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NHTSA

# Traffic Safety Facts RESEARCH NOTE

DOT HS 813 560

June 2024 (Revised)

# **Overview of Motor Vehicle Traffic Crashes** in 2022

There were 716 fewer people killed in motor vehicle traffic crashes on U.S. roadways during 2022, a 1.7-percent decrease from 43,230 in 2021 to 42,514 in 2022. The fatality rate per 100 million vehicle miles traveled (VMT) decreased by 3.6 percent from 1.38 in 2021 to 1.33 in 2022.

The estimated number of people injured on our roadways decreased in 2022 to 2.38 million, falling 4.6 percent from 2.50 million in 2021. The injury rate per 100 million VMT decreased by 6.3 percent from 80 in 2021 to 75 in 2022.

The estimated number of police-reported traffic crashes decreased from 6.10 million in 2021 to 5.93 million in 2022, a 2.8-percent decrease. VMT for 2022, reported through Federal Highway Administration (FHWA) increased by 2.0 percent from 3,132 billion in 2021 to 3,196 billion in 2022.

- Traffic fatalities **decreased** in 2022 compared to 2021 in the following categories.
  - Passenger vehicle<sup>1</sup> occupant fatalities (1,045 fewer fatalities, 3.9% decrease)
    - Passenger car occupant fatalities (927 fewer fatalities, 6.8% decrease)
    - Light-truck<sup>2</sup> occupant fatalities (118 fewer fatalities, 0.9% decrease)
  - Passenger vehicle occupant fatalities in vehicles that rolled over (300 fewer fatalities, 3.9% decrease)
  - o Passenger vehicle occupant fatalities who were ejected (447 fewer fatalities, 7.6% decrease)
  - Passenger vehicle occupant fatalities who were unrestrained (575 fewer fatalities, 4.8% decrease)
  - Urban fatalities (726 fewer fatalities, 2.8% decrease)
  - Rural fatalities (56 fewer fatalities, 0.3% decrease)
  - Speeding-related fatalities (347 fewer fatalities, 2.8% decrease)
  - Alcohol-impaired-driving fatalities (93 fewer fatalities, 0.7% decrease)
  - Fatalities in distraction-affected crashes (213 fewer fatalities, 6.0% decrease)
  - Fatalities in traffic crashes involving young drivers<sup>3</sup> (277 fewer fatalities, 4.9% decrease)
- Traffic fatalities **increased** in 2022 compared to 2021 in the following categories.
  - Fatalities in large-truck crashes (115 more fatalities, 2.0% increase)
    - Large-truck<sup>4</sup> occupant fatalities (86 more fatalities, 8.5% increase)
  - Pedestrian fatalities (52 more fatalities, 0.7% increase)

<sup>&</sup>lt;sup>1</sup> Includes passenger cars and light trucks.

<sup>&</sup>lt;sup>2</sup> Includes SUVs, pickups, and vans with gross vehicle weight ratings (GVWR) of 10,000 pounds or less.

<sup>&</sup>lt;sup>3</sup> Refers to a person 15 to 20 years old operating a motor vehicle.

<sup>&</sup>lt;sup>4</sup> Includes commercial and non-commercial trucks with GVWRs over 10,000 pounds. This definition applies to any mention of "large trucks" throughout this report.

- Pedalcyclist fatalities (129 more fatalities, 13% increase)<sup>5</sup>
- Motorcyclist fatalities (75 more fatalities, 1.2% increase)<sup>5</sup>
- Fatalities in hit-and-run crashes (15 more fatalities, 0.5% increase)
  - Pedestrian fatalities in hit-and-run crashes (79 more fatalities, 4.3% increase)
  - Pedalcyclist fatalities in hit-and-run crashes (40 more fatalities, 18% increase)<sup>5</sup>
- Fatalities in traffic crashes involving older drivers<sup>6</sup> (327 more fatalities, 4.0% increase)
- The estimated number of people injured **decreased** in most person-type categories from 2021 to 2022.

Information in this research note is presented in the following sections.

- Overall Trends
- <u>People Killed and Injured in Traffic Crashes, by Person Type</u>
- <u>People Killed and Injured in Traffic Crashes Involving Large Trucks</u>
- Three Major Behavioral Factors: Speeding Involvement, Alcohol-Impaired Driving, and Restraint Use
  - o Speeding Involvement
  - o <u>Alcohol-Impaired Driving</u>
  - o <u>Restraint Use</u>
- Traffic Fatalities, by Rural/Urban Classification
- Additional Facts
  - Time of Day and Day of Week
  - o <u>Demographics</u>
  - o <u>Other Characteristics</u>
- State Data

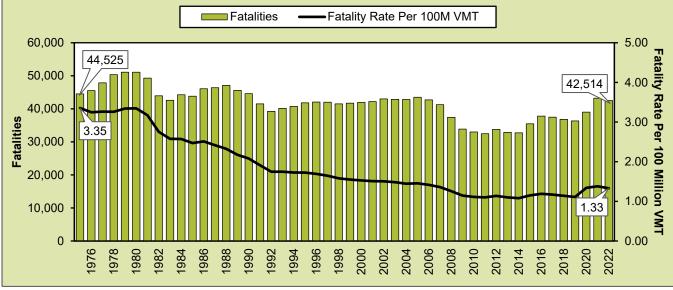
**Important Change for Motorized Bicycles**: Prior to 2022, motorized bicycles were collected as motor vehicles in FARS and CRSS and their operators and passengers were captured as motorists. Beginning in 2022, FARS and CRSS are no longer collecting motorized bicycles as motor vehicles. Consequently, operators and passengers of motorized bicycles will be captured as pedalcyclists when involved in a motor vehicle traffic crash. Any traffic crash involving only motorized bicycle(s) will no longer be captured in FARS or CRSS.

# **Overall Trends**

In 2022 there were 42,514 motor vehicle traffic fatalities in the United States, a 1.7-percent fatality decrease from 43,230 traffic fatalities in 2021, as shown in Figure 1. The 2022 fatality rate per 100 million VMT (1.33) is down from 1.38 in 2021.

<sup>&</sup>lt;sup>5</sup> Starting in 2022, people on motorized bicycles are classified as pedalcyclists instead of motorcyclists. Consider this when looking at the 2022 pedalcyclist, motorcyclist, and nonoccupant data.

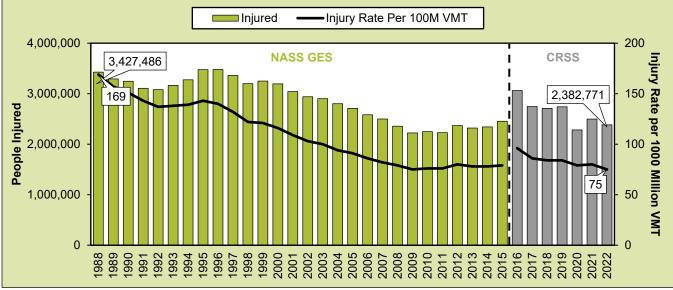
<sup>&</sup>lt;sup>6</sup> Refers to a person 65 and older operating a motor vehicle.



#### Figure 1. Traffic Fatalities and Fatality Rate per 100 Million VMT, 1975-2022

Sources: FARS 1975-2021 Final File, 2022 ARF; 1975-2022 VMT - FHWA's Annual Highway Statistics

In 2022 an estimated 2.38 million people were injured in motor vehicle traffic crashes, compared to 2.50 million in 2021 as shown in Figure 2, a decrease of 4.6 percent but was not statistically significant. This decrease came after a statistically significant increase of people injured from 2020 to 2021.





Sources: FARS 1988-2021 Final File, 2022 ARF; NASS GES 1988-2015; CRSS 2016-2022; 1988-2022 VMT – FHWA's Annual Highway Statistics

Note: CRSS estimates and NASS GES estimates are not comparable due to different sample designs.

The fatality rate per 100 million VMT decreased by 3.6 percent from 1.38 in 2021 to 1.33 in 2022, as shown in Table 1. The injury rate per 100 million VMT decreased by 6.3 percent from 80 in 2021 to 75 in 2022. Overall, VMT during 2022 increased by 2.0 percent as compared to the VMT in 2021—from 3,132 billion to 3,196 billion. Figures 1 and 2 depict the fatality and injury rate trends over time.

Table 1. Traffic Fatality and Injury Rates per 100 Million VMT, 2021-2022							
	2021	2022	Change				

	2021	2022	Change	% Change
Fatality Rate	1.38	1.33	-0.05	-3.6%
Injury Rate	80	75	-5	-6.3%

Sources: FARS 2021 Final File, 2022 ARF; CRSS 2021-2022; 2021-2022 VMT - FHWA's Annual Highway Statistics

The estimated number of police-reported motor vehicle traffic crashes decreased by 2.8 percent from 6,103,213 in 2021 to 5,930,496 in 2022, as presented in Table 2. Property-damage-only crashes, crashes in which there were no injuries to occupants or nonoccupants involved, decreased by 2.5 percent from 2021 to 2022. These decreases were not statistically significant. Fatal traffic crashes decreased from 39,785 in 2021 to 39,221 in 2022, a 1.4-percent decrease. Fatal crash counts are not tested for statistical significance because they are a census.

 Table 2. Police-Reported Traffic Crashes, by Crash Severity, 2021-2022

Crash Severity	2021	2022	Change	% Change
Total Crashes	6,103,213	5,930,496	-172,717	-2.8%
Fatal Crashes	39,785	39,221	-564	-1.4%
Non-Fatal Crashes	6,063,428	5,891,275	-172,153	-2.8%
Injury Crashes	1,727,608	1,664,598	-63,010	-3.6%
Property-Damage- Only Crashes	4,335,820	4,226,677	-109,143	-2.5%

Sources: FARS 2021 Final File, 2022 ARF; CRSS 2021-2022

# People Killed and Injured in Traffic Crashes, by Person Type

The comparison of traffic fatality composition between 2020 and 2022, is shown in Table 3. The biggest change is in passenger car occupant fatalities, as a proportion of overall traffic fatalities, decreasing from 32 percent in 2020 to 30 percent in 2022. Considering the same comparison between 2020 and 2022, the percentage of light-truck occupant fatalities increased from 29 percent to 30 percent of all fatalities. The percentage of nonoccupant fatalities increased from 20 percent in 2020 to 21 percent in 2022. The proportion of motorcyclist fatalities increased from 14 percent in 2020 to 15 percent in 2022, and the proportion of large truck, bus, and other vehicle occupant fatalities increased from 4 percent to 5 percent.

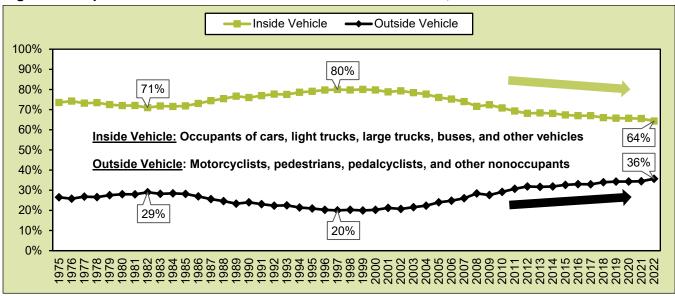
#### Table 3. Composition of Motor Vehicle Traffic Fatalities, by Person Type, 2020-2022

Person Type	2020	2021	2022
Passenger Car Occupants	32%	32%	30%
Light-Truck Occupants	29%	30%	30%
Large-Truck/Bus/Other Vehicle Occupants	4%	4%	5%
Motorcyclists	14%	14%	15%
Nonoccupants	20%	20%	21%

Source: FARS 2020-2021 Final File, 2022 ARF

Notes: Starting in 2022, people on motorized bicycles are classified as pedalcyclists instead of motorcyclists. Percentages may not add up to 100 percent due to independent rounding.

The proportion of people killed "inside the vehicle" (occupants of passenger cars, light trucks, large trucks, buses, and other vehicles) has declined from a high of 80 percent in 1996 to 64 percent in 2022, as seen in Figure 3. Correspondingly, the proportion of people killed "outside the vehicle" (motorcyclists, pedestrians, pedalcyclists, and other nonoccupants) has increased from a low of 20 percent in 1996 to a high of 36 percent in 2022.



#### Figure 3. Proportion of Traffic Fatalities Inside/Outside Vehicles, 1975-2022

Source: FARS 1975-2021 Final File, 2022 ARF

Table 4 presents the change from 2021 and 2022 in the number of occupant and nonoccupant fatalities as well as the estimated number of occupants and nonoccupants injured.

Overall, most categories of occupant and nonoccupant fatalities decreased from 2021 to 2022 except for SUV occupant fatalities, large-truck occupant fatalities, motorcyclist fatalities, pedestrian fatalities, and pedalcyclist fatalities. In summary for 2022:

- The number of passenger vehicle occupant fatalities decreased by 1,045, a 3.9-percent decrease from 2021.
  - Passenger car occupant fatalities decreased by 927, a 6.8-percent decrease from 2021.
  - Light-truck occupant fatalities decreased by 118, a 0.9-percent decrease from 2021. Of the light-truck categories (SUVs, pickups, and vans):
    - SUV occupant fatalities increased by 113, a 1.6-percent increase from 2021;
    - Pickup occupant fatalities decreased by 198, a 4.2-percent decrease from 2021; and
    - Van occupant fatalities decreased by 37, a 3.4-percent decrease from 2021.
- Large-truck occupant fatalities increased by 86, an 8.5-percent increase from 2021.
- Motorcyclist fatalities increased by 75, a 1.2-percent increase from 2021.
- Pedestrian fatalities increased by 52, a 0.7-percent increase from 2021. In 2022 the number of pedestrians killed in traffic crashes was the highest since 1981.
- Pedalcyclist fatalities increased by 129, a 13-percent increase from 2021. In 2022 the number of pedalcyclists killed in traffic crashes was the highest since FARS began in 1975.

The estimated number of people injured in 2022 decreased by 115,098 to 2.38 million, a 4.6-percent decrease from the 2.50 million people injured in 2021. Most categories of occupants injured decreased while nonoccupants injured increased from 2021 to 2022. In summary for 2022:

- Passenger vehicle occupants injured decreased by 192,204, a statistically significant 9.2-percent decrease from 2021.
  - Passenger car occupants injured decreased by 139,048, a statistically significant 13-percent decrease from 2021.
  - Light-truck occupants injured decreased by 53,156, a statistically significant 5.4-percent decrease from 2021. Of the light-truck categories:

- SUV occupants injured decreased by 35,676, a statistically significant 5.4-percent decrease from 2021;
- Pickup occupants injured decreased by 9,028, a 4.0-percent decrease from 2021; and
- Van occupants injured decreased by 8,646, a 9.0-percent decrease from 2021.
- Large-truck occupants injured decreased by 295, a 0.7-percent decrease from 2021.
- Motorcyclists injured decreased by 2,211, a 2.6-percent decrease from 2021.
- Pedestrians injured increased by 6,757, a statistically significant 11-percent increase from 2021.
- Pedalcyclists injured increased by 4,580, an 11-percent increase from 2021.

•	Killed				Injured					
Description	2024			% Change						
Description	2021	2022	Change	% Change	2021	2022	Change	% Change		
Total	43,230	42,514	-716	-1.7%	2,497,869	2,382,771	-115,098	-4.6%		
			Οςςι	ipants						
Total Occupants**	28,339	27,344	-995	-3.5%	2,295,884	2,169,123	-126,761	-5.5%*		
Passenger Vehicles	26,465	25,420	-1,045	-3.9%	2,092,743	1,900,539	-192,204	-9.2%*		
Passenger Cars	13,618	12,691	-927	-6.8%	1,108,839	969,791	-139,048	-13%*		
Light Trucks***	12,847	12,729	-118	-0.9%	983,904	930,748	-53,156	-5.4%*		
SUVs	6,990	7,103	+113	+1.6%	659,903	624,227	-35,676	-5.4%*		
Pickups	4,770	4,572	-198	-4.2%	228,002	218,974	-9,028	-4.0%		
Vans	1,084	1,047	-37	-3.4%	95,997	87,351	-8,646	-9.0%		
Large Trucks	1,011	1,097	+86	+8.5%	42,169	41,874	-295	-0.7%		
			Motor	cyclists						
Motorcyclists	6,143	6,218	+75	+1.2%	84,898	82,687	-2,211	-2.6%		
	Nonoccupants									
Total Nonoccupants****	8,748	8,952	+204	+2.3%	117,087	130,961	+13,874	+12%*		
Pedestrians	7,470	7,522	+52	+0.7%	60,579	67,336	+6,757	+11%*		
Pedalcyclists	976	1,105	+129	+13%	41,615	46,195	+4,580	+11%		

#### Table 4. Occupants and Nonoccupants Killed and Injured in Traffic Crashes, 2021-2022

Sources: FARS 2021 Final File, 2022 ARF; CRSS 2021-2022

\*These estimates are statistically significant at the  $\alpha$ =.05 level of significance.

\*\*Includes occupants of buses and other/unknown vehicle types.

\*\*\*Includes occupants of other/unknown light-truck vehicle types.

\*\*\*\*Includes other/unknown nonoccupants.

Notes: Starting in 2022, people on motorized bicycles are classified as pedalcyclists instead of motorcyclists. Changes in fatalities are not tested for statistical significance because they are from a census.

# People Killed and Injured in Traffic Crashes Involving Large Trucks

Table 5 displays the number of people killed and the estimated number of people injured in traffic crashes involving large trucks from 2021 to 2022. Large trucks include commercial and non-commercial trucks with GVWRs of over 10,000 pounds.

The number of people killed in traffic crashes involving large trucks increased by 2.0 percent from 2021 to 2022. Among fatalities in traffic crashes involving large trucks in 2022:

- Large-truck occupant fatalities in single-vehicle crashes increased by 29, a 5.0-percent increase from 2021.
- Large-truck occupant fatalities in multi-vehicle crashes increased by 57, a 13-percent increase from 2021.
- Occupants of other vehicles killed decreased by 9, a 0.2-percent decrease from 2021.
- Nonoccupants killed increased by 38, a 6.0-percent increase from 2021.

The estimated number of people injured in crashes involving large trucks increased by 3.7 percent from 2021 to 2022. Among the estimated number of people injured in crashes involving large trucks in 2022:

- Large-truck occupants injured in single-vehicle crashes increased by 3,338, a 24-percent increase from 2021.
- Large-truck occupants injured in multi-vehicle crashes decreased by 3,633, a 13-percent decrease from 2021.
- Occupants of other vehicles who were injured increased by 5,406, a 4.9-percent increase from 2021.
- Nonoccupants injured increased by 685, a 24-percent increase from 2021.

# Table 5. People Killed and Injured in Traffic Crashes Involving Large Trucks, by Person Type,2021-2022

	Killed			Injured				
Person Type	2021	2022	Change	% Change	2021	2022	Change	% Change
Total	5,821	5,936	+115	+2.0%	154,813	160,608	+5,795	+3.7%
Large-Truck Occupants	1,011	1,097	+86	+8.5%	42,169	41,874	-295	-0.7%
In Single-Vehicle Crashes	584	613	+29	+5.0%	13,823	17,161	+3,338	+24%
In Multi-vehicle Crashes	427	484	+57	+13%	28,346	24,713	-3,633	-13%
Other People	4,810	4,839	+29	+0.6%	112,644	118,735	+6,091	+5.4%
Other Vehicle Occupants	4,176	4,167	-9	-0.2%	109,795	115,201	+5,406	+4.9%
Nonoccupants	634	672	+38	+6.0%	2,849	3,534	+685	+24%

Sources: FARS 2021 Final File, 2022 ARF; CRSS 2021-2022

# Three Major Behavioral Factors: Speeding Involvement, Alcohol-Impaired Driving, and Restraint Use

NHTSA's three major behavioral focus areas are speeding involvement, alcohol-impaired driving, and restraint use. These terms are defined as follows.

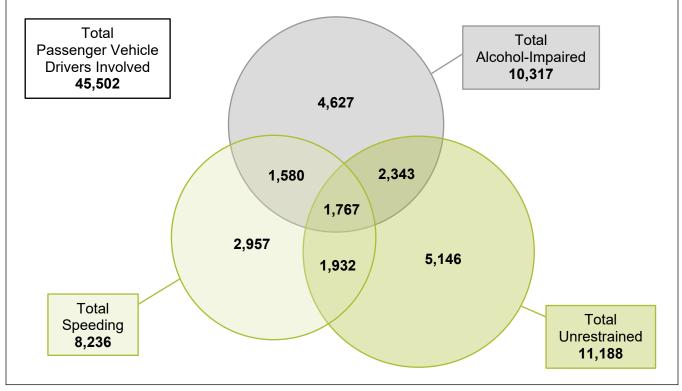
- NHTSA considers a traffic crash to be speeding-related if any driver in the crash was charged with a speeding-related offense or if a police officer indicated that racing, driving too fast for conditions, or exceeding the posted speed limit was a contributing factor in the crash. A speeding-related fatality is any fatality that occurs in a speeding-related crash.
  - The total percentage change for speeding-related fatalities (-2.8%) was lower than for total traffic fatalities (-1.7%) in 2022.
- Drivers or motorcycle riders (operators) are alcohol-impaired when their blood alcohol concentrations (BACs) are .08 grams per deciliter (g/dL) or higher. Thus, any fatal traffic crash involving a driver/rider with a BAC of .08 g/dL or higher is an alcohol-impaired-driving crash, and fatalities occurring in those crashes are considered to be alcohol-impaired-driving fatalities. Estimates of alcohol-impaired driving are generated using BAC values reported to FARS and BAC values imputed when they are not reported.
  - The total percentage change for alcohol-impaired-driving fatalities (-0.7%) was higher than for total traffic fatalities (-1.7%) in 2022.
- Not using a seat belt or child restraint indicates the passenger vehicle occupant was unrestrained.
  - The total percentage change for unrestrained passenger vehicle occupant fatalities (-4.8%) was lower than for total traffic fatalities (-1.7%) in 2022.

Figure 4 provides a Venn diagram of passenger vehicle drivers involved in fatal traffic crashes in 2022 by the three behavioral factors. Of the 45,502 passenger vehicle drivers involved in 2022:

• 20,352 had at least one of the three behavioral factors (45%), while 25,150 (55%) did not have any of the three behavioral factors;

- $\circ$  2,343 were both alcohol-impaired and unrestrained (5.1%);
- $\circ$  1,932 were both speeding and unrestrained (4.2%);
- $\circ$  1,580 were both speeding and alcohol-impaired (3.5%);
- $\circ$  1,767 were exhibiting all three behavioral factors simultaneously (3.9%).

# Figure 4. Passenger Vehicle Drivers Involved in Fatal Traffic Crashes, by Speeding Involvement, Alcohol-Impaired Driving, and Restraint Use, 2022



Source: FARS 2022 ARF

Note: NHTSA estimates BACs when alcohol test results are unknown.

#### Speeding Involvement

From 2021 to 2022 speeding-related fatalities decreased by 2.8 percent, from 12,498 in 2021 to 12,151 in 2022 (Table 6). Eighteen percent of all drivers involved in fatal traffic crashes were speeding at the time of the crashes, and 29 percent of all those killed in traffic crashes were in speeding-related traffic crashes.

### Table 6. Total and Speeding-Related Traffic Fatalities, 2021-2022

	2021	2022	Change	% Change
Total Fatalities	43,230	42,514	-716	-1.7%
Speeding-Related Fatalities	12,498	12,151	-347	-2.8%

Source: FARS 2021 Final File, 2022 ARF

#### Alcohol-Impaired Driving

Alcohol-impaired-driving fatalities decreased by 0.7 percent from 2021 to 2022 (Table 7), accounting for 32 percent of overall traffic fatalities in 2022. The alcohol-impaired-driving fatality rate per 100 million VMT decreased by 2.3 percent from 0.43 in 2021 to 0.42 in 2022.

Table 7. Total and Alcohol-Impaired-Driving Traffic Fatalities, and Alcohol-Impaired-Driving (Al-
Driving) Fatality Rates per 100 Million VMT, 2021-2022

	2021	2022	Change	% Change
Total Fatalities	43,230	42,514	-716	-1.7%
Alcohol-Impaired-Driving Fatalities	13,617	13,524	-93	-0.7%
AI-Driving Fatality Rate per 100 Million VMT	0.43	0.42	-0.01	-2.3%

Sources: FARS 2021 Final File, 2022 ARF; 2021-2022 VMT – FHWA's Annual Highway Statistics Note: NHTSA estimates BACs when alcohol test results are unknown.

As shown in Table 8, drivers of all vehicle types saw increases in the number of alcohol-impaired drivers involved in fatal crashes from 2021 to 2022, except for passenger car drivers which decreased by 3.8 percent and van drivers which decreased by 2.5 percent. Light truck drivers had the largest number increase (+325) in alcohol-impaired drivers involved in fatal crashes from 2021 to 2022. SUV drivers had the next largest number increase (+182) in alcohol-impaired drivers, followed by pickup drivers (+149).

Table 8. Alcohol-Im	naired Drivers	Involved in Fata	I Traffic Crashes	by Vehicle Type	2021-2022
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Vehicle Type	2021	2022	Change	% Change
Passenger Cars	5,107	4,911	-196	-3.8%
Light Trucks*	5,081	5,406	+325	+6.4%
Light Truck – SUVs	2,609	2,791	+182	+7.0%
Light Truck – Pickups	2,194	2,343	+149	+6.8%
Light Truck – Vans	277	270	-7	-2.5%
Motorcycles	1,784	1,808	+24	+1.3%
Large Trucks	146	163	+17	+12%

Source: FARS 2021 Final File, 2022 ARF

\*Includes other/unknown light-truck vehicle types.

Notes: Starting in 2022, people on motorized bicycles are classified as pedalcyclists instead of motorcyclists. NHTSA estimates BACs when alcohol test results are unknown.

#### Restraint Use

According to NHTSA's National Occupant Protection Use Survey (NOPUS),<sup>7</sup> the estimated passenger vehicle front-seat belt use for adults increased from 90.4 percent in 2021 to 91.6 percent in 2022, but the change was not statistically significant at the .05 level.

The percentages reported in this section are all based on known restraint use (restraint use was unknown for 11 percent of passenger vehicle occupant fatalities in 2022). Among passenger vehicle occupants killed in 2022, half (50%) were unrestrained (Table 9). Fifty-seven percent of those killed during the nighttime in 2022 were unrestrained as compared to 43 percent during the daytime.

For those passenger vehicle occupants who survived fatal crashes in 2022, only 14 percent were unrestrained compared to 50 percent of those who died. During the nighttime, 16 percent of passenger vehicle occupants who survived fatal crashes were unrestrained as compared to 13 percent during the daytime.

<sup>&</sup>lt;sup>7</sup> Boyle, L. L. (2023, November). Occupant restraint use in 2022: Results from the NOPUS controlled intersection study (Report No. DOT HS 813 523). National Highway Traffic Safety Administration. https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813523

# Table 9. Passenger Vehicle Occupants Involved in Fatal Traffic Crashes, by Restraint Use,Survival Status, and Time of Day, 2021-2022

	Passenger Vehicle Occupants Killed								
					Percent Based on K	nown Restraint Use			
	2021	2022	Change	% Change	2021	2022			
Passenger Vehicle Occupants Killed									
Total	26,465	25,420	-1,045	-3.9%					
Restrained	11,899	11,410	-489	-4.1%	50%	50%			
Unrestrained	11,877	11,302	-575	-4.8%	50%	50%			
Unknown	2,689	2,708	+19	+0.7%					
			Time	e of Day					
Daytime	13,241	12,690	-551	-4.2%					
Restrained	6,950	6,638	-312	-4.5%	57%	57%			
Unrestrained	5,223	4,949	-274	-5.2%	43%	43%			
Unknown	1,068	1,103	+35	+3.3%					
Nighttime	13,023	12,535	-488	-3.7%					
Restrained	4,885	4,704	-181	-3.7%	43%	43%			
Unrestrained	6,538	6,252	-286	-4.4%	57%	57%			
Unknown	1,600	1,579	-21	-1.3%					
		Passenger Ve	hicle Occupar	nts Who Surviv	ved Fatal Crashes				
Total	44,166	43,028	-1,138	-2.6%					
Restrained	33,696	32,832	-864	-2.6%	85%	86%			
Unrestrained	5,945	5,549	-396	-6.7%	15%	14%			
Unknown	4,525	4,647	+122	+2.7%					
			Time	e of Day					
Daytime	21,042	20,344	-698	-3.3%					
Restrained	16,909	16,355	-554	-3.3%	87%	87%			
Unrestrained	2,545	2,365	-180	-7.1%	13%	13%			
Unknown	1,588	1,624	+36	+2.3%					
Nighttime	23,046	22,603	-443	-1.9%					
Restrained	16,749	16,435	-314	-1.9%	83%	84%			
Unrestrained	3,385	3,171	-214	-6.3%	17%	16%			
Unknown	2,912	2,997	+85	+2.9%					

Source: FARS 2021 Final File, 2022 ARF

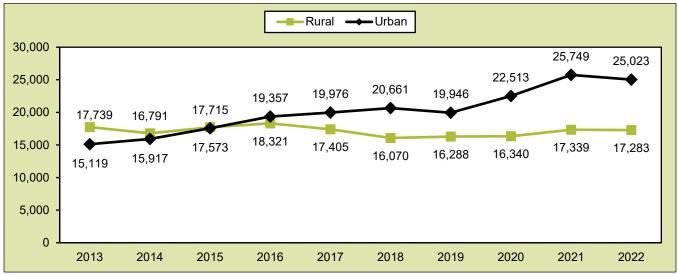
Notes: Daytime and nighttime totals do not add up to total killed or total survived. Total includes unknown time of day.

Daytime - 6 a.m. to 5:59 p.m.

Nighttime – 6 p.m. to 5:59 a.m.

# Traffic Fatalities, by Rural/Urban Classification

As shown in Figure 5, the number of traffic fatalities on urban roadways has been larger than the number of traffic fatalities on rural roadways since 2016. From 2013 to 2022 urban traffic fatalities increased by 66 percent and rural traffic fatalities decreased by 2.6 percent. From 2021 to 2022 urban traffic fatalities decreased by 2.8 percent and rural traffic fatalities decreased by 0.3 percent.

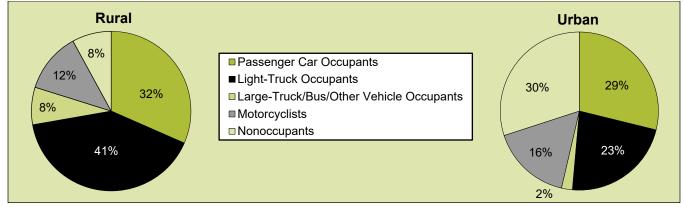


### Figure 5. Traffic Fatalities, by Rural/Urban Classification, 2013-2022

Source: FARS 2013-2021 Final File, 2022 ARF Note: Excludes unknown rural/urban classification.

Figure 6 highlights the proportion of fatalities between urban and rural areas. Urban areas have larger proportions of motorcyclist fatalities (16% versus 12%) and nonoccupant fatalities (30% versus 8%) than rural areas. Conversely, rural areas have larger proportions of passenger car occupant fatalities (32% versus 29%), light-truck occupant fatalities (41% versus 23%), and large-truck, bus, and other vehicle occupant fatalities (8% versus 2%) than urban areas.





Source: FARS 2022 ARF

Table 10 compares rural and urban characteristics in two different time periods: a 10-year comparison (2013 to 2022) and a 2-year comparison (2021 and 2022).

10-year (2013 and 2022) comparison summary:

- According to the Census Bureau, urban population increased by 3.9 percent from 2013 to 2022; rural population increased by 12 percent.
- Urban VMT increased by 6.0 percent since 2013; rural VMT increased by 9.6 percent.
- Urban fatalities increased by 66 percent since 2013; rural fatalities decreased by 2.6 percent.
- Urban fatality rate per 100 million VMT increased by 55 percent from 0.74 in 2013 to 1.15 in 2022; rural fatality rate decreased by 12 percent from 1.90 in 2013 to 1.68 in 2022.

- Pedestrian fatalities in urban areas increased by 81 percent since 2013; they decreased by 10 percent in rural areas.
- Pedalcyclist fatalities in urban areas increased by 79 percent since 2013; they decreased by 21 percent in rural areas.

2-year (2021 and 2022) comparison summary:

- According to the Census Bureau, urban population increased slightly from 2021 to 2022; rural population increased by 2.1 percent.
- Urban VMT increased by 1.0 percent since 2021; rural VMT increased by 4.2 percent.
- Urban fatalities decreased by 2.8 percent since 2021; rural fatalities decreased by 0.3 percent.
- Urban fatality rate per 100 million VMT decreased by 4.2 percent from 1.20 in 2021 to 1.15 in 2022; rural fatality rate decreased by 4.5 percent from 1.76 in 2021 to 1.68 in 2022.
- Passenger vehicle occupant fatalities in urban areas decreased by 6.1 percent since 2021; they decreased by 1.8 percent in rural areas.
- Motorcyclist fatalities in urban areas decreased by 0.8 percent since 2021; they increased by 5.8 percent in rural areas.
- Pedestrian fatalities in urban areas increased by 0.8 percent since 2021; they decreased by 0.5 percent in rural areas.
- Pedalcyclist fatalities in urban areas increased by 9 percent since 2021; they increased by 35 percent in rural areas.

# Table 10. 10-Year (2013 and 2022) and 2-Year (2021 and 2022) Comparison of Rural/Urban Characteristics

	Urban Percentage Change	Rural Percentage Change	Urban Percentage Change	Rural Percentage Change		
Characteristics	10-Year Co	omparison	2-Year Comparison			
Population	+3.9%	+12%	0.0%	+2.1%		
VMT	+6.0%	+9.6%	+1.0%	+4.2%		
Total Fatalities	+66%	-2.6%	-2.8%	-0.3%		
Fatality Rate per 100 Million VMT	+55%	-12%	-4.2%	-4.5%		
Passenger Vehicle Occupant Fatalities	*	*	-6.1%	-1.8%		
Motorcyclist Fatalities	*	*	-0.8%	+5.8%		
Pedestrian Fatalities	+81%	-10%	+0.8%	-0.5%		
Pedalcyclist Fatalities	+79%	-21%	+9.0%	+35%		

Sources: Population – Census Bureau; 2013, 2021, and 2022 VMT – FHWA's Annual Highway Statistics; FARS 2013 Final File, 2022 ARF \*Due to a vehicle classification change, the 2020 and later year data are not comparable to 2019 and earlier years. Note: Starting in 2022, people on motorized bicycles are classified as pedalcyclists instead of motorcyclists.

# **Additional Facts**

### Time of Day and Day of Week

- Nighttime (6 p.m. to 5:59 a.m.) fatalities decreased by 1.5 percent (23,242 in 2021 to 22,895 in 2022). In comparison, daytime (6 a.m. to 5:59 p.m.) traffic fatalities decreased by 1.9 percent (19,660 in 2021 to 19,293 in 2022).
- Weekend (Friday 6 p.m. to Monday 5:59 a.m.) fatalities decreased by 2.2 percent (18,022 in 2021 to 17,630 in 2022). In comparison, weekday (Monday 6 a.m. to Friday 5:59 p.m.) fatalities decreased by 1.2 percent (25,117 in 2021 to 24,805 in 2022).

### Demographics

- Male fatalities decreased by 1.0 percent (30,964 in 2021 to 30,669 in 2022), and female fatalities decreased by 3.3 percent (12,135 in 2021 to 11,737 in 2022).
- There were more fatalities among people 75+ years old (3,453 in 2021 to 3,680 in 2022, or a 6.6-percent increase) and 65 to 74 years old (4,077 in 2021 to 4,291 in 2022, or a 5.2-percent increase) from 2021 to 2022. All other age groups decreased with the largest decrease in the 5-to-9 age group (368 in 2021 to 312 in 2022, or a 15- percent decrease).
- Fatal traffic crashes involving young drivers 15 to 20 years old decreased by 5.5 percent from 4,970 in 2021 to 4,698 in 2022.
- Fatal traffic crashes involving older drivers 65+ years old increased by 4.7 percent from 7,515 in 2021 to 7,870 in 2022. In 2022 the number of fatalities in traffic crashes involving older drivers was the highest since FARS began in 1975.
- Table 11 below shows the 2-year (2021 and 2022) and 10-year (2013 and 2022) trends of drivers involved in fatal crashes. In general, older drivers (65+) had higher percentages when compared to other age groups.

# Table 11. Comparison of 2-Year and 10-Year Percentage Change of All Drivers Involved in FatalTraffic Crashes With 10-Year Percentage Change of Population Estimate and Licensed DriverData, by Age Group

		All Drivers Involved in rashes	10-Year Percentage Change of Population	10-Year Percentage Change of Licensed Driver Data (2013-2022)		
Age Group	2-Year Comparison (2021-2022)	10-Year Comparison (2013-2022)	Estimates (2013-2022)			
15–24	-5.3%	+18%	+0.8%	-2.2%		
25–44	-3.1%	+43%	+7.1%	+11%		
45–64	-2.7%	+24%	-0.6%	+0.8%		
65+	+5.4%	+43%	+29%	+40%		
Total*	-2.2%	+34%	+5.5%	+11%		

Sources: FARS 2013 and 2021 Final File, 2022 ARF; Population – Census Bureau; Licensed Drivers – FHWA \*Includes those who were under 15 years old.

Notes: Percentages are based on known values. Licensed drivers age 15 to 20 may include drivers under 15, because individual age data are not available for under 16.

### Other Characteristics

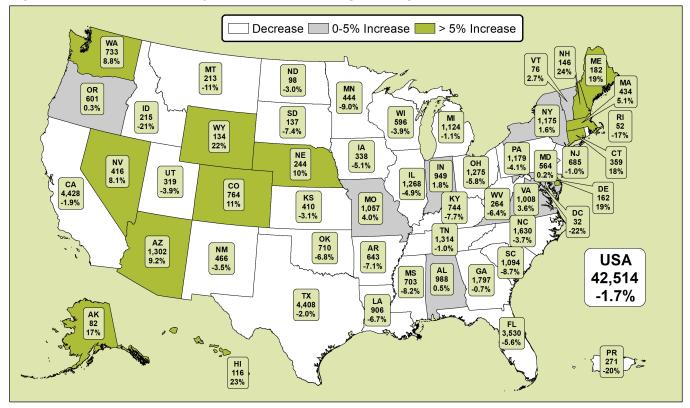
- Traffic fatalities in single-vehicle crashes decreased by 0.4 percent (23,274 in 2021 to 23,170 in 2022). In comparison, fatalities in multi-vehicle crashes decreased by 3.1 percent (19,956 in 2021 to 19,344 in 2022).
- Passenger vehicle occupants killed in vehicles that rolled over decreased by 3.9 percent (7,612 in 2021 to 7,312 in 2022).
- In 2022, of the 25,420 passenger vehicle occupants killed, 21 percent (5,445) were ejected from the vehicles, a 7.6-percent decrease from 5,892 occupants ejected and killed in 2021.
- The number of passenger vehicle occupants killed decreased by 5.9 percent in vehicles 10 years and older (16,511 in 2021 to 15,541 in 2022). In comparison, those killed in vehicles 9 years and newer decreased by 0.8 percent (9,925 in 2021 to 9,850 in 2022).
- There were 2,932 fatalities in traffic crashes involving hit-and-run drivers in 2022, an increase of 0.5 percent from 2,917 in 2021.
  - Of the 7,522 pedestrian fatalities, 1,910 (25%) were involved in hit-and-run crashes in 2022.
  - Of the 1,105 pedalcyclist fatalities, 265 (24%) were involved in hit-and-run crashes in 2022.

- Fatalities in school-transportation-related traffic crashes were relatively the same in 2021 and 2022 (108 and 104 fatalities).
- The number of fatalities in distraction-affected crashes, i.e., a crash involving at least one driver who was distracted, was 3,308, or 7.8 percent of total traffic fatalities in 2022. This represents a 6.0-percent decrease from 3,521 in 2021.
- The number of fatalities involving drowsy drivers was 693 or 1.6 percent of total traffic fatalities in 2022. This represents a 1.1-percent decrease from 701 in 2021.

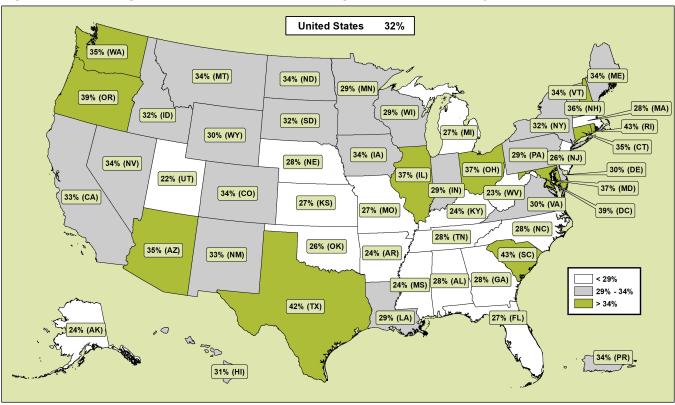
# State Data

Figure 7 displays a map of 2022 traffic fatalities by State and the percentage changes from 2021. Figure 8 contains a color-coded map of the percentage of alcohol-impaired-driving fatalities by State in 2022.

Figure 7. Traffic Fatalities, by State and Percentage Change, 2021-2022



Source: FARS 2021 Final File, 2022 ARF Note: Puerto Rico is not included in the U.S. total.



### Figure 8. Percentages of Alcohol-Impaired-Driving Traffic Fatalities, by State, 2022

Source: FARS 2022 ARF Notes: Puerto Rico is not included in the U.S. percentage. NHTSA estimates BACs when alcohol test results are unknown.

Table 12 shows the total number of motor vehicle traffic crash fatalities and the number of alcohol-impaireddriving fatalities for 2021 and 2022, the changes in the number of fatalities, and the percentage change for each State, the District of Columbia, and Puerto Rico. Twenty-nine States, the District of Columbia, and Puerto Rico had reductions in the number of traffic fatalities. In 2022 the largest reduction was in Florida, with 211 fewer fatalities. Twenty-one States had more fatalities in 2021 than in 2022. Arizona had the largest increase with 110 additional fatalities.

Nationwide, 32 percent of the total traffic fatalities were in alcohol-impaired-driving crashes. Twenty-four States saw increases in the number of alcohol-impaired-driving fatalities from 2021 to 2022, with the largest increase of 68 fatalities in South Carolina followed by 46 in Colorado. Twenty-four States, the District of Columbia, and Puerto Rico saw declines in the number of alcohol-impaired-driving fatalities from 2021 to 2022. Florida had the largest decrease, with 93 fewer lives lost in alcohol-impaired-driving crashes in 2022. North Dakota and Pennsylvania were the only States with no change in the number of alcohol-impaired-driving fatalities from 2021 to 2022.

	2021			2022			2021 to 2022 Change			
		Alcohol-l Driving F			Alcohol-li Driving F		Total Fatalities		Alcohol-Impaired- Driving Fatalities	
<b>-</b>	Total			Total				%		%
State	Fatalities	Number	Percent	Fatalities	Number	Percent	Change	Change	Change	Change
Alabama	983	283	29%	988	281	28%	+5	+0.5%	-2	-0.7%
Alaska	70	25	36%	82	20	24%	+12	+17%	-5	-20%
Arizona	1,192	437	37%	1,302	450	35%	+110	+9.2%	+13	+3.0%
Arkansas	692	183	26%	643	153	24%	-49	-7.1%	-30	-16%
California	4,513	1,453	32%	4,428	1,479	33%	-85	-1.9%	+26	+1.8%
Colorado	691	214	31%	764	260	34%	+73	+11%	+46	+21%
Connecticut	303	117	39%	359	127	35%	+56	+18%	+10	+8.5%
Delaware	136 41	35	25% 32%	162	<u>49</u> 12	30%	+26	+19%	+14 -1	+40%
Dist of Columbia Florida	3,741	13		32 3,530	940	39% 27%	-9 -211	-22% -5.6%	-93	-7.7% -9.0%
	1,809	1,033	28% 26%	1,797	507	28%	-211	-0.7%		+8.1%
Georgia	94	469	20%	1,797	307	31%	+22	+23%	+38 +9	+32%
Hawaii Idaho	273	28 83	30%	215	69	31%	-58	-21%	-14	-17%
Illinois	1,334	463	30%	1,268	471	37%	-56	-21%	-14 +8	+1.7%
Indiana	932	240	26%	949	274	29%	+17	+1.8%	+34	+14%
lowa	356	120	34%	338	116	34%	-18	-5.1%	-4	-3.3%
Kansas	423	103	24%	410	109	27%	-18	-3.1%	+6	+5.8%
Kentucky	806	190	24%	744	176	24%	-62	-7.7%	-14	-7.4%
Louisiana	971	301	31%	906	267	29%	-65	-6.7%	-34	-11%
Maine	153	44	29%	182	62	34%	+29	+19%	+18	+41%
Maryland	563	190	34%	564	207	37%	+1	+0.2%	+17	+8.9%
Massachusetts	413	150	36%	434	123	28%	+21	+5.1%	-28	-19%
Michigan	1,137	329	29%	1,124	305	27%	-13	-1.1%	-24	-7.3%
Minnesota	488	134	28%	444	130	29%	-44	-9.0%	-4	-3.0%
Mississippi	766	155	20%	703	168	24%	-63	-8.2%	+13	+8.4%
Missouri	1,016	287	28%	1,057	290	27%	+41	+4.0%	+3	+1.0%
Montana	239	102	43%	213	71	34%	-26	-11%	-31	-30%
Nebraska	221	64	29%	244	67	28%	+23	+10%	+3	+4.7%
Nevada	385	122	32%	416	140	34%	+31	+8.1%	+18	+15%
New Hampshire	118	44	37%	146	52	36%	+28	+24%	+8	+18%
New Jersey	692	174	25%	685	177	26%	-7	-1.0%	+3	+1.7%
New Mexico	483	156	32%	466	152	33%	-17	-3.5%	-4	-2.6%
New York	1,156	396	34%	1,175	371	32%	+19	+1.6%	-25	-6.3%
North Carolina	1,693	474	28%	1,630	460	28%	-63	-3.7%	-14	-3.0%
North Dakota	101	34	34%	98	34	34%	-3	-3.0%	0	0.0%
Ohio	1,354	529	39%	1,275	471	37%	-79	-5.8%	-58	-11%
Oklahoma	762	191	25%	710	186	26%	-52	-6.8%	-5	-2.6%
Oregon	599	219	36%	601	232	39%	+2	+0.3%	+13	+5.9%
Pennsylvania	1,230	338	27%	1,179	338	29%	-51	-4.1%	0	0.0%
Rhode Island	63	24	38%	52	22	43%	-11	-17%	-2	-8.3%
South Carolina	1,198	406	34%	1,094	474	43%	-104	-8.7%	+68	+17%
South Dakota	148	50	34%	137	44	32%	-11	-7.4%	-6	-12%
Tennessee	1,327	353	27%	1,314	364	28%	-13	-1.0%	+11	+3.1%
Texas	4,500	1,921	43%	4,408	1,869	42%	-92	-2.0%	-52	-2.7%
Utah	332	76	23%	319	71	22%	-13	-3.9%	-5	-6.6%
Vermont	74	22	29%	76	26	34%	+2	+2.7%	+4	+18%
Virginia	973	285	29%	1,008	298	30%	+35	+3.6%	+13	+4.6%
Washington	674	262	39%	733	256	35%	+59	+8.8%	-6	-2.3%
West Virginia	282	65	23%	264	60	23%	-18	-6.4%	-5	-7.7%
Wisconsin	620 110	199	32%	596	171	29%	-24	-3.9%	-28	-14%
Wyoming	<b>43,230</b>	36	33% <b>31%</b>	134 <b>42,514</b>	40 <b>13,524</b>	30% 32%	+24 - <b>716</b>	+22% -1.7%	+4 -93	+11% -0.7%
National Puerto Rico	<b>43,230</b> 337	<b>13,617</b> 117	31% 35%	<b>42,514</b> 271	<b>13,524</b> 91	32% 34%	-/16 -66	-1.7%	-93 -26	-0.7% -22%

#### Table 12. Total and Alcohol-Impaired-Driving Traffic Fatalities, by State, 2021 and 2022

Source: FARS 2021 Final File, 2022 ARF

Notes: Puerto Rico is not included in the U.S. total. Percentages of alcohol-impaired-driving fatalities are computed based on unrounded estimates. Year-to-year percentage changes in alcohol-impaired-driving fatalities are based on rounded estimates. NHTSA estimates BACs when alcohol test results are unknown.

## 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 2022 ARF, the 2021 Final File was released to replace the 2021 ARF. The final fatality count in motor vehicle traffic crashes for 2021 was 43,230, which was updated from 42,939 in the 2021 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. The new system, called CRSS, replaced the National Automotive Sampling System (NASS) General Estimates System (GES) in 2016. More information on CRSS can be found at <a href="https://www.nhtsa.gov/crash-data-systems/crash-report-sampling-system-crss">www.nhtsa.gov/crash-data-systems/crash-report-sampling-system-crss</a>.

## 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. Vehicle-related analysis for 2020 and later years are 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 <a href="https://vpic.nhtsa.dot.gov/">https://vpic.nhtsa.dot.gov/</a>.

### For More Information:

Motor vehicle traffic crash data are available from the National Center for Statistics and Analysis, 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 https://cdan.dot.gov/.

- 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.

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 <a href="https://crashstats.nhtsa.dot.gov/">https://crashstats.nhtsa.dot.gov/</a>.

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U.S. Department of Transportation

National Highway Traffic Safety Administration

**U.S. Department of Transportation** 1200 New Jersey Avenue SE, Washington, DC 20590 This research note and other general information on highway traffic safety may be found at: <u>https://crashstats.nhtsa.dot.gov/</u>.