Pocket Guide to Transportation

2023

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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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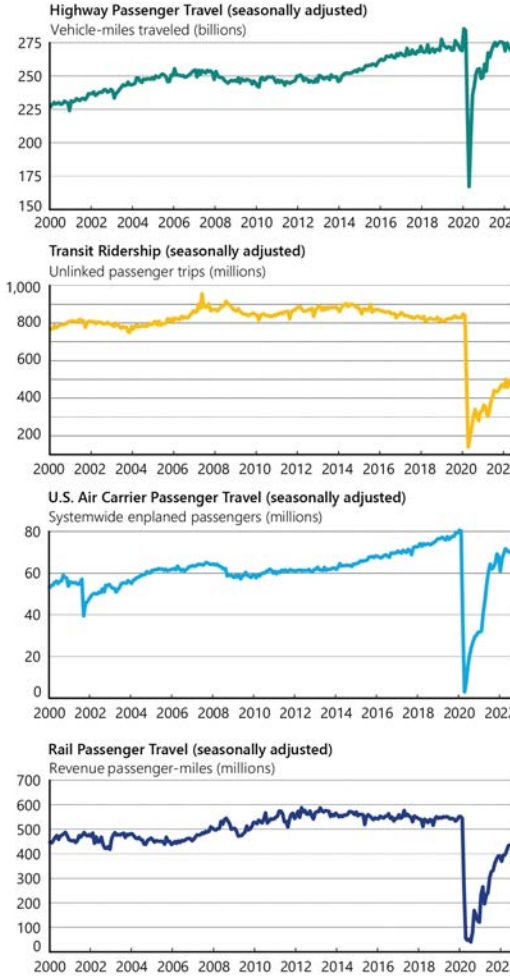
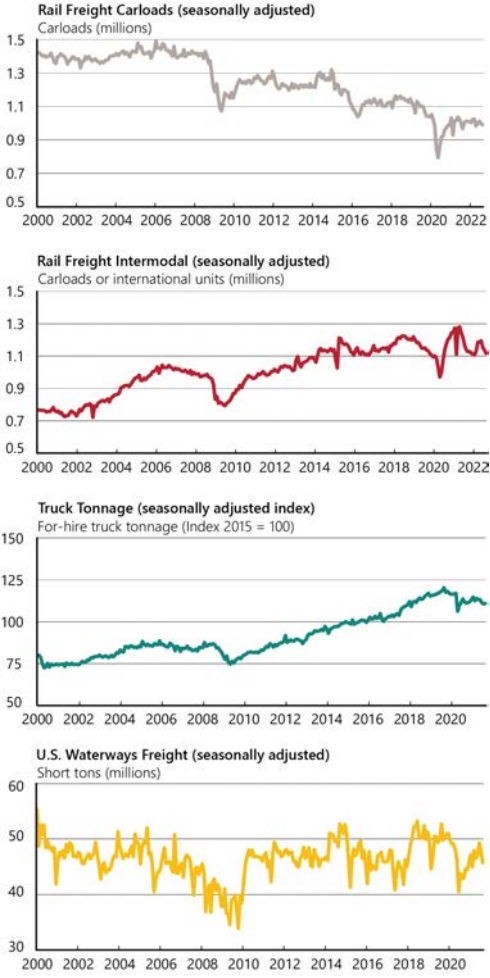


NOTES: Graph scales are not comparable. Seasonally-adjusted data measure the real differences in data trends by adjusting for seasonal factors, such as the change in the number of days, weekends, holidays, or other seasonal activity in a month such as vacation travel.

SOURCE: **Seasonally-adjusted transportation data**–U.S. Department of Transportation, Bureau of Transportation Statistics, available at www.bts.gov as of October 2022.

Major Trends

Moving Freight: January 2000–August 2022



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 October 2022.

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	2010	2020
Highway		
Public roads	4,067,077	4,172,562
Public road lanes[a]	8,582,261	8,790,746
Pipeline		
Gas distribution	1,229,946	1,328,885
Gas transmission and gathering	324,458	319,224
Rail		
Class I freight railroad	95,700	91,773
Amtrak	21,178	20,787
Transit		
Commuter rail[b]	7,630	7,930
Heavy rail[b]	1,617	1,663
Light rail[b,c]	1,497	2,096
Water		
Navigable waterways[d]	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.

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 October 2022.

1-2 Transportation Facilities

number

Mode	2010	2020
Air		
Certificated airports[a]	551	519
General aviation airports	19,251	19,395
Highway		
Bridges	604,493	618,456
Pipeline		
LNG facilities	122	165
Rail		
Amtrak stations	512	526
Transit rail		
Commuter rail stations	1,225	1,311
Heavy rail stations	1,041	1,057
Light rail stations[b]	848	1,287
Water		
Ports[c]	178	192
Cargo handling docks	8,060	8,334
Lock chambers	239	237

[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

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 August 2022. **Pipeline**–U.S. Department of Transportation, Pipeline and Hazardous Materials Administration, available at https://www.phmsa.dot.gov as of August 2022. **Transit**–U.S. Department of Transportation, National Transit Database, available at https://www.transit.dot.gov/ntd/ as of August 2022. **Water**–U.S. Army Corps of Engineers, Navigation Data Center, *Transportation Facts and Information*, available at http://www.navigationdatacenter.us/ as of August 2022.

1-3 Transportation Vehicles

number

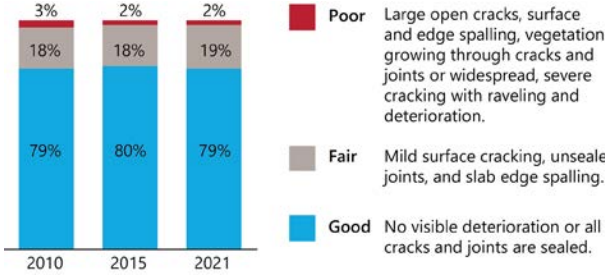
Mode	2010	2020
Air		
Air carrier aircraft	7,185	5,882
General aviation aircraft	223,370	204,980
Highway		
Light-duty vehicle[a]	230,444,440	253,121,228
Truck	10,770,054	13,479,382
Motorcycle	8,009,503	8,317,363
Rail		
Class I freight locomotive	23,893	23,544
Class I freight car	397,730	252,400
Amtrak locomotive	282	384
Amtrak car	1,274	1,313
Transit rail		
Commuter rail[b]	6,768	7,524
Heavy rail[b]	11,510	11,064
Light rail[b]	2,096	2,799
Water		
Nonself-propelled vessel	31,906	34,168
Self-propelled vessel	10,775	10,333
Oceangoing vessel	221	180
Recreational boat	12,438,926	11,838,188

[a]Includes passenger cars, light trucks, vans, and sport utility vehicles. [b]Includes revenue vehicles available for maximum service.

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 January 2022.

1-4 Airport Runway Pavement Condition

percent of NPIAS runways

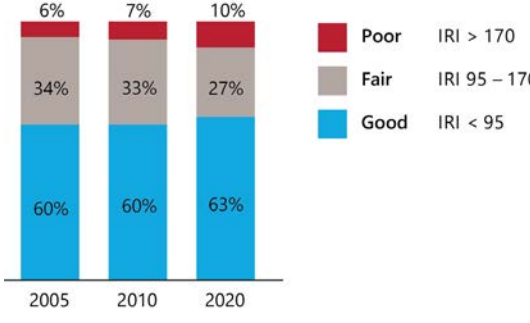


NOTE: National Plan of Integrated Airport Systems (NPIAS) airports include commercial service airports, reliever airports, and selected general aviation airports.

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 October 2022.

1-5 National Highway System Pavement Condition

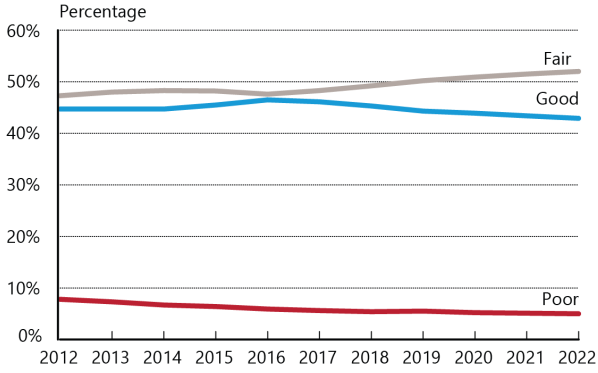
percent of NHS facility miles



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 November 2022.

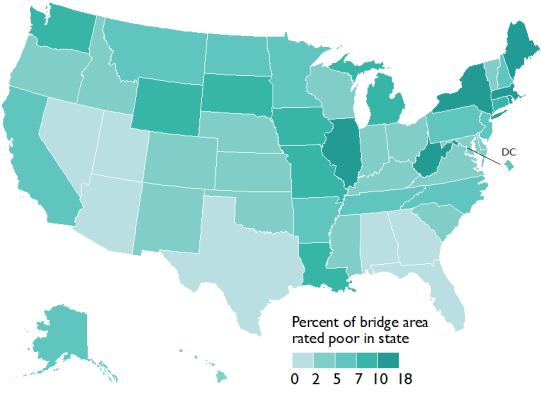
1-6 Bridge Condition by Deck Area: 2012–2022



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 October 2022.

1-7 Condition of Highway Bridges by State: 2022



SOURCE: U.S. Department of Transportation, Federal Highway Administration, National Bridge Inventory, available at https://www.fhwa.dot.gov/bridge/nbi.cfm as of October 2022.

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

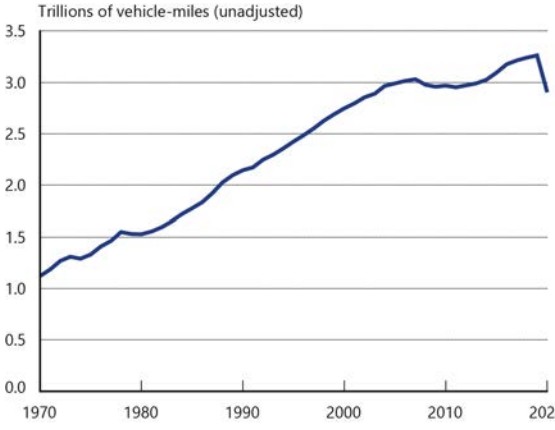
millions

Mode	2010	2020
Air		
U.S. air carrier, domestic[a]	5,976	4,214
Highway		
Light-duty vehicle[b]	2,648,456	2,568,745
Motorcycle	18,513	17,632
Truck	286,527	302,141
Bus	13,770	15,104
Passenger rail		
Amtrak[c]	295	185
Commuter rail[c]	342	314
Heavy rail[c]	666	663
Light rail [c,d]	93	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.

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 October 2022.

2-2 Highway Travel: 1970–2020



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 October 2022.

2-3 Passenger-Miles Traveled

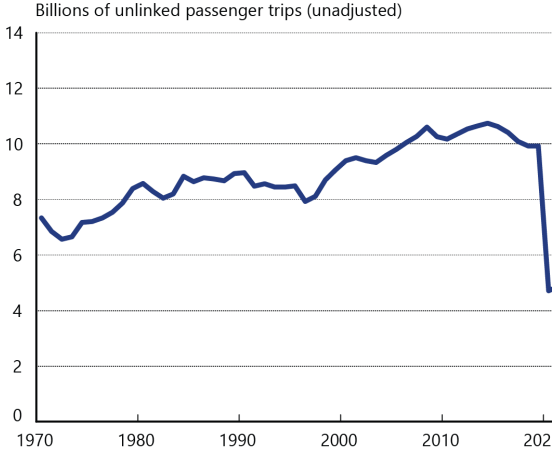
millions

Mode	2010	2020
Air		
U.S. air carrier, domestic	554,711	304,253
Highway		
Light-duty vehicle[a]	4,431,451	4,304,298
Motorcycle	21,483	21,237
Truck	286,527	302,141
Bus	270,344	306,843
Passenger rail		
Amtrak[b]	6,420	3,450
Commuter rail	10,774	6,021
Heavy rail	16,407	8,947
Light rail[c]	2,173	1,834

[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.

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 October 2022.

2-4 Transit Ridership: 1970–2021



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. **1990-2021**–American Public Transportation Association, *Ridership Report*, available at https://www.apta.com/research-technical-resources/transit-statistics/ridership-report/ as of October 2022.

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

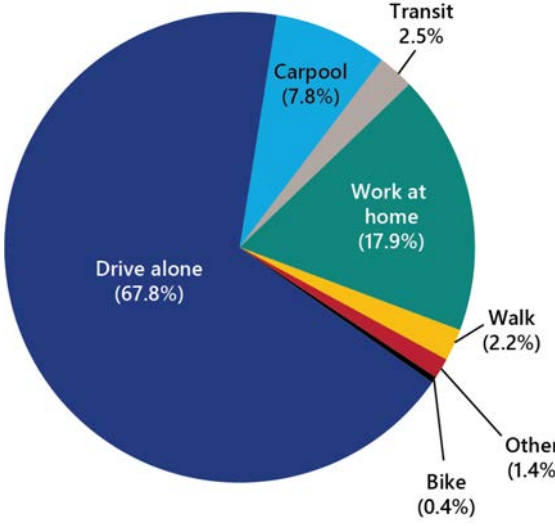
[a]The *2017 National Household Travel Survey* includes a different methodology compared to previous years, such as an address-based sample including more urban and cell phone only households. [b]Public transit includes local bus, commuter bus, commuter train, subway, trolley, and streetcar. [c]Other 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 October 2022.

2-6 Commute to Work Mode Share: 2021

percent of workers age 16 and older

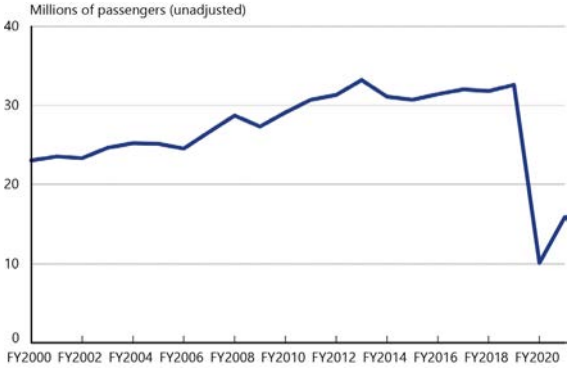


[a] Includes motorcycle, taxi, and other means.

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 October 2022.

2-7 Amtrak Ridership: FY2000–FY2021



SOURCE: U.S. Department of Transportation, Federal Railroad Administration, available at http://safetydata.fra.dot.gov/officeofsafety/default.aspx/ as of October 2022.

2-8 Top 10 Amtrak Stations: FY2021

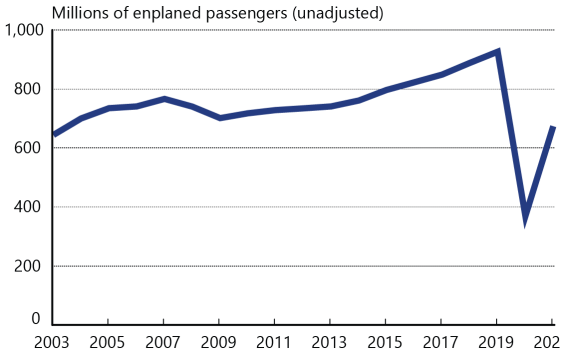
by passengers

Rank	Station	FY '20–FY '21 change	Millions of passengers
1	New York Penn Station, NY	-25.2%	4.1
2	Washington, DC	-32.5%	1.8
3	Philadelphia Gray 30th St., PA	-33.7%	1.5
4	Chicago, IL	-20.8%	1.3
5	Boston South Station, MA	-14.3%	0.7
6	Los Angeles, CA	-34.2%	0.5
7	Baltimore, MD	-17.0%	0.4
8	Albany-Rensselaer, NY	-15.9%	0.4
9	New Haven Union Station, CT	-18.4%	0.3
10	Boston Back Bay Station, MA	-9.1%	0.3

NOTE: Includes passenger boardings and alightings.

SOURCE: Amtrak, *National Fact Sheet and State Fact Sheet*, available at www.amtrak.com/home.html as of October 2022.

2-9 U.S. Air Carrier Passenger Traffic: 2003–2021



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 2022.

2-10 Top 10 U.S. Airports: 2021
by enplaned passengers

Rank	Airport	'20-'21 change	Millions of passengers
1	Atlanta, GA	▲ 78%	36.7
2	Dallas/Fort Worth, TX	▲ 61%	30.0
3	Denver, CO	▲ 76%	28.6
4	Chicago O'Hare, IL	▲ 80%	26.4
5	Los Angeles, CA	▲ 68%	23.7
6	Charlotte, NC	▲ 60%	20.9
7	Orlando, FL	▲ 87%	19.6
8	Las Vegas, NV	▲ 80%	19.1
9	Phoenix, AZ	▲ 80%	18.9
10	Miami, FL	▲ 99%	17.5

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 October 2022.

2-11 Top 10 World Airports: 2021

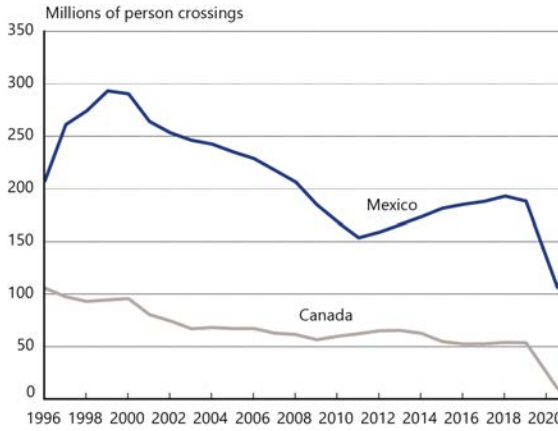
by enplaned, deplaned, and in-transit passengers

Rank	Airport	'20-'21 change	
1	Atlanta, USA	▲ 76.4%	75.7
2	Dallas/Fort Worth, USA	▲ 58.7%	62.5
3	Denver, USA	▲ 74.4%	58.8
4	Chicago O'Hare, USA	▲ 75.1%	54.0
5	Los Angeles, USA	▲ 66.8%	48.0
6	Charlotte, USA	▲ 59.2%	43.3
7	Orlando, USA	▲ 86.7%	40.4
8	Guangzhou, China	▼ -8.0%	40.3
9	Chengdu, China	▼ -1.5%	40.1
10	Las Vegas, USA	▲ 78.6%	39.8

NOTE: Preliminary data for passengers enplaned, deplaned, and passengers in transit.

SOURCE: Airports Council International, available at https://www.aci.aero/ as of October 2022.

2-12 Incoming Land Border Person Crossings: 1996–2021



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 2022.

2-13 Top 5 Land Ports of Entry: 2021

by incoming person crossings

U.S.-Canada ports of entry

Rank	Port	'20-'21 change	Millions of person crossings
1	Detroit, MI	▼ -26.2%	1.4
2	Buffalo-Niagara Falls, NY	▼ -37.0%	1.1
3	Massena, NY	▼ -4.1%	0.8
4	Blaine, WA	▼ -49.4%	0.3
5	Champlain, NY	▼ -27.9%	0.7

U.S.-Mexico ports of entry

Rank	Port	'20-'21 change	Millions of person crossings
1	San Ysidro, CA	▲ 18.5%	27.4
2	El Paso, TX	▲ 11.8%	13.3
3	Otay Mesa, CA	▲ 1.9%	9.5
4	Calexico, CA	▲ 19.2%	9.3
5	Laredo, TX	▲ 10.4%	8.5

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 2022.

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	2020	2050
Truck	13,690	13,148	26,023
Rail	553	537	1,026
Water	293	242	439
Air and truck-air	654	599	1,345
Pipeline	946	998	1,279
Multiple modes[a]	2,658	2,489	6,050
Other[b]	45	12	92
Total	**18,839**	**18,024**	**36,254**

Weight of shipments (millions of tons)

Mode	2017	2020	2050
Truck	12,810	12,595	19,310
Rail	1,624	1,428	1,916
Water	918	858	1,240
Air and truck-air	6	6	13
Pipeline	3,451	3,523	5,102
Multiple modes[a]	689	684	1,190
Other[b]	311	208	133
Total	**19,809**	**19,303**	**28,904**

Ton miles of shipments (billions of ton miles)

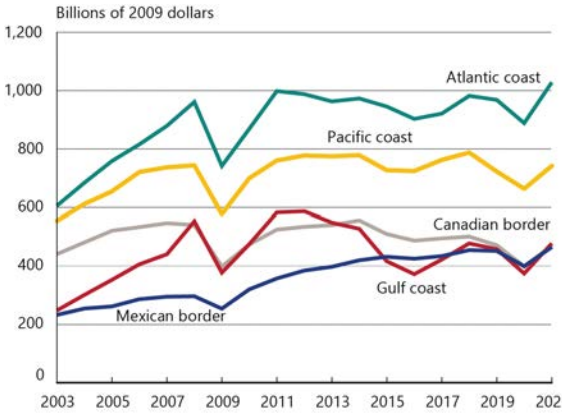
Mode	2017	2020	2050
Truck	2,397	2,358	3,931
Rail	1,095	946	1,230
Water	448	424	538
Air and truck-air	7	7	14
Pipeline	883	926	1,357
Multiple modes[a]	581	575	1,022
Other[b]	13	14	18
Total	**5,428**	**5,251**	**8,110**

[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.

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 2022.

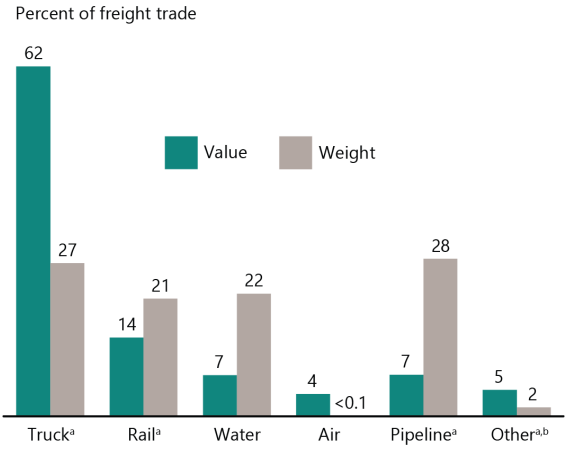
3-2 U.S. Trade by Coasts and Borders: 2003–2021



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: 2021

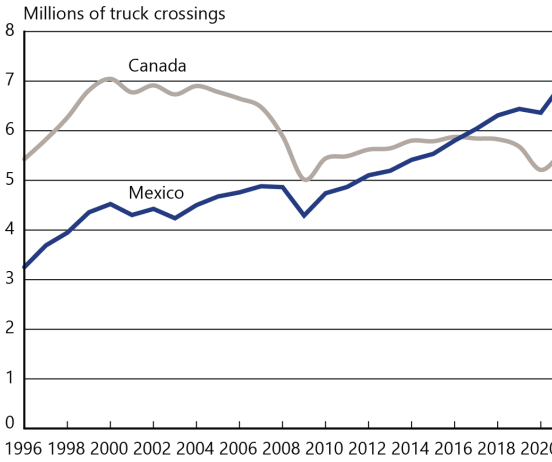


[a] Export weights for land modes are estimated by the Bureau of Transportation Statistics using value-to-weight ratios derived from import data. [b]Includes mail, other, unknown, and shipments through Foreign Trade Zones.

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://www.bts.gov/transborder as of March 2022.

3-4 Incoming Truck Border Crossings: 1996–2021



SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, *Border Crossing Entry Data*, available at https://data.transportation.gov/ as of March 2022.

3-5 Top 5 Truck Ports of Entry: 2021

by incoming truck crossings

U.S.-Canada ports of entry

Rank	Port	'20-'21 change	Millions of truck crossings
1	Detroit, MI	▲ 3.3%	1.4
2	Buffalo-Niagara Falls, NY	▲ 7.6%	0.9
3	Port Huron, MI	▲ 16.6%	0.9
4	Blaine, WA	▲ 13.4%	0.4
5	Champlain-Rouses Point, NY	▲ 7.2%	0.3

U.S.-Mexico ports of entry

Rank	Port	'20-'21 change	Millions of truck crossings
1	Laredo, TX	▲ 10.7%	2.6
2	Otay Mesa, CA	▲ 1.0%	0.9
3	Hidalgo, TX	▲ 2.4%	0.7
4	Ysleta, TX	▲ 38.3%	0.7
5	Calexico, CA	▲ 10.5%	0.4

NOTE: Customs and Border Patrol CBP separated the Ysleta Port of Entry from the El Paso Port of Entry beginning on March 1, 2020.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, *Border Crossing Entry Data*, available at https://data.transportation.gov/ as of September 2022.

3-6 Top 10 U.S. Water Ports: 2020

by short tons

Rank	Port	'19-'20 change	Millions of short tons
1	Houston, TX	▼ -3.2%	275.9
2	South Louisiana, LA	▼ -5.4%	225.1
3	Corpus Christi, TX	▲ 35.6%	150.8
4	New York, NY and NJ	▼ -9.4%	123.7
5	New Orleans, LA	▼ -12.0%	81.1
6	Long Beach, CA	▼ -1.9%	79.2
7	Baton Rouge, LA	▼ -2.3%	71.7
8	Beaumont, TX	▼ -30.2%	70.6
9	Los Angeles, CA	▼ -5.6%	59.5
10	Virginia, VA	▼ -6.0%	58.0

by container TEUs (2019)

Rank	Port	'18-'19 change	Millions of TEUs
1	Los Angeles, CA	▼ -5.5%	6.3
2	Long Beach, CA	▼ -6.0%	5.3
3	New York, NY and NJ	▼ -0.6%	5.3
4	Savannah, GA	▲ 4.0%	3.5
5	Houston, TX	▲ 8.7%	2.4
6	Virginia, VA	▲ 0.2%	2.2
7	Oakland, CA	▲ 5.5%	1.9
8	Charleston, SC	▲ 2.8%	1.9
9	Tacoma, WA	▲ 3.3%	1.6
10	Seattle, WA	▲ 0.7%	1.3

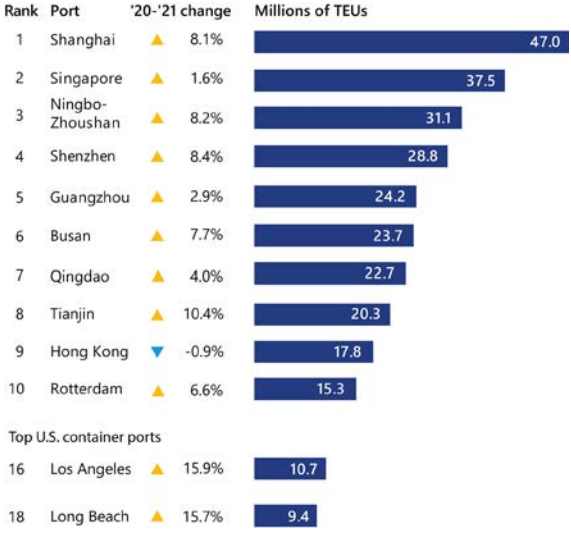
KEY: TEU = twenty-foot equivalent unit.

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

SOURCE: U.S. Army Corps of Engineers, Waterborne Commerce Statistics Center, personal communication as of November 2022.

3-7 Top 10 World Container Ports: 2021

TEUs, including full and empty containers

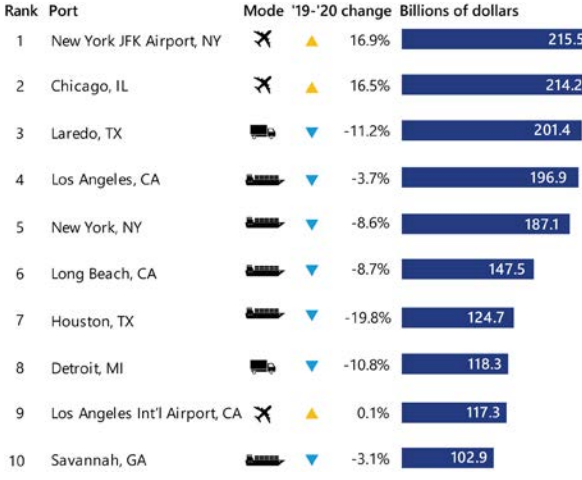


KEY: TEU = twenty-foot equivalent unit.

SOURCE: Lloyd's List, *One Hundred Ports 2022*, available at https://lloydslist.maritimeintelligence.informa.com/one-hundred-container-ports-2022 as of October 2022.

3-8 Top 10 U.S. International Trade Gateways: 2020

by value of shipments



KEY: = airport, = land port, = 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: As cited in U.S. Department of Transportation, Bureau of Transportation Statistics, *National Transportation Statistics*, table 1-51, available at https://www.bts.gov/nts as of October 2022.

4 Safety

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

4-1 Transportation Fatalities by Mode

Mode	2010	2020	2021
Air	**477**	**349**	**U**
U.S. air carrier	2	0	U
Commuter carrier	0	5	U
On-demand air taxi	17	21	U
General aviation	458	332	U
Highway	**32,999**	**38,824**	**U**
Passenger car occupants	12,491	13,472	U
Motorcyclists	4,518	5,579	U
Light-truck occupants	9,782	10,352	U
Heavy-truck occupants	530	831	U
Bus occupants	44	16	U
Pedestrians	4,302	6,516	U
Pedalcyclists	623	938	U
Other	709	1,120	U
Pipeline	**22**	**15**	**13**
Rail	**735**	**743**	**890**
Train Accidents	8	6	8
Highway-rail grade crossing[a]	261	195	236
Trespassers	441	518	614
Other	25	24	32
Transit[b]	**224**	**289**	**322**
Water	**821**	**838**	**696**
Freight vessel and Industrial/Other	62	56	27
Passenger vessel and Recreational boating	759	782	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 2022.

4-2 Transportation Injuries by Mode

Mode	2010	2020	2021
Air	**278**	**202**	**U**
U.S. air carrier	17	8	U
Commuter carrier	2	0	U
On-demand air taxi	3	9	U
General aviation	256	187	U
Highway [a]	**2,247,988**	**2,282,015**	**U**
Passenger car occupants[a]	1,256,101	1,221,335	U
Motorcyclists[a]	82,300	82,528	U
Light-truck occupants[a]	737,152	813,509	U
Heavy-truck occupants[a]	19,937	44,934	U
Bus occupants[a]	17,586	6,620	U
Pedestrians[a]	70,267	54,769	U
Pedalcyclists[a]	51,688	38,886	U
Other[a]	12,956	19,435	U
Pipeline	**108**	**39**	**32**
Rail	**8,379**	**5,551**	**5,817**
Train Accidents	110	72	118
Highway-rail grade crossing[b]	888	697	670
Trespassers	390	561	522
Other	6,991	4,221	4,507
Transit[c]	**23,107**	**15,421**	**16,549**
Water	**3,770**	**3,540**	**3,025**
Freight vessel and Industrial/Other	407	208	232
Passenger vessel and Recreational boating	3,363	3,332	2,793

[a]2020 and 2021 Crash Reporting Sampling System (CRSS) estimates for injuries are not comparable with 2010 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.

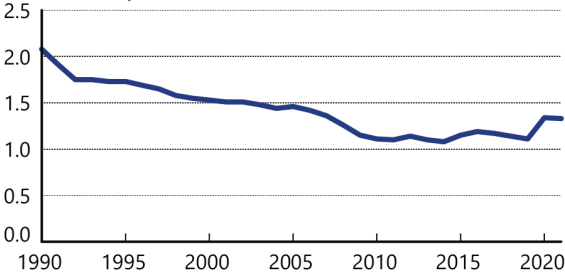
NOTES: Highway numbers are estimates rather than actual counts. The estimates are calculated from data obtained from a nationally representative sample of crashes. NHTSA redesigned the nationally representative sample of police-reported traffic crashes, which estimates the number of police-reported injury and property-damage-only crashes in the US. The new system, CRSS, replaced the NASS GES in 2016 and has a different sample design. Thus, the 2020 and 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 November 2022.

4-3 Fatality Rates by Mode

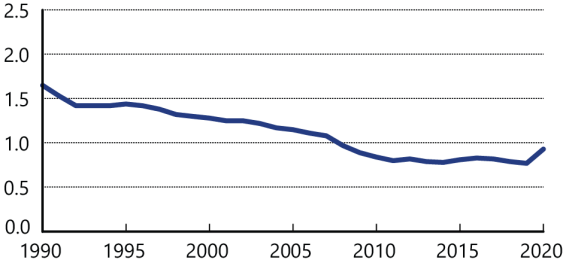
Highway: 1990–2021

Fatalities per 100 million vehicle-miles



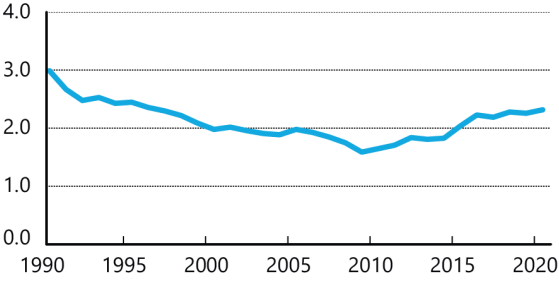
Passenger car and light-truck occupants: 1990–2020

Fatalities per 100 million vehicle-miles



Highway nonoccupants: 1990–2020

Fatalities per 100,000 population



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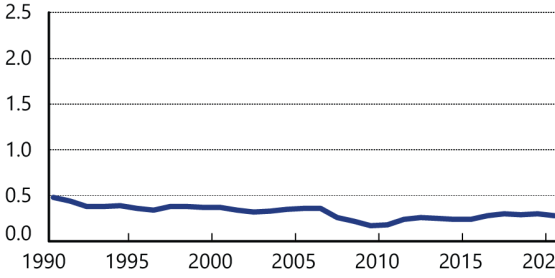
4-3 Fatality Rates by Mode (continued)

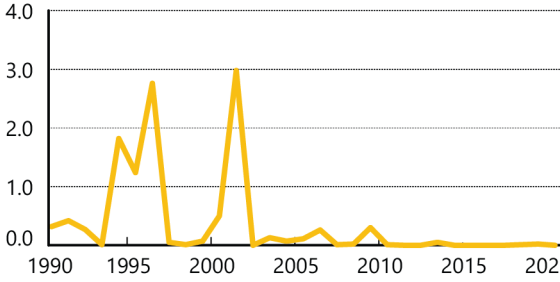
Large-truck occupants: 1990–2020

Fatalities per 100 million vehicle-miles



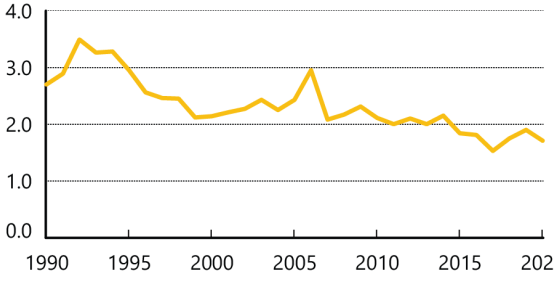
U.S. air carriers: 1990–2020

Fatalities per 100,000 flight hours



General aviation: 1990–2020

Fatalities per 100,000 flight hours



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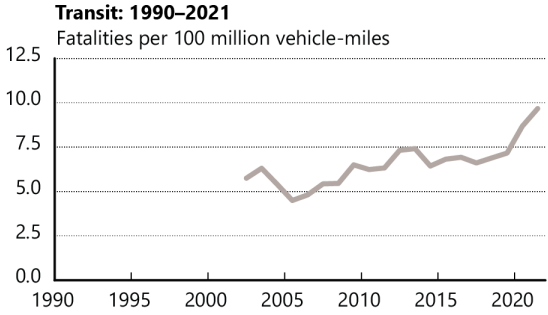
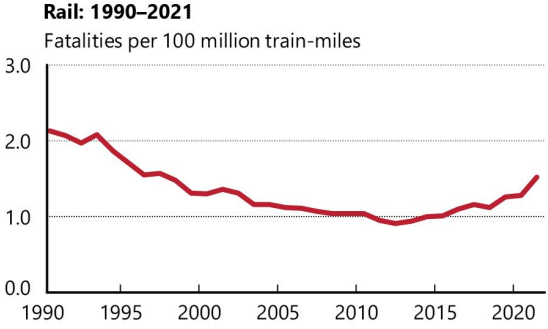
4-3 Fatality Rates by Mode (continued)

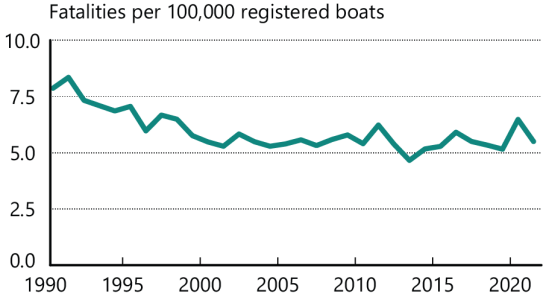
Transit: 1990–2021



Rail: 1990–2021

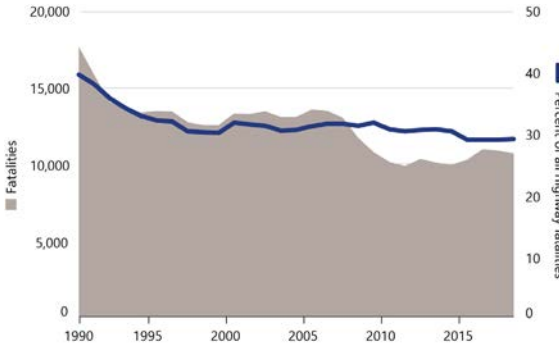


Recreational boating: 1990–2021



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 2022. **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 2022. **Rail**—U.S. Department of Transportation, Federal Railroad Administration, table 1.12, available at https://safetydata.fra.dot.gov/ as of October 2022.

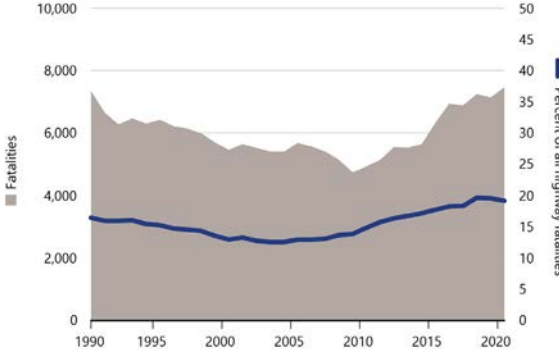
4-4 Alcohol-Impaired Driving Fatalities: 1990–2020



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: 2019 Fatal Motor Vehicle Crashes: Overview* as of October 2022.

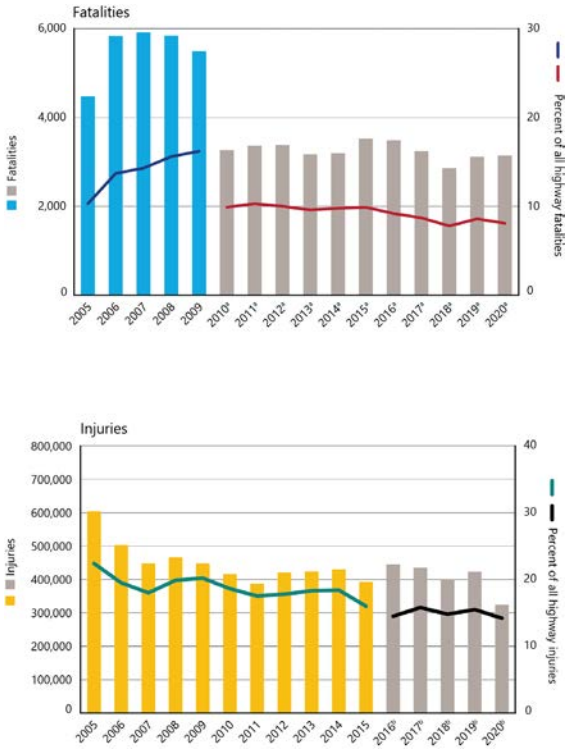
4-5 Pedestrian and Bicyclist Fatalities: 1990–2020



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 2022.

4-6 Distracted Driving Fatalities and Injuries: 2005–2020



[a]Distracted driving fatality data for 2010 and on are not comparable with previous years due to changes in methodology. [b]Crash Reporting Sampling System (CRSS) estimates for injuries are not comparable with 2015 and earlier National Automotive Sampling System (NASS) General Estimates System (GES) estimates because of different sampling designs.

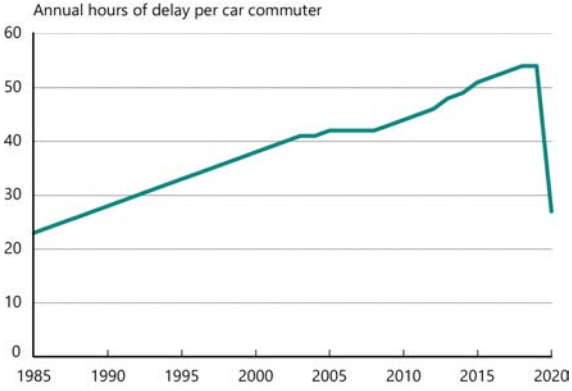
NOTE: Distracted driving involves any activity that could divert a person's attention away from the primary task of driving, such as texting, using a cell phone, eating and drinking, grooming, using a navigation system, adjusting a radio, etc.

SOURCE: **Fatalities**–U.S. Department of Transportation, National Center for Statistics and Analysis, *Fatality and Injury Reporting System Tool* (FIRST), available at www.cdan.dot.gov; **Injuries**- U.S. Department of Transportation, National Highway Traffic Safety Administration, Traffic Safety Facts, *Research Note*, Distracted Driving 2020, available at www.crashstats.nhtsa.dot.gov, as of October 2022.

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



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 2022.

5-2 Top 10 Metropolitan Area Congestion Rankings: 2020

by calendar year, average minutes of congestion

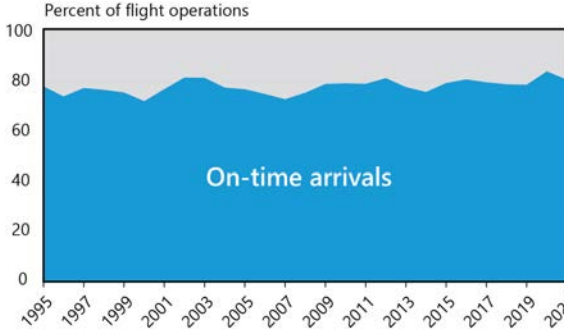
Rank	Urban area	Minutes of delay
1	Los Angeles, CA	266
2	Washington, DC	265
3	Seattle, WA	260
4	Denver, CO	258
5	San Juan, PR	252
6	New York, NY	245
7	Portland, OR	220
8	Riverside-San Bernardino, CA	208
9	Houston, TX	193
10	Baltimore, MD	188
	Average of 52 MSAs	138

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 2022.

5-3 U.S. Airline On-time Performance: 1995–2021

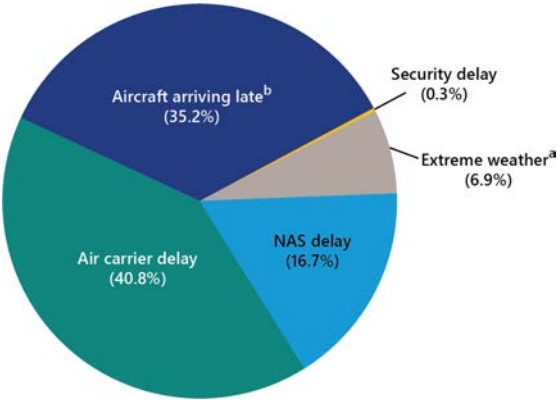


NOTE: Flights arriving at the gate within 15 minutes of scheduled arrival time are on time.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, *Airline On-Time Performance*, available at www.bts.gov as of March 2022.

5-4 U.S. Major Airport Delays by Cause: 2021

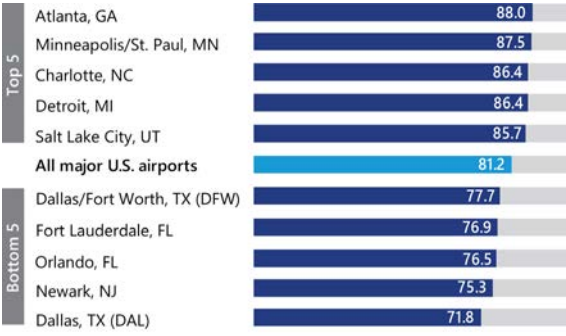
percent of delayed time



[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, *Airline On-Time Performance*, available at transtats.bts.gov as of October 2022.

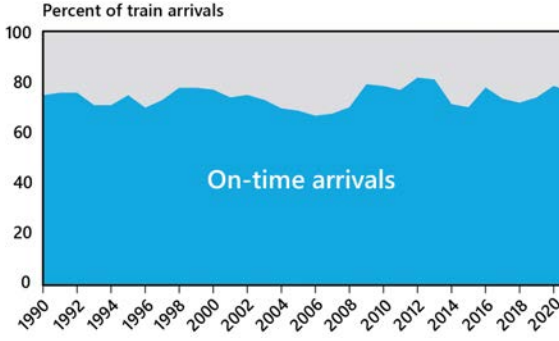
5-5 U.S. Major Airport Performance Rankings: 2021

by percent of on-time arrivals



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 2022.

5-6 Amtrak On-time Performance: FY1990–FY2021



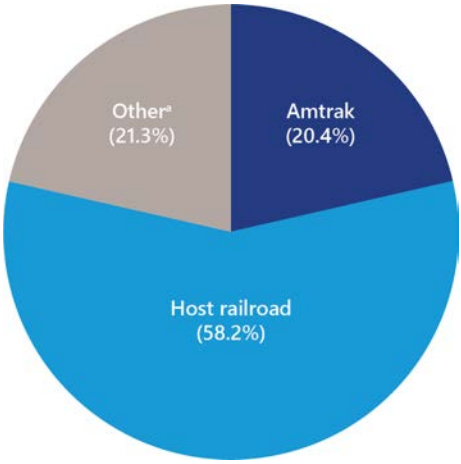
NOTE: On-time performance is a percentage measure of train performance. A train is considered on-time if it arrives at the final destination, or end-point, within an allowed number of minutes, or tolerance, of its scheduled arrival time. Trains are allowed a certain tolerance at the end-point based on 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 2022.

5-7 Amtrak Delays by Cause: FY2021

percent of delayed time



[a]Delays not attributable to Amtrak or other host railroads, such as customs and immigration, law enforcement action, weather, or waiting for scheduled departure time.

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

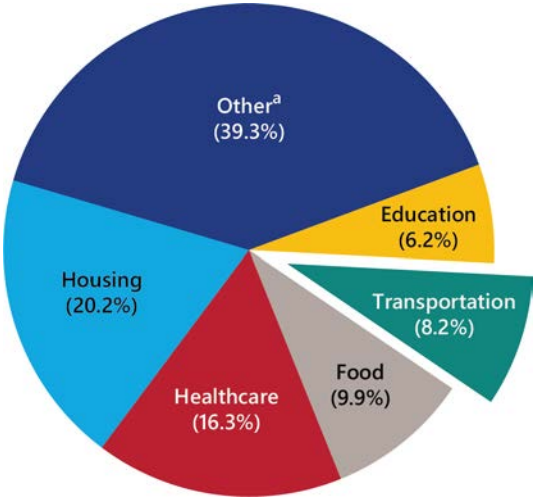
SOURCE: As cited in U.S. Department of Transportation, Bureau of Transportation Statistics, *National Transportation Statistics*, table 1-73, available at www.bts.gov/nts as of October 2022.

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



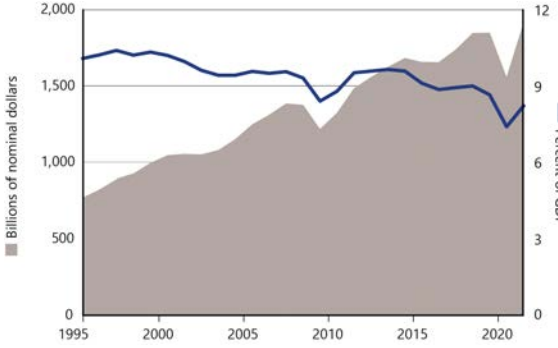
[a]Includes all other categories (e.g., entertainment, personal care products and services, and payments to pension plans).

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 2022.

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 2022.

6-3 Transportation-Related Final Demand

billions of chained 2012 dollars

Category	2011	2021
Personal consumption of transportation	**1,105**	**1,414**
Motor vehicles and parts	370	614
Motor vehicle fuels, lubricants, and fluids	400	405
Transportation services	335	395
Gross private domestic investment	**192**	**235**
Transportation structures	10	12
Transportation equipment	182	223
Government transportation-related purchases	**317**	**326**
Federal purchases	41	43
State and local purchases	252	271
Defense-related purchases	25	13
Exports (+)	**303**	**269**
Imports (-)	**396**	**482**
Total transportation-related GDP	**1,524**	**1,717**
U.S. GDP	**15,892**	**19,610**

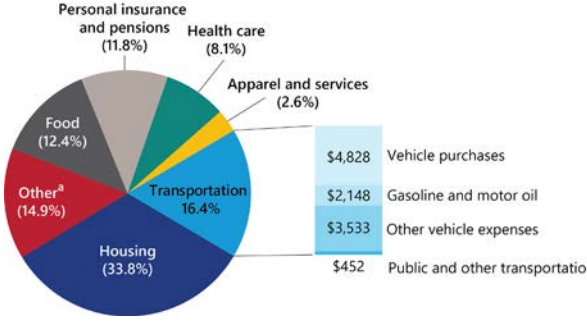
KEY: GDP = gross domestic product

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 2022.

6-4 Household Expenses by Category: 2021

percent of average annual household expenses

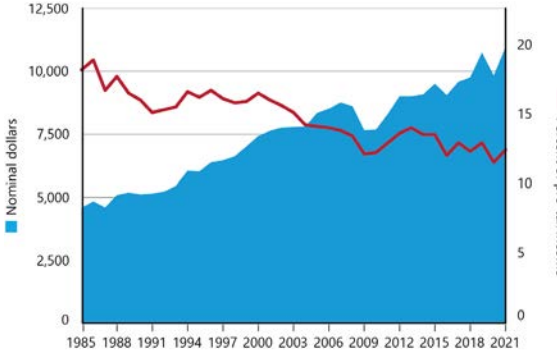


[a] Includes alcoholic beverages, cash contributions, education, entertainment, personal care products and services, reading, tobacco products and smoking supplies, and other miscellaneous items.

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

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, *Consumer Expenditure Survey*, available at www.bls.gov/cex as of October 2022.

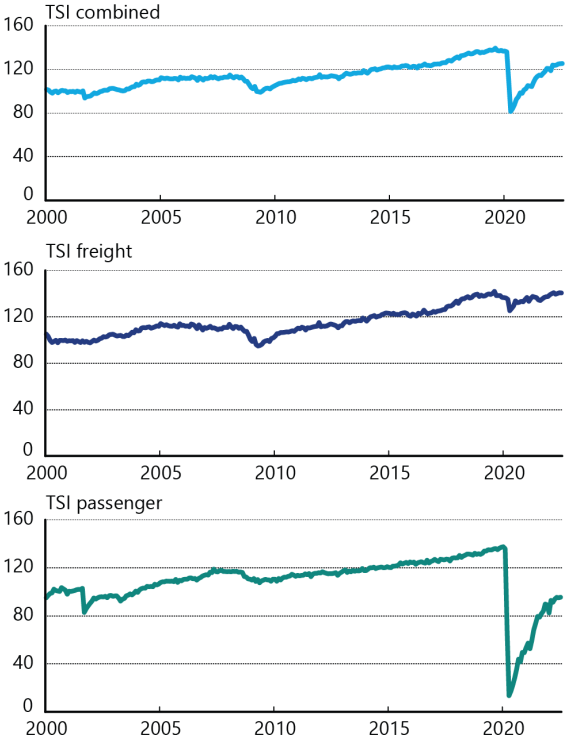
6-5 Household Transportation Expenses: 1985–2021



SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, *Consumer Expenditure Survey*, available at www.bls.gov/cex as of October 2022.

6-6 Transportation Services Index (TSI): January 2000–July 2022

chain-type index: 2000 = 100, seasonally adjusted



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 2022.

6-7 Employment in Transportation-Related Industries

thousands

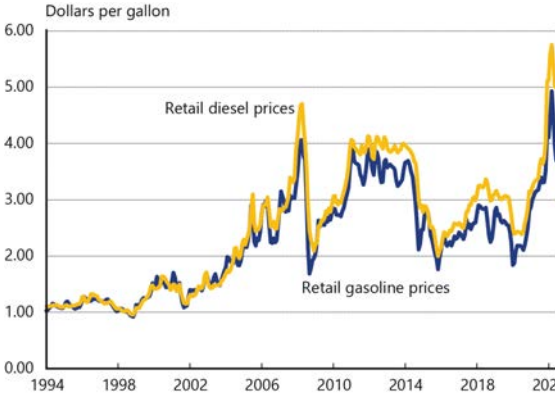
Category	2011	2021
For-hire transportation and warehousing	**4,289**	**6,092**
Air	457	475
Rail	193	146
Water	61	56
Truck	1,301	1,514
Transit and ground passenger	447	375
Pipeline	43	50
Scenic and sightseeing	28	23
Support activities	573	722
Couriers and messengers	529	1,082
Warehousing and storage	658	1,648
Transportation-related manufacturing[a]	**1,685**	**1,934**
Other transportation-related industries	**4,811**	**5,377**
Postal service	**631**	**606**
Government employment[b]	**854**	**851**
Total transportation-related labor force	**12,270**	**14,859**
U.S. labor force	**131,914**	**146,124**

[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.

NOTES: Annual averages based on NAICS data. Details may not add to totals due to rounding.

SOURCE: 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 September 2022.

6-8 Motor Vehicle Fuel Prices: April 1994–September 2022



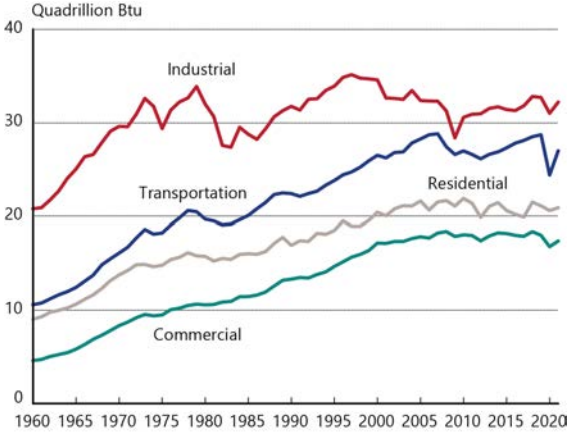
NOTES: Retail Gasoline Prices include average nominal monthly prices of U.S. Regular All Formations retail gasoline. Diesel Retail Prices include average nominal monthly prices of U.S. No. 2 Diesel Retail Prices.

SOURCE: U.S. Department of Energy, Energy Information Administration, available at https://www.eia.gov/ as of October 2022.

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: 1960–2021



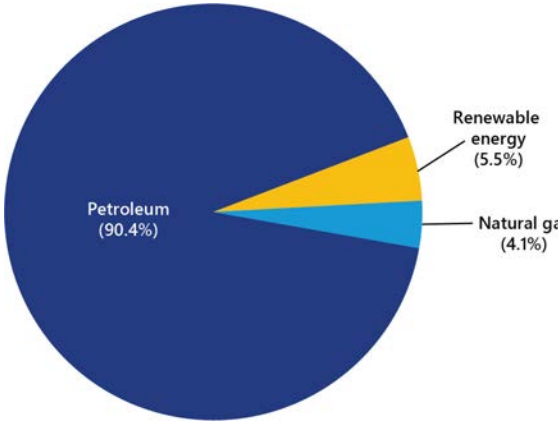
KEY: Btu = British thermal unit.

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 2.1a as of October 2022.

7-2 Transportation Energy Consumption by Source: 2021

percent of Btu consumed

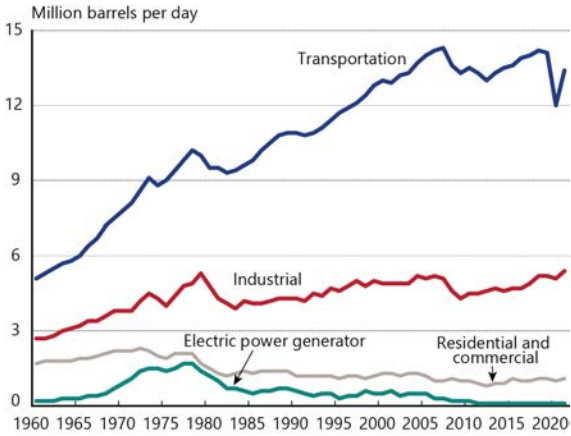


KEY: Btu = British thermal unit.

NOTES: Includes primary energy consumed. Excludes electricity retail sales and electrical system energy losses. Percents may not add to 100 due to rounding.

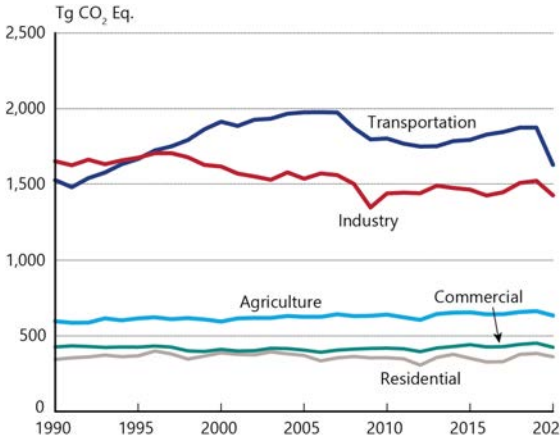
SOURCE: U.S. Department of Energy, U.S. Energy Information Administration, *Monthly Energy Review*, available at www.eia.gov/totalenergy/data/monthly, Table 2.5, as of October 2022.

7-3 Petroleum Consumption by Sector: 1960–2021



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 2022.

7-4 Greenhouse Gas Emissions by Sector: 1990–2020



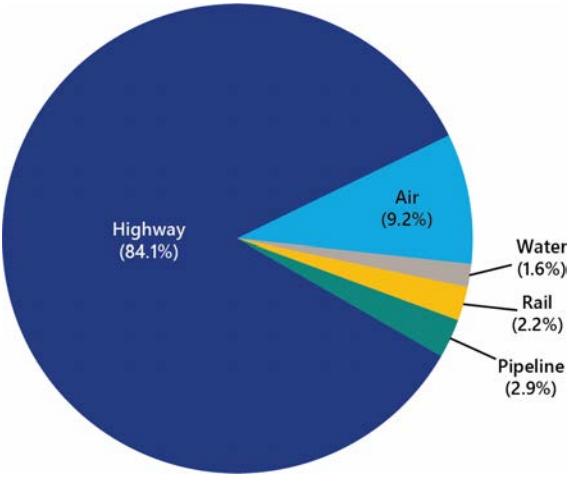
KEY: Tg CO_2 Eq. = teragrams of carbon dioxide equivalent. Teragram = 1 million metric tons.

NOTES: Electric power sector emissions are distributed across sectors. Emissions include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorochemicals, and sulfur hexafluoride.

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 2022.

7-5 Greenhouse Gas Emissions by Transportation Mode: 2020

Percent of Tg CO_2 Eq.

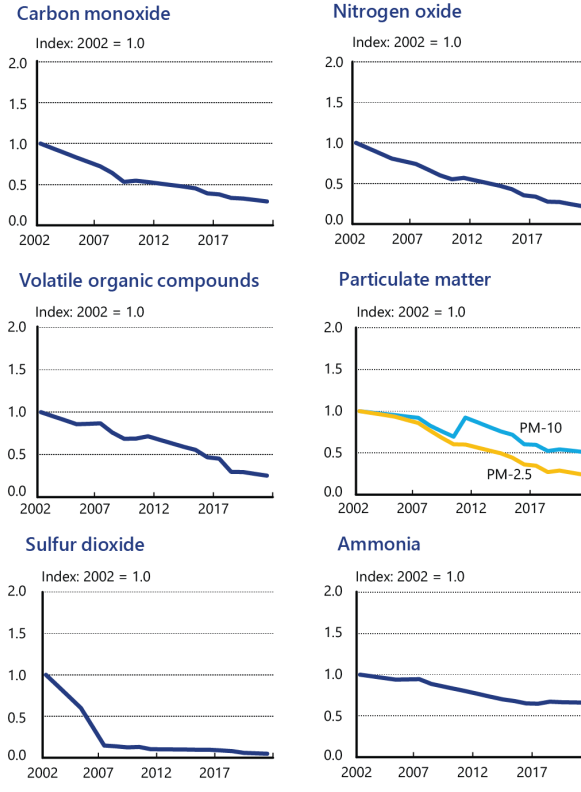


KEY: Tg CO_2 Eq. = teragrams of carbon dioxide equivalent. Teragram = 1 million metric tons.

NOTES: Percents may not add to 100 due to rounding. Does not include international bunker fuels.

SOURCES: U.S. Environmental Protection Agency, *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2020 Report Tables*, available at https://www.epa.gov/greenvehicles/fast-facts-transportation-greenhouse-gas-emissions, *Fast Facts: U.S. Transportation Sector GHG Emissions*, as of May 2022.

7-6 Highway Vehicle Air Pollutant Emissions: 2002–2021

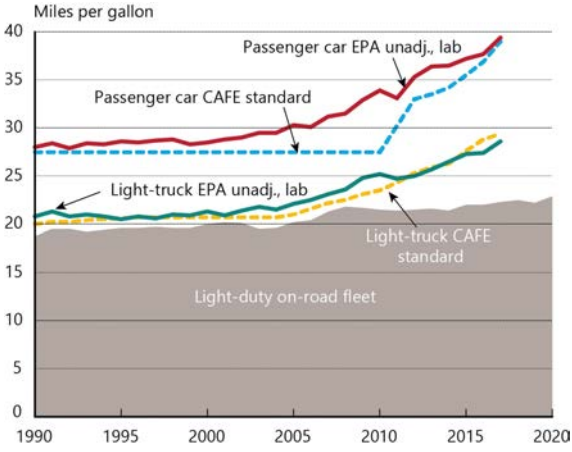


KEY: PM = particulate matters; PM-10 = airborne particulates of less than 10 microns; PM-2.5 = airborne particulates of less than 2.5 microns.

NOTES: Indices are calculated using data on highway vehicle emissions only. Particulate matters is 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 October 2022.

7-7 Fuel Economy of Light-Duty Vehicles: 1990–2020

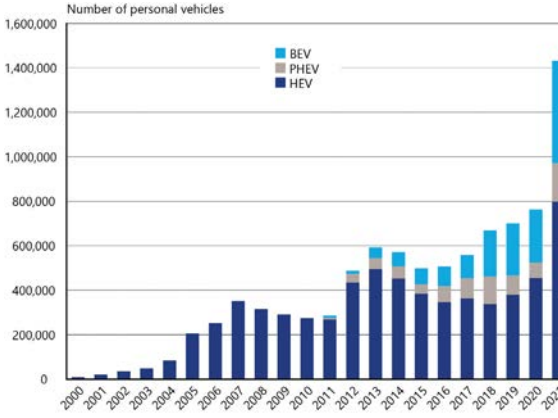


KEY: CAFE = Corporate Average Fuel Economy; EPA = Environmental Protection Agency.

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 2022.

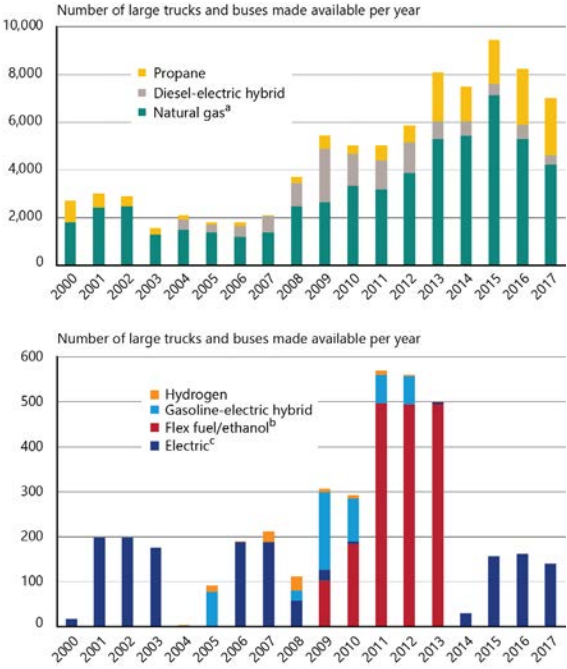
7-8 Sales of Hybrid, Plug-in Hybrid, and Battery Electric Vehicles: 2000–2021



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 as of May 2022.

7-9 Alternative Fuel Vehicles by Fuel Type, Large Trucks and Buses: 2000–2017



NOTES: [a]Includes compressed natural gas (CNG) and liquified natural gas (LNG). Includes the total number of heavy duty vehicles that were manufactured or converted by vehicle suppliers (companies or organizations) in the associated calendar year. [b]Flex fuel/ethanol vehicles are capable of running on E85, unblended gasoline, or any ethanol-gasoline blends in between. [c]Excludes gasoline-electric and diesel-electric hybrids.

SOURCE: U.S. Department of Energy, Energy Information Administration, Alternative Fuel Vehicle Data, Supplier Database, available at www.eia.gov/renewable/afv/ as of October 2022.

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 1 mile.

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