## Traffic Safety Facts 1999

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

## School Buses



A school bus-related crash is a crash which involves, either directly or indirectly, a school bus-type vehicle, or a vehicle functioning as a school bus, transporting children to or from school or school-related activities.

Since 1989 there have been about 411,000 fatal traffic crashes. Of those, 0.31 percent $(1,291)$ were classified as school bus-related.

Since 1989, 1,445 people have died in school bus-related crashes - an average of 131 fatalities per year. Most of the people who lost their lives in those crashes ( 65 percent) were occupants of other vehicles involved. Nonoccupants (pedestrians, bicyclists, etc.) accounted for 25 percent of the deaths, and school bus occupants accounted for 10 percent (drivers 2 percent, passengers 8 percent).

Since 1989, 226 school-age pedestrians (less than 19 years old) have died in school bus-related crashes. Nearly two-thirds ( 66 percent) were killed by school buses, 5 percent by vehicles functioning as school buses, and 29 percent by other vehicles involved in the crashes. More than half of all school-age pedestrians killed in school bus-related crashes were between the ages of 5 and 7 .

Figure 1. Occupant and Pedestrian Fatalities in School Bus-Related Crashes, by Age, 1989-1999


Note: Occupant fatalities shown are for occupants of school buses or vehicles used as school buses.
"From 1989 to 1999, more than half
of all school-age pedestrians killed in school bus-related crashes were 5 to 7 years old." "

On average, 15 school-age pedestrians are killed by school buses (or vehicles used as school buses) each year, and 6 are killed by other vehicles involved in school bus-related crashes.

More school-age pedestrians are killed in the afternoon than in the morning, with 42 percent of the fatalities occurring in crashes between 3:00 and 4:00 PM.

Table 1. Fatalities in School Bus-Related Crashes by Time of Day, 1989-1999

| Time of Day | Occupant Fatalities* | Pedestrians (School Age) | Total Fatalities |
| :---: | :---: | :---: | :---: |
| 12:00-6:59 AM | 6 | 8 | 14 |
| 7:00-7:59 AM | 50 | 27 | 77 |
| 8:00-8:59 AM | 14 | 15 | 29 |
| 9:00-9:59 AM | 6 | 7 | 13 |
| 10:00-10:59 AM | 4 | 0 | 4 |
| 11:00-11:59 AM | 1 | 6 | 7 |
| 12:00-12:59 PM | 5 | 7 | 12 |
| 1:00-1:59 PM | 4 | 5 | 9 |
| 2:00-2:59 PM | 11 | 32 | 43 |
| 3:00-3:59 PM | 24 | 96 | 120 |
| 4:00-4:59 PM | 10 | 20 | 30 |
| 5:00-11:59 PM | 6 | 3 | 9 |
| Total | 141 | 226 | 367 |

*Does not include occupants of other vehicles in school bus-related crashes.

Between 1989 and 1999, 96 crashes occurred in which at least one occupant of a school bus or a vehicle functioning as a school bus died. More than half of those crashes ( 53 percent) involved another vehicle. In the 45 single-vehicle crashes, 58 occupants - 10 drivers and 48 passengers - were killed. In the 51 multiple-vehicle crashes, 20 drivers and 63 passengers died. In the 45 single-vehicle crashes, the first harmful events were as follows: striking a fixed object ( 25 crashes), a person falling from the vehicle ( 10 crashes), the vehicle overturning ( 5 crashes), the vehicle colliding with a train ( 3 crashes), and collision with object not fixed (1 crash).

In 41 percent of all crashes involving fatalities to occupants of a school bus or vehicle used as a school bus, the principal point of impact was the front of the vehicle.

Since 1989, 5 drivers and 16 passengers have died in school buses providing transportation for purposes other than school or school-related activities (churches, civic organizations, etc.). In 1987, one such multi-vehicle crash resulted in the deaths of 27 occupants, including the driver.
"Impacts to the front of the school bus occur in 41 percent of fatal school busrelated crashes.

Table 2. Occupant Fatalities in School Bus-Related Crashes by Principal Impact Point on School Bus Vehicle, 1989-1999

| Principal <br> Impact Point on <br> Bus | Type of Crash |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Single-Vehicle |  | Multiple-Vehicle |  | Total |  |
|  | Crashes | Fatalities | Crashes | Fatalities | Crashes | Fatalities |
| Front | 14 | 17 | 25 | 52 | $\mathbf{3 9}$ | $\mathbf{6 9}$ |
| Right Side | 6 | 6 | 11 | 16 | $\mathbf{1 7}$ | $\mathbf{2 2}$ |
| Left Side | 2 | 3 | 11 | 11 | $\mathbf{1 3}$ | $\mathbf{1 4}$ |
| Rear | 4 | 10 | 3 | 3 | $\mathbf{7}$ | $\mathbf{1 3}$ |
| Top | 2 | 3 | 0 | 0 | $\mathbf{2}$ | $\mathbf{3}$ |
| Undercarriage | 1 | 1 | 1 | 1 | $\mathbf{2}$ | $\mathbf{2}$ |
| Noncollision | 16 | 18 | 0 | 0 | $\mathbf{1 6}$ | $\mathbf{1 8}$ |
| Total | $\mathbf{4 5}$ | $\mathbf{5 8}$ | $\mathbf{5 1}$ | $\mathbf{8 3}$ | $\mathbf{9 6}$ | $\mathbf{1 4 1}$ |

Table 3. School-Age Pedestrians Killed in School Bus-Related Crashes by Vehicle Maneuver, 1989-1999

| Vehicle Maneuver | Striking Vehicle |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | School Bus | Vehicle <br> Used as School Bus | Other Vehicle | Total |
| Going Straight | 61 | 7 | 45 | 113 |
| Slowing or Stopping in Traffic Lane | 7 | 0 | 3 | 10 |
| Starting in Traffic Lane | 56 | 2 | 1 | 59 |
| Passing or Overtaking Another Vehicle | 0 | 0 | 8 | 8 |
| Leaving a Parked Position | 5 | 1 | 0 | 6 |
| Maneuvering to Avoid an Animal, Pedestrian, Object, Other Vehicle, etc. | 0 | 0 | 4 | 4 |
| Turning Right | 9 | 0 | 0 | 9 |
| Turning Left | 5 | 0 | 0 | 5 |
| Backing Up (Other Than for Parking) | 2 | 0 | 0 | 2 |
| Negotiating a Curve | 2 | 0 | 3 | 5 |
| Entering Parked Position | 2 | 0 | 0 | 2 |
| Changing Lanes | 0 | 0 | 1 | 1 |
| Other/Unknown | 0 | 1 | 1 | 2 |
| Total School-Age Pedestrians Killed | 149 | 11 | 66 | 226 |

Table 4. School Bus-Related Crashes Involving Occupant Fatalities, 1989-1999

| 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 |
| 1989 | 7 | 8 | 5 | 25 | 3 | 3 | 1 | 1 | 10 | 11 | 6 | 26 |
| 1990 | 5 | 7 | 4 | 4 | 0 | 0 | 0 | 0 | 5 | 7 | 4 | 4 |
| 1991 | 0 | 0 | 6 | 10 | 4 | 6 | 1 | 1 | 4 | 6 | 7 | 11 |
| 1992 | 3 | 3 | 4 | 4 | 2 | 3 | 0 | 0 | 5 | 6 | 4 | 4 |
| 1993 | 5 | 5 | 2 | 5 | 2 | 2 | 1 | 1 | 7 | 7 | 3 | 6 |
| 1994 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 4 | 0 | 0 | 3 | 4 |
| 1995 | 2 | 8 | 3 | 4 | 1 | 1 | 0 | 0 | 3 | 9 | 3 | 4 |
| 1996 | 5 | 5 | 3 | 3 | 2 | 2 | 0 | 0 | 7 | 7 | 3 | 3 |
| 1997 | 0 | 0 | 5 | 8 | 1 | 1 | 1 | 1 | 1 | 1 | 6 | 9 |
| 1998 | 1 | 2 | 4 | 4 | 0 | 0 | 0 | 0 | 1 | 2 | 4 | 4 |
| 1999 | 2 | 2 | 6 | 6 | 0 | 0 | 2 | 2 | 2 | 2 | 8 | 8 |
| Total | 30 | 40 | 42 | 73 | 15 | 18 | 9 | 10 | 45 | 58 | 51 | 83 |

*Includes one crash with 21 occupant fatalities.
Note: Does not include occupants of other vehicles in school bus-related crashes.

Table 5. Fatalities in School Bus-Related Crashes, 1989-1999

| Year | Occupants of School Bus* |  |  | Pedestrians |  |  | Other Nonoccupants | Occupants of Other Vehicle | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Driver | Passenger | Total | Struck by School Bus* | Struck by Other Vehicle | Total |  |  |  |
| 1989 | 4 | 33 | 37 | 25 | 7 | 32 | 1 | 72 | 142 |
| 1990 | 4 | 7 | 11 | 32 | 7 | 39 | 1 | 64 | 115 |
| 1991 | 2 | 15 | 17 | 21 | 5 | 26 | 5 | 86 | 134 |
| 1992 | 1 | 9 | 10 | 21 | 8 | 29 | 2 | 83 | 124 |
| 1993 | 1 | 12 | 13 | 32 | 8 | 40 | 2 | 86 | 141 |
| 1994 | 2 | 2 | 4 | 28 | 9 | 37 | 2 | 64 | 107 |
| 1995 | 0 | 13 | 13 | 24 | 10 | 34 | 4 | 72 | 123 |
| 1996 | 2 | 8 | 10 | 16 | 7 | 23 | 2 | 101 | 136 |
| 1997 | 5 | 5 | 10 | 17 | 2 | 19 | 5 | 97 | 131 |
| 1998 | 3 | 3 | 6 | 21 | 3 | 24 | 7 | 91 | 128 |
| 1999 | 6 | 4 | 10 | 19 | 6 | 25 | 3 | 126 | 164 |
| Total | 30 | 111 | 141 | 256 | 72 | 328 | 34 | 942 | 1,445 |
| Average | 3 | 10 | 13 | 23 | 7 | 30 | 3 | 86 | 131 |

*Includes school bus body type and vehicle used as school bus.

## For more information:

Information on school bus traffic fatalities is available from the National Center for Statistics and Analysis, NRD-31, 400 Seventh Street, S.W., Washington, D.C. 20590. NCSA information can also be obtained by telephone or by fax-on-demand at 1-800-934-8517. FAX messages should be sent to (202) 366-7078. General information on highway traffic safety can be accessed by Internet users at http://www.nhtsa.dot.gov/people/ncsa. To report a safety-related problem or to inquire about motor vehicle safety information, contact the Auto Safety Hotline at 1-800-424-9393.

