

DOT HS 813 452

Large Trucks

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

- <u>Overview</u>
- Crash Characteristics
- Drivers
- <u>State</u>

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

June 2023 (Revised)

Key Findings

- In 2021 there were 5,788 people killed in traffic crashes involving large trucks. This was a 17-percent increase from 4,945 in 2020.
- Seventy-two percent of people killed in large-truck traffic crashes in 2021 were occupants of other vehicles.
- Seventy-eight percent of the fatal traffic crashes involving large trucks in 2021 occurred on weekdays (6 a.m. Monday to 5:59 p.m. Friday).
- Three percent of drivers of large trucks involved in fatal traffic crashes in 2021 had blood alcohol concentrations (BACs) of .08 grams per deciliter (g/dL) or higher, much lower than drivers of other vehicle types (28% for motorcycles, 24% for passenger cars, and 20% for light trucks).
- Drivers of large trucks involved in fatal traffic crashes in 2021 had a higher percentage (20.8%) of previously recorded crashes compared to drivers of other vehicle types (motorcycles, 19.9%; passenger cars, 18.2%; and light trucks, 17.2%).
- In 2021 drivers of large trucks in fatal traffic crashes were less likely (6.5%) to have previous license suspensions or revocations than other vehicle types (motorcycles, 16.8%; passenger cars, 14.2%; and light trucks, 11.2%).

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 policereported estimates, including injury estimates. Refer to the end of this publication for more information on FARS, NASS GES, and CRSS.

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

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

Overview

In 2021 there were 5,788 people killed and an estimated 154,993 people injured in traffic crashes involving large trucks. An estimated 523,796 large trucks were involved in police-reported traffic crashes nationwide during 2021.

Table 1 provides an overview of people killed and injured in traffic crashes involving large trucks from 2012 to 2021.

Fatalities in traffic crashes involving large trucks increased by 17 percent from 2020 to 2021. Of the fatalities in 2021:

- 72 percent (4,149) were occupants of other vehicles;
- 17 percent (1,008) were occupants of large trucks; and
- 11 percent (631) were nonoccupants (pedestrians, pedalcyclists, or other nonoccupants).

From 2020 to 2021 there was a 23-percent increase in the number of large-truck occupants killed, and a 19-percent increase in the number of occupants of other vehicles killed in traffic crashes involving large trucks. From 2020 to 2021 there was a 1-percent increase in the number of nonoccupants killed.

In 2021 there were an estimated 154,993 people injured in traffic crashes involving large trucks—an increase of 9 percent from an estimated 141,613 in 2020. Of the people injured in 2021:

- 71 percent (109,981) were occupants of other vehicles;
- 27 percent (42,164) were occupants of large trucks; and
- 2 percent (2,848) were nonoccupants.

From 2020 to 2021 there was a 16-percent increase in the number of nonoccupants injured, a 13-percent increase in the number of occupants of other vehicles injured, and a 1-percent increase in the number of large truck occupants injured.

Table 1. People Killed and Injured in Traffic Crashes Involving Large Trucks, by Person Type and	
Crash Type, 2012–2021	

	Large Truck Occupants by Crash Type					Other People							
	Single	Vehicle	Mult Veh	•	То	tal		Occupants of Other Vehicles Nonoccupants		То	tal		
Year	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Total
Killed													
2012	423	11%	274	7%	697	18%	2,857	72%	390	10%	3,247	82%	3,944
2013	431	11%	264	7%	695	17%	2,845	71%	441	11%	3,286	83%	3,981
2014	405	10%	251	6%	656	17%	2,859	73%	393	10%	3,252	83%	3,908
2015	395	10%	270	7%	665	16%	3,017	74%	413	10%	3,430	84%	4,095
2016	520	11%	295	6%	815	17%	3,351	72%	512	11%	3,863	83%	4,678
2017	525	11%	353	7%	878	18%	3,535	72%	493	10%	4,028	82%	4,906
2018	538	11%	352	7%	890	18%	3,563	71%	553	11%	4,116	82%	5,006
2019	494	10%	399	8%	893	18%	3,569	71%	570	11%	4,139	82%	5,032
2020	504	10%	318	6%	822	17%	3,501	71%	622	13%	4,123	83%	4,945
2021	582	10%	426	7%	1,008	17%	4,149	72%	631	11%	4,780	83%	5,788
						In	jured						
2012	8,893	9%	16,478	16%	25,372	24%	76,342	73%	2,740	3%	79,082	76%	104,454
2013	8,949	9%	15,673	16%	24,621	26%	69,221	72%	2,254	2%	71,476	74%	96,097
2014	10,280	9%	16,865	15%	27,146	24%	82,282	74%	2,389	2%	84,671	76%	111,817
2015	10,175	9%	19,927	17%	30,102	26%	85,172	72%	2,561	2%	87,733	74%	117,835
2016†	12,941	10%	23,241	17%	36,183	27%	94,958	70%	3,587	3%	98,545	73%	134,727

1200 New Jersey Avenue SE, Washington, DC 20590

	La	rge Truc	k Occup	k Occupants by Crash Type Other People									
	Single	Vehicle	-	ultiple Occupants of ehicle Total Other Vehicles		Total			Nonoccupants		Total		
Year	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Total
2017†	14,550	10%	25,442	17%	39,992	27%	105,509	71%	2,808	2%	108,317	73%	148,309
2018†	13,480	9%	25,719	17%	39,200	26%	108,490	72%	3,480	2%	111,970	74%	151,170
2019†	15,199	10%	30,490	19%	45,688	29%	109,515	69%	4,156	3%	113,670	71%	159,359
2020†	14,969	11%	26,597	19%	41,566	29%	97,595	69%	2,452	2%	100,048	71%	141,613
2021†	13,823	9%	28,341	18%	42,164	27%	109,981	71%	2,848	2%	112,829	73%	154,993

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

Note: Due to a vehicle classification change, the 2020 and later year data are not comparable to 2019 and earlier years.

In 2021 large trucks accounted for 9 percent of all vehicles involved in fatal traffic crashes and 5 percent of all vehicles involved in injury and property-damage-only traffic crashes. Large trucks accounted for 5 percent of all registered vehicles and 10 percent of the total vehicle miles traveled (VMT) in 2021. In comparison, passenger vehicles (passenger cars, SUVs, pickup trucks, and vans) accounted for 92 percent of all registered vehicles and 88 percent of the total VMT in 2021.

Table 2 summarizes the number of large trucks involved in fatal and injury traffic crashes, the number of registered large trucks, involvement rates for every 100,000 registered large trucks, large-truck VMT, and the involvement rates for every 100 million large-truck VMT from 2012 to 2021.

Year	Number of Large Trucks Involved	Number of Large Trucks Registered	Involvement Rate per 100,000 Registered Large Trucks	Large-Truck VMT (millions)	Involvement Rate per 100 Million Large-Truck VMT
			Fatal Traffic Crashes		_
2012	3,825	10,659,380	35.88	269,207	1.42
2013	3,921	10,597,356	37.00	275,017	1.43
2014	3,749	10,905,956	34.38	279,132	1.34
2015	4,075	11,203,184	36.37	279,844	1.46
2016	4,562	11,498,561	39.67	287,895	1.58
2017	4,805	12,229,216	39.29	297,593	1.61
2018	4,909	13,233,910	37.09	304,864	1.61
2019	5,033	13,085,643	38.46	300,050	1.68
2020	4,821	12,899,371	37.37	297,649	1.62
2021	5,700	13,859,181	41.13	327,026	1.74
		I	njury Traffic Crashes		
2012	76,621	10,659,380	719	269,207	28
2013	73,089	10,597,356	690	275,017	27
2014	88,473	10,905,956	811	279,132	32
2015	87,307	11,203,184	779	279,844	31
2016†	102,080	11,498,561	888	287,895	35
2017†	106,733	12,229,216	873	297,593	36
2018†	112,253	13,233,910	848	304,864	37
2019†	118,527	13,085,643	906	300,050	40
2020†	104,741	12,899,371	812	297,649	35
2021†	117,312	13,859,181	846	327,026	36

Table 2. Large Trucks Involved in Fatal and Injury Traffic Crashes, and Involvement Rates, 2012–2021

Sources: FARS 2012–2020 Final File, 2021 ARF; NASS GES 2012–2015; CRSS 2016–2021; VMT and Registered Vehicles - Federal Highway Administration

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

Note: Due to a vehicle classification change, the 2020 and later year data are not comparable to 2019 and earlier years.

Crash Characteristics

In 2021 large trucks were more likely to be involved in fatal multivehicle traffic crashes as opposed to fatal singlevehicle crashes than were passenger vehicles. Eighty-one percent of large trucks involved in fatal traffic crashes were in multivehicle crashes, compared with 63 percent for passenger vehicles.

Table 3 presents percentages of two-vehicle fatal traffic crashes involving large trucks by initial impact point of the large truck and the other vehicle (excluding large trucks) in 2021. The large truck and the other vehicle impacted each other on the front 31.7 percent of the time. The large trucks were impacted from the rear 4 times more often than the other vehicles (23.6% and 5.6%).

Table 3. Percentage of Two-Vehicle Fatal Traffic Crashes Involving Large Trucks, by Initial Impact	
Point, 2021	

	Impact Point on Other Vehicle							
Impact Point on Large Truck	Front	Left Side	Right Side	Rear	Total			
Front	31.7%	12.9%	10.3%	5.5%	60.4%			
Left Side	8.1%	1.0%	0.6%	0.0%	9.8%			
Right Side	5.3%	0.7%	0.2%	0.1%	6.2%			
Rear	22.3%	0.8%	0.5%	<0.1%	23.6%			
Total	67.4%	15.5%	11.6%	5.6%	100.0%			

Source: FARS 2021 ARF

Notes: Excludes two-vehicle traffic crashes involving two large trucks. Totals may not equal sum of components due to independent rounding.

According to Table 4, both the large truck and the other vehicle (excluding large trucks) were proceeding straight at the time of the traffic crash in 43.1 percent of the two-vehicle fatal crashes. In 8.3 percent of these two-vehicle traffic crashes, the other vehicle was turning left regardless of the large-truck maneuver. In 8.9 percent of these traffic crashes the truck and the other vehicle were both negotiating a curve. In 8.3 percent of the two-vehicle fatal traffic crashes, either the truck or the other vehicle was stopped in the road (6.5% and 1.8%).

Table 4. Percentage of Vehicle Maneuvers in Two-Vehicle Fatal Traffic Crashes Involving a Large Truck, by Maneuver of the Large Truck and Maneuver of the Other Vehicle, 2021

	Vehicle Maneuver of the Other Vehicle						
Vehicle Maneuver of the Large Truck	Going Straight	Stopped in Road	Turning Right	Turning Left	Negotiating a Curve	Other/Unknown Maneuver	Total
Going Straight	43.1%	1.5%	0.8%	7.1%	1.2%	8.7%	62.3%
Stopped in Road	5.8%	0.0%	<0.1%	<0.1%	0.3%	0.4%	6.5%
Turning Right	1.0%	0.0%	<0.1%	0.0%	0.1%	0.2%	1.4%
Turning Left	6.3%	0.0%	0.0%	<0.1%	0.6%	0.7%	7.6%
Negotiating a Curve	1.0%	0.2%	<0.1%	0.8%	8.9%	1.3%	12.2%
Other/Unknown Maneuver	7.9%	0.1%	<0.1%	0.3%	0.6%	1.1%	10.0%
Total	65.1%	1.8%	0.9%	8.3%	11.6%	12.4%	100.0%

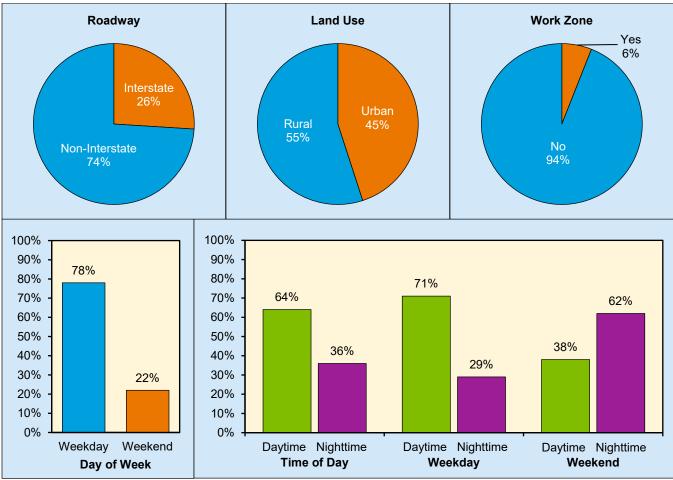
Source: FARS 2021 ARF

Notes: Excludes two-vehicle traffic crashes involving two large trucks. Totals may not equal sum of components due to independent rounding.

Figure 1 shows the percentages of fatal traffic crashes involving large trucks by roadway, urban/rural land use, work zone, day of the week (weekday/weekend), and time of day (nighttime/daytime) in 2021.

- Twenty-six percent of fatal traffic crashes involving large trucks occurred on interstates.
- Fifty-five percent of fatal traffic crashes involving large trucks occurred in rural areas.
- Only 6 percent of fatal traffic crashes involving large trucks occurred in work zones.
- Seventy-eight percent of the fatal traffic crashes involving large trucks occurred on weekdays.
- Of those fatal traffic crashes involving large trucks during weekdays, 71 percent occurred during daytime from 6 a.m. to 5:59 p.m.

Figure 1. Percentage of Fatal Traffic Crashes Involving Large Trucks in Relation to Roadway, Land Use, Work Zone, Day of Week and Time of Day, 2021



Source: FARS 2021 ARF

Note: Unknowns were removed before calculating percentages.

Weekday - Monday 6 a.m. to Friday 5:59 p.m. (4.5 days)

Weekend – Friday 6 p.m. to Monday 5:59 a.m. (2.5 days)

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

Nighttime – 6 p.m. to 5:59 a.m.

Drivers

Drivers are considered to be alcohol-impaired when their BACs are .08 g/dL or higher. Figure 2 displays the proportions of alcohol-impaired drivers in fatal traffic crashes by vehicle types (large trucks, passenger cars, light trucks, and motorcycles) over the 10-year period 2012 to 2021. The percentage of drivers of large trucks involved in fatal traffic crashes who were alcohol-impaired was 3 percent in 2021. For drivers of other types of vehicles involved in fatal traffic crashes in 2021, the percentages of alcohol-impaired drivers were 28 percent for motorcycles, 24 percent for passenger cars, and 20 percent for light trucks.

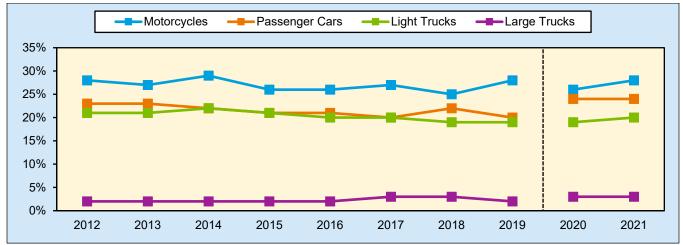


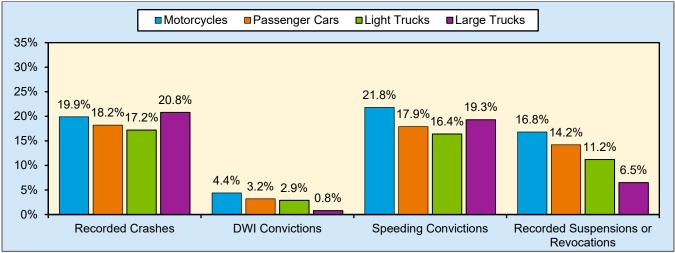
Figure 2. Estimated Proportions of Alcohol-Impaired Drivers in Fatal Traffic Crashes, by Vehicle Type, 2012–2021

Source: FARS 2012–2020 Final File, FARS 2021 ARF Notes: Due to a vehicle classification change, the 2020 and later year data are not comparable to 2019 and earlier years. NHTSA estimates BACs when alcohol test results are unknown.

Figure 3 presents the percentages of drivers involved in fatal traffic crashes who had previous driving records (recorded crashes, DWI convictions, speeding convictions, and recorded suspensions or revocations) within 5 years from the time of the crash, by vehicle types in 2021.

- Large-truck drivers had a higher percentage (20.8%) of previously recorded traffic crashes compared to drivers of other vehicle types (motorcycles, 19.9%; passenger cars, 18.2%; and light trucks, 17.2%).
- Large-truck drivers had the lowest percentage (0.8%) of previous DWI convictions compared to drivers of other vehicle types (motorcycles, 4.4%; passenger cars, 3.2%; and light trucks, 2.9%).
- Almost 22 percent of all motorcycle drivers involved in fatal traffic crashes had at least one prior speeding conviction, slightly higher than large-truck drivers (21.8% versus 19.3%) involved in fatal traffic crashes.
- Drivers of large trucks in fatal traffic crashes were less likely (6.5%) to have previous license suspensions or revocations than other vehicle types (motorcycles, 16.8%; passenger cars, 14.2%; and light trucks, 11.2%).

Figure 3. Percentage of Previous 5-Year Driving Records of Drivers Involved in Fatal Traffic Crashes, by Vehicle Type, 2021



Source: FARS 2021 ARF

Note: Excludes all drivers with previous records that were unknown.

State

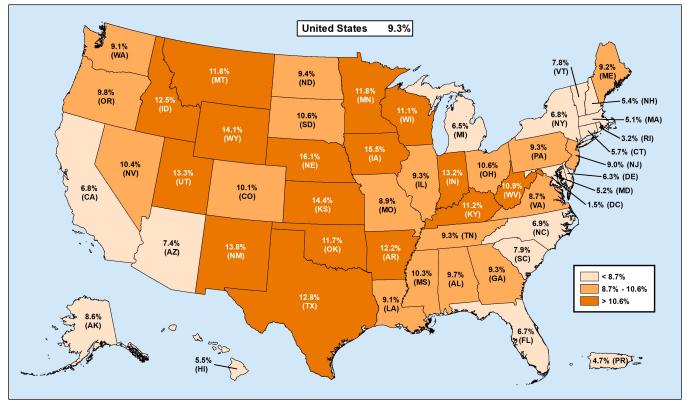
Figure 4 displays the percentage of large trucks involved in fatal traffic crashes by State. Table 5 presents the large-truck involvement in fatal traffic crashes in 2021 for the 50 States, the District of Columbia, and Puerto Rico. Puerto Rico is not included in the overall U.S. total.

- On average nationwide, 9.3 percent of all vehicles involved in fatal traffic crashes were large trucks.
- The percentage of large trucks involved in fatal traffic crashes, as a proportion of all vehicles, ranged from 1.5 percent in the District of Columbia to 16.1 percent in Nebraska.
- The percentage of large trucks involved in fatal traffic crashes was 10 percent or higher in 21 States.
- Texas had the highest number of large trucks involved in fatal traffic crashes at 832, and the largest number of total vehicles involved in fatal traffic crashes.
- The States with higher percentages of large trucks involved in fatal traffic crashes are in the middle of the country as compared to the eastern and western portions of the country.

Table 6 shows the number of people killed in large-truck traffic crashes for each of the 50 States, the District of Columbia, and Puerto Rico, by person type in 2021. Puerto Rico is not included in the overall U.S. total.

- The highest number of large-truck occupants killed was 170 in Texas, followed by 48 in California.
- The number of other-vehicle occupants killed ranged from 0 in the District of Columbia to 549 in Texas. Fourteen States each had more than 100 occupants of other vehicles killed in large-truck traffic crashes.
- Texas had the highest number of nonoccupants killed in large-truck traffic crashes at 87. Two other states (California and Florida) had more than 60 nonoccupants killed in large-truck traffic crashes.

Figure 4. Large Trucks Involved, as a Percentage of Total Vehicles in Fatal Traffic Crashes, by State, 2021



Source: FARS 2021 ARF

		Large Trucks Involved in Fatal Traffic Crashes					
State	Total Vehicles Involved in Fatal Traffic Crashes	Number	Percentage of Total Vehicles	Percentage of U.S. Total for Large Trucks			
Alabama	1,381	134	9.7%	2.4%			
Alaska	93	8	8.6%	0.1%			
Arizona	1,707	127	7.4%	2.2%			
Arkansas	960	117	12.2%	2.1%			
California	6,114	416	6.8%	7.3%			
Colorado	1,024	103	10.1%	1.8%			
Connecticut	438	25	5.7%	0.4%			
Delaware	207	13	6.3%	0.2%			
District of Columbia	67	13	1.5%	0.2%			
Florida	5,482	366	6.7%	6.4%			
	2,640	245	9.3%	4.3%			
Georgia	2,040		9.3% 5.5%	0.1%			
Hawaii		7					
Idaho	376	47	12.5%	0.8%			
Illinois	1,901	177	9.3%	3.1%			
Indiana	1,392	184	13.2%	3.2%			
lowa	491	76	15.5%	1.3%			
Kansas	603	87	14.4%	1.5%			
Kentucky	1,163	130	11.2%	2.3%			
Louisiana	1,381	126	9.1%	2.2%			
Maine	195	18	9.2%	0.3%			
Maryland	801	42	5.2%	0.7%			
Massachusetts	586	30	5.1%	0.5%			
Michigan	1,658	108	6.5%	1.9%			
Minnesota	672	79	11.8%	1.4%			
Mississippi	1,045	108	10.3%	1.9%			
Missouri	1,434	128	8.9%	2.2%			
Montana	287	34	11.8%	0.6%			
Nebraska	311	50	16.1%	0.9%			
Nevada	567	59	10.4%	1.0%			
New Hampshire	148	8	5.4%	0.1%			
New Jersey	974	88	9.0%	1.5%			
New Mexico	645	89	13.8%	1.6%			
New York	1,600	108	6.8%	1.9%			
North Carolina	2,363	164	6.9%	2.9%			
North Dakota	139	13	9.4%	0.2%			
Ohio	1,932	204	10.6%	3.6%			
Oklahoma	1,085	127	11.7%	2.2%			
Oregon	833	82	9.8%	1.4%			
Pennsylvania	1,761	163	9.3%	2.9%			
Rhode Island	94	3	3.2%	0.1%			
South Carolina	1,726	137	7.9%	2.4%			
South Dakota	179	19	10.6%	0.3%			
Tennessee	1,966	183	9.3%	3.2%			
Texas	6,510	832	12.8%	14.6%			
Utah	474	63	13.3%	1.1%			
Vermont	102	8	7.8%	0.1%			
Virginia	1,342	117	8.7%	2.1%			
Washington	951	87	9.1%	1.5%			
Washington West Virginia	384	42	10.9%	0.7%			
Wisconsin	879	98	11.1%	1.7%			
Wyoming	142	20	14.1%	0.4%			
U.S. Total	61,332	5,700	9.3%	100.0%			
0.3. 10tal	467	5,700 22	<u>9.3%</u> 4.7%	100.0%			

Source: FARS 2021 ARF

Note: Percentages may not equal sum of components due to independent rounding.

	Truck Occupants by Crash Type Other People						
	Single	Multiple		Occupants of			
State	Vehicle	Vehicle	Total	Other Vehicles	Nonoccupants	Total	Total
Alabama	15	8	23	117	10	127	150
Alaska	1	0	1	6	1	7	8
Arizona	16	11	27	102	14	116	143
Arkansas	16	14	30	78	8	86	116
California	30	18	48	328	61	389	437
Colorado	8	7	15	78	9	87	102
Connecticut	1	1	2	20	4	24	26
Delaware	1	0	1	10	3	13	14
District of Columbia	0	1	1	0	0	0	1
Florida	20	26	46	264	63	327	373
Georgia	19	23	42	184	18	202	244
Hawaii	0	1	1	6	0	6	7
Idaho	7	2	9	34	2	36	45
Illinois	15	11	26	140	14	154	180
Indiana	17	17	34	116	17	133	167
Iowa	12	6	18	46	3	49	67
Kansas	11	7	18	54	7	61	79
Kentucky	17	15	32	90	6	96	128
Louisiana	10	13	23	96	16	112	135
	2		23	90 16		112	135
Maine Manual		0			0		
Maryland	4	1	5	24	12	36	41
Massachusetts	4	0	4	21	6	27	31
Michigan	13	7	20	82	9	91	111
Minnesota	14	4	18	55	7	62	80
Mississippi	4	8	12	83	11	94	106
Missouri	21	9	30	98	9	107	137
Montana	9	1	10	22	6	28	38
Nebraska	10	7	17	38	2	40	57
Nevada	7	3	10	44	7	51	61
New Hampshire	0	1	1	6	0	6	7
New Jersey	11	6	17	56	15	71	88
New Mexico	14	12	26	47	16	63	89
New York	9	5	14	76	24	100	114
North Carolina	14	10	24	131	17	148	172
North Dakota	3	0	3	9	1	10	13
Ohio	20	14	34	164	22	186	220
Oklahoma	13	7	20	107	9	116	136
Oregon	10	3	13	55	16	71	84
Pennsylvania	18	11	29	117	16	133	162
Rhode Island	0	0	0	3	0	3	3
South Carolina	15	4	19	113	12	125	144
South Dakota	2	0	2	115	3	123	20
Tennessee	20	12	32	124	23	147	179
	89	81	170	549	87	636	806
Texas			16	<u>549</u> 44	87 7	51	67
Utah	6	10		44 5			
Vermont	0	3	3		0	5	8
Virginia	17	7	24	88	8	96	120
Washington	5	6	11	59	17	76	87
West Virginia	4	3	7	35	3	38	45
Wisconsin	3	9	12	83	8	91	103
Wyoming	5	1	6	11	2	13	19
U.S. Total	582	426	1,008	4,149	631	4,780	5,788
Puerto Rico	1	1	2	15	3	18	20

Table 6. Fatalities in Traffic Crashes Involving Large Trucks, by State and Person Type, 2021

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 large truck fatalities from the 2020 Final File was 4,945, which was updated from 4,965 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-damageonly 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.

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, Revised). *Large trucks: 2021 data* (Traffic Safety Facts. Report No. DOT HS 813 452). 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 <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>https://www.nhtsa.gov/report-a-safety-problem</u>.

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
- Motorcycles
- Occupant Protection in Passenger Vehicles
- Older Population
- Passenger Vehicles
- Pedestrians
- Rural/Urban Comparison of Motor Vehicle Traffic Fatalities
- School-Transportation-Related Crashes
- Speeding
- State Alcohol-Impaired-Driving Estimates
- State Traffic Data
- 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