Traffic Safety Facts

2009-2018 Data

July 2020

DOT HS 812 944



This fact sheet includes 10 years of data, from 2009 to 2018. The information is presented as follows.

- <u>Overview</u>
- All-Age Fatalities
 - Person Type
 - School Bus Occupants and Pedestrians
- School-Age Fatalities
 - Location
 - Time of Day
 - Vehicle Maneuver and Pedestrians

School-Transportation-Related Crashes

A school-transportation-related crash is a crash that either directly or indirectly involves a school transportation vehicle, which includes 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.

Key Findings

- From 2009 to 2018 there were 1,207 people of all ages killed in school-transportationrelated crashes—an average of 121 fatalities per year.
- From 2009 to 2018 there were 121 occupants killed in school transportation vehicles; 55 were drivers and 66 were passengers.
- There were nearly two times more fatalities among pedestrians (208) than occupants of school transportation vehicles (121) in school-transportation-related crashes.
- There were 98 vehicles used as school buses with at least one occupant fatality between 2009 and 2018. The front of those vehicles were involved in the most fatalities.
- From 2009 to 2018 there were 249 school-age children killed in school-transportation-related crashes; 52 were occupants of school transportation vehicles, 92 were occupants of other vehicles, 100 were pedestrians, 4 were pedalcyclists, and 1 was another nonoccupant.
- Over half (52%) of the school-age pedestrians killed in school-transportation-related crashes from 2009 to 2018 were 5 to 10 years old.
- More school-age pedestrians were killed from 6 a.m. to 7:59 a.m. and from 3 p.m. to 3:59 p.m. than any other hours of the day.
- Nearly half (48%) of the school-age pedestrians killed in school-transportation-related crashes were struck by school buses or vehicles functioning as school buses (2009 to 2018).

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 2009 to 2018 there were 317,789 fatal motor vehicle traffic crashes. Of those crashes, 1,083 (0.3%) were classified as school-transportation-related. Half of school-transportation-related crashes from 2009 through 2018 occurred in rural areas.

There have been 1,207 people killed in school-transportation-related crashes in the 10-year period from 2009 to 2018—an average of 121 fatalities per year. Twenty-one percent (249) of these fatalities were of school age (18 and younger).



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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 other vehicles involved (Table 1).

From 2009 to 2018 there were 100 school-age pedestrians who died in school-transportation-related crashes. Forty-seven percent were struck by school buses, 1 percent by vehicles functioning as school buses, and 52 percent by other vehicles (passenger cars, light trucks and vans, large trucks, and motorcycles, etc.) involved in the crashes.

All-Age Fatalities

Person Type

Table 1 shows fatalities by person type in school-transportation-related crashes in the 10-year period from 2009 to 2018. A total of 1,207 people were killed in school-transportation-related crashes, and 70 percent were occupants of other vehicles.

Among the 121 occupants of school transportation vehicles killed, 55 were drivers and 66 were passengers. Among the 208 pedestrians killed in school-transportation-related crashes, 141 were struck by school vehicles and 67 were struck by other vehicles.

Table 1

Fatalities (All Ages) in School-Transportation-Related Crashes, by Year and Person Type, 2009–2018

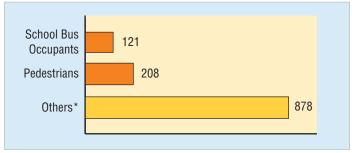
	Occupants of School				Pedestrians				
	Transportation Vehicles*			Struck by	Struck by		Other	Occupants of	
Year	Drivers	Passengers	Total	School Vehicle	Other Vehicle	Total	Nonoccupants**	Other Vehicles	Total
2009	2	3	5	13	8	21	1	91	118
2010	6	10	16	21	5	26	4	84	130
2011	7	4	11	12	9	21	5	86	123
2012	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	71	96
2018	4	10	14	11	11	22	2	79	117
Ten-Year Total	55	66	121	141	67	208	37	841	1,207
Percentage of Total	5%	5%	10%	12%	6%	17%	3%	70%	100%
Ten-Year Average	6	7	12	14	7	21	4	84	121

Source: FARS 2009-2017 Final File, 2018 ARF

School Bus Occupants and Pedestrians

Figure 1 shows school bus occupant fatalities and pedestrian fatalities (both bars in dark orange) of all ages in school-transportation-related crashes from 2009 to 2018. There were nearly two times more fatalities among pedestrians (208) than occupants of school transportation vehicles (121).

Figure 1
School Bus Occupant and Pedestrian Fatalities (All Ages)
in School-Transportation-Related Crashes, 2009–2018



Source: FARS 2009-2017 Final File, 2018 ARF

Note: Occupant fatalities shown are for occupants of school buses and non-school buses used as school buses.

^{*}Include school bus body types and non-school buses used as school buses.

^{**}Include bicyclists, other cyclists, and people on personal conveyances such as skateboards, scooters, wheelchairs, etc.

^{*}Includes other nonoccupants and occupants of other vehicles.

Figure 2 presents the total number of school bus occupant and pedestrian fatalities in school-transportation-related crashes by age group between 2009 and 2018. Among all school bus occupants killed, 22 (18%) were 5 to 10 years old, 20 (17%) were 14 to

18 years old, and 69 (57%) were 19 and older. Among all pedestrians killed in school-transportation-related crashes, 52 (25%) were 5 to 10 years old, 26 (13%) were 14 to 18 years old, and 107 (52%) were older than 18.

Figure 2
School Bus Occupant and Pedestrian Fatalities (All Ages) in School-Transportation-Related Crashes, by Age Group, 2009–2018



Source: FARS 2009-2017 Final File, 2018 ARF

Note: Occupant fatalities shown are for occupants of school buses and non-school buses used as school buses.

Table 2 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 98 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 Buses and Vehicles Used as School Buses With an Occupant Fatality and Number of Occupant Fatalities (All Ages) in Those Vehicles, by Rollover/Initial Impact Point, 2009–2018

	Large School Buses			d Vehicles hool Buses		ehicles hool Buses	Total	
Rollover/Initial Impact Point	Fatal Vehicles	Occupant Fatalities	Fatal Vehicles	Occupant Fatalities	Fatal Vehicles	Occupant Fatalities	Fatal Vehicles	Occupant Fatalities
Rollover	18	31	7	9	1	1	26	41
Front	28	32	5	5	3	3	36	40
Right Side	4	5	1	1	1	2	6	8
Left Side	4	4	1	1	1	1	6	6
Rear	6	6	2	2	0	0	8	8
Other/Unknown*	16	18	0	0	0	0	16	18
Total	76	96	16	18	6	7	98	121

Source: FARS 2009-2017 Final File, 2018 ARF

Note: Fatal vehicles are vehicles with at least one occupant fatality.

^{*}Includes non-collision, top, and undercarriage.

Table 3 provides the information on school-transportation-related crashes involving school bus occupant fatalities. In the 41 single-vehicle crashes, 51 occupants—20 drivers and 31 passengers—were killed. In the 57 multiple-vehicle crashes, 35 drivers and 35 passengers died in the school buses. In the 41

single-vehicle crashes, the first harmful events were as follows: striking a fixed object (24 crashes), a person falling from the vehicle (8 crashes), the vehicle overturning (6 crashes), and three 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 Year, Vehicle Occupied, and Crash Type, 2009–2018

	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
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
2018	4	4	6	7	1	1	1	2	5	5	7	9
Total	36	46	40	50	5	5	17	20	41	51	57	70
Average	4	5	4	5	1	1	2	2	4	5	6	7

Source: FARS 2009–2017 Final File, 2018 ARF

Note: Excludes occupants of other vehicles in school-transportation-related crashes.

School-Age Fatalities

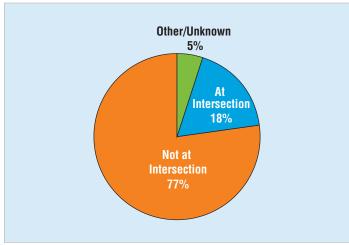
From 2009 to 2018 there were 249 school-age children who died in school-transportation-related crashes; 52 were occupants of school transportation vehicles, 92 were occupants of other vehicles, 100 were pedestrians, 4 were pedalcyclists, and 1 was other nonoccupant (Table 4).

Over half (52%) of the school-age pedestrians killed in school-transportation-related crashes from 2009 to 2018 were 5 to 10 years old, and 26 percent were 14 to 18 years old.

Location

As shown in Figure 3, over three-fourths (77%) of school-age pedestrians killed in school-transportation-related crashes between 2009 and 2018 were not at intersections.

Figure 3
School-Age (18 and Younger) Pedestrians Killed in
School-Transportation-Related Crashes, by Location,
2009–2018



Source: FARS 2009-2017 Final File, 2018 ARF

Time of Day

Table 4 provides school-age (18 and younger) fatalities in school-transportation-related crashes by time of day. Among the 249 school-age fatalities between 2009 and 2018, more school-age pedestrians were killed from 6 to 7:59 a.m., and 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 (92) 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, 2009–2018

	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	1	2	0	5
6-6:59 a.m.	3	0	7	25	0	35
7–7:59 a.m.	7	1	22	22	0	52
8-8:59 a.m.	3	0	6	6	0	15
9–9:59 a.m.	1	0	3	0	0	4
10-10:59 a.m.	2	0	4	0	0	6
11–11:59 a.m.	0	1	3	1	0	5
Noon-12:59 p.m.	1	0	2	1	0	4
1-1:59 p.m.	2	0	3	2	0	7
2-2:59 p.m.	3	0	7	4	1	16
3-3:59 p.m.	16	0	16	21	2	55
4–4:59 p.m.	7	0	11	11	0	29
5–11:59 p.m.	1	2	7	5	1	16
Total	47	5	92	100	4	249

Source: FARS 2009-2017 Final File, 2018 ARF

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 2009 to 2018, of the school-age pedestrians killed in crashes, 48 percent were struck by school buses or vehicles functioning as school buses, while 52 percent were struck by

vehicles of other body types. Of school-age pedestrians killed in school-transportation-related crashes, 24 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 Striking Vehicle Type, 2009–2018

Vehicle Maneuver	School Bus Body Type	Vehicle Used as School Bus	Other Body Type	Total
Going Straight	23	1	44	68
Slowing in Road	1	0	0	1
Accelerating in Road	2	0	1	3
Starting in Road	10	0	0	10
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	6	0	0	6
Negotiating a Curve	2	0	3	5
Other/Unknown	0	0	1	1
Total	47	1	52	100

Source: FARS 2009-2017 Final File, 2018 ARF

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

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 2018 ARF, the 2017 Final file was also released to replace the previous year's 2017 ARF. The final fatality count in motor vehicle crashes for 2017 was 37,473, which was updated from 37,133 from the 2017 ARF. The number of fatalities in school-transportation-related crashes from the 2017 Final file was 96, which was updated from 95 from the 2017 ARF.

The suggested APA format citation for this document is:

National Center for Statistics and Analysis. (2020, July). *School-transportation-related crashes: 2009–2018 data* (Traffic Safety Facts. Report No. DOT HS 812 944). National Highway Traffic Safety Administration.

For More Information:

Information on traffic fatalities is available from the National Center for Statistics and Analysis, 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/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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