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

Traffic Safety Facts
2021 Data

DOT HS 813 474 June 2023

Passenger Vehicles

In this fact sheet for 2021 the information is presented as follows.

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

Key Findings

- 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.
- Passenger vehicles made up 92 percent of registered vehicles and accounted for 88 percent of total vehicle miles traveled (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 the traffic fatality rate per 100,000 registered vehicles continued to be the highest for passenger car occupants (12.53), followed by pickup occupants (8.59), SUV occupants (7.04), and van occupants (6.88).
- 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.
- When a passenger car and a light truck hit head-on in a fatal traffic crash in 2021, an occupant was 3.1 times more frequently killed in the passenger car than in the light truck.
- Eighty-three percent of passenger vehicle occupants who were totally ejected from vehicles involved in fatal traffic crashes in 2021 were killed.
- Among passenger vehicle occupants killed in 2021 by vehicle type, the percentages of fatalities in vehicles that rolled over in traffic crashes was highest for pickups (41%), followed by SUVs (37%), vans (26%), and passenger cars (21%).
- Drivers of passenger cars had the highest percentage of alcohol impairment in fatal traffic crashes (24%) compared to other passenger vehicle drivers (22% for pickups, 19% for SUVs, and 13% for vans) in 2021.
- Drivers of passenger cars had the highest percentage of drivers who were speeding in fatal traffic crashes (22%) compared to other passenger vehicle drivers (16% for pickups, 15% for SUVs, and 10% for vans) in 2021.

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 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.

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).

This fact sheet has only 2020 and 2021 data using vPIC. For earlier-year data, refer to the 2020 Passenger Vehicles TSF at: crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813323. **The data in this previous publication used the earlier vehicle type classification based on NCSA body type.**

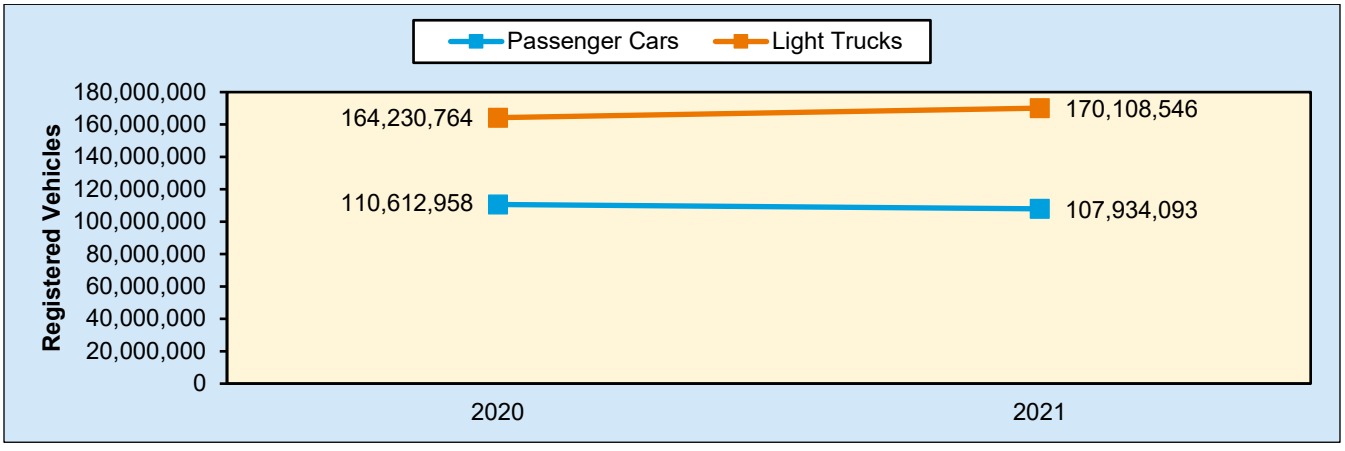
A motor vehicle traffic crash is defined as an incident that involved one or more motor vehicles in-transport that originated on or had a harmful event (injury or damage) on a public trafficway, such as a road or highway. Crashes that occurred on private property not regularly used by the public for 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.

Registration Data

The passenger vehicle registration data contained in this fact sheet was obtained from R. L. Polk’s National Vehicle Population Profile (NVPP), a compilation of all passenger vehicles registered in compliance with State requirements.

Figure 1 highlights the passenger car and light-truck registration data from 2020 to 2021. From 2020 to 2021 passenger car registrations decreased by 2 percent, and light-truck registrations increased by 4 percent. Among the light-truck categories in 2021 compared to 2020, SUV registrations increased by 6 percent, pickup registrations increased by 2 percent, and van registrations decreased by 2 percent.

Figure 1. Passenger Car and Light-Truck Registrations, 2020 and 2021



Source: Registered Vehicles – Polk data from S&P Global Mobility, Copyright © R.L. Polk & Co.

Overview

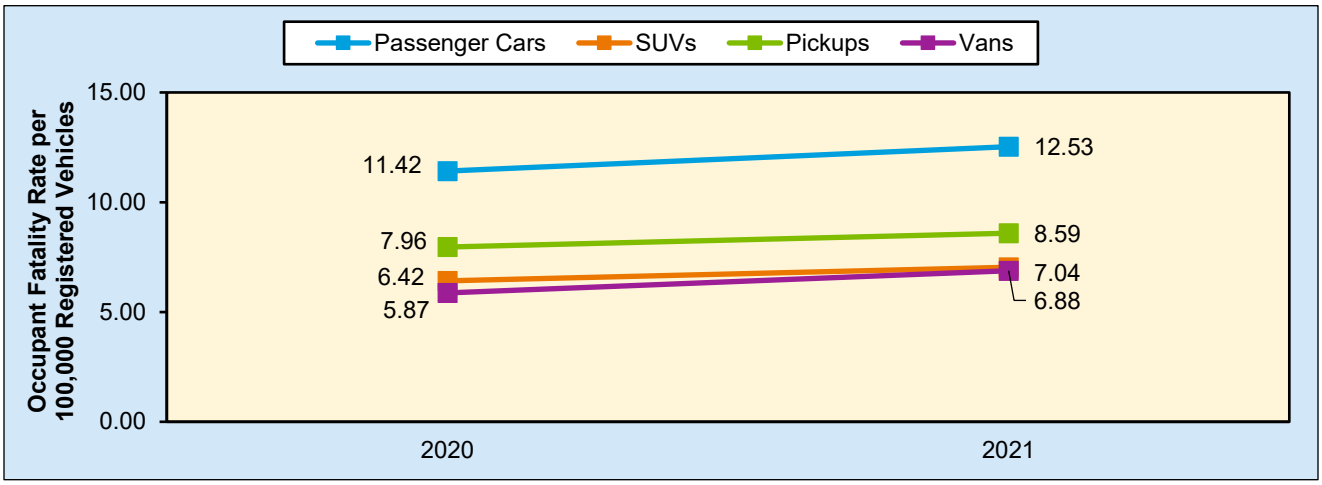
In 2021:

- There were 26,325 passenger vehicle occupants who died in motor vehicle traffic crashes, a 10-percent increase from 23,914 in 2020, and an estimated 2,092,541 passenger vehicle occupants who were injured, a 10-percent increase from 1,907,011 in 2020.
- Passenger vehicles made up 92 percent of registered vehicles and accounted for 88 percent of total VMT.
- An estimated 10,843,740 vehicles were involved in police-reported traffic crashes; 86 percent (9,292,148) were passenger vehicles.
- There were 61,322 vehicles involved in fatal traffic crashes, of which 76 percent (46,822) were passenger vehicles.

Figure 2 displays the occupant fatality rates per 100,000 registered vehicles in traffic crashes for four types of passenger vehicles (passenger cars, SUVs, pickups, and vans) from 2020 to 2021. Overall, the occupant fatality rate trend for each vehicle type increased from 2020 to 2021. The data for Figure 2 is presented in Tables 1 and 2.

In 2021 the fatality rate continued to be highest for passenger car occupants (12.53), followed by pickup occupants (8.59), SUV occupants (7.04), and van occupants (6.88). Occupant fatality rates per 100,000 registered vehicles from 2020 to 2021 increased by 10 percent (11.42 to 12.53) for passenger cars and increased by 9 percent (6.87 to 7.52) for light trucks. Among light-truck categories, occupant fatality rates increased by 10 percent (6.42 to 7.04) for SUVs, increased by 8 percent (7.96 to 8.59) for pickups, and increased by 17 percent (5.87 to 6.88) for vans.

Figure 2. Passenger Vehicle Occupant Fatality Rates per 100,000 Registered Vehicles in Traffic Crashes, by Vehicle Type, 2020 and 2021



Sources: FARS 2020 Final File, 2021 Annual Report File (ARF); Registered Vehicles – Polk data from S&P Global Mobility, Copyright © R.L. Polk & Co.

Table 1 presents the number of occupant fatalities, estimated number of occupants injured, number of registered vehicles, and occupant fatality/injury rates per 100,000 registered vehicles in traffic crashes for total passenger vehicles as well as separately for passenger cars and light trucks from 2020 to 2021.

- Passenger car occupant fatalities, as a proportion of passenger vehicle occupant traffic fatalities, decreased from 53 percent in 2020 (12,628 of 23,914) to 51 percent in 2021 (13,529 of 26,325).
- Light-truck occupant fatalities, as a proportion of passenger vehicle occupant traffic fatalities, increased from 47 percent in 2020 (11,286 of 23,914) to 49 percent in 2021 (12,796 of 26,325).
- From 2020 to 2021 in traffic crashes:
    - The total passenger vehicle occupant fatality rate increased from 8.70 to 9.47.

- The passenger car occupant fatality rate increased from 11.42 to 12.53.
- The light-truck occupant fatality rate increased from 6.87 to 7.52.
- The passenger vehicle occupant injury rate increased from 694 to 753.
- The passenger car occupant injury rate increased from 924 to 1,027.
- The light-truck occupant injury rate increased from 539 to 578.

Table 1. Passenger Vehicle Occupants Killed and Injured in Traffic Crashes, Registered Vehicles, and Occupant Fatality/Injury Rates per 100,000 Registered Vehicles, by Vehicle Type, 2020 and 2021

Year	Passenger Vehicle Type						Total		
	Passenger Cars			Light Trucks					
	Occupant Fatalities	Registered Vehicles	Occupant Fatality Rate	Occupant Fatalities	Registered Vehicles	Occupant Fatality Rate	Occupant Fatalities	Registered Vehicles	Occupant Fatality Rate
2020	12,628	110,612,958	11.42	11,286	164,230,764	6.87	23,914	274,843,722	8.70
2021	13,529	107,934,093	12.53	12,796	170,108,546	7.52	26,325	278,042,639	9.47
Year	Occupants Injured	Registered Vehicles	Occupant Injury Rate	Occupants Injured	Registered Vehicles	Occupant Injury Rate	Occupants Injured	Registered Vehicles	Occupant Injury Rate
2020	1,022,587	110,612,958	924	884,424	164,230,764	539	1,907,011	274,843,722	694
2021	1,108,721	107,934,093	1,027	983,820	170,108,546	578	2,092,541	278,042,639	753

Sources: FARS 2020 Final File, 2021 ARF; CRSS 2020-2021; Registered Vehicles – Polk data from S&P Global Mobility, Copyright © R.L. Polk & Co.

Table 2 presents the same information as in Table 1 for three light-truck categories (SUVs, pickups, and vans) from 2020 to 2021 in traffic crashes.

- The SUV occupant fatality rate increased from 6.42 to 7.04.
- The pickup occupant fatality rate increased from 7.96 to 8.59.
- The van occupant fatality rate increased from 5.87 to 6.88.
- The SUV occupant injury rate increased from 620 to 667.
- The pickup occupant injury rate increased from 403 to 412.
- The van occupant injury rate increased from 528 to 613.

Table 2. Light-Truck Occupants Killed and Injured in Traffic Crashes, Registered Vehicles, and Occupant Fatality/Injury Rates per 100,000 Registered Vehicles, by Vehicle Type, 2020 and 2021

Year	Light-Truck Vehicle Type								
	SUVs			Pickups			Vans		
	Occupant Fatalities	Registered Vehicles	Occupant Fatality Rate	Occupant Fatalities	Registered Vehicles	Occupant Fatality Rate	Occupant Fatalities	Registered Vehicles	Occupant Fatality Rate
2020	6,015	93,697,770	6.42	4,333	54,407,874	7.96	938	15,977,754	5.87
2021	6,961	98,928,860	7.04	4,757	55,373,724	8.59	1,078	15,660,603	6.88
Year	Occupants Injured	Registered Vehicles	Occupant Injury Rate	Occupants Injured	Registered Vehicles	Occupant Injury Rate	Occupants Injured	Registered Vehicles	Occupant Injury Rate
2020	580,609	93,697,770	620	219,498	54,407,874	403	84,318	15,977,754	528
2021	659,855	98,928,860	667	227,981	55,373,724	412	95,984	15,660,603	613

Sources: FARS 2020 Final File, 2021 ARF; CRSS 2020-2021; Registered Vehicles – Polk data from S&P Global Mobility, Copyright © R.L. Polk & Co.

The Federal Highway Administration (FHWA) releases annual estimates of the number of miles traveled by vehicle type (passenger cars, light trucks, motorcycles, buses, and large trucks). Table 3 contains the VMT estimates for passenger cars and light trucks along with occupant fatality and injury rates per 100 million VMT from 2020 to 2021 in traffic crashes. Some highlights:

- The occupant fatality rate per 100 million VMT for passenger vehicles increased from 0.93 to 0.95.
- The occupant fatality rate for passenger cars increased from 1.22 to 1.26.
- The occupant fatality rate for light trucks increased from 0.73 to 0.75.
- The 2021 occupant injury rate for passenger vehicles was 75, an increase from 74 in 2020.
- The 2021 occupant injury rate for passenger cars was 103, an increase from 99 in 2020.
- The 2020 and 2021 occupant injury rates for light trucks were the same at 58.

Table 3. Passenger Vehicle Occupants Killed and Injured in Traffic Crashes, Vehicle Miles Traveled, and Occupant Fatality/Injury Rates per 100 Million VMT, by Vehicle Type, 2020 and 2021

Year	Passenger Vehicle Type						Total		
	Passenger Cars			Light Trucks					
	Occupant Fatalities	VMT (millions)	Occupant Fatality Rate	Occupant Fatalities	VMT (millions)	Occupant Fatality Rate	Occupant Fatalities	VMT (millions)	Occupant Fatality Rate
2020	12,628	1,035,519	1.22	11,286	1,537,469	0.73	23,914	2,572,988	0.93
2021	13,529	1,077,651	1.26	12,796	1,698,422	0.75	26,325	2,776,073	0.95
Year	**Occupants Injured**	**VMT (millions)**	**Occupant Injury Rate**	**Occupants Injured**	**VMT (millions)**	**Occupant Injury Rate**	**Occupants Injured**	**VMT (millions)**	**Occupant Injury Rate**
2020	1,022,587	1,035,519	99	884,424	1,537,469	58	1,907,011	2,572,988	74
2021	1,108,721	1,077,651	103	983,820	1,698,422	58	2,092,541	2,776,073	75

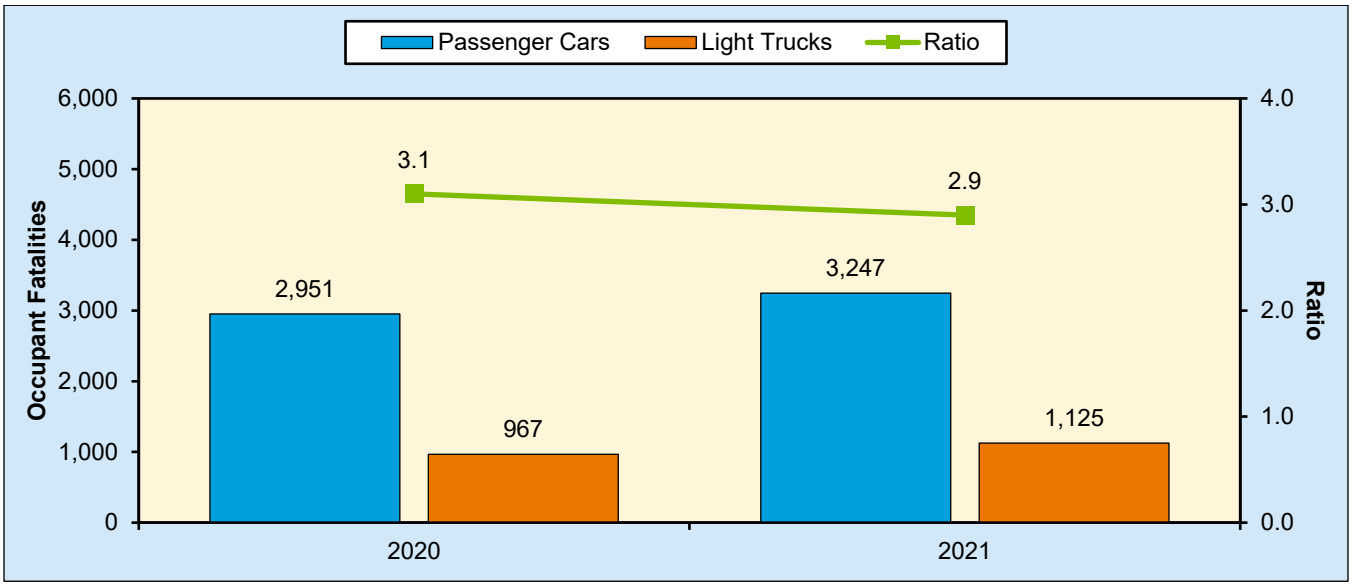
Sources: FARS 2020 Final File, 2021 ARF; CRSS 2020-2021; VMT – FHWA

Fatal Passenger Car and Light-Truck, Two-Vehicle Traffic Crashes

In 2021 there were 4,372 fatal two-vehicle traffic crashes each involving a passenger car and a light truck, which accounted for 28 percent of all fatal two-vehicle traffic crashes (15,563) and 11 percent of all fatal traffic crashes (39,508). Figure 3 displays the number of occupant fatalities in two-vehicle traffic crashes involving one passenger car and one light truck from 2020 to 2021. In these crashes, there was a range of 2.9 to 3.1 times as many passenger car occupant fatalities as light-truck occupant fatalities, and in 2021 the ratio was 2.9. In more detail from 2020 to 2021:

- When a passenger car and a light truck hit head-on, an occupant was 3.1 to 3.2 times more frequently killed in the passenger car than in the light truck. In 2021 the ratio was 3.1.
- When a passenger car front hit the side of a light truck, an occupant was 1.5 to 1.7 times more frequently killed in the light truck than in the passenger car. In 2021 the ratio was 1.7.
- However, when a light truck front hit the side of a passenger car, an occupant was 12.6 to 13.5 times more frequently killed in the passenger car than in the light truck. In 2021 the ratio was 12.6.

Figure 3. Occupant Fatalities and Ratios in Two-Vehicle Traffic Crashes Involving a Passenger Car and a Light Truck, 2020 and 2021



Source: FARS 2020 Final File, 2021 ARF

Table 4 presents the number of occupant fatalities in two-vehicle traffic crashes between a passenger car and a light truck from 2020 to 2021:

- The number of passenger car occupant fatalities increased by 10 percent, from 2,951 in 2020 to 3,247 in 2021.
- The number of light-truck occupant fatalities increased by 16 percent, from 967 in 2020 to 1,125 in 2021.

Table 4. Occupant Fatalities in Two-Vehicle Traffic Crashes Involving a Passenger Car and a Light Truck, 2020 and 2021

Occupants	Year		Percentage Change
	2020	2021	
Killed in Passenger Cars	2,951	3,247	+10%
Killed in Light Trucks	967	1,125	+16%

Source: FARS 2020 Final File, 2021 ARF

Restraint Use

The 2021 National Occupant Protection Use Survey (NOPUS) observed that the seat belt use rate among adult front-seat occupants was 90.4 percent for passenger vehicles, 90.8 percent for passenger cars, 92.4 percent for vans and SUVs, and 85.1 percent for pickups.[1]

Lap/shoulder seat belts, when used, are estimated to reduce the risk of fatal injury to front-seat passenger car occupants by 45 percent and the risk of moderate-to-critical injury by 50 percent. For light-truck occupants, seat belts are estimated to reduce the risk of fatal injury by 60 percent and moderate-to-critical injury by 65 percent.[2]

[1] National Center for Statistics and Analysis. (2021, December). *Seat belt use in 2021 – Overall results* (Traffic Safety Facts Research Note. Report No. DOT HS 813 241). National Highway Traffic Safety Administration. crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813241

[2] Kahane, C. J. (2015, January). *Lives saved by vehicle safety technologies and associated Federal Motor Vehicle Safety Standards, 1960 to 2012 – Passenger cars and LTVs – With reviews of 26 FMVSS and the effectiveness of their associated safety technologies in reducing fatalities, injuries, and crashes* (Report No. DOT HS 812 069). National Highway Traffic Safety Administration. crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812069

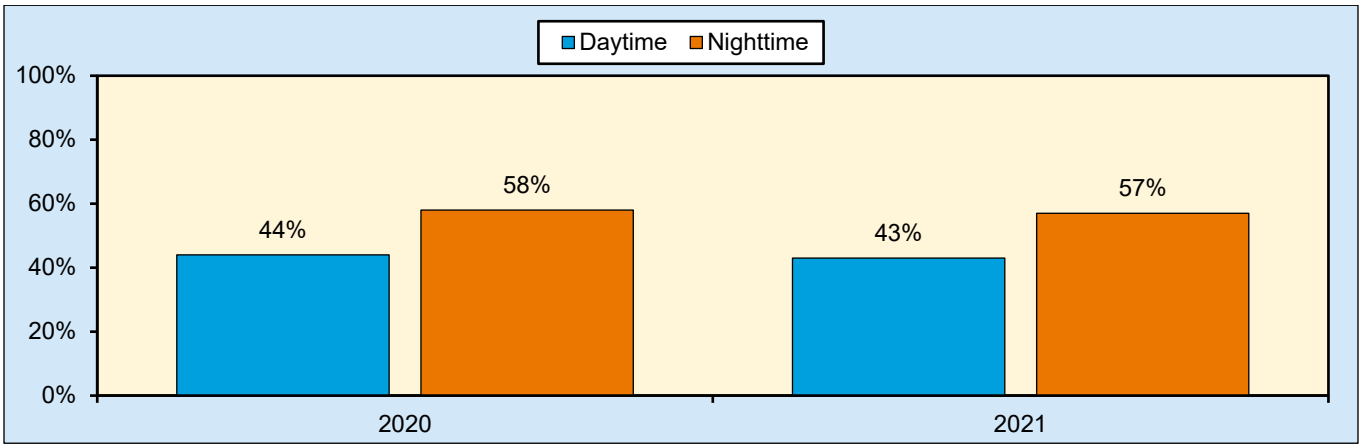
Seat belts saved an estimated 14,955 lives of passenger vehicle occupants 5 and older in 2017 (latest data available).[3]

In fatal traffic crashes in 2021 there were 26,325 passenger vehicle occupants who were killed. Rural areas accounted for 48 percent of these occupant fatalities. For these passenger vehicle occupant fatalities occurring in rural areas, 51 percent were unrestrained (based on known restraint use) compared to 49 percent in urban areas (based on known restraint use). Sixty-one percent of rural pickup occupants killed were unrestrained (based on known restraint use) – the highest percentage of any passenger vehicle occupants killed among rural and urban areas.

Figure 4 displays the percentages of passenger vehicle occupants killed in traffic crashes who were unrestrained (based on known restraint use) by time of day:

- Daytime (6 a.m. to 5:59 p.m.) declined from 44 percent in 2020 to 43 percent in 2021.
- Nighttime (6 p.m. to 5:59 a.m.) declined from 58 percent in 2020 to 57 percent in 2021.

Figure 4. Percentages of Unrestrained* Passenger Vehicle Occupant Fatalities in Traffic Crashes, by Time of Day, 2020 and 2021



Source: FARS 2020 Final File, 2021 ARF
*Based on known restraint use.
Daytime – 6 a.m. to 5:59 p.m.
Nighttime – 6 p.m. to 5:59 a.m.

Table 5 presents the percentages of unrestrained (based on known restraint use) passenger vehicle occupant fatalities in traffic crashes, by vehicle type and time of day, from 2020 to 2021. Van fatalities had the lowest daytime percentage (35%), and passenger car and van occupant fatalities each had the lowest nighttime percentage (54%) of unrestrained occupant fatalities in 2021, while pickup occupant fatalities had the highest percentages (55% daytime and 68% nighttime).

[3] National Center for Statistics and Analysis. (2019, March). *Lives saved in 2017 by restraint use and minimum drinking-age-laws* (Traffic Safety Facts Crash•Stats. Report No. DOT HS 812 683). National Highway Traffic Safety Administration. crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812683

Table 5. Percentages of Unrestrained* Passenger Vehicle Occupant Fatalities in Traffic Crashes, By Time of Day and Vehicle Type, 2020 and 2021

Time of Day and Year		Passenger Vehicle Type					Total
		Passenger Cars	Light Trucks				
			SUVs	Pickups	Vans	Total**	
Daytime	2020	39%	44%	55%	44%	48%	44%
	2021	40%	42%	55%	35%	46%	43%
Nighttime	2020	54%	61%	69%	50%	63%	58%
	2021	54%	57%	68%	54%	61%	57%

Source: FARS 2020 Final File, 2021 ARF
*Based on known restraint use.
Daytime – 6 a.m. to 5:59 p.m.
Nighttime – 6 p.m. to 5:59 a.m.

Ejection

The term "totally ejected" means that the occupant's body was entirely outside the vehicle but may have been in contact with the vehicle; "partially ejected" means that part of the occupant's body was outside the vehicle at some time during the crash sequence. Eighty-three percent of passenger vehicle occupants (4,586 of 5,494) who were totally ejected from vehicles involved in fatal traffic crashes in 2021 were killed. Ejection from a vehicle is one of the deadliest events that can happen to a person in a crash. Seat belts are shown to be effective in mitigating ejection risks.

Table 6 presents the ejection status of passenger vehicle occupants involved (killed and survived) in fatal traffic crashes in 2021. In passenger cars, 14 percent of occupants killed were totally ejected from the vehicles, while 21 percent of those killed in light trucks were totally ejected.

Table 6. Passenger Vehicle Occupants Involved in Fatal Traffic Crashes, by Vehicle Type, Survival Status, and Ejection Status, 2021

Vehicle Type by Survival Status		Ejection Status										Total	
		Not Ejected		Ejected						Unknown			
				Totally Ejected		Partially Ejected		Total*					
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Passenger Cars	Killed	11,080	82%	1,842	14%	507	4%	2,367	17%	82	1%	13,529	100%
	Survived	16,507	96%	352	2%	63	0.4%	422	2%	274	2%	17,203	100%
	Total	27,587	90%	2,194	7%	570	2%	2,789	9%	356	1%	30,732	100%
Light Trucks	Killed	9,212	72%	2,744	21%	723	6%	3,500	27%	84	1%	12,796	100%
	Survived	25,445	96%	556	2%	87	0.3%	667	3%	435	2%	26,547	100%
	Total	34,657	88%	3,300	8%	810	2%	4,167	11%	519	1%	39,343	100%
Passenger Vehicles	**Killed**	**20,292**	**77%**	**4,586**	**17%**	**1,230**	**5%**	**5,867**	**22%**	**166**	**1%**	**26,325**	**100%**
	Survived	**41,952**	**96%**	**908**	**2%**	**150**	**0.3%**	**1,089**	**2%**	**709**	**2%**	**43,750**	**100%**
	Total	**62,244**	**89%**	**5,494**	**8%**	**1,380**	**2%**	**6,956**	**10%**	**875**	**1%**	**70,075**	**100%**

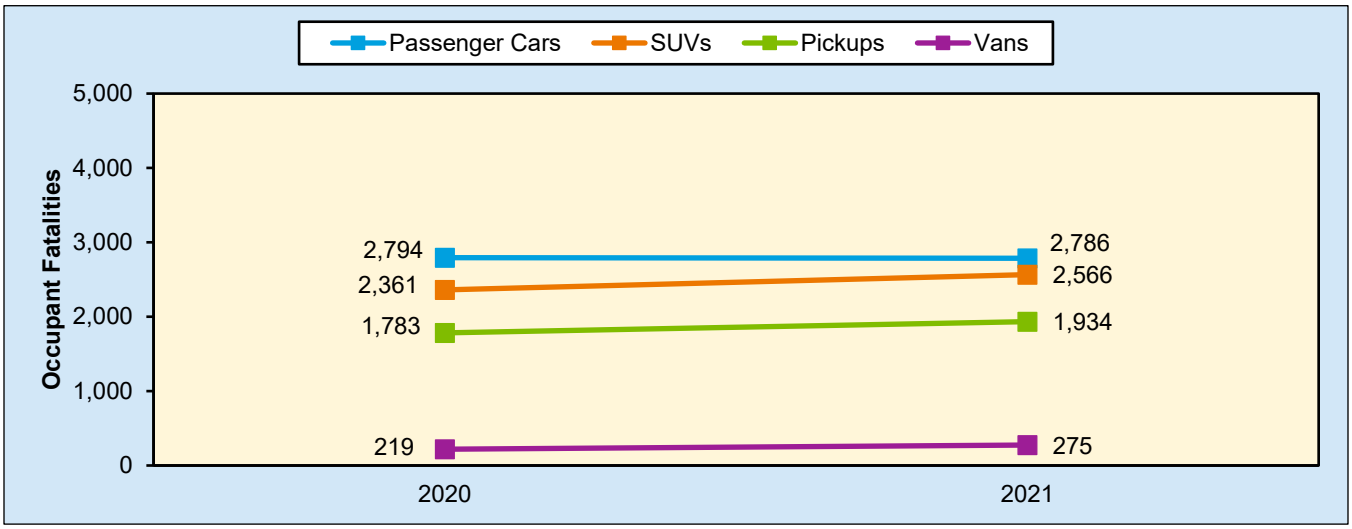
Source: FARS 2021 ARF
*Includes ejected unknowns if totally or partially ejected.

Rollover

A rollover traffic crash is one of the most dangerous forms of crashes among passenger vehicles, accounting for 29 percent of passenger vehicle occupant fatalities in 2021. Among passenger vehicle occupants killed in 2021 by vehicle type, the percentages of fatalities in vehicles that rolled over in traffic crashes was highest for pickups (41%), followed by SUVs (37%), vans (26%), and passenger cars (21%).

Three of the four passenger vehicle categories in Figure 5 increased from 2020 to 2021, except for passenger cars. The data used in Figure 5 is shown in Table 7.

Figure 5. Passenger Vehicle Occupant Fatalities in Vehicles That Rolled Over in Traffic Crashes, by Vehicle Type, 2020 and 2021



Source: FARS 2020 Final File, 2021 ARF

Table 7 presents the number of passenger vehicle occupants killed in vehicles that rolled over in traffic crashes by vehicle type from 2020 to 2021.

From 2020 to 2021 the rollover fatalities in traffic crashes for occupants of:

- Total passenger vehicles increased from 7,157 to 7,561 (6%);
- Passenger cars decreased from 2,794 to 2,786 (-0.3%);
- SUVs increased from 2,361 to 2,566 (9%);
- Pickups increased from 1,783 to 1,934 (8%); and
- Vans increased from 219 to 275 (26%).

Table 7. Passenger Vehicle Occupant Fatalities in Vehicles That Rolled Over in Traffic Crashes, by Vehicle Type, 2020 and 2021

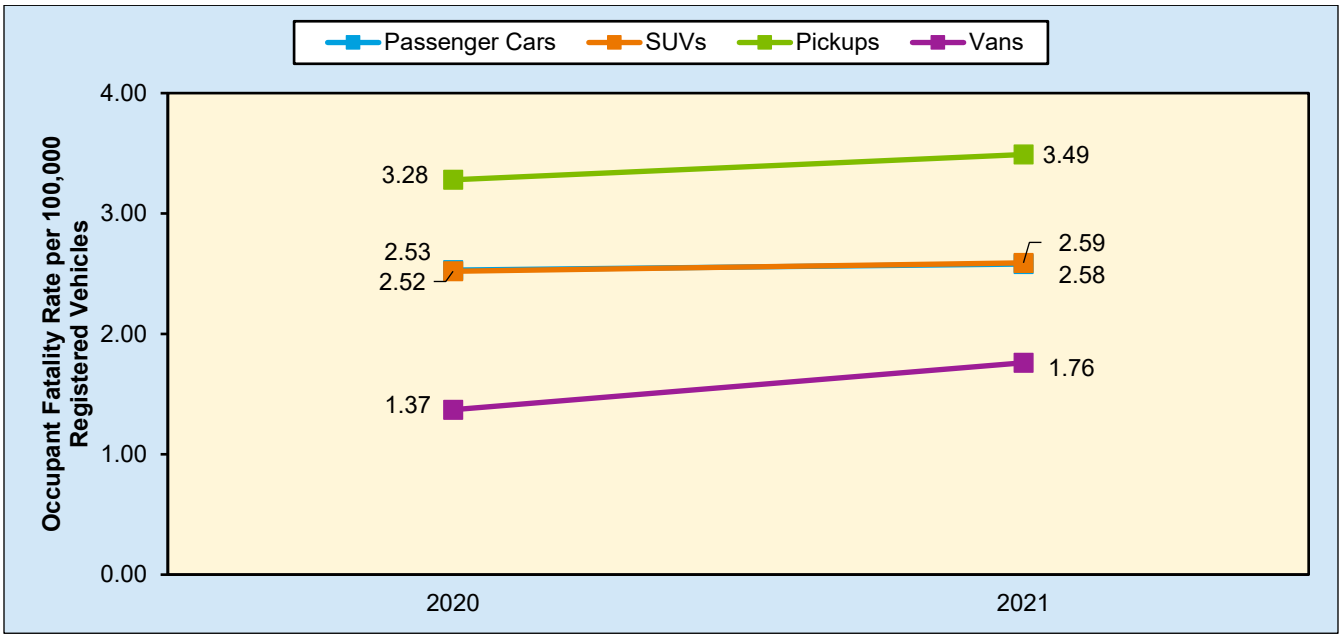
Year	Passenger Vehicle Type					Total Occupant Fatalities
	Passenger Cars	Light Trucks				
		SUVs	Pickups	Vans	Total	
2020	2,794	2,361	1,783	219	4,363	7,157
2021	2,786	2,566	1,934	275	4,775	7,561

Source: FARS 2020 Final File, 2021 ARF

Among passenger vehicles involved in rural fatal traffic crashes in 2021 by vehicle type, SUVs and pickups experienced the highest rollover percentage (30%) compared to 21 percent for passenger cars and 20 percent for vans. The rollover percentages for passenger vehicles in urban areas by vehicle type were much lower: 14 percent for pickups, 13 percent for SUVs, 9 percent for passenger cars, and 9 percent for vans.

Figure 6 displays the occupant fatality rates per 100,000 registered vehicles in vehicles that rolled over in traffic crashes by vehicle type from 2020 to 2021. The data for Figure 6 is presented in Table 8.

Figure 6. Passenger Vehicle Occupant Fatality Rates per 100,000 Registered Vehicles in Vehicles That Rolled Over in Traffic Crashes, by Vehicle Type, 2020 and 2021



Sources: FARS 2020 Final File, 2021 ARF; Registered Vehicles – Polk data from S&P Global Mobility, Copyright © R.L. Polk & Co.

Table 8 presents the passenger vehicle occupant fatality rates per 100,000 registered vehicles in vehicles that rolled over in traffic crashes by vehicle type from 2020 to 2021.

From 2020 to 2021 the occupant fatality rates per 100,000 registered vehicles, in vehicle that rolled over in traffic crashes for:

- Total passenger vehicles increased from 2.60 to 2.72 (5%);
- Passenger cars increased from 2.53 to 2.58 (2%);
- SUVs increased from 2.52 to 2.59 (3%);
- Pickups increased from 3.28 to 3.49 (6%); and
- Vans increased from 1.37 to 1.76 (28%).

Table 8. Passenger Vehicle Occupant Fatality Rates Per 100,000 Registered Vehicles in Vehicles That Rolled Over in Traffic Crashes, by Vehicle Type, 2020 and 2021

Year	Passenger Vehicle Type					Total
	Passenger Cars	Light Trucks				
		SUVs	Pickups	Vans	Total	
2020	2.53	2.52	3.28	1.37	2.66	2.60
2021	2.58	2.59	3.49	1.76	2.81	2.72

Sources: FARS 2020 Final File, 2021 ARF; Registered Vehicles – Polk data from S&P Global Mobility, Copyright © R.L. Polk & Co.

Alcohol

A driver is considered to be alcohol-impaired when the driver's blood alcohol concentration (BAC) is .08 grams per deciliter (g/dL) or higher. From 2020 to 2021 the percentages of alcohol-impaired passenger vehicle drivers involved (killed and survived) in fatal traffic crashes for each vehicle type changed slightly as shown in Table 9. Drivers of passenger cars had the highest percentages of alcohol impairment in fatal traffic crashes (24%) compared to other passenger vehicle drivers (22% for pickups, 19% for SUVs, and 13% for vans) in 2021. The

percentages of alcohol-impaired van drivers involved in fatal traffic crashes was substantially lower than other passenger vehicle drivers.

Table 9. Percentages of Alcohol-Impaired Passenger Vehicle Drivers Involved in Fatal Traffic Crashes, by Vehicle Type, 2020 and 2021

	Drivers by Passenger Vehicle Type											
			Light Trucks									
	Passenger Cars		SUVs		Pickups		Vans		Total		Total	
Year	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
2020	4,530	24%	2,042	17%	1,898	22%	237	13%	4,178	19%	8,707	21%
2021	5,057	24%	2,589	19%	2,133	22%	270	13%	4,992	20%	10,049	22%

Source: FARS 2020 Final File, 2021 ARF
Note: NHTSA estimates BACs when alcohol test results are unknown.

Speeding

NHTSA considers a driver to be speeding if the driver 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. From 2020 to 2021 the percentages of passenger vehicle drivers involved in fatal traffic crashes for each vehicle type who were speeding changed slightly as shown in Table 10. Drivers of passenger cars had the highest percentages of drivers who were speeding (22%) compared to other passenger vehicle drivers (16% for pickups, 15% for SUVs, and 10% for vans) in 2021. The percentages of van drivers involved in fatal traffic crashes who were speeding was substantially lower than other passenger vehicle drivers.

Table 10. Percentages of Passenger Vehicle Drivers Involved in Fatal Traffic Crashes Who Were Speeding, by Vehicle Type, 2020 and 2021

	Drivers by Passenger Vehicle Type											
			Light Trucks									
	Passenger Cars		SUVs		Pickups		Vans		Total		Total	
Year	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
2020	4,363	23%	1,827	16%	1,452	17%	199	11%	3,478	16%	7,841	19%
2021	4,644	22%	2,021	15%	1,576	16%	221	10%	3,818	15%	8,462	18%

Source: FARS 2020 Final File, 2021 ARF

Three Behavioral Factors: Speeding Involvement, Alcohol-Impaired Driving, and Seat Belt Non-Use

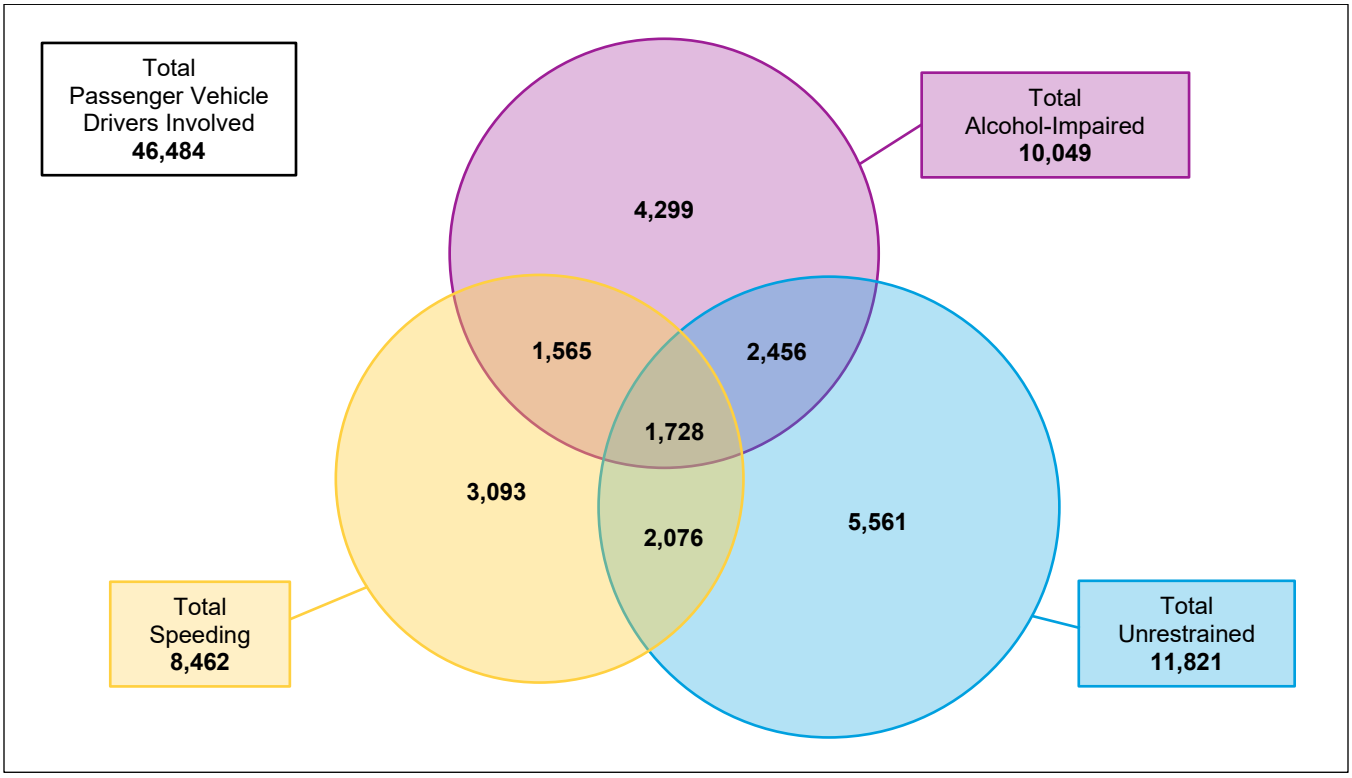
Figure 7 is a Venn diagram of passenger vehicle drivers involved in fatal traffic crashes in 2021 by the three behavioral factors (speeding involvement, alcohol-impaired driving, and seat belt non-use). Of the 46,484 passenger vehicle drivers involved in 2021:

- 20,778 had at least one of the three behavioral factors (45%);
  - 11,821 were unrestrained (not excluding other behavioral factors [25%]);
    - 5,561 were only unrestrained (12%);
  - 10,049 were alcohol-impaired (not excluding other behavioral factors [22%]);
    - 4,299 were only alcohol-impaired (9.2%);
  - 8,462 were speeding (not excluding other behavioral factors [18%]);
    - 3,093 were only speeding (6.7%);
  - 2,456 were both alcohol-impaired and unrestrained (5.3%);

- 2,076 were both speeding and unrestrained (4.5%);
- 1,565 were both speeding and alcohol-impaired (3.4%);
- 1,728 were in all three behavioral factors simultaneously (3.7%);

- 25,706 did not have any of the three factors (55%).

Figure 7. Passenger Vehicle Drivers Involved in Fatal Traffic Crashes, by Speeding Involvement, Alcohol-Impaired Driving, and Seat Belt Non-Use, 2021



Source: FARS 2021 ARF
Note: NHTSA estimates BACs when alcohol test results are unknown.

State

Figure 8 shows a heat map of the percentages of passenger vehicle occupant fatalities compared to total traffic fatalities within the State in 2021. In general, the States with lower percentages of passenger vehicle occupant fatalities were more likely to have nonoccupant (pedestrian, pedalcyclist, or other nonoccupant) or other traffic fatalities than the States with higher percentages. The percentages ranged from 24 percent (the District of Columbia) to 76 percent (Mississippi), compared to the national average of 61 percent.

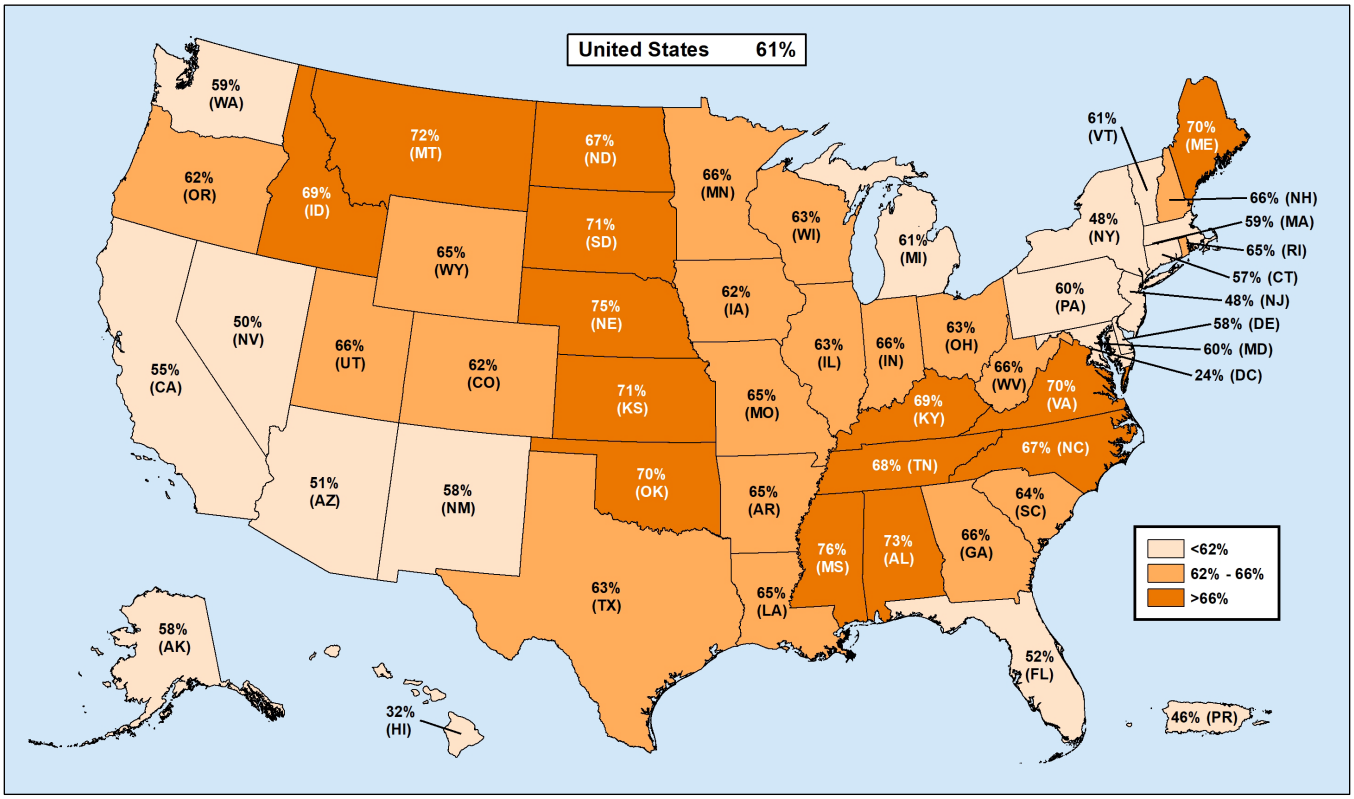
For each State, the District of Columbia, and Puerto Rico, Table 11 presents the number of passenger vehicle occupant fatalities in traffic crashes in 2021 by vehicle type. Puerto Rico is not included in the overall U.S. total.

Of the total passenger vehicle occupant fatalities in traffic crashes by State (excluding the District of Columbia and Puerto Rico) in 2021:

- The State with the largest percentage of passenger car fatalities was Connecticut (70%), followed by Delaware (67%) and Rhode Island (66%).
- The States with the largest percentages of SUV fatalities were New Hampshire (40%) and North Dakota (40%), followed by Montana (37%).
- The State with the largest percentage of pickup fatalities was Wyoming (38%), followed by Hawaii (33%).

- The State with the largest percentages of van fatalities was North Dakota (15%), followed by Nevada (8%) and Ohio (8%).

Figure 8. Percentages of Passenger Vehicle Occupant Fatalities in Traffic Crashes, by State, 2021



Source: FARS 2021 ARF

Table 11. Passenger Vehicle Occupant Fatalities in Traffic Crashes, by State and Vehicle Type, 2021

State	Passenger Vehicle Type										Total Occupant Fatalities
	Passenger Cars		Light Trucks								
			SUVs		Pickups		Vans		Total		
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
Alabama	368	51%	182	25%	131	18%	40	6%	353	49%	721
Alaska	16	41%	11	28%	11	28%	1	3%	23	59%	39
Arizona	307	51%	173	29%	102	17%	20	3%	295	49%	602
Arkansas	206	46%	123	27%	97	22%	22	5%	242	54%	448
California	1,413	60%	506	22%	358	15%	67	3%	931	40%	2,344
Colorado	170	40%	155	36%	88	21%	16	4%	259	60%	429
Connecticut	119	70%	38	22%	8	5%	4	2%	50	30%	169
Delaware	53	67%	17	22%	6	8%	3	4%	26	33%	79
Dist of Columbia	8	80%	2	20%	0	0%	0	0%	2	20%	10
Florida	1,089	56%	481	25%	292	15%	68	4%	841	44%	1,930
Georgia	613	52%	285	24%	238	20%	46	4%	569	48%	1,182
Hawaii	12	40%	8	27%	10	33%	0	0%	18	60%	30
Idaho	83	44%	47	25%	48	26%	9	5%	104	56%	187
Illinois	471	56%	240	28%	91	11%	42	5%	373	44%	844
Indiana	332	54%	165	27%	81	13%	36	6%	282	46%	614
Iowa	102	47%	55	25%	50	23%	12	5%	117	53%	219
Kansas	121	40%	86	29%	80	27%	13	4%	179	60%	300
Kentucky	281	51%	138	25%	117	21%	17	3%	272	49%	553
Louisiana	293	47%	139	22%	185	29%	11	2%	335	53%	628
Maine	39	36%	36	34%	25	23%	7	7%	68	64%	107
Maryland	209	63%	78	23%	30	9%	17	5%	125	37%	334
Massachusetts	141	57%	79	32%	20	8%	6	2%	105	43%	246
Michigan	316	46%	228	33%	116	17%	31	4%	375	54%	691
Minnesota	152	47%	96	30%	56	17%	18	6%	170	53%	322
Mississippi	289	50%	148	25%	130	22%	16	3%	294	50%	583
Missouri	313	48%	188	29%	132	20%	24	4%	344	52%	657
Montana	54	31%	64	37%	46	27%	9	5%	119	69%	173
Nebraska	68	41%	47	28%	38	23%	12	7%	97	59%	165
Nevada	79	41%	60	31%	37	19%	15	8%	112	59%	191
New Hampshire	36	46%	31	40%	9	12%	2	3%	42	54%	78
New Jersey	215	64%	83	25%	23	7%	16	5%	122	36%	337
New Mexico	115	41%	80	29%	75	27%	8	3%	163	59%	278
New York	307	56%	161	29%	59	11%	25	5%	245	44%	552
North Carolina	604	54%	263	24%	192	17%	58	5%	513	46%	1,117
North Dakota	21	31%	27	40%	10	15%	10	15%	47	69%	68
Ohio	458	54%	214	25%	115	13%	67	8%	396	46%	854
Oklahoma	234	44%	156	29%	129	24%	12	2%	297	56%	531
Oregon	176	48%	92	25%	83	22%	19	5%	194	52%	370
Pennsylvania	389	53%	216	30%	97	13%	30	4%	343	47%	732
Rhode Island	27	66%	11	27%	2	5%	1	2%	14	34%	41
South Carolina	410	54%	203	27%	124	16%	27	4%	354	46%	764
South Dakota	55	52%	30	29%	17	16%	3	3%	50	48%	105
Tennessee	457	51%	254	28%	154	17%	36	4%	444	49%	901
Texas	1,315	47%	698	25%	712	25%	93	3%	1,503	53%	2,818
Utah	101	47%	66	30%	37	17%	13	6%	116	53%	217
Vermont	23	51%	14	31%	7	16%	1	2%	22	49%	45
Virginia	358	53%	190	28%	101	15%	32	5%	323	47%	681
Washington	231	58%	93	23%	62	16%	10	3%	165	42%	396
West Virginia	71	39%	57	31%	48	26%	8	4%	113	61%	184
Wisconsin	193	50%	123	32%	51	13%	21	5%	195	50%	388
Wyoming	16	23%	24	34%	27	38%	4	6%	55	77%	71
U.S. Total	**13,529**	**51%**	**6,961**	**26%**	**4,757**	**18%**	**1,078**	**4%**	**12,796**	**49%**	**26,325**
Puerto Rico	105	68%	37	24%	8	5%	4	3%	49	32%	154

Source: FARS 2021 ARF

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 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. The number of passenger vehicle occupant fatalities from the 2020 Final File was 23,914, which was updated from 23,824 from 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.

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/.

The suggested APA format citation for this document is:

National Center for Statistics and Analysis. (2023, June). *Passenger vehicles: 2021 data* (Traffic Safety Facts. Report No. DOT HS 813 474). National Highway Traffic Safety Administration.

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 NCSARequests@dot.gov or 800-934-8517. NCSA programs can be found at www.nhtsa.gov/data. To report a motor vehicle safety-related problem or to inquire about safety information, contact the Vehicle Safety Hotline at 888-327-4236 or www.nhtsa.gov/report-a-safety-problem.

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

Other fact sheets available from NCSA:

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