

DOT HS 813 515

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Summary of Motor Vehicle Traffic Crashes

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Key Findings

- In 2021 there were an estimated 6,102,936 police-reported traffic crashes in which 42,939 people were killed and an estimated 2,497,657 people were injured.
- Compared to 2020 this was a 10-percent increase in the number of traffic fatalities, and a 9.4-percent increase in the estimated number of people injured. The estimated number of police-reported traffic crashes increased by 16 percent.
- One person was killed every 12 minutes and an estimated 5 people injured every minute in traffic crashes in 2021.
- The fatality rate per 100 million vehicle miles traveled (VMT) increased from 1.34 in 2020 to 1.37 in 2021, and the injury rate per 100 million VMT increased from 79 in 2020 to 80 in 2021.
- In 2021 there were 13,384 people killed in alcohol-impaired-driving crashes, an average of one alcohol-impaired-driving fatality every 39 minutes. Fatalities in alcohol-impaired-driving crashes increased by 14 percent (11,718 to 13,384 fatalities) from 2020 to 2021.
- In 2021 there were 12,330 fatalities in speeding-related crashes, 29 percent of total traffic fatalities for the year and an increase of 8 percent from 11,428 in 2020, the highest since 2007.
- In 2021 there were 7,388 pedestrians killed, and an estimated 60,577 pedestrians injured in traffic crashes. On average, a pedestrian was killed every 71 minutes and injured every 9 minutes in traffic crashes in 2021.
- Of the 1,184 children killed in traffic crashes, an estimated 294 (25%) were killed in alcohol-impaired-driving crashes in 2021.
- Young drivers accounted for 8.4 percent of all drivers involved in fatal traffic crashes in 2021. However, young drivers were only 5.0 percent of all licensed drivers in 2021.
- In 2021 there were 7,489 people 65 and older killed and an estimated 266,064 injured in motor vehicle traffic crashes. Older people made up 17 percent of all traffic fatalities and 11 percent of all people injured in 2021.
- Forty-three percent of motorcycle riders who died in single-vehicle traffic crashes in 2021 were alcohol-impaired.

This fact sheet contains information on fatal motor vehicle traffic crashes based on data from the Fatality Analysis Reporting System (FARS) and non-fatal motor vehicle traffic crashes from the National Automotive Sampling System (NASS) General Estimates System (GES) and Crash Report Sampling System (CRSS). A change instituted with the release of 2020 data is rounding estimates to the nearest whole number instead of the nearest thousand for all police-reported crashes, including injury estimates. Refer to the end of this publication for more information on FARS, NASS GES, and CRSS.

Due to a vehicle classification change, the 2020 and later-year vehicle type classifications are not comparable to 2019 and earlier-year vehicle type classifications. This change affects any analysis with a vehicle component to it. Refer to the end of this publication for more information on Product Information Catalog and Vehicle Listing (vPIC).

A motor vehicle traffic crash is defined as an incident that involved one or more motor vehicles in-transport that originated on or had a harmful event (injury or damage) on a public trafficway, such as a road or highway. Crashes that occurred on private property not regularly used by the public for transport, including some parts of parking lots and driveways, are excluded. The terms "motor vehicle traffic crash" and "traffic crash" are used interchangeably in this document.

Overview

Motor vehicle travel is a major means of transportation in the United States, providing an unparalleled degree of mobility. Traffic crashes took the lives of 42,939 people in 2021. The mission of the National Highway Traffic Safety Administration is to save lives, prevent injuries, and reduce economic costs due to road traffic crashes, through education, research, safety standards, and enforcement.

10-Year Trend: 2012 to 2021

The number of police-reported traffic crashes, by crash severity, is presented in Table 1 for the 10-year period 2012 to 2021. From 2012 to 2021 the number of fatal traffic crashes increased by 27 percent. The number of fatal traffic crashes increased by 10 percent from 2020 to 2021, while the estimated number of police-reported traffic crashes increased by 16 percent.

	Fatal		Injury		Property-Da	amage-Only	Total		
Year	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
2012	31,006	0.6%	1,634,180	29.1%	3,949,858	70.3%	5,615,045	100.0%	
2013	30,202	0.5%	1,591,016	28.0%	4,065,673	71.5%	5,686,891	100.0%	
2014	30,056	0.5%	1,647,726	27.2%	4,386,502	72.3%	6,064,284	100.0%	
2015	32,538	0.5%	1,715,394	27.2%	4,548,203	72.2%	6,296,134	100.0%	
2016*	34,748	0.5%	2,116,308	31.0%	4,670,073	68.5%	6,821,129	100.0%	
2017*	34,560	0.5%	1,888,525	29.3%	4,529,513	70.2%	6,452,598	100.0%	
2018*	33,919	0.5%	1,893,704	28.1%	4,807,058	71.4%	6,734,681	100.0%	
2019*	33,487	0.5%	1,916,344	28.4%	4,806,253	71.1%	6,756,084	100.0%	
2020*	35,935	0.7%	1,593,390	30.3%	3,621,681	69.0%	5,251,006	100.0%	
2021*	39,508	0.6%	1,727,608	28.3%	4,335,820	71.0%	6,102,936	100.0%	

Table 1. Police-Reported Traffic Crashes, by Crash Severity, 2012–2021

Sources: FARS 2012–2020 Final File, 2021 Annual Report File (ARF); NASS GES 2012–2015; CRSS 2016–2021 *CRSS estimates and NASS GES estimates are not comparable due to different sample designs. Refer to end of document for more information about CRSS.

While Table 1 presents data on traffic crashes, Table 2 presents data on people killed and injured in traffic crashes in the 10-year period 2012 to 2021. Also presented are the fatality and injury rates based on population, licensed drivers, registered vehicles, and vehicle miles traveled (VMT). Figure 1 shows a map of the fatality rate per 100 million VMT for each State, the District of Columbia, and Puerto Rico.

In 2021 there were 42,939 people killed and an estimated 2,497,657 people injured in traffic crashes. Compared to 2020, this was a 10-percent increase in the number of fatalities, and a 9.4-percent increase in the estimated number of people injured. Over the decade 2012 to 2021, there was a 27-percent increase in the number of those killed in traffic crashes. On average in 2021 there were 118 people who died each day and an estimated 6,843 people who were injured each day in traffic crashes. This translates to one person killed every 12 minutes and an estimated 5 people injured every minute in traffic crashes in 2021.

After a decrease of traffic fatalities from 2017 to 2019, this is the second consecutive year of an increase in the number of deaths on our Nation's highways. The fatality rate per 100 million VMT increased from 1.34 in 2020 to 1.37 in 2021. In the 10-year period 2012 to 2021 the fatality rate per 100 million VMT fluctuated from a low of 1.08 in 2014 to a high of 1.37 in 2021. The fatality rates based on population, licensed drivers, and registered vehicles also increased from 2020 to 2021. The injury rate per 100 million VMT was 79 in 2020 and increased to 80 in 2021.

			Fatality Rate per		Fatality Rate per 100,000	Registered	Fatality Rate per 100,000		Fatality Rate per 100			
Year	Killed	Population	100,000 Population	Licensed Drivers	Licensed Drivers	Motor Vehicles	Registered Vehicles	VMT (millions)	Million VMT			
	Killed											
2012	33,782	313,877,662	10.76	211,814,830	15.95	265,647,194	12.72	2,963,497	1.14			
2013	32,893	316,059,947	10.41	212,159,728	15.50	269,294,302	12.21	2,982,941	1.10			
2014	32,744	318,386,329	10.28	214,092,472	15.29	274,804,904	11.92	3,020,377	1.08			
2015	35,484	320,738,994	11.06	218,084,465	16.27	281,312,446	12.61	3,089,841	1.15			
2016	37,806	323,071,755	11.70	221,711,918	17.05	288,033,900	13.13	3,173,815	1.19			
2017	37,473	325,122,128	11.53	225,346,257	16.63	290,335,891	12.91	3,210,248	1.17			
2018	36,835	326,838,199	11.27	227,558,385	16.19	297,036,214	12.40	3,240,327	1.14			
2019	36,355	328,329,953	11.07	228,915,520	15.88	299,267,114	12.15	3,261,772	1.11			
2020	39,007	331,501,080	11.77	228,195,802	17.09	297,100,832	13.13	2,903,622	1.34			
2021	42,939	331,893,745	12.94	232,781,797	18.45	302,722,453	14.18	3,132,411	1.37			
Year	Injured	Population	Injury Rate per 100,000 Population	Licensed Drivers	Injury Rate per 100,000 Licensed Drivers	Registered Motor Vehicles	Injury Rate per 100,000 Registered Vehicles	VMT (millions)	Injury Rate per 100 Million VMT			
Injured												
2012	2,369,083	313,877,662	755	211,814,830	1,118	265,647,194	892	2,963,497	80			
2013	2,318,992	316,059,947	734	212,159,728	1,093	269,294,302	861	2,982,941	78			
2014	2,342,621	318,386,329	736	214,092,472	1,094	274,804,904	852	3,020,377	78			
2015	2,454,778	320,738,994	765	218,084,465	1,126	281,312,446	873	3,089,841	79			

Table 2. People Killed and Injured, and Fatality and Injury Rates per Population, Licensed Drivers, Registered Vehicles, and VMT, 2012–2021

Year	Injured	Population	Injury Rate per 100,000 Population	Licensed Drivers	Injury Rate per 100,000 Licensed Drivers	Registered Motor Vehicles	Injury Rate per 100,000 Registered Vehicles	VMT (millions)	Injury Rate per 100 Million VMT
2016*	3,061,885	323,071,755	948	221,711,918	1,381	288,033,900	1,063	3,173,815	96
2017*	2,745,268	325,122,128	844	225,346,257	1,218	290,335,891	946	3,210,248	86
2018*	2,710,059	326,838,199	829	227,558,385	1,191	297,036,214	912	3,240,327	84
2019*	2,740,141	328,329,953	835	228,915,520	1,197	299,267,114	916	3,261,772	84
2020*	2,282,209	331,501,080	688	228,195,802	1,000	297,100,832	768	2,903,622	79
2021*	2,497,657	331,893,745	753	232,781,797	1,073	302,722,453	825	3,132,411	80

Sources: FARS 2012–2020 Final File, 2021 ARF; NASS GES 2012–2015; CRSS 2016–2021; VMT and Licensed Drivers — Federal Highway Administration (FHWA); Registered Vehicles – Polk data from S&P Global Mobility, Copyright © R.L. Polk & Co., and FHWA; Population — Census Bureau

*CRSS estimates and NASS GES estimates are not comparable due to different sample designs. Refer to end of document for more information about CRSS.

In 2021 the highest fatality rate per 100 million VMT in the United States (50 States and the District of Columbia, excluding Puerto Rico) was in South Carolina (2.08) followed by Mississippi (1.89). The lowest was in Massachusetts (0.71) followed by Rhode Island (0.84).





Sources: FARS 2021 ARF; VMT - FHWA

Fatalities by person type in 2021 are shown in Figure 2. In 2021 the largest percentage was passenger car occupant fatalities at 32 percent, followed by 30 percent for light-truck occupant fatalities and 20 percent for nonoccupants. The remaining proportions of motorcyclist fatalities and large-truck, bus, and other vehicle occupant fatalities were at 14 percent and 5 percent, respectively.



Figure 2. Percentage of Traffic Fatalities, by Person Type, 2021

Source: FARS 2021 ARF Note: Percentages may not add up to 100 percent due to independent rounding.

Traffic Safety Fact Sheets

The National Center for Statistics and Analysis (NCSA) annually publishes a series of Traffic Safety Fact Sheets, brief reports on subjects of interest to the traffic safety community. Currently 16 fact sheets are available. There are two fact sheets that focus on State data only. Some cover driver or occupant behavior such as alcohol-impaired driving, speeding, and occupant protection. Others focus on populations of interest, such as pedestrians, bicyclists and other cyclists, children, young drivers, and older population. Specific vehicle types are the emphasis in fact sheets on passenger vehicles, large trucks, motorcycles, and school transportation. The Rural/Urban Comparison fact sheet focuses on the locations of the crashes. Finally, this fact sheet, Summary of Motor Vehicle Traffic Crashes provides a brief summary for each of these fact sheets, along with links and references for further information.

State

The 2021 State Traffic Data Fact Sheet includes a range of topics such as fatality rates, speeding-related crashes, and crash types. The 2021 State Alcohol-Impaired-Driving Estimates fact sheet focuses on alcohol at the State level and includes the range of known alcohol test results for drivers involved in fatal crashes.

For more detailed information, view the 2021 State Traffic Data Fact Sheet at <u>https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813509.pdf</u>.

For more detailed information, view the 2021 State Alcohol-Impaired-Driving Estimates Fact Sheet at <u>https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813472.pdf</u>.

Behavior

Driver behavior such as driving while alcohol-impaired and speeding, as well as whether passenger vehicle occupants are wearing seat belts, are important areas of interest. These behaviors are the subjects of this set of traffic safety fact sheets.

Alcohol-Impaired Driving

Drivers are considered to be alcohol-impaired when their blood alcohol concentrations (BACs) are .08 grams per deciliter (g/dL) or higher. In 2021 there were 13,384 people killed in alcohol-impaired-driving crashes, an average of one alcohol-impaired-driving fatality every 39 minutes. These alcohol-impaired-driving fatalities accounted for 31 percent of the total traffic fatalities in the United States.

Fatalities in alcohol-impaired-driving crashes increased by 14.2 percent (11,718 to 13,384 fatalities) from 2020 to 2021.

In 2021, among the 13,384 alcohol-impaired-driving fatalities, 67 percent (9,027) were in crashes in which at least one driver had a BAC of .15 g/dL or higher.

The percentages of alcohol-impaired drivers involved in fatal crashes in 2021 was highest for motorcycle riders (28%) compared to drivers of passenger cars (24%), light trucks (20%), and large trucks (3%).

For more detailed information, view the 2021 Alcohol-Impaired-Driving Fact Sheet at <u>https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813450.pdf</u>.

Speeding

In 2021 there were 12,330 fatalities in speeding-related crashes, 29 percent of total traffic fatalities for the year and an increase of 8 percent from 11,428 in 2020, the highest since 2007. There were an estimated 328,946 people injured (13% of total people injured) in speeding-related traffic crashes in 2021.

Thirty-five percent of male drivers and 21 percent of female drivers in the 15- to 20-year-old age group involved in fatal traffic crashes in 2021 were speeding, the highest among the age groups.

Drivers who were speeding when involved in fatal traffic crashes in 2021 had BACs of .08 g/dL or greater (37% versus 17%)—or even higher BACs of .15 g/dL or greater (25% versus 11%)—more frequently than those drivers who were not speeding.

Thirty-three percent of motorcycle riders involved in fatal traffic crashes in 2021 were speeding, more than drivers of any other vehicle type.

For more detailed information, view the 2021 Speeding Fact Sheet at <u>https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813473.pdf</u>.

Occupant Protection

According to the 2021 NHTSA's National Occupant Protection Use Survey (NOPUS, Report No. DOT HS 813 241), the estimated seat belt use rate over the decade 2012 to 2021 increased from 86.1 percent in 2012 to 90.4 percent in 2021.

There were 42,939 traffic fatalities in the United States in 2021, of which 26,325 (61%) were occupants of passenger vehicles. Of the 26,325 passenger vehicle occupants killed in 2021, there were 11,820 (45%) who were restrained and 11,813 (45%) who were unrestrained at the time of the crashes. Considering only passenger vehicle occupant fatalities whose restraint use was known, 50 percent were restrained and 50 percent were unrestrained.

In traffic crashes in 2021, considering known driver restraint use by passenger vehicle type, 60 percent of pickup drivers who were killed were unrestrained, compared to 49 percent of SUV drivers, 47 percent of passenger car drivers, and 44 percent of van drivers.

In 2017 seat belts saved an estimated 14,955 lives among passenger vehicle occupants 5 and older (latest data available).

For more detailed information, view the 2021 Occupant Protection in Passenger Vehicles Fact Sheet at <u>https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813449.pdf</u>.

People

Another interest area regarding crash data are the various populations involved. NHTSA publishes fact sheets on crash data specific to pedestrians, bicyclists and other cyclists, children, young drivers, and older population.

Pedestrians

A pedestrian is defined as any person on foot, walking, running, jogging, hiking, sitting, or lying down involved in a motor vehicle traffic crash. It excludes people on personal conveyances like roller skates, inline skates, skateboards, baby strollers, scooters, toy wagons, motorized skateboards, motorized toy cars, Segway-style devices, motorized and non-motorized wheelchairs, and scooters for those with disabilities.

In 2021 there were 7,388 pedestrians killed in traffic crashes, a 12.5-percent increase from the 6,565 pedestrian fatalities in 2020. This is the highest since 1981 when 7,837 pedestrians died in traffic crashes. There were also an estimated 60,577 pedestrians injured in traffic crashes, an 11-percent increase from 54,771 pedestrians injured in 2020. Pedestrian deaths accounted for 17 percent of all traffic fatalities and 2 percent of all people injured in traffic crashes in 2021.

On average, a pedestrian was killed every 71 minutes and injured every 9 minutes in traffic crashes in 2021.

Seventy percent of the pedestrians killed in traffic crashes were males in 2021.

For more detailed information, view the 2021 Pedestrians Fact Sheet at https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813458.pdf.

Bicyclists and Other Cyclists

Pedalcyclists are bicyclists and other cyclists including riders of two-wheel, nonmotorized vehicles, tricycles, and unicycles powered solely by pedals.

In 2021 there were 966 pedalcyclist fatalities, accounting for 2.2 percent of all traffic fatalities that year. There was a 1.9-percent increase in pedalcyclists killed (966) from the 948 pedalcyclists killed in 2020.

Eighty-five percent of fatal pedalcyclist crashes in 2021 were in urban areas.

Twenty-one percent of the pedalcyclists who died in 2021 had BACs of .01 g/dL or greater.

For more detailed information, view the 2021 Bicyclists and Other Cyclists Fact Sheet at <u>https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813484.pdf</u>.

Children

Of the 42,939 traffic fatalities in 2021 in the United States, 1,184 (3%) were children 14 and younger. Child traffic fatalities increased by 8 percent from 2020 (1,101) to 2021 (1,184). An estimated 162,298 children were injured in traffic crashes in 2021, a 17-percent increase from 139,058 in 2020.

An average of 3 children were killed and an estimated 445 children were injured every day in traffic crashes in 2021.

In 2021, based on known restraint use, 69 percent of the children riding with unrestrained passenger vehicle drivers were also unrestrained.

Of the 1,184 children killed in traffic crashes, an estimated 294 (25%) were killed in alcohol-impaired-driving crashes in 2021.

For more detailed information, view the 2021 Children Fact Sheet at <u>https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813456.pdf</u>.

Young Drivers

In 2021 there were 2,116 young drivers aged 15 to 20 who died in traffic crashes, an 11-percent increase from 1,899 in 2020. There were an estimated 203,256 young drivers injured in traffic crashes, an increase of 7 percent from 189,959 in 2020.

Young drivers accounted for 8.4 percent of all drivers involved in fatal traffic crashes in 2021. However, young drivers were only 5.0 percent of all licensed drivers in 2021.

The rate of drivers involved in fatal traffic crashes per 100,000 licensed drivers for young female drivers was 25.51 in 2021. For young male drivers in 2021 the involvement rate was 60.28, more than twice that of young female drivers.

For more detailed information, view the 2021 Young Drivers Fact Sheet at <u>https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813492.pdf</u>.

Older Population

In 2021 there were 7,489 people 65 and older killed and an estimated 266,064 injured in motor vehicle traffic crashes. Older people made up 17 percent of all traffic fatalities and 11 percent of all people injured in 2021. Compared to 2020 there was a 14-percent increase in the number of traffic fatalities and a 14-percent increase in the number of those injured in the older age group.

In 2021 there were 55.8 million people—17 percent of the total U.S. population—who were 65 and older. The older population traffic fatality rates per 100,000 population in 2021 was 13.41, an increase of 11 percent from 12.09 in 2020.

For more detailed information, view the 2021 Older Population Fact Sheet at <u>https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813491.pdf</u>.

Vehicles

In addition to different populations of traffic fatalities, information regarding vehicles used at the time of travel is of importance in research, program development, and rulemaking. Traffic crashes related to passenger vehicles, large trucks, motorcycles, and vehicles used for school transportation are each discussed in separate NHTSA fact sheets.

Passenger Vehicles

Passenger vehicles are defined as motor vehicles with gross vehicle weight ratings (GVWR) of 10,000 pounds or less and include passenger cars and light trucks (SUVs, pickups, and vans).

Passenger vehicles made up 92 percent of registered vehicles and accounted for 88 percent of total VMT in 2021. There were 61,322 vehicles involved in fatal traffic crashes in 2021, of which 76 percent (46,822) were passenger vehicles.

In 2021 there were 26,325 passenger vehicle occupants who died in motor vehicle traffic crashes, a 10-percent increase from 23,914 in 2020. An estimated 2,092,541 passenger vehicle occupants were injured, a 10-percent increase from 1,907,011 in 2020.

Among the passenger vehicle occupants killed in 2021 in motor vehicle traffic crashes, 51 percent were passenger car occupants and 49 percent were light-truck occupants.

For more detailed information, view the 2021 Passenger Vehicles Fact Sheet at <u>https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813474.pdf</u>.

Large Trucks

A large truck is defined as any medium or heavy truck, excluding buses and motor homes, with a GVWR greater than 10,000 pounds. These large trucks include both commercial and non-commercial vehicles. In 2021 some 71 percent of the large trucks involved in fatal crashes were heavy large trucks (GVWR > 26,000 lbs.).

In 2021 there were 5,788 people killed in traffic crashes involving large trucks. This was a 17-percent increase from 4,945 in 2020. Seventy-two percent (4,149) of people killed in large-truck traffic crashes in 2021 were occupants of other vehicles.

In 2021 there were an estimated 154,993 people injured in traffic crashes involving large trucks—an increase of 9 percent from an estimated 141,613 in 2020. Seventy-one percent (109,981) of people injured in large-truck crashes in 2021 were occupants of other vehicles.

Three percent of drivers of large trucks involved in fatal traffic crashes in 2021 had BACs of .08 g/dL or higher, much lower than drivers of other vehicle types (28% for motorcycles, 24% for passenger cars, and 20% for light trucks).

For more detailed information, view the 2021 Large Trucks Fact Sheet at <u>https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813452.pdf</u>.

Motorcycles

Motorcycles include two- and three-wheeled motorcycles, off-road motorcycles, mopeds, scooters, minibikes, and pocket bikes. The motorcycle rider is the person operating the motorcycle; the passenger is a person seated on, but not operating the motorcycle; the motorcyclist is a general term referring to either the rider or passenger.

In 2021 there were 5,932 motorcyclists killed, 14 percent of all traffic fatalities. This is the highest number of motorcyclists killed since FARS started data collection in 1975. The number of motorcyclist fatalities in 2021 increased by 8 percent from 2020, from 5,506 to 5,932. An estimated 82,686 motorcyclists were injured in 2021, a 5-percent increase from 78,944 motorcyclists injured in 2020.

Per VMT in 2021, the fatality rate for motorcyclists (30.20) was almost 24 times the passenger car occupant fatality rate (1.26).

Forty-three percent of motorcycle riders who died in single-vehicle crashes in 2021 were alcohol-impaired. Motorcycle riders involved in fatal crashes had higher percentages of alcohol impairment than drivers of any other motor vehicle type (28% for motorcycles, 24% for passenger cars, 20% for light trucks, and 3% for large trucks) in 2021.

In States without universal helmet laws, 55 percent of motorcyclists killed in 2021 were not wearing helmets, as compared to 9 percent in States with universal helmet laws.

For more detailed information, view the 2021 Motorcycles Fact Sheet at https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813466.pdf.

School Transportation

From 2012 to 2021 there were 998 fatal school-transportation-related crashes, and 1,110 people of all ages were killed in those traffic crashes—an average of 111 fatalities per year.

There were 113 occupants killed in school transportation vehicles; 52 were drivers, and 61 were passengers from 2012 to 2021. Most (70%) of the people killed in school-transportation-related crashes were occupants of other vehicles involved in the crashes.

More school-age pedestrians were killed from 6 to 6:59 a.m. and 3 to 3:59 p.m. than any other hours of the day from 2012 to 2021.

For more detailed information, view the 2012-2021 School-Transportation-Related Crashes Fact Sheet at <u>https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813477.pdf</u>.

Crash Location

Data relating to crash location in this report pertain to whether a crash was in a rural location or an urban location, as defined by FHWA.

Rural/Urban Comparison

Of the 42,939 motor vehicle traffic fatalities in 2021, there were 17,103 (40%) that occurred in rural areas, 25,598 (60%) in urban areas, and 238 (1%) in areas that were not reported as rural or urban.

Traffic fatalities in rural areas increased by 5 percent from 16,340 in 2020 to 17,103 in 2021, and in urban areas increased by 14 percent from 22,513 in 2020 to 25,598 in 2021.

According to the Census Bureau's 2021 American Community Survey, an estimated 20 percent of the U.S. population lived in rural areas, and according to the FHWA 31 percent of the total VMT in 2021 were in rural areas. However, rural areas accounted for 40 percent of all traffic fatalities in 2021.

For more detailed information, view the 2021 Rural/Urban Comparison of Motor Vehicle Traffic Fatalities Fact Sheet at <u>https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813488.pdf</u>.

Economic Cost for All Traffic Crashes

The estimated economic cost of all traffic crashes in the United States in 2019 (the most recent year for which cost data is available) was \$340 billion. When quality of life valuations are considered, the total value of societal harm from traffic crashes in the United States in 2019 was an estimated \$1.4 trillion. Included in the economic costs are:

- Lost productivity,
- Workplace costs,
- Legal and court costs,
- Medical costs,
- Emergency medical services,
- Insurance administration costs,
- Congestion costs, and
- Property damage.

These costs represent the tangible losses that result from motor vehicle traffic crashes. However, in cases of serious injury or death, such costs fail to capture the relatively intangible value of lost quality-of-life that results from these injuries.

Each fatality resulted in an average discounted lifetime economic cost of \$1.6 million, and an average comprehensive cost of \$11.3 million. For further information on cost estimates, see *The Economic and Societal Impact of Motor Vehicle Crashes, 2019 (Revised)* at https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813403.

Fatality Analysis Reporting System

FARS contains data on every fatal motor vehicle traffic crash within the 50 States, the District of Columbia, and Puerto Rico. To be included in FARS, a traffic crash must involve a motor vehicle traveling on a trafficway customarily open to the public, and must result in the death of a vehicle occupant or a nonoccupant within 30 days of the crash. The Annual Report File (ARF) is the FARS data file associated with the most recent available year, which is subject to change when it is finalized the following year to the final version known as the Final File. The additional time between the ARF and the Final File provides the opportunity for submission of important variable data requiring outside sources, which may lead to changes in the final counts. More information on FARS can be found at <u>www.nhtsa.gov/crash-data-systems/fatality-analysis-reporting-system</u>.

The updated final counts for the previous data year will be reflected with the release of the recent year's ARF. For example, along with the release of the 2021 ARF, the 2020 Final File was released to replace the 2020 ARF. The final fatality count in motor vehicle traffic crashes for 2020 was 39,007, which was updated from 38,824 in the 2020 ARF.

Crash Report Sampling System

NHTSA's National Center for Statistics and Analysis (NCSA) 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 United States. CRSS replaced the National Automotive Sampling System (NASS) General Estimates System (GES) in 2016. More information on CRSS can be found at <u>www.nhtsa.gov/crash-data-systems/crash-report-sampling-system-crss</u>.

Product Information Catalog and Vehicle Listing (vPIC) Vehicle Classification

Historically, vehicle type classifications (e.g., passenger cars, light trucks, large trucks, motorcycles, buses) from FARS, NASS GES, and CRSS used for analysis and data reporting were based on analyst-coded vehicle body type. NHTSA did not have manufacturer authoritative data to assist in vehicle body type coding. NCSA has developed a Product Information Catalog and Vehicle Listing (vPIC) dataset that is being used to decode VINs (Vehicle Identification Numbers) and extract vehicle information. Details of vehicles (make, model, body class, etc.) involved in crashes are obtained from vPIC via VIN-linkage. The VIN-derived information from vPIC uses the manufacturer's classification of body class, which allows for more accurate vehicle type analysis.

The vPIC-based analysis data are available beginning with 2020 FARS and CRSS data files. Starting with the release of 2021 FARS and CRSS data, all vehicle-related analysis for 2020 and later years will be based on vPIC vehicle classification. As a result, the 2020 and later-year vehicle type classifications are not comparable to 2019 and earlier-year vehicle type classifications. This change affects any analysis with a vehicle component to it. More information on vPIC can be found at https://vpic.nhtsa.dot.gov/.

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For More Information:

Motor vehicle traffic crash data are available from the National Center for Statistics and Analysis (NCSA), NSA-230. NCSA can be contacted at <u>NCSARequests@dot.gov</u> or 800-934-8517. NCSA programs can be found at <u>www.nhtsa.gov/data</u>. To report a motor vehicle safety-related problem or to inquire about safety information, contact the Vehicle Safety Hotline at 888-327-4236 or <u>www.nhtsa.gov/report-a-safety-problem</u>.

The following data tools and resources can be found at <u>https://cdan.nhtsa.gov/</u>.

- Fatal Motor Vehicle Traffic Crash Data Visualizations
- Motor Vehicle Traffic Crash Databook
- Fatality and Injury Reporting System Tool (FIRST)
- State Traffic Safety Information (STSI)
- Traffic Safety Facts Annual Report Tables
- FARS Data Tables (FARS Encyclopedia)
- Crash Viewer
- Product Information Catalog and Vehicle Listing (vPIC)
- FARS, NASS GES, CRSS, NASS Crashworthiness Data System (CDS), and Crash Investigation Sampling System (CISS) data can be downloaded for further analysis.

Other fact sheets available from NCSA:

- Alcohol-Impaired Driving
- Bicyclists and Other Cyclists
- Children
- Large Trucks
- Motorcycles
- Occupant Protection in Passenger Vehicles
- Older Population
- Passenger Vehicles
- Pedestrians
- Rural/Urban Comparison of Motor Vehicle Traffic Fatalities
- School-Transportation-Related Crashes
- Speeding
- State Alcohol-Impaired-Driving Estimates
- State Traffic Data
- Young Drivers

Detailed data on motor vehicle traffic crashes are published annually in *Traffic Safety Facts: A Compilation of Motor Vehicle Traffic Crash Data*. The fact sheets and Traffic Safety Facts annual report can be found at https://crashstats.nhtsa.dot.gov/.



U.S. Department of Transportation

National Highway Traffic Safety Administration