Infrastructure

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AMERICA IN FACTS 2024

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Infrastructure facts

Federal infrastructure and transportation spending

- In FY 2023, the federal government spent \$146.2 billion on transportation and infrastructure, with 38% for highways and 20% for air travel.
- The Federal Emergency Management Agency (FEMA) has so far obligated at least \$326.3 million to rebuild and repair infrastructure damaged by natural disasters that occurred in 2023.

Condition of American infrastructure

- A higher share of urban roads are in poor condition compared to rural roads, and that's been the case across all years of data. In 2020, the most recent year of complete data, 11% of rural roads and 32% of urban roads were in unsatisfactory condition.
- Since 2012, the share of the nation's highway bridges rated "fair" has increased, while the share in poor or good condition decreased. Fair became the most common bridge rating in 2018, surpassing "good." Forty-nine percent of bridges were rated fair in 2022 and 2023.
- The share of commuter rail and heavy rail tracks in good condition increased between 2018 and 2021. Conditions for light rail tracks were steady.
- In 2023, about 78% of flight departures were on time, up nearly two percentage points from 2022.

Transportation safety

- Traffic injuries per vehicle mile traveled declined between 2016 and 2021. However, fatality rates decreased from 2016 to 2019 before increasing in 2020 and 2021. In 2021, 79.7 people were injured and 1.4 people died per 100 million vehicle miles traveled.
- Between 2013 and 2022, there were 259 accidents on scheduled flights operated by US air carriers. Air carrier accidents can include a variety of incidents where a person onboard is seriously injured or a plane is damaged. Three accidents resulted in fatalities. Turbulence caused more than one-third of accidents but did not result in any fatalities.
- Rail transit accidents are most common on light rail systems. There were 679 accidents per 100 million vehicle miles traveled by light rail in 2022 (up 6% over 2021) compared to 50 on heavy rail (up 14% over 2021).

Broadband use

- In 2022, 20.7% of people did not have a fixed broadband subscription in their home. The share of people without a broadband subscription was highest in Mississippi (33.5%) and Louisiana (29.8%).
- The share of people without broadband subscriptions was highest among the American Indian/Alaska Native population and varied by household income and homeownership.

About the data

What are the primary sources of data on this topic?

- Federal Emergency Management Agency
- Federal Highway Administration
- Federal Transit Administration
- Bureau of Transportation Statistics
- Department of Transportation
- Census Bureau

What adjustments did USAFacts make to this data?

- To focus specifically on the infrastructure costs related to natural disasters, data for FEMA spending excludes funding for emergency work and administrative costs.
- Federal infrastructure and transportation spending and FEMA spending data has been adjusted for inflation using the Consumer Price Index for All Consumers (not seasonally adjusted).
- USAFacts analyzed Census Bureau American Community Survey microdata to produce estimates of broadband subscriptions among states and different populations.



Source: USAFacts aggregation of data from the Office of Management and Budget (OMB), the Census Bureau, and the Bureau of Economic Analysis (BEA) Adjusted for inflation (FY 2023 dollars) Note: *Includes direct spending and transfers.

Federal agencies spending: Infrastructure

Federal agency	Net spending in FY 2023*	Share of spending transferred to state and local governments	Share of spending that was mandatory
Department of Transportation	\$109.8 billion	80%	11%
Federal Communications Commission	\$17.9 billion	14%	65%
Department of Homeland Security	\$16.1 billion	1%	**
Department of Commerce	\$1.9 billion	12%	22%
Other agencies	\$559 million	***	***

Source: USAFacts calculations based on the Public Budget Database from the Office of Management and Budget

*Because of budgetary rules pertaining to offsetting receipts and offsetting collections, agencies can have negative net outlays, negative net transfers, or

negative net mandatory spending. This happens when money agencies receive from certain sources exceeds the amount they spend, resulting in a surplus.

**The Department of Homeland Security received \$250 million more than it spent on mandatory infrastructure programs.

***Combined, all other agencies received \$545 million more than they spent on mandatory infrastructure programs, including \$30 million received from the Transportation Services Economic Relief grant program.

For more information on this issue, see here: https://www.whitehouse.gov/wp-content/uploads/2023/03/ap_18_offsetting_fv2024.pdf.

How does the federal government spend its infrastructure and transportation dollars?

In FY 2023, the federal government spent \$146.2 billion on transportation and infrastructure. About 38% of this spending (including transfers to state and local governments) was for highway transportation and 20% was for air travel. Infrastructure and transportation expenditures fell for the second consecutive year after COVID-19 stimulus spending caused it to hit an all-time high in 2021. However, it remains 13% above 2019 prepandemic levels (when adjusted for inflation).

FEDERAL TRANSPORTATION AND INFRASTRUCTURE SPENDING



Note: Includes federal transfers to states and local governments.

How much does FEMA spend to rebuild infrastructure after natural disasters? The Federal Emergency Management Agency (FEMA) has thus far allocated \$326.3 million to repair and rebuild infrastructure after natural disasters that occurred in 2023. Most of the funds were designated for rebuilding roads, bridges, and public utilities, such as power lines and water storage facilities.



FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) INFRASTRUCTURE SPENDING AFTER NATURAL DISASTERS

Source: Federal Emergency Management Agency

Adjusted for inflation (2023 dollars)

Note: Data excludes funding for emergency work necessary after a disaster declaration and administrative costs. Data is updated frequently and is correct as of March 25, 2024.

In what condition are the country's roads and bridges?

In 2020, 11% of rural roads and 32% of urban roads were in unsatisfactory condition. Road condition ratings are based on the smoothness of the roadway. The Bureau of Transportation Statistics has not provided complete road data past 2020. About 44% of the nation's highway bridges were in good condition in 2023, down 3 percentage points since 2012. The proportion of bridges rated poor also decreased while an increasing share were rated fair.

SHARE OF ROADS IN UNSATISFACTORY CONDITION URBAN VS. RURAL ROADS



SHARE OF HIGHWAY BRIDGES



Is motor vehicle travel getting safer?

Traffic injuries increased to 79.7 per 100 million vehicle miles traveled in 2021 but remained lower than rates from 2016 through 2019. Injury rates for motor vehicle occupants and other travelers (motorcyclists, pedestrians, and bicyclists) declined between 2016 and 2021. Fatality rates increased 21% in 2020 and 2% in 2021. This erased the progress made reducing the fatality rate over the previous three years. In 2016, 1.2 people died in a motor vehicle accident for every 100 million vehicle miles traveled compared to 1.4 in 2021 — that's more than 5,000 additional deaths in 2021.

TRAFFIC INJURIES PER 100 MILLION VEHICLE MILES TRAVELED



Source: National Highway Traffic Safety Administration

Note: Other includes motorcyclists, pedestrians, and bicyclists. The data collection system changed in 2016. Data for 2016 and later is not comparable to data from 2015 and earlier.

TRAFFIC FATALITIES

PER 100 MILLION VEHICLE MILES TRAVELED



Source: National Highway Traffic Safety Administration Note: Non-occupants include pedestrians and bicyclists.

Is flight performance improving or declining?

In 2023, about 78% of flight departures were on time, up nearly 2 percentage points from 2022. Air carrier accidents can include events such as ground collisions or cabin incidents where people onboard are injured or killed, or the plane is damaged. There were 259 accidents on scheduled flights in the United States between 2013 and 2022. Turbulence was responsible for 95 of them, or 37%. Ground collisions were responsible for 40 accidents, accounting for 15%. Three accidents resulted in fatalities and 146 resulted in serious injuries.

FLIGHTS ON-TIME PERFORMANCE



NUMBER OF AIR CARRIER ACCIDENTS (2013–2022) BY ACCIDENT EVENT AND WORST INJURY SEVERITY



Source: National Transportation Safety Board Note: Accidents occur while any person is on a plane with the intention of flying and a person dies or is seriously injured, or the plane is substantially damaged.

How safe is our nation's rail transportation?

A higher share of commuter rail tracks, heavy rail tracks, and rail vehicles were in a state of good repair in 2021 compared to 2018. Meanwhile, the share of light rail tracks in good repair remained steady. Rail accidents are most common on light rail transit. There were 679 accidents per 100 million vehicle miles on light rail compared to 50 on subways, metros, and other heavy rail in 2022 and 22 on commuter rail in 2019 (the most recent year of data available).

RAIL TRANSIT ASSETS IN A STATE OF GOOD REPAIR (2018 VS. 2021)



Source: Department of Transportation

Note: Includes only assets which transit agencies own and for which they are responsible for replacing, refurbishing, etc.

RAIL TRANSIT ACCIDENTS

PER 100 MILLION VEHICLE MILES



Source: Bureau of Transportation Statistics Note: Data for 2022 is preliminary. Commuter rail data is unavailable for 2020–2022. Light rail includes streetcar and hybrid rail.

Who doesn't have a broadband subscription?

In 2022, 20.7% of people lived in a home without a fixed broadband subscription. This varied from 12.7% of people in New Hampshire to 33.5% in Mississippi. Broadband subscriptions also varied by race and ethnicity, household income, and homeownership status. American Indian and Alaska Native people were the most likely to lack a broadband subscription in 2022, with 37.8% of their population going without.

SHARE OF PEOPLE WITHOUT A FIXED BROADBAND SUBSCRIPTION (2022) BY STATE



Fixed broadband is a type of high-speed internet connection that uses wires or cables to deliver internet. The Census Bureau asks whether people use broadband, dialup service (which is slower than broadband), a mobile network, or satellite for their home internet.

Source: USAFacts analysis of Census Bureau data Note: Fixed broadband includes cable, fiber optic, or DSL.

SHARE OF POPULATION WITHOUT A FIXED BROADBAND SUBSCRIPTION (2022)

BY RACE/ETHNICITY



BY HOUSEHOLD INCOME



BY HOMEOWNERSHIP



Source: USAFacts analysis of Census Bureau data

Note: Fixed broadband includes cable, fiber optic, or DSL. All races exclude Hispanic. Other includes all other races and multiracial people.

Chart sources and notes

For each **chapter**, all chart names are listed and additional information is provided for each.

- Chart sources and notes are structured as follows: Chart title: Source(s) Note(s):
- 2. For all population-adjusted data where adjustments are not provided by the source data, we use intercensal/postcensal estimates from the US Census Bureau, unless otherwise noted.
- 3. USAFacts compiles data for government revenue, spending, and debt, as well as on family and individual income and taxes from various government sources, which primarily include the Office of Management and Budget (OMB), the Census Bureau, the Bureau of Economic Analysis (BEA), and the Federal Reserve. The full citations for this data are not included below; to see detailed descriptions and notes about our methodology for compiling this data, please visit: <u>https://usafacts.org/methodology/</u>.

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Government spending 1980-2023, infrastructure: USAFacts aggregation of data from OMB, Census Bureau, and BEA.

Federal transportation and infrastructure spending: Ibid.

Federal Emergency Management Agency (FEMA) infrastructure spending after natural disasters: Federal Emergency Management Agency (FEMA) (2024). *OpenFEMA Dataset: Public Assistance Funded Projects Details - v1.* <u>https://www.fema.gov/openfema-data-page/public-assistance-funded-projects-details-v1.</u>

Share of roads in unsatisfactory condition: Bureau of Transportation Statistics (BTS) (2022). *State Transportation Statistics: Road Condition*. US Department of Transportation (USDOT). <u>https://www.bts.gov/content/condition-us-roadways-functional-system</u>. Note(s): Original data is reported as the International Roughness Index (IRI) in inches per mile. Lower IRI represents smoother riding roadways.

"Unsatisfactory condition" corresponds to an IRI of >170. Percentages capture share of miles that are in unsatisfactory condition. U.S. includes the 50 states, the District of Columbia, and Puerto Rico.

Share of highway bridges, by condition: BTS (2023). *State Transportation Statistics: Bridge Condition.* USDOT. <u>https://www.bts.gov/content/</u> <u>condition-us-highway-bridges</u>.

Note(s): Percentages capture share of square meters that are in poor condition. U.S. totals include the 50 states, the District of Columbia, Guam, Puerto Rico, and U.S. Virgin Islands.

Traffic injuries: National Highway Traffic Safety Administration (2023). *Traffic Safety Facts Annual Report Tables: National Statistics; Table 2. People Killed and Injured and Fatality and Injury Rates; Table 4. People Killed and Injured, by Person Type and Vehicle Type.* US Department of Transportation. <u>https://cdan.dot.gov/tsftables/tsfar.htm</u>.

Note(s): (1) The numbers of people injured are estimates, not actual counts, based on a nationally representative sample of crashes. (2) The data for 2019–2021 is subject to change with future releases of the Traffic Safety Facts Annual Report from the source.

Traffic fatalities: Ibid.

Note(s): The data for 2019–2021 is subject to change with future releases of the Traffic Safety Facts Annual Report from the source.

Flights on-time performance: BTS (2024). On-Time Performance - Reporting Operating Carrier Flight Delays at a Glance. <u>https://www.transtats.bts.</u> gov/HomeDrillChart.asp.

Note(s): The BTS releases seasonally adjusted air traffic data based on monthly reports from commercial U.S. air carriers. This data is often retroactively updated and is current as of May 26, 2023.

Number of air carrier accidents (2013–2022): National Transportation Safety Board (2023). 2003–2022 Accident Statistics (Table 29. Accident Aircraft 20003 through 2022 US Civil Aviation). <u>https://www.ntsb.gov/safety/Pages/research.aspx</u>.

Note(s): Data included is for scheduled flights operated by US regional and major airlines. Federal regulation defines serious injury when an injury meets any of these four criteria: 1) requires more than 48 hours hospitalization, 2) fracture of any bone, 3) severe hemorrhage, nerve, muscle or tendon damage, 4) injury to an internal organ, 5) second or third-degree burns, or any burn over more than 5% of the body.

Rail transit assets in a state of good repair: Department of Transportation (2023). *2021 TAM Data Summary: A Snapshot of Asset-Related Data Reported to the National Transit Database*. <u>https://www.transit.dot.gov/sites/fta.dot.gov/files/2023-03/2021-TAM-Data-Snapshot.pdf</u>.

Rail transit accidents (2018 vs. 2021): BTS (2024). *Transit Safety Data by Mode for All Reported Accidents*. USDOT. <u>https://www.bts.gov/content/</u> <u>transit-safety-data-modea-all-reported-accidentsb</u>.

Note(s): Accidents include transit vehicle collisions with motor vehicles, objects, and people (excluding suicides), as well as derailments / vehicles going off the road. Accident figures do not include fires, security events, or not otherwise classified safety events. The definition of light rail changed, so we only show light rail data for 2015 and onwards.

Share of people without a fixed broadband subscription (2022), by state: USAFacts analysis of Census Bureau data (February 2024). *ACS 1-Year Estimates Public Use Microdata Sample, Custom Table* (Vintage: 2022, Weighting: PUMS person weight). <u>https://data.census.gov/mdat/#/</u>.

Share of people without a fixed broadband subscription (2022), by race/ethnicity, household income, and homeownership: Ibid.

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