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

## Traffic Safety Facts 1993

 School Buses> "An average of 41 school-age children die in school bus related traffic crashes each year-11 school bus occupants and 30 nedestrians",

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 1983 there have been about 430,000 fatal traffic crashes. Less than 0.4 percent were classified as school bus related. School bus-type vehicles were involved in 90 percent of those school bus-related crashes. Vans and transit or other buses providing school-related group transportation accounted for the other 10 percent.

Since 1983, 1,572 people have died in school bus-related crashes-an average of 143 fatalities per year. Most of the people who lost their lives in those crashes ( 59 percent) were occupants of other vehicles involved. Nonoccupants (pedestrians, bicyclists, etc.) accounted for 29 percent of the deaths, and school bus occupants accounted for 11 percent (drivers 2 percent, passengers 9 percent).

Since 1983, 327 school-age pedestrians (less than 19 years old) have died in school bus-related crashes. Two-thirds ( 65 percent) were killed by school buses, 5 percent by vehicles functioning as school buses, and 30 percent by other vehicles involved in the crashes. 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, 1983-1993


Note: Occupant fatalities shown are for occupants of school buses or vehicles used as school buses.
"From 1983 to 1993, half of all schoolage pedestrians killed in school bus related crashes were 5to 7 vears-old","

On average, 21 school-age pedestrians are killed by school buses (or vehicles used as school buses) each year, and 9 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 43 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, 1983-1993

| Time of Day | Occupant <br> Fatalities* | Pedestrians (School Age) | Total <br> Fatalities |
| :---: | :---: | :---: | :---: |
| 12:00-6:59 AM | 17 | 6 | 23 |
| 7:00-7:59 AM | 40 | 40 | 80 |
| 8:00-8:59 AM | 13 | 28 | 41 |
| 9:00-9:59 AM | 4 | 3 | 7 |
| 10:00-10:59 AM | 5 | 0 | 5 |
| 11:00-11:59 AM | 4 | 10 | 14 |
| 12:00-12:59 PM | 5 | 11 | 16 |
| 1:00-1:59 PM | 5 | 5 | 10 |
| 2:00-2:59 PM | 16 | 41 | 57 |
| 3:00-3:59 PM | 45 | 141 | 186 |
| 4:00-4:59 PM | 5 | 36 | 41 |
| 5:00-11:59 PM | 20 | 6 | 26 |
| Total | 179 | 327 | 506 |

* Does not include occupants of other vehicles in school bus-related crashes.
"Inattention" and "failure to yield" were the factors most often reported by police for school bus drivers striking a school-age pedestrian. For drivers of other vehicles killing a pedestrian in a school bus-related crash, the factors most often cited were "failure to obey signs, safety zones, or warning signs on vehicles," "passing where prohibited," and "driving too fast."

Between 1983 and 1993, 100 crashes occurred in which at least one occupant of a school bus or a vehicle functioning as a school bus died. The majority of those crashes ( 52 percent) involved another vehicle. In the 48 single-vehicle crashes, 69 occupants- 17 drivers and 52 passengers-were killed. In the 52 multiple-vehicle crashes, 16 drivers and 94 passengers died. In the 48 single-vehicle crashes, the first harmful events were as follows: striking a fixed object ( 28 crashes), the vehicle overturning ( 8 crashes), a person falling from the vehicle ( 8 crashes), the vehicle colliding with a train ( 3 crashes), and other noncollision ( 1 crash).

In 44 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.

Table 2. Occupant Fatalities in School Bus-Related Crashes by Principal Impact Point on School Bus Vehicle, 1983-1993

| Principal Impact <br> Point <br> on Bus | Type of Crash |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Crashes | Fatalities | Crashes | Fatalities | Crashes | Fatalities |
|  | 16 | 28 | 28 | 68 | 44 | 96 |
| Right Side | 6 | 6 | 9 | 14 | 15 | 20 |
| Left Side | 2 | 3 | 7 | 10 | 9 | 13 |
| Rear | 2 | 2 | 6 | 10 | 8 | 12 |
| Top | 3 | 8 | 2 | 8 | 5 | 16 |
| Undercarriage | 1 | 1 | 0 | 0 | 1 | 1 |
| Noncollision | 16 | 19 | 0 | 0 | 16 | 19 |
| Unknown | 2 | 2 | 0 | 0 | 2 | 2 |
| Total | 48 | 69 | 52 | 110 | 100 | 179 |

"Impacts to the front of the vehicle occur in 44 percent of fatal school bus related crashes."

Table 3. School-Age Pedestrians Killed in School Bus-Related Crashes by Vehicle Maneuver, 1983-1993

| Vehicle Maneuver | Striking Vehicle |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  |  | Vehicle <br> Used as <br> School Bus | Other <br> Vehicle | Total |
| School Bus | 80 | 10 | 58 | 148 |
| Going Straight | 3 | 1 | 3 | 7 |
| Slowing or Stopping in Traffic Lane | 89 | 2 | 0 | 91 |
| Starting in Traffic Lane | 0 | 0 | 23 | 23 |
| Passing or Overtaking Another Vehicle | 10 | 2 | 0 | 12 |
| Leaving a Parked Position | 0 | 0 | 7 | 7 |
| Maneuvering to Avoid an Animal, <br> Pedestrian, Object, Other Vehicle, etc. | 11 | 0 | 0 | 11 |
| Turning Right | 9 | 0 | 0 | 9 |
| Turning Left | 5 | 1 | 0 | 6 |
| Backing Up (Other Than for Parking) | 1 | 0 | 5 | 6 |
| Negotiating a Curve | 1 | 0 | 0 | 1 |
| Entering Parked Position | 1 | 0 | 1 | 2 |
| Changing Lanes | 2 | 1 | 1 | 4 |
| Other/Unknown | 212 | 17 | 98 | 327 |
| Total School-Age Pedestrians Killed |  |  |  |  |

Since 1983, 4 drivers and 35 passengers have died in school buses providing transportation for purposes other than school or school-related activities (churches, civic organizations, etc.). In one such multi-vehicle crash, 27 occupants, including the driver, died.

Table 4. School Bus-Related Crashes Involving Occupant Fatalities, 1983-1993

| 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 |
| 1983 | 1 | 9 | 3 | 7 | 1 | 2 | 0 | 0 | 2 | 11 | 3 | 7 |
| 1984 | 3 | 4 | *3 | 15 | 1 | 1 | 2 | 2 | 4 | 5 | 5 | 17 |
| 1985 | 4 | 9 | 6 | 15 | 0 | 0 | 0 | 0 | 4 | 9 | 6 | 15 |
| 1986 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 |
| 1987 | 0 | 0 | 6 | 11 | 3 | 3 | 3 | 3 | 3 | 3 | 9 | 14 |
| 1988 | 2 | 2 | 4 | 5 | 1 | 1 | 0 | 0 | 3 | 3 | 4 | 5 |
| 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 |
| Total | 30 | 47 | 44 | 102 | 18 | 22 | 8 | 8 | 48 | 69 | 52 | 110 |

* Includes one crash with 9 occupant fatalities.
** 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, 1983-1993

| 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 |  |  |  |
| 1983 | 2 | 16 | 18 | 36 | 12 | 48 | 6 | 88 | 160 |
| 1984 | 5 | 17 | 22 | 28 | 11 | 39 | 5 | 96 | 162 |
| 1985 | 2 | 22 | 24 | 28 | 13 | 41 | 4 | 89 | 158 |
| 1986 | 2 | 0 | 2 | 31 | 16 | 47 | 6 | 73 | 128 |
| 1987 | 8 | 9 | 17 | 32 | 11 | 43 | 5 | 113 | 178 |
| 1988 | 2 | 6 | 8 | 19 | 17 | 36 | 6 | 80 | 130 |
| 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 |
| Total | 33 | 146 | 179 | 305 | 115 | 420 | 43 | 930 | 1,572 |
| Average | 3 | 13 | 16 | 28 | 10 | 38 | 4 | 85 | 143 |

* 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. Telephone inquiries should be addressed to Ms. Louann Hall at (202) 366-4198. FAX messages should be sent to (202) 366-7078. To report a safety-related problem or to inquire about motor vehicle safety information, contact the Auto Safety Hotline at 1-800-424-9393.

