating Statistics, 1999,* Washington, DC: 2001, available at http://www.uscgboating.org/Saf/pdf/Boating_Statistics_2000.pdf and 1999.pdf as of Nov. 14, 2001.

Table 5-7: General Aviation and Air Taxi Aircraft and Hours Flown: 2000
(Excludes commuter aircraft)

	Active aircraft	Hours flown (thousands)
Alabama	3,480	462
Alaska	5,925	692
Arizona	6,062	824
Arkansas	2,660	442
California	23,454	3,183
Colorado	5,246	651
Connecticut	1,793	241
Delaware	2,068	303
District of Columbia	152	13
Florida	14,096	2,299
Georgia	4,809	702
Hawaii	435	184
Idaho	2,328	336
Illinois	7,478	998
Indiana	3,964	503
Iowa	2,772	331
Kansas	3,611	494
Kentucky	2,033	244
Louisiana	3,012	677
Maine	1,086	114
Maryland	3,436	487
Massachusetts	2,717	329
Michigan	7,236	935
Minnesota	5,141	707
Mississippi	2,038	256
Missouri	3,777	545
Montana	2,374	271
Nebraska	2,013	275
Nevada	2,715	774
New Hampshire	1,485	203
New Jersey	3,791	583
New Mexico	2,990	430
New York	6,082	816
North Carolina	5,620	769
North Dakota	1,585	419
Ohio	6,486	840
Oklahoma	4,080	648
Oregon	4,687	564
Pennsylvania	**5,648**	**724**
Rhode Island	393	45
South Carolina	2,689	387
South Dakota	1,376	157
Tennessee	4,228	638
Texas	18,869	2,980
Utah	1,673	234
Vermont	600	57
Virginia	3,354	414
Washington	7,166	912
West Virginia	1,075	136
Wisconsin	4,649	590
Wyoming	778	98
United States, total	217,215	30,916

NOTE: These data are derived from a sample survey of general aviation and air taxi aircraft. The data are estimates subject to sampling as well as nonsampling error.

SOURCE: U.S. Department of Transportation, Federal Aviation Administration, *General Aviation and Air Taxi Activity Survey: 2000* . Washington, DC: 2002, available at http://www.api.faa.gov/GASurvey/index.htm as of July 22, 2002.

Table 5-8: Active Aviation Pilots and Flight Instructors: 2000[1]

			Airplane pilots[2]				
	Total	Students	Private	Commercial	Airline transport	Misc.[3]	Flight instructor[4]
Alabama	7,262	1,170	3,065	1,649	1,084	294	920
Alaska	8,638	833	3,686	2,130	1,906	83	1,118
Arizona	17,429	2,329	6,508	3,345	4,654	593	2,617
Arkansas	4,988	776	2,153	1,206	788	65	634
California	71,053	10,173	31,571	13,448	12,786	3,075	8,984
Colorado	17,539	2,320	6,256	3,144	5,138	681	2,549
Connecticut	6,523	944	2,714	989	1,648	228	837
Delaware	1,462	245	532	236	413	36	233
District of Columbia	476	86	191	99	69	31	45
Florida	47,191	6,672	16,324	10,059	13,267	869	6,890
Georgia	18,087	2,441	6,053	2,845	6,448	300	2,107
Hawaii	2,927	471	611	587	1,031	227	0
Idaho	4,480	581	2,148	950	711	90	535
Illinois	21,521	3,497	9,168	3,832	4,606	418	3,054
Indiana	11,715	1,874	5,728	2,091	1,867	155	1,488
Iowa	6,135	912	3,372	1,130	667	54	771
Kansas	8,412	1,169	4,136	1,729	1,268	110	1,184
Kentucky	6,720	988	2,397	1,155	2,104	76	919
Louisiana	5,894	911	2,224	1,474	1,035	250	701
Maine	3,105	444	1,494	608	522	37	384
Maryland	8,383	1,217	3,499	1,535	1,869	263	1,194
Massachusetts	9,692	1,583	4,535	1,711	1,480	383	1,242
Michigan	17,755	3,008	8,517	3,008	2,852	370	2,388
Minnesota	15,530	2,244	6,728	2,949	3,417	192	2,025
Mississippi	4,111	594	1,595	1,086	750	86	490
Missouri	11,070	1,549	5,008	2,045	2,312	156	1,548
Montana	3,613	481	1,718	878	469	67	431
Nebraska	4,141	654	2,054	884	524	25	432
Nevada	6,270	691	2,131	1,141	2,095	212	864
New Hampshire	4,242	499	1,544	676	1,417	106	613
New Jersey	11,403	1,826	4,909	1,833	2,417	418	1,517
New Mexico	4,406	787	1,788	916	772	143	549
New York	18,649	3,628	8,020	3,305	2,819	877	2,516
North Carolina	14,769	2,148	6,144	2,600	3,615	262	1,732
North Dakota	2,458	401	1,153	688	199	17	292
Ohio	19,301	3,065	8,602	3,338	3,857	439	2,839
Oklahoma	8,654	1,392	3,839	1,893	1,453	77	1,180
Oregon	9,942	1,625	4,972	1,910	1,175	260	1,123
Pennsylvania	**18,022**	**2,683**	**7,604**	**3,075**	**4,124**	**536**	**2,575**
Rhode Island	1,216	184	569	210	223	30	136
South Carolina	6,363	933	2,708	1,343	1,244	135	714
South Dakota	2,230	328	1,034	549	302	17	263
Tennessee	12,132	1,675	4,351	2,024	3,826	256	1,600
Texas	48,396	6,613	16,857	9,044	14,839	1,043	6,487
Utah	6,591	1,205	2,678	1,116	1,468	124	768
Vermont	1,487	220	681	261	264	61	162
Virginia	14,640	1,987	5,114	2,835	4,299	405	2,055
Washington	21,116	2,929	8,170	3,896	5,535	586	2,658
West Virginia	1,992	312	953	399	293	35	274
Wisconsin	11,275	1,768	5,682	1,884	1,830	111	1,455
Wyoming	1,812	254	901	354	273	30	195
United States, total	593,218	87,319	244,389	112,092	134,024	15,394	78,287

[1]An active pilot is a person who holds a pilot certificate and a valid medical certificate issued within the last 25 months.
[2]Includes pilots with an airplane only certificate and those with an airplane and a helicopter and/or glider certificate.
[3]Includes helicopter, glider, and recreational pilots. Does not include pilots holding an airplane certificate. A recreational pilot may fly no more than one passenger in a light, single engine aircraft with no more than four seats during good weather and daylight hours and, unless authorized, no more than 50 miles from the home airport.
[4]Not included in total. A flight instructor must hold a flight instructor certificate in addition to a pilot certificate.

NOTE: Excludes U.S. military personnel holding civilian certificates who are stationed in a foreign country and pilots in U.S. territories.

SOURCE: U.S. Department of Transportation, Federal Aviation Administration, *U.S. Civil Airmen Statistics 2000* . Washington, DC: 2002, available at http://www.api.faa.gov/CivilAir/index.htm as of July 22, 2002.

F Economy and Finance

Table 6-1: Transportation and Warehousing Establishments and Employment in Pennsylvania: 1999

Business type	Establishments[1] (number)	Number of employees	Annual payroll ($ thousands)
Total transportation and warehousing	**6,663**	**155,320**	**4,872**
Air transportation	146	20,636	1,138
Water transportation	49	878	37
Truck transportation	3,898	59,883	1,925
Transit and ground passenger transportation	1,045	26,921	362
Pipeline transportation	110	1,000-2,499	D
Scenic and sightseeing transportation	41	500-999	D
Support activities for transportation	798	10,062	313
Couriers and messengers	342	26,664	764
Warehousing and storage	234	7,867	213

KEY: D = withheld to avoid disclosing data for individual companies.

Table 6-2: Transportation and Warehousing Establishments and Employment in the United States: 1999

Business type	Establishments[1] (number)	Number of employees	Annual payroll ($ thousands)
Total transportation and warehousing	**187,339**	**3,627,057**	**116,682,214**
Air transportation	5,285	582,838	24,414,357
Water transportation	1,950	71,844	3,039,510
Truck transportation	108,749	1,384,178	43,626,168
Transit and ground passenger transportation	16,254	370,022	6,729,332
Pipeline transportation	2,550	48,149	3,032,689
Scenic and sightseeing transportation	2,267	22,877	540,702
Support activities for transportation	31,392	440,175	14,915,625
Couriers and messengers	11,938	578,368	16,725,960
Warehousing and storage	6,954	128,606	3,657,871

[1] The transportation and warehousing sector (North American Industrial Classification System [NAICS] 48 and 49) includes industries providing transportation of passengers and cargo, warehousing and storage for goods, scenic and sightseeing transportation, and support activities related to modes of transportation. Establishments in these industries use transportation equipment or transportation related facilities as a productive asset. The type of equipment depends on the mode of transportation. The modes of transportation comprise air, rail, water, road, and pipeline.

SOURCE FOR DATA ON THIS PAGE: U.S. Department of Commerce, U.S. Census Bureau, *1999 County Business Patterns* , Washington, DC: May 2001, available at http://www.census.gov/epcd/cbp/map/99data/06/999.txt as of Oct. 25, 2001.

Table 6-3: Transportation Revenues Collected by State and Local Governments in Pennsylvania ($ millions)

	1995		1996		1997		1998		1999	
Mode	**State**	**Local**	**State**	**Local**	**State**	**Local**	**State**	**Local**	**State**	**Local**
Total (current $)	1,641	834	1,639	876	1,690	883	1,925	944	1,901	920
Highway	1,633	185	1,631	193	1,682	195	1,907	205	1,901	209
Transit	Z	346	Z	361	Z	368	Z	416	Z	366
Air	8	298	9	317	8	313	18	316	Z	338
Water	Z	5	Z	5	Z	7	Z	7	Z	7
Total (chained 1996 $)	1,679	853	1,639	876	1,647	861	1,846	906	1,776	859
Highway	1,670	189	1,631	193	1,639	190	1,829	197	1,776	195
Transit	Z	354	Z	361	Z	359	Z	399	Z	342
Air	8	305	9	317	8	305	17	303	Z	316
Water	Z	6	Z	5	Z	7	Z	6	Z	6

Table 6-4: Transportation Expenditures by State and Local Governments in Pennsylvania[1] ($ millions)

	1995		1996		1997		1998		1999	
Mode	**State**	**Local**	**State**	**Local**	**State**	**Local**	**State**	**Local**	**State**	**Local**
Total (current $)	2,125	2,591	2,048	2,737	2,082	2,793	2,633	2,839	2,751	2,812
Highway	2,101	992	2,026	1,038	2,064	1,098	2,599	1,087	2,739	1,139
Transit	Z	1,335	Z	1,342	Z	1,397	Z	1,441	Z	1,362
Air	16	239	17	347	14	280	30	300	6	302
Water	7	24	5	9	4	19	4	11	6	10
Total (chained 1996 $)	2,173	1,286	2,048	1,396	2,030	1,363	2,525	1,342	2,569	1,356
Highway	2,149	1,015	2,026	1,038	2,012	1,070	2,493	1,042	2,558	1,063
Transit	Z	1366	Z	1342	Z	1362	Z	1382	Z	1272
Air	17	245	17	347	13	273	28	288	6	282
Water	7	24	5	9	4	18	4	11	5	10

[1]Includes federal grants.

KEY FOR DATA ON THIS PAGE: Z = zero or less than 1 unit of measurement.

NOTE FOR DATA ON THIS PAGE: Dollars are converted using a chain-type price index from U.S. Department of Commerce, Bureau of Economic Analysis, *National Income and Product Accounts Tables,* Washington, DC: 2001, table 7.1, available at http://www.bea.doc.gov/bea/dn/nipaweb/ as of Dec. 12, 2001.

SOURCE FOR DATA ON THIS PAGE: U.S. Department of Commerce, U.S. Census Bureau, *State and Local Government Finance Estimates,* available at ftp://ftp.census.gov/pub/outgoing/govs/ as of October 2001.

Table 6-5: State Motor-Fuel Tax Rates: 2000
(Cents per gallon)

State	Gasoline	Diesel	Liquified petroleum gas	Gasohol[1]
Alabama	18.00	19.00	17.00	18.00
Alaska	8.00	8.00	0.00	0.00
Arizona	18.00	27.00	18.00	18.00
Arkansas	19.50	20.50	16.50	18.60
California	18.00	18.00	6.00	18.00
Colorado	22.00	20.50	20.50	22.00
Connecticut	32.00	18.00	0.00	31.00
Delaware	23.00	22.00	22.00	23.00
District of Columbia	20.00	20.00	20.00	20.00
Florida	13.10	25.10	16.00	13.10
Georgia	7.50	7.50	7.50	7.50
Hawaii	16.00	16.00	11.00	16.00
Idaho	25.00	25.00	18.10	22.50
Illinois	19.00	21.50	19.00	19.00
Indiana	15.00	16.00	0.00	15.00
Iowa	20.00	22.50	20.00	19.00
Kansas	20.00	22.00	19.00	20.00
Kentucky	16.40	13.40	15.00	16.40
Louisiana	20.00	20.00	16.00	20.00
Maine	19.00	20.00	18.00	19.00
Maryland	23.50	24.25	23.50	23.50
Massachusetts	21.00	21.00	8.10	21.00
Michigan	19.00	15.00	15.00	19.00
Minnesota	20.00	20.00	15.00	20.00
Mississippi	18.40	18.40	17.00	18.40
Missouri	17.00	17.00	17.00	17.00
Montana	27.00	27.75	0.00	27.00
Nebraska	22.80	22.80	22.80	22.80
Nevada	24.75	27.75	22.00	24.75
New Hampshire	19.50	19.50	18.00	19.50
New Jersey	10.50	13.50	5.25	10.50
New Mexico	18.50	19.50	0.00	18.50
New York	29.30	27.95	8.00	29.30
North Carolina	21.20	21.20	21.20	21.20
North Dakota	21.00	21.00	21.00	21.00
Ohio	22.00	22.00	22.00	22.00
Oklahoma	17.00	14.00	17.00	17.00
Oregon	24.00	24.00	24.00	24.00
Pennsylvania	**25.90**	**30.80**	**18.90**	**25.90**
Rhode Island	29.00	29.00	29.00	29.00
South Carolina	16.00	16.00	16.00	16.00
South Dakota	22.00	22.00	20.00	20.00
Tennessee	20.00	17.00	14.00	20.00
Texas	20.00	20.00	15.00	20.00
Utah	24.50	24.50	24.50	24.50
Vermont	20.00	17.00	0.00	20.00
Virginia	17.50	16.00	10.00	17.50
Washington	23.00	23.00	0.00	23.00
West Virginia	25.35	25.35	25.35	25.35
Wisconsin	25.40	25.40	25.40	25.40
Wyoming	14.00	14.00	0.00	14.00
Federal tax	18.40	24.40	13.60	13.00

[1] Tax rates for gasoline blended with 10 percent ethanol.

NOTE: Tax rates in effect as of Jan. 1, 2000.

SOURCE: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics 2000,* Washington, DC: 2001, table MF-121T.

G Energy and Environment

Table 7-1: Transportation Energy Consumption: 1999
(Trillion Btu)

State	Natural gas[1]	Petroleum: Distillate fuel (diesel)	Petroleum: Jet fuel	Petroleum: Motor gasoline[2]	Petroleum: Residual fuel	Petroleum: Other[3]	Petroleum: Total	Ethanol[4]	Electricity	Net energy	Electrical system energy losses[5]	Total
Alabama	22.9	118.4	11.1	298.0	6.5	3.7	437.8	S	0.0	460.7	0.0	460.7
Alaska	4.5	21.5	134.1	32.9	1.7	3.3	193.5	0.4	0.0	198.0	0.0	198.0
Arizona	19.0	92.0	54.6	283.9	0.0	3.1	433.5	1.3	0.0	452.5	0.0	452.5
Arkansas	9.1	84.5	25.9	172.6	0.0	5.1	288.0	0.0	0.0	297.2	0.0	297.2
California	12.9	373.3	559.5	1,749.0	175.3	23.6	2,880.6	4.9	1.8	2,895.3	3.6	2,898.9
Colorado	8.4	67.8	44.2	241.5	0.0	3.9	357.4	4.5	S	365.8	S	365.9
Connecticut	0.8	34.4	13.9	183.9	0.1	1.9	234.2	0.3	0.0	234.9	0.0	234.9
Delaware	0.1	8.6	0.6	47.7	13.2	0.5	70.6	0.0	0.0	70.6	0.0	70.6
Dist. of Columbia	0.3	3.6	0.0	20.5	0.0	0.3	24.5	0.0	0.6	25.3	1.2	26.5
Florida	7.2	210.3	164.3	897.5	57.4	8.7	1,338.1	0.1	0.2	1,345.4	0.4	1,345.8
Georgia	9.1	196.7	86.8	566.9	5.7	5.2	861.3	0.0	0.3	870.8	0.7	871.4
Hawaii	0.0	9.1	53.7	45.8	12.9	0.8	122.3	0.0	0.0	122.3	0.0	122.3
Idaho	4.7	34.0	4.9	80.8	0.0	1.2	121.0	0.0	0.0	125.7	0.0	125.7
Illinois	55.3	202.6	103.4	612.7	0.2	11.8	930.8	20.3	1.5	987.5	2.9	990.5
Indiana	14.6	186.4	63.5	373.7	1.9	5.1	630.6	9.0	0.1	645.3	0.1	645.4
Iowa	7.9	74.9	5.0	185.9	0.0	3.8	269.6	6.7	S	277.5	S	277.5
Kansas	31.6	60.5	19.7	170.7	0.1	5.2	256.2	0.5	0.0	287.8	0.0	287.8
Kentucky	17.2	122.9	39.5	261.0	0.0	3.6	427.0	0.3	0.0	444.2	0.0	444.2
Louisiana	50.0	147.4	192.9	255.9	153.5	5.1	754.9	0.1	S	804.9	S	804.9
Maine	0.0	22.2	4.9	83.7	1.4	1.0	113.2	0.0	S	113.2	S	113.2
Maryland	3.4	73.3	22.3	295.0	7.4	2.2	400.3	0.2	0.5	404.1	1.0	405.1
Massachusetts	2.8	57.0	45.8	328.7	0.2	4.1	435.7	0.0	0.8	439.2	1.6	440.8
Michigan	23.3	132.7	51.7	624.5	0.3	12.2	821.4	3.4	S	844.7	S	844.8
Minnesota	22.5	93.4	71.4	306.5	S	5.8	477.1	19.5	0.0	499.6	0.0	499.6
Mississippi	66.1	81.2	54.8	196.2	6.9	3.6	342.7	0.0	0.0	408.9	0.0	408.9
Missouri	6.8	172.0	72.3	364.6	S	6.6	615.6	1.4	0.1	622.5	0.1	622.6
Montana	6.1	34.7	4.7	59.1	0.0	1.9	100.4	S	0.0	106.5	0.0	106.5
Nebraska	2.9	76.9	8.9	103.1	0.0	2.7	191.5	2.1	0.0	194.4	0.0	194.4
Nevada	0.9	36.9	47.4	111.7	0.0	0.9	196.9	2.3	0.0	197.8	0.0	197.8
New Hampshire	S	14.5	4.6	80.8	S	0.5	100.5	0.0	0.0	100.5	0.0	100.5
New Jersey	4.3	120.9	206.1	476.6	48.9	5.1	857.6	0.7	0.5	862.4	0.9	863.3
New Mexico	47.4	55.5	15.4	113.7	0.0	1.9	186.5	2.0	0.0	233.9	0.0	233.9
New York	8.6	147.5	51.7	690.6	47.1	7.3	944.2	1.2	9.1	961.9	17.7	979.6
North Carolina	10.9	132.6	38.6	502.6	1.0	5.3	680.0	3.0	0.0	690.9	0.0	690.9
North Dakota	9.9	26.0	2.3	43.0	0.0	1.2	72.5	0.4	0.0	82.4	0.0	82.4
Ohio	18.5	222.5	93.3	623.2	0.1	11.1	950.2	19.6	0.2	968.9	0.3	969.2
Oklahoma	24.5	111.7	37.3	223.3	0.0	5.7	378.0	0.0	0.0	402.5	0.0	402.5
Oregon	10.9	70.2	36.5	188.0	18.0	4.3	317.0	1.1	0.1	328.0	0.2	328.2
Pennsylvania	**37.3**	**197.6**	**90.4**	**607.0**	**37.8**	**9.7**	**942.6**	**1.0**	**1.3**	**981.3**	**2.6**	**983.9**
Rhode Island	0.3	9.3	6.0	49.8	S	0.5	65.6	0.0	0.0	65.9	0.0	65.9
South Carolina	3.7	85.8	8.7	273.0	2.8	2.3	372.7	0.0	0.0	376.4	0.0	376.4
South Dakota	6.1	21.1	4.4	51.5	0.0	1.3	78.2	1.8	0.0	84.3	0.0	84.3
Tennessee	25.9	131.7	67.0	360.3	0.0	5.1	564.2	0.0	S	590.1	S	590.1
Texas	73.0	479.2	594.8	1,252.3	131.9	17.6	2,475.8	4.8	0.1	2,548.8	0.1	2,549.0
Utah	2.8	45.1	42.2	119.2	0.0	1.7	208.2	0.9	S	211.1	S	211.1
Vermont	S	12.3	0.8	39.7	0.0	0.4	53.2	0.0	0.0	53.2	0.0	53.2
Virginia	8.3	142.3	52.8	438.1	9.2	3.9	646.5	2.8	0.3	655.1	0.6	655.7
Washington	8.2	95.9	125.6	325.2	57.4	4.6	608.9	2.5	0.1	617.1	0.1	617.3
West Virginia	31.5	46.9	1.0	100.5	0.0	1.7	150.1	S	0.0	181.6	0.0	181.6
Wisconsin	4.2	101.0	19.3	303.0	S	4.3	427.6	2.5	S	431.8	S	431.8
Wyoming	14.5	62.4	1.0	39.8	0.0	2.2	105.3	0.0	0.0	119.8	0.0	119.8
United States	761.1	5,160.9	3,461.8	15,855.4	798.9	234.8	25,511.8	121.6	17.5	26,290.3	34.3	26,324.6

[1] Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and gas consumed as vehicle fuel.

[2] Includes ethanol blended into motor gasoline.

[3] "Other" sum of aviation gasoline, LPG, and lubricants.

[4] Ethanol blended into motor gasoline is included in motor gasoline, but is also shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total.

[5] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

KEY: Btu = British thermal unit; S = less than 0.05 trillion Btu.

NOTE: Totals may not equal sum of components due to rounding.

SOURCE: U.S. Department of Energy, Energy Information Administration, *State Energy Data Report 1999,* Washington, DC: May 2001, table 7, available at http://www.eia.doe.gov/pub/state.data/pdf/sedr.pdf as of Feb. 21, 2002.

Table 7-2: Energy Consumption by End-Use Sector: 1999
(Trillion Btu)

		End-use sectors[2]							
	Total energy	Transportation		Residential		Commercial		Industrial	
State	consumed[1]	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Alabama	2,004.8	460.7	23.0	341.0	17.0	226.3	11.3	976.7	48.7
Alaska	694.7	198.0	28.5	47.7	6.9	63.1	9.1	385.9	55.5
Arizona	1,219.8	452.5	37.1	279.0	22.9	266.7	21.9	221.6	18.2
Arkansas	1,203.7	297.2	24.7	193.3	16.1	123.8	10.3	589.4	49.0
California	8,375.4	2,898.9	34.6	1,416.2	16.9	1,236.5	14.8	2,823.7	33.7
Colorado	1,155.5	365.9	31.7	261.4	22.6	255.1	22.1	273.1	23.6
Connecticut	839.3	234.9	28.0	245.2	29.2	196.8	23.4	162.4	19.3
Delaware	278.8	70.6	25.3	56.0	20.1	44.8	16.1	107.4	38.5
District of Columbia	169.8	26.5	15.6	33.5	19.7	106.2	62.5	3.7	2.2
Florida	3,852.9	1,345.8	34.9	1,017.8	26.4	809.5	21.0	679.8	17.6
Georgia	2,798.1	871.4	31.1	553.1	19.8	416.3	14.9	957.3	34.2
Hawaii	241.4	122.3	50.7	23.0	9.5	24.8	10.3	71.3	29.5
Idaho	518.3	125.7	24.3	95.9	18.5	86.9	16.8	209.8	40.5
Illinois	3,882.6	990.5	25.5	897.4	23.1	722.0	18.6	1,272.6	32.8
Indiana	2,735.8	645.4	23.6	483.6	17.7	300.7	11.0	1,306.2	47.7
Iowa	1,121.7	277.5	24.7	222.5	19.8	158.5	14.1	463.3	41.3
Kansas	1,050.0	287.8	27.4	200.9	19.1	169.2	16.1	392.2	37.4
Kentucky	1,830.2	444.2	24.3	315.9	17.3	219.0	12.0	851.1	46.5
Louisiana	3,615.4	804.9	22.3	325.0	9.0	236.5	6.5	2,249.0	62.2
Maine	528.6	113.2	21.4	97.6	18.5	57.6	10.9	260.2	49.2
Maryland	1,378.2	405.1	29.4	358.6	26.0	337.1	24.5	277.4	20.1
Massachusetts	1,569.1	440.8	28.1	411.7	26.2	325.2	20.7	391.4	24.9
Michigan	3,239.6	844.8	26.1	744.3	23.0	568.1	17.5	1,082.5	33.4
Minnesota	1,675.3	499.6	29.8	340.2	20.3	217.9	13.0	617.7	36.9
Mississippi	1,208.5	408.9	33.8	202.6	16.8	145.6	12.0	451.4	37.4
Missouri	1,768.0	622.6	35.2	431.7	24.4	334.1	18.9	379.6	21.5
Montana	412.4	106.5	25.8	61.8	15.0	48.0	11.6	196.1	47.6
Nebraska	602.0	194.4	32.3	130.0	21.6	111.3	18.5	166.2	27.6
Nevada	615.3	197.8	32.1	122.4	19.9	97.1	15.8	198.0	32.2
New Hampshire	335.4	100.5	30.0	81.9	24.4	56.2	16.8	96.9	28.9
New Jersey	2,588.7	863.3	33.3	539.9	20.9	540.8	20.9	644.7	24.9
New Mexico	635.0	233.9	36.8	93.2	14.7	105.6	16.6	202.4	31.9
New York	4,283.0	979.6	22.9	1,092.3	25.5	1,216.1	28.4	994.9	23.2
North Carolina	2,446.9	690.9	28.2	562.7	23.0	439.5	18.0	753.7	30.8
North Dakota	365.7	82.4	22.5	54.2	14.8	42.6	11.6	186.4	51.0
Ohio	4,323.4	969.2	22.4	866.7	20.0	632.1	14.6	1,855.3	42.9
Oklahoma	1,377.5	402.5	29.2	259.1	18.8	197.7	14.4	518.2	37.6
Oregon	1,109.2	328.2	29.6	238.4	21.5	190.5	17.2	352.1	31.7
Pennsylvania	**3,715.5**	**983.9**	**26.5**	**858.6**	**23.1**	**582.6**	**15.7**	**1,290.4**	**34.7**
Rhode Island	261.1	65.9	25.2	66.0	25.3	52.2	20.0	77.0	29.5
South Carolina	1,493.0	376.4	25.2	288.1	19.3	210.3	14.1	618.2	41.4
South Dakota	239.0	84.3	35.3	53.3	22.3	39.2	16.4	62.2	26.0
Tennessee	2,070.5	590.1	28.5	441.5	21.3	328.1	15.8	710.8	34.3
Texas	11,501.0	2,549.0	22.2	1,323.3	11.5	1,147.2	10.0	6,481.5	56.4
Utah	693.9	211.1	30.4	127.5	18.4	120.2	17.3	235.1	33.9
Vermont	165.0	53.2	32.2	42.6	25.8	29.4	17.8	39.9	24.2
Virginia	2,227.3	655.7	29.4	494.4	22.2	462.8	20.8	614.4	27.6
Washington	2,240.8	617.3	27.5	435.7	19.4	332.0	14.8	855.9	38.2
West Virginia	735.4	181.6	24.7	141.9	19.3	101.0	13.7	310.8	42.3
Wisconsin	1,810.5	431.8	23.8	375.8	20.8	285.4	15.8	717.4	39.6
Wyoming	421.8	119.8	28.4	35.9	8.5	42.1	10.0	224.0	53.1
United States	95,682.4	26,324.6	27.5	18,382.3	19.2	15,058.5	15.7	35,917.1	37.5

[1] U.S. total energy and U.S. industrial sector include 57.7 trillion Btu of net imports of coal coke that is not allocated to the states. State and U.S. totals include 92.6 trillion Btu of net imports of electricity generated from nonrenewable energy sources.

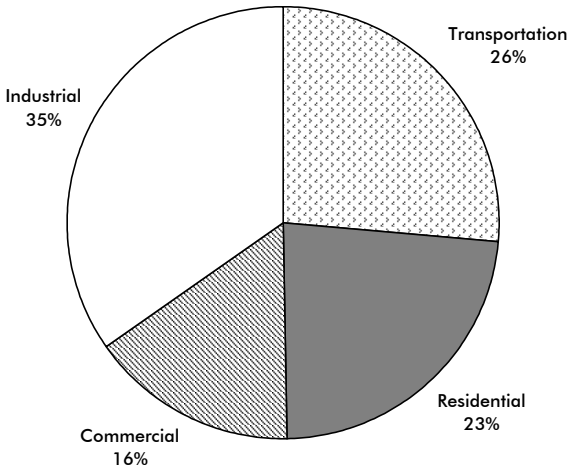
[2] End-use sector data include electricity sales and associated electrical system energy losses.

KEY: Btu = British thermal unit; Number = trillion Btu.

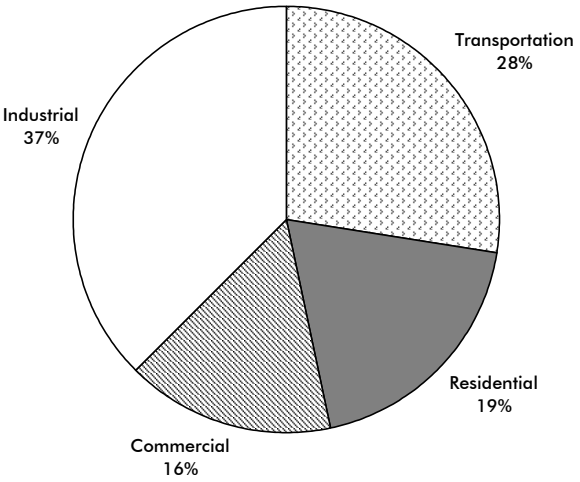
SOURCE: U.S. Department of Energy, Energy Information Administration, *State Energy Data Report 1999,* Washington, DC: May 2001, available at http://www.eia.doe.gov/pub/state.data/pdf/sedr.pdf as of Feb. 21, 2002.

Figure 7-1: Energy Consumption by End-Use Sector: 1999

Pennsylvania

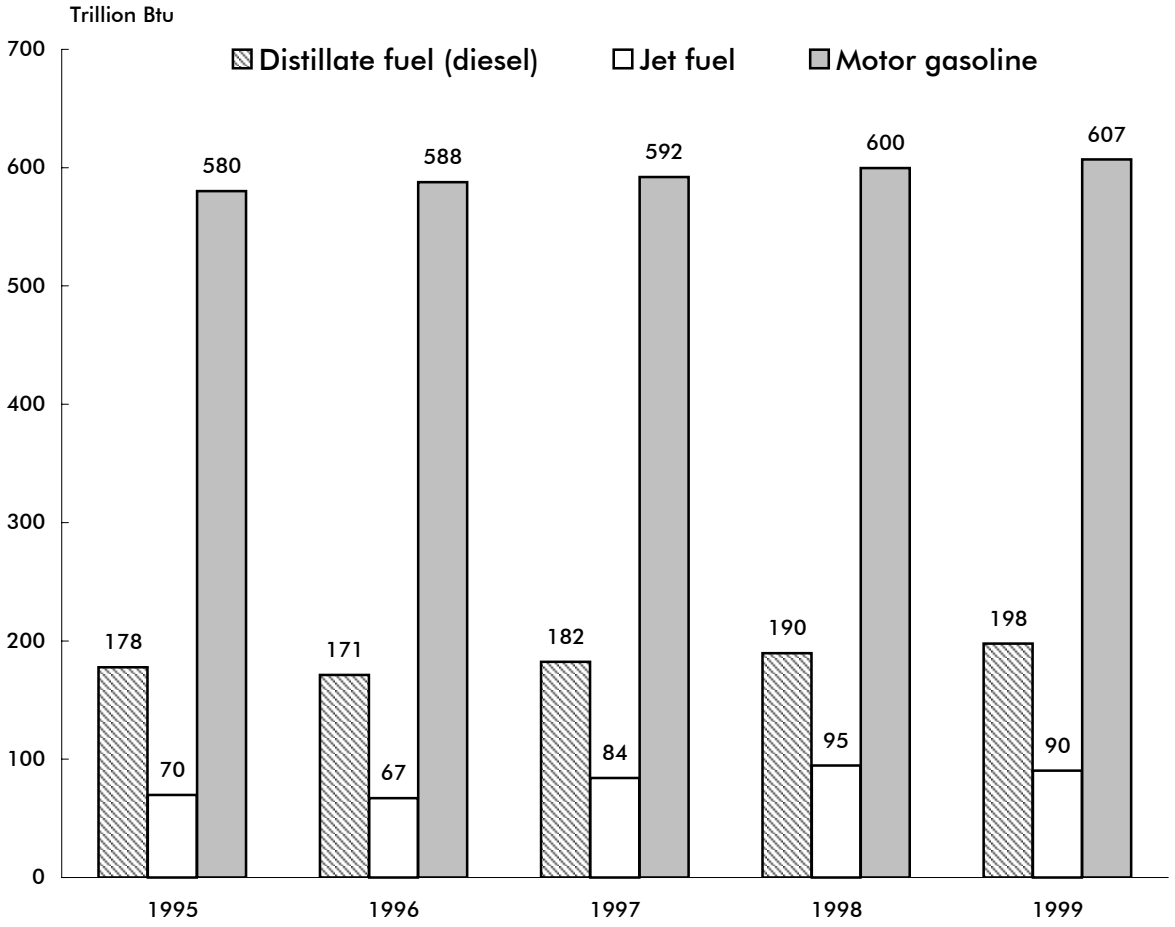


United States



SOURCE: U.S. Department of Energy, Energy Information Administration, *State Energy Data Report 1999,* Washington, DC: May 2001, table 9, available at http://www.eia.doe.gov/pub/state.data/pdf/sedr.pdf as of Feb. 21, 2002.

Figure 7-2: Pennsylvania Transportation Energy Consumption



KEY: Btu = British thermal unit.
SOURCE: U.S. Department of Energy, Energy Information Administration, *State Energy Data Report 1999* , Washington, DC: May 2001, table 45, available at http://www.eia.doe.gov/pub/state.data/pdf/sedr.pdf as of Feb. 21, 2002.

Table 7-3: Transportation Energy Consumption per Capita: 1999

State	Population (thousands)	Petroleum Total (trillion Btu)	Petroleum Per capita[1] (million Btu)	All energy sources Total (trillion Btu)	All energy sources Per capita[1] (million Btu)
Alabama	4,370	437.8	100.2	460.7	105.4
Alaska	620	193.5	312.1	198.0	319.4
Arizona	4,778	433.5	90.7	452.5	94.7
Arkansas	2,551	288.0	112.9	297.2	116.5
California	33,145	2,880.6	86.9	2,898.9	87.5
Colorado	4,056	357.4	88.1	365.9	90.2
Connecticut	3,282	234.2	71.4	234.9	71.6
Delaware	754	70.6	93.6	70.6	93.6
District of Columbia	519	24.5	47.2	26.5	51.1
Florida	15,111	1,338.1	88.6	1,345.8	89.1
Georgia	7,788	861.3	110.6	871.4	111.9
Hawaii	1,185	122.3	103.2	122.3	103.2
Idaho	1,252	121.0	96.6	125.7	100.4
Illinois	12,128	930.8	76.7	990.5	81.7
Indiana	5,943	630.6	106.1	645.4	108.6
Iowa	2,869	269.6	94.0	277.5	96.7
Kansas	2,654	256.2	96.5	287.8	108.4
Kentucky	3,961	427.0	107.8	444.2	112.1
Louisiana	4,372	754.9	172.7	804.9	184.1
Maine	1,253	113.2	90.3	113.2	90.3
Maryland	5,172	400.3	77.4	405.1	78.3
Massachusetts	6,175	435.7	70.6	440.8	71.4
Michigan	9,864	821.4	83.3	844.8	85.6
Minnesota	4,776	477.1	99.9	499.6	104.6
Mississippi	2,768	342.7	123.8	408.9	147.7
Missouri	5,468	615.6	112.6	622.6	113.9
Montana	883	100.4	113.7	106.5	120.6
Nebraska	1,666	191.5	114.9	194.4	116.7
Nevada	1,809	196.9	108.8	197.8	109.3
New Hampshire	1,201	100.5	83.7	100.5	83.7
New Jersey	8,143	857.6	105.3	863.3	106.0
New Mexico	1,740	186.5	107.2	233.9	134.4
New York	18,197	944.2	51.9	979.6	53.8
North Carolina	7,651	680.0	88.9	690.9	90.3
North Dakota	634	72.5	114.4	82.4	130.0
Ohio	11,257	950.2	84.4	969.2	86.1
Oklahoma	3,358	378.0	112.6	402.5	119.9
Oregon	3,316	317.0	95.6	328.2	99.0
Pennsylvania	**11,994**	**942.6**	**78.6**	**983.9**	**82.0**
Rhode Island	991	65.6	66.2	65.9	66.5
South Carolina	3,886	372.7	95.9	376.4	96.9
South Dakota	733	78.2	106.7	84.3	115.0
Tennessee	5,484	564.2	102.9	590.1	107.6
Texas	20,044	2,475.8	123.5	2,549.0	127.2
Utah	2,130	208.2	97.7	211.1	99.1
Vermont	594	53.2	89.6	53.2	89.6
Virginia	6,873	646.5	94.1	655.7	95.4
Washington	5,756	608.9	105.8	617.3	107.2
West Virginia	1,807	150.1	83.1	181.6	100.5
Wisconsin	5,250	427.6	81.4	431.8	82.2
Wyoming	480	105.3	219.4	119.8	249.6
United States	272,691	25,511.8	93.6	26,324.6	96.5

[1] Calculated by the Bureau of Transportation Statistics.

KEY: Btu = British thermal unit.

SOURCE: U.S. Department of Energy, Energy Information Administration, *State Energy Data Report 1999,* Washington, DC: May 2001, available at http://www.eia.doe.gov/pub/state.data/pdf/sedr.pdf as of Feb. 21, 2002.

Table 7-4: Pennsylvania and U.S. Motor-Fuel Use: 2000[1] (Millions of gallons)

	Gasoline				Special fuel (mainly diesel)		Total use	
	Highway use		Non-highway use					
Vehicle ownership	**Pennsylvania**	**United States**	**Pennsylvania**	**United States**	**Pennsylvania**	**United States**	**Pennsylvania**	**United States**
Private and commercial	4,872	126,735	64	2,876	1,375	33,377	6,311	162,988
Public use	77	2,149	4	96	N	N	81	2,245
Total	4,949	128,884	68	2,972	1,375	33,377	6,392	165,232

[1]Based on reports from state motor-fuel tax agencies. Gasohol is included with gasoline. Public use and nonhighway use were estimated by the Federal Highway Administration.

KEY: N = data do not exist.

NOTE: The term "motor fuel" applies to gasoline and all other fuels, including special fuels, coming under the purview of the state motor-fuel tax laws. "Special fuels" include diesel fuel and, to the extent they can be quantified, liquefied petroleum gases such as propane. Gasohol, a blend of gasoline and fuel alcohol, is included with gasoline.

SOURCE: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics 2000* , Washington, DC: October 2001, available at http://www.fhwa.dot.gov/ohim/hs00/pdf/mf21.pdf as of Apr. 20, 2002.

Table 7-5: Pennsylvania Air Quality Nonattainment Areas for Carbon Monoxide (CO)

County	Area	Nonattainment in year	Redesignation to attainment	Classification	Part or whole county	Population (2000)
Allegheny	Pittsburgh	95 96 97 98 99 00 01	NA	Not classified	Part	335,668
Philadelphia	Philadelphia-Camden Co, PA-NJ	95	3/15/1996	Moderate <=12.7ppm	Part	669,998

KEY: NA = not applicable.

NOTES: Nonattainment areas do not meet the national primary or secondary ambient air quality standard for the specified pollutant. Nonattainment areas are classified based on design values: Moderate = an area with a design value of 9.1 up to 16.4 ppm.

SOURCE: U.S. Environmental Protection Agency, Green Book, available at http://www.epa.gov/oar/oaqps/greenbk/anay.html as of Apr. 20, 2002.

Table 7-6: Pennsylvania Air Quality Nonattainment Areas for Ozone (O_3)

County	Area	Nonattainment in year	Redesignation to attainment	Classification	Part or whole county	Population (2000)
Adams	York	95 96 97 98 99 00 01	NA	Marginal	Whole	91,292
Allegheny	Pittsburgh-Beaver Valley	95 96 97 98 99 00 01	11/19/2001	Moderate	Whole	1,281,666
Armstrong	Pittsburgh-Beaver Valley	95 96 97 98 99 00 01	11/19/2001	Moderate	Whole	72,392
Beaver	Pittsburgh-Beaver Valley	95 96 97 98 99 00 01	11/19/2001	Moderate	Whole	181,412
Berks	Reading	95 96	6/6/1997	Moderate	Whole	373,638
Blair	Altoona	95 96 97 98 99 00 01	NA	Marginal	Whole	129,144
Bucks	Philadelphia-Wilmington-Trenton, PA-NJ-DE-MD	95 96 97 98 99 00 01	NA	Severe-15	Whole	597,635
Butler	Pittsburgh-Beaver Valley	95 96 97 98 99 00 01	11/19/2001	Moderate	Whole	174,083
Cambria	Johnstown	95 96 97 98 99 00 01	NA	Marginal	Whole	152,598
Carbon	Allentown-Bethlehem-Easton, PA-NJ	95 96 97 98 99 00 01	NA	Marginal	Whole	58,802
Chester	Philadelphia-Wilmington-Trenton, PA-NJ-DE-MD	95 96 97 98 99 00 01	NA	Severe-15	Whole	433,501
Columbia	Scranton-Wilkes-Barre	95 96 97 98 99 00 01	NA	Marginal	Whole	64,151
Crawford	Crawford County	95 96 97 98 99 00 01	NA	Incomplete data	Whole	90,366
Cumberland	Harrisburg-Lebanon-Carisle	95 96 97 98 99 00 01	NA	Marginal	Whole	213,674
Dauphin	Harrisburg-Lebanon-Carisle	95 96 97 98 99 00 01	NA	Marginal	Whole	251,798
Delaware	Philadelphia-Wilmington-Trenton, PA-NJ-DE-MD	95 96 97 98 99 00 01	NA	Severe-15	Whole	550,864
Erie	Erie	95 96 97 98 99 00 01	NA	Marginal	Whole	280,843
Fayette	Pittsburgh-Beaver Valley	95 96 97 98 99 00 01	11/19/2001	Moderate	Whole	148,644
Franklin	Franklin County	95 96 97 98 99 00 01	NA	Incomplete data	Whole	129,313
Greene	Greene County	95 96 97 98 99 00 01	NA	Incomplete data	Whole	40,672
Juniata	Juniata County	95 96 97 98 99 00 01	NA	Incomplete data	Whole	22,821
Lackawanna	Scranton-Wilkes-Barre	95 96 97 98 99 00 01	NA	Marginal	Whole	213,295
Lancaster	Lancaster	95 96 97 98 99 00 01	NA	Marginal	Whole	470,658
Lawrence	Lawrence County	95 96 97 98 99 00 01	NA	Incomplete data	Whole	94,643
Lebanon	Harrisburg-Lebanon-Carisle	95 96 97 98 99 00 01	NA	Marginal	Whole	120,327
Lehigh	Allentown-Bethlehem-Easton, PA-NJ	95 96 97 98 99 00 01	NA	Marginal	Whole	312,090
Luzerne	Scranton-Wilkes-Barre	95 96 97 98 99 00 01	NA	Marginal	Whole	319,250
Mercer	Youngstown-Warren-Sharon, PA portion	95 96 97 98 99 00 01	NA	Marginal	Whole	120,293
Monroe	Scranton-Wilkes-Barre	95 96 97 98 99 00 01	NA	Marginal	Whole	138,687
Montgomery	Philadelphia-Wilmington-Trenton, PA-NJ-DE-MD	95 96 97 98 99 00 01	NA	Severe-15	Whole	750,097
Northampton	Allentown-Bethlehem-Easton, PA-NJ	95 96 97 98 99 00 01	NA	Marginal	Whole	267,066
Northumberland	Northumberland County	95 96 97 98 99 00 01	NA	Incomplete data	Whole	94,556
Perry	Harrisburg-Lebanon-Carisle	95 96 97 98 99 00 01	NA	Marginal	Whole	43,602
Philadelphia	Philadelphia-Wilmington-Trenton, PA-NJ-DE-MD	95 96 97 98 99 00 01	NA	Severe-15	Whole	1,517,550
Pike	Pike County	95 96 97 98 99 00 01	NA	Incomplete data	Whole	46,302
Schuylkill	Schuylkill County	95 96 97 98 99 00 01	NA	Incomplete data	Whole	150,336
Snyder	Snyder County	95 96 97 98 99 00 01	NA	Incomplete data	Whole	37,546
Somerset	Johnstown	95 96 97 98 99 00 01	NA	Marginal	Whole	80,023
Susquehanna	Susquehanna County	95 96 97 98 99 00 01	NA	Incomplete data	Whole	42,238
Warren	Warren County	95 96 97 98 99 00 01	NA	Incomplete data	Whole	43,863
Washington	Pittsburgh-Beaver Valley	95 96 97 98 99 00 01	11/19/2001	Moderate	Whole	202,897
Wayne	Wayne County	95 96 97 98 99 00 01	NA	Incomplete data	Whole	47,722
Westmoreland	Pittsburgh-Beaver Valley	95 96 97 98 99 00 01	11/19/2001	Moderate	Whole	369,993
Wyoming	Scranton-Wilkes-Barre	95 96 97 98 99 00 01	NA	Marginal	Whole	28,080
York	York	95 96 97 98 99 00 01	NA	Marginal	Whole	381,751

KEY: NA = not applicable.

NOTES: Nonattainment areas do not meet the national primary or secondary ambient air quality standard (NAAQS) for the specified pollutant. Nonattainment areas are classified based on design values: Extreme = design value of 0.280 ppm (parts per million) and above; Severe-17 = design value of 0.190 up to 0.280 ppm and has 17 years to reach attainment; Severe-15 = design value of 0.180 up to 0.190 ppm and has 15 years to reach attainment; Serious = design value of 0.160 up to 0.180 ppm; Moderate = design value of 0.138 up to 0.160 ppm; Marginal = design value of 0.121 up to 0.138 ppm; Section 185A = an area designated as an ozone nonattainment area as of the date of enactment of the Clean Air Act Amendments of 1990 and has not violated the national primary ambient air quality standard for ozone for the 36-month period commencing on Jan. 1, 1987, and ending on Dec. 31, 1989.

SOURCE: U.S. Environmental Protection Agency, Green Book, available at http://www.epa.gov/oar/oaqps/greenbk/anay.html as of Apr. 20, 2002.

Table 7-7: Pennsylvania Air Quality Nonattainment Areas for Particulate Matter (PM-10)

County	Area	Nonattainment in Year	Redesignation to attainment	Classification	Part or whole county	Population (2000)
Allegheny	Clairton and 4 boroughs	95 96 97 98 99 00 01	NA	Not classified	Part	335,668

KEY: NA = not applicable.

SOURCE: U.S. Environmental Protection Agency, Green Book, available at http://www.epa.gov/oar/oaqps/greenbk/anay.html as of Apr. 20, 2002.

Table 7-8: Highway Noise Barriers: 1999

State	Total length (meters)	Barrier cost ($ 1998)
Alabama	0	0
Alaska	9,338	2,742,486
Arizona	48,593	15,130,670
Arkansas	1,989	653,497
California	777,160	487,177,331
Colorado	104,377	45,351,408
Connecticut	46,049	28,335,802
Delaware	1,262	242,013
District of Columbia	0	0
Florida	70,991	62,276,735
Georgia	33,530	20,247,589
Hawaii	3,103	1,743,452
Idaho	200	583,002
Illinois	97,803	70,985,221
Indiana	18,568	20,297,106
Iowa	7,857	3,215,640
Kansas	2,103	2,082,034
Kentucky	8,249	5,306,199
Louisiana	12,077	5,974,212
Maine	561	292,861
Maryland	99,587	153,227,923
Massachusetts	10,250	5,259,055
Michigan	67,071	60,139,968
Minnesota	101,811	62,694,176
Mississippi	0	0
Missouri	6,113	4,179,360
Montana	0	0
Nebraska	5,060	4,026,138
Nevada	17,847	10,855,220
New Hampshire	6,392	5,785,519
New Jersey	142,055	210,429,029
New Mexico	21,196	9,306,885
New York	110,698	116,448,616
North Carolina	45,977	24,702,615
North Dakota	0	0
Ohio	138,197	68,064,386
Oklahoma	13,186	4,229,909
Oregon	72,552	30,075,899
Pennsylvania	**83,526**	**88,259,488**
Rhode Island	0	0
South Carolina	2,665	1,713,629
South Dakota	0	0
Tennessee	28,846	20,574,450
Texas	55,310	39,635,228
Utah	70,260	24,841,367
Vermont	1,004	356,344
Virginia[1]	153,313	143,003,313
Washington	74,812	32,296,683
West Virginia	408	170,529
Wisconsin	29,730	28,768,150
Wyoming	293	100,271
United States	2,611,953	1,931,107,534

[1]Includes 4,061 meters of federal barriers on the Dulles Access Highway.

SOURCE: U.S. Department of Transportation, Federal Highway Administration, Office of Planning, Environment, and Real Estate, available at http://www.fhwa.dot.gov/environment/ab_noise.htm as of Feb. 20, 2002.

H Information on Data Sources

Airline freight and passenger data

The U.S. Department of Transportation's (USDOT) Bureau of Transportation Statistics (BTS) collects and compiles data on the volume of revenue passengers, freight, and mail traffic handled and reported by the nation's large certificated air carriers. These carriers hold Certificates of Public Convenience and Necessity (CPN) issued by the USDOT authorizing the performance of air transportation. Large certificated air carriers operate aircraft with seating capacity of more than 60 seats or a maximum payload capacity of more than 18,000 pounds or conduct international operations. Data for commuters, intrastate, nonscheduled air taxi operators, and foreign flag air carriers are not included in this BTS data.

Additional information:

Contact: USDOT, Bureau of Transportation Statistics, Office of Airline Information

Print source: USDOT, Bureau of Transportation Statistics, Office of Airline Information. *Airport Activity Statistics*. Washington, DC: Annual issues.

Internet: http://www.bts.gov

Commodity Flow Survey

The Commodity Flow Survey (CFS) provides data on the movement of freight by type of commodity shipped and by mode of transport. In 1997, 100,000 domestic establishments were randomly selected from a universe of approximately 800,000 engaged in mining, manufacturing, wholesale, warehouses of multi-establishment companies, and some selected activities in retail and service. The survey excluded establishments classified as farms, forestry, fisheries, governments, construction, transportation, foreign establishments, services, and most establishments in retail. For the 1997 CFS, each selected establishment reported a sample of about 25 outbound shipments for a one-week period in each of four calendar quarters in 1997. This produced a total sample of over 5 million shipments. Due to industry-wide reporting problems, shipments by oil and gas extraction establishments were excluded from data tabulations.

For each sampled 1997 CFS shipment, zip code of origin and destination, 5-digit Standard Classification of Transported Goods (SCTG) code, weight, value, and modes of transport were provided. Information on whether the shipment was containerized, a hazardous material, or an export was also obtained. Route-distance for each mode, for each shipment, is imputed from a Mode-Distance Table developed by Oak Ridge National Laboratory. Distance was used to compute ton-mileage by mode of transport. The CFS provides nationwide geographic coverage in 89 National Transportation Analysis Regions, stratified by state and, for the 1997 CFS, metropolitan area.

Additional information:

Contact: USDOT, Bureau of Transportation Statistics, Office of Statistical Programs

Print source: USDOT, Bureau of Transportation Statistics and U.S. Department of Commerce, Bureau of the Census, *[state]: 1997 Commodity Flow Survey*. EC97TCF-[state], Washington, DC: 1999.

Internet: http://www.bts.gov/ntda/cfs/

Commuting data

Commuting data are derived from the Census 2000 Supplementary Survey (C2SS). The C2SS used the questionnaire and methods developed for the American Community Survey to collect demographic, social,

economic, and housing data from a national sample of 700,000 households. Group quarters were not included in the sample. The C2SS was conducted in 1,203 counties with monthly samples of about 58,000 housing units. Economic, demographic, and housing characteristics from the Census 2000 Supplementary Survey are reported for the United States as a whole, the 50 states, and the District of Columbia.

The Census 2000 Supplementary Survey is not directly comparable with the 1990 Census for several reasons, one being that the former did not include group quarters. This may understate some categories such as walking.

Additional information:

Contact: USDOC, U.S. Census Bureau, Demographic Surveys Division

Internet: http://www.census.gov

Gas and hazardous liquid pipeline data

U.S. fatality and injury data for natural gas pipelines and hazardous liquid pipelines are based on reports filed with the U.S. Department of Transportation, Office of Pipeline Safety (OPS) under 49 CFR 191. Accidents must be reported as soon as possible, but no later than 30 days after discovery. Undetected releases are a possible source of error; even if subsequently detected and reported, it may not be possible to accurately reconstruct the accident. Property damage figures are estimates.

Gas pipeline incidents involve: 1) releases of gas from a pipeline or liquefied natural gas (LNG) or gas from an LNG facility that results in a) death or personal injury necessitating in-patient hospitalization, or b) estimated property damage, including cost of gas lost, of the operator or others, or both, of $50,000 or more; 2) an event that results in an emergency shutdown of an LNG facility; or 3) an event that is significant, in the judgment of the operator, even though it did not meet the criteria of 1) or 2).

For hazardous liquids pipelines, an accident report is required for each failure in a pipeline system in which there is a release of the hazardous liquid or carbon dioxide transported resulting in any of the following: 1) explosion or fire not intentionally set by the operator; 2) loss of 50 or more barrels (8 or more cubic meters) of hazardous liquid or carbon dioxide; 3) escape to the atmosphere of more than 5 barrels (0.8 cubic meters) a day of highly volatile liquids; 4) death of any person; 5) bodily harm to any person resulting in one or more of the following: a) loss of consciousness, b) an individual being carried from the scene, c) medical treatment, or d) disability which prevents the discharge of normal duties or the pursuit of normal activities beyond the day of the accident; or 6) estimated property damage, including cost of clean-up and recovery, value of lost product, and damage to the property of the operator or others, or both, exceeding $50,000.

Additional information:

Contact: USDOT, Research and Special Programs Administration, Office of Pipeline Safety

Internet: http://ops.dot.gov

Government transportation revenue and expenditure data

The U.S. Department of Commerce (USDOC), U.S. Census Bureau conducts an Annual Survey of Government Finances. Alternatively, every five years, in years ending in a ‘2’ or ‘7’, a Census of Governments, including a finance portion, is conducted. The survey coverage includes all state and local governments in the United States. For both the

Census and annual survey, the finance detail data is equivalent, encompassing the entire range of government finance activities—revenue, expenditure, debt, and assets.

The data collection for the annual survey uses two methods: mail canvas and central collection from state sources. Data for local governments includes county, municipal, township, special district, and school district data. Data for state governments are compiled from state government audits, budgets, and other financial reports into the classification categories used for reporting by the Census Bureau.

Reporting of government finances by the Census Bureau involves presentation of data in terms of uniform categories. While often similar to, or identical to, the classification used by the state or local government, there could be instances in which a significant difference exists between the name of a state or local financial item and the final category to which it is assigned by the Census Bureau.

Like financial transactions are combined. The financial categories for revenue involve grouping of items by source. Revenue items of the same kind are merged. Financial transactions for expenditures are classified both by function and by object category. Debt items are classified by term (short- and long-term), as well as by type of debt and, to a limited extent, by purpose. Assets also are put into uniform categories, grouped by type of holding, with holdings for insurance trust systems grouped separately from general government.

The share of government sector financial totals contributed by a state government or by local governments differs materially from one state to another. Users can review the *Government Finance and Employment Classification Manual* for additional information regarding the financial categories. The financial amounts in the tables and files are statistical in nature and do not represent accounting statements or conditions.

The local government statistics are developed from a sample survey. Therefore, the local totals, as well as state and local aggregates, are considered estimated amounts subject to sampling error. State government finance data are not subject to sampling. Consequently, state-local aggregates for individual states are more reliable (on a relative standard error basis) than the local government estimates they include.

Additional information:

Contact: USDOC, U.S. Census Bureau, Finance Branch

Print Sources: USDOC, U.S. Census Bureau, *Federal Aid to States: 2000*

Internet: http://www.census.gov

Hazardous materials incidents data

Incidents resulting in certain unintentional releases of hazardous materials must be reported under 49 CFR 171.16. Each carrier must submit a report to the USDOT, Research and Special Programs Administration (RSPA) within 30 days of the incident, including information on the mode of transportation involved, results of the incident, and a narrative description of the accident. These reports are generally made available on RSPA's incident database within 90 days of receipt.

Fatalities and injuries are counted only if directly caused by a hazardous material. For example, a truck operator killed by impact forces during a motor vehicle crash would not be counted as a hazardous-material fatality.

RSPA contacts the submitting carrier by telephone to verify all reported fatalities.

Although RSPA acknowledges that there is some level of underreporting, it believes that the underreporting is mostly limited to small, nonserious incidents. The reporting requirements were extended to intrastate highway carriers on October 1, 1998, and the response rate from this new group is expected to increase over time. Property damage figures are estimates determined by the carrier prior to the 30-day reporting deadline, and are generally not subsequently updated. Property damage figures, therefore, may underestimate actual damages.

Additional information:

Contact: USDOT, Research and Special Programs Administration, Office of Hazardous Materials Planning and Analysis

Print source: USDOT, Research and Special Programs Administration, Office of Hazardous Materials Safety, *Hazmat Summary by State for Calendar Year 2000*. Washington, DC: 2001

Internet: http://hazmat.dot.gov

Highway mileage, condition, and use, driver licenses, and highway vehicle registrations data

Data on roadway mileage, condition, and use are extracted from the Highway Performance Monitoring System (HPMS), which uses a stratified simple random sample of highway links (small sections of roadway) selected from state inventory files. The HPMS sample was designed as a fixed sample to minimize data collection costs, but adjustments to maintain representativeness are carried out periodically. The HPMS also consists of universe reporting (a complete census) for the Interstate and the National Highway System, and tabular summary reporting of limited information.

Data are collected independently by the 50 states, Metropolitan Planning Organizations (MPOs), and lower jurisdictions. Many of the geometric data items rarely change, such as number of lanes; others change frequently, such as traffic. The U.S. Department of Transportation, Federal Highway Administration (FHWA) provides guidelines for data collection in the HPMS *Field Manual*, which the states follow to varying extents depending on matters such as staff, resources, state perspective, uses of the data, and state/MPO/local needs for the data. State Departments of Transportation (DOTs) report HPMS data annually to the FHWA.

HPMS data are subject to sampling and nonsampling error. Nonsampling error is the major concern with these data. For some of the most variable and important data items, such as traffic, guidelines for measurement and data collection have been produced. States have the option of using the guidelines or using their own procedures. Many data items are difficult and costly to collect and are reported as estimates not based on direct measurement. The data are collected and reported by many entities and individuals within the responsible organizations. Most do a reasonably good job, but staff turnover, cost, equipment issues, etc., can create difficulties.

States provide vehicle registration data to the FHWA. Vehicle registration data are shown on a calendar-year basis. Efforts are made to exclude transfers, re-registrations, and any other factors that could result in duplication in the vehicle counts. Registration practices for commercial vehicles differ greatly among the states. Some states register a tractor-semitrailer combination as a single unit; others register the tractor and the semitrailer

separately. Some states register buses with trucks or automobiles, while many states do not report house and light utility trailers separately from commercial trailers or semitrailers. Some states do not require registration of car or light utility trailers. In some instances, FHWA has supplemented the data supplied by the states with information obtained from other sources.

States also provide driver licensing data to the FHWA. Although efforts are made to minimize license duplication, drivers who move from one state to another are sometimes counted in both states until the license from the previous state of residence expires. Problems with the data also arise from the fact that: 1) some individuals obtain their drivers licenses in states other than those of legal residence; 2) some individuals fraudulently obtain multiple licenses; 3) not all individuals who drive are licensed; and 4) the purging of expired licenses or licenses from deceased individuals is not performed on a continual basis.

Additional information:

Contact: USDOT, Federal Highway Administration, Office of Highway Policy Information

Print source: USDOT, Federal Highway Administration, *Highway Statistics*. Washington, DC: Annual issues.

Internet: http://www.fhwa.dot.gov/ohim/index.html

Highway safety data

Fatalities: Highway fatality data are extracted from the Fatality Analysis Reporting System (FARS), which is compiled by the U.S. Department of Transportation (USDOT), National Highway Traffic Safety Administration (NHTSA). Data are gathered from a census of police accident reports (PARs), state vehicle registration files, state drivers licensing files, state highway department data, vital statistics, death certificates, coroner/medical examiner reports, hospital medical reports, and emergency medical service reports. A separate form is completed for each fatal crash. Blood alcohol concentration (BAC) is estimated when not known. Statistical procedures used for unknown data in FARS can be found in the NHTSA report, *A Method for Estimating Posterior BAC Distributions for Persons Involved in Fatal Traffic Accidents*, DOT HS 807 094 (Washington, DC: July 1986).

Data are collected from relevant state agencies and electronically submitted for inclusion in the FARs database on a continuous basis. Cross-verification of PARs with death certificates helps prevent undercounting. Moreover, when data are entered, they are checked automatically for acceptable range values and consistency, enabling quick corrections when necessary. Several programs continually monitor the data for completeness and accuracy. Periodically, sample cases are analyzed for accuracy and consistency.

FARS data do not include motor vehicle fatalities on nonpublic roads. These are thought to account for about 2 percent or fewer of the total motor vehicle fatalities per year.

Injuries and crashes: NHTSA's General Estimates System (GES) data are a nationally representative sample of police-reported crashes that contributed to an injury or fatality or resulted in property damage and involved at least one motor vehicle traveling on a trafficway. GES data collectors randomly

sample PARs and forward copies to a central contractor for coding into a standard GES system format. Documents such as police diagrams or supporting text provided by the officers might be further reviewed to complete a data entry. A NHTSA study of injuries from motor vehicle crashes estimated the total count of nonfatal injuries at over 5 million compared with the GES's estimate of 3.2 million in 1998.

Additional information:

Contact: USDOT, National Highway Traffic Safety Administration, National Center for Statistics and Analysis

Print source: USDOT, National Highway Traffic Safety Administration, *Traffic Safety Facts*. Washington, DC: Annual issues.

Internet: http://www.nhtsa.dot.gov

International visitors data

Data on international visitors to the United States are based on international arrivals by air to the United States (excluding those from Canada and Mexico). Information is derived from the Immigration and Naturalization Service's (INS) Visitor Arrivals Program (I-94) and the U.S. Department of Commerce, Tourism Industries Office's Survey of International Air Travelers. The survey obtains data on overseas travel patterns, characteristics, and spending patterns of international travelers to and from the United States. Between 69,000 and 95,000 travelers are surveyed each year. The survey results are weighted so they represent the international travel populations of U.S. residents and non-residents based upon Immigration and Naturalization Service data.

Additional information:

Contact: U.S. Department of Commerce (USDOC), International Trade Administration, Tourism Industries Office

Print source: USDOC, International Trade Administration, Tourism Industries Office, *Overseas Visitors to Select U.S. States and Territories.* Washington, DC: Annual issues; *and* USDOC, International Trade Administration, Tourism Industries Office, *Overseas Visitors to Select U.S. Cities/Hawaiian Islands*. Washington, DC: Annual issues.

Internet: http://tinet.ita.doc.gov/

Passenger border crossing data

U.S. Custom Service personnel collect passenger border-crossing entry data for all U.S. land, air, and maritime ports. These numbers reflect all entries, and it is not possible to divide these data into separate entries for same-day and overnight travel or by country of residence for the traveler. Additionally, for border-crossing figures, the total number of people is not the number of unique individuals, but rather indicates the number of border crossings. Multiple crossings by the same individual count as multiple border crossings.

Additional information:

Contact: USDOT, Bureau of Transportation Statistics, Office of Transportation Analysis

Internet: http://www.bts.gov

Railroad industry and shipments data

The Association of American Railroads (AAR) database aggregates data from several sources concerning the freight railroad industry and movement of freight, both nationally and statewide. The state-specific

data include commerce, employment, and financial contributions.

The primary source of data for Class I railroads is Schedule 700 of the R-1 Annual Report to the Surface Transportation Board (STB) by individual carriers (100 percent reporting) and the 2000 Carload Waybill Sample. The primary source of data for non-Class I railroads is AAR's Profiles of U.S. Railroads from statistics supplied annually by nearly all operating U.S. freight railroads. Some of the data are estimated based on more aggregated, national figures.

The STB defines Class I railroads as having operating revenues at or above a threshold indexed to a base of $250 million (1991) and adjusted annually in concert with changes in the Railroad Freight Rate Index published by the Bureau of Labor Statistics. Declassification from Class I status occurs when a railroad falls below the applicable threshold for three consecutive years. Although few in number, Class I railroads account for over 90 percent of the industry's revenue.

The AAR determines the number of non-Class I railroads through an annual survey sent to each U.S. freight railroad.

Historical reliability may vary due to changes in the railroad industry, including bankruptcies, mergers, and declassification by the STB. Small data errors may also have occurred because of independent rounding in this series by the AAR.

Additional information:

Contact: Association of American Railroads, Policy and Economics Department

Internet: http://www.aar.org

Railroad safety data

Railroads are required to file a report for each accident or incident to the Federal Railroad Administration (FRA). These include: 1) train accidents, reported on Form F 6180.54, comprised of collisions, derailments, and other events involving the operation of on-track equipment and causing reportable damage above an established threshold ($6,600 in 1998); 2) highway-rail grade crossing incidents, reported on Form F 6180.57, involving impact between railroad on-track equipment and highway users at crossings; and 3) other incidents, reported on Form F 6180.55a, involving all other reportable incidents or exposures that cause a fatality or injury to any person or an occupational illness to a railroad employee.

Railroads are required by FRA regulations to use the current *FRA Guide for Preparing Accident/Incident Reports* when preparing reports.

The Systems Support Division of FRA maintains the Railroad Accident/Incident Reporting System (RAIRS), consisting of four databases: rail equipment, injury/illness, grade-crossing accidents, and railroad summary (freight and passenger). These databases include information on all railroad accidents, grade-crossing accidents, railroad employee casualties, and any other injuries on railroad property, and provide the basis for accident analyses and assessment as well as annual reports. The databases are updated monthly from information submitted by the railroads.

Additional information:

Contact: USDOT, Federal Railroad Administration, Office of Safety

Print publication: USDOT, Federal Railroad Administration, *Railroad Safety Statistics*. Washington, DC: Annual issues.

Internet: http://www.fra.dot.gov

Recreational boating safety and vehicles data

The U.S. Coast Guard, of the U.S. Department of Transportation, collects data on recreational boating accidents from two sources: 1) Boating Accident Report (BAR) data forwarded to the Coast Guard by jurisdictions with an approved boat numbering and casualty reporting system, and 2) reports of Coast Guard investigations of fatal boating accidents that occurred on waters under federal jurisdiction. Recreational Boating Accident Investigation data are used if submitted to the Coast Guard and are relied on as much as possible to provide accident statistics. In the absence of investigations, information is collected from reports filed by boat operators.

Boat operators are required to file a BAR if an accident results in 1) loss of life, 2) personal injury that requires medical treatment beyond first aid, 3) damage to the vessel and other property exceeding $500, or 4) complete loss of the vessel.

Boat operators are required to report their accidents to authorities in the state where the accident occurred. States with approved boat numbering systems furnish the Coast Guard with BAR data. The minimum reporting requirements are set by federal regulation, but states are allowed to have stricter requirements. The Coast Guard reports recreational boating safety data in the report *Boating Statistics,* which only covers accidents meeting the federal minimum reporting requirements.

The statistics in *Boating Statistics* cover boating accidents reported on waters of joint federal and state jurisdiction, and exclusive state jurisdiction.

The Coast Guard believes over 90 percent of fatal accidents are included in *Boating Statistics*. A smaller percentage of nonfatal accidents are reported because of reporting thresholds, ignorance of the law, and difficulties enforcing the law. Federal law does not require the reporting of accidents on private waters where states have no jurisdiction. Reports of accidents on such waters are included when received by the Coast Guard if they satisfy the other requirements of inclusion. Accidents excluded are those in which the boat was used as a platform for other activities (e.g., swimming), and those in which a person dies of natural causes aboard a boat. However, the data do include accidents involving people in the water who are struck by their boat or another boat.

Additional information:

Contact: USDOT, U.S. Coast Guard, Office of Boating Safety

Print source: USDOT, U.S. Coast Guard, Office of Boating Safety, *Boating Statistics,* Washington, DC: Annual issues.

Internet: http://www.uscgboating.org

Transborder surface freight data

The Transborder Surface Freight Dataset is extracted from the Census Foreign Trade Statistics Program and made available by the Bureau of Transportation Statistics. Import and export data are extracted from administrative records required by the Departments of Commerce and Treasury. This dataset incorporates all shipments entering or exiting the United States by surface modes of

transport (that is, other than air or maritime vessel) to and from Canada or Mexico. Prior to January 1997, this dataset also included transhipments in its detailed tables, that is, shipments entering or exiting the United States by way of U.S. Customs ports on the northern or southern borders, even when the actual origin or final destination of the goods was other than Canada or Mexico. Shipments that neither originate nor terminate in the United States (i.e., intransit shipments) are beyond the scope of this dataset because they are not considered U.S. international trade shipments.

Users should be aware that the trade data fields (such as value and commodity classification) are typically more rigorously reviewed than transportation data fields (i.e., mode of transportation and port of entry/exit). Users should also be aware that the use of foreign trade data to describe physical transportation flows might not be direct. For example, this dataset provides surface transportation information for individual Customs districts and ports on the northern and southern borders. However, because of filing procedures for trade documents, these ports may or may not reflect where goods physically crossed the border. This is because the filer of information may choose to file trade documents at one port, while shipments actually enter or exit at another port.

Import data are generally more accurate than export data. This is primarily due to the fact that Customs uses import documents for enforcement purposes, while it performs no similar function for exports.

Additional information:

Contact: USDOT, Bureau of Transportation Statistics, Office of Transportation Analysis

Internet: http://www.bts.gov

Transit operating, financial, and safety data

Transit data are from the National Transit Database (NTD) produced by the USDOT, Federal Transit Administration (FTA). Data are collected from transit agencies that receive Urbanized Area Formula Program funds. Transit operators that do not report to FTA are those that do not receive federal funding, typically private, small, and rural operators. FTA reviews and validates information submitted by individual transit agencies. Reliability may vary because some transit agencies cannot obtain accurate information or may interpret certain data definitions differently than intended.

In 2000, 592 agencies reported to the NTD. Of that total, 67 transit agencies received exemptions from detailed reporting because they operated 9 or fewer vehicles, and 7 were excluded because their data were incomplete. Thus, 518 individual reporters were included in the NTD accounting for 90 to 95 percent of transit passenger-miles.

Data are collected on a range of variables including capital and operating funding, transit service supplied and consumed, and transit safety and security. Transit operators must report fatalities, injuries, accidents, incidents, and property damage in excess of $1,000.

Additional information:

Contact: USDOT, Federal Transit Administration

Print source: USDOT, Federal Transit Administration, *Data Tables*. Washington, DC: Annual issues; and USDOT, Federal Transit Administration, *National Transit Database Reporting Manual*. Washington, DC: Annual issues.

Internet: http://www.fta.dot.gov

Transportation establishment, employees, and payroll data

Data on employees, establishments, and payroll are taken from County Business Patterns, a database of employment in the United States using the North American Industry Classification System (NAICS). Data are collected annually. Data are extracted from the Business Register, the Census Bureau's file of all known single and multi-establishment companies. The Annual Company Organization Survey and quinquennial Economic Censuses provide individual establishment data for multi-location firms. Data for single-location firms are obtained from various programs conducted by the Census Bureau, such as the Economic Censuses, the Annual Survey of Manufactures, and Current Business Surveys. They are also obtained from administrative records of the Internal Revenue Service (IRS), the Social Security Administration (SSA), and the Bureau of Labor Statistics (BLS).

Additional information:

Contact: USDOC, U.S. Census Bureau, Economic Planning and Coordination Division

Print source: USDOC, U.S. Census Bureau, *[State]: County Business Patterns 1999*. CBP/99-6. Washington, DC: 2001.

Internet: http://www.census.gov/epcd/cbp/view/cbpview.html

Vehicle Inventory and Use Survey

The Vehicle Inventory and Use Survey (VIUS) collects data on the physical and operational characteristics of private and commercial trucks in the United States. The 1997 VIUS sampled about 131,000 trucks from an estimated universe of over 75 million trucks. The sample excludes vehicles owned by federal, state, and local government including ambulances, buses, motor homes, farm tractors, unpowered trailer units, and trucks reported to have been sold, junked, or wrecked prior to July 1, 1996. Light trucks registered as cars, as is the practice in many states, were included. Unregistered trucks used off-road are not included. Census delivered a mail-out/mail-back survey to the owner identified in the vehicle registration records. Data collection is staggered as state records become available. Owners report data only for the vehicles selected. The response rate for the 1997 VIUS was about 85 percent.

Additional information:

Contact: USDOC, U.S. Census Bureau, Service Sector Statistics Division

Print source: USDOC, U.S. Census Bureau, *[state]: 1997 Vehicle Inventory and Use Survey*. EC97TV-[state]. Washington, DC: 1999.

Internet: http://www.census.gov/svsd/www/tiusview.html

Waterborne imports and vessel data

The U.S. Department of Transportation's Maritime Administration (MARAD) classifies merchant-based vessels by size and type and reports this information in its annual publication, *Merchant Fleets of the World*. MARAD compiles these figures from a data service provided by Lloyd's Maritime Information Service. The parent company, Lloyd's Register (LR), collects data from several sources, including its offices around the world, data transfers and agreements with other classification societies, questionnaires to ship owners and shipbuilders, feedback from government agencies, and input from port agents.

MARAD's Office of Statistical and Economic Analysis maintains the waterborne databank used to compile the annual import and export statistics from monthly and quarterly data provided by the U.S. Army Corps of Engineers. MARAD publishes the data in reports of vessel movements, trade and cargo by type of service, U.S. and foreign port, country of origin/destination, commodity, value, weight, and containerized cargo.

MARAD distributes the reports and performs special tabulations and customized maritime data reports created for other government agencies and the private sector on a reimbursable basis. MARAD also provides these services for historic data and maintains the Schedule K Classification of Foreign Ports by Geographic Trade Area and Country.

Additional information:

Contact: USDOT, Maritime Administration, Office of Statistical and Economic Analysis

Print source: USDOT, Maritime Administration, *Merchant Fleets of the World*.

Internet: http://www.marad.dot.gov

Waterborne shipments data

The U.S. Army Corps of Engineers' (Corps) Navigation Data Center (NDC) collects data on waterborne commodity and vessel movements, domestic commercial vessel characteristics, port and waterway facilities, and navigation dredging projects.

The NDC's databases contain information on physical characteristics, infrastructure, and commodities for principal facilities on the U.S. coast, Great Lakes, and inland ports. The data consists of listings of port area's waterfront facilities, including information on berthing, cranes, transit sheds, grain elevators, marine repair plants, fleeting areas, and docking and storage facilities.

All vessel operators of record report their domestic waterborne traffic movements to the Corps via ENG Forms 3925 and 3925b. Cargo movements are reported according to points of loading and unloading. Excluded cargo movements are: 1) cargo carried on general ferries, 2) coal and petroleum products loaded from shore facilities directly into vessels for fuel use, 3) military cargo moved in U.S. Department of Defense vessels, and 4) cargo weighing less than 100 tons moved on government equipment. The Corps calculates ton-miles by multiplying the cargo's tonnage by the distance between points of loading and unloading.

An annual survey of companies that operate inland waterway vessels is the principal source of data for inland non self-propelled vessels, self-propelled vessels, and flag passenger and cargo vessels. More than 3,000 surveys are sent to these companies, and response rates are typically above 90 percent.

Additional information:

Contact: U.S. Army Corps of Engineers, Waterborne Commerce Statistics Center

Print source: U.S. Army Corps of Engineers, *Waterborne Commerce of the United States*. New Orleans, LA: Annual issues.

Internet: http://www.wrsc.usace.army.mil

I Glossary

British thermal unit (Btu): The amount of energy required to raise the temperature of 1 pound of water 1 degree Fahrenheit (F) at or near 39.2 degrees F and 1 atmosphere of pressure.

Certificated airport: An airport holding an operating certificate issued by the Federal Aviation Administration in accordance with Code of Federal Regulations (CFR) Title 14, Chapter 1, Part 139 allowing it to serve scheduled or unscheduled air carrier aircraft designed for more than 30 passengers.

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

Container: A box-like device used to store, protect, and handle a number of packages or items as a unit of transit that can be interchanged between trucks, trains, and ships without rehandling the contents.

Controlled right-of-way: Lanes restricted for at least a portion of the day for use by transit vehicles and other high occupancy vehicles (HOVs).

Demand responsive: Transit service provided without a fixed route and without a fixed schedule that operates in response to calls from passengers or their agents to the transit operator or dispatcher. Service is usually provided using cars, vans, or buses with fewer than 25 seats.

Directional route-miles: The mileage in each direction over which public transportation vehicles travel while in revenue service. Directional route-miles are a measure of the facility or roadway, not the service carried on the facility such as the number of routes or vehicle-miles. Directional route-miles are computed with regard to direction of service, but without regard to the number of traffic lanes or rail tracks existing in the right-of-way.

Dry-bulk carrier (water): A ship with specialized holds for carrying dry cargo such as coal, grain, and iron ore in unpackaged bulk form.

Enplanements: The total number of revenue passengers boarding aircraft.

Exclusive right-of-way: Lanes reserved at all times for transit use and other high occupancy vehicles (HOVs).

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

Full container ship: Ships equipped with permanent container cells, with little or no space for other types of cargo.

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

Light rail: A streetcar-type vehicle operated on city streets, semi-exclusive rights-of-way, or exclusive rights-of-way.

Service may be provided by step-entry vehicles or by level boarding.

Major arterial highway: A major highway used primarily for through traffic.

Metric ton: 1,814 pounds (2,000 pounds multiplied by 0.907).

Minor arterial: In rural areas, roads linking cities and larger towns. In urban areas, roads distributing trips to small geographic area but not penetrating identifiable neighborhoods.

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

Mixed right-of-way: Lanes used for general automobile traffic.

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

Natural gas distribution pipeline: Smaller than transmission pipelines and maintained by companies that distribute natural gas locally (intrastate). Distribution pipeline systems are analogous to networks of lesser roads and residential streets that people travel after getting off the freeway.

Natural gas transmission pipeline: Analogous to a major freeway, it is the main interstate transportation route for moving large amounts of natural gas from the source of production to points of distribution. Transmission pipelines are designed to move large amounts of natural gas from areas where the gas is extracted and stored to the local distribution companies that provide natural gas to homes and businesses.

Principal arterial highway: Major streets or highways, many of multilane or freeway design, serving high-volume traffic corridor movements that connect major generators of travel.

Short ton: 2,000 pounds.

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

Ton-mile: The movement of one ton of cargo the distance of one statute mile.

Trackage rights: The authority of one railroad to use the tracks of another railroad for a fee.

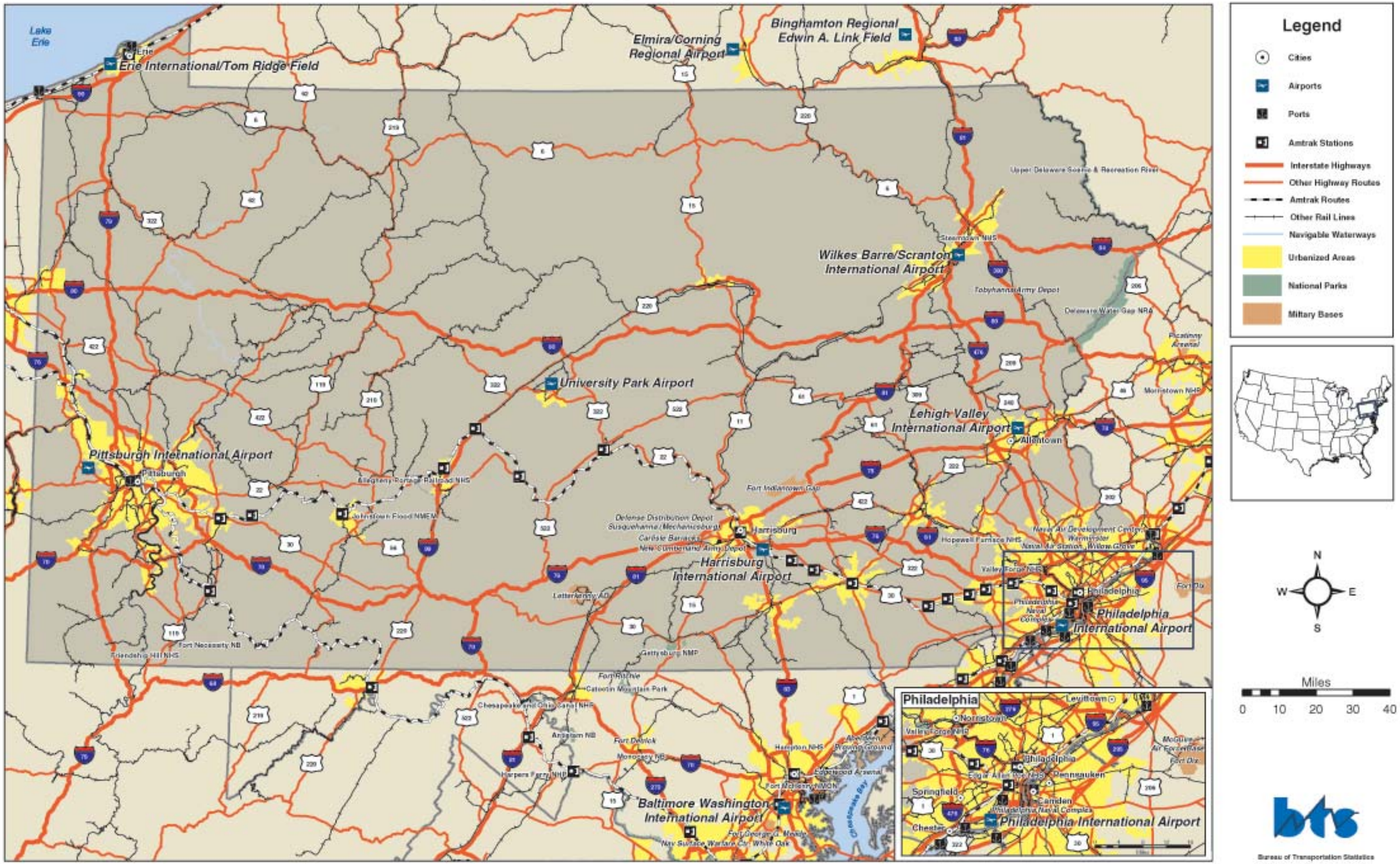
Trolley bus: Rubber-tired, electric transit vehicle, manually steered and propelled by a motor drawing current, normally through overhead wires, from a central power source.

Unlinked passenger trips: The number of passengers who board public transportation vehicles. A passenger is counted each time he or she boards a vehicle even if on the same journey from origin to destination.

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

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

Pennsylvania: Major Transportation Facilities



Notes: Data in this map are derived from federal data sources, primarily the U.S. Department of Transportation, U.S. Geological Survey, and the Army Corps of Engineers. Displayed data may not include all state and local transportation or other facilities.
Airports depicted are those reporting 100,000 or more enplanements in 2000. Pipelines and transit facilities are not depicted.