Traffic Safety Facts

2010-2019 Data



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In this fact sheet 10 years of data from 2010 to 2019 is presented as follows.

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School-Transportation-Related Crashes

A school-transportation-related crash is a motor vehicle traffic crash that directly or indirectly involves a school transportation vehicle. These include a vehicle of a school bus body type or a non-school-bus vehicle functioning as a school bus, transporting children to or from school or school-related activities. For the purposes of this facts sheet, school-age children are defined as 18 and younger. Although ages 5 to 18 are typically considered school-age, the data shows some school-bus transportation occupant fatalities under the age of 5.

Key Findings

- From 2010 to 2019 there were 1,080 schooltransportation-related crashes and 1,199 people of all ages killed in those crashes an average of 120 fatalities per year.
- From 2010 to 2019 there were 126 occupants killed in school transportation vehicles; 58 were drivers and 68 were passengers. Most (69%) of the people killed in school-transportation-related crashes were occupants of other vehicles involved in the crash.
- Between 2010 and 2019 there were 1.6 times more fatalities among pedestrians (203) than occupants of school transportation vehicles (126) in schooltransportation-related crashes.
- Among all school bus occupants killed from 2010 to 2019, about 17 percent were 5 to 10 years old and 59 percent were 19 and older. Among all pedestrians killed in school-transportation-related crashes, 23 percent were 5 to 10 years old and 54 percent were 19 and older.

- From 2010 to 2019 impacts to the front of the school transportation vehicles were involved in the most (36%) occupant fatalities.
- From 2010 to 2019 there were 240 school-age children who died in school-transportation-related crashes; 52 were occupants of school transportation vehicles, 90 were occupants of other vehicles, 92 were pedestrians, 5 were pedalcyclists, and 1 was "other" nonoccupant.
- Between 2010 and 2019 over half (51%) of the school-age pedestrians killed in schooltransportation-related crashes were 5 to 10 years old.
- From 2010 to 2019 more school-age pedestrians were killed from 3 p.m. to 3:59 p.m. and from 7 a.m. to 7:59 a.m. than any other hours of the day.
- From 2010 to 2019 of all school-age pedestrians killed in school-transportationrelated crashes, a quarter (25%) were struck by school transportation vehicles that were going straight.

This fact sheet contains information on fatal motor vehicle traffic crashes based on data from the Fatality Analysis Reporting System (FARS). Refer to the end of this publication for more information on FARS.

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.

Overview

From 2010 to 2019 there were 320,436 fatal motor vehicle traffic crashes. Of those crashes, 1,080 (0.3%) were classified as school-transportation-related. Almost half of school-transportation-related crashes from 2010 through 2019 occurred in rural areas.

In the 10-year period from 2010 to 2019 there have been 1,199 people killed in school-transportation-related crashes—an average of 120 fatalities per year. Twenty percent (240) of these fatalities were of school age (18 and younger).

Occupants of school transportation vehicles accounted for 11 percent of the fatalities and nonoccupants (pedestrians, bicyclists, etc.) accounted for 20 percent of the fatalities. Most (69%) of the people who lost their lives in these crashes were occupants of other vehicles involved (Table 1).

All-Age Fatalities

Person Type

Table 1 shows fatalities by person type in school-transportationrelated crashes from 2010 to 2019. A total of 1,199 people were killed in school-transportation-related crashes and 828 (69%) were occupants of other vehicles.

Among the 126 occupants of school transportation vehicles killed, 58 were drivers and 68 were passengers. Among the 203 pedestrians killed in school-transportation-related crashes, 141 were struck by school transportation vehicles and 62 were struck by other vehicles.

Table 1

Fatalities (All Ages) in School-Transportation-Related Crashes, by Person Type, 2010–2019

	Occupants of School				Pedestrians				
	Transportation Vehicles*		Struck by	Struck by		Other	Occupants of		
Year	Drivers	Passengers	Total	School Vehicle*	Other Vehicle	Total	Nonoccupants**	Other Vehicles	Total
2010	6	10	16	21	5	26	4	84	130
2011	7	4	11	12	9	21	5	86	123
2012	6	8	14	18	9	27	3	88	132
2013	5	6	11	16	6	22	5	93	131
2014	4	7	11	21	7	28	4	77	120
2015	8	5	13	11	0	11	4	87	115
2016	5	9	14	15	5	20	6	85	125
2017	8	4	12	3	7	10	3	72	97
2018	4	10	14	12	11	23	2	78	117
2019	5	5	10	12	3	15	6	78	109
Ten-Year Total	58	68	126	141	62	203	42	828	1,199
Percentage of Total	5%	6%	11%	12%	5%	17%	4%	69%	100%
Ten-Year Average	6	7	13	14	6	20	4	83	120

Source: FARS 2010-2018 Final File, 2019 Annual Report File (ARF)

*Includes school bus body type and non-school bus body type functioning as a school bus.

**Includes bicyclists, other cyclists, and people on personal conveyances such as skateboards, scooters, wheelchairs, etc.

School Bus Occupants and Pedestrians

There were nearly 1.6 times more pedestrian fatalities (203) than fatalities to occupants of school transportation vehicles (126), as shown in Table 1. Figure 1 presents the total number of school transportation vehicle occupant and pedestrian fatalities in school-transportation-related crashes by age group between 2010 and 2019. Among all school bus occupants

killed, 22 (17%) were 5 to 10 years old, 19 (15%) were 14 to 18 years old, and 74 (59%) were 19 and older. Among all pedestrians killed in school-transportation-related crashes, 47 (23%) were 5 to 10 years old, 24 (12%) were 14 to 18 years old, and 110 (54%) were 19 and older.

Figure 1

School Transportation Vehicle Occupant and Pedestrian Fatalities (All Ages) in School-Transportation-Related Crashes, by Age Group, 2010–2019



Source: FARS 2010-2018 Final File, 2019 ARF

Notes: Excludes people with unknown age. Occupant fatalities include both occupants of school buses and occupants of non-school buses functioning as school buses.

Table 2 shows the number of school transportation vehicle occupant fatalities in school-transportation-related crashes by rollover status or initial impact point on the school transportation vehicle. There were 104 vehicles used as school buses in which at least one occupant in the vehicle died. Impacts to the front of the school transportation vehicle were the most frequent initial impact point for the vehicle used as a school bus, while the front of those vehicles were involved in the most fatalities.

Table 2

School Transportation Vehicles With an Occupant Fatality and Number of Occupant Fatalities (All Ages) in Those Vehicles, by Rollover/Initial Impact Point and Vehicle Type, 2010–2019

	Large School Buses		Van-Based Vehicles Used as School Buses		Other Vehicles Used as School Buses		Total	
Rollover/Initial Impact Point	Fatal Vehicles	Occupant Fatalities	Fatal Vehicles	Occupant Fatalities	Fatal Vehicles	Occupant Fatalities	Fatal Vehicles	Occupant Fatalities
Rollover	19	32	6	7	1	1	26	40
Front	32	36	5	5	4	4	41	45
Right Side	4	5	1	1	1	2	6	8
Left Side	4	4	2	2	1	1	7	7
Rear	7	7	2	2	0	0	9	9
Other/Unknown*	15	17	0	0	0	0	15	17
Total	81	101	16	17	7	8	104	126

Source: FARS 2010–2018 Final File, 2019 ARF

Notes: Fatal vehicles are vehicles with at least one occupant fatality. Rollover status and initial impact point data are mutually exclusive. Large school buses are over 10,000 lbs, and van-based vehicles used as school buses are 10,000 lbs or less.

*Includes non-collision, top, and undercarriage.

Table 3 provides the information on school-transportationrelated crashes involving fatalities to occupants of school transportation vehicles. In the 44 single-vehicle crashes, 54 occupants—22 drivers and 32 passengers—were killed. In the 60 multiple-vehicle crashes, 72 occupants—36 drivers and 36 passengers—died in the school transportation vehicles. In those single-vehicle crashes, the most prevalent first harmful events were as follows: collision with fixed object (27 crashes), a person falling/jumping from the vehicle (7 crashes), roll-over/overturn (6 crashes), and four other crashes (i.e., fire/ explosion, railway vehicle, and thrown or falling object).

Table 3

School-Transportation-Related Crashes Involving School Bus Occupant Fatalities (All Ages), by Vehicle Type Occupied and Crash Type, 2010–2019

	Large School Bus Body Types				Van-Based and Other Vehicles Used as School Buses				Total			
	Single-Vehicle		Multiple-Vehicle		Single-Vehicle		Multiple-Vehicle		Single-Vehicle		Multiple-Vehicle	
Year	Crashes	Fatalities	Crashes	Fatalities	Crashes	Fatalities	Crashes	Fatalities	Crashes	Fatalities	Crashes	Fatalities
2010	8	8	6	6	1	1	1	1	9	9	7	7
2011	3	3	5	6	1	1	1	1	4	4	6	7
2012	3	5	5	7	1	1	1	1	4	6	6	8
2013	5	6	3	3	0	0	1	2	5	6	4	5
2014	2	2	3	8	0	0	1	1	2	2	4	9
2015	2	3	5	6	1	1	3	3	3	4	8	9
2016	2	7	3	3	0	0	4	4	2	7	7	7
2017	6	7	2	2	0	0	3	3	6	7	5	5
2018	4	4	5	6	1	1	2	3	5	5	7	9
2019	4	4	5	5	0	0	1	1	4	4	6	6
Ten-Year Total	39	49	42	52	5	5	18	20	44	54	60	72
Ten-Year Average	4	5	4	5	1	1	2	2	4	5	6	7

Source: FARS 2010-2018 Final File, 2019 ARF

Notes: Excludes occupants of other vehicles in school-transportation-related crashes. Large school buses are over 10,000 lbs, and van-based vehicles used as school buses are 10,000 lbs or less.

School-Age Fatalities

From 2010 to 2019 there were 240 school-age children who died in school-transportation-related crashes; 52 were occupants of school transportation vehicles, 90 were occupants of other vehicles, 92 were pedestrians, 5 were pedalcyclists, and 1 was other nonoccupant (Table 4).

Over half (51%) of the school-age pedestrians killed in schooltransportation-related crashes from 2010 to 2019 were 5 to 10 years old, and 26 percent were 14 to 18 years old.

Location

As shown in Figure 2, over three-fourths (76%) of school-age pedestrians killed in school-transportation-related crashes between 2010 and 2019 were not at intersections.

Figure 2

School-Age (18 and Younger) Pedestrians Killed in School-Transportation-Related Crashes, by Location, 2010–2019



Source: FARS 2010–2018 Final File, 2019 ARF

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Time of Day

Table 4 provides school-age (18 and younger) fatalities in school-transportation-related crashes by time of day. Among the 240 school-age fatalities between 2010 and 2019, more school-age pedestrians were killed from 3 to 3:59 p.m., and 7 to

7:59 a.m. than any other hours of the day. There were nearly two times more fatalities among occupants of other vehicles (90) than occupants of school transportation vehicles (52).

Table 4

School-Age (18 and Younger) Fatalities in School-Transportation-Related Crashes, by Time of Day and Person Type, 2010–2019

	Occupants of Vehicles Used as School Buses					
Time of Day	Large School Buses	Van-Based Vehicles Used as School Buses	Occupants of Other Vehicles	Pedestrians	Pedalcyclists	Total*
Midnight–5:59 a.m.	1	1	0	2	0	4
6–6:59 a.m.	3	0	7	23	0	33
7–7:59 a.m.	7	1	18	17	0	43
8–8:59 a.m.	3	0	5	4	0	12
9–9:59 a.m.	1	0	4	0	0	5
10–10:59 a.m.	2	0	3	0	0	5
11–11:59 a.m.	0	1	3	1	0	5
Noon-12:59 p.m.	0	0	2	1	0	3
1–1:59 p.m.	2	0	5	1	0	8
2–2:59 p.m.	3	0	6	4	1	15
3–3:59 p.m.	17	0	16	23	3	59
4–4:59 p.m.	8	0	14	12	0	34
5–11:59 p.m.	2	0	7	4	1	14
Total	49	3	90	92	5	240

Source: FARS 2010-2018 Final File, 2019 ARF

*Includes other nonoccupants, such as people on personal conveyances (e.g., skateboards, scooters, or wheelchairs).

Vehicle Maneuver and Pedestrians

Table 5 presents the number of school-age pedestrians killed in school-transportation-related crashes by vehicle maneuver and vehicle type. From 2010 to 2019 half (50%) of the schoolage pedestrians killed in crashes were struck by school buses or vehicles functioning as school buses, while the other half were struck by vehicles of other body types. Of school-age pedestrians killed in school-transportation-related crashes, a quarter (25%) were struck by school buses or vehicles functioning as school buses that were going straight.

Table 5

School-Age (18 and Younger) Pedestrians Killed in School-Transportation-Related Crashes, by Vehicle Maneuver and
Striking Vehicle Type, 2010–2019

Vehicle Maneuver	School Bus Body Type	Vehicle Used as School Bus	Other Body Type	Total	
Going Straight	22	1	41	64	
Slowing in Road	1	0	0	1	
Accelerating in Road	2	0	1	3	
Starting in Road	7	0	1	8	
Turning Right	6	0	1	7	
Turning Left	5	0	0	5	
Negotiating a Curve	2	0	1	3	
Other/Unknown	0	0	1	1	
Total	45	1	46	92	

Source: FARS 2010-2018 Final File, 2019 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 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 <u>www.nhtsa.gov/crash-data-systems/fatality-analysis-reporting-system</u>.

The updated final counts for the previous data year will be reflected with the release of the recent year's ARF. For example, along with the release of the 2019 ARF, the 2018 Final File was released to replace the 2018 ARF. The final fatality count in motor vehicle traffic crashes for 2018 was 36,835, which was updated from 36,560 in the 2018 ARF. The number of fatalities in school-transportation-related crashes from the 2018 Final file was 117, which was the same as the 2018 ARF.

The 2016 and 2017 Final Files have been amended, but this amendment did not change the overall number of fatal crashes or fatalities. However, the number of fatalities in school-transportation-related crashes from the 2017 amended Final File was 97, which was updated from 96 from the 2017 Final File.

Additional data visualization tools for fact sheets can be found at https://cdan.dot.gov/DataVisualization/DataVisualization.htm#

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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 <u>NCSARequests@dot.gov</u> or 800-934-8517. NCSA programs can be found at <u>www.nhtsa.gov/data</u>. Additional data tools, such as the State Traffic Safety Information (STSI), Fatality and Injury Reporting System Tool (FIRST), and more can be found at <u>https://cdan.nhtsa.gov/</u>. To report a motor vehicle safety-related problem or to inquire about safety information, contact the Vehicle Safety Hotline at 888-327-4236 or <u>www-odi.nhtsa.dot.gov/VehicleComplaint/</u>.

Other fact sheets available from NCSA are Alcohol-Impaired Driving, Bicyclists and Other Cyclists, Children, Large Trucks, Motorcycles, Occupant Protection in Passenger Vehicles, Older Population, Passenger Vehicles, Pedestrians, Rural/Urban Comparison of Traffic Fatalities, 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. The fact sheets and Traffic Safety Facts annual report can be found at https://crashstats.nhtsa.dot.gov/



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