# **Traffic Safety Facts**

2004-2013 Data

June 2015

DOT HS 812 170



# **Key Findings**

- From 2004 to 2013, there were 327 school-age children who died in school-transportation-related crashes; 54 were occupants of school transportation vehicles, 147 were occupants of other vehicles, 116 were pedestrians, 9 were pedalcyclists, and 1 was other nonoccupant.
- More school-age pedestrians were killed from 7 to 8 a.m. and from 3 to 4 p.m. than any other hours of the day.
- There were 42 (36%) school-age pedestrians killed in schooltransportation-related crashes who were 8 to 13 years old.
- More than two-thirds (67%) of the school-age pedestrians fatally injured in crashes were struck by school buses or vehicles functioning as school buses.
- There were almost three times more fatalities among occupants of other vehicles (147) than occupants of school transportation vehicles (54).
- There were 1,344 people of all ages killed in school-transportation-related crashes—an average of 134 fatalities per year.
- Among the 106 occupants killed in school transportation vehicles, 45 were drivers and 61 were passengers.
- Impacts to the front of school transportation vehicles occurred in 53 percent of fatal school-transportationrelated crashes.



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 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 or younger.

This fact sheet includes 10 years of data, from 2004 to 2013. School-transportation-related crash information is presented in the following order.

- Overview
- Age Group
- Time of Day
- Occupant Fatalities

- Impact Point and Crash Type
- Vehicle Maneuver
- Person Type

#### **Overview**

From 2004 to 2013 there were 340,039 fatal motor vehicle traffic crashes. Of those, 1,214 (0.4%) were classified as school-transportation-related.

From 2004 to 2013, there were 1,344 people killed in school-transportation-related crashes—an average of 134 fatalities per year. Occupants of school transportation vehicles accounted for 8 percent of the fatalities, and nonoccupants (pedestrians, bicyclists, etc.) accounted for 21 percent of the fatalities. Most (71%) of the people who lost their lives in these crashes were occupants of other vehicles involved in the crashes (Table 5).

From 2004 to 2013, there were 116 school-age pedestrians (18 or younger) who died in school-transportation-related crashes. Sixty-two percent were struck by school buses, 5 percent by vehicles functioning as school buses, and 33 percent by other vehicles (passenger cars, light trucks and vans, large trucks, and motorcycles, etc.) involved in the crashes.

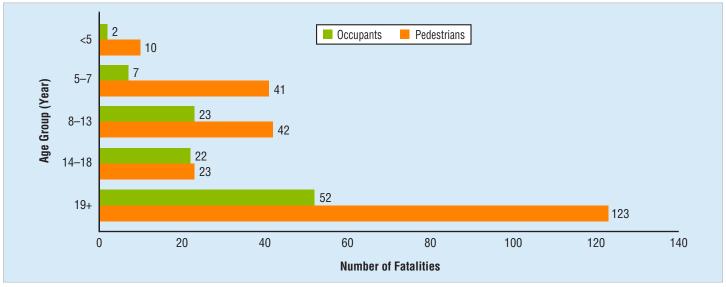
### **Age Group**

Figure 1 presents the total number of school bus occupant and pedestrian fatalities in school-transportation-related crashes by age group. There were 41 (35%) pedestrians 5 to 7 years old and 42

(36%) pedestrians 8 to 13 years old killed in school-transportation-related crashes.

Figure 1

Total School Bus Occupant and Pedestrian Fatalities in School-Transportation-Related Crashes, by Age Group, 2004–2013



Source: Fatality Analysis Reporting System (FARS) 2004–2012 Final File and 2013 Annual Report File (ARF). Note: Occupant fatalities shown are for occupants of school buses and non-school buses used as school buses.

On average, 8 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.

# Time of Day

Table 1 provides school-age (18 and younger) fatalities in school-transportation-related crashes by time of day. More school-age pedestrians were killed from 7 to 8 a.m. and from 3 to 4 p.m. than any other hours of the day. There were almost three times more fatalities among occupants of other vehicles (147) than occupants of school transportation vehicles (54).

Table 1
School-Age (18 and Younger) Fatalities in School-Transportation-Related Crashes, by Time of Day and Person Type, 2004–2013

Time of Day	Occupants of School	Occupants of Other	Dadaatsiana	Dedeleveliste	Other*	Total
Time of Day	Transportation Vehicles	Vehicles	Pedestrians	Pedalcyclists	Nonoccupants	Total
Midnight-6:59 a.m.	2	12	21	0	0	35
7–7:59 a.m.	6	37	28	1	0	72
8-8:59 a.m.	5	12	10	0	0	27
9-9:59 a.m.	0	4	0	1	0	5
10-10:59 a.m.	4	2	0	0	0	6
11-11:59 a.m.	1	0	0	0	0	1
Noon-12:59 p.m.	1	1	2	1	0	5
1-1:59 p.m.	2	2	4	0	0	8
2-2:59 p.m.	6	11	11	3	0	31
3-3:59 p.m.	15	39	27	1	1	83
4-4:59 p.m.	9	15	7	0	0	31
5-11:59 p.m.	3	12	6	2	0	23
Total	54	147	116	9	1	327

Source: FARS 2004-2012 Final File and 2013 ARF.

<sup>\*</sup>Includes on personal conveyances such as skateboards, scooters, wheelchairs, etc.

### **Impact Point and Crash Type**

Table 2 shows information on the total number of school bus occupant fatalities in school-transportation-related crashes by initial impact point on the school transportation vehicle. There were 87 crashes in which at least one occupant of a school transportation vehicle died. More than half of those crashes (61%) involved at least

one other vehicle. Impacts to the front of the school transportation vehicle occurred in 53 percent and impacts to the right side of the school transportation vehicle occurred in 11 percent of fatal school-transportation-related crashes.

Table 2
Fatal Crashes and Total School Transportation Occupant Fatalities (All Ages) in School-Transportation-Related Crashes, by Initial Impact Point on School Transportation Vehicle and Crash Type, 2004–2013

		Crash					
Initial Impact Point on	Single-	Vehicle	Multiple	-Vehicle	Total		
School Transportation Vehicle	*Crashes	*Crashes Fatalities *Crashes		Fatalities	*Crashes	Fatalities	
Front	15	17	31	39	46	56	
Right Side	5	5	5	8	10	13	
Left Side	0	0	7	10	7	10	
Rear	1	1	7	8	8	9	
Тор	0	0	0	0	0	0	
Undercarriage	2	2	1	1	3	3	
Non-Collision	11	12	0	0	11	12	
Other/Unknown	0	0	2	3	2	3	
Total	34	37	53	69	87	106	

Source: FARS 2004-2012 Final File and 2013 ARF.

#### Occupant Fatalities

Table 3 provides the information on school-transportation-related crashes involving occupant fatalities. In the 34 single-vehicle crashes, 37 occupants—17 drivers and 20 passengers—were killed. In the 53 multiple-vehicle crashes, 28 drivers and 41 passengers died in the school buses. In the 34 single-vehicle crashes, the first

harmful events were as follows: striking a fixed object (20 crashes), the vehicle overturning (5 crashes), a person falling from the vehicle (7 crashes), and collision with a non-fixed object (1 crash) (e.g., pedestrian, pedalcyclist, railway vehicle, live animal, ridden animal or animal-drawn conveyance), and one other crash.

Table 3
School Transportation-Related Crashes Involving Occupant Fatalities (All Ages), by Year, Vehicle Occupied, and Crash Type, 2004–2013

	School Bus Body Type				Vehicle Used as School Bus				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	<b>Fatalities</b>
2004	2	2	5	5	0	0	0	0	2	2	5	5
2005	3	3	4	5	0	0	2	2	3	3	6	7
2006	0	0	3	6	0	0	2	2	0	0	5	8
2007	2	2	1	1	0	0	1	2	2	2	2	3
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
Total	30	33	40	50	4	4	13	19	34	37	53	69
Average	3	3	4	5	0	0	1	2	3	4	5	7

Source: FARS 2004-2012 Final File and 2013 ARF.

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

<sup>\*</sup>Only includes school-transportation-related crashes in which there was a fatality in a school transportation vehicle.

#### Vehicle Maneuver

Table 4 presents the number of school-age pedestrians killed in school-transportation-related crashes by vehicle maneuver. From 2004 to 2013, over two-thirds (67%) of the school-age pedestrians fatally injured in crashes were struck by school buses or vehicles functioning as school buses, while 33 percent were struck by vehicles

of other body types. Of school-age pedestrians fatally injured in school-transportation-related crashes, one-third (34%) were struck by school buses or vehicles functioning as school buses that were going straight.

Table 4
School-Age (18 and Younger) Pedestrians Killed in School-Transportation-Related Crashes, by Vehicle Maneuver and Vehicle Type, 2004–2013

Vehicle Maneuver	School Bus Body Type	Vehicle Used as School Bus	Other Body Type	Total
Going Straight	37	3	26	66
Slowing to Traffic Lane	1	0	0	1
Accelerating in Traffic Lane	2	0	0	2
Starting in Traffic Lane	14	1	0	15
Stopped in Road	1	0	0	1
Passing or Overtaking Another Vehicle	0	0	6	6
Leaving/Entering a Parked Position	3	0	0	3
Maneuvering to Avoid	0	0	1	1
Turning Right	5	0	1	6
Turning Left	8	1	0	9
Negotiating a Curve	1	1	4	6
Total	72	6	38	116

Source: FARS 2004-2012 Final File and 2013 ARF.

# **Person Type**

Table 5 shows fatalities by person type in school-transportation-related crashes (2004–2013). Among the 106 occupants killed in school transportation vehicles, 45 were drivers and 61 were passengers. Among the 239 pedestrians killed in school-transportation-related crashes, 189 were struck by school vehicles

and 49 were struck by other vehicles. From 2004 to 2013, three drivers and three passengers have died in school bus body vehicles providing transportation for purposes other than school or school-related activities (churches, civic organizations, etc.).

Table 5
Fatalities (All Ages) in School-Transportation-Related Crashes, by Year and Person Type, 2004–2013

		pants of Schortation Vehic		Pedestrians			Other	Occupants of	
Year	Driver	Passenger	Total	Struck by School Vehicle   Struck by Other Vehicle   Total			Nonoccupants	Other Vehicles	Total
2004	3	4	7	27	3	30	3	93	133
2005	5	5	10	27	3	30	7	87	134
2006	3	5	8	19	3	22	2	118	150
2007	4	1	5	16	2	19**	6	112	142
2008	4	15	19	20	1	21	8	104	152
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	92	130
Total	45	61	106	189	49	239	44	955	1,344
Average	5	6	11	19	5	24	4	96	134

Source: FARS 2004–2012 Final File and 2013 ARF.

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

<sup>\*\*</sup>Includes 1 pedestrian fatality in which the striking vehicle was not identified

This fact sheet contains information on motor vehicle fatalities and fatal crashes, based on data from the Fatality Analysis Reporting System. FARS is a census of fatal crashes within the 50 States, the District of Columbia, and Puerto Rico (although Puerto Rico data is not included in this fact sheet).

The suggested APA format citation for this document is:

National Center for Statistics and Analysis. (2015, June). School-transportation-related crashes: 2004–2013 data. (Traffic Safety Facts. Report No. DOT HS 812 170). Washington, DC: National Highway Traffic Safety Administration.

#### For More Information:

Information on traffic fatalities is available from the National Center for Statistics and Analysis (NCSA), NVS-424, 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 is online 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, Large Trucks, Motorcycles, Occupant Protection, Older Population, Passenger Vehicles, Pedestrians, Rural/Urban Comparisons, Speeding, State Alcohol Estimates, State Traffic Data, 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 report can be accessed online at www-nrd.nhtsa.dot.gov/CATS/index.aspx.

