Traffic Safety Facts
2020 Data

June 2022

DOT HS 813 323

NHTSA

In this fact sheet for 2020 the information is presented as follows.

Passenger Vehicles

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, vans, and other light trucks).

Key Findings

- In 2020 there were 23,824 passenger vehicle occupants who died in motor vehicle traffic crashes, a 6.5-percent increase from 22,372 in 2019. An estimated 2,034,844 passenger vehicle occupants were injured, a 17-percent decrease from 2,447,985 in 2019.
- Passenger vehicles made up 92 percent of registered vehicles and accounted for 88 percent of total vehicle miles traveled (VMT) in 2020. There were 54,272 vehicles involved in fatal crashes in 2020, of which 76 percent (41,434) were passenger vehicles.
- In 2020 the fatality rate per 100,000 registered vehicles continued to be the highest for passenger car occupants (10.79), followed by pickup occupants (7.95), SUV occupants (6.39), and van occupants (5.83).
- Among the passenger vehicle occupants killed in 2020 in motor vehicle traffic crashes, 57 percent were passenger car occupants and 43 percent were light-truck occupants.
- When a passenger car and a light truck hit head-on in a fatal crash in 2020, an occupant was 3.1 times more frequently killed in the passenger car than in the light truck.
- Eighty-two percent of passenger vehicle occupants who were totally ejected from vehicles involved in fatal crashes in 2020 were killed.
- Among passenger vehicle occupants killed in 2020 by vehicle type, the percentage of fatalities in rollover crashes was highest for SUVs (42%), followed by pickups (41%), vans (23%), and passenger cars (22%).
- Drivers of passenger cars had the highest percentage of alcohol impairment in fatal crashes (23%) compared to other passenger vehicle drivers (22% for pickups, 18% for SUVs, and 12% for vans) in 2020.

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

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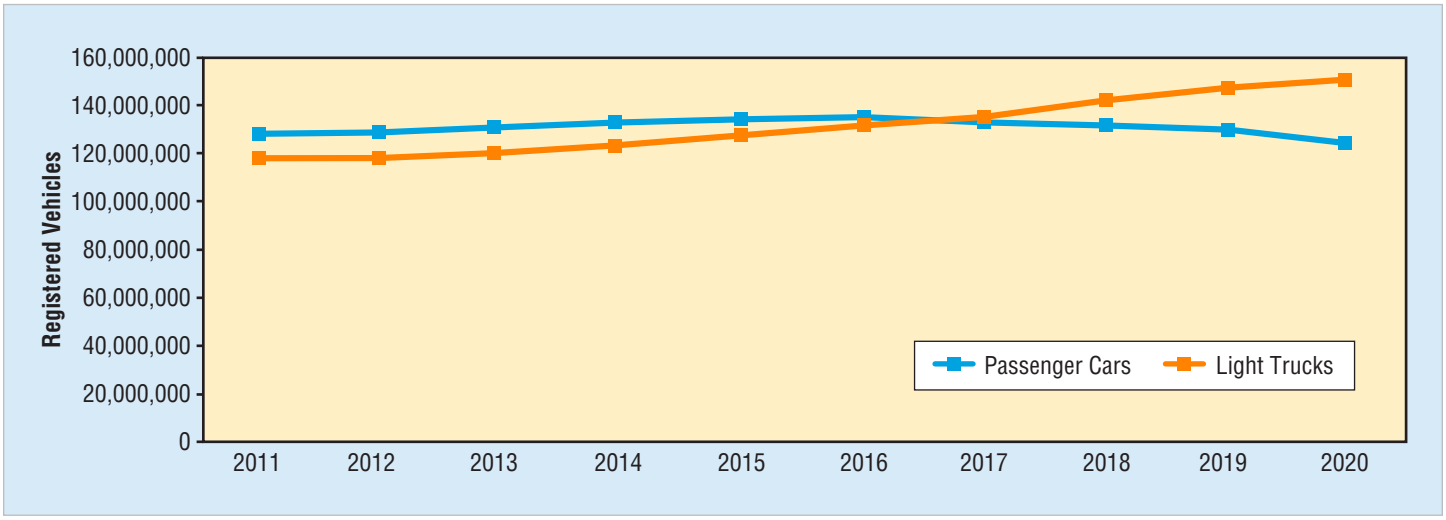
A motor vehicle traffic crash is defined as an incident that involved one or more motor vehicles in transport that originated on a public trafficway, such as a road or highway. Crashes that occurred on private property, including parking lots and driveways, are excluded. The terms "motor vehicle traffic crash" and "traffic crash" are used interchangeably.

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 2011 to 2020. Since 2017 the number of registered light trucks was more than the number of registered passenger cars. From 2019 to 2020 passenger car registrations decreased by 4 percent, and light-truck registrations increased by 2 percent. Among the light-truck categories in 2020 compared to 2019, SUV registrations increased by 5 percent, pickup registrations stayed roughly the same, and van registrations decreased by 4 percent.

Figure 1
Passenger Car and Light-Truck Registrations, 2011-2020



Source: Registered Vehicles – Polk data from R. L. Polk & Co., a foundation of IHS Markit automotive solutions

Overview

In 2020:

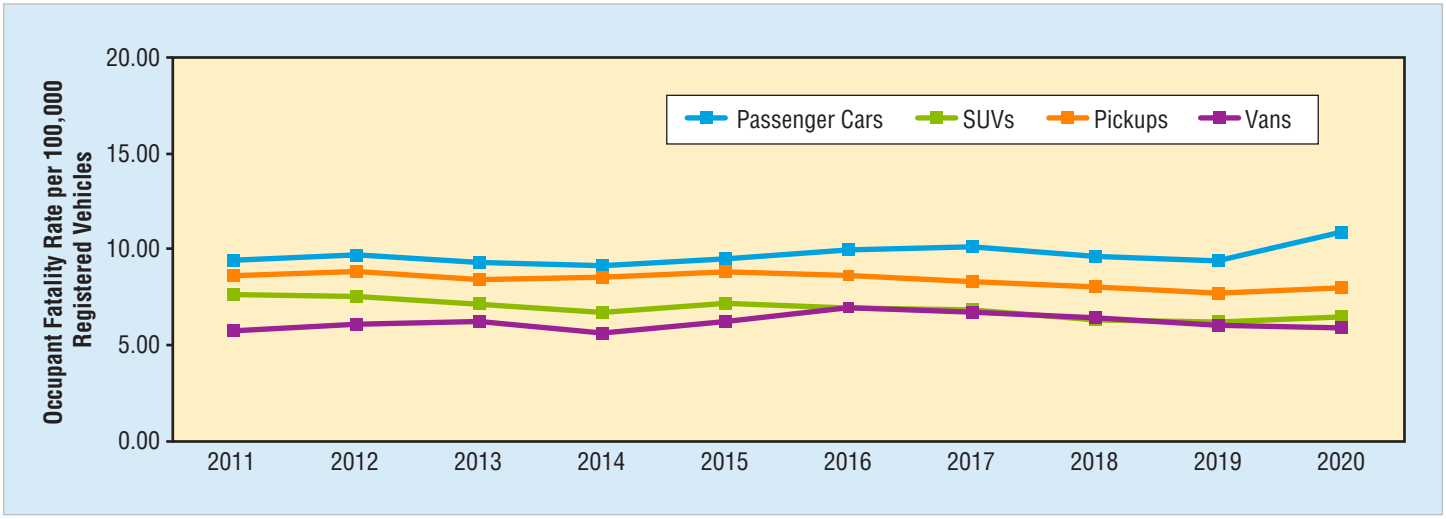
- There were 23,824 passenger vehicle occupants who died in motor vehicle traffic crashes, a 6.5-percent increase from 22,372 in 2019, and an estimated 2,034,844 passenger vehicle occupants who were injured, a 17-percent decrease from 2,447,985 in 2019.
- Passenger vehicles made up 92 percent of registered vehicles and accounted for 88 percent of total VMT.
- An estimated 9,144,629 vehicles were involved in police-reported traffic crashes; 93 percent (8,548,775) were passenger vehicles.
- There were 54,272 vehicles involved in fatal crashes, of which 76 percent (41,434) were passenger vehicles.

Figure 2 displays the occupant fatality rates per 100,000 registered vehicles for four types of passenger vehicles (passenger cars, SUVs, pickups, and vans) from 2011 to 2020. Overall, the occupant fatality rate trend for each vehicle type generally decreased over time with a slight increase in 2014 and 2015 and a large increase for passenger cars from 2019 to 2020. The data for Figure 2 is presented in Tables 1 and 2.

In 2020 the fatality rate continued to be highest for passenger car occupants (10.79), followed by pickup occupants (7.95), SUV occupants (6.39), and van occupants (5.83). Occupant fatality rates per 100,000 registered vehicles from 2019 to 2020 increased by 13 percent (9.52 to 10.79) for passenger cars and increased by 1 percent (6.83 to 6.90) for light trucks. Among light-truck categories, occupant fatality rates increased by 3 percent (6.23 to 6.39) for SUVs, increased by 2 percent (7.78 to 7.95) for pickups, and decreased by 5 percent (6.13 to 5.83) for vans.

Figure 2

Passenger Vehicle Occupant Fatality Rates per 100,000 Registered Vehicles, by Vehicle Type, 2011-2020



Sources: Fatalities – FARS 2011-2019 Final File, 2020 Annual Report File (ARF); Registered Vehicles – Polk data from R. L. Polk & Co., a foundation of IHS Markit automotive solutions

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 for total passenger vehicles as well as separately for passenger cars and light trucks from 2011 to 2020.

- Passenger car occupant fatalities, as a proportion of passenger vehicle occupant fatalities, increased from 56 percent in 2011 (12,014 of 21,316) to 57 percent in 2020 (13,472 of 23,824).
- Light-truck occupant fatalities, as a proportion of passenger vehicle occupant fatalities, decreased from 44 percent in 2011 (9,302 of 21,316) to 43 percent in 2020 (10,352 of 23,824).
- From 2011 to 2020:[†]
  - The total passenger vehicle occupant fatality rate ranged from a high of 8.91 in 2016 to a low of 8.09 in 2019.
  - The passenger car occupant fatality rate ranged from a high of 10.79 in 2020 to a low of 9.11 in 2014.
  - The light-truck occupant fatality rate ranged from a high of 7.93 in 2012 to a low of 6.83 in 2019.
  - The total passenger vehicle occupant injury rate for NASS GES (2011 to 2015) ranged from a high of 853 in 2012 to a low of 805 in 2011. The passenger vehicle occupant injury rate for CRSS dropped from 1,021 in 2016 to 740 in 2020.
  - The passenger car occupant injury rate for NASS GES ranged from a high of 1,047 in 2012 to a low of 980 in 2011. The passenger car occupant injury rate for CRSS dropped from 1,254 in 2016 to 978 in 2020.
  - The light-truck occupant injury rate for NASS GES ranged from a high of 646 in 2012 to a low of 617 in 2011. The light-truck occupant injury rate for CRSS dropped from 784 in 2016 to 543 in 2020.

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

Table 1

Passenger Vehicle Occupants Killed and Injured, Registered Vehicles, and Occupant Fatality/Injury Rates per 100,000 Registered Vehicles, by Vehicle Type, 2011-2020

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
2011	12,014	126,966,714	9.46	9,302	118,702,389	7.84	21,316	245,669,103	8.68
2012	12,361	127,077,676	9.73	9,418	118,690,690	7.93	21,779	245,768,366	8.86
2013	12,037	128,936,225	9.34	9,186	120,491,485	7.62	21,223	249,427,710	8.51
2014	11,947	131,138,925	9.11	9,103	123,470,278	7.37	21,050	254,609,203	8.27
2015	12,763	133,218,366	9.58	9,878	127,401,053	7.75	22,641	260,619,419	8.69
2016	13,508	134,827,696	10.02	10,279	132,052,102	7.78	23,787	266,879,798	8.91
2017	13,477	132,864,363	10.14	10,186	135,594,973	7.51	23,663	268,459,336	8.81
2018	12,888	132,837,515	9.70	9,957	141,312,896	7.05	22,845	274,150,411	8.33
2019	12,355	129,838,156	9.52	10,017	146,751,968	6.83	22,372	276,590,124	8.09
2020	13,472	124,893,768	10.79	10,352	149,947,352	6.90	23,824	274,841,120	8.67
Year	Occupants Injured	Registered Vehicles	Occupant Injury Rate	Occupants Injured	Registered Vehicles	Occupant Injury Rate	Occupants Injured	Registered Vehicles	Occupant Injury Rate
2011	1,243,706	126,966,714	980	732,764	118,702,389	617	1,976,469	245,669,103	805
2012	1,330,250	127,077,676	1,047	766,295	118,690,690	646	2,096,545	245,768,366	853
2013	1,298,569	128,936,225	1,007	752,585	120,491,485	625	2,051,154	249,427,710	822
2014	1,294,030	131,138,925	987	783,906	123,470,278	635	2,077,936	254,609,203	816
2015	1,382,271	133,218,366	1,038	808,707	127,401,053	635	2,190,979	260,619,419	841
2016†	1,690,359	134,827,696	1,254	1,034,963	132,052,102	784	2,725,321	266,879,798	1,021
2017†	1,528,666	132,864,363	1,151	937,147	135,594,973	691	2,465,813	268,459,336	919
2018†	1,510,852	132,837,515	1,137	921,272	141,312,896	652	2,432,124	274,150,411	887
2019†	1,498,083	129,838,156	1,154	949,902	146,751,968	647	2,447,985	276,590,124	885
2020†	1,221,335	124,893,768	978	813,509	149,947,352	543	2,034,844	274,841,120	740

Sources: Fatalities – FARS 2011-2019 Final File, 2020 ARF; Injured – NASS GES 2011-2015, CRSS 2016-2020; Registered Vehicles – Polk data from R. L. Polk & Co., a foundation of IHS Markit automotive solutions

*Includes other/unknown light-truck vehicle types.

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

Table 2 presents the same information as in Table 1 for three light-truck categories (SUVs, pickups, and vans) from 2011 to 2020.†

- The SUV occupant fatality rate ranged from a high of 7.74 in 2011 to a low of 6.23 in 2019.
- The pickup occupant fatality rate ranged from a high of 8.96 in 2012 and 2015, to a low of 7.78 in 2019.
- The van occupant fatality rate ranged from a high of 7.01 in 2016 to a low of 5.66 in 2014.
- The SUV occupant injury rate for NASS GES (2011 to 2015) ranged from a high of 756 in 2012 to a low of 708 in 2011. The SUV occupant injury rate for CRSS dropped from 921 in 2016 to 612 in 2020.
- The pickup occupant injury rate for NASS GES ranged from a high of 500 in 2012 to a low of 464 in 2013. The pickup occupant injury rate for CRSS dropped from 574 in 2016 to 434 in 2020.
- The van occupant injury rate for NASS GES ranged from a high of 764 in 2013 to a low of 691 in 2015. The van occupant injury rate for CRSS dropped from 845 in 2016 to 554 in 2020.

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

Table 2

Light-Truck Occupants Killed and Injured, Registered Vehicles, and Occupant Fatality/Injury Rates per 100,000 Registered Vehicles, by Vehicle Type, 2011-2020

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
2011	3,884	50,161,565	7.74	4,270	48,912,291	8.73	1,128	19,592,314	5.76
2012	3,885	51,305,806	7.57	4,343	48,465,436	8.96	1,167	18,886,646	6.18
2013	3,831	53,477,838	7.16	4,175	48,644,891	8.58	1,142	18,339,481	6.23
2014	3,800	56,277,894	6.75	4,249	49,134,966	8.65	1,021	18,030,322	5.66
2015	4,213	59,662,508	7.06	4,471	49,911,616	8.96	1,128	17,801,045	6.34
2016	4,462	63,137,745	7.07	4,470	51,212,656	8.73	1,240	17,677,143	7.01
2017	4,610	66,483,111	6.93	4,335	51,853,163	8.36	1,175	17,235,329	6.82
2018	4,554	71,048,354	6.41	4,267	53,177,694	8.02	1,081	17,064,295	6.33
2019	4,727	75,837,561	6.23	4,213	54,174,715	7.78	1,025	16,718,278	6.13
2020	5,075	79,475,064	6.39	4,330	54,442,406	7.95	933	16,010,050	5.83
Year	Occupants Injured	Registered Vehicles	Occupant Injury Rate	Occupants Injured	Registered Vehicles	Occupant Injury Rate	Occupants Injured	Registered Vehicles	Occupant Injury Rate
2011	355,211	50,161,565	708	237,548	48,912,291	486	139,169	19,592,314	710
2012	387,641	51,305,806	756	242,298	48,465,436	500	135,446	18,886,646	717
2013	384,476	53,477,838	719	225,494	48,644,891	464	140,103	18,339,481	764
2014	410,986	56,277,894	730	241,873	49,134,966	492	129,964	18,030,322	721
2015	438,752	59,662,508	735	243,432	49,911,616	488	122,972	17,801,045	691
2016†	581,307	63,137,745	921	293,777	51,212,656	574	149,356	17,677,143	845
2017†	536,303	66,483,111	807	259,216	51,853,163	500	137,294	17,235,329	797
2018†	530,434	71,048,354	747	265,282	53,177,694	499	121,806	17,064,295	714
2019†	555,934	75,837,561	733	266,662	54,174,715	492	122,928	16,718,278	735
2020†	486,652	79,475,064	612	236,264	54,442,406	434	88,724	16,010,050	554

Sources: Fatalities – FARS 2011-2019 Final File, 2020 ARF; Injured – NASS GES 2011-2015, CRSS 2016-2020; Registered Vehicles – Polk data from R. L. Polk & Co., a foundation of IHS Markit automotive solutions

*Excludes other/unknown light-truck vehicle types.

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

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 2011 to 2020. Some highlights:

- The occupant fatality rate per 100 million VMT for passenger cars ranged from a high of 1.15 in 2020 to a low of 0.86 in 2014.
- The occupant fatality rate for light trucks ranged from a high of 0.74 in 2020 to a low of 0.65 in 2019.
- The 2020 occupant injury rate for passenger cars was 105, a decrease from 117 in 2016.
- The 2020 occupant injury rate for light trucks was 58, a decrease from 73 in 2016.

Table 3

Passenger Vehicle Occupants Killed and Injured, Vehicle Miles Traveled, and Occupant Fatality/Injury Rates per 100 Million VMT, by Vehicle Type, 2011-2020

	Passenger Vehicle Type						Total*		
	Passenger Cars			Light Trucks*					
Year	Occupant Fatalities	VMT (millions)	Occupant Fatality Rate	Occupant Fatalities	VMT (millions)	Occupant Fatality Rate	Occupant Fatalities	VMT (millions)	Occupant Fatality Rate
2011	12,014	1,369,810	0.88	9,302	1,280,648	0.73	21,316	2,650,458	0.80
2012	12,361	1,377,486	0.90	9,418	1,286,574	0.73	21,779	2,664,060	0.82
2013	12,037	1,384,194	0.87	9,186	1,293,536	0.71	21,223	2,677,730	0.79
2014	11,947	1,396,098	0.86	9,103	1,314,458	0.69	21,050	2,710,556	0.78
2015	12,763	1,420,869	0.90	9,878	1,358,824	0.73	22,641	2,779,693	0.81
2016	13,508	1,439,678	0.94	10,279	1,410,040	0.73	23,787	2,849,718	0.83
2017	13,477	1,424,056	0.95	10,186	1,453,322	0.70	23,663	2,877,378	0.82
2018	12,888	1,403,760	0.92	9,957	1,493,323	0.67	22,845	2,897,083	0.79
2019	12,355	1,372,622	0.90	10,017	1,551,431	0.65	22,372	2,924,053	0.77
2020	13,472	1,167,293	1.15	10,352	1,401,452	0.74	23,824	2,568,745	0.93
Year	Occupants Injured	VMT (millions)	Occupant Injury Rate	Occupants Injured	VMT (millions)	Occupant Injury Rate	Occupants Injured	VMT (millions)	Occupant Injury Rate
2011	1,243,706	1,369,810	91	732,764	1,280,648	57	1,976,469	2,650,458	75
2012	1,330,250	1,377,486	97	766,295	1,286,574	60	2,096,545	2,664,060	79
2013	1,298,569	1,384,194	94	752,585	1,293,536	58	2,051,154	2,677,730	77
2014	1,294,030	1,396,098	93	783,906	1,314,458	60	2,077,936	2,710,556	77
2015	1,382,271	1,420,869	97	808,707	1,358,824	60	2,190,979	2,779,693	79
2016†	1,690,359	1,439,678	117	1,034,963	1,410,040	73	2,725,321	2,849,718	96
2017†	1,528,666	1,424,056	107	937,147	1,453,322	64	2,465,813	2,877,378	86
2018†	1,510,852	1,403,760	108	921,272	1,493,323	62	2,432,124	2,897,083	84
2019†	1,498,083	1,372,622	109	949,902	1,551,431	61	2,447,985	2,924,053	84
2020†	1,221,335	1,167,293	105	813,509	1,401,452	58	2,034,844	2,568,745	79

Sources: Fatalities – FARS 2011-2019 Final File, 2020 ARF; Injured – NASS GES 2011-2015, CRSS 2016-2020; VMT – FHWA
*Includes other/unknown light-truck vehicle types.
†CRSS estimates and NASS GES estimates are not comparable due to different sample designs. Refer to end of document for more information about CRSS.

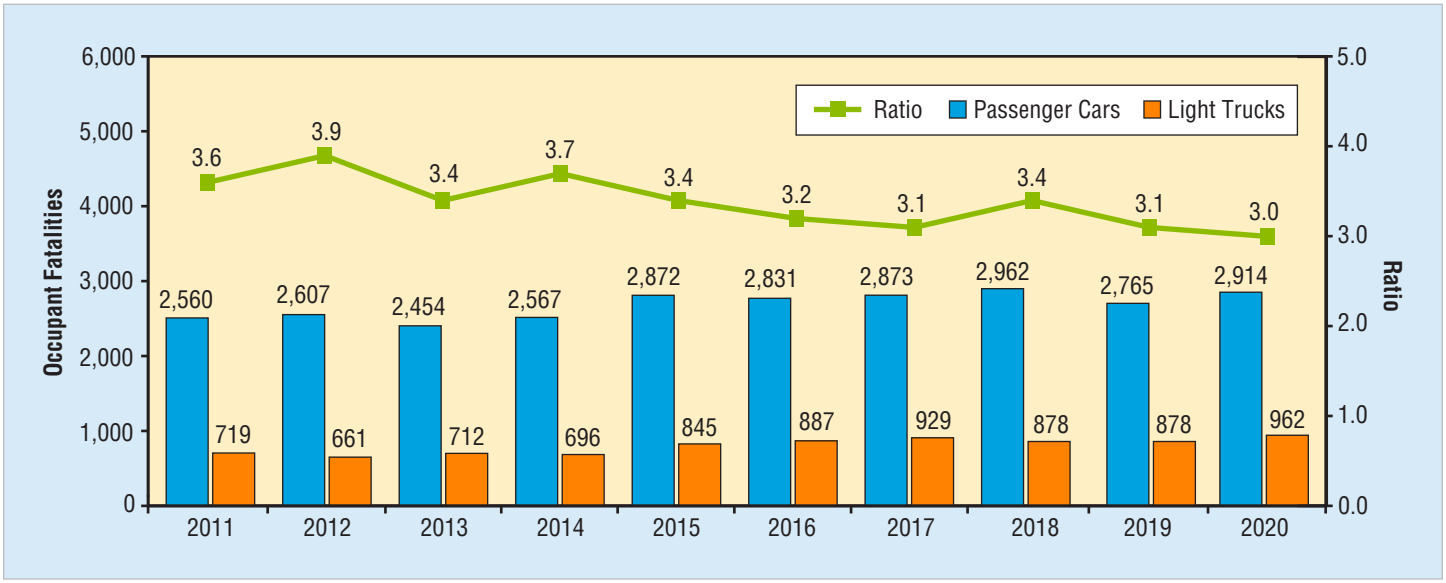
Fatal Passenger Car and Light-Truck, Two-Vehicle Crashes

In 2020 there were 3,509 fatal two-vehicle crashes each involving a passenger car and a light truck, which accounted for 28 percent of all fatal two-vehicle crashes (12,544) and 10 percent of all fatal crashes (35,766). Figure 3 displays the number of occupant fatalities in two-vehicle crashes involving one passenger car and one light truck from 2011 to 2020. In these crashes, there was a range of 3.0 to 3.9 times as many passenger car occupant fatalities as light-truck occupant fatalities. The lowest and highest of these ratios are reported for this section. In more detail from 2011 to 2020:

- When a passenger car and a light truck hit head-on, an occupant was 2.9 to 3.7 times more frequently killed in the passenger car than in the light truck. In 2020 the ratio was 3.1.
- When a passenger car front hit the side of a light truck, an occupant was 1.3 to 1.7 times more frequently killed in the light truck than in the passenger car. In 2020 the ratio was 1.6.
- However, when a light truck front hit the side of a passenger car, an occupant was 13.3 to 22.7 times more frequently killed in the passenger car than in the light truck. In 2020 the ratio was 14.1.

Figure 3

Occupant Fatalities and Ratios in Two-Vehicle Crashes Involving a Passenger Car and a Light Truck, 2011-2020



Source: FARS 2011-2019 Final File, 2020 ARF

Table 4 presents the number of occupant fatalities in two-vehicle crashes between a passenger car and a light truck from 2019 to 2020:

- The number of passenger car occupant fatalities increased by 5.4 percent, from 2,765 in 2019 to 2,914 in 2020.
- The number of light-truck occupant fatalities increased by 9.6 percent, from 878 in 2019 to 962 in 2020.

Table 4

Occupant Fatalities in Two-Vehicle Crashes Involving a Passenger Car and a Light Truck, 2019 and 2020

Occupants	Year		Percentage Change
	2019	2020	
Killed in Passenger Cars	2,765	2,914	+5.4%
Killed in Light Trucks	878	962	+9.6%

Source: FARS 2019 Final File, 2020 ARF

Restraint Use

The 2020 National Occupant Protection Use Survey (NOPUS) observed that the seat belt use rate among adult front-seat occupants was 90.3 percent for passenger vehicles, 91.0 percent for passenger cars, 92.0 percent for vans and SUVs, and 85.5 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] Seat belts saved an estimated 14,955 lives of passenger vehicle occupants 5 and older in 2017 (latest data available).[3]

In fatal crashes in 2020 there were 23,824 passenger vehicle occupants who were killed. Rural areas accounted for 50 percent of these occupant fatalities. For these passenger vehicle occupant fatalities occurring in rural areas, 52 percent were unrestrained (based on known restraint use) compared to 49 percent in urban areas (based on known restraint use). Sixty-three percent of rural pickup occupants killed were

[1] National Center for Statistics and Analysis. (2021, February). *Seat belt use in 2020 – Overall results* (Traffic Safety Facts Research Note. Report No. DOT HS 813 072). National Highway Traffic Safety Administration. Available at crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813072

[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. Available at crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812069

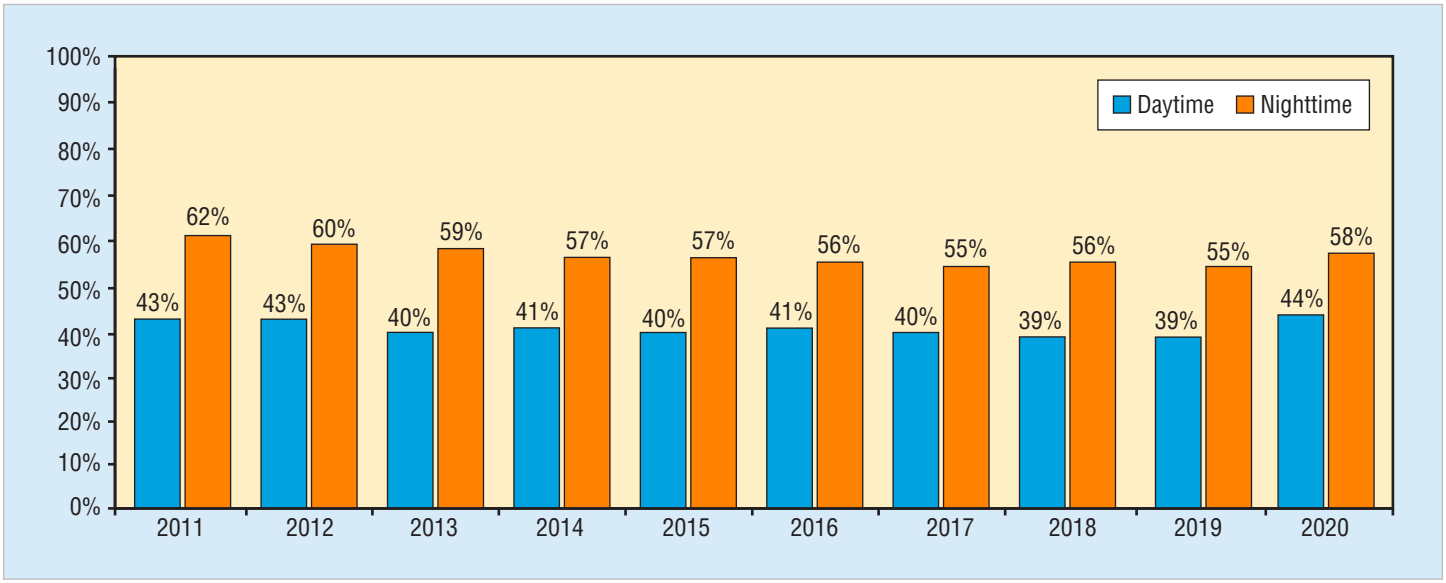
[3] National Center for Statistics and Analysis. (2019, March). *Lives saved in 2017 by restraint use and minimum drinking-age-laws* (Traffic Safety Facts Crash•Stats. Report No. DOT HS 812 683). National Highway Traffic Safety Administration. Available at crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812683

unrestrained (based on known restraint use) – the highest percentage of any passenger vehicle occupants killed among rural and urban areas.

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

- Daytime (6 a.m. to 5:59 p.m.) declined from 43 percent in 2011 to 39 percent in 2019 and then increased to 44 percent in 2020.
- Nighttime (6 p.m. to 5:59 a.m.) declined from 62 percent in 2011 to 55 percent in 2019 and then increased to 58 percent in 2020.

Figure 4
Percentage of Unrestrained* Passenger Vehicle Occupant Fatalities, by Time of Day, 2011-2020



Source: FARS 2011-2019 Final File, 2020 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, by vehicle type and time of day, from 2011 to 2020. Passenger car fatalities had the lowest daytime percentage (39%), and van occupant fatalities had the lowest nighttime percentage (50%) of unrestrained occupant fatalities in 2020, while pickup occupant fatalities had the highest percentages (55% daytime and 69% nighttime).

Table 5

Percentage of Unrestrained* Passenger Vehicle Occupant Fatalities, by Time of Day and Vehicle Type, 2011-2020

Time of Day and Year		Passenger Vehicle Type					
			Light Trucks				
		Passenger Cars	SUVs	Pickups	Vans	Total**	Total**
Daytime	2011	36%	51%	55%	43%	52%	43%
	2012	36%	52%	57%	37%	52%	43%
	2013	34%	47%	52%	42%	48%	40%
	2014	34%	48%	53%	33%	49%	41%
	2015	34%	46%	52%	39%	48%	40%
	2016	34%	47%	54%	36%	48%	41%
	2017	35%	43%	52%	35%	46%	40%
	2018	34%	43%	51%	39%	46%	39%
	2019	35%	39%	51%	36%	44%	39%
	2020	39%	45%	55%	43%	49%	44%
Nighttime	2011	56%	66%	75%	57%	69%	62%
	2012	54%	68%	72%	54%	68%	60%
	2013	52%	66%	73%	53%	68%	59%
	2014	51%	63%	71%	50%	66%	57%
	2015	51%	64%	69%	49%	65%	57%
	2016	50%	63%	69%	48%	64%	56%
	2017	48%	62%	68%	51%	63%	55%
	2018	51%	61%	69%	44%	63%	56%
	2019	51%	58%	65%	50%	61%	55%
	2020	54%	62%	69%	50%	64%	58%

Source: FARS 2011-2019 Final File, 2020 ARF
*Based on known restraint use.
**Includes occupants of other/unknown light-truck vehicle types.
Daytime – 6 a.m. to 5:59 p.m.
Nighttime – 6 p.m. to 5:59 a.m.

Ejection

The term "totally ejected" indicates 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-two percent of passenger vehicle occupants (4,235 of 5,144) who were totally ejected from vehicles involved in fatal crashes in 2020 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 crashes in 2020. In passenger cars, 14 percent of occupants killed were totally ejected from the vehicles, while 23 percent of those killed in light trucks were totally ejected.

Table 6

Passenger Vehicle Occupants Involved in Fatal Crashes, by Vehicle Type, Survival Status, and Ejection Status, 2020

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	10,985	82%	1,879	14%	517	4%	2,418	18%	69	1%	13,472	100%
	Survived	16,836	96%	388	2%	51	**	444	3%	188	1%	17,468	100%
	Total	27,821	90%	2,267	7%	568	2%	2,862	9%	257	1%	30,940	100%
Light Trucks*	Killed	7,299	71%	2,356	23%	620	6%	3,001	29%	52	1%	10,352	100%
	Survived	20,096	96%	521	2%	74	**	605	3%	250	1%	20,951	100%
	Total	27,395	88%	2,877	9%	694	2%	3,606	12%	302	1%	31,303	100%
Passenger Vehicles*	**Killed**	**18,284**	**77%**	**4,235**	**18%**	**1,137**	**5%**	**5,419**	**23%**	**121**	**1%**	**23,824**	**100%**
	Survived	**36,932**	**96%**	**909**	**2%**	**125**	**	**1,049**	**3%**	**438**	**1%**	**38,419**	**100%**
	Total	**55,216**	**89%**	**5,144**	**8%**	**1,262**	**2%**	**6,468**	**10%**	**559**	**1%**	**62,243**	**100%**

Source: FARS 2020 ARF
*Includes SUVs, pickups, vans, and other/unknown light-truck vehicle types.
**Less than 0.5 percent.
***Includes ejected unknowns if totally or partially ejected.

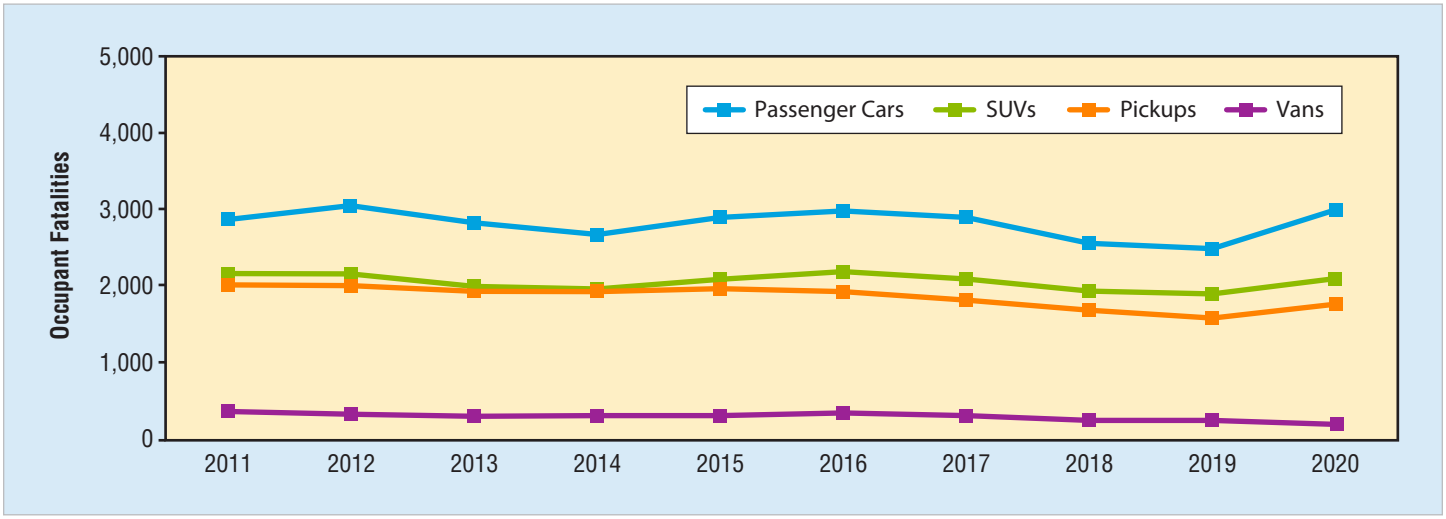
Rollover

A rollover crash is one of the most dangerous forms of crashes among passenger vehicles, accounting for 30 percent of passenger vehicle occupant fatalities in 2020. Among passenger vehicle occupants killed in 2020 by vehicle type, the percentage of fatalities in rollover crashes was highest for SUVs (42%), followed by pickups (41%), vans (23%), and passenger cars (22%).

Overall, each of the four passenger vehicle categories in Figure 5 generally fluctuated in the number of occupants killed in rollover crashes from 2011 to 2020, with slight increases for all vehicle types except for pickups from 2014 to 2016 and increases for all vehicle types except vans from 2019 to 2020. The data used in Figure 5 is shown in Table 7.

Figure 5

Passenger Vehicle Occupant Fatalities in Rollover Crashes, by Vehicle Type, 2011-2020



Source: FARS 2011-2019 Final File, 2020 ARF

Table 7 presents the number of passenger vehicle occupants killed in rollover crashes by vehicle type from 2011 to 2020. In the 10-year period, the percentages of rollover occupant fatalities for:

- Total passenger vehicles decreased by 4 percent (7,400 to 7,107);
- Passenger cars increased by 5 percent (2,849 to 3,001);
- SUVs decreased by 3 percent (2,172 to 2,107);
- Pickups decreased by 11 percent (1,993 to 1,778); and
- Vans decreased by 43 percent (375 to 213).

From 2019 to 2020 the percentages of rollover occupant fatalities for:

- Total passenger vehicles increased by 13 percent (6,316 to 7,107);
- Passenger cars increased by 19 percent (2,517 to 3,001);
- SUVs increased by 10 percent (1,917 to 2,107);
- Pickups increased by 11 percent (1,603 to 1,778); and
- Vans decreased by 16 percent (255 to 213).

Table 7

Passenger Vehicle Occupant Fatalities in Rollover Crashes, by Vehicle Type, 2011-2020

Year	Passenger Vehicle Type					Total Occupant Fatalities*
	Passenger Cars	Light Trucks				
		SUVs	Pickups	Vans	Total*	
2011	2,849	2,172	1,993	375	4,551	7,400
2012	3,025	2,161	2,012	326	4,502	7,527
2013	2,823	1,966	1,903	326	4,207	7,030
2014	2,663	1,965	1,907	305	4,186	6,849
2015	2,878	2,073	1,942	308	4,346	7,224
2016	2,973	2,160	1,933	347	4,493	7,466
2017	2,891	2,122	1,831	326	4,304	7,195
2018	2,607	1,965	1,701	259	3,959	6,566
2019	2,517	1,917	1,603	255	3,799	6,316
2020	3,001	2,107	1,778	213	4,106	7,107

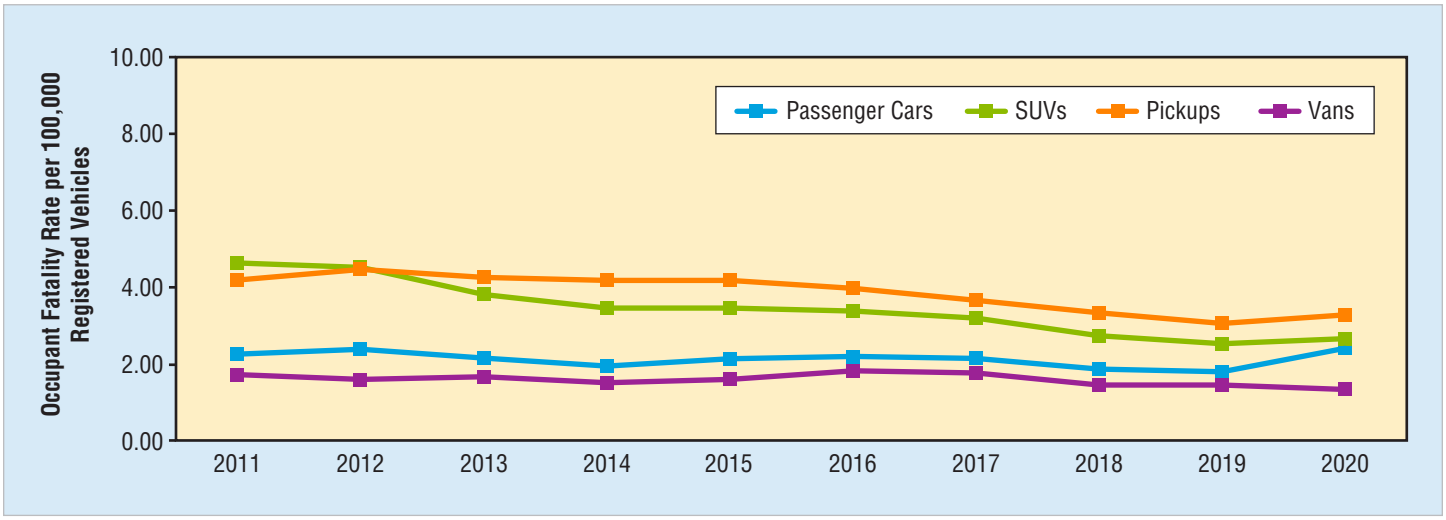
Source: FARS 2011-2019 Final File, 2020 ARF
*Includes occupants of other/unknown light-truck vehicle types.

Among passenger vehicles involved in rural fatal crashes in 2020 by vehicle type, SUVs experienced the highest rollover percentage (33%) compared to 29 percent for pickups, 22 percent for passenger cars, and 20 percent for vans. The rollover percentages for passenger vehicles in urban areas by vehicle type were much lower: 15 percent for SUVs, 14 percent for pickups, 10 percent for passenger cars, and 7 percent for vans.

Figure 6 displays the occupant fatality rates per 100,000 registered vehicles in rollover crashes by vehicle type from 2011 to 2020. The data for Figure 6 is presented in Table 8.

Figure 6

Passenger Vehicle Occupant Fatality Rates per 100,000 Registered Vehicles in Rollover Crashes, by Vehicle Type, 2011-2020



Sources: Fatalities – FARS 2011-2019 Final File, 2020 ARF; Registered Vehicles – Polk data from R. L. Polk & Co., a foundation of IHS Markit automotive solutions

Table 8 presents the passenger vehicle occupant fatality rates per 100,000 registered vehicles in rollover crashes by vehicle type from 2011 to 2020. In the 10-year period, the occupant fatality rates in rollover crashes for:

- Total passenger vehicles decreased by 14 percent (3.01 to 2.59);
- Passenger cars increased by 7 percent (2.24 to 2.40);
- SUVs decreased by 39 percent (4.33 to 2.65);
- Pickups decreased by 20 percent (4.07 to 3.27); and
- Vans decreased by 30 percent (1.91 to 1.33).

From 2019 to 2020 the occupant fatality rates in rollover crashes for:

- Total passenger vehicles increased by 14 percent (2.28 to 2.59);
- Passenger cars increased by 24 percent (1.94 to 2.40);
- SUVs increased by 5 percent (2.53 to 2.65);
- Pickups increased by 10 percent (2.96 to 3.27); and
- Vans decreased by 13 percent (1.53 to 1.33).

Table 8

Passenger Vehicle Occupant Fatality Rates Per 100,000 Registered Vehicles in Rollover Crashes, by Vehicle Type, 2011-2020

Year	Passenger Vehicle Type					Total*
	Passenger Cars	Light Trucks				
		SUVs	Pickups	Vans	Total*	
2011	2.24	4.33	4.07	1.91	3.83	3.01
2012	2.38	4.21	4.15	1.73	3.79	3.06
2013	2.19	3.68	3.91	1.78	3.49	2.82
2014	2.03	3.49	3.88	1.69	3.39	2.69
2015	2.16	3.47	3.89	1.73	3.41	2.77
2016	2.21	3.42	3.77	1.96	3.40	2.80
2017	2.18	3.19	3.53	1.89	3.17	2.68
2018	1.96	2.77	3.20	1.52	2.80	2.40
2019	1.94	2.53	2.96	1.53	2.59	2.28
2020	2.40	2.65	3.27	1.33	2.74	2.59

Sources: Fatalities – FARS 2011-2019 Final File, 2020 ARF; Registered Vehicles – Polk data from R. L. Polk & Co., a foundation of IHS Markit automotive solutions
*Includes other/unknown light-truck vehicle types.

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 2011 to 2020 the percentage of alcohol-impaired passenger vehicle drivers involved (killed and survived) in fatal crashes decreased slightly among each vehicle type except vans as shown in Table 9.

Drivers of passenger cars had the highest percentage of alcohol impairment in fatal crashes (23%) compared to other passenger vehicle drivers (22% for pickups, 18% for SUVs, and 12% for vans) in 2020. The percentage of alcohol-impaired van drivers involved in fatal crashes was substantially lower than other passenger vehicle drivers.

Table 9

Percentage of Alcohol-Impaired Passenger Vehicle Drivers Involved in Fatal Crashes, by Vehicle Type, 2011-2020

	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
2011	4,103	24%	1,410	21%	1,877	24%	256	12%	3,551	21%	7,654	22%
2012	4,129	23%	1,482	21%	1,919	24%	253	12%	3,663	21%	7,792	22%
2013	4,072	23%	1,420	21%	1,887	24%	251	12%	3,573	21%	7,645	22%
2014	3,892	22%	1,494	21%	1,936	25%	246	12%	3,688	22%	7,579	22%
2015	4,087	21%	1,543	20%	2,058	24%	230	11%	3,866	21%	7,953	21%
2016	4,423	21%	1,641	19%	1,965	23%	279	12%	3,933	20%	8,356	20%
2017	4,286	20%	1,718	19%	1,923	22%	324	15%	3,991	20%	8,277	20%
2018	4,479	22%	1,680	19%	1,831	21%	252	12%	3,788	19%	8,267	21%
2019	4,023	20%	1,630	18%	1,813	21%	245	12%	3,710	19%	7,734	20%
2020	4,726	23%	1,806	18%	1,883	22%	214	12%	3,917	19%	8,643	21%

Source: FARS 2011-2019 Final File, 2020 ARF
*Includes drivers of other/unknown light-truck vehicle types.

State

Figure 7 shows a heat map of the percentage of passenger vehicle occupant fatalities compared to total traffic fatalities within the State in 2020. 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 47 percent (Hawaii and the District of Columbia) to 75 percent (Alabama), compared to the national average of 61 percent.

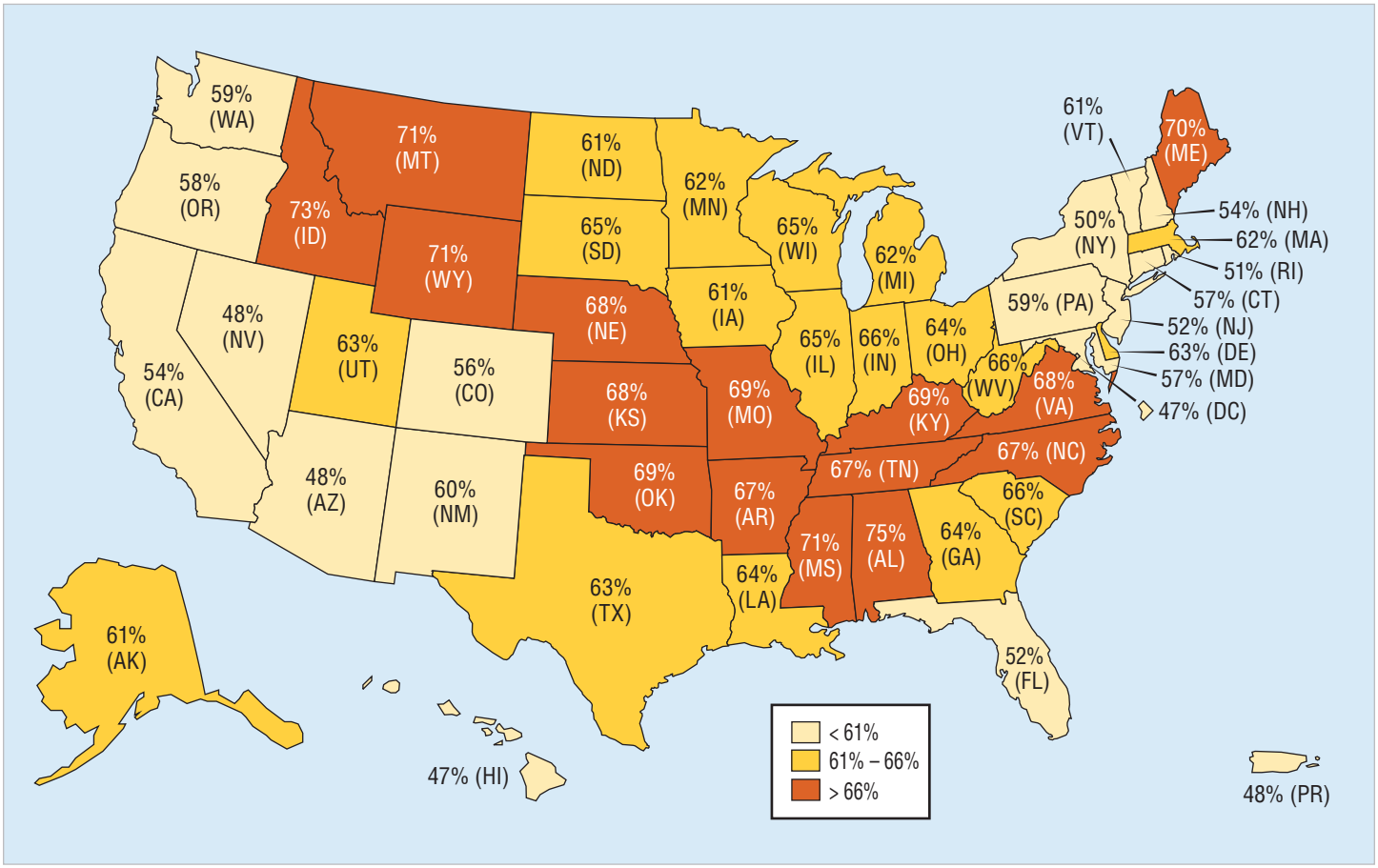
For each State, the District of Columbia, and Puerto Rico, Table 10 presents the number of passenger vehicle occupant fatalities in 2020 by vehicle type. Puerto Rico is not included in the overall U.S. total.

Of the total passenger vehicle fatalities by State (excluding the District of Columbia and Puerto Rico) in 2020:

- The State with the largest percentage of passenger car fatalities was Rhode Island (88%), followed by New Hampshire (71%).
- The State with the largest percentage of SUV fatalities was Alaska (44%), followed by Wyoming (38%).
- The State with the largest percentage of pickup fatalities was South Dakota (37%), followed by Montana (32%) and Oklahoma (32%).
- The States with the largest percentages of van fatalities were Iowa (9%) and South Dakota (9%).

Figure 7

Percentage of Passenger Vehicle Occupant Fatalities in Traffic Crashes, by State, 2020



Source: FARS 2020 ARF

Table 10

Passenger Vehicle Occupant Fatalities, by State and Vehicle Type, 2020

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	395	56%	142	20%	152	22%	16	2%	310	44%	705
Alaska	16	41%	17	44%	6	15%	0	0%	23	59%	39
Arizona	293	58%	105	21%	73	14%	34	7%	214	42%	507
Arkansas	198	46%	110	26%	107	25%	14	3%	231	54%	429
California	1,368	66%	339	16%	288	14%	66	3%	693	34%	2,061
Colorado	153	44%	107	30%	74	21%	17	5%	198	56%	351
Connecticut	116	69%	33	20%	14	8%	5	3%	52	31%	168
Delaware	39	53%	23	32%	9	12%	2	3%	34	47%	73
Dist of Columbia	13	76%	3	18%	0	0%	1	6%	4	24%	17
Florida	1,041	60%	383	22%	256	15%	62	4%	704	40%	1,745
Georgia	602	56%	214	20%	230	21%	25	2%	470	44%	1,072
Hawaii	24	60%	9	23%	7	18%	0	0%	16	40%	40
Idaho	78	50%	31	20%	37	24%	10	6%	78	50%	156
Illinois	481	62%	182	23%	77	10%	36	5%	295	38%	776
Indiana	335	57%	114	19%	101	17%	39	7%	254	43%	589
Iowa	107	52%	40	20%	40	20%	18	9%	98	48%	205
Kansas	138	48%	64	22%	68	24%	18	6%	150	52%	288
Kentucky	314	58%	108	20%	92	17%	27	5%	227	42%	541
Louisiana	267	50%	92	17%	161	30%	13	2%	267	50%	534
Maine	57	50%	27	24%	27	24%	3	3%	57	50%	114
Maryland	219	68%	57	18%	38	12%	8	2%	103	32%	322
Massachusetts	145	68%	51	24%	11	5%	6	3%	68	32%	213
Michigan	327	49%	201	30%	96	14%	46	7%	343	51%	670
Minnesota	122	50%	61	25%	46	19%	16	7%	123	50%	245
Mississippi	304	57%	97	18%	124	23%	12	2%	233	43%	537
Missouri	396	58%	138	20%	122	18%	23	3%	283	42%	679
Montana	71	47%	23	15%	48	32%	9	6%	80	53%	151
Nebraska	84	53%	28	18%	44	28%	2	1%	74	47%	158
Nevada	85	56%	36	24%	28	18%	4	3%	68	44%	153
New Hampshire	40	71%	12	21%	2	4%	2	4%	16	29%	56
New Jersey	207	69%	61	20%	16	5%	18	6%	95	31%	302
New Mexico	99	41%	70	29%	63	26%	8	3%	141	59%	240
New York	331	64%	118	23%	34	7%	33	6%	187	36%	518
North Carolina	630	61%	184	18%	182	18%	41	4%	408	39%	1,038
North Dakota	22	36%	19	31%	18	30%	2	3%	39	64%	61
Ohio	478	60%	181	23%	110	14%	21	3%	313	40%	791
Oklahoma	195	43%	95	21%	147	32%	15	3%	258	57%	453
Oregon	161	55%	63	21%	56	19%	15	5%	134	45%	295
Pennsylvania	417	62%	149	22%	70	10%	32	5%	252	38%	669
Rhode Island	30	88%	2	6%	2	6%	0	0%	4	12%	34
South Carolina	400	57%	146	21%	121	17%	33	5%	300	43%	700
South Dakota	27	30%	22	24%	34	37%	8	9%	64	70%	91
Tennessee	462	57%	160	20%	165	20%	27	3%	352	43%	814
Texas	1,233	51%	525	22%	603	25%	69	3%	1,197	49%	2,430
Utah	95	54%	42	24%	30	17%	8	5%	80	46%	175
Vermont	24	63%	10	26%	1	3%	3	8%	14	37%	38
Virginia	322	55%	121	21%	117	20%	22	4%	260	45%	582
Washington	195	59%	65	20%	59	18%	13	4%	138	41%	333
West Virginia	75	42%	47	27%	49	28%	6	3%	102	58%	177
Wisconsin	216	54%	114	29%	50	13%	19	5%	183	46%	399
Wyoming	25	28%	34	38%	25	28%	6	7%	65	72%	90
U.S. Total	**13,472**	**57%**	**5,075**	**21%**	**4,330**	**18%**	**933**	**4%**	**10,352**	**43%**	**23,824**
Puerto Rico	90	78%	20	17%	4	3%	1	1%	25	22%	115

Source: FARS 2020 ARF

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

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 2020 ARF, the 2019 Final File was released to replace the 2019 ARF. The final fatality count in motor vehicle traffic crashes for 2019 was 36,355, which was updated from 36,096 in the 2019 ARF. The number of passenger vehicle occupant fatalities from the 2019 Final File was 22,372, which was updated from 22,215 from the 2019 ARF.

The 2017 and 2018 Final Files have been amended, but this amendment did not change the overall number of fatal crashes or fatalities.

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

In calendar year 2020, NCSA changed the methodology of estimating people nonfatally injured in motor vehicle traffic crashes. The new approach combines people nonfatally injured from both FARS and NASS GES/CRSS. This is done by extracting people nonfatally injured in fatal crashes from FARS with people nonfatally injured in police-reported injury crashes from NASS GES/CRSS. The old approach extracted people nonfatally injured from only NASS GES/CRSS, regardless of crash severity. This change in methodology caused some estimates of people injured to change for prior years.

The suggested APA format citation for this document is:

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For More Information:

Motor vehicle traffic crash data are available from the National Center for Statistics and Analysis (NCSA), NSA-230. NCSA can be contacted at 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-odi.nhtsa.dot.gov/VehicleComplaint/.

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

- Fatal Motor Vehicle Crash Data Visualizations
- 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 Traffic Fatalities
- School-Transportation-Related Crashes
- Speeding
- State Alcohol-Impaired-Driving Estimates
- State Traffic Data
- Summary of Motor Vehicle Crashes
- Young Drivers

Detailed data on motor vehicle traffic crashes are published annually in *Traffic Safety Facts: A Compilation of Motor Vehicle 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