Traffic Safety Facts
2017 Data
January 2019
DOT HS 812 663

NHTSA

Large Trucks

Key Findings

- In 2017 there were 4,761 people killed in crashes involving large trucks, a 9-percent increase from 2016.
- Seventy-two percent of people killed in large-truck crashes in 2017 were occupants of other vehicles.
- Seventy-eight percent of the fatal crashes involving large trucks in 2017 occurred on weekdays (6 a.m. Monday to 5:59 p.m. Friday).
- Three percent of the large-truck drivers involved in fatal crashes in 2017 had blood alcohol concentrations (BACs) of .08 g/dL or higher, much lower than drivers of other vehicle types (27% for motorcycles, 21% for passenger cars, and 20% for light trucks).
- In 2017 drivers of large trucks in fatal crashes were less likely to have previous license suspensions or revocations than were passenger car drivers.
- Large-truck drivers involved in fatal crashes in 2017 had a higher percentage (20.7%) of previously recorded crashes compared to drivers of other vehicle types (motorcycles, 20.3%; passenger cars, 19.1%; and light trucks, 17.0%).

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National Highway Traffic Safety Administration
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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 can include commercial and non-commercial vehicles. Seventy-nine percent of the large trucks involved in fatal traffic crashes were heavy large trucks (GVWR > 26,000 lbs.) in 2017.

In this fact sheet for 2017, large-truck information is presented as follows:

- Overview
- Crash Characteristics
- Large-Truck Drivers
- States

This fact sheet contains information on fatal motor vehicle crashes and fatalities, based on data from the Fatality Analysis Reporting System (FARS). Refer to the end of this publication for more information on FARS. Injury estimates are based on data obtained from a nationally representative sample of police-reported crashes, but at the time of publication, estimates for 2016 and 2017 were not available. For more information, read **Crash Report Sampling System (CRSS) Replaces the National Automotive Sampling System (NASS) General Estimates System (GES)** at the end of this publication.

Overview

In 2017 there were 4,761 people killed in crashes involving large trucks.

Table 1 provides an overview of people killed in crashes involving large trucks from 2008 to 2017.

Fatalities in crashes involving large trucks increased by 9.0 percent from 4,369 in 2016 to 4,761 in 2017. Over a 10-year period there was a 12-percent increase in the total number of people killed in large-truck crashes, from 4,245 fatalities in 2008 to 4,761 fatalities in 2017. Of the fatalities in 2017:

- 72 percent (3,450) were occupants of other vehicles;
- 18 percent (841) were occupants of large trucks; and
- 10 percent (470) were nonoccupants (pedestrians, pedalcyclists, etc.).

From 2016 to 2017 there was a 9-percent increase in the number of occupants of other vehicles killed, and a 1-percent decrease in the number of nonoccupants killed. This is the highest number of other occupants killed in the most recent 10-year period (2008 to 2017), and the second highest number of nonoccupants killed in that 10-year period.

Table 1

People Killed or Injured in Crashes Involving Large Trucks, by Person Type and Crash Type, 2008–2017

Year	Truck Occupants by Crash Type						Other People						Total
	Single Vehicle		Multiple Vehicle		Total		Occupant of Other Vehicle		Nonoccupant		Total		
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
Killed													
2008	430	10%	252	6%	682	16%	3,151	74%	412	10%	3,563	84%	4,245
2009	333	10%	166	5%	499	15%	2,558	76%	323	10%	2,881	85%	3,380
2010	339	9%	191	5%	530	14%	2,797	76%	359	10%	3,156	86%	3,686
2011	408	11%	232	6%	640	17%	2,713	72%	428	11%	3,141	83%	3,781
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	458	10%	267	6%	725	17%	3,170	73%	474	11%	3,644	83%	4,369
2017	498	10%	343	7%	841	18%	3,450	72%	470	10%	3,920	82%	4,761
Injured													
2008	10,000	8%	13,000	12%	23,000	20%	64,000	78%	3,000	3%	67,000	80%	90,000
2009	7,000	7%	9,000	12%	17,000	19%	56,000	79%	1,000	2%	57,000	81%	74,000
2010	9,000	6%	11,000	12%	20,000	19%	58,000	78%	2,000	3%	60,000	81%	80,000
2011	7,000	6%	15,000	13%	23,000	19%	64,000	79%	2,000	2%	65,000	81%	88,000
2012	9,000	6%	17,000	13%	25,000	19%	76,000	78%	3,000	3%	79,000	81%	104,000
2013	9,000	8%	15,000	16%	24,000	25%	69,000	72%	2,000	3%	71,000	75%	95,000
2014	10,000	9%	17,000	14%	27,000	23%	82,000	74%	2,000	3%	84,000	77%	111,000
2015	10,000	8%	19,000	15%	30,000	24%	84,000	73%	3,000	4%	86,000	76%	116,000

IMPORTANT: 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, CRSS, replaced the NASS GES in 2016 and has a different sample design.

Note: Injury totals may not equal the sum of components due to independent rounding.

Sources: 2008–2016 FARS Final File, 2017 FARS Annual Report File (ARF)
2008–2015 NASS GES
2016 and 2017 CRSS data not yet available.

In 2017 large trucks accounted for 9 percent of all vehicles involved in fatal crashes. Large trucks accounted for 4 percent of all registered vehicles and 9 percent of the total vehicle miles traveled (VMT) in 2016 (2017 data not yet available). For comparison, passenger vehicles (passenger cars, SUVs, pickup trucks, and vans) accounted for 93 percent of all registered vehicles and 90 percent of the total VMT in 2016.

Table 2 summarizes the number of large trucks involved in fatal and injury crashes, the number of registered large trucks, involvement rates for every 100,000 registered large trucks, large-truck miles traveled, and the involvement rates for every 100 million large-truck miles traveled from 2008 to 2017.

Table 2

Large-Truck Involvement in Fatal and Injury Crashes, and Involvement Rates, 2008–2017

Year	Number of Large Trucks Involved	Number of Large Trucks Registered	Involvement Rate per 100,000 Registered Large Trucks	Large-Truck Miles Traveled (millions)	Involvement Rate per 100 million Large-Truck Miles Traveled
Fatal Crashes					
2008	4,089	10,873,275	37.61	310,680	1.32
2009	3,211	10,973,214	29.26	288,306	1.11
2010	3,494	10,770,054	32.44	286,527	1.22
2011	3,633	10,270,693	35.37	267,594	1.36
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	4,251	11,498,561	36.97	287,895	1.48
2017	4,657	*	N/A	*	N/A
Injury Crashes					
2008	66,000	10,873,275	608	310,680	21
2009	53,000	10,973,214	487	288,306	19
2010	58,000	10,770,054	541	286,527	20
2011	63,000	10,270,693	609	267,594	23
2012	77,000	10,659,380	719	269,207	28
2013	73,000	10,597,356	690	275,017	27
2014	88,000	10,905,956	811	279,132	32
2015	87,000	11,203,184	779	279,844	31

IMPORTANT: 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, CRSS, replaced the NASS GES in 2016 and has a different sample design.
Note: In 2011, the Federal Highway Administration implemented an enhanced methodology for estimating registered vehicles and vehicle miles traveled by vehicle type. These revisions were applied to data after 2006. In some cases, the changes were significant and should be taken into account when comparing registered vehicle counts and/or vehicle miles traveled for 2006 and earlier years with the numbers for 2007 and later years.
Sources: 2008–2016 FARS Final File, 2017 FARS ARF, 2008–2015 NASS GES, Vehicle miles traveled and registered vehicles – Federal Highway Administration.
2016 and 2017 CRSS data not available.

Crash Characteristics

In 2017 large trucks were more likely to be involved in fatal multiple-vehicle crashes as opposed to fatal single-vehicle crashes than were passenger vehicles (82% of fatal crashes involving large trucks are multiple-vehicle crashes, compared with 62% for fatal crashes involving passenger vehicles).

Table 3 presents percentages of two-vehicle fatal crashes involving large trucks by initial impact point of the large truck and the other vehicle in 2017. Both vehicles were struck in the front 32 percent of the time. The trucks were struck in the rear 3 times more often than the other vehicles (21% and 6%, respectively).

Table 3

Percentage of Two-Vehicle Fatal Crashes Involving Large Trucks, by Initial Impact Point of the Large Trucks and Other Vehicles, 2017

Impact Point on Large Truck	Impact Point on Other Vehicle				
	Front	Left Side	Right Side	Rear	Total
Front	32%	13%	11%	6%	61%
Left Side	9%	1%	0%	0%	10%
Right Side	6%	1%	0%	0%	6%
Rear	21%	1%	0%	0%	22%
Total	**67%**	**15%**	**12%**	**6%**	**100%**

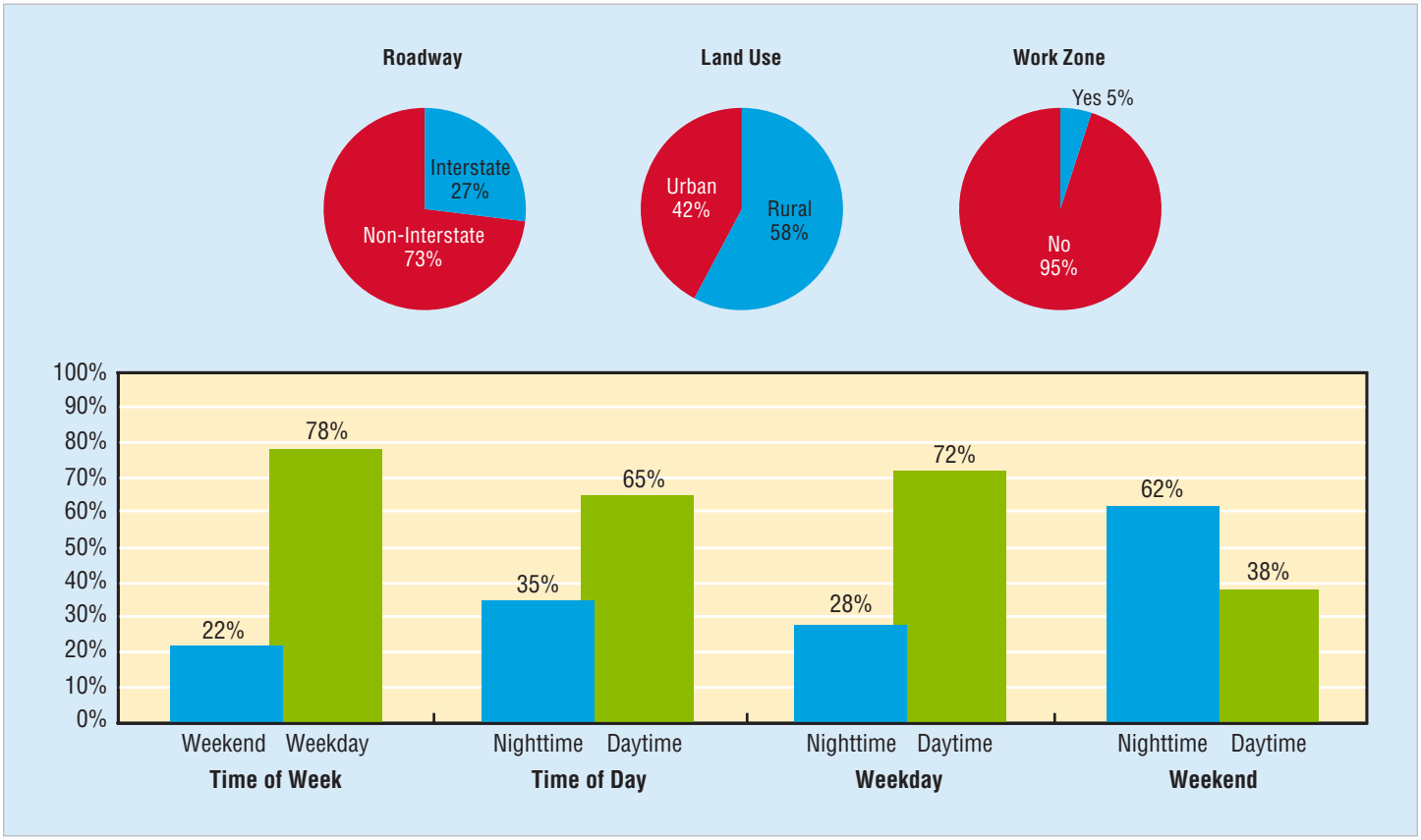
Note: Totals may not equal the sum of components due to independent rounding.
Source: 2017 FARS ARF

According to data (not shown above), both the large truck and the other vehicle were proceeding straight at the time of the crash in 44 percent of the two-vehicle fatal crashes. In 8 percent of these crashes, the other vehicle was turning left or right regardless of the large truck maneuver. In 9 percent of these crashes the truck and the other vehicle were negotiating curves. In 8 percent of the two-vehicle fatal crashes, either the truck or the other vehicle was stopped in a traffic lane (6% and 2%, respectively).

Figure 1 shows the percentages of fatal 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 2017.

- More than 1 out of 4 fatal large-truck crashes (27%) occurred on interstates.
- Fifty-eight percent of fatal crashes involving large trucks occurred in rural areas.
- Only 5 percent of fatal crashes involving large trucks occurred in work zones.
- Seventy-eight percent of the fatal crashes involving large trucks occurred on weekdays.
- Of those weekday large-truck fatal crashes, 72 percent occurred during the daytime hours of 6 a.m. to 5:59 p.m.

Figure 1
Percentage of Fatal Crashes Involving Large Trucks, by Roadway, Land Use, Work Zone, Day of Week, Time of Day, Time of Day (Weekday), and Time of Day (Weekend), 2017



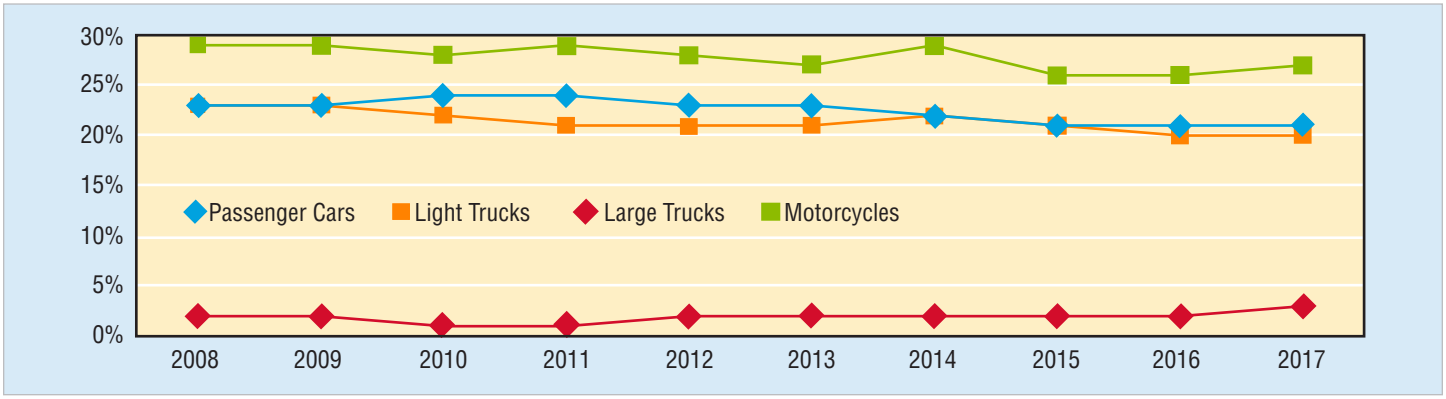
Note: Unknowns were removed before calculating percentages.
Weekday: 6 a.m. Monday to 5:59 p.m. Friday
Weekend: 6 p.m. Friday to 5:59 a.m. Monday
Daytime: 6 a.m. to 5:59 p.m. Nighttime: 6 p.m. to 5:59 a.m.
Source: 2017 FARS ARF

Large-Truck Drivers

The percentage of large-truck drivers involved in fatal crashes who had blood alcohol concentrations (BACs) of .08 g/dL or higher was 3 percent in 2017. For drivers of other types of vehicles involved in fatal crashes in 2017, the percentages of drivers with BACs of .08 g/dL or higher were 27 percent for motorcycles, 21 percent for passenger cars, and 20 percent for light trucks.

Figure 2 displays the 10-year proportions of drivers in fatal crashes with BACs of .08 g/dL or higher by vehicle types (large trucks, passenger cars, light trucks, and motorcycles).

Figure 2
Estimated Proportions of Drivers in Fatal Crashes With BACs of .08 g/dL or Higher, 2008–2017

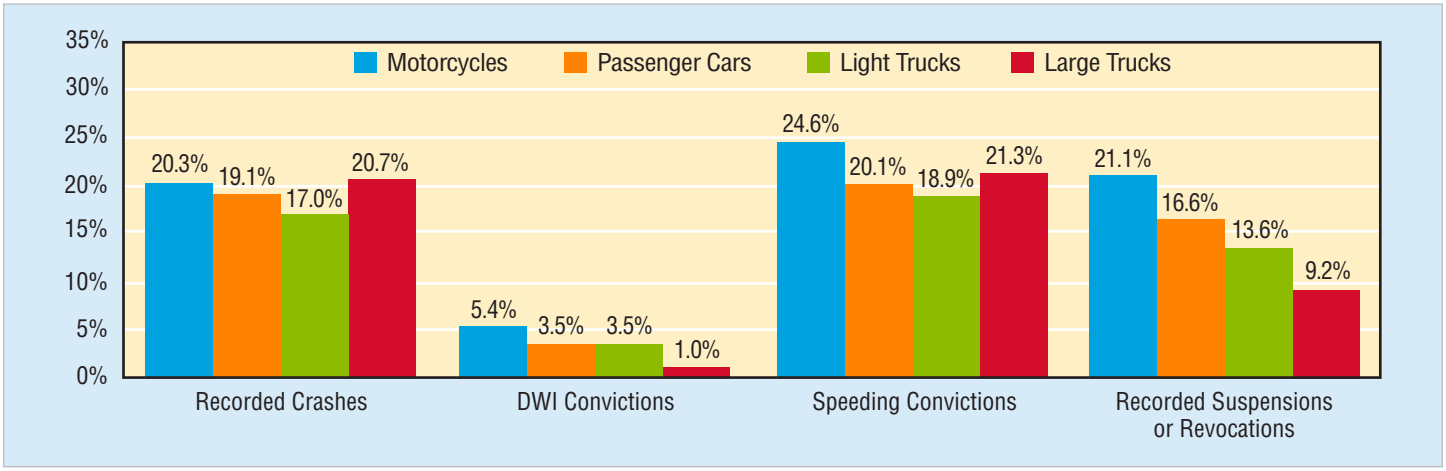


Source: 2008–2016 FARS Final File, 2017 FARS ARF

Figure 3 presents the percentages of drivers involved in fatal crashes with previous driving records (recorded crashes, driving while intoxicated [DWI] convictions, speeding convictions, and recorded suspensions or revocations) by vehicle types (motorcycles, passenger cars, light trucks, and large trucks) in 2017.

- Large-truck drivers have a higher percentage (20.7%) of previously recorded crashes compared to drivers of other vehicle types (motorcycles, 20.3%; passenger cars, 19.1%; and light trucks, 17.0%).
- More than 21 percent of all large-truck drivers involved in fatal crashes had at least one prior speeding conviction, almost the same as passenger car drivers involved in fatal crashes.
- Drivers of large trucks in fatal crashes were less likely to have previous license suspensions or revocations than were passenger car drivers (9.2% and 16.6%, respectively).

Figure 3
Previous Driving Records of Drivers Involved in Fatal Traffic Crashes, by Vehicle Type, 2017



Note: Excludes all drivers with previous records that were unknown. Starting in 2015, the time period for qualifying events was expanded from the previous 3 years of driving records to the previous 5 years.
Source: 2017 FARS ARF

States

Table 4 presents the large-truck involvement in fatal crashes in 2017 for each of the 50 States, District of Columbia, and Puerto Rico. Figure 4 is a map that displays the percentages of large trucks involved in fatal crashes. Puerto Rico is not included in the overall U.S. total for Table 4.

- On average in the country, large trucks made up 8.8 percent of all vehicles involved in fatal crashes.
- The percentage of large trucks involved in fatal crashes ranged from none in the District of Columbia to 16.1 percent in North Dakota.
- Large-truck involvement was 10 percent or higher in 17 States.
- Texas had the highest number of large trucks involved in fatal crashes at 621, and the largest number of total vehicles involved in fatal crashes.
- The States with the largest percentages of large trucks involved in fatal crashes are in the West North Central, and West South Central portions of the country. The Eastern and Western portions of the country have lower percentages.

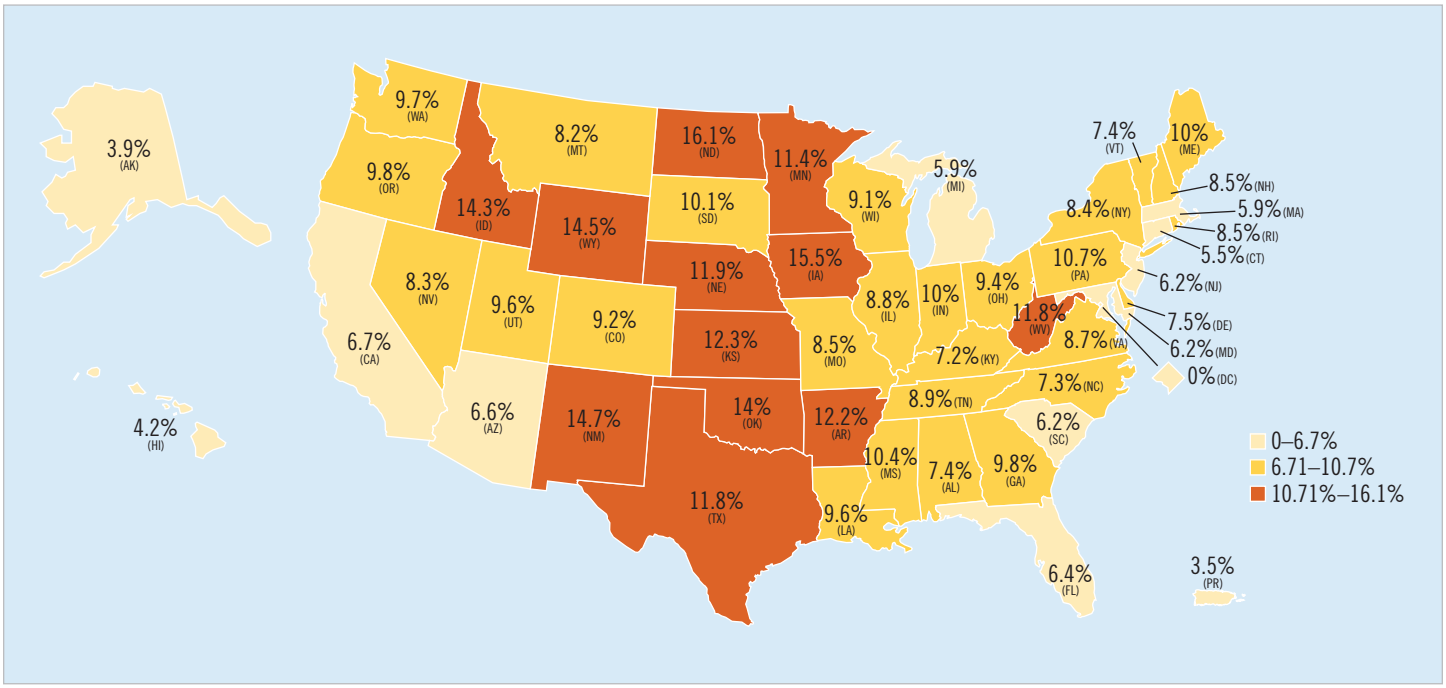
Table 5 presents an overview of the people killed in large-truck crashes for each of the 50 States, District of Columbia, and Puerto Rico, by the person type in 2017. Puerto Rico is not included in the overall U.S. total.

- The number of occupants of other vehicles killed ranged from none in the District of Columbia to 461 in Texas. Eleven States each had more than 100 occupants of other vehicles killed in large-truck crashes.
- The highest number of occupants of large trucks killed was 129 in Texas. The second highest was 53 in California.

Additional State/county-level data is available at NHTSA's State Traffic Safety Information website at https://cdan.nhtsa.gov/stsi.htm.

Figure 4

Map of Percentages of Large Trucks Involved in Fatal Motor Vehicle Traffic Crashes, by State, 2017



Source: 2017 FARS ARF

Table 4

Large-Truck Involvement in Fatal Crashes, by State, 2017

State	Total Vehicles Involved in Fatal Crashes	Large Trucks Involved in Fatal Crashes		
		Number	Percentage of Total Vehicles	Percentage of U.S. Total for Large Trucks
Alabama	1,263	94	7.4%	2.0%
Alaska	103	4	3.9%	0.1%
Arizona	1,399	93	6.6%	2.0%
Arkansas	687	84	12.2%	1.8%
California	5,094	341	6.7%	7.3%
Colorado	944	87	9.2%	1.9%
Connecticut	382	21	5.5%	0.5%
Delaware	174	13	7.5%	0.3%
District of Columbia	38	0	0	0
Florida	4,635	296	6.4%	6.4%
Georgia	2,298	225	9.8%	4.8%
Hawaii	144	6	4.2%	0.1%
Idaho	329	47	14.3%	1.0%
Illinois	1,578	139	8.8%	3.0%
Indiana	1,314	131	10.0%	2.8%
Iowa	452	70	15.5%	1.5%
Kansas	626	77	12.3%	1.7%
Kentucky	1,099	79	7.2%	1.7%
Louisiana	1,052	101	9.6%	2.2%
Maine	251	25	10.0%	0.5%
Maryland	785	49	6.2%	1.1%
Massachusetts	473	28	5.9%	0.6%
Michigan	1,500	88	5.9%	1.9%
Minnesota	533	61	11.4%	1.3%
Mississippi	938	98	10.4%	2.1%
Missouri	1,332	113	8.5%	2.4%
Montana	231	19	8.2%	0.4%
Nebraska	319	38	11.9%	0.8%
Nevada	458	38	8.3%	0.8%
New Hampshire	142	12	8.5%	0.3%
New Jersey	870	54	6.2%	1.2%
New Mexico	536	79	14.7%	1.7%
New York	1,366	115	8.4%	2.5%
North Carolina	2,017	147	7.3%	3.2%
North Dakota	149	24	16.1%	0.5%
Ohio	1,685	158	9.4%	3.4%
Oklahoma	933	131	14.0%	2.8%
Oregon	590	58	9.8%	1.2%
Pennsylvania	1,711	183	10.7%	3.9%
Rhode Island	106	9	8.5%	0.2%
South Carolina	1,362	85	6.2%	1.8%
South Dakota	159	16	10.1%	0.3%
Tennessee	1,463	130	8.9%	2.8%
Texas	5,266	621	11.8%	13.3%
Utah	397	38	9.6%	0.8%
Vermont	94	7	7.4%	0.2%
Virginia	1,165	101	8.7%	2.2%
Washington	821	80	9.7%	1.7%
West Virginia	398	47	11.8%	1.0%
Wisconsin	839	76	9.1%	1.6%
Wyoming	145	21	14.5%	0.5%
U.S. Total	**52,645**	**4,657**	**8.8%**	**100.0%**
Puerto Rico	397	14	3.5%	100.0%

Note: Percentage of U.S. total for large trucks may not equal the sum of components due to independent rounding.
Source: 2017 FARS ARF

Table 5

Fatalities in Motor Vehicle Traffic Crashes Involving Large Trucks, by State and Person Type, 2017

State	Truck Occupants by Crash Type			Other People			Total
	Single Vehicle	Multiple Vehicle	Total	Occupant of Other Vehicle	Nonoccupant	Total	
Alabama	16	4	20	74	5	79	99
Alaska	0	0	0	4	1	5	5
Arizona	10	9	19	62	13	75	94
Arkansas	19	8	27	51	6	57	84
California	37	16	53	244	64	308	361
Colorado	12	14	26	53	8	61	87
Connecticut	4	0	4	19	0	19	23
Delaware	0	0	0	11	3	14	14
District of Columbia	0	0	0	0	0	0	0
Florida	26	19	45	211	36	247	292
Georgia	20	25	45	157	12	169	214
Hawaii	0	0	0	8	1	9	9
Idaho	8	5	13	28	5	33	46
Illinois	8	9	17	117	15	132	149
Indiana	11	6	17	113	8	121	138
Iowa	12	6	18	43	6	49	67
Kansas	8	5	13	72	3	75	88
Kentucky	8	2	10	72	7	79	89
Louisiana	22	8	30	67	5	72	102
Maine	1	4	5	13	5	18	23
Maryland	8	2	10	29	9	38	48
Massachusetts	3	2	5	16	7	23	28
Michigan	5	8	13	70	5	75	88
Minnesota	4	2	6	47	8	55	61
Mississippi	10	7	17	80	5	85	102
Missouri	12	5	17	84	10	94	111
Montana	2	0	2	18	2	20	22
Nebraska	4	0	4	34	0	34	38
Nevada	1	2	3	26	8	34	37
New Hampshire	1	0	1	9	3	12	13
New Jersey	3	3	6	34	14	48	54
New Mexico	8	9	17	47	6	53	70
New York	10	3	13	75	33	108	121
North Carolina	15	14	29	127	8	135	164
North Dakota	6	3	9	17	0	17	26
Ohio	10	8	18	131	15	146	164
Oklahoma	17	11	28	100	5	105	133
Oregon	6	4	10	35	9	44	54
Pennsylvania	19	13	32	122	13	135	167
Rhode Island	0	1	1	5	2	7	8
South Carolina	14	3	17	65	8	73	90
South Dakota	4	2	6	14	1	15	21
Tennessee	14	10	24	102	10	112	136
Texas	67	62	129	461	59	520	649
Utah	4	4	8	26	2	28	36
Vermont	1	0	1	7	2	9	10
Virginia	8	10	18	69	11	80	98
Washington	5	4	9	63	5	68	77
West Virginia	5	4	9	39	4	43	52
Wisconsin	4	6	10	70	2	72	82
Wyoming	6	1	7	9	1	10	17
U.S. Total	**498**	**343**	**841**	**3,450**	**470**	**3,920**	**4,761**
Puerto Rico	0	0	0	10	4	14	14

Source: 2017 FARS ARF

Fatality Analysis Reporting System (FARS)

The Fatality Analysis Reporting System (FARS) contains data on every fatal traffic crash within the 50 States, the District of Columbia, and Puerto Rico. To be included in FARS, a crash must involve a motor vehicle traveling on a public trafficway and must result in the death of a vehicle occupant or a non-occupant 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 about a year later. The updated version of the file is aptly 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.

The updated final counts for a given previous calendar year will be reflected with the release of the recent year's Annual Report File. For example, along with the release of the 2017 ARF this year, the 2016 Final file was also released to replace last year's 2016 ARF. The final fatality count for 2016 is 37,806, which is updated from 37,461 from the 2016 ARF a year ago. The large truck crash fatality count from the 2016 Final file is 4,369 versus 4,317 from the 2016 ARF.

Crash Report Sampling System (CRSS) Replaces the National Automotive Sampling System (NASS) General Estimates System (GES)

NHTSA's National Center for Statistics and Analysis 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 NASS GES in 2016. NCSA released the 2016 CRSS data in March 2018, but is currently reassessing this data, which is subject to change. NCSA plans to release the updated 2016 and new 2017 CRSS files in early 2019. Thus, no CRSS estimates will be presented in this fact sheet. For more information on CRSS, see the Additional Resources section of the CRSS web page at https://www.nhtsa.gov/national-center-statistics-and-analysis-ncsa/crash-report-sampling-system-crss.

The suggested APA format citation for this document is:

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For more information

Information on traffic fatalities is available from the National Center for Statistics and Analysis (NCSA), NSA-230, 1200 New Jersey Avenue SE., Washington, DC 20590. NCSA can be contacted at 800-934-8517 or by e-mail at ncsaweb@dot.gov. General information on highway traffic safety can found at www.nhtsa.gov/NCSA. To report a safety-related problem or to inquire about motor vehicle safety information, contact the Vehicle Safety Hotline at 888-327-4236.

Other fact sheets available from the National Center for Statistics and Analysis are *Alcohol-Impaired Driving, Bicyclists and Other Cyclists, Children, Motorcycles, Occupant Protection in Passenger Vehicles, Older Population, Passenger Vehicles, 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,* and *Young Drivers.* Detailed data on motor vehicle traffic crashes are published annually in *Traffic Safety Facts: A Compilation of Motor Vehicle Crash Data from the Fatality Analysis Reporting System and the General Estimates System.* The fact sheets and annual Traffic Safety Facts reports can found at https://crashstats.nhtsa.dot.gov/.

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