

Traffic Safety Facts

2008–2017 Data

July 2019

DOT HS 812 712



Key Findings

- From 2008 to 2017, there were 1,241 people of all ages killed in school-transportation-related crashes—an average of 124 fatalities per year.
- From 2008 to 2017, there were 264 school-age children killed in school-transportation-related crashes: 61 were occupants of school transportation vehicles, 100 were occupants of other vehicles, 97 were pedestrians, 5 were pedalcyclists, and 1 was another nonoccupant.
- More school-age pedestrians were killed from 7 a.m. to 7:59 a.m. and from 3 p.m. to 3:59 p.m. than any other hours of the day.
- Almost half (49%) of the school-age pedestrians killed in school-transportation-related crashes from 2008 to 2017 were 5 to 10 years old.
- More than half (56%) of the school-age pedestrians fatally injured in school-transportation-related crashes were struck by school buses or vehicles functioning as school buses (2008 to 2017).
- Among school-age child occupants killed in school-transportation-related crashes, nearly two times more died in other vehicles (100), than school transportation vehicles (61).
- Among the 126 occupants killed in school transportation vehicles, 55 were drivers and 71 were passengers.



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National Highway Traffic Safety Administration

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School-Transportation-Related Crashes

A school-transportation-related crash is a crash that involves, either directly or indirectly, a school bus body vehicle, or a non-school bus functioning as a school bus, transporting children to or from school or school-related activities. In this fact sheet, “school-age” children are defined as children 18 and younger.

This fact sheet includes 10 years of data, from 2008 to 2017. Information on school-transportation-related crashes is presented as follows:

- Overview
- Person Type
- Age Group
- School-Age Fatalities by Time of Day
- School Bus Occupant Fatalities
- Vehicle Maneuver and Pedestrian Fatalities

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.

Overview

From 2008 to 2017, there were 317,994 fatal motor vehicle traffic crashes. Of those crashes, 1,113 (0.4%) were classified as school-transportation-related. Fifty-two percent of school-transportation-related crashes from 2008 through 2017 occurred in rural areas.

Between 2008 and 2017, there have been 1,241 people killed in school-transportation-related crashes—an average of 124 fatalities per year. Twenty-one percent (264) of these fatalities were of school-age children (18 and younger).

Occupants of school transportation vehicles accounted for 10 percent of the fatalities, and nonoccupants (pedestrians, bicyclists, etc.) accounted for 20 percent of the fatalities. Most (70%) of the people who lost their lives in these crashes were occupants of the other vehicles involved (Table 1).

From 2008 to 2017, 97 school-age pedestrians died in school-transportation-related crashes. Fifty-five percent were struck by school buses, 1 percent by vehicles functioning as school buses, and 44 percent by other vehicles (passenger cars, light trucks and vans, large trucks, and motorcycles, etc.) involved in the crashes.

Person Type

Table 1 shows fatalities by person type in school-transportation-related crashes (2008-2017). Among the 126 occupants killed in school transportation vehicles, 55 were drivers and 71 were passengers. Among the 207 pedestrians killed in school-transportation-related crashes, 150 were struck by school vehicles and 57 were struck by other vehicles.

From 2008 to 2017, three drivers and four passengers died in school bus body vehicles providing transportation for purposes other than school or school-related activities (churches, civic organizations, etc.).

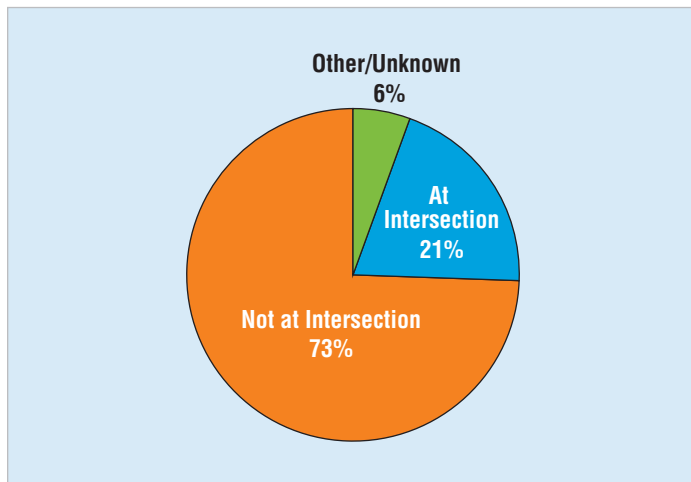
Table 1
Fatalities (All Ages) in School-Transportation-Related Crashes, by Year and Person Type, 2008-2017

Year	Occupants of School Transportation Vehicles*			Pedestrians			Other Nonoccupants**	Occupants of Other Vehicles	Total
	Driver	Passenger	Total	Struck by School Vehicle	Struck by Other Vehicle	Total			
2009	2	3	5	13	8	21	1	91	118
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	70	95
Total	55	71	126	150	57	207	43	865	1,241
Percent of Total	4%	6%	10%	12%	5%	17%	3%	70%	100%
Average	6	7	13	15	6	21	4	87	124

Source: FARS 2008-2016 Final File, 2017 Annual Report File (ARF)
 *Includes school bus body type and non-school bus used as school bus.
 **Includes bicyclist, other cyclist, and persons on personal conveyances such as skateboards, scooters, wheelchairs, etc.

Nearly three-fourths (73%) of school-age pedestrians killed in school-transportation-related crashes between 2008 and 2017 were not at an intersection (see Figure 1).

Figure 1
School-Age (18 and Younger) Pedestrians Killed in School-Transportation-Related Crashes, by Location, 2008-2017



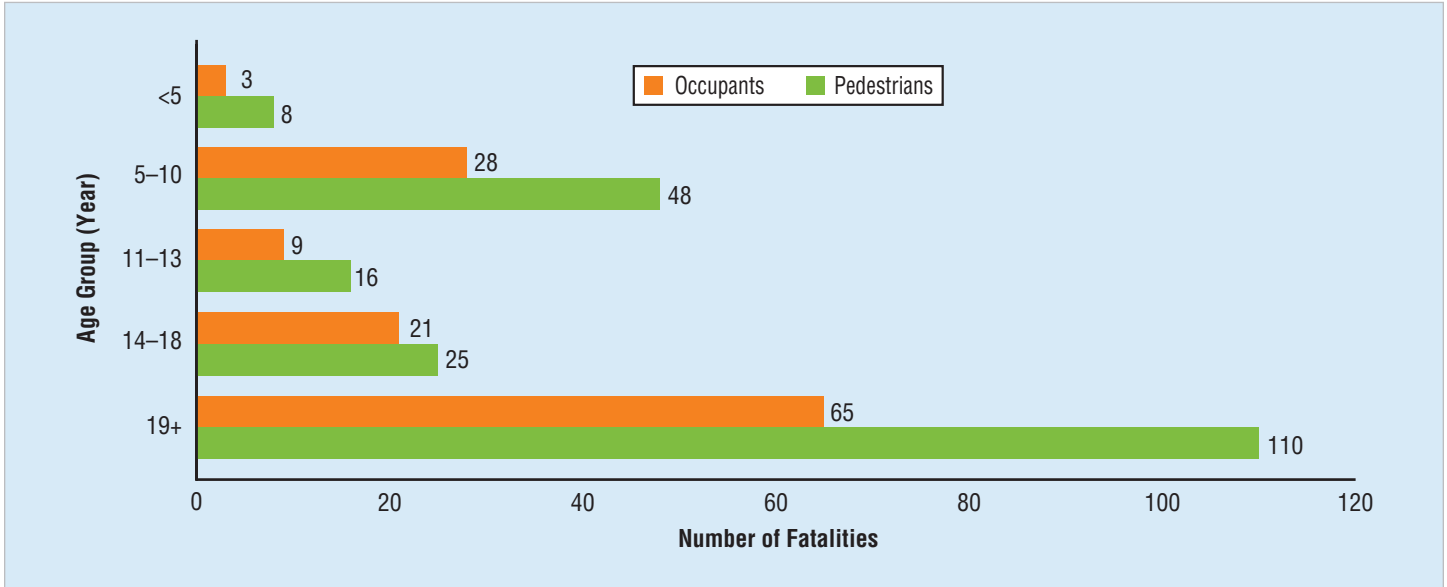
Source: FARS 2008-2016 Final File, 2017 ARF

Age Group

From 2008 to 2017, there were 264 school-age children who died in school-transportation-related crashes: 61 were occupants of school transportation vehicles, 100 were occupants of other vehicles, 97 were pedestrians, 5 were pedalcyclists, and 1 was other nonoccupant.

Figure 2 presents the total number of school bus occupant and pedestrian fatalities in school-transportation-related crashes by age group between 2008 and 2017. Among all school-age pedestrians killed in school-transportation-related crashes, 25 (26%) were 14 to 18 years old, and 48 (49%) were 5 to 10 years old.

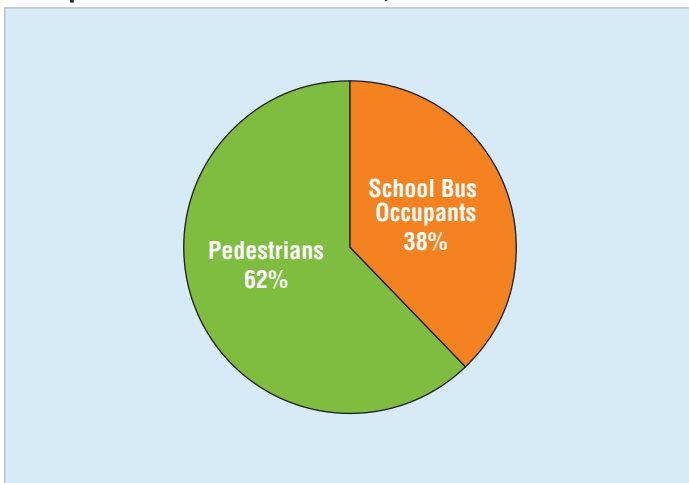
Figure 2
Total School Bus Occupant and Pedestrian Fatalities in School-Transportation-Related Crashes, by Age Group, 2008-2017



Source: FARS 2008-2016 Final File, 2017 ARF
 Note: Occupant fatalities shown are for occupants of school buses and non-school buses used as school buses.

Figure 3 graphs school bus occupant and pedestrians of all ages combined. Nearly two-thirds (62%) of these fatalities were outside the school bus when the crash occurred.

Figure 3
School Bus Occupant and Pedestrian Fatalities in School-Transportation-Related Crashes, 2008-2017



Source: FARS 2008-2016 Final File, 2017 ARF
 Note: Occupant fatalities shown are for occupants of school buses and non-school buses used as school buses.

On average, 5 school-age pedestrians killed were struck by school transportation vehicles (school buses and non-school-bus vehicles used as school buses) each year, and 4 by other vehicles involved in school-bus-related crashes.

School-Age Fatalities by Time of Day

Table 2 provides school-age (18 and younger) fatalities in school-transportation-related crashes by time of day. Among the 264 school-age fatalities between 2008 and 2017, more school-age pedestrians were killed from 7 to 7:59 a.m., and from 3 to 3:59 p.m. than any other hours of the day. There were nearly two times more fatalities among occupants of other vehicles (100) than occupants of school transportation vehicles (61).

Table 2

School-Age (18 and Younger) Fatalities in School-Transportation-Related Crashes, by Time of Day and Person Type, 2008-2017

Time of Day	Occupants of Vehicles Used As School Buses			Occupants of Other Vehicles	Pedestrians	Pedalcyclists	Total*
	Occupants of Large School Buses	Occupants of Van-Based Vehicles Used as School Buses	Occupants of Other Vehicles Used as School Buses				
Midnight-5:59 a.m.	1	1	0	1	2	0	5
6-6:59 a.m.	3	0	0	7	21	0	31
7-7:59 a.m.	7	1	1	21	21	1	52
8-8:59 a.m.	3	0	0	7	7	0	17
9-9:59 a.m.	0	0	0	4	0	0	4
10-10:59 a.m.	1	0	0	4	0	0	5
11-11:59 a.m.	0	1	0	3	1	0	5
Noon-12:59 p.m.	1	0	0	2	1	0	4
1-1:59 p.m.	2	0	0	2	2	0	6
2-2:59 p.m.	4	4	0	10	4	1	24
3-3:59 p.m.	19	0	0	19	22	2	62
4-4:59 p.m.	8	0	0	13	10	0	31
5-11:59 p.m.	2	2	0	7	6	1	18
Total	51	9	1	100	97	5	264

Source: FARS 2008-2016 Final File, 2017 ARF

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

School Bus Occupant Fatalities

Table 3 shows the total number of school bus occupant fatalities in school-transportation-related crashes by rollover status or initial impact point on the school transportation vehicle. There were 99 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 3

School Buses and Vehicles Used as School Buses with an Occupant Fatality, and Number of Occupant Fatalities in Those Vehicles, by Rollover/Initial Impact Point, 2008-2017

Rollover/Initial Impact Point	Large School Buses		Van-Based Vehicles		Other Vehicles		Total	
	Fatal Vehicles*	Occupant Fatalities	Fatal Vehicles*	Occupant Fatalities	Fatal Vehicles*	Occupant Fatalities	Fatal Vehicles*	Occupant Fatalities
Rollover	15	30	8	10	1	1	24	41
Front	28	32	4	4	3	3	35	39
Right Side	5	6	1	1	0	0	6	7
Left Side	5	5	3	6	2	2	10	13
Rear	6	6	2	2	0	0	8	8
Other/Unknown**	16	18	0	0	0	0	16	18
Total	75	97	18	23	6	6	99	126

Source: FARS 2008-2016 Final File, 2017 ARF

*Fatal vehicles are vehicles with at least one occupant fatality.

**Other/Unknown includes non-collision, top, and undercarriage.

Table 4 provides information on school-transportation-related crashes involving school bus occupant fatalities. In the 40 single-vehicle crashes, 50 occupants—21 drivers and 29 passengers—were killed. In the 59 multiple-vehicle crashes, 34 drivers and 42 passengers died in the school buses. In the 40 single-vehicle

crashes, the first harmful events were as follows: striking a fixed object (23 crashes), the vehicle overturning (6 crashes), a person falling from the vehicle (8 crashes), and three other crashes (i.e., fire/ explosion, railway vehicle, and thrown or falling object).

Table 4

School-Transportation-Related Crashes Involving School Bus Occupant Fatalities (All Ages), by Year, Vehicle Occupied, And Crash Type, 2008–2017

Year	School Bus Body Type				Vehicle Used as School Bus				Total			
	Single-Vehicle		Multiple-Vehicle		Single-Vehicle		Multiple-Vehicle		Single-Vehicle		Multiple-Vehicle	
	Crashes	Fatalities	Crashes	Fatalities	Crashes	Fatalities	Crashes	Fatalities	Crashes	Fatalities	Crashes	Fatalities
2008	3	3	6	9	1	1	3	6	4	4	9	15
2009	1	1	2	2	0	0	1	2	1	1	3	4
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
Total	35	45	40	52	5	5	19	24	40	50	59	76
Average	4	5	4	5	1	1	2	2	4	5	6	8

Source: FARS 2008–2016 Final File, 2017 ARF

Note: Does not include occupants of other vehicles in school-transportation-related crashes.

Vehicle Maneuver and Pedestrian Fatalities

Table 5 presents the number of school-age pedestrians killed in school-transportation-related crashes by vehicle maneuver and vehicle type. From 2008 to 2017, more than half (56%) of the school-age pedestrians killed in crashes were struck by school buses or vehicles functioning as school buses, while 44 percent were struck

by vehicles of other body types. Of school-age pedestrians killed in school-transportation-related crashes, 28 percent 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 Vehicle Type, 2008–2017

Vehicle Maneuver	School Bus Body Type	Vehicle Used as School Bus	Other Body Type	Total
Going Straight	26	1	34	61
Slowing in Road	1	0	0	1
Accelerating in Road	2	0	1	3
Starting in Road	11	0	0	11
Passing or Overtaking Another Vehicle	0	0	2	2
Leaving/Entering a Parked Position	1	0	0	1
Turning Right	2	0	1	3
Turning Left	8	0	0	8
Negotiating a Curve	2	0	4	6
Other/Unknown	0	0	1	1
Total	53	1	43	97

Source: FARS 2008–2016 Final File, 2017 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 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 about a year later. The final 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 ARF. For example, along with the release of the 2017 ARF, the 2016 Final file was also released to replace the previous year's 2016 ARF. The final fatality count in motor vehicle crashes for 2016 was 37,806, which was updated from 37,461 from the 2016 ARF. The number of fatalities in school-transportation-related crashes from the 2016 Final file was 125, which was updated from 119 from the 2016 ARF.

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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 NCSARequests@dot.gov. General information on highway traffic safety can be found at www.nhtsa.gov/research-data. 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*, *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 annual Traffic Safety Facts report can be found at <https://crashstats.nhtsa.dot.gov>.



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