Pocket Guide to Transportation
2024

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U.S. Department of Transportation
Office of the Secretary of Transportation

Bureau of Transportation Statistics

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2024

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Acknowledgments

About the
Pocket Guide to Transportation

The BTS *Pocket Guide to Transportation* is a quick reference guide that provides transportation statistics at your fingertips. It provides key information and highlights major trends on the U.S. transportation system. Intended as a compact reference, the *Pocket Guide* supports the BTS mission to create, manage, and share transportation statistical knowledge.
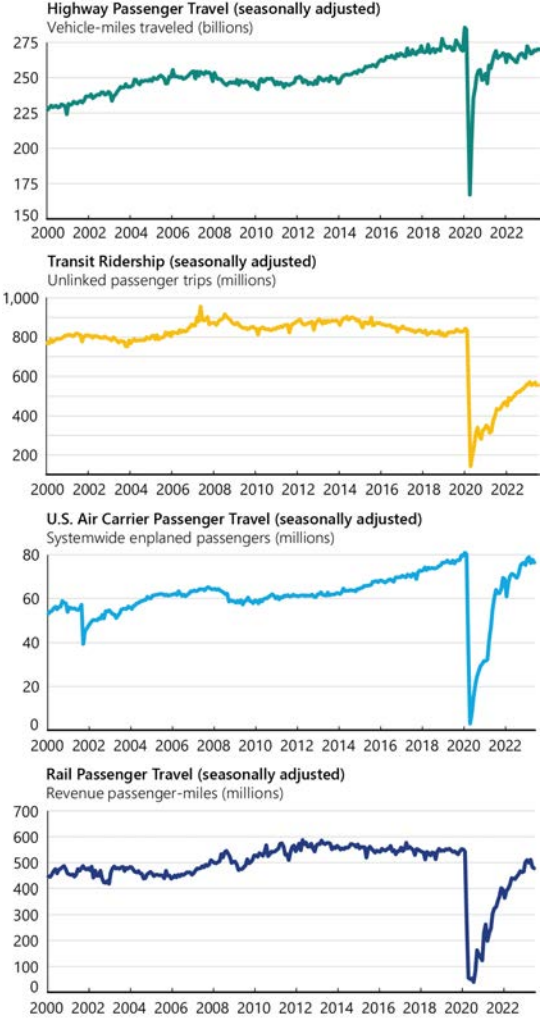
Many of the tables and figures within this publication are derived from *National Transportation Statistics* available at www.bts.gov. The *Pocket Guide* is also available online at https://www.bts.gov/pocketguide.

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Notes: Graph scales are not comparable. Seasonally-adjusted data measure the real differences in data trends by adjusting for seasonal factors, such as the change in the number of days, weekends, holidays, or other seasonal activity in a month such as vacation travel.

Source: **Seasonally adjusted transportation data**–U.S. Department of Transportation, Bureau of Transportation Statistics, available at www.bts.gov as September 2023.

Major Trends

Moving Freight: January 2000–July 2023

Rail Freight Carloads (seasonally adjusted)
Carloads (millions)

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Truck Tonnage (seasonally adjusted index)
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Short tons (millions)

Notes: Graph scales are not comparable. Rail freight intermodal - Rail intermodal traffic includes shipping containers and truck trailers moved on rail cars. U.S. waterways freight - Includes tonnage carried on internal U.S. waterways.

Source: **Seasonally adjusted transportation data**–U.S. Department of Transportation, Bureau of Transportation Statistics, available at www.bts.gov as of September 2023.

1 INFRASTRUCTURE

The U.S. transportation system consists of a network of roads, bridges, airports, railroads, transit systems, ports, waterways, and pipelines connecting the Nation to the rest of the world.

1-1 Transportation Network Length
miles

Mode	2011	2021	2022
Highway			
Public roads	4,077,756	4,187,440	U
Public road lanes[a]	8,567,618	8,823,515	U
Pipeline			
Gas distribution	2,121,355	2,300,982	2,321,509
Gas transmission and gathering	324,336	318,650	412,731
Rail			
Class I freight railroad	95,514	91,651	U
Amtrak	21,225	21,124	U
Transit			
Commuter rail[b]	7,576	7,951	7,934
Heavy rail[b]	1,617	1,681	1,681
Light rail[b,c]	1,740	2,098	2,127
Water			
Navigable waterways[d]	25,000	25,000	25,000

[a]Measured in lane-miles. [b]Measured in directional route-miles. [c]Light Rail was revised beginning in 2011 and includes light rail, street car rail, and hybrid rail. [d]Estimated length of domestic waterways.

Key: U = data are not available.

Sources: **Highway, Pipeline, Rail, Transit, Water**–As cited in U.S. Department of Transportation, Bureau of Transportation Statistics, *National Transportation Statistics*, tables 1-1, 1-6, and 1-10, available at https://www.bts.gov/nts as of November 2023.

1-2 Transportation Facilities

number

Mode	2011	2021	2022
Air			
Certificated airports[a]	547	519	517
General aviation airports	19,235	19,542	19,452
Highway			
Bridges	605,103	619,622	620,669
Pipeline			
LNG facilities	128	168	173
Rail			
Amtrak stations	511	526	528
Transit rail			
Commuter rail stations	1,219	1,392	1,315
Heavy rail stations	1,041	1,055	1,055
Light rail stations[b]	895	1,346	1,414
Water			
Ports[c]	179	192	U
Cargo handling docks	8,197	8,276	U
Lock chambers	239	237	U

[a]Certificated airports serve air carrier operations with aircrafts seating more than nine passengers. [b]Light Rail was revised beginning in 2011 and includes light rail, street car rail, and hybrid rail. [c]Ports handling over 250,000 short tons.

Key: LNG = liquified natural gas; U = data are not available.

Sources: **Air, Highway, Rail**–As cited in U.S. Department of Transportation, Bureau of Transportation Statistics, *National Transportation Statistics*, tables 1-3, 1-7, and 1-28, available at https://www.bts.gov/nts as of November 2023. **Pipeline**–U.S. Department of Transportation, Pipeline and Hazardous Materials Administration, available at https://www.phmsa.dot.gov as of September 2023. **Transit**–U.S. Department of Transportation, National Transit Database, available at https://www.transit.dot.gov/ntd/ as of November 2023. **Water**–U.S. Army Corps of Engineers, Navigation Data Center, *Transportation Facts and Information*, available at http://www.navigationdatacenter.us/ as of November 2023.

1-3 Transportation Vehicles

number

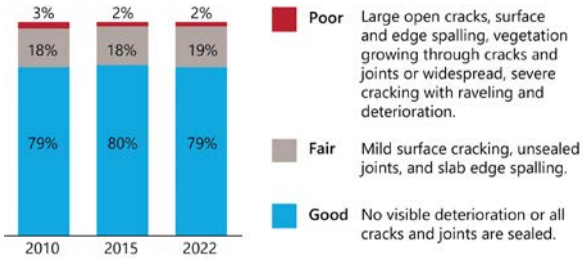| Mode	2011	2021	2022
Air			
Air carrier aircraft	7,168	5,815	6,852
General aviation aircraft	220,453	209,194	209,140
Highway			
Light-duty vehicle[a]	233,841,422	257,675,179	U
Truck	10,270,693	13,859,181	U
Motorcycle	8,437,502	9,881,414	U
Rail			
Class I freight locomotive	24,250	23,264	U
Class I freight car	380,699	243,087	U
Amtrak locomotive	287	395	U
Amtrak car	1,301	1,529	U
Transit rail			
Commuter rail[b]	6,971	7,545	7,645
Heavy rail[b]	14,942	10,942	10,880
Light rail[b, c]	2,284	2,859	2,892
Water			
Nonself-propelled vessel	32,454	34,364	U
Self-propelled vessel	10,702	10,392	U
Oceangoing vessel	214	183	178
Recreational boat	12,173,935	11,957,886	11,770,383

[a]Includes passenger cars, light trucks, vans, and sport utility vehicles. [b]Includes revenue vehicles available for maximum service. [c]Light rail was revised beginning in 2011.

Key: U = data are not available.

Source: As cited in U.S. Department of Transportation, Bureau of Transportation Statistics, *National Transportation Statistics*, table 1-11, available at https://www.bts.gov/nts as of November 2023.

1-4 Airport Runway Pavement Condition
percent of NPIAS runways

|			
Poor	Large open cracks, surface and edge spalling, vegetation growing through cracks and joints or widespread, severe cracking with raveling and deterioration.
Fair	Mild surface cracking, unsealed joints, and slab edge spalling.
Good	No visible deterioration or all cracks and joints are sealed.

Note: National Plan of Integrated Airport Systems (NPIAS) airports include commercial service airports, reliever airports, and selected general aviation airports.

Source: As cited in U.S. Department of Transportation, Bureau of Transportation Statistics, *National Transportation Statistics*, table 1-25, available at https://www.bts.gov/nts as of September 2023.

1-5 National Highway System Pavement Condition
percent of NHS facility miles

|	
Poor	IRI > 170
Fair	IRI 95 – 170
Good	IRI < 95
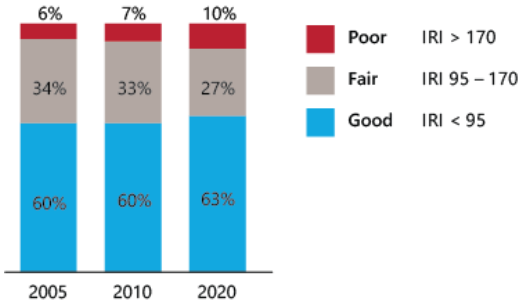
Notes: Pavement condition is measured by the International Roughness Index (IRI) which takes a longitudinal profile of pavement roughness based on one-way facility centerline miles. A lower IRI indicates smoother highway conditions and a higher IRI indicates rougher highway conditions.

Source: U.S. Department of Transportation, Federal Highway Administration, Highway Statistics, table HM-47, available at https://www.fhwa.dot.gov/policyinformation/statistics.cfm as of October 2023.

## 1-6 Condition of Highway Bridges: 2012–2023

deck area percentage of good, fair, and poor bridges
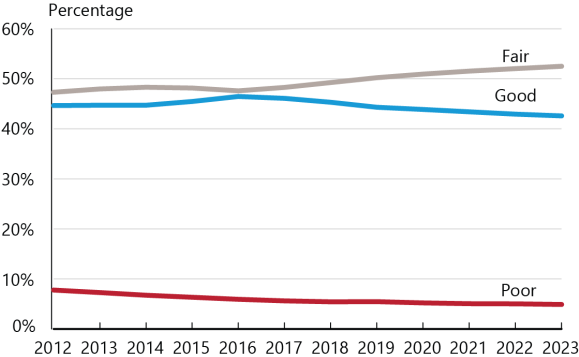
Note: The deck area calculation was changed as of 2018 in accordance with 23 CFR 490.409.

Source: U.S. Department of Transportation, Federal Highway Administration, National Bridge Inventory, available at https://www.fhwa.dot.gov/bridge/nbi.cfm as of September 2023.

1-7 Condition of Highway Bridges by State: 2023
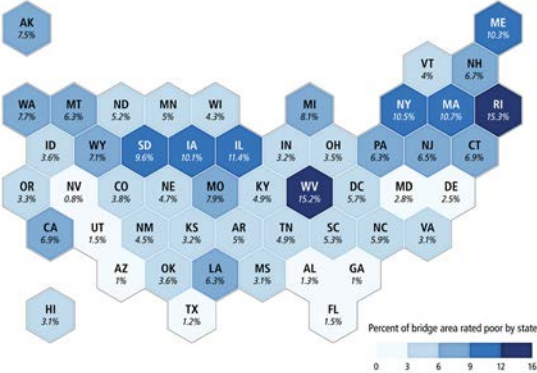
Source: U.S. Department of Transportation, Federal Highway Administration, National Bridge Inventory, available at https://www.fhwa.dot.gov/bridge/nbi.cfm as of September 2023.

2   MOVING PEOPLE

The U.S. transportation system makes personal mobility possible. Every day people use the transportation system to get to and from work, school, and shopping.

2-1   Vehicle-Miles Traveled
millions

Mode	2011	2021	2022
Air			
U.S. air carrier, domestic[a]	6,005	5,650	6,191
Highway			
Light-duty vehicle[b]	2,650,458	2,768,999	U
Motorcycle	18,542	19,642	U
Truck	267,594	327,026	U
Bus	13,807	16,744	U
Passenger rail			
Amtrak[c]	296	157	U
Commuter rail[c]	366	303	343
Heavy rail[c]	730	640	652
Light rail[c,d]	147	112	120

[a]Measured in revenue aircraft-miles. [b]Includes passenger cars, light trucks, vans, and sport utility vehicles. [c]Measured in passenger car-miles. [d]Light rail was revised beginning in 2011 and includes light rail, street car rail, and hybrid rail.

Key: U = data are not available.

Source: As cited in U.S. Department of Transportation, Bureau of Transportation Statistics, *National Transportation Statistics*, table 1-35, available at https://www.bts.gov/nts as of November 2023.

2-2   Highway Travel: 1970–2021

Trillions of vehicle-miles (unadjusted)
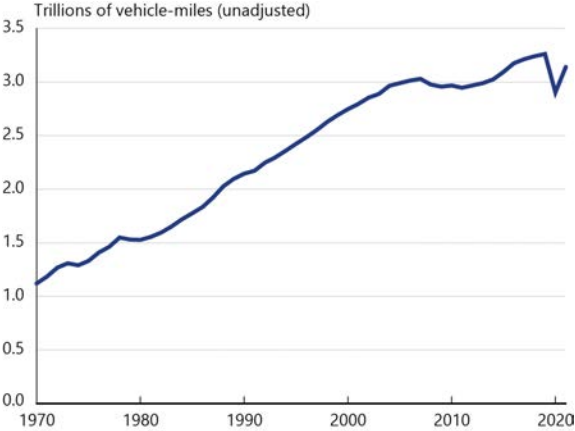
Note: Data for 2007 and later years may not be comparable to previous years due to changes in methodology.

Source: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics*, available at https://www.fhwa.dot.gov/policyinformation/statistics.cfm as of September 2023.

2-3   Passenger-Miles Traveled

millions

| Mode	2011	2021	2022
Air			
U.S. air carrier, domestic	565,614	573,404	708,960
Highway			
Light-duty vehicle[a]	4,436,788	4,639,370	U
Motorcycle	21,517	23,659	U
Truck	267,594	327,026	U
Bus	271,151	345,697	U
Passenger rail			
Amtrak[b]	6,568	2,860	4,888
Commuter rail	11,314	3,707	5,924
Heavy rail	17,317	7,405	9,802
Light rail[c]	2,363	1,041	1,474

[a]Includes passenger cars, light trucks, vans, and sport utility vehicles.
[b]Measured in revenue passenger-miles. [c]Light rail was revised beginning in 2011 and includes light rail, street car rail, and hybrid rail.

Key: U = data are not available.

Source: As cited in U.S. Department of Transportation, Bureau of Transportation Statistics, *National Transportation Statistics*, table 1-40, available at https://www.bts.gov/nts as of November 2023.

2-4   Transit Ridership: 1970–2022

Billions of unlinked passenger trips (unadjusted)
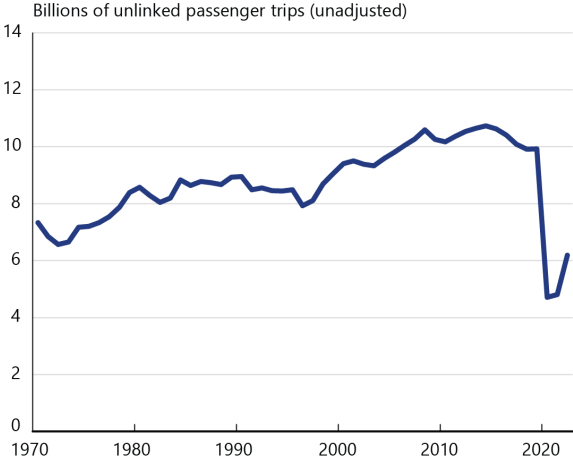
Note: Includes bus, commuter rail, demand response, heavy rail, light rail, trolley bus, ferry boat, aerial tramway, automated guideway, cable car, inclined plane, monorail, and other.

Sources: **1970–1989**: American Public Transportation Association, *Public Transportation Fact Book*, Appendix, available at https://www.apta.com/Pages/default.aspx/ as of March 2020. **1990-2022**: American Public Transportation Association, *Ridership Report*, available at https://www.apta.com/research-technical-resources/transit-statistics/ridership-report/ as of September 2023.

2-5   Daily Passenger Travel

|	2001	2009	2017[a]
Travel per person			
Daily person-trips	4.1	3.8	3.4
Daily person-miles	36.9	36.1	36.1
Travel per driver			
Daily vehicle-trips	3.4	3.0	2.7
Daily vehicle-miles of travel	32.7	29.0	25.8
Average commute			
Length in miles	12.1	11.8	11.5
Travel time in minutes	23.3	23.9	26.6
Percent of work trips by usual mode			
Private vehicles	90.8	89.4	87.5
Public transit [b]	5.1	5.1	6.9
Walk	2.8	2.8	2.9
Other [c]	1.3	2.7	2.7

[a]The *2017 National Household Travel Survey* includes a different methodology compared to previous years, such as an address-based sample including more urban and cell phone only households. [b]Public transit includes local bus, commuter bus, commuter train, subway, trolley, and streetcar. [c]Other includes travel modes not specifically cited, such as motorcycle, taxi, bike, truck, and other.

Note: The usual mode is defined as the means of transportation usually used to go to work in the week prior to the travel day.

Source: U.S. Department of Transportation, Federal Highway Administration, *2017 National Household Travel Survey*, Summary of Travel Trends, available at https://nhts.ornl.gov/ as of September 2018.

## 2-6 Commute Mode Share: 2022

percent of workers age 16 and older
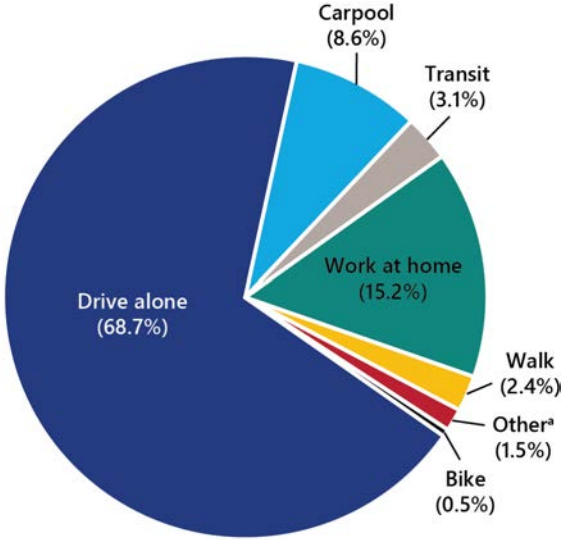
ª Includes motorcycle, taxi, and other means.

Notes: Percents may not add to 100 due to rounding. The *American Community Survey* asks for the mode usually used by the respondent to get to work. For more than one mode of transportation, respondents select the mode used for most of the distance traveled.

Source: As cited in U.S. Department of Transportation, Bureau of Transportation Statistics, *National Transportation Statistics*, table 1-41, available at www.bts.gov as of September 2023.

2-7 Amtrak Ridership: FY2000–FY2022

Millions of passengers (unadjusted)
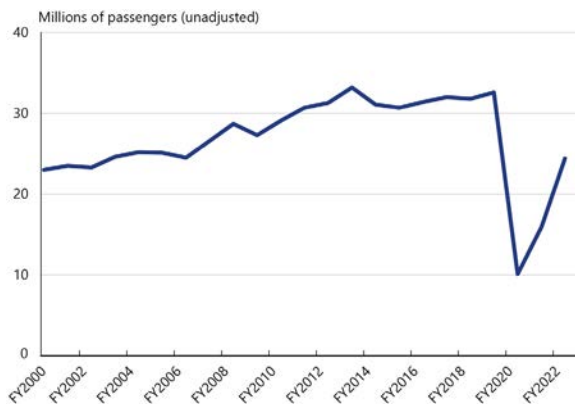
Note: Amtrak's fiscal year is October of previous year to September of current year.
Source: U.S. Department of Transportation, Federal Railroad Administration, available at http://safetydata.fra.dot.gov/officeofsafety/default.aspx/ as of September 2023.

2-8 Top 10 Amtrak Stations: FY2022
by passengers

Rank	Station	FY '21–FY '22 change		Millions of passengers
1	New York Penn Station, NY	▲	97.2%	8.0
2	Washington, DC	▲	106.5%	3.6
3	Philadelphia Gray 30th St., PA	▲	103.9%	3.1
4	Chicago, IL	▲	76.5%	2.4
5	Boston South Station, MA	▲	79.1%	1.2
6	Los Angeles, CA	▲	99.1%	0.9
7	Baltimore, MD	▲	87.6%	0.8
8	Albany-Rensselaer, NY	▲	68.9%	0.6
9	New Haven Union Station, CT	▲	77.6%	0.6
10	Boston Back Bay Station, MA	▲	88.0%	0.6

Notes: Includes passenger boardings and alightings. Amtrak's fiscal year is October of previous year to September of current year.
Source: Amtrak, *National Fact Sheet and State Fact Sheet*, available at https://media.amtrak.com/fact-sheets/ as of September 2023.

2-9   U.S. Air Carrier Passenger Traffic: 2003–2022

Millions of enplaned passengers (unadjusted)
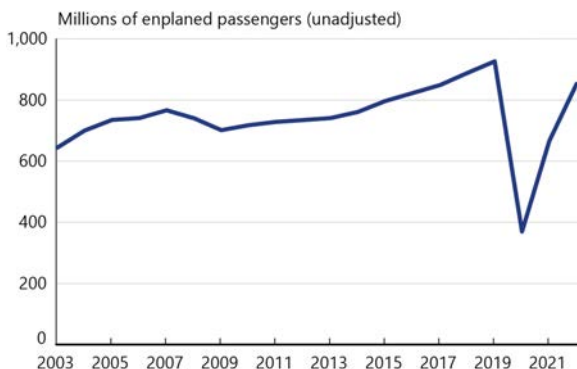
Note: Includes passenger enplanements on scheduled services only (domestic and international flights).

Source: U.S. Department of Transportation, Bureau of Transportation Statistics, Office of Airline Information, T-100 Market data, available at www.bts.gov as of September 2023.

2-10   Top 10 U.S. Airports: 2022
by enplaned passengers

Rank	Airport	'21-'22 change	Millions of passengers
1	Atlanta, GA	▲ 24%	45.4
2	Dallas/Fort Worth, TX	▲ 18%	35.3
3	Denver, CO	▲ 18%	33.8
4	Chicago O'Hare, IL	▲ 26%	33.1
5	Los Angeles, CA	▲ 37%	32.3
6	New York JFK, NY	▲ 76%	26.9
7	Las Vegas, NV	▲ 33%	25.4
8	Orlando, FL	▲ 25%	24.5
9	Miami, FL	▲ 37%	23.9
10	Charlotte, NC	▲ 11%	23.1

Note: Includes passenger enplanements on U.S. carrier scheduled domestic and international service and foreign carrier scheduled international service to and from the United States.

Source: As cited in U.S. Department of Transportation, Bureau of Transportation Statistics, *National Transportation Statistics*, table 1-44, available at https://www.bts.gov/nts as of September 2023.

2-11 Top 10 World Airports: 2022
by enplaned, deplaned, and in-transit passengers

Rank	Airport	'21-'22 change	Millions of passengers
1	Atlanta, USA	▲ 23.8%	93.7
2	Dallas/Fort Worth, USA	▲ 17.5%	73.4
3	Denver, USA	▲ 17.8%	69.3
4	Chicago O'Hare, USA	▲ 26.5%	68.3
5	Dubai, United Arab Emirates	▲ 127.0%	66.1
6	Los Angeles, USA	▲ 37.3%	65.9
7	Istanbul, Turkey	▲ 73.8%	64.3
8	London LHR, United Kingdom	▲ 217.7%	61.6
9	New Delhi, India	▲ 60.2%	59.5
10	Paris CDG, France	▲ 119.4%	57.5

Key: LHR = London Heathrow Airport; CDG = Charles de Gaulle Airport

2-12   Incoming Land Border Person Crossings: 1996–2022
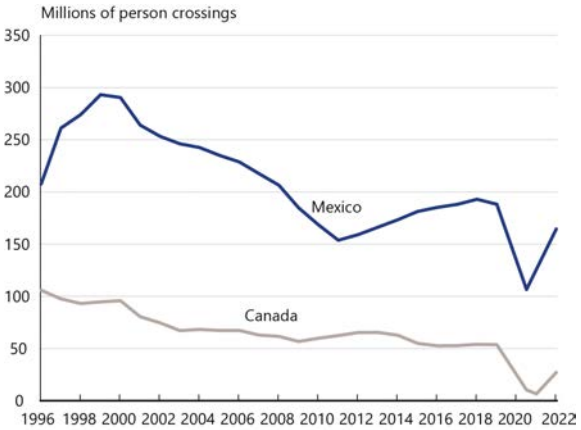
Millions of person crossings

Note: Excludes drivers and passengers in commercial trucks.

Source: U.S. Department of Transportation, Bureau of Transportation Statistics, *Border Crossing Entry Data*, available at https://www.bts.gov/content/border-crossingentry-data/ as of September 2023.

2-13   Top 5 Land Ports of Entry: 2022
by incoming person crossings

U.S.-Canada ports of entry

Rank	Port	'21-'22 change	Millions of person crossings
1	Buffalo-Niagara Falls, NY	▲ 299.1%	5.7
2	Detroit, MI	▲ 264.2%	4.1
3	Blaine, WA	▲ 377.8%	4.0
4	Champlain, NY	▲ 134.5%	1.6
5	Port Huron, MI	▲ 354.3%	1.4

U.S.-Mexico ports of entry

Rank	Port	'21-'22 change	Millions of person crossings
1	San Ysidro, CA	▲ 15.5%	31.6
2	El Paso, TX	▲ 34.8%	17.9
3	Otay Mesa, CA	▲ 26.8%	12.0
4	Laredo, TX	▲ 20.9%	11.3
5	Hidalgo, TX	▲ 25.1%	10.6

Note: Excludes drivers and passengers in commercial trucks.

Source: U.S. Department of Transportation, Bureau of Transportation Statistics, *Border Crossing Entry Data*, available at https://www.bts.gov/content/border-crossingentry-data/ as of September 2023.

2-14 Top 20 U.S. Gateways for Nonstop International Air Travel

enplaned passengers

Airport	2021	2022	% Change 2021–2022
New York (JFK), NY	12,837,605	26,436,095	105.9
Miami, FL	11,657,668	19,278,043	65.4
Los Angeles, CA	7,884,354	16,209,837	105.6
Newark, NJ	6,497,145	12,154,945	87.1
Chicago (O'Hare), IL	5,322,536	11,170,708	109.9
San Francisco, CA	3,307,669	9,768,851	195.3
Atlanta, GA	5,576,511	9,684,512	73.7
Dallas-Ft. Worth, TX	5,906,386	9,411,196	59.3
Houston (G. Bush), TX	6,509,607	9,312,102	43.1
Washington (Dulles), DC	3,297,574	7,162,960	117.2
Fort Lauderdale, FL	4,021,658	6,252,009	55.5
Boston, MA	2,121,449	5,934,143	179.7
Orlando, FL	1,911,039	5,341,069	179.5
Seattle-Tocoma, WA	1,560,235	4,253,618	172.6
Charlotte, NC	2,043,216	3,452,376	69.0
Denver, CO	1,872,306	3,280,838	75.2
Philadelphia, PA	1,024,876	3,065,063	199.1
Las Vegas, NV	764,157	2,555,105	234.4
Detroit, MI	973,467	2,162,156	122.1
Minneapolis-St. Paul, MN	739,101	2,118,757	186.7
Total, top 20 U.S. international airports	**85,828,559**	**169,004,383**	**96.9**
Top 20, percentage of total	**90.6%**	**89.8%**	**-0.008**
Total, all U.S. international airports	**94,710,245**	**188,161,320**	**98.7**

Source: U.S. Department of Transportation, Bureau of Transportation Statistics, Office of Airline Information, T-100 International Segment Data, special calculation, September 2023.

3   MOVING GOODS

The freight transportation network links natural resources, manufacturing facilities, labor markets, and customers across the Nation and with international trading partners.

3-1   Freight Shipments Within the U.S. by Mode

Value of shipments (billions of constant 2017 dollars)

Mode	2017	2022	2050
Truck	13,690	13,611	26,023
Rail	553	563	1,026
Water	293	253	439
Air and truck-air	654	655	1,345
Pipeline	946	1,057	1,279
Multiple modes[a]	2,658	2,595	6,050
Other[b]	45	26	92
Total	**18,839**	**18,760**	**36,254**

Weight of shipments (millions of tons)

Mode	2017	2022	2050
Truck	12,810	12,641	19,310
Rail	1,624	1,567	1,916
Water	918	784	1,240
Air and truck-air	6	8	13
Pipeline	3,451	3,901	5,102
Multiple modes[a]	689	624	1,190
Other[b]	311	86	133
Total	**19,809**	**19,611**	**28,904**

Ton-miles of shipments (billions of ton-miles)

Mode	2017	2022	2050
Truck	2,397	2,331	3,931
Rail	1,095	998	1,230
Water	448	372	538
Air and truck-air	7	10	14
Pipeline	883	1,053	1,357
Multiple modes[a]	581	551	1,022
Other[b]	13	8	18
Total	**5,428**	**5,323**	**8,110**

[a]Includes mail. [b]Includes other, unknown, and imported crude oil with no domestic mode.

Notes: Details may not add to totals due to rounding. Includes domestic trade and the domestic portion of imports and exports. 2050 data are forecasted data.

Source: U.S. Department of Transportation, Bureau of Transportation Statistics and Federal Highway Administration, *Freight Analysis Framework*, Version 5.4, available at www.bts.gov/faf as of October 2023.

3-2　U.S. Trade by Coasts and Borders: 2003–2021

Billions of 2009 dollars
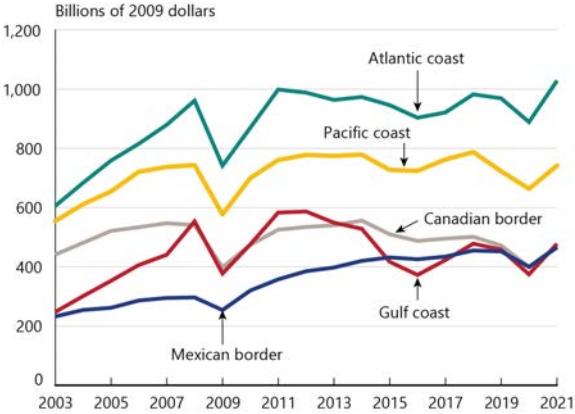
Note: Includes U.S. International merchandise trade only.

Sources: **Value**– U.S. Department of Commerce, Census Bureau, Foreign Trade Division, HS Port-Level Data (Washington, DC: annual issues) as of October 2022. **Implicit GDP Deflator**– Organization for Economic Co-operation and Development, GDP Implicit Price Deflator in United States [USAGDPDEFAISMEI], retrieved from FRED, Federal Reserve Bank of St. Louis; available at https://fred.stlouisfed.org/series/USAGDPDEFAISMEI, available at www.bea.gov as of October 2022.

3-3   U.S. Trade with Canada and Mexico by Mode: 2022

Percent of freight trade
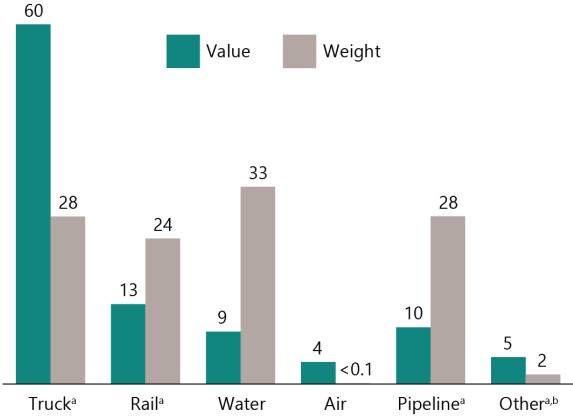
[a]Export weights for land modes are estimated by the Bureau of Transportation Statistics using value-to-weight ratios derived from import data. [b]Includes mail, other, unknown, and shipments through Foreign Trade Zones.

Note: Percents may not add to 100 due to rounding.

Source: U.S. Department of Transportation, Bureau of Transportation Statistics, North American Transborder Freight Data, special tabulation, available at https://data.bts.gov/stories/s/myhq-rm6q as of March 2023.

3-4 Incoming Truck Border Crossings: 1996–2022
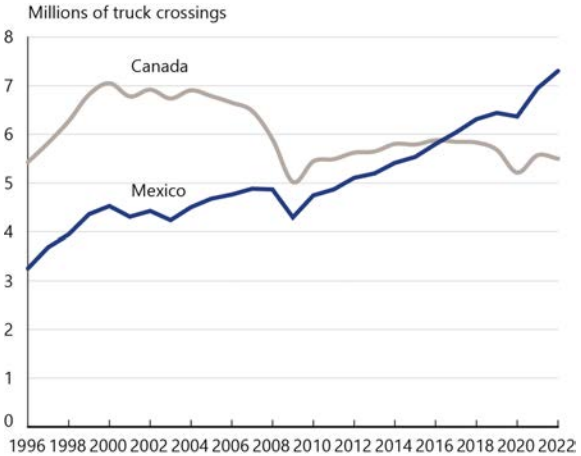
Millions of truck crossings
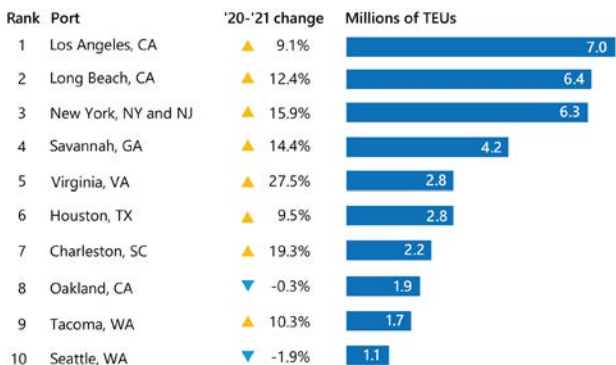

Source: U.S. Department of Transportation, Bureau of Transportation Statistics, *Border Crossing Entry Data*, available at https://data.transportation.gov/ as of March 2023.

3-5 Top 5 Truck Ports of Entry: 2022

by incoming truck crossings

U.S.-Canada ports of entry

Rank	Port	'21-'22 change	Millions of truck crossings
1	Detroit, MI	▲ 1.2%	1.4
2	Buffalo-Niagara Falls, NY	▼ -1.4%	0.9
3	Port Huron, MI	▲ 2.7%	0.9
4	Blaine, WA	▼ -5.3%	0.4
5	Champlain-Rouses Point, NY	▼ -6.6%	0.3

U.S.-Mexico ports of entry

Rank	Port	'21-'22 change	Millions of truck crossings
1	Laredo, TX	▲ 9.0%	2.8
2	Otay Mesa, CA	▲ 12.3%	1.1
3	Hidalgo, TX	▼ -2.0%	0.7
4	Ysleta, TX	▼ -2.8%	0.7
5	Calexico, CA	▲ 4.3%	0.5

Source: U.S. Department of Transportation, Bureau of Transportation Statistics, *Border Crossing Entry Data*, available at https://data.transportation.gov/ as of September 2023.

3-6 Top 10 U.S. Water Ports: 2021

by short tons

Rank	Port	'20-'21 change	Millions of short tons
1	Houston, TX	▼ -3.4%	266.5
2	South Louisiana, LA	▼ -0.2%	224.7
3	Corpus Christi, TX	▲ 9.1%	164.4
4	New York, NY and NJ	▲ 15.1%	142.3
5	Long Beach, CA	▲ 15.6%	91.5
6	New Orleans, LA	▲ 10.4%	89.5
7	Beaumont, TX	▲ 5.7%	74.6
8	Baton Rouge, LA	▼ -0.6%	71.2
9	Virginia, VA	▲ 11.1%	64.5
10	Los Angeles, CA	▲ 8.1%	64.3

by container TEUs, excluding foreign empty TEUs

Rank	Port	'20-'21 change	Millions of TEUs
1	Los Angeles, CA	▲ 9.1%	7.0
2	Long Beach, CA	▲ 12.4%	6.4
3	New York, NY and NJ	▲ 15.9%	6.3
4	Savannah, GA	▲ 14.4%	4.2
5	Virginia, VA	▲ 27.5%	2.8
6	Houston, TX	▲ 9.5%	2.8
7	Charleston, SC	▲ 19.3%	2.2
8	Oakland, CA	▼ -0.3%	1.9
9	Tacoma, WA	▲ 10.3%	1.7
10	Seattle, WA	▼ -1.9%	1.1

Key: TEU = twenty-foot equivalent unit.

Notes: Includes domestic and foreign waterborne trade. Excludes foreign empty TEUs.

Source: U.S. Army Corps of Engineers, Waterborne Commerce Statistics Center, *The U.S. Coastal and Inland Navigation System, 2021 Transportation Facts & Information* and *Waterborne container traffic.*

3-7 Top 10 World Container Ports: 2022

TEUs, including full and empty containers

Rank	Port	'21-'22 change	Millions of TEUs
1	Shanghai	▲ 0.6%	47.3
2	Singapore	▼ -0.5%	37.3
3	Ningbo-Zhoushan	▲ 7.3%	33.4
4	Shenzhen	▲ 4.4%	30.0
5	Qingdao	▲ 8.3%	25.7
6	Guangzhou	▲ 1.6%	24.9
7	Busan	▼ -2.8%	22.1
8	Tianjin	▲ 3.7%	21.0
9	Hong Kong	▼ -6.3%	16.7
10	Rotterdam	▼ -5.5%	14.5
	Top U.S. container ports		
16	Los Angeles	▼ -7.2%	9.9
17	New York & New Jersey	▲ 5.7%	9.5

Key: TEU = twenty-foot equivalent unit.

Source: Lloyd's List, One Hundred Ports 2023, available at https://lloydslist.maritimeintelligence.informa.com/one-hundred-container-ports-2023 as of September 2023.

3-8 Top 10 International Trade Gateways by Mode: 2022

by value of shipments

Rank	Port	Mode	Billions of dollars
1	Los Angeles, CA	W	446.8
2	Laredo, TX	L	408.0
3	Houston, TX	W	376.4
4	New Orleans, LA	W	338.2
5	Detroit, MI	L	287.7
6	Chicago, IL	A	286.6
7	New Orleans, LA	A	219.2
8	Los Angeles International Airport, CA	A	153.6
9	El Paso, TX	L	135.4
10	John F. Kennedy International Airport, NY	A	127.4

Key: A = airport; L = land port; W = water port.

Notes: Air gateways include a low level (generally less than 3% of the total value) of freight shipped through small user-fee airports located in the same area as the gateways listed. Air gateways not identified by airport name (e.g., Chicago, IL) include major airport(s) in the area and small regional airports.

Source: Bureau of Transportation Statistics, adapted from U.S. Census Bureau: Economic Indicators Division USA Trade Online. U.S. Import and Export Merchandise trade statistics as of November 2023.

4 SAFETY

Transportation safety is the top priority of the U.S. Department of Transportation.

4-1 Transportation Fatalities by Mode

Mode	2011	2021	2022
Air	**499**	**371**	**U**
U.S. air carrier	0	0	U
Commuter carrier	0	2	U
On-demand air taxi	41	25	U
General aviation	458	344	U
Highway	**32,479**	**42,939**	**U**
Passenger car occupants	12,014	13,529	U
Motorcyclists	4,630	5,932	U
Light-truck occupants	9,302	12,796	U
Heavy-truck occupants	640	1,008	U
Bus occupants	55	14	U
Pedestrians	4,457	7,388	U
Pedalcyclists	682	966	U
Other	699	1,306	U
Pipeline	**13**	**13**	**5**
Rail	**681**	**852**	**922**
Train Accidents	6	7	12
Highway-rail grade crossing[a]	246	232	273
Trespassers	399	581	619
Other	30	32	18
Transit[b]	**227**	**321**	**338**
Water	**904**	**715**	**686**
Freight vessel and Industrial/Other	50	44	17
Passenger vessel and Recreational boating	854	671	669

[a]Individual modes don't add up to totals due to double counting in highway, rail, and transit grade crossings. [b]Includes transit employee, contract worker, passenger, people waiting or leaving (revenue facility occupant), and other fatalities for all modes reported to the National Transit Database. Excludes commuter rail (reporting under FRA jurisdiction). Other transit fatalities are assumed to be counted under Highway or Rail categories.

Key: U = data are not available.

Source: As cited in U.S. Department of Transportation, Bureau of Transportation Statistics, *National Transportation Statistics*, table 2-1, available at www.bts.gov/nts as of October 2023.

4-2 Transportation Injuries by Mode

Mode	2011	2021	2022
Air	**364**	**247**	**U**
U.S. air carrier	21	14	U
Commuter carrier	0	7	U
On-demand air taxi	15	5	U
General aviation	328	221	U
Highway[a]	**2,227,209**	**2,497,657**	**U**
Passenger car occupants[a]	1,243,706	1,108,721	U
Motorcyclists[a]	81,706	82,686	U
Light-truck occupants[a]	732,764	983,820	U
Heavy-truck occupants[a]	22,936	42,164	U
Bus occupants[a]	13,807	11,663	U
Pedestrians[a]	69,036	60,577	U
Pedalcyclists[a]	48,134	41,615	U
Other[a]	15,120	166,411	U
Pipeline	**55**	**33**	**22**
Rail	**8,455**	**5,911**	**6,390**
Train Accidents	217	130	57
Highway-rail grade crossing[b]	1,048	684	813
Trespassers	366	536	550
Other	6,824	4,561	4,970
Transit[c]	**21,044**	**16,566**	**18,710**
Water	**3,823**	**3,054**	**2,576**
Freight vessel and Industrial/Other	390	251	211
Passenger vessel and Recreational boating	3,433	2,803	2,365

[a]2021 Crash Reporting Sampling System (CRSS) estimates for injuries are not comparable with 2011 and earlier NASS GES estimates because of different sampling designs. [b]Excludes injuries involving motor vehicles at public highway-rail grade crossings, which are assumed to be counted under Highway categories. [c]Includes transit employee, contract worker, passenger, people waiting or leaving (revenue facility occupant), and other injuries for all modes reported to the National Transit Database. Excludes commuter rail (reporting under FRA jurisdiction). Other transit injuries are assumed to be counted under Highway or Rail categories.

Key: U = data are not available.

Notes: Highway numbers are estimates rather than actual counts. The estimates are calculated from data obtained from a nationally representative sample of crashes. NHTSA redesigned the nationally representative sample of police-reported traffic crashes, which estimates the number of police-reported injury and property-damage-only crashes in the U.S. The new system, CRSS, replaced the NASS GES in 2016 and has a different sample design. Thus, 2021 persons injured estimates are not comparable to earlier estimates.

Source: As cited in U.S. Department of Transportation, Bureau of Transportation Statistics, *National Transportation Statistics*, table 2-2, available at www.bts.gov/nts as of October 2023.

4-3   Fatality Rates by Mode

Highway: 1990–2021
Fatalities per 100 million vehicle-miles
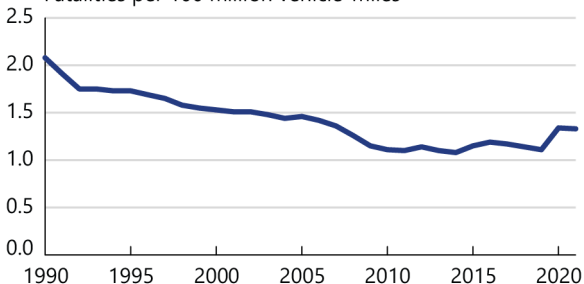
Passenger car and light-truck occupants: 1990–2021
Fatalities per 100 million vehicle-miles
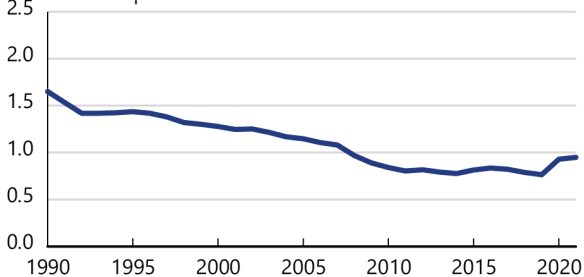
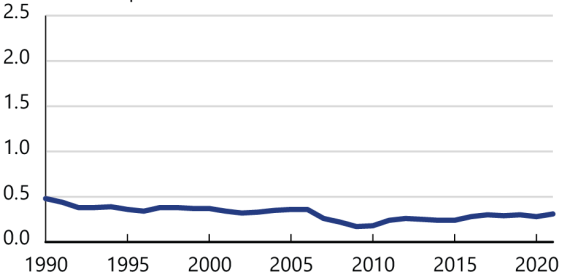### Highway nonoccupants: 1990–2021
Fatalities per 100,000 population
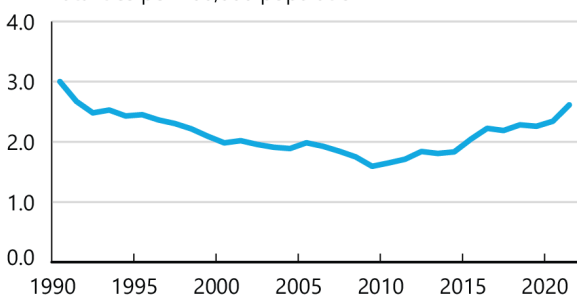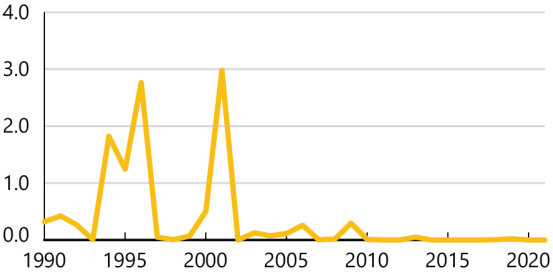
4-3 Fatality Rates by Mode (continued)

Large-truck occupants: 1990–2021
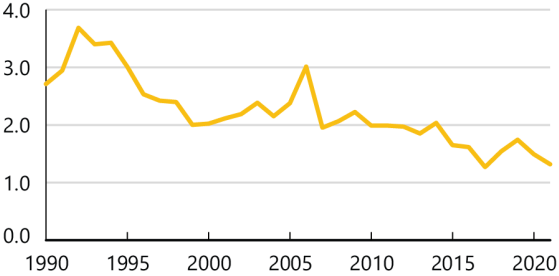
Fatalities per 100 million vehicle-miles

U.S. air carriers: 1990–2021
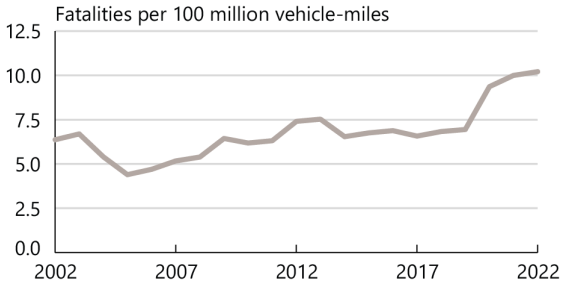
Fatalities per 100,000 flight hours

General aviation: 1990–2021

Fatalities per 100,000 flight hours

Transit: 2002–2022
Fatalities per 100 million vehicle-miles

Rail: 1990–2022
Fatalities per 100 million train-miles
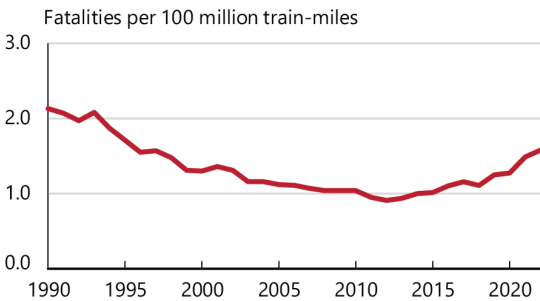
Recreational boating: 1990–2022
Fatalities per 100,000 registered boats
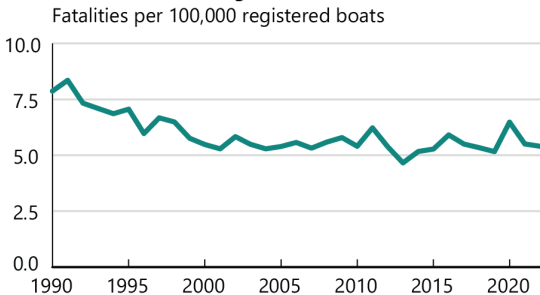
Note: Graphs with same color trend lines have identical scales.

Sources: **Highway, Passenger car and light-truck occupants, Highway-nonoccupants, Large-truck occupants, U.S. air carriers, General aviation, and Recreational boating** - As cited in or calculated from U.S. Department of Transportation, Bureau of Transportation Statistics, *National Transportation Statistics*, tables 2-9, 2-14, 2-17, 2-19, 2-21, 2-23, 2-47, and 3-10 available at www.bts.gov/nts as of October 2023. **Transit**—U.S. Department of Transportation, Federal Transit Administration, *NTD Safety & Security Time Series Data*, available at https://www.transit.dot.gov/ntd as of October 2023. **Rail**—U.S. Department of Transportation, Federal Railroad Administration, table 1.12, available at https://safetydata.fra.dot.gov/ as of October 2023.

4-4 Alcohol-Impaired Driving Fatalities: 1990–2021
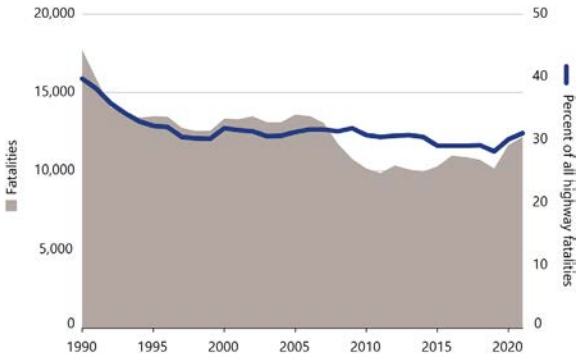
Note: Includes fatalities occurring in any crash involving a driver with a blood alcohol concentration (BAC) of 0.08 grams per deciliter or higher.

Source: U.S. Department of Transportation, National Highway Traffic Safety Administration, *Traffic Safety Facts: 2021 Fatal Motor Vehicle Crashes: Overview* as of October 2023, available at https://cdan.dot.gov/tsftables/tsfar.htm

4-5 Pedestrian and Bicyclist Fatalities: 1990–2021
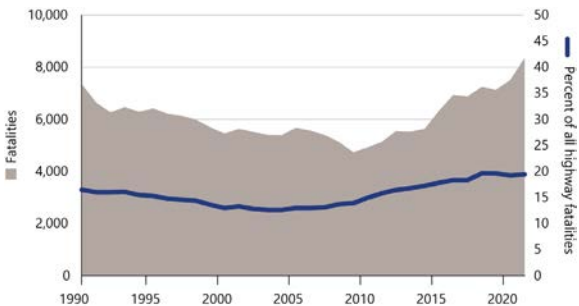
Note: Includes pedestrians and riders of nonmotorized bicycles and other pedal-powered vehicles.

Source: As cited in U.S. Department of Transportation, Bureau of Transportation Statistics, *National Transportation Statistics*, table 2-1, available at www.bts.gov/nts as of October 2023.

4-6 Distracted Driving Fatalities and Injuries: 2005–2021
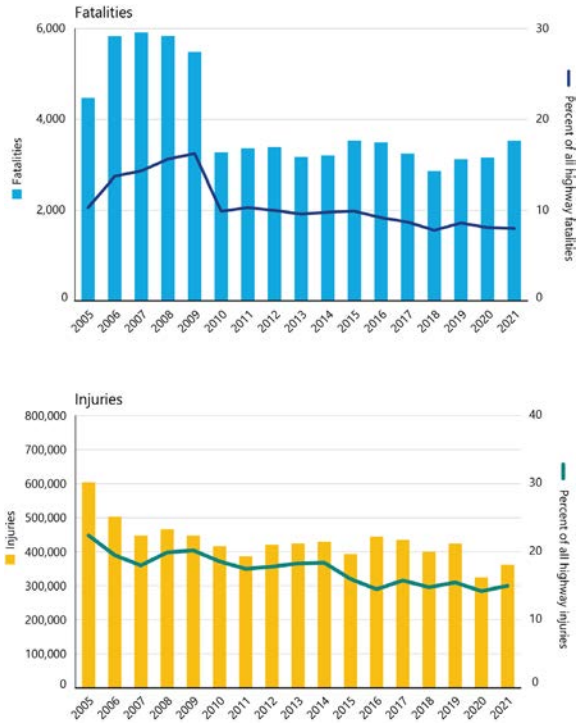
Note: Distracted driving involves any activity that could divert a person's attention away from the primary task of driving, such as texting, using a cell phone, eating and drinking, grooming, using a navigation system, adjusting a radio, etc.

Sources: **Fatalities**–U.S. Department of Transportation, National Center for Statistics and Analysis, *Fatality and Injury Reporting System Tool* (FIRST), available at https://cdan.dot.gov/; **Injuries**–U.S. Department of Transportation, National Highway Traffic Safety Administration, Traffic Safety Facts, *Research Note, Distracted Driving 2020*, available at https://crashstats.nhtsa.dot.gov; as of October 2023.

5   PERFORMANCE

The physical capacity of the U.S. transportation
system has not kept pace with growth in travel
and commerce. The resulting congestion and delays
have significant impacts on passengers and freight
shippers.

5-1   Road Congestion: 1985–2020

Annual hours of delay per car commuter
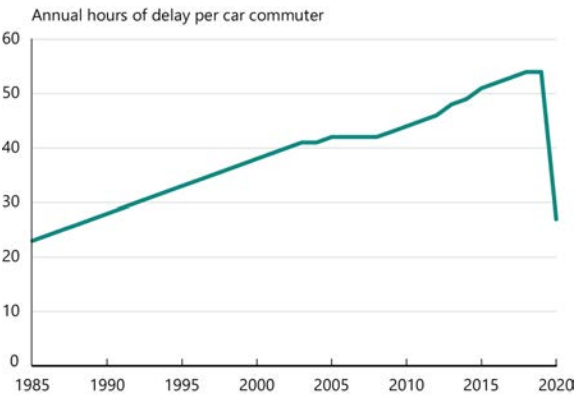
Notes: **Annual hours of delay per car commuter**–The extra time spent during the
year traveling at congested speeds rather than free-flow speeds by private vehicle
drivers and passengers who typically travel in the peak periods.

The methodology to calculate congestion performance measures was updated
to reflect more comprehensive data collection using INRIX data for each of the
494 U.S. urban areas. The congestion estimates for all study years are recalculated
every time the methodology is altered to provide a consistent data trend. For a
detailed explanation of the updated methodology, see the Urban Mobility Report
at http://mobility.tamu.edu/ums/report/.

Source: Texas A&M Transportation Institute, *Urban Mobility Report*, available at
https://mobility.tamu.edu/umr/report/ as of October 2023.

5-2 Top 10 Metropolitan Area Congestion Rankings: 2021

by calendar year, average minutes of congestion

Rank	Urban area	Minutes of delay
1	Los Angeles, CA	388
2	New York, NY	357
3	Washington, DC	355
4	Seattle, WA	353
5	Portland, OR	342
6	Houston, TX	284
7	Denver, CO	281
8	San Francisco, CA	273
9	New Orleans, LA	268
10	Chicago, IL	262
	Average of 52 MSAs	316

Key: MSA = Metropolitan Statistical Area

Notes: **Minutes of Congestion**–the amount of time when freeways operate less than 90 percent of free-flow freeway speeds. Calculated by calendar year for an average duration of daily congestion.

Source: U.S. Department of Transportation, Federal Highway Administration, *Urban Congestion Report*, personal communication, as of October 2023.

5-3 U.S. Airline On-time Performance: 1995–2022
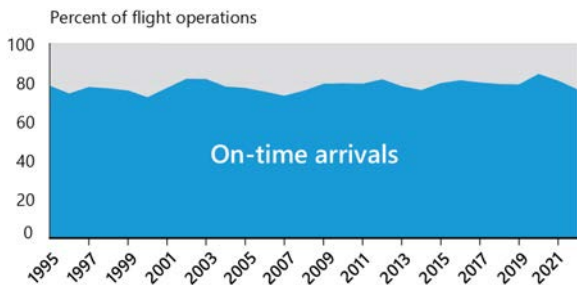
Percent of flight operations

Note: Flights arriving at the gate within 15 minutes of scheduled arrival time are on time.

Source: U.S. Department of Transportation, Bureau of Transportation Statistics, *Airline On-Time Performance*, available at transtats.bts.gov as of October 2023.

5-4   U.S. Major Airport Delays by Cause: 2022

percent of delayed time

- Air carrier delay (38.3%)
- Security delay (0.6%)
- NAS delay (8.4%)
- Extreme weather[a] (52.8%)
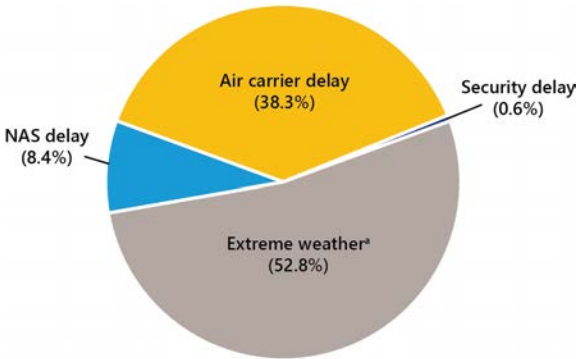
[a]Includes weather events that prevent flying. Other weather delays that slow operations are included under other categories. [b]Delay resulting from a previous flight with the same aircraft arriving late.

Key: NAS = Delays attributable to the national aviation system (NAS) that refer to a broad set of conditions, such as non-extreme weather, airport operations, heavy traffic volume, and air traffic control.

Note: Percents may not add to 100 due to rounding.

Source: U.S. Department of Transportation, Bureau of Transportation Statistics, *Aviation Facts and Figures*, https://data.bts.gov/stories/s/Aviation-Facts-and-Figures/2ub2-svfq, as of October 2023.

5-5   U.S. Major Airport Performance Rankings: 2022

by percent of on-time arrivals

	Airport	On-time arrivals
Top 5	Atlanta, GA (ATL)	84.3
	Salt Lake City, UT (SLC)	82.4
	Minneapolis/St. Paul, MN (MSP)	81.9
	Detroit, MI (DTW)	81.8
	San Francisco, CA (SFO)	81.2
	All major U.S. airports	76.6
Bottom 5	New York, NY (LGA)	71.7
	Tampa, FL (TPA)	71.4
	Fort Lauderdale, FL (FLL)	70.9
	Orlando, FL (MCO)	68.5
	Newark, NJ (EWR)	68.3

Note: Flights arriving at the gate within 15 minutes of scheduled arrival time are on time.

Source: U.S. Department of Transportation, Bureau of Transportation Statistics, *Airline On-Time Performance*, available at transtats.bts.gov as of October 2023.

5-6 Amtrak On-time Performance: FY1990–FY2022

Percent of train arrivals
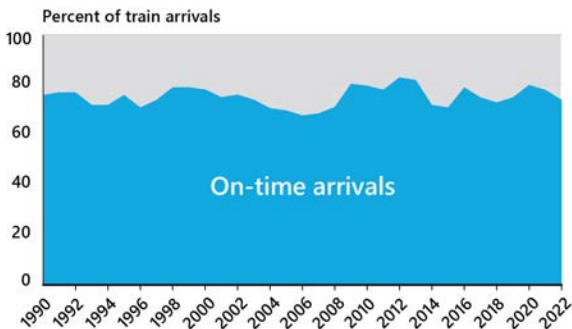
Note: On-time performance is a percentage measure of train performance. A train is considered on-time if it arrives at the final destination, or end-point, within an allowed number of minutes, or tolerance, of its scheduled arrival time. Trains are allowed a certain tolerance at the end-point based on the number of miles traveled.

Trip length	Train arrives at endpoint within
0-250 miles	10 minutes
251-350 miles	15 minutes
351-450 miles	20 minutes
451-550 miles	25 minutes
>551 miles	30 minutes

Source: As cited in U.S. Department of Transportation, Bureau of Transportation Statistics, *National Transportation Statistics*, table 1-73, available at transtats.bts.gov/ as of October 2023.

5-7 Amtrak Delays by Cause: FY2022
percent of delayed time

Pie chart:
- Amtrak (22.7%)
- Host railroad (59.6%)
- Other (17.7%)
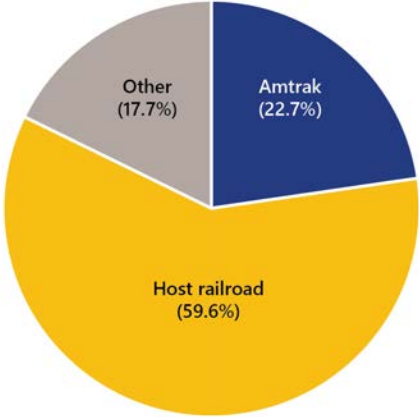
Note: **Other**–delays not attributable to Amtrak or other host railroads, such as customs and immigration, law enforcement action, weather, or waiting for scheduled departure time.

Source: As cited in U.S. Department of Transportation, Bureau of Transportation Statistics, *National Transportation Statistics*, table 1-73, available at www.bts.gov/nts as of October 2023.

6   ECONOMY

Transportation is a major sector of the U.S. economy. The transportation system moves people and goods, employs millions of workers, and consumes resources and services provided by other sectors.

6-1   U.S. GDP by Spending Category: 2021
percent of GDP

Education (6.2%)
Transportation (8.4%)
Food (9.9%)
Healthcare (16.3%)
Housing (20.2%)
Other[a] (39.1%)
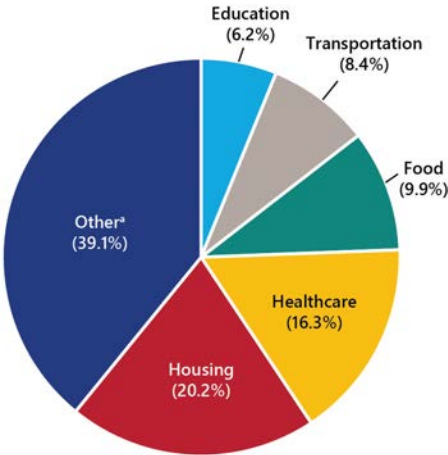
[a]Includes all other categories (e.g., entertainment, personal care products and services, and payments to pension plans).

Key: GDP = Gross Domestic Product

Note: Percents may not add to 100 due to rounding.

Source: As cited in U.S. Department of Transportation, Bureau of Transportation Statistics, *National Transportation Statistics*, table 3-9, available at www.bts.gov/nts as of October 2023.

6-2   U.S. Transportation Spending: 1995–2021
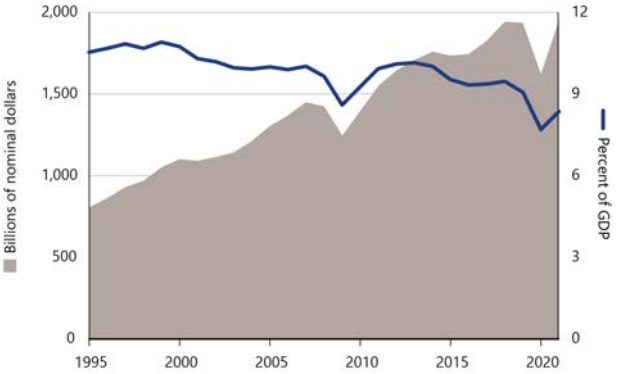
Key: GDP = gross domestic product

Source: As cited in U.S. Department of Transportation, Bureau of Transportation Statistics, *National Transportation Statistics*, table 3-9, available at www.bts.gov/nts as of October 2023.

6-3 Transportation-Related Final Demand

billions of chained 2017 dollars

Category	2012	2022
Personal consumption of transportation	**1,099**	**1,423**
Motor vehicles and parts	394	573
Motor vehicle fuels, lubricants, and fluids	275	294
Transportation services	357	469
Gross private domestic investment	**244**	**242**
Transportation structures	12	14
Transportation equipment	232	228
Government transportation-related purchases	**305**	**U**
Federal purchases	41	U
State and local purchases	246	U
Defense-related purchases	19	14
Exports (+)	**338**	**407**
Imports (-)	**429**	**541**
Total transportation-related GDP	**1,580**	**U**
U.S. GDP	**17,443**	**21,822**

Key: GDP = gross domestic product; U = data are not available.

Notes: Data may not add to totals due to rounding. Transportation-related final demand measures the size of transportation functions in relation to the Gross Domestic Product (GDP). It includes the transportation portion of the four components of the GDP: personal consumption, gross private domestic investment, government purchases, and net exports of goods and services.

Source: As cited in U.S. Department of Transportation, Bureau of Transportation Statistics, *National Transportation Statistics*, table 3-4, available at www.bts.gov/nts as of October 2023.

6-4 Household Expenses by Category: 2022

U.S. dollars
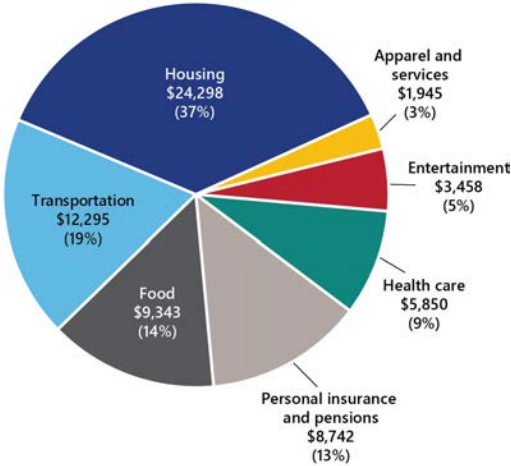
- Housing $24,298 (37%)
- Apparel and services $1,945 (3%)
- Entertainment $3,458 (5%)
- Health care $5,850 (9%)
- Personal insurance and pensions $8,742 (13%)
- Food $9,343 (14%)
- Transportation $12,295 (19%)

Source: U.S. Department of Labor, Bureau of Labor Statistics, *Consumer Expenditure Survey*, available at www.bls.gov/cex as of October 2023.
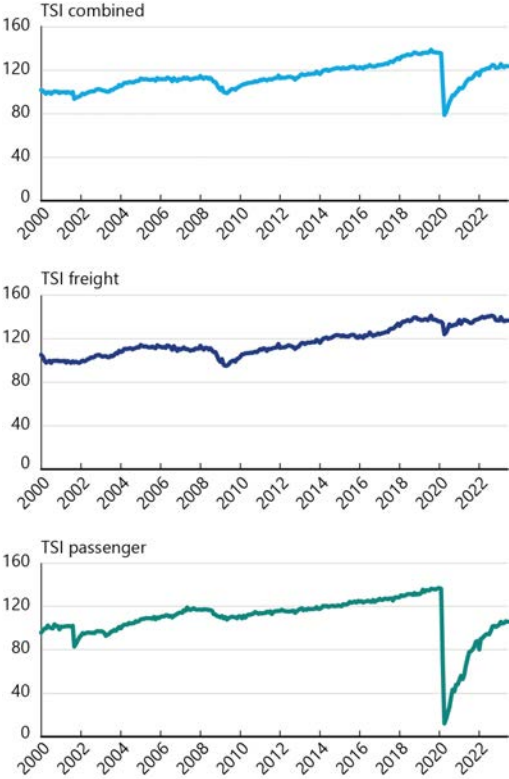
6-5 Household Transportation Expenses: 1985–2022
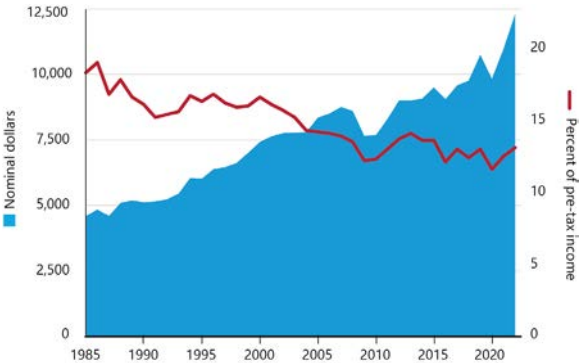
Source: U.S. Department of Labor, Bureau of Labor Statistics, *Consumer Expenditure Survey*, available at www.bls.gov/cex as of October 2023.

6-6 Transportation Services Index (TSI): 2000–2023

chain-type index: 2000 = 100, seasonally adjusted

TSI combined

TSI freight

TSI passenger

Notes: **TSI Combined**–The TSI, created by the U.S. Department of Transportation, Bureau of Transportation Statistics, is a measure of the month-to month changes in the output of services provided by the for-hire transportation industries. TSI data change monthly due to the use of concurrent seasonal analysis, which results in seasonal analysis factors changing as each month's data are added.

TSI Freight–Includes freight railroad services (including rail-based intermodal shipments such as containers on flat cars), inland waterway traffic, pipeline movements (including principally petroleum and petroleum products and natural gas), and air freight.

TSI Passenger–The passenger transportation services index consists of local mass transit, intercity passenger rail, and passenger air transportation.

Source: U.S. Department of Transportation, Bureau of Transportation Statistics, available at www.bts.gov as of October 2023.

6-7 Employment in Transportation-Related Industries

thousands

Category	2012	(P) 2022
For-hire transportation and warehousing	**4,404**	**6,651**
Air	459	503
Rail	195	147
Water	64	64
Truck	1,350	1,586
Transit and ground passenger	448	413
Pipeline	44	50
Scenic and sightseeing	28	31
Support activities	591	791
Couriers and messengers	534	1,129
Warehousing and storage	692	1,937
Transportation-related manufacturing[a]	**1,761**	**2,018**
Other transportation-related industries	**5,002**	**5,684**
Postal service	**611**	**603**
Government employment[b]	**890**	**847**
Total transportation-related labor force	**12,669**	**15,802**
U.S. labor force	**134,157**	**152,575**

[a]Includes transportation equipment; petroleum products; tires; rubber; plastics; search, detection, navigation, guidance, aeronautical, and nautical systems; and instrument manufacturing. [b]Fiscal year data for federal, state, and local personnel.

Key: P = preliminary.

Notes: Annual averages based on NAICS data. Details may not add to totals due to rounding. 2022 Government employment data is incomplete, only representative through March.

Source: All data as cited in U.S. Department of Transportation, Bureau of Transportation Statistics, *National Transportation Statistics*, table 3-23, available at www.bts.gov/nts as of October 2023, except 2022 *USDOT Government employment*: U.S. Department of Transportation, Office of the Secretary of Transportation, Workforce Statistics Archive, *Workforce Data by Fiscal Year*, Onboard Statistics, available at https://www.transportation.gov/assistant-secretary-administration/human-resources/workforce-statistics-archive as of November 2023.

## 6-8 Motor Vehicle Fuel Prices: 1999–2023
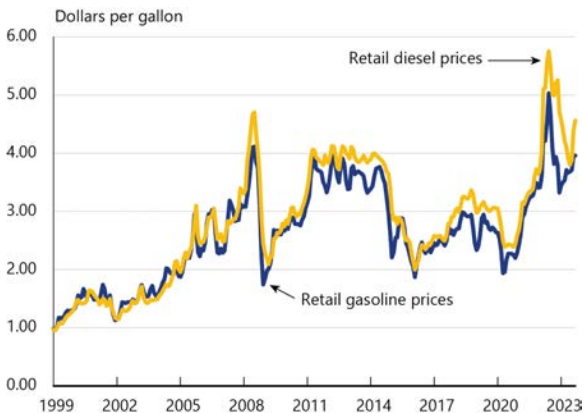
Notes: Retail Gasoline Prices include average nominal monthly prices of U.S. Regular All Formations retail gasoline. Diesel Retail Prices include average nominal monthly prices of U.S. No. 2 Diesel Retail Prices.

Source: U.S. Department of Energy, Energy Information Administration, available at https://www.eia.gov/ as of October 2023.

7 ENVIRONMENT

The U.S. transportation system is a major consumer of energy and has consequences for the environment.

7-1 Energy Consumption by Sector: 1960–2022
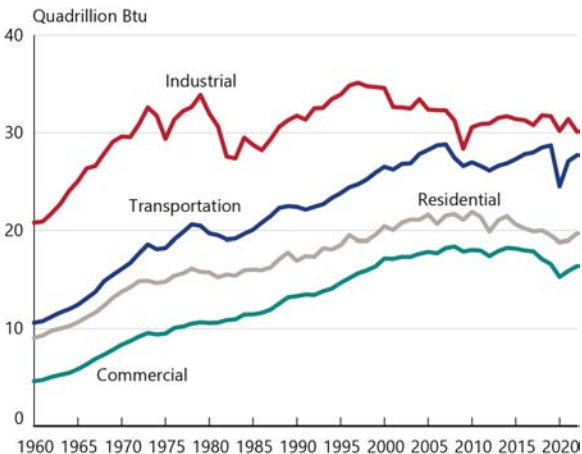
Quadrillion Btu

Industrial
Transportation
Residential
Commercial

Key: Btu = British thermal unit.

Note: Includes primary energy consumption, electricity retail sales, and electrical system energy losses.

Source: U.S. Department of Energy, U.S. Energy Information Administration, *Monthly Energy Review*, available at www.eia.gov/totalenergy/data/monthly, tables 2.1a, 2.1b as of October 2023.

7-2 Transportation Energy Consumption by Source: 2022

percent of Btu consumed
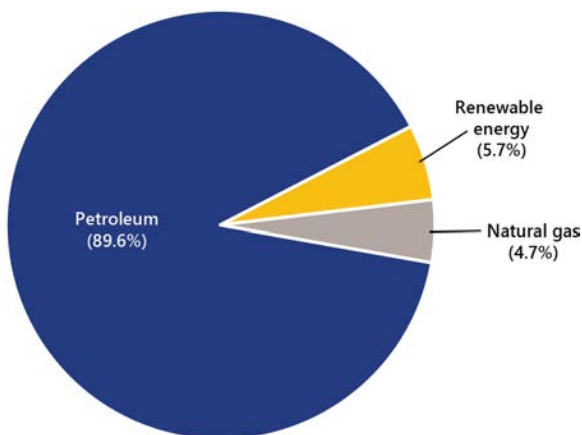
Petroleum (89.6%)

Renewable energy (5.7%)

Natural gas (4.7%)

Key: Btu = British thermal unit.

Note: Includes primary energy consumption, electricity retail sales, and electrical system energy losses.

Source: U.S. Department of Energy, U.S. Energy Information Administration, *Monthly Energy Review*, available at www.eia.gov/totalenergy/data/monthly, table 2.5, as of October 2023.

7-3 Petroleum Consumption by Sector: 1960–2022
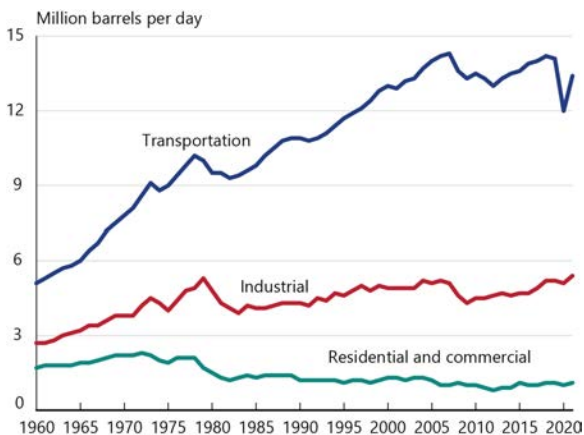
Source: U.S. Department of Energy, U.S. Energy Information Administration, *Monthly Energy Review*, available at www.eia.gov/totalenergy/data/monthly, tables 3.7-3.8, as of October 2023.

7-4 Greenhouse Gas Emissions by Sector: 1990–2021
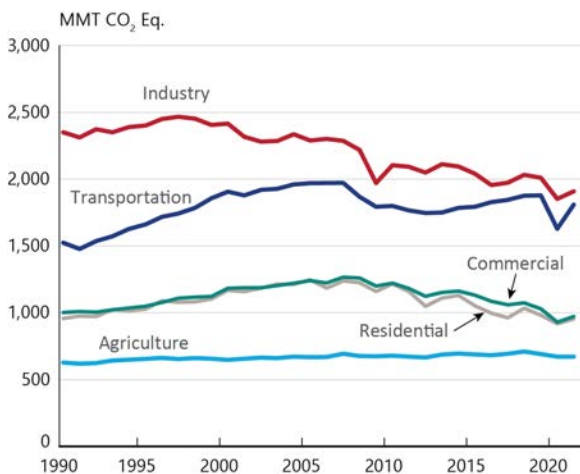
MMT CO_2 Eq.

Key: MMT CO_2 Eq. = million metric tons of carbon dioxide equivalent.

Note: Electric power sector emissions are distributed across sectors. Emissions include Carbon dioxide (CO_2), Hydrofluorocarbons (HFCs), Methane (CH_4), Nitrous oxide (N_2O), Perfluorocarbons (PFCs), and Sulfur Hexafluoride (SF_6).

Source: U.S. Environmental Protection Agency, *Inventory of U.S. Greenhouse Gas Emissions and Sinks: Report Tables*, https://cfpub.epa.gov/ghgdata/inventoryexplorer/#transportation/entiresector/allgas/category/all, as of October 2023.

7-5 Greenhouse Gas Emissions by Transportation Mode: 2021

Percent of MMT CO_2 Eq.

Highway (82.7%)
Air (8.6%)
Water (2.8%)
Rail (1.9%)
Pipeline (3.5%)
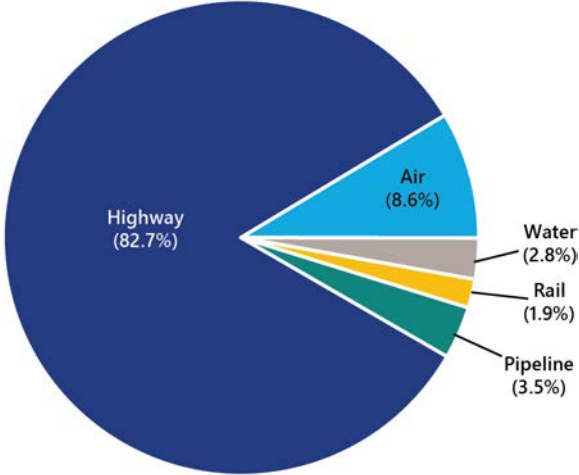
Key: MMT CO_2 Eq. = million metric tons of carbon dioxide equivalent.

Notes: Percents may not add to 100 due to rounding. Does not include international bunker fuels.
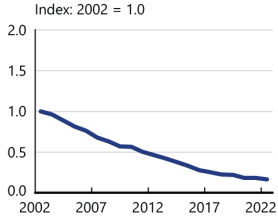
Source: U.S. Environmental Protection Agency, *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2021 Report Tables*, available at https://www.epa.gov/greenvehicles/fast-facts-transportation-greenhouse-gas-emissions, Fast Facts: U.S. Transportation Sector GHG Emissions (pdf), as of October 2023.

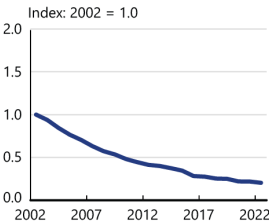## 7-6   Highway Vehicle Air Pollutant Emissions: 2002–2022
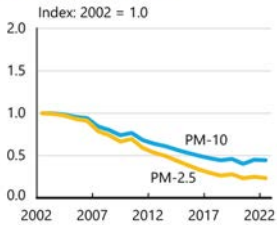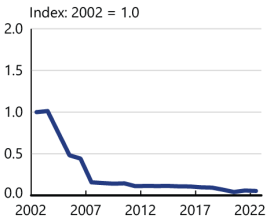
Carbon monoxide
Index: 2002 = 1.0
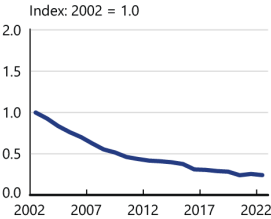
Nitrogen oxide
Index: 2002 = 1.0

Volatile organic compounds
Index: 2002 = 1.0

Particulate matter
Index: 2002 = 1.0

Sulfur dioxide
Index: 2002 = 1.0

Ammonia
Index: 2002 = 1.0
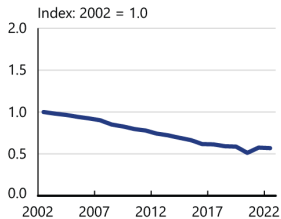
Key: PM-10 = airborne particulates of less than 10 microns; PM-2.5 = airborne particulates of less than 2.5 microns.

Notes: Indices are calculated using data on highway vehicle emissions only. Particulate matters include PM without condensibles.

Source: As cited in U.S. Department of Transportation, Bureau of Transportation Statistics, *National Transportation Statistics*, tables 4-45 through 4-50, available at www.bts.gov/nts as of September 2023.

## 7-7 Fuel Economy of Light-Duty Vehicles: 1990–2021
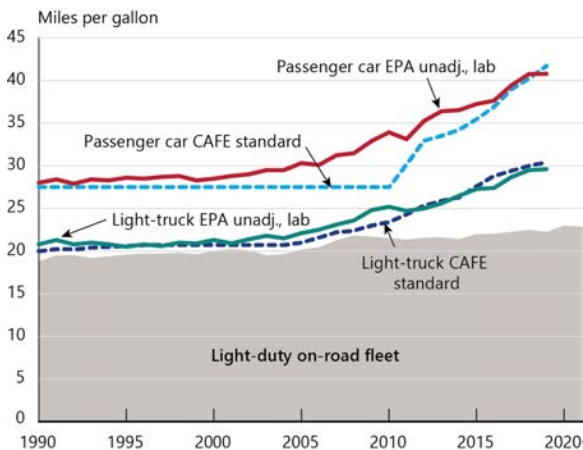
Key: CAFE = Corporate Average Fuel Economy; EPA = Environmental Protection Agency.

Notes: New fleet data and CAFE standards are for vehicle model years. On-road fleet data include passenger cars and light trucks and are estimated using average miles traveled per gallon of fuel consumed for each calendar year.

Source: As cited in U.S. Department of Transportation, Bureau of Transportation Statistics, *National Transportation Statistics*, table 4-23, available at www.bts.gov/nts as of October 2023.

7-8 Sales of Hybrid, Plug-in Hybrid, and Battery Electric Vehicles: 2000–2021

Number of personal vehicles
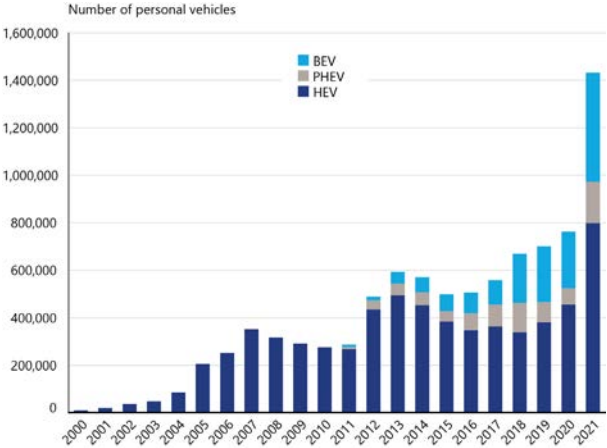
Key: BEV = Battery electric-only vehicles, HEV = Hybrid electric vehicle, PHEV = Plug-in hybrid electric vehicle

Source: Oak Ridge National Laboratory, *Transportation Energy Data Book*, Annual Issues, available at tedb.ornl.gov, table 6.2 as of October 2023.

Glossary

Air carrier: Certificated provider of scheduled and nonscheduled services.

Alternative fueled vehicle: A vehicle designed to operate on an alternative fuel (e.g., compressed natural gas, propane, electricity). The vehicle can be either a dedicated vehicle designed to operate exclusively on alternative fuel or a non-dedicated vehicle designed to operate on alternative fuel and/or traditional fuel.

Chained dollars: A method of adjusting to real dollar amounts to account for both changes in price-levels and the composition of output over time. This is completed by using a chain-weighted type index, or average weights in successive time periods, to get a comparable time series of data.

Class I railroad: Railroads earning adjusted annual operating revenues for three consecutive years of $250,000,000 or more, based on 1991 dollars with an adjustment factor applied to subsequent years.

Commuter rail: Urban/suburban passenger train service for short-distance travel between a central city and adjacent suburbs run on tracks of a traditional railroad system. Does not include heavy or light rail transit service.

Demand response transit: A nonfixed-route, nonfixed-schedule form of transportation that operates in response to calls from passengers or their agents to the transit operator or dispatcher.

Directional route-miles: The sum of the mileage in each direction over which transit vehicles travel while in revenue service.

Enplanements: Total number of revenue passengers boarding aircraft.

For-hire: Refers to a vehicle operated on behalf of or by a company that provides services to external customers for a fee. It is distinguished from private transportation services, in which a firm transports its own freight and does not offer its transportation services to other shippers.

General aviation: Civil aviation operations other than those air carriers holding a Certificate of Public Convenience and Necessity. Types of aircraft used in general aviation range from corporate, multi–engine jets piloted by a professional crew to amateur-built, single-engine, piston-driven, acrobatic planes.

Gross domestic product: The total value of goods and services produced by labor and property located in the United States. As long as the labor and property are located in the United States, the suppliers may be either U.S. residents or residents of foreign countries.

Heavy-rail transit: High-speed transit rail operated on rights-of-way that exclude all other vehicles and pedestrians.

Hybrid electric vehicle: Hybrid electric vehicles combine features of internal combustion engines and electric motors. Unlike 100% electric vehicles, hybrid vehicles do not need to be plugged into an external source of electricity to be recharged. Most hybrid vehicles operate on gasoline.

International Roughness Index (IRI): A scale for pavement roughness based on the simulated response of a generic motor vehicle to the roughness in a single wheel path of the road surface.

Lane-miles: One mile of one lane of road.

Light-duty vehicle: Includes passenger cars, light trucks, vans, pickup trucks, and sport/utility vehicles regardless of wheelbase.

Light-rail transit: Urban transit rail operated on a reserved right-of-way that may be crossed by roads used by motor vehicles and pedestrians.

Nominal dollars: A market value that does not take inflation into account and reflects prices and quantities that were current during the period being measured.

Nonself-propelled vessels: Includes dry cargo, tank barges, and railroad car floats that operate in U.S. ports and waterways.

Oceangoing vessels: Includes U.S. flag, privately owned merchant fleet of oceangoing, self-propelled, cargo-carrying vessels of 1,000 gross tons or greater.

Particulates: Carbon particles formed by partial oxidation and reduction of hydrocarbon fuel. Also included are trace quantities of metal oxides and nitrides originating from engine wear, component degradation, and inorganic fuel additives.

Passenger-mile: One passenger transported one mile. For example, 1 vehicle traveling 3 miles carrying 5 passengers generates 15 passenger-miles.

Personal communication: Involves contacting the source for data if not publicly available.

Plug-in hybrid electric vehicles: Plug-in hybrids use the electric battery as the primary energy source by relying on battery power for propulsion for a limited range (15–40 miles) before switching to internal combustion propulsion (thus reducing gasoline consumption).

Reliever airports: Airports designated by the Federal Aviation Administration to relieve congestion at commercial service airports and to provide improved general aviation access to the overall community.

Seasonally adjusted: Measures the real differences in data trends by adjusting for seasonal factors, such as the change in the number of days, weekends, holidays, or other seasonal activity in a month, such as vacation travel.

Self-propelled vessels: Includes dry cargo vessels, tankers, and offshore supply vessels, tugboats, pushboats, and passenger vessels, such as excursion/sightseeing boats, combination passenger and dry cargo vessels, and ferries.

Short ton: A unit of weight equal to 2,000 pounds.

Structurally deficient: Structural deficiencies are characterized by deteriorated conditions of significant bridge elements and reduced load-carrying capacity.

Real dollars: A method of adjusting nominal dollars to account for price level changes over time. It reflects purchasing power in a given period.

Tg CO_2 Eq.: Teragrams of carbon dioxide equivalent, a metric measure used to compare the emissions from various greenhouse gases based on their global warming potential.

Ton-mile: A unit of measure equal to movement of 1 ton over 1 mile.

Transportation Services Index: BTS' monthly measure indicating the relative change in the volume of services over time performed by the for-hire transportation sector. Change is shown relative to a base year, which is given a value of 100. The TSI covers the activities of for-hire freight carriers, for-hire passenger carriers, and a combination of the two. See www.bts.gov for a detailed explanation.

Transportation Services Index Combined: The combined Transportation Services Index (TSI) includes available data on freight traffic, as well as passenger travel, that have been weighted to yield a monthly measure of transportation services output.

Transportation Services Index Freight: The freight TSI measures the output of the for-hire freight transportation industry and consists of data from for-hire trucking, rail, inland waterways, pipelines, and air freight.

Transportation Services Index Passenger: The passenger TSI includes local transit, intercity passenger rail, and passenger air transportation, which have been weighted to yield a monthly measure of transportation services output.

Unlinked passenger trip: The number of passengers who board public transportation vehicles. Passengers are counted each time they board vehicles no matter how many vehicles they use to travel from their origin to their destination.

Vehicle-mile: One vehicle traveling one mile.

Statistics published in this *Pocket Guide to Transportation* come from many different sources. Some statistics are based on samples and are subject to sampling variability. Statistics may also be subject to omissions and errors in reporting, recording, and processing.

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