# **Traffic Safety Facts**

2011-2020 Data

June 2022

DOT HS 813 327



In this fact sheet 10 years of data from 2011 to 2020 are presented as follows.

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



U.S. Department of Transportation National Highway Traffic Safety Administration

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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 vehicles include those of a school bus body type or a non-school-bus functioning as a school bus, transporting children to and from school or school-related activities. For the purposes of this fact sheet, school-age children are defined as 18 and younger. Although ages 5 to 18 are typically considered school-age, the data shows there are some school transportation occupant fatalities under the age of 5.

# **Key Findings**

- From 2011 to 2020 there were 1,009 fatal school-transportation-related crashes, and 1,125 people of all ages were killed in those crashes—an average of 113 fatalities per year.
- There were 113 occupants killed in school transportation vehicles; 53 were drivers, and 60 were passengers from 2011 to 2020. Most (70%) of the people killed in school-transportation-related crashes were occupants of other vehicles involved in the crashes.
- There were 1.6 times more fatalities among pedestrians (183) than occupants of school transportation vehicles (113) in school-transportation-related crashes from 2011 to 2020.
- From 2011 to 2020 among all school bus occupants killed, 18 percent were 5 to 10 years old, and 61 percent were 19 and older. Among all pedestrians killed in school-transportation-related crashes, 24 percent were 5 to 10 years old, and 53 percent were 19 and older.

- Impacts to the fronts of school transportation vehicles were involved in the most occupant fatalities from 2011 to 2020.
- From 2011 to 2020 there were 218 school-age children who died in school-transportation-related crashes; 44 were occupants of school transportation vehicles, 83 were occupants of other vehicles, 85 were pedestrians, 5 were pedalcyclists, and 1 was an "other" nonoccupant.
- Over half (52%) of the school-age pedestrians killed in school-transportation-related crashes from 2011 to 2020 were 5 to 10 years old.
- More school-age pedestrians were killed from 3 p.m. to 3:59 p.m. and 7 a.m. to 7:59 a.m. than any other hours of the day from 2011 to 2020.
- From 2011 to 2020 of all school-age pedestrians killed in school-transportation-related crashes, more than one-fifth (21%) 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

In 2020 schools were disrupted because of the COVID-19 pandemic. Most schools switched to virtual learning for a large proportion of 2020. This change resulted in school-transportation-related fatalities decreasing by 51 percent, from 111 in 2019 to 54 in 2020.

From 2011 to 2020 there were 326,149 fatal motor vehicle traffic crashes. Of those crashes, 1,009 (0.3%) were classified as school-transportation-related. Almost half (49%) of school-transportation-related crashes from 2011 to 2020 occurred in rural areas.

In the 10-year period from 2011 to 2020 there have been 1,125 people killed in school-transportation-related crashes—an

average of 113 fatalities per year. Nineteen percent (218) of these fatalities were of school-age (18 and younger).

Occupants of school transportation vehicles accounted for 10 percent of these fatalities, and nonoccupants (pedestrians, bicyclists, etc.) accounted for 20 percent of these fatalities. Most (70%) of the people who died 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-transportation-related crashes from 2011 to 2020. During this time 1,125 people were killed in school-transportation-related crashes; 787 (70%) were occupants of other vehicles.

Among the 113 occupants of school transportation vehicles killed, 53 were drivers, and 60 were passengers. Among the 183 pedestrians killed in school-transportation-related crashes, 124 were struck by school transportation vehicles, and 59 were struck by other vehicles.

Table 1

Fatalities (All Ages) in School-Transportation-Related Crashes, by Year and Person Type, 2011–2020

	Occupants of School				Pedestrians				
Year	Transportation Vehicles*  Drivers Passengers Total		Struck by School Vehicle*	Struck by Other Vehicle	Total	Other Nonoccupants**	Occupants of Other Vehicles	Total	
Teal	DIIAGI2	Passengers	IUlai	School vehicle	Other vehicle		Nonoccupants	Other vehicles	
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	80	111
2020	1	2	3	4	2	6	4	41	54
Ten-Year Total	53	60	113	124	59	183	42	787	1,125
Percentage of Total	5%	5%	10%	11%	5%	16%	4%	70%	100%
Ten-Year Average	5	6	11	12	6	18	4	79	113

Source: FARS 2011–2019 Final File, 2020 Annual Report File (ARF)

<sup>\*</sup>Includes school bus body type and non-school bus body type functioning as a school bus.

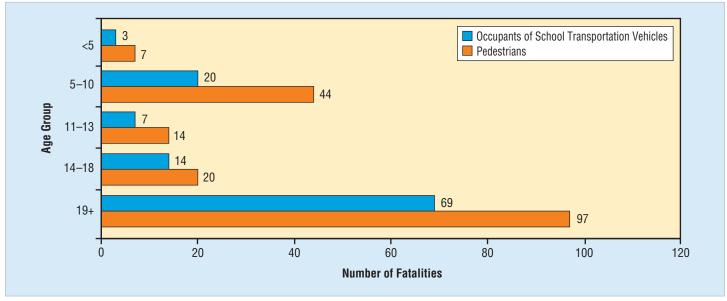
<sup>\*\*</sup>Includes bicyclists, other cyclists, and people on personal conveyances such as skateboards, scooters, wheelchairs, etc.

# School Bus Occupants and Pedestrians

There were 1.6 times more fatalities among pedestrians (183) than among occupants of school transportation vehicles (113), 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 from 2011 to 2020. Among all school bus occupants killed, 20

(18%) were 5 to 10 years old, 14 (12%) were 14 to 18 years old, and 69 (61%) were 19 and older. Among all pedestrians killed in school-transportation-related crashes, 44 (24%) were 5 to 10 years old, 20 (11%) were 14 to 18 years old, and 97 (53%) were 19 and older.

Figure 1
School Transportation Vehicle Occupant and Pedestrian Fatalities (All Ages) in School-Transportation-Related Crashes, by Age Group, 2011–2020



Source: FARS 2011-2019 Final File, 2020 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 90 vehicles used as school buses in which at least one occupant in the vehicle died.

Impacts to the fronts of school transportation vehicles were the most frequent initial impact point for vehicles used as school buses, and the fronts of those vehicles were involved in the most fatalities.

Table 2
School Transportation Vehicles With an Occupant Fatality and Number of Occupant Fatalities in Those Vehicles, by Rollover/Initial Impact Point and Vehicle Type, 2011–2020

	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	17	30	5	6	1	1	23	37
Front	26	31	5	5	5	5	36	41
Right Side	3	4	1	1	1	2	5	7
Left Side	3	3	2	2	1	1	6	6
Rear	6	6	1	1	0	0	7	7
Other/Unknown*	13	15	0	0	0	0	13	15
Total	68	89	14	15	8	9	90	113

Source: FARS 2011-2019 Final File, 2020 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.

Table 3 provides information on school-transportation-related crashes involving fatalities of occupants of school transportation vehicles. In the 36 single-vehicle crashes, 46 occupants—19 drivers and 27 passengers—were killed. In the 54 multiple-vehicle crashes, 67 occupants—34 drivers and 33 passengers—died in the school transportation vehicles. In

those single-vehicle crashes, the most prevalent first harmful events were as follows: collision with a fixed object (21 crashes), rollover/overturn (6 crashes), a person falling/jumping from the vehicle (5 crashes), and 4 other types of 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 Type Occupied, and Crash Type, 2011–2020

	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
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
2020	0	0	1	2	1	1	0	0	1	1	1	2
Ten-Year Total	31	41	37	48	5	5	17	19	36	46	54	67
Ten-Year Average	3	4	4	5	1	1	2	2	4	5	5	7

Source: FARS 2011–2019 Final File, 2020 ARF

Notes: Large school buses are over 10,000 lbs, and van-based vehicles used as school buses are 10,000 lbs or less. 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.

<sup>\*</sup>Includes non-collision, top, and undercarriage.

## **School-Age Fatalities**

From 2011 to 2020 there were 218 school-age children who died in school-transportation-related crashes; 44 were occupants of school transportation vehicles, 83 were occupants of other vehicles, 85 were pedestrians, 5 were pedalcyclists, and 1 was an "other" nonoccupant (Table 4).

Over half (52%) of the school-age pedestrians killed in school-transportation-related crashes from 2011 to 2020 were 5 to 10 years old, and 24 percent were 14 to 18 years old.

#### Location

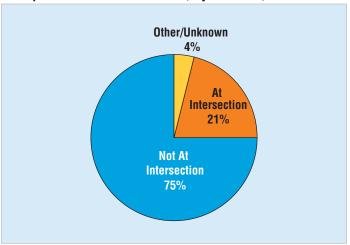
As shown in Figure 2, three-fourths (75%) of school-age pedestrians killed in school-transportation-related crashes between 2011 and 2020 were not at intersections.

## Time of Day

Table 4 provides school-age (18 and younger) fatalities in school-transportation-related crashes by time of day. Among the 218 school-age fatalities from 2011 to 2020, more schoolage 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 twice as many fatalities among occupants of other vehicles (83) than occupants of school transportation vehicles (44).

Figure 2
School-Age (18 and Younger) Pedestrians Killed in School-Transportation-Related Crashes, by Location, 2011–2020



Source: FARS 2011-2019 Final File, 2020 ARF

Table 4
School-Age (18 and Younger) Fatalities in School-Transportation-Related Crashes, by Time of Day and Person Type, 2011–2020

	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	Other Nonoccupants	Total*
Midnight-5:59 a.m.	1	1	0	2	0	0	4
6–6:59 a.m.	3	0	7	21	0	0	31
7–7:59 a.m.	6	1	15	17	0	0	39
8–8:59 a.m.	1	0	5	2	0	0	8
9–9:59 a.m.	1	0	4	0	0	0	5
10–10:59 a.m.	1	0	3	0	0	0	4
11–11:59 a.m.	0	1	3	1	0	0	5
Noon–12:59 p.m.	0	0	1	1	0	0	2
1–1:59 p.m.	1	0	5	1	0	0	7
2–2:59 p.m.	3	0	6	4	1	1	15
3–3:59 p.m.	15	0	16	20	3	0	54
4–4:59 p.m.	7	0	12	12	0	0	31
5–11:59 p.m.	2	0	6	4	1	0	13
Total	41	3	83	85	5	1	218

Source: FARS 2011–2019 Final File, 2020 ARF

<sup>\*</sup>Includes other nonoccupants such as people on personal conveyances (for example 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 2011 to 2020 less than half (47%) of the school-age pedestrians killed in crashes were struck by school buses or vehicles functioning as school buses, while more than

half (53%) were struck by vehicles of other body types. Of school-age pedestrians killed in school-transportation-related crashes, over one-fifth (21%) 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, 2011–2020

Vehicle Maneuver	School Bus Body Type	Vehicle Used as School Bus	Other Body Type	Total	
Going Straight	17	1	39	57	
Slowing in Road	1	0	0	1	
Accelerating in Road	2	0	1	3	
Starting in Road	7	0	1	8	
Passing or Overtaking Another Vehicle	0	0	1	1	
Turning Right	7	0	1	8	
Turning Left	4	0	0	4	
Negotiating a Curve	1	0	1	2	
Other/Unknown	0	0	1	1	
Total	39	1	45	85	

Source: FARS 2011-2019 Final File, 2020 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 <a href="https://www.nhtsa.gov/crash-data-systems/fatality-analysis-reporting-system">www.nhtsa.gov/crash-data-systems/fatality-analysis-reporting-system</a>.

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 2020 ARF, the 2019 Final File was released to replace the 2019 ARF. The final fatality count in motor vehicle traffic crashes for 2019 was 36,355, which was updated from 36,096 in the 2019 ARF. The number of school-transportation-related fatalities from the 2019 Final File was 111, which was updated from 109 from the 2019 ARF.

The 2017 and 2018 Final Files have been amended, but this amendment did not change the overall number of fatal crashes or fatalities.

The suggested APA format citation for this document is:

National Center for Statistics and Analysis. (2022, June). *School-transportation-related crashes: 2011–2020 data* (Traffic Safety Facts. Report No. DOT HS 813 327). 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 <a href="https://www.ncsa.gov/data">NCSARequests@dot.gov</a> or 800-934-8517. NCSA programs can be found at <a href="https://www.nhtsa.gov/data">www.nhtsa.gov/data</a>. To report a motor vehicle safety-related problem or to inquire about safety information, contact the Vehicle Safety Hotline at 888-327-4236 or <a href="https://www-odi.nhtsa.dot.gov/VehicleComplaint/">www-odi.nhtsa.dot.gov/VehicleComplaint/</a>.

The following data tools and resources can be found at <a href="https://cdan.nhtsa.gov/">https://cdan.nhtsa.gov/</a>.

- Fatal Motor Vehicle Crash Data Visualizations
- 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
- 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
- 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 <a href="https://crashstats.nhtsa.dot.gov/">https://crashstats.nhtsa.dot.gov/</a>.



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