U.S. Department of Transportation
National Highway Traffic Safety Administration

TRAFFIC SAFETY FACTS
Research Note

NHTSA

DOT HS 813 443 | Summary of Statistical Findings | May 2023

Distracted Driving in 2021

The National Highway Traffic Safety Administration works to reduce the occurrence of distracted driving and raise awareness of its dangers. This risky driving behavior poses a danger not only to vehicle occupants but pedestrians and pedalcyclists as well. Driver distraction is a specific type of driver inattention that occurs when drivers divert attention from the driving task to focus on some other activity. Often discussions regarding distracted driving center around cell phone use and texting, but distracted driving also includes things such as eating, talking to passengers, adjusting the radio/climate controls, or adjusting other vehicle controls. A distraction-affected crash is any traffic crash in which a driver was identified as distracted at the time of the crash.

- Eight percent of fatal crashes, 14 percent of injury crashes, and 13 percent of all police-reported motor vehicle traffic crashes in 2021 were reported as distraction-affected crashes.
- In 2021 there were 3,522 people killed and an estimated additional 362,415 people injured in motor vehicle traffic crashes involving distracted drivers.
- Five percent of all drivers involved in fatal traffic crashes in 2021 were reported as distracted at the time of the crashes. Seven percent of drivers 15 to 20 years old involved in fatal crashes were reported as distracted. This age group has the largest proportion of drivers who were distracted at the time of the fatal crashes.
- In 2021 there were 644 nonoccupants (pedestrians, pedalcyclists, and others) killed in distraction-affected traffic crashes.

Methodology

This research note 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 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 and CRSS. In this note the terms "motor vehicle traffic crashes" and "traffic crashes" are used interchangeably. Also "cell phones" and "mobile phones" are used interchangeably.

The national estimates produced from CRSS data are subject to sampling errors. The CRSS Analytic User's Manual 2016-2021 (Report No. DOT HS 813 436) contains information on sampling errors and generalized variance function standard errors for 2016-2021 CRSS estimates.

As defined in the *Overview of the National Highway Traffic Safety Administration's Driver Distraction Program* (Report No. DOT HS 811 299), distraction is a specific type of inattention that occurs when drivers divert their attention from the driving task to focus on some other activity. It describes distraction as a subset of inattention (which includes fatigue, and physical and emotional conditions of the driver). However, while NHTSA may define the terms in this manner, inattention and distraction are often used interchangeably or simultaneously in other material, including police crash reports (PCRs). It is important that users of NHTSA data be aware of these differences in definitions. It is also important to acknowledge the inherent limitations in the data collection for distraction-affected crashes and the resulting injuries and fatalities. This report's appendix has a table describing the coding for distraction-affected crashes for FARS and CRSS, and discusses limitations in the distracted driving data.

Data

Economic Cost for All Traffic Crashes

The estimated economic cost of all motor vehicle traffic crashes in the United States in 2019 (the most recent year for which cost data is available) was $340 billion,

of which $98 billion resulted from distracted-driving crashes. Included in the economic costs are:

- Lost productivity,
- Workplace costs,
- Legal and court costs,
- Medical costs,
- Emergency medical services,
- Insurance administration costs,
- Congestion impacts, 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 intangible value of lost quality-of-life from these injuries. When quality-of-life valuations are considered, the total value of societal harm from motor vehicle traffic crashes in the United States in 2019 was an estimated $1.37 trillion, of which $395 billion resulted from distracted-driving crashes.

For further information on cost estimates, see *The Economic and Societal Impact of Motor Vehicle Crashes, 2019.*[1] This report estimated distraction from a naturalistic observation study and found that distraction was involved in 29 percent of all crashes, resulting in 10,546 fatalities, 1.3 million nonfatal injuries, and $98.2 billion in economic costs in 2019. These estimates are different from FARS/CRSS numbers used in this research note.

Fatalities in Distraction-Affected Traffic Crashes

In 2021 there were 3,211 fatal motor vehicle traffic crashes that involved distraction (8% of 39,508 fatal crashes) nationwide. These crashes involved 3,346 distracted drivers, since some crashes each involved more than one distracted driver. Five percent (3,346 of 60,904) of drivers involved in fatal crashes were distracted. In distraction-affected crashes, 3,522 fatalities (8% of 42,939 fatalities) occurred. Table 1 provides information on fatal crashes, drivers involved in these crashes, and fatalities in distraction-affected crashes from 2017 to 2021.

Much attention has been focused on the dangers of using cell phones and other electronic devices while driving. In 2021 there were 377 fatal crashes reported as having cell phone use as a distraction (12% of all distraction-affected fatal crashes). For these distraction-affected crashes, the PCRs each stated that at least one of the involved drivers was talking on, listening to, or engaged in some other cell phone activity at the time of the crash. In 2021 a total of 410 people died in crashes involving at least one driver who was engaged in cell-phone-related activities.

Table 1
Fatal Traffic Crashes, Drivers Involved in Fatal Crashes, and Fatalities in Distraction-Affected Crashes, and Cell Phone Use by Distracted Drivers, 2017–2021

Year	Total	Distraction-Affected (D-A)		Cell Phone in Use	
		Number	Percentage of Total	Number	Percentage of D-A
Fatal Traffic Crashes					
2017	34,560	3,003	9%	418	14%
2018	33,919	2,645	8%	356	13%
2019	33,487	2,872	9%	395	14%
2020	35,935	2,889	8%	355	12%
2021	39,508	3,211	8%	377	12%
Drivers Involved in Fatal Crashes					
2017	52,752	3,065	6%	421	14%
2018	51,905	2,704	5%	361	13%
2019	51,302	2,979	6%	399	13%
2020	54,165	2,977	5%	357	12%
2021	60,904	3,346	5%	382	11%
Fatalities					
2017	37,473	3,242	9%	450	14%
2018	36,835	2,858	8%	393	14%
2019	36,355	3,119	9%	430	14%
2020	39,007	3,154	8%	397	13%
2021	42,939	3,522	8%	410	12%

Source: FARS 2017-2020 Final File, 2021 Annual Report File (ARF)

[1] Blincoe, L., Miller, T., Wang, J.-S., Swedler, D., Coughlin, T., Lawrence, B., Guo, F., Klauer, S., & Dingus, T. (2023, February). *The economic and societal impact of motor vehicle crashes, 2019 (Revised)* (Report No. DOT HS 813 403). National Highway Traffic Safety Administration. https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813403

Table 2 presents data on drivers involved in fatal crashes in 2021 by age group. Seven percent (368 of 5,088) of drivers 15 to 20 years old involved in fatal crashes were distracted at the time of the crashes. This age group has the largest proportion of drivers within each age group who were distracted (column titled "All Distracted Drivers: Percentage of Total Drivers in This Age Group").

Table 2
Drivers Involved in Fatal Traffic Crashes, by Age Group, Distraction, and Cell Phone Use, 2021

Age Group	Total Drivers		All Distracted Drivers			Drivers Using Cell Phones		
	Number	Percentage of Total Drivers	Number	Percentage of Total Drivers in This Age Group	Percentage of All Distracted Drivers	Number	Percentage of All Distracted Drivers In This Age Group	Percentage of Drivers Using Cell Phones
15–20	5,088	8%	368	7%	11%	61	17%	16%
21–24	5,513	9%	357	6%	11%	58	16%	15%
25–34	13,200	22%	820	6%	25%	113	14%	30%
35–44	10,291	17%	543	5%	16%	70	13%	18%
45–54	8,764	14%	425	5%	13%	34	8%	9%
55–64	8,085	13%	318	4%	10%	26	8%	7%
65–74	4,768	8%	216	5%	6%	17	8%	4%
75+	3,263	5%	192	6%	6%	3	2%	1%
Total	**60,904**	**100%**	**3,346**	**5%**	**100%**	**382**	**12%**	**100%**

Source: FARS 2021 ARF
Notes: The total includes 94 drivers 14 and younger, 7 of whom were noted as distracted. Additionally, the total includes 1,838 of unknown age, 100 of whom were noted as distracted.

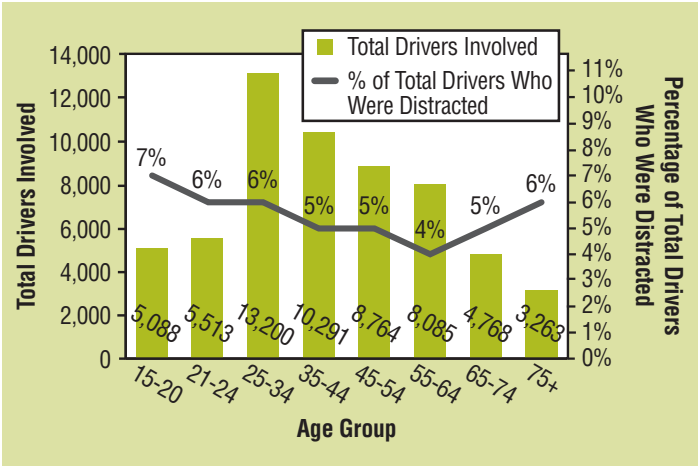
Comparing the percentages of drivers of each age group involved in fatal crashes to the percentages involved in distraction-affected fatal crashes points to overrepresentation of distraction in drivers under 35. This is seen by comparing the columns titled "Total Drivers: Percentage of Total Drivers" and "All Distracted Drivers: Percentage of All Distracted Drivers." In summary:

- Drivers in the 15-to-20 age group made up 8 percent of drivers in fatal crashes, but were 11 percent of all distracted drivers and 16 percent of drivers distracted by cell phones in fatal crashes.
- Drivers in the 21-to-24 age group made up 9 percent of drivers in fatal crashes, but were 11 percent of all distracted drivers and 15 percent of drivers distracted by cell phones in fatal crashes.
- Drivers in the 25-to-34 age group made up 22 percent of drivers in fatal crashes, but were 25 percent of all distracted drivers and 30 percent of drivers distracted by cell phones in fatal crashes.

Looking at the "All Distracted Drivers: Percentage of Total Drivers in This Age Group" column, the percentages gradually declined from 7 percent for the 15-to-20 age group to 4 percent for the 55-to-64 age group, and then gradually increased to 6 percent for the 75+ age group.

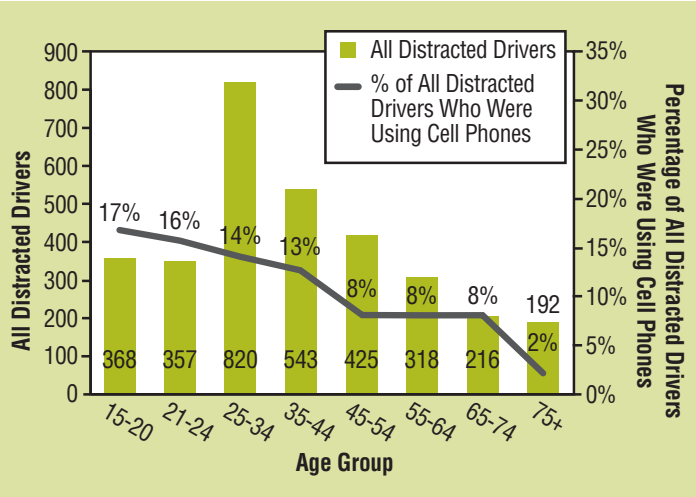
The distributions of drivers by age group for total drivers involved in fatal crashes and percentage of distracted drivers involved in fatal crashes, and distracted drivers involved in fatal crashes and percentage of distracted drivers using cell phones during fatal crashes, are shown in Figures 1a and 1b.

Figure 1a
Drivers Involved and Percentage of Drivers Involved in Fatal Traffic Crashes Who Were Distracted, by Age Group, 2021



Source: FARS 2021 ARF

Figure 1b
Distracted Drivers and Percentage of Distracted Drivers Involved in Fatal Traffic Crashes Who Were Using Cell Phones, by Age Group, 2021



Source: FARS 2021 ARF

Table 3 shows the role of the people killed in distraction-affected crashes in 2021. The large majority of fatalities in distraction-affected crashes (and in all fatal crashes) were motor vehicle occupants (including motorcyclists): 80 percent for all fatal crashes and 82 percent for distraction-affected fatal crashes. The other victims were nonoccupants – pedestrians, pedalcyclists, and others. Distracted drivers were involved in the deaths of 644 nonoccupants in 2021. In general, looking at person type, the proportion of fatalities in distraction-affected fatal crashes is very similar to that in all fatal crashes.

Table 3
Fatalities in All Traffic Crashes and Distraction-Affected Crashes, by Person Type, 2021

Person Type	Total Fatalities		Distraction-Affected (D-A) Fatalities	
	Number	Percent	Number	Percent
Total	**42,939**	**100%**	**3,522**	**100%**
Occupants				
Driver	27,422	64%	2,079	59%
Passenger	6,868	16%	799	23%
Total Occupants	34,290	80%	2,878	82%
Nonocccupants				
Pedestrian	7,388	17%	543	15%
Pedalcyclist	966	2%	75	2%
Other/Unknown	295	1%	26	1%
Total Nonoccupants	8,649	20%	644	18%

Source: FARS 2021 ARF

Seventy-one percent of the distracted drivers involved in fatal crashes were males as compared to 72 percent of drivers in all fatal crashes in 2021.

Estimates of People Injured in Distraction-Affected Traffic Crashes

In 2021 an estimated 2,497,657 people were injured in police-reported traffic crashes (Table 4). The number of people injured in distraction-affected crashes in 2021 was estimated at 326,415 (15% of all people injured). An estimated 28,994 people were injured in 2021 in crashes involving cell phone use or other cell-phone-related activities (8% of all people injured in distraction-affected crashes).

Table 4
People Injured in All Crashes and Distraction-Affected Crashes, 2017–2021

Year	Total	Distracted-Affected (D-A) Crashes			
		Number	Percentage of Total	Cell Phone Use	
				Number	Percentage of D-A
2017	2,745,268	434,733	16%	31,076	7%
2018	2,710,059	400,303	15%	32,632	8%
2019	2,740,141	423,847	15%	28,300	7%
2020	2,282,209	324,663	14%	30,000	9%
2021	2,497,657	362,415	15%	28,994	8%

Sources: FARS 2017–2020 Final File, 2021 ARF; CRSS 2017–2021

Over the past 5 years, the *estimated number* of people injured in distraction-affected crashes has shown decreases and increases. The *percentage* of injured people in distraction-affected crashes as a portion of all people injured has remained relatively constant.

Traffic Crashes of All Severity

Table 5 provides information for all police-reported traffic crashes from 2017 through 2021 including fatal crashes, injury crashes, and property-damage-only (PDO) crashes for the year. During this period, the percentages of crashes of all severities that involve distractions fluctuated very little.

In 2021 there were an estimated 248,327 distraction-affected injury crashes (14% of all injury crashes). In these crashes, an estimated 254,834 drivers (8% of all drivers in injury crashes) were distracted at the time of the crashes.

Table 5
Traffic Crashes and Distraction-Affected Crashes, by Crash Severity, 2017–2021

Year	Crash Severity	Total	Distracted-Affected (D-A) Crashes			
			Number	Percentage of Total	Cell Phone Use	
					Number	Percentage of D-A
2017	Fatal Crash	34,560	3,003	9%	418	14%
	Injury Crash	1,888,525	285,416	15%	20,539	7%
	PDO Crash	4,529,513	623,963	14%	49,929	8%
	Total	**6,452,598**	**912,382**	**14%**	**70,886**	**8%**
2018	Fatal Crash	33,919	2,645	8%	356	13%
	Injury Crash	1,893,704	276,553	15%	21,191	8%
	PDO Crash	4,807,058	659,615	14%	37,991	6%
	Total	**6,734,681**	**938,812**	**14%**	**59,537**	**6%**
2019	Fatal Crash	33,487	2,872	9%	395	14%
	Injury Crash	1,916,344	286,993	15%	20,527	7%
	PDO Crash	4,806,253	696,339	14%	40,166	6%
	Total	**6,756,084**	**986,204**	**15%**	**61,088**	**6%**
2020	Fatal Crash	35,935	2,889	8%	355	12%
	Injury Crash	1,593,390	215,310	14%	19,660	9%
	PDO Crash	3,621,681	462,106	13%	39,084	8%
	Total	**5,251,006**	**680,305**	**13%**	**59,099**	**9%**
2021	Fatal Crash	39,508	3,211	8%	377	12%
	Injury Crash	1,727,608	248,327	14%	20,015	8%
	PDO Crash	4,335,820	553,389	13%	44,518	8%
	Total	**6,102,936**	**804,928**	**13%**	**64,910**	**8%**

Sources: FARS 2017–2020 Final File, 2021 ARF; CRSS 2017–2021

Attribute Selection

As discussed in the Methodology section of this Research Note, FARS and CRSS were accessed to retrieve data on distraction-affected crashes. Table A-1 contains every variable attribute available for coding for driver distraction along with examples to illustrate the meaning of the attribute. This is the coding scheme available for FARS and CRSS. Table A-1 further indicates whether that attribute was included in the analysis for distraction-affected crashes.

In 2012 the variable attributes changed to account for different ways that PCRs from States describe general categories of distraction, inattention, and careless driving. These additional attributes provide a more accurate classification of the behavior indicated on the PCR.

Data Limitations

NHTSA recognizes that there are limitations to the collection and reporting of FARS and CRSS data with regard to driver distraction. The data collections for FARS and CRSS are based on PCRs and information gathered after the crashes have occurred.

One noteworthy challenge for collection of distracted driving data is the PCR itself. PCRs vary across jurisdictions, creating inconsistencies in reporting. Many variables on the PCR are nearly universal, but distraction is not one of those variables. Some PCRs identify distraction as a distinct reporting field while others do not have such a field and identification of distraction is based upon the narrative portion of the report. This variation in reporting forms contributes to variation in the reported number of distraction-affected crashes. Any national or State count of distraction-affected crashes should be interpreted with this limitation in mind due to potential underreporting in some States and overreporting in others.

Table A-1
Attributes Included in "Driver Distracted by" Element and Indication of Inclusion in Distraction-Affected Definitions, FARS and CRSS, 2017–2021

Attribute	Description
Not Included	
Not Distracted	Completely attentive to driving; no indication of distraction or noted as "Not Distracted"
Looked But Did Not See (deleted in 2018)	Used when the driver was paying attention to driving (not distracted), but did not see the relevant vehicle, object, etc.
No Driver Present/Unknown if Driver Present	Used when no driver is in this vehicle or when it is unknown if there was a driver present in this vehicle at the time of the crash
Not Reported	No field available on PCR; field on PCR left blank; no other information available
Reported as Unknown if Distracted	Used when the case material specifically indicates unknown
Included	
By Other Occupant(s)	Used when the driver was distracted by another occupant in this driver's vehicle prior to realization of impending danger; includes conversing with or looking at another occupant
By a Moving Object in Vehicle	Used when the driver was distracted by a moving object in this driver's vehicle prior to realization of impending danger; includes a dropped object, a moving pet, insect, or cargo
While Talking or Listening to Cell Phone	Used when the driver was talking or listening on a mobile phone; includes talking or listening on a "hands-free" or Bluetooth-enabled phone
While Manipulating Mobile Phone	Used when the driver was dialing or text messaging (texting) on a mobile phone; any manual button/control actuation on the phone qualifies
Other Mobile Phone Related	Used when the case material indicates the driver was distracted from the driving task due to mobile phone involvement, but none of the specified codes are applicable (reaching for mobile phone, etc.). This attribute is also applied when specific details regarding mobile phone distraction/usage are not provided.
Adjusting Audio or Climate Controls	Used when the driver was distracted from the driving task while adjusting the air conditioner, heater, radio, cassette, using the radio, using the cassette, or CD that are mounted in the vehicle
While Using Other Component/Controls Integral to Vehicle	Used when the driver was distracted while manipulating a control in the vehicle including adjusting headlamps or interior lights, controlling windows (power or manual), manipulating door locks (power or manual), adjusting side view mirrors (power or manual), adjusting rear view mirror, adjusting seat (power or manual), adjusting steering wheel, adjusting seat belt, on-board navigational devices, etc.
While Using or Reaching for Device/ Object Brought Into Vehicle	Used when the driver was distracted while using or reaching for a device in the vehicle including a radar detector, CDs, razor, music portable CD player, headphones, a navigational device, laptop or tablet PC, etc.
Distracted by Outside Person, Object, or Event	Used when the driver was distracted by an outside person, object, or event prior to realization of impending danger; includes animals on the roadside, a previous crash, or non-traffic-related sign (advertisement, electronic billboard, etc.). Do not use this attribute for a person, object, or event that the driver has recognized and for which the driver has taken some action (e.g., avoiding a pedestrian on the roadway).
Eating or Drinking	Used when the driver was eating or drinking or involved in an activity related to these actions (e.g., picking food from carton placed on passenger seat, reaching to throw out used food wrapper)
Smoking Related	Used when the driver was smoking or involved in an activity related to smoking, such as lighting a cigarette, putting ashes in the ash tray, etc.
Distraction/Inattention	Used exclusively when "Distraction/Inattention" or "Inattention/Distraction" is noted in the case material as one combined attribute
Distraction/Careless	Used exclusively when "Distraction/Careless" or "Careless/Distraction" is noted in the case material as one combined attribute
Careless/Inattentive	Used exclusively when "Careless/Inattentive" or "Inattentive/Careless" is noted in the case material as one combined attribute

Continued on next page.

Table A-1 (continued)
Attributes Included in "Driver Distracted by" Element and Indication of Inclusion in Distraction-Affected Definitions, FARS and CRSS, 2017–2021

Attribute	Description
Distraction (Distracted), Details Unknown	Used when "distraction" or "distracted" is noted in the case material, but specific distractions cannot be identified
Inattention (inattentive), Details Unknown	Used when "inattention" or "inattentive" is noted in the case material, but it cannot be identified if this refers to a distraction
Lost in Thought/Day Dreaming	Used when the driver was not completely attentive to driving because he/she was thinking about items other than the driving task
Other Distraction	Used when details regarding this driver's distraction are known but none of the specified codes are applicable
Distracted Driver of a Non-Contact Vehicle (new in 2018 from Related Factors - Crash Level Element)	Used for situations where the investigating officer indicates that the driver of a non-contact vehicle ("phantom vehicle") was distracted.

The following are potential reasons for underreporting of distraction-affected crashes.

1. Self-reported data elements, such as admitting to texting while driving, are always subject to bias (underreporting or false reporting). In some cases, the only source of distraction information for an investigating police officer may be the surviving driver's account of the crash and the likelihood that the driver might admit to a negative behavior such as texting while driving might be small.
2. If a driver fatality occurs in the crash, law enforcement must rely on the crash investigation in order to report on whether driver distraction was involved. Law enforcement may not have information to indicate distraction. These investigations may rely on witness account and oftentimes these accounts may not be available either.
3. Technologies are changing at a rapid speed and it is difficult to update PCRs to accommodate these changes. Without broad-sweeping changes to PCRs to incorporate new technologies and features of technologies, it is difficult to capture the data that involves driver interaction with these devices.

The following is a challenge in quantifying external distractions.

1. In the reporting of distraction-affected crashes, oftentimes an external distraction is identified as a distinct type of distraction. Some scenarios captured under external distractions might actually be related to the task of driving (e.g., looking at a street sign). However, the crash reports may not differentiate these driving-related tasks from other external distractions (looking at previous crash or billboard). Currently, the category of external distractions is included in the counts of distraction-affected crashes.

The most current information on distracted-driving laws by State is available on the Governors Highway Safety Association website at https://ghsa.org/state-laws/issues/distracted%20driving.

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 public trafficway that results 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 www.nhtsa.gov/crash-data-systems/fatality-analysis-reporting-system.

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 www.nhtsa.gov/crash-data-systems/crash-report-sampling-system-crss.

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This research note and other general information on highway traffic safety may be found at: https://crashstats.nhtsa.dot.gov/#/

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