# Buses Involved in Fatal Accidents Factbook 2004



## **Center for National Truck and Bus Statistics**

University of Michigan Transportation Research Institute 2901 Baxter Road • Ann Arbor, Michigan 48109-2150

## **BUSES INVOLVED IN FATAL ACCIDENTS FACTBOOK 2004**

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Center for National Truck and Bus Statistics

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|                     | APPROXIMATE (              | CONVERSION                 | IS TO SI UNITS         |                   |                   | <b>APPROXIMATE C</b>   | ONVERSIONS    | FROM SI UNIT                  | S                   |
|---------------------|----------------------------|----------------------------|------------------------|-------------------|-------------------|------------------------|---------------|-------------------------------|---------------------|
| Symbol              | When You Know              | Multiply By                | To Find                | Symbol            | Symbol            | When You Know          | Multiply By   | To Find                       | Symbol              |
|                     |                            | LENGTH                     |                        |                   |                   |                        | LENGTH        |                               |                     |
| in                  | inches                     | 25.4                       | millimeters            | mm                | mm                | Millimeters            | 0.039         | Inches                        | in                  |
| ft                  | feet                       | 0.305                      | meters                 | m                 | M                 | Meters                 | 3.28          | Feet                          | ft                  |
| yd                  | yards                      | 0.914                      | meters                 | m                 | M                 | Meters                 | 1.09          | Yards                         | yd                  |
| mi                  | miles                      | 1.61                       | kilometers             | km                | Km                | Kilometers             | 0.621         | Miles                         | mi                  |
|                     |                            | AREA                       |                        |                   |                   |                        | AREA          |                               |                     |
| in <sup>2</sup>     | square inches              | 645.2                      | square millimeters     | $mm^2$            | mm <sup>2</sup>   | square millimeters     | 0.0016        | square inches                 | in <sup>2</sup>     |
| ft <sup>2</sup>     | square feet                | 0.093                      | square meters          | $m^2$             | m <sup>2</sup>    | square meters          | 10.764        | square feet                   | ft <sup>2</sup>     |
| yd <sup>2</sup>     | square yards               | 0.836                      | square meters          | $m^2$             | m <sup>2</sup>    | square meters          | 1.195         | square yards                  | yd <sup>2</sup>     |
| ac                  | acres                      | 0.405                      | hectares               | ha                | На                | Hectares               | 2.47          | Acres                         | ac                  |
| mi <sup>2</sup>     | square miles               | 2.59                       | square kilometers      | km <sup>2</sup>   | Km <sup>2</sup>   | square kilometers      | 0.386         | square miles                  | mi <sup>2</sup>     |
|                     |                            | VOLUME                     |                        |                   |                   |                        | VOLUME        |                               |                     |
| fl oz               | fluid ounces               | 29.57                      | milliliters            | mL                | rnL               | Milliliters            | 0.034         | fluid ounces                  | fl oz               |
| gal                 | gallons                    | 3.785                      | liters                 | L                 | L                 | Liters                 | 0.264         | Gallons                       | gal<br>ft³          |
| gal<br>ft³          | cubic feet                 | 0.028                      | cubic meters           | $m^3$             | m <sup>3</sup>    | cubic meters           | 35.71         | cubic feet                    |                     |
| yd <sup>3</sup>     | cubic yards                | 0.765                      | cubic meters           | $m^3$             | m <sup>3</sup>    | cubic meters           | 1.307         | cubic yards                   | yd <sup>3</sup>     |
| NOTE: Vo            | olumes greater than 1000   | L shall be shown           | in m <sup>3</sup> .    |                   |                   |                        |               |                               |                     |
|                     |                            | MASS                       |                        |                   |                   |                        | MASS          |                               |                     |
| OZ                  | ounces                     | 28.35                      | grams                  | g                 | G                 | Grams                  | 0.035         | Ounces                        | oz                  |
| lb                  | pounds                     | 0.454                      | kilograms              | kg                | Kg                | Kilograms              | 2.202         | Pounds                        | lb                  |
| Т                   | short tons (2001 lb)       | 0.907                      | megagrams              | Mg                | Mg                | megagrams              | 1.103         | short tons                    | Т                   |
|                     |                            |                            | (or "metric ton")      | (or "t")          | (or "t")          | (or "metric ton")      |               | (2001 lb)                     |                     |
|                     | TEMP                       | ERATURE (exa               | act)                   |                   |                   | TEMF                   | PERATURE (exa | act)                          |                     |
| °F                  | Fahrenheit<br>temperature  | 5(F-32)/9<br>or (F-32)/1.8 | Celcius<br>temperature | °C                | °C                | Celcius<br>temperature | 1.8C + 32     | Fahrenheit temperature        | °F                  |
|                     | IL                         | LUMINATION                 |                        |                   |                   | I                      | LLUMINATION   |                               |                     |
| fc                  | foot-candles               | 10.76                      | lux                    | lx                | Lx                | Lux                    | 0.0929        | foot-candles                  | fc                  |
| fl                  | foot-Lamberts              | 3.426                      | candela/m <sup>2</sup> | cd/m <sup>2</sup> | Cd/m <sup>2</sup> | candela/m <sup>2</sup> | 0.2919        | foot-lamberts                 | fl                  |
|                     | FORCE and                  | PRESSURE or                | STRESS                 |                   |                   | FORCE and              | d PRESSURE o  | r STRESS                      |                     |
| lbf                 | poundforce                 | 4.45                       | newtons                | N                 | N                 | Newtons                | 0.225         | Poundforce                    | lbf                 |
| lbf/in <sup>2</sup> | poundforce per square inch | 6.89                       | kilopascals            | kpa               | kPa               | Kilopascals            | 0.145         | poundforce per<br>square inch | lbf/in <sup>2</sup> |

<sup>\*</sup> SI is the symbol for the International System of Units. Appropriate rounding should be made to comply with Section 4 of ASTM E380.

(Revised September 1993)

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The BIFA survey is conducted by the Center for National Truck and Bus Statistics at the University of Michigan Transportation Research Institute. The preparation of the data file and codebook was supported by the Federal Motor Carrier Safety Administration.

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## Introduction

This report, *Buses Involved in Fatal Accidents Factbook 2004*, provides descriptive statistics about buses involved in fatal accidents in the United States. The data come from the Buses Involved in Fatal Accidents (BIFA) survey program, initiated in 1999 by the Center for National Truck and Bus Statistics (CNTBS) at the University of Michigan Transportation Research Institute (UMTRI).

Modeled after UMTRI's Trucks Involved in Fatal Accidents (TIFA) program, the BIFA survey collects detailed information on all buses involved in all fatal traffic accidents. Buses are defined as motor vehicles with seating for nine or more, including the driver, that are not operated as personal transportation, and all motor vehicles with seating for 16 or more.

The BIFA file is produced annually, beginning with the 1999 data year, from a survey of bus crashes identified from the Fatality Analysis Reporting System (FARS) file, compiled by the National Center for Statistics and Analysis at the National Highway Traffic Safety Administration. Accident, vehicle, and driver records that appear to involve a bus are selected from the FARS file. Police reports for each accident represented are requested from the appropriate states. The 2004 BIFA file is a census file, meaning there is one record for each of the 307 buses involved in a fatal accident that year.

Trained and experienced interviewers contact individuals knowledgeable about the bus, including drivers, safety officers, police officers, emergency personnel, and witnesses. The interviewers verify that the vehicle is a bus and then collect information about the bus, bus driver, and the motor carrier that operated the bus. The interview produces a detailed description of the physical configuration of the bus, the operating authority of the bus, and the trip the bus was on at the time of the accident. An editor reviews each case to ensure accuracy and consistency.

The BIFA file combines the detailed physical description of the vehicle from the BIFA survey with matching accident, driver, and vehicle data from the FARS file. Almost all variables in FARS describing the accident, vehicle, and driver are included in the BIFA file. No FARS data are altered or corrected. The BIFA variables supplement the FARS data with extensive detail on the bus, including the bus's seating capacity; its weight and length; the number of passengers at the time of the crash; operating authority; type of trip; hours driving; and the bus's role in the accident. The methodology, as well as a complete list of variables and data in the BIFA survey, is fully documented in *Buses Involved in Fatal Accidents Codebook 2004*.

#### Report overview

This report consists of four sections. The "Trends" section provides data on fatalities and fatal accident involvements from 2000 through 2004. The "Accident conditions" section provides information about the accidents the buses were involved in, including distributions of bus fatal involvements across states, and information about the weather, road type, and roadway condition at the time of the accident. The "Vehicle" section includes statistics about bus body style, seating capacity, and the weights, lengths, and axle counts of the buses. The "Driver" section includes information about bus driver injury, licensing, previous driving record, age, sex, and other driver characteristics.

Virtually all tables present counts of involvements: that is, the number of the buses involved in a fatal accident by various factors and conditions of interest.

Within this report buses are classified by how they are operated rather than by their physical configuration. The BIFA survey collects a detailed physical description of each vehicle. But the most meaningful and straightforward classification for this report is how the bus is used. Thus, if a bus is used to transport K-12 students for a school, it is classified as a school bus. Other buses that are of the type designed for use as school buses, but which are actually used for a different purpose, are classified according to the operator type. "School buses" that are converted to private use would be classified as "other bus type" here, a category used for the less common operator types. Likewise, a "school bus" used by a charter bus company would be categorized as "charter." However, in most cases the physical configuration of the bus corresponds to the expected type for each.

#### Bus Operator Types Used in this Factbook

School – any public or private school or district, or contracted carrier operating on behalf of the entity, providing transportation for pupils.

Transit – an entity providing passenger transportation over fixed, scheduled routes, within primarily urban geographical areas.

Intercity – a company providing for-hire, long-distance passenger transportation between cities over fixed routes with regular schedules.

Charter – companies that operate buses on a for-hire basis, usually providing round-trip service for a tour group or an outing, either on an ad hoc or scheduled basis.

Other – this category includes buses operated by private companies (primary business other than passenger transportation), non-governmental organizations (such as churches and non-profit organizations), non-educational units of government (such as departments of corrections or highway departments), and private individuals (entertainers, sports teams, etc.).

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Unknown – in cases where sufficient information could not be obtained about the operator type, "unknown" was assigned.

Definitions of terms and a table of abbreviations may be found on page 51.

## Trends, 2000-2004

This section contains tables displaying trends in bus involvements in fatal traffic accidents and the number of persons killed in those accidents. The trends are presented by bus operator type, state, and person type.

- During the 5-year period 2000-2004, an average of 322 buses were involved in a fatal traffic accident each year. In 2004 there was a decrease of 27 bus involvements (307 total) from 334 involvements in 2003.
- Buses owned or operated for a school district were the most common operator type, accounting for 38.9% of all buses involved in fatal crashes during the 5-year period on average. Urban transit authority buses represent the second most frequent bus type for fatal involvements, averaging 33.2%.
- 2004 experienced a slight decrease in school bus involvements (125 in 2004 compared to 130 in 2003).
- California, New York, and Florida had the greatest number of bus involvements over the period 2000-2004.
- Total fatalities for 2004 showed a decrease of 10.0% from the 2003 figure of 391. In 2004 there were 352 persons killed in crashes involving a bus; 12 of them were bus drivers, and 43 were passengers on the bus. Other vehicle drivers and passengers represented the largest source of fatalities with 201 (57.1%), and non-motorists represented 96 (27.3%) of the fatalities.
- Of the non-motorist fatalities, 90 pedestrians and 6 bicyclists were killed during 2004 in accidents involving buses.



<u>Trends, 2000-2004</u> Page 7

## Annual fatal involvements

Table 1-1 Fatal Bus Involvements by Year and Bus Type

| Accident | School | Transit | Intercity | Charter | Other | Unknown | Total |
|----------|--------|---------|-----------|---------|-------|---------|-------|
| year     | No.    | No.     | No.       | No.     | No.   | No.     | No.   |
| 2000     | 138    | 133     | 15        | 31      | 36    | 5       | 358   |
| 2001     | 131    | 96      | 15        | 37      | 23    | 10      | 312   |
| 2002     | 102    | 98      | 10        | 29      | 24    | 35      | 298   |
| 2003     | 130    | 111     | 8         | 38      | 39    | 8       | 334   |
| 2004     | 125    | 96      | 8         | 42      | 34    | 2       | 307   |
| Total    | 626    | 534     | 56        | 177     | 156   | 60      | 1609  |

Table 1-2
Fatal Bus Involvements by Year and Operator Type

|                                      | 2000 |       | 2001 |       | 2002 |       | 2003 |       | 2004 |       | Total |       |
|--------------------------------------|------|-------|------|-------|------|-------|------|-------|------|-------|-------|-------|
| Bus Operator Type                    | No.  | Pct.  | No.   | Pct.  |
| School district                      | 138  | 38.5  | 131  | 42.0  | 102  | 34.2  | 130  | 38.9  | 125  | 40.7  | 626   | 38.9  |
| Urban transit authority              | 133  | 37.2  | 96   | 30.8  | 98   | 32.9  | 111  | 33.2  | 96   | 31.3  | 534   | 33.2  |
| Scheduled intercity                  | 15   | 4.2   | 15   | 4.8   | 10   | 3.4   | 8    | 2.4   | 8    | 2.6   | 56    | 3.5   |
| Charter bus                          | 31   | 8.7   | 37   | 11.9  | 29   | 9.7   | 38   | 11.4  | 42   | 13.7  | 177   | 11.0  |
| Private company                      | 3    | 0.8   | 2    | 0.6   | 2    | 0.7   | 4    | 1.2   | 2    | 0.7   | 13    | 0.8   |
| Non-government organization          | 12   | 3.4   | 9    | 2.9   | 10   | 3.4   | 11   | 3.3   | 9    | 2.9   | 51    | 3.2   |
| Non-educational unit of government   | 6    | 1.7   | 1    | 0.3   | 4    | 1.3   | 7    | 2.1   | 6    | 2.0   | 24    | 1.5   |
| Private, for personal transportation | 0    | 0.0   | 1    | 0.3   | 1    | 0.3   | 0    | 0.0   | 0    | 0.0   | 2     | 0.1   |
| Other                                | 15   | 4.2   | 10   | 3.2   | 7    | 2.3   | 17   | 5.1   | 17   | 5.5   | 66    | 4.1   |
| Unknown                              | 5    | 1.4   | 10   | 3.2   | 35   | 11.7  | 8    | 2.4   | 2    | 0.7   | 60    | 3.7   |
| Total                                | 358  | 100.0 | 312  | 100.0 | 298  | 100.0 | 334  | 100.0 | 307  | 100.0 | 1609  | 100.0 |

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Table 1-3
Fatal Bus Involvements by Year, Bus Type and Passenger Seating Capacity

| Bus operator type      | 200 | 10    | 200 | )1    | 200 | )2    | 200 | )3    | 200 | )4    | Tot  | tal   |
|------------------------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|------|-------|
| Bus seating capacity   | No. | Pct.  | No.  | Pct.  |
| School district        |     |       |     |       |     |       |     |       |     |       |      |       |
| 8-14                   | 3   | 0.8   | 3   | 1.0   | 3   | 1.0   | 5   | 1.5   | 0   | 0.0   | 14   | 0.9   |
| 15-50                  | 27  | 7.5   | 18  | 5.8   | 23  | 7.7   | 29  | 8.7   | 14  | 4.6   | 111  | 6.9   |
| 51-99                  | 100 | 27.9  | 107 | 34.3  | 74  | 24.8  | 92  | 27.5  | 99  | 32.2  | 472  | 29.3  |
| Est. 15 or more        | 2   | 0.6   | 1   | 0.3   | 2   | 0.7   | 2   | 0.6   | 10  | 3.3   | 17   | 1.1   |
| Unknown                | 6   | 1.7   | 2   | 0.6   | 0   | 0.0   | 2   | 0.6   | 2   | 0.7   | 12   | 0.7   |
| Total school district  | 138 | 38.5  | 131 | 42.0  | 102 | 34.2  | 130 | 38.9  | 125 | 40.7  | 626  | 38.9  |
| Transit bus authority  |     |       |     |       |     |       |     |       |     |       |      |       |
| 8-14                   | 4   | 1.1   | 1   | 0.3   | 2   | 0.7   | 5   | 1.5   | 5   | 1.6   | 17   | 1.1   |
| 15-50                  | 115 | 32.1  | 81  | 26.0  | 89  | 29.9  | 91  | 27.2  | 69  | 22.5  | 445  | 27.7  |
| 51-99                  | 10  | 2.8   | 13  | 4.2   | 5   | 1.7   | 7   | 2.1   | 3   | 1.0   | 38   | 2.4   |
| Est. 15 or more        | 2   | 0.6   | 0   | 0.0   | 1   | 0.3   | 7   | 2.1   | 18  | 5.9   | 28   | 1.7   |
| Unknown                | 2   | 0.6   | 1   | 0.3   | 1   | 0.3   | 1   | 0.3   | 1   | 0.3   | 6    | 0.4   |
| Total transit bus      | 133 | 37.2  | 96  | 30.8  | 98  | 32.9  | 111 | 33.2  | 96  | 31.3  | 534  | 33.2  |
| Intercity bus operator |     | •     |     | -     |     |       |     |       |     |       |      |       |
| 8-14                   | 0   | 0.0   | 0   | 0.0   | 0   | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   |
| 15-50                  | 9   | 2.5   | 10  | 3.2   | 7   | 2.3   | 3   | 0.9   | 4   | 1.3   | 33   | 2.1   |
| 51-99                  | 6   | 1.7   | 5   | 1.6   | 3   | 1.0   | 5   | 1.5   | 4   | 1.3   | 23   | 1.4   |
| Total intercity bus    | 15  | 4.2   | 15  | 4.8   | 10  | 3.4   | 8   | 2.4   | 8   | 2.6   | 56   | 3.5   |
| Charter bus operator   |     |       |     |       |     |       |     |       |     |       |      |       |
| 8-14                   | 1   | 0.3   | 0   | 0.0   | 0   | 0.0   | 0   | 0.0   | 1   | 0.3   | 2    | 0.1   |
| 15-50                  | 11  | 3.1   | 18  | 5.8   | 14  | 4.7   | 14  | 4.2   | 18  | 5.9   | 75   | 4.7   |
| 51-99                  | 13  | 3.6   | 8   | 2.6   | 7   | 2.3   | 17  | 5.1   | 16  | 5.2   | 61   | 3.8   |
| Est. 15 or more        | 4   | 1.1   | 9   | 2.9   | 8   | 2.7   | 4   | 1.2   | 7   | 2.3   | 32   | 2.0   |
| Unknown                | 2   | 0.6   | 2   | 0.6   | 0   | 0.0   | 3   | 0.9   | 0   | 0.0   | 7    | 0.4   |
| Total charter bus      | 31  | 8.7   | 37  | 11.9  | 29  | 9.7   | 38  | 11.4  | 42  | 13.7  | 177  | 11.0  |
| Other operator         |     |       |     |       |     |       |     |       |     |       |      |       |
| 8-14                   | 11  | 3.1   | 3   | 1.0   | 6   | 2.0   | 17  | 5.1   | 18  | 5.9   | 55   | 3.4   |
| 15-50                  | 21  | 5.9   | 14  | 4.5   | 12  | 4.0   | 17  | 5.1   | 8   | 2.6   | 72   | 4.5   |
| 51-99                  | 2   | 0.6   | 4   | 1.3   | 3   | 1.0   | 4   | 1.2   | 3   | 1.0   | 16   | 1.0   |
| Est. 15 or more        | 2   | 0.6   | 1   | 0.3   | 3   | 1.0   | 0   | 0.0   | 4   | 1.3   | 10   | 0.6   |
| Unknown                | 0   | 0.0   | 1   | 0.3   | 0   | 0.0   | 1   | 0.3   | 1   | 0.3   | 3    | 0.2   |
| Total other            | 36  | 10.1  | 23  | 7.4   | 24  | 8.1   | 39  | 11.7  | 34  | 11.1  | 156  | 9.7   |
| Unknown operator type  |     |       |     |       |     |       |     |       |     |       |      |       |
| 8-14                   | 1   | 0.3   | 0   | 0.0   | 3   | 1.0   | 0   | 0.0   | 0   | 0.0   | 4    | 0.2   |
| 15-50                  | 3   | 0.8   | 0   | 0.0   | 0   | 0.0   | 1   | 0.3   | 0   | 0.0   | 4    | 0.2   |
| 51-99                  | 0   | 0.0   | 0   | 0.0   | 0   | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   |
| Est. 15 or more        | 0   | 0.0   | 0   | 0.0   | 3   | 1.0   | 0   | 0.0   | 1   | 0.3   | 4    | 0.2   |
| Unknown                | 1   | 0.3   | 10  | 3.2   | 29  | 9.7   | 7   | 2.1   | 1   | 0.3   | 48   | 3.0   |
| Total unknown          | 5   | 1.4   | 10  | 3.2   | 35  | 11.7  | 8   | 2.4   | 2   | 0.7   | 60   | 3.7   |
| Total                  | 358 | 100.0 | 312 | 100.0 | 298 | 100.0 | 334 | 100.0 | 307 | 100.0 | 1609 | 100.0 |

Trends, 1999-2004 Page 9

Table 1-4 Fatal Bus Involvements by Year and State

|                  | 200 | 00    | 200 | 1     | 200 | 2     | 200 | 3     | 200 | )4    | Tota | al    |
|------------------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|------|-------|
| State            | No. | Pct.  | No.  | Pct.  |
| Alabama          | 3   | 0.8   | 4   | 1.3   | 1   | 0.3   | 2   | 0.6   | 5   | 1.6   | 15   | 0.9   |
| Alaska           | 3   | 0.8   | 3   | 1.0   | 0   | 0.0   | 0   | 0.0   | 1   | 0.3   | 7    | 0.4   |
| Arizona          | 7   | 2.0   | 6   | 1.9   | 8   | 2.7   | 8   | 2.4   | 12  | 3.9   | 41   | 2.5   |
| Arkansas         | 1   | 0.3   | 7   | 2.2   | 3   | 1.0   | 1   | 0.3   | 4   | 1.3   | 16   | 1.0   |
| California       | 38  | 10.6  | 38  | 12.2  | 38  | 12.8  | 41  | 12.3  | 37  | 12.1  | 192  | 11.9  |
| Colorado         | 8   | 2.2   | 6   | 1.9   | 6   | 2.0   | 9   | 2.7   | 4   | 1.3   | 33   | 2.1   |
| Connecticut      | 2   | 0.6   | 0   | 0.0   | 3   | 1.0   | 1   | 0.3   | 2   | 0.7   | 8    | 0.5   |
| Delaware         | 1   | 0.3   | 0   | 0.0   | 1   | 0.3   | 4   | 1.2   | 2   | 0.7   | 8    | 0.5   |
| Dist of Columbia | 3   | 0.8   | 2   | 0.6   | 1   | 0.3   | 2   | 0.6   | 1   | 0.3   | 9    | 0.6   |
| Florida          | 38  | 10.6  | 21  | 6.7   | 22  | 7.4   | 21  | 6.3   | 26  | 8.5   | 128  | 8.0   |
| Georgia          | 12  | 3.4   | 9   | 2.9   | 8   | 2.7   | 13  | 3.9   | 10  | 3.3   | 52   | 3.2   |
| Hawaii           | 4   | 1.1   | 5   | 1.6   | 5   | 1.7   | 3   | 0.9   | 5   | 1.6   | 22   | 1.4   |
| Idaho            | 0   | 0.0   | 4   | 1.3   | 2   | 0.7   | 1   | 0.3   | 1   | 0.3   | 8    | 0.5   |
| Illinois         | 13  | 3.6   | 13  | 4.2   | 7   | 2.3   | 7   | 2.1   | 6   | 2.0   | 46   | 2.9   |
| Indiana          | 4   | 1.1   | 4   | 1.3   | 1   | 0.3   | 4   | 1.2   | 3   | 1.0   | 16   | 1.0   |
| Iowa             | 5   | 1.4   | 3   | 1.0   | 3   | 1.0   | 3   | 0.9   | 4   | 1.3   | 18   | 1.1   |
| Kansas           | 4   | 1.1   | 2   | 0.6   | 3   | 1.0   | 4   | 1.2   | 3   | 1.0   | 16   | 1.0   |
| Kentucky         | 4   | 1.1   | 2   | 0.6   | 5   | 1.7   | 5   | 1.5   | 5   | 1.6   | 21   | 1.3   |
| Louisiana        | 2   | 0.6   | 8   | 2.6   | 3   | 1.0   | 5   | 1.5   | 4   | 1.3   | 22   | 1.4   |
| Maine            | 0   | 0.0   | 2   | 0.6   | 0   | 0.0   | 0   | 0.0   | 1   | 0.3   | 3    | 0.2   |
| Maryland         | 4   | 1.1   | 5   | 1.6   | 5   | 1.7   | 12  | 3.6   | 10  | 3.3   | 36   | 2.2   |
| Massachusetts    | 3   | 0.8   | 3   | 1.0   | 6   | 2.0   | 5   | 1.5   | 4   | 1.3   | 21   | 1.3   |
| Michigan         | 17  | 4.7   | 9   | 2.9   | 11  | 3.7   | 6   | 1.8   | 10  | 3.3   | 53   | 3.3   |
| Minnesota        | 10  | 2.8   | 5   | 1.6   | 4   | 1.3   | 6   | 1.8   | 4   | 1.3   | 29   | 1.8   |
| Mississippi      | 3   | 0.8   | 2   | 0.6   | 1   | 0.3   | 1   | 0.3   | 2   | 0.7   | 9    | 0.6   |
| Missouri         | 8   | 2.2   | 6   | 1.9   | 8   | 2.7   | 10  | 3.0   | 7   | 2.3   | 39   | 2.4   |
| Montana          | 0   | 0.0   | 0   | 0.0   | 1   | 0.3   | 1   | 0.3   | 0   | 0.0   | 2    | 0.1   |
| Nebraska         | 0   | 0.0   | 2   | 0.6   | 1   | 0.3   | 3   | 0.9   | 1   | 0.3   | 7    | 0.4   |
| Nevada           | 6   | 1.7   | 5   | 1.6   | 6   | 2.0   | 6   | 1.8   | 2   | 0.7   | 25   | 1.6   |
| New Hampshire    | 1   | 0.3   | 0   | 0.0   | 0   | 0.0   | 1   | 0.3   | 1   | 0.3   | 3    | 0.2   |
| New Jersey       | 13  | 3.6   | 10  | 3.2   | 12  | 4.0   | 10  | 3.0   | 13  | 4.2   | 58   | 3.6   |
| New Mexico       | 5   | 1.4   | 3   | 1.0   | 5   | 1.7   | 3   | 0.9   | 4   | 1.3   | 20   | 1.2   |
| New York         | 33  | 9.2   | 39  | 12.5  | 26  | 8.7   | 32  | 9.6   | 25  | 8.1   | 155  | 9.6   |
| North Carolina   | 7   | 2.0   | 2   | 0.6   | 6   | 2.0   | 9   | 2.7   | 8   | 2.6   | 32   | 2.0   |
| North Dakota     | 1   | 0.3   | 0   | 0.0   | 1   | 0.3   | 3   | 0.9   | 0   | 0.0   | 5    | 0.3   |
| Ohio             | 9   | 2.5   | 6   | 1.9   | 9   | 3.0   | 14  | 4.2   | 6   | 2.0   | 44   | 2.7   |
| Oklahoma         | 8   | 2.2   | 4   | 1.3   | 4   | 1.3   | 5   | 1.5   | 3   | 1.0   | 24   | 1.5   |
| Oregon           | 0   | 0.0   | 2   | 0.6   | 3   | 1.0   | 3   | 0.9   | 2   | 0.7   | 10   | 0.6   |
| Pennsylvania     | 17  | 4.7   | 12  | 3.8   | 15  | 5.0   | 27  | 8.1   | 14  | 4.6   | 85   | 5.3   |
| Rhode Island     | 2   | 0.6   | 1   | 0.3   | 2   | 0.7   | 0   | 0.0   | 1   | 0.3   | 6    | 0.4   |
| South Carolina   | 2   | 0.6   | 7   | 2.2   | 5   | 1.7   | 0   | 0.0   | 6   | 2.0   | 20   | 1.2   |
| South Dakota     | 0   | 0.0   | 0   | 0.0   | 0   | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   |
| Tennessee        | 7   | 2.0   | 6   | 1.9   | 3   | 1.0   | 5   | 1.5   | 7   | 2.3   | 28   | 1.7   |
| Texas            | 28  | 7.8   | 16  | 5.1   | 24  | 8.1   | 17  | 5.1   | 18  | 5.9   | 103  | 6.4   |
| Utah             | 4   | 1.1   | 2   | 0.6   | 2   | 0.7   | 2   | 0.6   | 4   | 1.3   | 14   | 0.9   |
| Vermont          | 0   | 0.0   |     | 0.3   | 1   | 0.3   | 2   | 0.6   | 0   | 0.0   | 4    | 0.2   |
| Virginia         | 4   | 1.1   | 5   | 1.6   | 6   | 2.0   | 4   | 1.2   | 9   | 2.9   | 28   | 1.7   |
| Washington       | 4   | 1.1   | 10  | 3.2   | 3   | 1.0   | 6   | 1.8   | 2   | 0.7   | 25   | 1.6   |
| West Virginia    | 0   | 0.0   | 2   | 0.6   | 3   | 1.0   | 1   | 0.3   | 2   | 0.7   | 8    | 0.5   |
| Wisconsin        | 7   | 2.0   | 8   | 2.6   | 5   | 1.7   | 6   | 1.8   | 6   | 2.0   | 32   | 2.0   |
| Wyoming          | 3   | 0.8   | 0   | 0.0   | 0   | 0.0   | 0   | 0.0   | 0   | 0.0   | 3    | 0.2   |
| Total            | 358 | 100.0 | 312 | 100.0 | 298 | 100.0 | _   | 100.0 | 307 | 100.0 | 1609 | 100.0 |
| ıolai            | 330 | 100.0 | 312 | 100.0 | 290 | 100.0 | 334 | 100.0 | 301 | 100.0 | 1009 | 100.0 |

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## Annual fatalities

Table 1-5
Fatalities in Bus Involvements by Year and Person Type

|                       | 20  | 000   | 20  | 01    | 200 | 02    | 200 | 03    | 200 | )4    | To   | otal  |
|-----------------------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|------|-------|
| Vehicle/Person type   | No. | Pct.  | No.  | Pct.  |
| Bus                   |     |       |     |       |     |       |     |       |     |       |      |       |
| Driver                | 15  | 3.8   | 12  | 3.4   | 11  | 3.1   | 9   | 2.3   | 12  | 3.4   | 47   | 2.5   |
| Passenger             | 26  | 6.6   | 25  | 7.0   | 44  | 12.3  | 49  | 12.5  | 43  | 12.2  | 187  | 10.1  |
| Unknown occupant type | 0   | 0.0   | 0   | 0.0   | 0   | 0.0   | 1   | 0.3   | 0   | 0.0   | 1    | 0.1   |
| Bus total             | 41  | 10.4  | 37  | 10.4  | 55  | 15.3  | 59  | 15.1  | 55  | 15.6  | 247  | 13.3  |
| Other vehicle         |     |       |     |       |     |       |     |       |     |       |      |       |
| Drivers               | 190 | 48.1  | 153 | 43.0  | 151 | 42.1  | 157 | 40.2  | 161 | 45.7  | 812  | 43.8  |
| Passengers            | 61  | 15.4  | 60  | 16.9  | 56  | 15.6  | 73  | 18.7  | 40  | 11.4  | 290  | 15.7  |
| Unknown occupant type | 3   | 0.8   | 0   | 0.0   | 0   | 0.0   | 1   | 0.3   | 0   | 0.0   | 4    | 0.2   |
| Other vehicle total   | 254 | 64.3  | 213 | 59.8  | 207 | 57.7  | 231 | 59.1  | 201 | 57.1  | 1106 | 59.7  |
| Non-motorists         |     |       |     |       |     |       |     |       |     |       |      |       |
| Pedestrian            | 91  | 23.0  | 92  | 25.8  | 83  | 23.1  | 93  | 23.8  | 90  | 25.6  | 449  | 24.2  |
| Bicyclist             | 9   | 2.3   | 14  | 3.9   | 13  | 3.6   | 8   | 2.0   | 6   | 1.7   | 50   | 2.7   |
| Unknown non-motorist  | 0   | 0.0   | 0   | 0.0   | 1   | 0.3   | 0   | 0.0   | 0   | 0.0   | 1    | 0.1   |
| Non-motorist total    | 100 | 25.3  | 106 | 29.8  | 97  | 27.0  | 101 | 25.8  | 96  | 27.3  | 500  | 27.0  |
| Total                 | 395 | 100.0 | 356 | 100.0 | 359 | 100.0 | 391 | 100.0 | 352 | 100.0 | 1853 | 100.0 |

## Accident conditions

This section provides statistics that describe conditions at the scene of fatal traffic accidents involving buses. Tables present various accident characteristics, including temporal and environmental conditions, as well as distributions of collision type and the bus's role in the accident. Though the tables focus on accident-level characteristics, all tables show counts of buses involved in fatal accidents, rather than counts of accidents. Some fatal traffic accidents include more than one bus.

- About 50% of fatal bus involvements occurred from 6:00 to 8:59 a.m. or from 2:00 to 4:59 p.m., primarily due to school buses.
- Overall, 80.8% of fatal involvements of buses occurred during the work week, but this varies by bus type. Transit buses experienced 27.1% of their involvements on the weekend (Saturday and Sunday), compared with only 4.0% for school buses.
- The majority (83.7%) of fatal involvements occurred under "normal" weather conditions (i.e. no rain, snow, fog, or other adverse condition). Thirty or 9.8% of fatal involvements occurred under rain conditions.
- Overall, 68.4% of the fatal bus involvements occurred in daylight and 27.1% of the
  involvements occurred under dark or dark but lighted conditions. Intercity and charter
  buses had a high incidence of fatal involvements occurring during dark or dark but
  lighted conditions, accounting for 50.0% and 42.8% of the involvements,
  respectively.
- Local streets (township or municipality) accounted for 34.6% of fatal bus involvements, 24.8% of bus involvements were on state highways, and 14% were on county roads.
- Over sixty-five percent of the fatal involvements of buses occurred on undivided roads with two-way traffic.
- In 30.0% of fatal involvements, the bus hit an object in the road (often a pedestrian or other non-motorist); in 9.8% of involvements another vehicle crossed the center line of the road and struck the bus head on; and in 10.7% of involvements the bus struck the side of another vehicle. These proportions can differ dramatically by bus type.
- In 63.2% of fatal bus involvements the first harmful event was collision with a motor vehicle; 27.4% involved collision with a pedestrian. Transit and intercity buses had the highest incidence of collisions involving pedestrians, with 45.8% and 37.5% respectively.

• Over 29% of fatal bus involvements included a non-motorist fatality. Among school buses 20% of the non-motorist fatals were passengers discharged from the bus. For all bus types, the majority of non-motorists killed were not bus passengers.

Accident conditions Page 13

## Geographic distributions

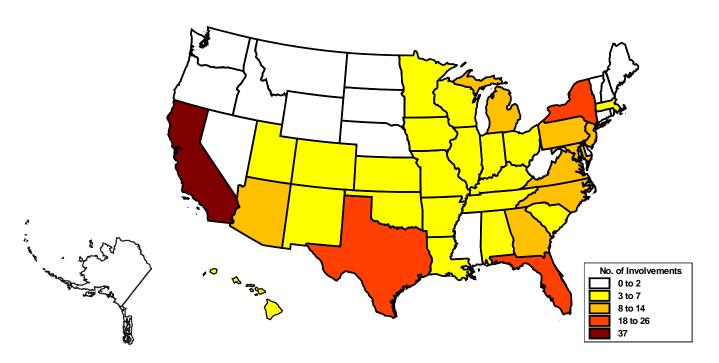


Figure 2-1: Fatal Bus Involvements by State

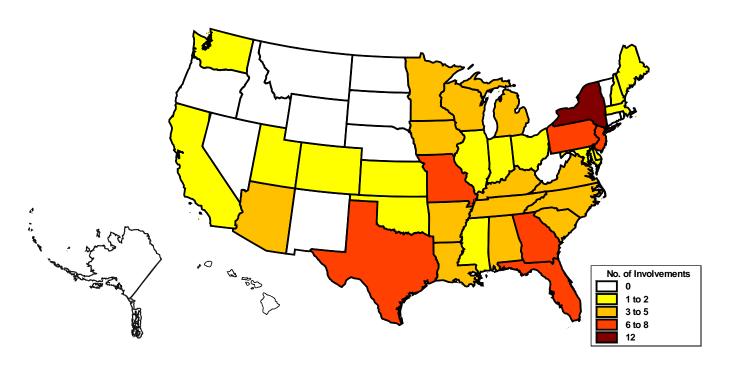


Figure 2-2: Fatal Bus Involvements by State – School Buses Only

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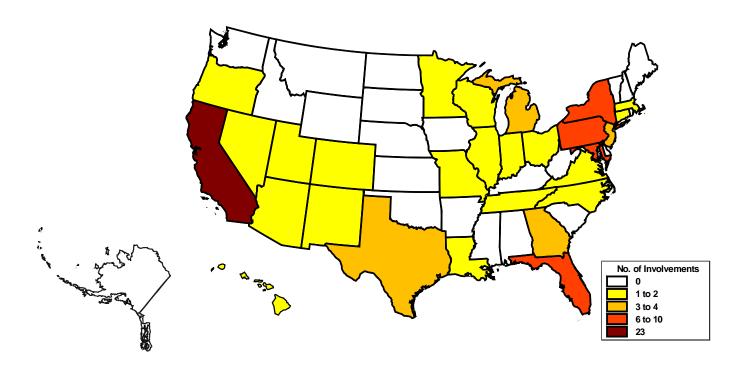


Figure 2-3: Fatal Bus Involvements by State – Transit Buses Only

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Table 2-1 Fatal Bus Involvements by State and Bus Type

|                  | Sch | nool  | Tra | nsit  | Inte | rcity | Cha | arter | Ot  | her   | Unkr | nown  | To  | tal   |
|------------------|-----|-------|-----|-------|------|-------|-----|-------|-----|-------|------|-------|-----|-------|
| State            | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  |
| Alabama          | 3   | 2.4   | 0   | 0.0   | 0    | 0.0   | 1   | 2.4   | 1   | 2.9   | 0    | 0.0   | 5   | 1.6   |
| Alaska           | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 2.4   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| Arizona          | 3   | 2.4   | 2   | 2.1   | 2    | 25.0  | 2   | 4.8   | 3   | 8.8   | 0    | 0.0   | 12  | 3.9   |
| Arkansas         | 3   | 2.4   | 0   | 0.0   | 0    | 0.0   | 1   | 2.4   | 0   | 0.0   | 0    | 0.0   | 4   | 1.3   |
| California       | 2   | 1.6   | 23  | 24.0  | 0    | 0.0   | 8   | 19.0  | 4   | 11.8  | 0    | 0.0   | 37  | 12.1  |
| Colorado         | 1   | 0.8   | 1   | 1.0   | 0    | 0.0   | 2   | 4.8   | 0   | 0.0   | 0    | 0.0   | 4   | 1.3   |
| Connecticut      | 0   | 0.0   | 2   | 2.1   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 2   | 0.7   |
| Delaware         | 2   | 1.6   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 2   | 0.7   |
| Dist of Columbia | 0   | 0.0   | 1   | 1.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| Florida          | 7   | 5.6   | 10  | 10.4  | 0    | 0.0   | 6   | 14.3  | 2   | 5.9   | 1    | 50.0  | 26  | 8.5   |
| Georgia          | 6   | 4.8   | 3   | 3.1   | 1    | 12.5  | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 10  | 3.3   |
| Hawaii           | 0   | 0.0   | 1   | 1.0   | 0    | 0.0   | 2   | 4.8   | 2   | 5.9   | 0    | 0.0   | 5   | 1.6   |
| Idaho            | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 1   | 2.9   | 0    | 0.0   | 1   | 0.3   |
| Illinois         | 2   | 1.6   | 2   | 2.1   | 0    | 0.0   | 1   | 2.4   | 1   | 2.9   | 0    | 0.0   | 6   | 2.0   |
| Indiana          | 1   | 0.8   | 1   | 1.0   | 0    | 0.0   | 1   | 2.4   | 0   | 0.0   | 0    | 0.0   | 3   | 1.0   |
| Iowa             | 4   | 3.2   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 4   | 1.3   |
| Kansas           | 2   | 1.6   | 0   | 0.0   | 1    | 12.5  | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 3   | 1.0   |
| Kentucky         | 4   | 3.2   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 1   | 2.9   | 0    | 0.0   | 5   | 1.6   |
| Louisiana        | 3   | 2.4   | 1   | 1.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 4   | 1.3   |
| Maine            | 1   | 0.8   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| Maryland         | 1   | 0.8   | 6   | 6.3   | 1    | 12.5  | 1   | 2.4   | 1   | 2.9   | 0    | 0.0   | 10  | 3.3   |
| Massachusetts    | 1   | 0.8   | 1   | 1.0   | 1    | 12.5  | 0   | 0.0   | 1   | 2.9   | 0    | 0.0   | 4   | 1.3   |
| Michigan         | 5   | 4.0   | 4   | 4.2   | 0    | 0.0   | 1   | 2.4   | 0   | 0.0   | 0    | 0.0   | 10  | 3.3   |
| Minnesota        | 3   | 2.4   | 1   | 1.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 4   | 1.3   |
| Mississippi      | 2   | 1.6   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 2   | 0.7   |
| Missouri         | 6   | 4.8   | 1   | 1.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 7   | 2.3   |
| Montana          | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   |
| Nebraska         | 0   | 0.0   | 0   | 0.0   | 1    | 12.5  | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| Nevada           | 0   | 0.0   | 1   | 1.0   | 0    | 0.0   | 1   | 2.4   | 0   | 0.0   | 0    | 0.0   | 2   | 0.7   |
| New Hampshire    | 1   | 0.8   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| New Jersey       | 6   | 4.8   | 3   | 3.1   | 0    | 0.0   | 2   | 4.8   | 2   | 5.9   | 0    | 0.0   | 13  | 4.2   |
| New Mexico       | 0   | 0.0   | 2   | 2.1   | 0    | 0.0   | 0   | 0.0   | 2   | 5.9   | 0    | 0.0   | 4   | 1.3   |
| New York         | 12  | 9.6   | 9   | 9.4   | 0    | 0.0   | 2   | 4.8   | 1   | 2.9   | 1    | 50.0  | 25  | 8.1   |
| North Carolina   | 5   | 4.0   | 1   | 1.0   | 0    | 0.0   | 1   | 2.4   | 1   | 2.9   | 0    | 0.0   | 8   | 2.6   |
| North Dakota     | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   |
| Ohio             | 2   | 1.6   | 2   | 2.1   | 0    | 0.0   | 0   | 0.0   | 2   | 5.9   | 0    | 0.0   | 6   | 2.0   |
| Oklahoma         | 2   | 1.6   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 1   | 2.9   | 0    | 0.0   | 3   | 1.0   |
| Oregon           | 0   | 0.0   | 2   | 2.1   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 2   | 0.7   |
| Pennsylvania     | 6   | 4.8   | 7   | 7.3   | 0    | 0.0   | 0   | 0.0   | 1   | 2.9   | 0    | 0.0   | 14  | 4.6   |
| Rhode Island     | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 2.4   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| South Carolina   | 3   | 2.4   | 0   | 0.0   | 0    | 0.0   | 1   | 2.4   | 2   | 5.9   | 0    | 0.0   | 6   | 2.0   |
| South Dakota     | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   |
| Tennessee        | 5   | 4.0   | 1   | 1.0   | 1    | 12.5  | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 7   | 2.3   |
| Texas            | 8   | 6.4   | 3   | 3.1   | 0    | 0.0   | 5   | 11.9  | 2   | 5.9   | 0    | 0.0   | 18  | 5.9   |
| Utah             | 2   | 1.6   | 2   | 2.1   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 4   | 1.3   |
| Vermont          | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   |
| Virginia         | 5   | 4.0   | 2   | 2.1   | 0    | 0.0   | 1   | 2.4   | 1   | 2.9   | 0    | 0.0   | 9   | 2.9   |
| Washington       | 2   | 1.6   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 2   | 0.7   |
| West Virginia    | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 2.4   | 1   | 2.9   | 0    | 0.0   | 2   | 0.7   |
| Wisconsin        | 4   | 3.2   | 1   | 1.0   | 0    | 0.0   | 0   | 0.0   | 1   | 2.9   | 0    | 0.0   | 6   | 2.0   |
| Wyoming          | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   |
| Total            | 125 | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2    | 100.0 | 307 | 100.0 |

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## Temporal distributions

Table 2-2
Fatal Bus Involvements by Month and Bus Type

| Month of  | Sch | nool  | Tra | nsit  | Inte | rcity | Cha | arter | Ot  | her   | Unkı | nown  | To  | tal   |
|-----------|-----|-------|-----|-------|------|-------|-----|-------|-----|-------|------|-------|-----|-------|
| accident  | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  |
| January   | 15  | 12.0  | 7   | 7.3   | 0    | 0.0   | 2   | 4.8   | 3   | 8.8   | 1    | 50.0  | 28  | 9.1   |
| February  | 14  | 11.2  | 8   | 8.3   | 3    | 37.5  | 3   | 7.1   | 4   | 11.8  | 0    | 0.0   | 32  | 10.4  |
| March     | 11  | 8.8   | 7   | 7.3   | 0    | 0.0   | 6   | 14.3  | 2   | 5.9   | 1    | 50.0  | 27  | 8.8   |
| April     | 12  | 9.6   | 6   | 6.3   | 0    | 0.0   | 4   | 9.5   | 1   | 2.9   | 0    | 0.0   | 23  | 7.5   |
| May       | 17  | 13.6  | 8   | 8.3   | 1    | 12.5  | 3   | 7.1   | 3   | 8.8   | 0    | 0.0   | 32  | 10.4  |
| June      | 2   | 1.6   | 8   | 8.3   | 0    | 0.0   | 4   | 9.5   | 3   | 8.8   | 0    | 0.0   | 17  | 5.5   |
| July      | 0   | 0.0   | 6   | 6.3   | 1    | 12.5  | 2   | 4.8   | 4   | 11.8  | 0    | 0.0   | 13  | 4.2   |
| August    | 10  | 8.0   | 5   | 5.2   | 2    | 25.0  | 4   | 9.5   | 3   | 8.8   | 0    | 0.0   | 24  | 7.8   |
| September | 10  | 8.0   | 7   | 7.3   | 0    | 0.0   | 3   | 7.1   | 1   | 2.9   | 0    | 0.0   | 21  | 6.8   |
| October   | 5   | 4.0   | 10  | 10.4  | 0    | 0.0   | 3   | 7.1   | 2   | 5.9   | 0    | 0.0   | 20  | 6.5   |
| November  | 16  | 12.8  | 11  | 11.5  | 1    | 12.5  | 5   | 11.9  | 3   | 8.8   | 0    | 0.0   | 36  | 11.7  |
| December  | 13  | 10.4  | 13  | 13.5  | 0    | 0.0   | 3   | 7.1   | 5   | 14.7  | 0    | 0.0   | 34  | 11.1  |
| Total     | 125 | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2    | 100.0 | 307 | 100.0 |

Table 2-3
Fatal Bus Involvements by Day of Week and Bus Type

|             | Sch | nool  | Tra | nsit  | Inte | rcity | Cha | arter | Ot  | her   | Unkı | nown  | To  | tal   |
|-------------|-----|-------|-----|-------|------|-------|-----|-------|-----|-------|------|-------|-----|-------|
| Day of week | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  |
| Sunday      | 2   | 1.6   | 7   | 7.3   | 1    | 12.5  | 4   | 9.5   | 4   | 11.8  | 0    | 0.0   | 18  | 5.9   |
| Monday      | 23  | 18.4  | 18  | 18.8  | 2    | 25.0  | 5   | 11.9  | 5   | 14.7  | 0    | 0.0   | 53  | 17.3  |
| Tuesday     | 30  | 24.0  | 18  | 18.8  | 2    | 25.0  | 4   | 9.5   | 2   | 5.9   | 1    | 50.0  | 57  | 18.6  |
| Wednesday   | 21  | 16.8  | 11  | 11.5  | 1    | 12.5  | 6   | 14.3  | 5   | 14.7  | 0    | 0.0   | 44  | 14.3  |
| Thursday    | 24  | 19.2  | 15  | 15.6  | 0    | 0.0   | 9   | 21.4  | 3   | 8.8   | 1    | 50.0  | 52  | 16.9  |
| Friday      | 22  | 17.6  | 8   | 8.3   | 2    | 25.0  | 0   | 0.0   | 10  | 29.4  | 0    | 0.0   | 42  | 13.7  |
| Saturday    | 3   | 2.4   | 19  | 19.8  | 0    | 0.0   | 14  | 33.3  | 5   | 14.7  | 0    | 0.0   | 41  | 13.4  |
| Total       | 125 | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2    | 100.0 | 307 | 100.0 |

Table 2-4
Fatal Bus Involvements by Day Type and Bus Type

|           | Sch | nool  | Tra | nsit  | Inte | rcity | Cha | arter | Ot  | her   | Unkı | nown  | To  | tal   |
|-----------|-----|-------|-----|-------|------|-------|-----|-------|-----|-------|------|-------|-----|-------|
| Day type  | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  |
| Work week | 120 | 96.0  | 70  | 72.9  | 7    | 87.5  | 24  | 57.1  | 25  | 73.5  | 2    | 100.0 | 248 | 80.8  |
| Weekend   | 5   | 4.0   | 26  | 27.1  | 1    | 12.5  | 18  | 42.9  | 9   | 26.5  | 0    | 0.0   | 59  | 19.2  |
| Total     | 125 | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2    | 100.0 | 307 | 100.0 |

Note: Work week is defined as Monday through Friday, and weekend as Saturday and Sunday.

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Table 2-5
Fatal Bus Involvements by Time of Accident and Bus Type

| Time of  | Scł | nool  | Tra | nsit  | Inte | rcity | Cha | arter | Otl | ner   | Unkı | nown  | To  | tal   |
|----------|-----|-------|-----|-------|------|-------|-----|-------|-----|-------|------|-------|-----|-------|
| accident | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  |
| Midnight | 1   | 0.8   | 3   | 3.1   | 0    | 0.0   | 1   | 2.4   | 0   | 0.0   | 0    | 0.0   | 5   | 1.6   |
| 1:00 AM  | 0   | 0.0   | 0   | 0.0   | 1    | 12.5  | 2   | 4.8   | 1   | 2.9   | 0    | 0.0   | 4   | 1.3   |
| 2:00 AM  | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 2.4   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| 3:00 AM  | 0   | 0.0   | 1   | 1.0   | 0    | 0.0   | 2   | 4.8   | 0   | 0.0   | 0    | 0.0   | 3   | 1.0   |
| 4:00 AM  | 0   | 0.0   | 4   | 4.2   | 2    | 25.0  | 1   | 2.4   | 1   | 2.9   | 0    | 0.0   | 8   | 2.6   |
| 5:00 AM  | 1   | 0.8   | 2   | 2.1   | 1    | 12.5  | 5   | 11.9  | 1   | 2.9   | 1    | 50.0  | 11  | 3.6   |
| 6:00 AM  | 8   | 6.4   | 2   | 2.1   | 0    | 0.0   | 1   | 2.4   | 1   | 2.9   | 0    | 0.0   | 12  | 3.9   |
| 7:00 AM  | 33  | 26.4  | 2   | 2.1   | 1    | 12.5  | 1   | 2.4   | 4   | 11.8  | 0    | 0.0   | 41  | 13.4  |
| 8:00 AM  | 11  | 8.8   | 3   | 3.1   | 0    | 0.0   | 1   | 2.4   | 2   | 5.9   | 0    | 0.0   | 17  | 5.5   |
| 9:00 AM  | 2   | 1.6   | 5   | 5.2   | 0    | 0.0   | 3   | 7.1   | 3   | 8.8   | 0    | 0.0   | 13  | 4.2   |
| 10:00 AM | 2   | 1.6   | 4   | 4.2   | 1    | 12.5  | 2   | 4.8   | 1   | 2.9   | 0    | 0.0   | 10  | 3.3   |
| 11:00 AM | 2   | 1.6   | 4   | 4.2   | 0    | 0.0   | 4   | 9.5   | 1   | 2.9   | 0    | 0.0   | 11  | 3.6   |
| Noon     | 2   | 1.6   | 4   | 4.2   | 0    | 0.0   | 0   | 0.0   | 3   | 8.8   | 0    | 0.0   | 9   | 2.9   |
| 1:00 PM  | 8   | 6.4   | 6   | 6.3   | 0    | 0.0   | 2   | 4.8   | 1   | 2.9   | 0    | 0.0   | 17  | 5.5   |
| 2:00 PM  | 17  | 13.6  | 4   | 4.2   | 0    | 0.0   | 3   | 7.1   | 1   | 2.9   | 1    | 50.0  | 26  | 8.5   |
| 3:00 PM  | 25  | 20.0  | 6   | 6.3   | 1    | 12.5  | 3   | 7.1   | 4   | 11.8  | 0    | 0.0   | 39  | 12.7  |
| 4:00 PM  | 8   | 6.4   | 6   | 6.3   | 0    | 0.0   | 2   | 4.8   | 2   | 5.9   | 0    | 0.0   | 18  | 5.9   |
| 5:00 PM  | 1   | 0.8   | 7   | 7.3   | 0    | 0.0   | 0   | 0.0   | 1   | 2.9   | 0    | 0.0   | 9   | 2.9   |
| 6:00 PM  | 1   | 0.8   | 11  | 11.5  | 1    | 12.5  | 1   | 2.4   | 1   | 2.9   | 0    | 0.0   | 15  | 4.9   |
| 7:00 PM  | 0   | 0.0   | 5   | 5.2   | 0    | 0.0   | 1   | 2.4   | 1   | 2.9   | 0    | 0.0   | 7   | 2.3   |
| 8:00 PM  | 1   | 0.8   | 7   | 7.3   | 0    | 0.0   | 1   | 2.4   | 2   | 5.9   | 0    | 0.0   | 11  | 3.6   |
| 9:00 PM  | 2   | 1.6   | 2   | 2.1   | 0    | 0.0   | 2   | 4.8   | 2   | 5.9   | 0    | 0.0   | 8   | 2.6   |
| 10:00 PM | 0   | 0.0   | 2   | 2.1   | 0    | 0.0   | 2   | 4.8   | 1   | 2.9   | 0    | 0.0   | 5   | 1.6   |
| 11:00 PM | 0   | 0.0   | 6   | 6.3   | 0    | 0.0   | 1   | 2.4   | 0   | 0.0   | 0    | 0.0   | 7   | 2.3   |
| Total    | 125 | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2    | 100.0 | 307 | 100.0 |

Note: 1:00 AM signfies 1:00 to 1:59 AM, etc.

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Table 2-6 Fatal Bus Involvements by Time of Accident and Day Type

| Time of  | Work | week  | Wee | kend  | Total |       |
|----------|------|-------|-----|-------|-------|-------|
| accident | No.  | Pct.  | No. | Pct.  | No.   | Pct.  |
| Midnight | 1    | 0.4   | 4   | 6.8   | 5     | 1.6   |
| 1:00 AM  | 4    | 1.6   | 0   | 0.0   | 4     | 1.3   |
| 2:00 AM  | 1    | 0.4   | 0   | 0.0   | 1     | 0.3   |
| 3:00 AM  | 0    | 0.0   | 3   | 5.1   | 3     | 1.0   |
| 4:00 AM  | 5    | 2.0   | 3   | 5.1   | 8     | 2.6   |
| 5:00 AM  | 6    | 2.4   | 5   | 8.5   | 11    | 3.6   |
| 6:00 AM  | 10   | 4.0   | 2   | 3.4   | 12    | 3.9   |
| 7:00 AM  | 38   | 15.3  | 3   | 5.1   | 41    | 13.4  |
| 8:00 AM  | 17   | 6.9   | 0   | 0.0   | 17    | 5.5   |
| 9:00 AM  | 12   | 4.8   | 1   | 1.7   | 13    | 4.2   |
| 10:00 AM | 7    | 2.8   | 3   | 5.1   | 10    | 3.3   |
| 11:00 AM | 9    | 3.6   | 2   | 3.4   | 11    | 3.6   |
| Noon     | 6    | 2.4   | 3   | 5.1   | 9     | 2.9   |
| 1:00 PM  | 14   | 5.6   | 3   | 5.1   | 17    | 5.5   |
| 2:00 PM  | 23   | 9.3   | 3   | 5.1   | 26    | 8.5   |
| 3:00 PM  | 37   | 14.9  | 2   | 3.4   | 39    | 12.7  |
| 4:00 PM  | 16   | 6.5   | 2   | 3.4   | 18    | 5.9   |
| 5:00 PM  | 7    | 2.8   | 2   | 3.4   | 9     | 2.9   |
| 6:00 PM  | 12   | 4.8   | 3   | 5.1   | 15    | 4.9   |
| 7:00 PM  | 4    | 1.6   | 3   | 5.1   | 7     | 2.3   |
| 8:00 PM  | 5    | 2.0   | 6   | 10.2  | 11    | 3.6   |
| 9:00 PM  | 7    | 2.8   | 1   | 1.7   | 8     | 2.6   |
| 10:00 PM | 3    | 1.2   | 2   | 3.4   | 5     | 1.6   |
| 11:00 PM | 4    | 1.6   | 3   | 5.1   | 7     | 2.3   |
| Total    | 248  | 100.0 | 59  | 100.0 | 307   | 100.0 |

Note: Work week is defined as Monday through Friday, and weekend as Saturday and Sunday. 1:00 AM signifies 1:00 to 1:59 AM, etc.

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### **Environmental distributions**

Table 2-7
Fatal Bus Involvements by Land Use and Bus Type

|          | Sch | nool  | Tra | nsit  | Inte | rcity | Cha | arter | Ot  | her   | Unkı | nown  | To  | tal   |
|----------|-----|-------|-----|-------|------|-------|-----|-------|-----|-------|------|-------|-----|-------|
| Land use | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  |
| Urban    | 59  | 47.2  | 90  | 93.8  | 3    | 37.5  | 21  | 50.0  | 18  | 52.9  | 2    | 100.0 | 193 | 62.9  |
| Rural    | 66  | 52.8  | 5   | 5.2   | 5    | 62.5  | 21  | 50.0  | 16  | 47.1  | 0    | 0.0   | 113 | 36.8  |
| Unknown  | 0   | 0.0   | 1   | 1.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| Total    | 125 | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2    | 100.0 | 307 | 100.0 |

Table 2-8
Fatal Bus Involvements by Light Condition and Bus Type

|                  | Sch | nool  | Tra | nsit  | Inte | rcity | Cha | arter | Ot  | her   | Unkı | nown  | To  | tal   |
|------------------|-----|-------|-----|-------|------|-------|-----|-------|-----|-------|------|-------|-----|-------|
| Light condition  | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  |
| Daylight         | 108 | 86.4  | 49  | 51.0  | 4    | 50.0  | 23  | 54.8  | 25  | 73.5  | 1    | 50.0  | 210 | 68.4  |
| Dark             | 6   | 4.8   | 9   | 9.4   | 3    | 37.5  | 10  | 23.8  | 5   | 14.7  | 1    | 50.0  | 34  | 11.1  |
| Dark but lighted | 2   | 1.6   | 34  | 35.4  | 1    | 12.5  | 8   | 19.0  | 4   | 11.8  | 0    | 0.0   | 49  | 16.0  |
| Dawn             | 8   | 6.4   | 0   | 0.0   | 0    | 0.0   | 1   | 2.4   | 0   | 0.0   | 0    | 0.0   | 9   | 2.9   |
| Dusk             | 1   | 0.8   | 4   | 4.2   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 5   | 1.6   |
| Total            | 125 | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2    | 100.0 | 307 | 100.0 |

Table 2-9
Fatal Bus Involvements by Roadway Surface Condition and Bus Type

| Roadway sur-   | Sch | nool  | Tra | ınsit | Inte | rcity | Cha | arter | Ot  | her   | Unkı | nown  | To  | tal   |
|----------------|-----|-------|-----|-------|------|-------|-----|-------|-----|-------|------|-------|-----|-------|
| face condition | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  |
| Dry            | 97  | 77.6  | 82  | 85.4  | 5    | 62.5  | 30  | 71.4  | 24  | 70.6  | 2    | 100.0 | 240 | 78.2  |
| Wet            | 19  | 15.2  | 9   | 9.4   | 0    | 0.0   | 12  | 28.6  | 7   | 20.6  | 0    | 0.0   | 47  | 15.3  |
| Snow or slush  | 7   | 5.6   | 3   | 3.1   | 2    | 25.0  | 0   | 0.0   | 1   | 2.9   | 0    | 0.0   | 13  | 4.2   |
| Ice            | 1   | 0.8   | 1   | 1.0   | 1    | 12.5  | 0   | 0.0   | 1   | 2.9   | 0    | 0.0   | 4   | 1.3   |
| Other          | 1   | 0.8   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| Unknown        | 0   | 0.0   | 1   | 1.0   | 0    | 0.0   | 0   | 0.0   | 1   | 2.9   | 0    | 0.0   | 2   | 0.7   |
| Total          | 125 | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2    | 100.0 | 307 | 100.0 |

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Table 2-10 Fatal Bus Involvements by Weather Condition and Bus Type

| Weather      | Sch | nool  | Tra | nsit  | Inte | rcity | Cha | arter | Ot  | her   | Unkı | nown  | To  | tal   |
|--------------|-----|-------|-----|-------|------|-------|-----|-------|-----|-------|------|-------|-----|-------|
| condition    | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  |
| Normal       | 102 | 81.6  | 87  | 90.6  | 6    | 75.0  | 32  | 76.2  | 28  | 82.4  | 2    | 100.0 | 257 | 83.7  |
| Rain         | 11  | 8.8   | 7   | 7.3   | 0    | 0.0   | 8   | 19.0  | 4   | 11.8  | 0    | 0.0   | 30  | 9.8   |
| Sleet        | 1   | 0.8   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| Snow         | 5   | 4.0   | 1   | 1.0   | 1    | 12.5  | 1   | 2.4   | 2   | 5.9   | 0    | 0.0   | 10  | 3.3   |
| Fog          | 4   | 3.2   | 1   | 1.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 5   | 1.6   |
| Rain and fog | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 2.4   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| Other        | 2   | 1.6   | 0   | 0.0   | 1    | 12.5  | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 3   | 1.0   |
| Total        | 125 | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2    | 100.0 | 307 | 100.0 |

## Roadway distributions

Table 2-11 Fatal Bus Involvements by Roadway Function Class and Bus Type

|                        | School |       | Transit |       | Intercity |       | Charter |       | Other |       | Unknown |       | Total |       |
|------------------------|--------|-------|---------|-------|-----------|-------|---------|-------|-------|-------|---------|-------|-------|-------|
| Road function class    | No.    | Pct.  | No.     | Pct.  | No.       | Pct.  | No.     | Pct.  | No.   | Pct.  | No.     | Pct.  | No.   | Pct.  |
| Urban                  |        |       |         |       |           |       |         |       |       |       |         |       |       |       |
| Interstate             | 0      | 0.0   | 2       | 2.1   | 0         | 0.0   | 8       | 6.0   | 4     | 11.8  | 0       | 0.0   | 14    | 4.6   |
| Freeway/expressway     | 2      | 1.6   | 6       | 6.3   | 1         | 12.5  | 1       | 2.4   | 1     | 2.9   | 0       | 0.0   | 11    | 3.6   |
| Other principal artery | 13     | 10.4  | 32      | 33.3  | 0         | 0.0   | 7       | 16.7  | 4     | 11.8  | 1       | 50.0  | 57    | 18.6  |
| Minor artery           | 15     | 12.0  | 25      | 26.0  | 0         | 0.0   | 2       | 4.8   | 4     | 11.8  | 1       | 50.0  | 47    | 15.3  |
| Collector              | 8      | 6.4   | 11      | 11.5  | 1         | 12.5  | 0       | 0.0   | 4     | 11.8  | 0       | 0.0   | 24    | 7.8   |
| Local street           | 21     | 16.8  | 13      | 13.5  | 1         | 12.5  | 2       | 4.8   | 1     | 2.9   | 0       | 0.0   | 38    | 12.4  |
| Unknown urban          | 0      | 0.0   | 1       | 1.0   | 0         | 0.0   | 1       | 2.4   | 0     | 0.0   | 0       | 0.0   | 2     | 0.7   |
| Total urban            | 59     | 47.2  | 90      | 93.8  | 3         | 37.5  | 21      | 50.0  | 18    | 52.9  | 2       | 100.0 | 193   | 62.9  |
| Rural                  |        |       |         |       |           |       |         |       |       |       |         |       |       |       |
| Interstate             | 1      | 0.8   | 0       | 0.0   | 5         | 62.5  | 9       | 21.4  | 5     | 14.7  | 0       | 0.0   | 20    | 6.5   |
| Other principal artery | 5      | 4.0   | 3       | 3.1   | 0         | 0.0   | 4       | 9.5   | 3     | 8.8   | 0       | 0.0   | 15    | 4.9   |
| Minor artery           | 18     | 14.4  | 2       | 2.1   | 0         | 0.0   | 7       | 16.7  | 5     | 14.7  | 0       | 0.0   | 32    | 10.4  |
| Major collector        | 22     | 17.6  | 0       | 0.0   | 0         | 0.0   | 0       | 0.0   | 2     | 5.9   | 0       | 0.0   | 24    | 7.8   |
| Minor collector        | 7      | 5.6   | 0       | 0.0   | 0         | 0.0   | 0       | 0.0   | 0     | 0.0   | 0       | 0.0   | 7     | 2.3   |
| Local road             | 13     | 10.4  | 0       | 0.0   | 0         | 0.0   | 1       | 2.4   | 1     | 2.9   | 0       | 0.0   | 15    | 4.9   |
| Total rural            | 66     | 52.8  | 5       | 5.2   | 5         | 62.5  | 21      | 50.0  | 16    | 47.1  | 0       | 0.0   | 113   | 36.8  |
| Unknown                | 0      | 0.0   | 1       | 1.0   | 0         | 0.0   | 0       | 0.0   | 0     | 0.0   | 0       | 0.0   | 1     | 0.3   |
| Total urban and rural  | 125    | 100.0 | 96      | 100.0 | 8         | 100.0 | 42      | 100.0 | 34    | 100.0 | 2       | 100.0 | 307   | 100.0 |

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Table 2-12 Fatal Bus Involvements by Route Signing and Bus Type

|               | Sch | ool   | Tra | nsit  | Inte | rcity | Cha | arter | Ot  | her   | Unkı | nown  | To  | tal   |
|---------------|-----|-------|-----|-------|------|-------|-----|-------|-----|-------|------|-------|-----|-------|
| Route signing | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  |
| Interstate    | 2   | 1.6   | 2   | 2.1   | 5    | 62.5  | 14  | 33.3  | 9   | 26.5  | 0    | 0.0   | 32  | 10.4  |
| US highway    | 12  | 9.6   | 10  | 10.4  | 0    | 0.0   | 9   | 21.4  | 8   | 23.5  | 0    | 0.0   | 39  | 12.7  |
| State highway | 40  | 32.0  | 22  | 22.9  | 1    | 12.5  | 7   | 16.7  | 6   | 17.6  | 0    | 0.0   | 76  | 24.8  |
| County road   | 32  | 25.6  | 8   | 8.3   | 0    | 0.0   | 0   | 0.0   | 3   | 8.8   | 0    | 0.0   | 43  | 14.0  |
| Township      | 10  | 8.0   | 8   | 8.3   | 1    | 12.5  | 1   | 2.4   | 1   | 2.9   | 1    | 50.0  | 22  | 7.2   |
| Municipality  | 25  | 20.0  | 45  | 46.9  | 0    | 0.0   | 8   | 19.0  | 5   | 14.7  | 1    | 50.0  | 84  | 27.4  |
| Other         | 4   | 3.2   | 0   | 0.0   | 1    | 12.5  | 3   | 7.1   | 2   | 5.9   | 0    | 0.0   | 10  | 3.3   |
| Unknown       | 0   | 0.0   | 1   | 1.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| Total         | 125 | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2    | 100.0 | 307 | 100.0 |

Table 2-13
Fatal Bus Involvements by Relation to Junction and Bus Type

|                         | Sch | nool  | Tra | nsit  | Inte | rcity | Cha | arter | Ot  | her   | Unk | nown  | To  | otal  |
|-------------------------|-----|-------|-----|-------|------|-------|-----|-------|-----|-------|-----|-------|-----|-------|
| Relation to junction    | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No. | Pct.  | No. | Pct.  |
| Noninterchange          |     |       |     |       |      |       |     |       |     |       |     |       |     |       |
| Nonjunction             | 57  | 45.6  | 42  | 43.8  | 6    | 75.0  | 24  | 57.1  | 22  | 64.7  | 1   | 50.0  | 152 | 49.5  |
| Intersection            | 52  | 41.6  | 37  | 38.5  | 1    | 12.5  | 10  | 23.8  | 6   | 17.6  | 1   | 50.0  | 107 | 34.9  |
| Intersection related    | 12  | 9.6   | 13  | 13.5  | 1    | 12.5  | 5   | 11.9  | 3   | 8.8   | 0   | 0.0   | 34  | 11.1  |
| Driveway, alley, etc.   | 0   | 0.0   | 3   | 3.1   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0   | 0.0   | 3   | 1.0   |
| Entrance/exit ramp      | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 2.4   | 0   | 0.0   | 0   | 0.0   | 1   | 0.3   |
| Driveway access related | 3   | 2.4   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0   | 0.0   | 3   | 1.0   |
| Interchange area        |     |       |     |       |      |       |     |       |     |       |     |       |     |       |
| Intersection            | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 2.4   | 0   | 0.0   | 0   | 0.0   | 1   | 0.3   |
| Intersection related    | 1   | 0.8   | 0   | 0.0   | 0    | 0.0   | 1   | 2.4   | 1   | 2.9   | 0   | 0.0   | 3   | 1.0   |
| Entrance/exit ramp      | 0   | 0.0   | 1   | 1.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0   | 0.0   | 1   | 0.3   |
| Other location          | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 2   | 5.9   | 0   | 0.0   | 2   | 0.7   |
| Total                   | 125 | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2   | 100.0 | 307 | 100.0 |

Table 2-14
Fatal Bus Involvements by Number of Travel Lanes and Bus Type

| No. of       | Sch | nool  | Tra | nsit  | Inte | rcity | Cha | arter | Ot  | her   | Unkı | nown  | To  | tal   |
|--------------|-----|-------|-----|-------|------|-------|-----|-------|-----|-------|------|-------|-----|-------|
| travel lanes | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  |
| 1            | 1   | 0.8   | 1   | 1.0   | 0    | 0.0   | 2   | 4.8   | 0   | 0.0   | 0    | 0.0   | 4   | 1.3   |
| 2            | 106 | 84.8  | 56  | 58.3  | 4    | 50.0  | 26  | 61.9  | 24  | 70.6  | 1    | 50.0  | 217 | 70.7  |
| 3            | 4   | 3.2   | 9   | 9.4   | 1    | 12.5  | 5   | 11.9  | 5   | 14.7  | 0    | 0.0   | 24  | 7.8   |
| 4            | 6   | 4.8   | 22  | 22.9  | 1    | 12.5  | 5   | 11.9  | 4   | 11.8  | 1    | 50.0  | 39  | 12.7  |
| 5            | 1   | 0.8   | 3   | 3.1   | 0    | 0.0   | 3   | 7.1   | 0   | 0.0   | 0    | 0.0   | 7   | 2.3   |
| 6            | 4   | 3.2   | 5   | 5.2   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 9   | 2.9   |
| Unknown      | 3   | 2.4   | 0   | 0.0   | 2    | 25.0  | 1   | 2.4   | 1   | 2.9   | 0    | 0.0   | 7   | 2.3   |
| Total        | 125 | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2    | 100.0 | 307 | 100.0 |

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Table 2-15
Fatal Bus Involvements by Trafficway Flow and Bus Type

|                        | Sch | nool  | Tra | nsit  | Inte | rcity | Cha | arter | Ot  | her   | Unk | nown  | To  | otal  |
|------------------------|-----|-------|-----|-------|------|-------|-----|-------|-----|-------|-----|-------|-----|-------|
| Trafficway flow        | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No. | Pct.  | No. | Pct.  |
| Not divided            | 104 | 83.2  | 63  | 65.6  | 1    | 12.5  | 15  | 35.7  | 17  | 50.0  | 1   | 50.0  | 201 | 65.5  |
| Median – no barrier    | 9   | 7.2   | 20  | 20.8  | 6    | 75.0  | 14  | 33.3  | 9   | 26.5  | 0   | 0.0   | 58  | 18.9  |
| Median w/barrier       | 5   | 4.0   | 4   | 4.2   | 0    | 0.0   | 9   | 21.4  | 7   | 20.6  | 0   | 0.0   | 25  | 8.1   |
| One-way traffic        | 2   | 1.6   | 3   | 3.1   | 1    | 12.5  | 2   | 4.8   | 0   | 0.0   | 1   | 50.0  | 9   | 2.9   |
| Two-way left turn lane | 2   | 1.6   | 5   | 5.2   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0   | 0.0   | 7   | 2.3   |
| Entrance/exit ramp     | 0   | 0.0   | 1   | 1.0   | 0    | 0.0   | 1   | 2.4   | 0   | 0.0   | 0   | 0.0   | 2   | 0.7   |
| Unknown                | 3   | 2.4   | 0   | 0.0   | 0    | 0.0   | 1   | 2.4   | 1   | 2.9   | 0   | 0.0   | 5   | 1.6   |
| Total                  | 125 | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2   | 100.0 | 307 | 100.0 |

Table 2-16 Fatal Bus Involvements by Speed Limit and Bus Type

|             | Sch | nool  | Tra | nsit  | Inte | rcity | Cha | arter | Ot  | her   | Unkı | nown  | To  | tal   |
|-------------|-----|-------|-----|-------|------|-------|-----|-------|-----|-------|------|-------|-----|-------|
| Speed limit | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  |
| 10          | 1   | 0.8   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| 15          | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   |
| 20          | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   |
| 25          | 14  | 11.2  | 21  | 21.9  | 0    | 0.0   | 2   | 4.8   | 2   | 5.9   | 0    | 0.0   | 39  | 12.7  |
| 30          | 16  | 12.8  | 14  | 14.6  | 1    | 12.5  | 2   | 4.8   | 3   | 8.8   | 1    | 50.0  | 37  | 12.1  |
| 35          | 10  | 8.0   | 28  | 29.2  | 1    | 12.5  | 4   | 9.5   | 4   | 11.8  | 0    | 0.0   | 47  | 15.3  |
| 40          | 14  | 11.2  | 9   | 9.4   | 0    | 0.0   | 4   | 9.5   | 0   | 0.0   | 0    | 0.0   | 27  | 8.8   |
| 45          | 19  | 15.2  | 10  | 10.4  | 0    | 0.0   | 4   | 9.5   | 4   | 11.8  | 0    | 0.0   | 37  | 12.1  |
| 50          | 5   | 4.0   | 2   | 2.1   | 0    | 0.0   | 2   | 4.8   | 3   | 8.8   | 0    | 0.0   | 12  | 3.9   |
| 55          | 35  | 28.0  | 4   | 4.2   | 1    | 12.5  | 8   | 19.0  | 6   | 17.6  | 0    | 0.0   | 54  | 17.6  |
| 60          | 3   | 2.4   | 1   | 1.0   | 0    | 0.0   | 0   | 0.0   | 1   | 2.9   | 0    | 0.0   | 5   | 1.6   |
| 65          | 2   | 1.6   | 2   | 2.1   | 0    | 0.0   | 9   | 21.4  | 6   | 17.6  | 0    | 0.0   | 19  | 6.2   |
| 70          | 2   | 1.6   | 0   | 0.0   | 2    | 25.0  | 6   | 14.3  | 1   | 2.9   | 0    | 0.0   | 11  | 3.6   |
| 75          | 0   | 0.0   | 0   | 0.0   | 3    | 37.5  | 0   | 0.0   | 3   | 8.8   | 0    | 0.0   | 6   | 2.0   |
| Unknown     | 4   | 3.2   | 5   | 5.2   | 0    | 0.0   | 1   | 2.4   | 1   | 2.9   | 1    | 50.0  | 12  | 3.9   |
| Total       | 125 | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2    | 100.0 | 307 | 100.0 |

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# Accident description

Table 2-17
Fatal Bus Involvements by Accident Type and Bus Type

|                                 | Sch      | nool  | Tra | nsit  | Inte | rcity | Cha | arter | Ot  | her   | Unkı | nown  | To  | tal   |
|---------------------------------|----------|-------|-----|-------|------|-------|-----|-------|-----|-------|------|-------|-----|-------|
| Accident type                   | No.      | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  |
| Single vehicle                  |          |       |     |       |      |       |     |       |     |       |      |       |     |       |
| Ran off road                    | 0        | 0.0   | 1   | 1.0   | 0    | 0.0   | 1   | 2.4   | 2   | 5.9   | 0    | 0.0   | 4   | 1.3   |
| Hit object in road              | 32       | 25.6  | 44  | 45.8  | 3    | 37.5  | 6   | 14.3  | 6   | 17.6  | 1    | 50.0  | 92  | 30.0  |
| Same direction, same trafficwa  | ay       |       |     |       |      |       |     |       |     |       |      |       |     |       |
| Rearend, bus striking           | 2        | 1.6   | 0   | 0.0   | 1    | 12.5  | 5   | 11.9  | 2   | 5.9   | 0    | 0.0   | 10  | 3.3   |
| Rearend, bus struck             | 17       | 13.6  | 11  | 11.5  | 0    | 0.0   | 4   | 9.5   | 2   | 5.9   | 0    | 0.0   | 34  | 11.1  |
| Sideswipe, in other lane        | 0        | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 2.4   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| Sideswipe, in bus's lane        | 0        | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 2   | 5.9   | 0    | 0.0   | 2   | 0.7   |
| Opposite direction, same traffi | cway     |       |     |       |      |       |     |       |     |       |      |       |     |       |
| Head-on, in other's lane        | 1        | 0.8   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 1   | 2.9   | 0    | 0.0   | 2   | 0.7   |
| Head-on, in bus's lane          | 16       | 12.8  | 8   | 8.3   | 0    | 0.0   | 4   | 9.5   | 1   | 2.9   | 1    | 50.0  | 30  | 9.8   |
| Sideswipe, in other lane        | 1        | 0.8   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| Sideswipe, in bus's lane        | 7        | 5.6   | 0   | 0.0   | 1    | 12.5  | 2   | 4.8   | 5   | 14.7  | 0    | 0.0   | 15  | 4.9   |
| Change trafficway, one vehicle  | e turnin | g     |     |       |      |       |     |       |     |       |      |       |     |       |
| Bus turn across path            | 10       | 8.0   | 3   | 3.1   | 0    | 0.0   | 2   | 4.8   | 0   | 0.0   | 0    | 0.0   | 15  | 4.9   |
| Other turn across path          | 6        | 4.8   | 2   | 2.1   | 0    | 0.0   | 2   | 4.8   | 0   | 0.0   | 0    | 0.0   | 10  | 3.3   |
| Intersecting paths, both going  | straigh  | t     |     |       |      |       |     |       |     |       |      |       |     |       |
| Bus into side of other          | 18       | 14.4  | 10  | 10.4  | 0    | 0.0   | 4   | 9.5   | 1   | 2.9   | 0    | 0.0   | 33  | 10.7  |
| Other into side of bus          | 3        | 2.4   | 5   | 5.2   | 0    | 0.0   | 1   | 2.4   | 2   | 5.9   | 0    | 0.0   | 11  | 3.6   |
| Other accident types            |          |       |     |       |      |       |     |       |     |       |      |       |     |       |
| Untripped rollover              | 0        | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 2   | 5.9   | 0    | 0.0   | 2   | 0.7   |
| Other                           | 12       | 9.6   | 11  | 11.5  | 2    | 25.0  | 9   | 21.4  | 6   | 17.6  | 0    | 0.0   | 40  | 13.0  |
| Unknown                         | 0        | 0.0   | 1   | 1.0   | 1    | 12.5  | 1   | 2.4   | 2   | 5.9   | 0    | 0.0   | 5   | 1.6   |
| Total                           | 125      | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2    | 100.0 | 307 | 100.0 |

Table 2-18 Fatal Bus Involvements by Number of Vehicles in Crash and Bus Type

| Number of motor   | Sch | nool  | Tra | nsit  | Inte | rcity | Cha | arter | Otl | her   | Unkı | nown  | To  | otal  |
|-------------------|-----|-------|-----|-------|------|-------|-----|-------|-----|-------|------|-------|-----|-------|
| vehicles in crash | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  |
| 1                 | 32  | 25.6  | 46  | 47.9  | 4    | 50.0  | 6   | 14.3  | 13  | 38.2  | 1    | 50.0  | 102 | 33.2  |
| 2                 | 78  | 62.4  | 41  | 42.7  | 2    | 25.0  | 21  | 50.0  | 13  | 38.2  | 1    | 50.0  | 156 | 50.8  |
| 3                 | 11  | 8.8   | 7   | 7.3   | 1    | 12.5  | 9   | 21.4  | 4   | 11.8  | 0    | 0.0   | 32  | 10.4  |
| 4                 | 2   | 1.6   | 2   | 2.1   | 0    | 0.0   | 4   | 9.5   | 3   | 8.8   | 0    | 0.0   | 11  | 3.6   |
| 5                 | 1   | 0.8   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| 6                 | 1   | 0.8   | 0   | 0.0   | 0    | 0.0   | 1   | 2.4   | 0   | 0.0   | 0    | 0.0   | 2   | 0.7   |
| 9                 | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 2.4   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| 13                | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 1   | 2.9   | 0    | 0.0   | 1   | 0.3   |
| 14                | 0   | 0.0   | 0   | 0.0   | 1    | 12.5  | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| Total             | 125 | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2    | 100.0 | 307 | 100.0 |

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Table 2-19
Fatal Bus Involvements by First Harmful Event and Bus Type

|                                                    | Sch | nool  | Tra | nsit  | Inte | ercity | Cha | arter | Ot  | her   | Unkı | nown  | To  | tal   |
|----------------------------------------------------|-----|-------|-----|-------|------|--------|-----|-------|-----|-------|------|-------|-----|-------|
| First harmful event                                | No. | Pct.  | No. | Pct.  | No.  | Pct.   | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  |
| Noncollision event                                 |     |       |     |       |      |        |     |       |     |       |      |       |     |       |
| Overturn\rollover                                  | 0   | 0.0   | 1   | 1.0   | 1    | 12.5   | 0   | 0.0   | 3   | 8.8   | 0    | 0.0   | 5   | 1.6   |
| Injured in vehicle (other than cargo loss/shift)   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0    | 0   | 0.0   | 2   | 5.9   | 0    | 0.0   | 2   | 0.7   |
| Other noncollision                                 | 0   | 0.0   | 1   | 1.0   | 0    | 0.0    | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| Vehicle occupant struck or run over by own vehicle | 1   | 0.8   | 0   | 0.0   | 0    | 0.0    | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| Collision with motor vehicle                       |     |       |     |       |      |        |     |       |     |       |      |       |     |       |
| Motor vehicle in transport on same roadway         | 90  | 72.0  | 44  | 45.8  | 4    | 50.0   | 35  | 83.3  | 20  | 58.8  | 1    | 50.0  | 194 | 63.2  |
| Motor vehicle in transport on other roadway        | 0   | 0.0   | 1   | 1.0   | 0    | 0.0    | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| Parked motor vehicle (not in transport)            | 1   | 0.8   | 1   | 1.0   | 0    | 0.0    | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 2   | 0.7   |
| Working construction, maintenance, utility vehicle | 1   | 0.8   | 0   | 0.0   | 0    | 0      | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| Collision with nonfixed object                     | -   |       |     |       |      |        | -   |       |     |       |      | •     |     |       |
| Pedestrian                                         | 27  | 21.6  | 44  | 45.8  | 3    | 37.5   | 3   | 7.1   | 6   | 17.6  | 1    | 50.0  | 84  | 27.4  |
| Pedalcycle                                         | 3   | 2.4   | 2   | 2.1   | 0    | 0.0    | 1   | 2.4   | 0   | 0.0   | 0    | 0.0   | 6   | 2.0   |
| Non-motorist on personal conveyance                | 1   | 0.8   | 0   | 0.0   | 0    | 0.0    | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| Collision with fixed object                        |     |       |     |       |      |        |     |       |     |       |      |       |     |       |
| Guardrail                                          | 1   | 0.8   | 0   | 0.0   | 0    | 0.0    | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| Concrete traffic barrier                           | 0   | 0.0   | 1   | 1.0   | 0    | 0.0    | 0   | 0.0   | 1   | 2.9   | 0    | 0.0   | 2   | 0.7   |
| Highway/traffic sign post                          | 0   | 0.0   | 0   | 0.0   | 0    | 0.0    | 1   | 2.4   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| Curb                                               | 0   | 0.0   | 1   | 1.0   | 0    | 0.0    | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| Embankment - earth                                 | 0   | 0.0   | 0   | 0.0   | 0    | 0.0    | 0   | 0.0   | 1   | 2.9   | 0    | 0.0   | 1   | 0.3   |
| Fence                                              | 0   | 0.0   | 0   | 0.0   | 0    | 0.0    | 1   | 2.4   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| Tree                                               | 0   | 0.0   | 0   | 0.0   | 0    | 0.0    | 0   | 0.0   | 1   | 2.9   | 0    | 0.0   | 1   | 0.3   |
| Bridge overhead support                            | 0   | 0.0   | 0   | 0.0   | 0    | 0.0    | 1   | 2.4   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| Total                                              | 125 | 100.0 | 96  | 100.0 | 8    | 100.0  | 42  | 100.0 | 34  | 100.0 | 2    | 100.0 | 307 | 100.0 |

Table 2-20 Fatal Bus Involvements by Vehicle Role in Accident and Bus Type

|               | Sch | nool  | Tra | nsit  | Inte | rcity | Cha | arter | Ot  | her   | Unkı | nown  | To  | tal   |
|---------------|-----|-------|-----|-------|------|-------|-----|-------|-----|-------|------|-------|-----|-------|
| Vehicle role  | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  |
| Non-collision | 0   | 0.0   | 1   | 1.0   | 1    | 12.5  | 0   | 0.0   | 4   | 11.8  | 0    | 0.0   | 6   | 2.0   |
| Striking      | 68  | 54.4  | 65  | 67.7  | 5    | 62.5  | 25  | 59.5  | 16  | 47.1  | 1    | 50.0  | 180 | 58.6  |
| Struck        | 54  | 43.2  | 30  | 31.3  | 2    | 25.0  | 17  | 40.5  | 11  | 32.4  | 1    | 50.0  | 115 | 37.5  |
| Both          | 3   | 2.4   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 3   | 8.8   | 0    | 0.0   | 6   | 2.0   |
| Total         | 125 | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2    | 100.0 | 307 | 100.0 |

Table 2-21 Fatal Bus Involvements by Manner of Collision and Bus Type

|                                  | Scl | hool  | Tra | ınsit | Inte | rcity | Cha | arter | Ot  | her   | Unk | nown  | To  | otal  |
|----------------------------------|-----|-------|-----|-------|------|-------|-----|-------|-----|-------|-----|-------|-----|-------|
| Manner of collision              | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No. | Pct.  | No. | Pct.  |
| Not applicable                   | 35  | 28.0  | 51  | 53.1  | 4    | 50.0  | 7   | 16.7  | 14  | 41.2  | 1   | 50.0  | 112 | 36.5  |
| Rear-end                         | 21  | 16.8  | 14  | 14.6  | 3    | 37.5  | 12  | 28.6  | 6   | 17.6  | 0   | 0.0   | 56  | 18.2  |
| Head-on                          | 18  | 14.4  | 9   | 9.4   | 1    | 12.5  | 8   | 19.0  | 3   | 8.8   | 1   | 50.0  | 40  | 13.0  |
| Front-to-side: Same direction    | 2   | 1.6   | 1   | 1.0   | 0    | 0.0   | 1   | 2.4   | 1   | 2.9   | 0   | 0.0   | 5   | 1.6   |
| Front-to-side: Opp. direction    | 16  | 12.8  | 4   | 4.2   | 0    | 0.0   | 5   | 11.9  | 3   | 8.8   | 0   | 0.0   | 28  | 9.1   |
| Front-to-side: Right angle       | 30  | 24.0  | 16  | 16.7  | 0    | 0.0   | 7   | 16.7  | 4   | 11.8  | 0   | 0.0   | 57  | 18.6  |
| Front-to-side: Unknown direction | 1   | 0.8   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0   | 0.0   | 1   | 0.3   |
| Sideswipe: Same direction        | 1   | 0.8   | 1   | 1.0   | 0    | 0.0   | 2   | 4.8   | 1   | 2.9   | 0   | 0.0   | 5   | 1.6   |
| Sideswipe: Opp. direction        | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 2   | 5.9   | 0   | 0.0   | 2   | 0.7   |
| Other                            | 1   | 0.8   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0   | 0.0   | 1   | 0.3   |
| Total                            | 125 | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2   | 100.0 | 307 | 100.0 |

Accident conditions Page 25

## **Fatalities**

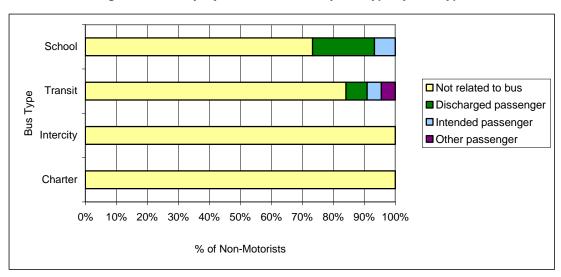
Table 2-22 Fatalities in Bus Involvements by Person Type and Bus Type

|                      | Sch | ool   | Trai | nsit  | Inter | city  | Cha | rter  | Oth | er    | Unkn | iown  | To  | tal   |
|----------------------|-----|-------|------|-------|-------|-------|-----|-------|-----|-------|------|-------|-----|-------|
| Vehicle/Person type  | No. | Pct.  | No.  | Pct.  | No.   | Pct.  | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  |
| Bus                  |     |       |      |       |       |       |     |       |     |       |      |       |     |       |
| Driver               | 2   | 1.5   | 1    | 1.0   | 1     | 8.3   | 5   | 7.7   | 3   | 7.0   | 0    | 0.0   | 12  | 3.4   |
| Passenger            | 4   | 3.1   | 1    | 1.0   | 3     | 25.0  | 17  | 26.2  | 18  | 41.9  | 0    | 0.0   | 43  | 12.2  |
| Bus total            | 6   | 4.6   | 2    | 2.0   | 4     | 33.3  | 22  | 33.8  | 21  | 48.8  | 0    | 0.0   | 55  | 15.6  |
| Other vehicle        |     |       |      |       |       |       |     |       |     |       |      |       |     |       |
| Drivers              | 70  | 53.4  | 44   | 44.4  | 4     | 33.3  | 31  | 47.7  | 11  | 25.6  | 1    | 50.0  | 161 | 45.7  |
| Passengers           | 23  | 17.6  | 4    | 4.0   | 1     | 8.3   | 7   | 10.8  | 5   | 11.6  | 0    | 0.0   | 40  | 11.4  |
| Other vehicle total  | 93  | 71.0  | 48   | 48.5  | 5     | 41.7  | 38  | 58.5  | 16  | 37.2  | 1    | 50.0  | 201 | 57.1  |
| Non-motorists        |     |       |      |       |       |       |     |       |     |       |      |       |     |       |
| Pedestrian           | 29  | 22.1  | 47   | 47.5  | 3     | 25.0  | 4   | 6.2   | 6   | 14.0  | 1    | 50.0  | 90  | 25.6  |
| Bicyclist            | 3   | 2.3   | 2    | 2.0   | 0     | 0.0   | 1   | 1.5   | 0   | 0.0   | 0    | 0.0   | 6   | 1.7   |
| Unknown non-motorist | 0   | 0.0   | 0    | 0.0   | 0     | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   |
| Non-motorist total   | 32  | 24.4  | 49   | 49.5  | 3     | 25.0  | 5   | 7.7   | 6   | 14.0  | 1    | 50.0  | 96  | 27.3  |
| Total                | 131 | 100.0 | 99   | 100.0 | 12    | 100.0 | 65  | 100.0 | 43  | 100.0 | 2    | 100.0 | 352 | 100.0 |

Table 2-23
Non-Motorist Fatality Involvements by Bus Type

| Relationship of             | Scl | hool  | Tra | ınsit | Inte | rcity | Cha | arter | Ot  | her   | Unkı | nown  | To  | tal   |
|-----------------------------|-----|-------|-----|-------|------|-------|-----|-------|-----|-------|------|-------|-----|-------|
| Non-Motorist to Bus         | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  |
| Discharged passenger        | 6   | 4.8   | 3   | 3.1   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 9   | 2.9   |
| Intended passenger          | 2   | 1.6   | 2   | 2.1   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 4   | 1.3   |
| Not related to bus          | 22  | 17.6  | 37  | 38.5  | 3    | 37.5  | 5   | 11.9  | 5   | 14.7  | 1    | 50.0  | 73  | 23.8  |
| No non-motorist involvement | 95  | 76.0  | 52  | 54.2  | 5    | 62.5  | 37  | 88.1  | 27  | 79.4  | 1    | 50.0  | 217 | 70.7  |
| Other                       | 0   | 0.0   | 2   | 2.1   | 0    | 0.0   | 0   | 0.0   | 2   | 5.9   | 0    | 0.0   | 4   | 1.3   |
| Total                       | 125 | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2    | 100.0 | 307 | 100.0 |

Figure 2-4: Fatally Injured Pedestrian/Bicyclist Type by Bus Type



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| Data from Ruses Involved in | Fotal Accidente 2004 |

## Vehicle

This section provides statistics that describe the physical configuration of buses involved in a fatal accident during 2004. The tables cover bus body style, model year, weight and length of the bus, seating capacity, number of passengers, and the type of carrier that operated the bus.

- Buses operated by school districts represented 40.7% of all buses involved in a fatal accident; transit buses accounted for 31.3% of the buses.
- Of the 125 school buses involved in fatal crashes, 89 were operated by public school districts and 32 were operated by a contracted carrier for the school district.
- The majority of the school buses (80 of the 125) were 36 to 40 feet in length. School buses were predominantly Type C school buses (75.2%), followed by Type D (19.2%), and Type A (4.0%). Transit buses were primarily heavy-duty buses. Charter buses were predominantly long-distance coaches. The other operator category was comprised of a wide variety of bus types, however, large passenger vans, and small shuttle buses comprised the majority of buses in this category.
- Nearly 90% of the buses involved in a fatal crash were less than fifteen years old, and 76.2% were less than ten years old.
- Overall, 68.4% of the buses were 31-40 feet in length, and 67.4% had a Gross Vehicle Weight Rating (GVWR) of Class 6 to Class 8.
- School buses had a higher average seating capacity than other bus types, with
   67.2% having a seating capacity of 61 or more.
- Roughly one-quarter or 24.4% of buses involved in fatal accidents were not carrying any passengers at the time of the accident.
- Buses operated by interstate for-hire carriers accounted for 19.9% of the fatal involvements, interstate government carriers represented 17.9%, and 40.1% of the involvements were buses operated by intrastate government carriers (primarily transit buses and school buses).
- Almost 70% of the buses were on local trips (within 50 miles of base) when involved in the fatal accident.

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<u>Vehicle</u> Page 29

Table 3-1 Fatal Bus Involvements by Operator Type and Bus Vehicle Description

| Operator type                                     |     |      |
|---------------------------------------------------|-----|------|
| Bus vehicle description                           | No. | Pct. |
| School district                                   |     |      |
| Small (15-25 feet length)                         | 2   | 0.7  |
| Small (unknown length)                            | 3   | 1.0  |
| Mid-size (27-34 feet length)                      | 15  | 4.9  |
| Full-size (35-40 feet length)                     | 91  | 29.6 |
| School bus                                        | 2   | 0.7  |
| Short school bus on truck-based chassis           | 2   | 0.7  |
| Small school bus on stripped chassis              | 1   | 0.3  |
| Full-size conventional-hood bus                   | 1   | 0.3  |
| Special needs short school bus on truck chassis   | 1   | 0.3  |
| Special needs mid-size school bus                 | 1   | 0.3  |
| Special needs full-size school bus                | 6   | 2.0  |
| Total school bus                                  | 125 | 40.7 |
| Transit bus authority                             |     |      |
| Alternative fuel heavy-duty                       | 10  | 3.3  |
| Alternative fuel shorter                          | 1   | 0.3  |
| Alternative fuel mid-size shuttle bus             | 1   | 0.3  |
| Articulated heavy-duty                            | 3   | 1.0  |
| Electric trolley                                  | 2   | 0.7  |
| Heavy-duty                                        | 51  | 16.6 |
| Long-distance coach                               | 1   | 0.3  |
| Long-distance coach with wheelchair lift          | 3   | 1.0  |
| Long-distance commuter coach with wheelchair lift | 1   | 0.3  |
| Mid-size shuttle                                  | 1   | 0.3  |
| Mid-size shuttle with wheelchair lift             | 2   | 0.7  |
| Shorter transit bus                               | 7   | 2.3  |
| Shuttle bus                                       | 1   | 0.3  |
| Shuttle bus on van-based chassis                  | 2   | 0.7  |
| Small shuttle bus with wheelchair lift            | 3   | 1.0  |
| Special needs small shuttle bus                   | 2   | 0.7  |
| Special needs mid-size shuttle bus                | 1   | 0.3  |
| Transit bus                                       | 4   | 1.3  |
| Total transit bus                                 | 96  | 31.3 |
| Intercity bus operator                            |     |      |
| Long-distance coach                               | 7   | 2.3  |
| Lond-distance coach with wheelchair lift          | 1   | 0.3  |
| Total intercity bus                               | 8   | 2.6  |
| Charter bus operator                              |     |      |
| Full-size conventional-hood bus                   | 1   | 0.3  |
| Large passenger van                               | 1   | 0.3  |
| Long-distance coach                               | 36  | 11.7 |
| Long-distance coach with wheelchair lift          | 1   | 0.3  |
| Mid-size shuttle bus on van-based chassis         | 1   | 0.3  |
| School bus                                        | 1   | 0.3  |
| Trolley replica bus                               | 1   | 0.3  |
| Total charter bus                                 | 42  | 13.7 |

(Continued on next page)

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Table 3-1 (continued)

| Other operator                                |     |       |
|-----------------------------------------------|-----|-------|
| Bus on van-based chassis                      | 1   | 0.3   |
| Full-size conventional-hood bus               | 1   | 0.3   |
|                                               |     |       |
| Full-size school bus                          | 2   | 0.7   |
| Full-size shuttle bus                         | 3   | 1.0   |
| Large passenger van                           | 9   | 2.9   |
| Large passenger van with cargo trailer        | 2   | 0.7   |
| Mid-size school bus                           | 1   | 0.3   |
| Personnel transporter on truck cab & chassis  | 1   | 0.3   |
| Short school bus on truck-based chassis       | 1   | 0.3   |
| Shorter transit bus                           | 1   | 0.3   |
| Shuttle bus on van-based chassis              | 1   | 0.3   |
| Small school bus                              | 1   | 0.3   |
| Small shuttle bus                             | 2   | 0.7   |
| Small shuttle bus on van-based chassis        | 1   | 0.3   |
| Small shuttle bus with wheelchair lift        | 3   | 1.0   |
| Special needs full-size conventional-hood bus | 1   | 0.3   |
| Special needs small shuttle bus               | 2   | 0.7   |
| Trolley replica bus                           | 1   | 0.3   |
| Total other operator                          | 34  | 11.1  |
| Unknown operator type                         |     |       |
| Bus on van-based chassis                      | 1   | 0.3   |
| Conventional-hood bus                         | 1   | 0.3   |
| Total unknown operator type                   | 2   | 0.7   |
| Total                                         | 307 | 100.0 |

Note: Bus vehicle description records descriptions from respondents.

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Table 3-2
Fatal Bus Involvements by Operator Type and Bus Operator Description

| Operator type                                     |     |      |
|---------------------------------------------------|-----|------|
| Operating authority description                   | No. | Pct. |
| School district                                   |     |      |
| Contracted carrier for school district            | 32  | 10.4 |
| Private school & college operated by church       | 1   | 0.3  |
| Public school district                            | 89  | 29.0 |
| Public school state department of education       | 3   | 1.0  |
| Total school bus                                  | 125 | 40.7 |
| Transit bus authority                             |     |      |
| Contracted carrier for transit authority          | 7   | 2.3  |
| Scheduled route & on-demand shuttle service       | 2   | 0.7  |
| Scheduled route & paratransit regional urban area | 7   | 2.3  |
| Schedueld route & paratransit urban area          | 2   | 0.7  |
| Scheduled route regional area                     | 1   | 0.3  |
| Scheduled route regional urban area               | 63  | 20.5 |
| Scheduled route urban area                        | 14  | 4.6  |
| Total transit bus                                 | 96  | 31.3 |
| Intercity bus operator                            |     |      |
| Commuter service                                  | 2   | 0.7  |
| Interstate passenger & express freight            | 5   | 1.6  |
| Scheduled route intercity                         | 1   | 0.3  |
| Total intercity bus                               | 8   | 2.6  |
| Charter bus operator                              |     |      |
| Charter service                                   | 41  | 13.4 |
| Charter service cruise ship shuttle               | 1   | 0.3  |
| Total charter bus                                 | 42  | 13.7 |

(Continued on next page)

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Table 3-2 (continued)

| Other operator                                     |     |       |
|----------------------------------------------------|-----|-------|
| Bicycle tour company transporting customers        | 1   | 0.3   |
| Church use                                         | 2   | 0.7   |
| Community college athletic program                 | 1   | 0.3   |
| Community service organization                     | 1   | 0.3   |
| Contracted carrier for community service org camp  | 1   | 0.3   |
| Contracted carrier for municipal on-demand shuttle | 1   | 0.3   |
| County agency for vocational assistance            | 1   | 0.3   |
| Drive away company delivering new bus              | 1   | 0.3   |
| Drive away company delivering used bus             | 1   | 0.3   |
| Early childhood development educational program    | 2   | 0.7   |
| Employee transportation                            | 1   | 0.3   |
| Farm labor transportation                          | 1   | 0.3   |
| Federal land management agency                     | 1   | 0.3   |
| International & intercity shuttle service          | 1   | 0.3   |
| Municipal airport shuttle service                  | 1   | 0.3   |
| National armed services division                   | 3   | 1.0   |
| Non-profit community organization                  | 1   | 0.3   |
| Non-profit organization of veterans                | 1   | 0.3   |
| Non-profit organization vocational day program     | 1   | 0.3   |
| Non-profit senior citizen service agency           | 2   | 0.7   |
| Nursing facility resident transportation           | 2   | 0.7   |
| Paratransit service                                | 1   | 0.3   |
| Scheduled shuttle service to correctional centers  | 1   | 0.3   |
| Shuttle service                                    | 2   | 0.7   |
| Sightseeing tour service                           | 1   | 0.3   |
| State university                                   | 1   | 0.3   |
| Tourist shuttle service                            | 1   | 0.3   |
| Total other operator                               | 34  | 11.1  |
| Unknown operator type                              | 2   | 0.7   |
| Total                                              | 307 | 100.0 |

Note: The operator authority records descriptions from respondents.

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Table 3-3
Fatal Bus Involvements by Bus Body Style and Bus Type

|                | School |       | School Transit |       | Inte | Intercity |     | Charter |     | Other |     | Unknown |     | otal  |
|----------------|--------|-------|----------------|-------|------|-----------|-----|---------|-----|-------|-----|---------|-----|-------|
| Bus body style | No.    | Pct.  | No.            | Pct.  | No.  | Pct.      | No. | Pct.    | No. | Pct.  | No. | Pct.    | No. | Pct.  |
| Bus            | 125    | 100.0 | 96             | 100.0 | 8    | 100.0     | 40  | 95.2    | 21  | 61.8  | 2   | 100.0   | 292 | 95.1  |
| Large van      | 0      | 0.0   | 0              | 0.0   | 0    | 0.0       | 1   | 2.4     | 11  | 32.4  | 0   | 0.0     | 12  | 3.9   |
| Other          | 0      | 0.0   | 0              | 0.0   | 0    | 0.0       | 1   | 2.4     | 2   | 5.9   | 0   | 0.0     | 3   | 1.0   |
| Total          | 125    | 100.0 | 96             | 100.0 | 8    | 100.0     | 42  | 100.0   | 34  | 100.0 | 2   | 100.0   | 307 | 100.0 |

Table 3-4
Fatal Bus Involvements by Bus Body Configuration and Bus Type

|                        | Sch | ool   | Transit |       | Inte | rcity | Cha | arter | Ot  | her   | Unkı | nown  | To  | otal  |
|------------------------|-----|-------|---------|-------|------|-------|-----|-------|-----|-------|------|-------|-----|-------|
| Bus body configuration | No. | Pct.  | No.     | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  |
| Type A school bus      | 5   | 4.0   | 0       | 0.0   | 0    | 0.0   | 0   | 0.0   | 1   | 2.9   | 0    | 0.0   | 6   | 2.0   |
| Type B school bus      | 1   | 8.0   | 0       | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| Type C school bus      | 94  | 75.2  | 0       | 0.0   | 0    | 0.0   | 1   | 2.4   | 2   | 5.9   | 0    | 0.0   | 97  | 31.6  |
| Type D school bus      | 24  | 19.2  | 0       | 0.0   | 0    | 0.0   | 0   | 0.0   | 2   | 5.9   | 0    | 0.0   | 26  | 8.5   |
| Flat front             | 0   | 0.0   | 83      | 86.5  | 0    | 0.0   | 0   | 0.0   | 4   | 11.8  | 0    | 0.0   | 87  | 28.3  |
| Big cowl and chassis   | 1   | 0.8   | 0       | 0.0   | 0    | 0.0   | 1   | 2.4   | 2   | 5.9   | 1    | 50.0  | 5   | 1.6   |
| High platform          | 0   | 0.0   | 5       | 5.2   | 8    | 100.0 | 37  | 88.1  | 0   | 0.0   | 0    | 0.0   | 50  | 16.3  |
| Small cowl and chassis | 0   | 0.0   | 8       | 8.3   | 0    | 0.0   | 1   | 2.4   | 10  | 29.4  | 1    | 50.0  | 20  | 6.5   |
| Other                  | 0   | 0.0   | 0       | 0.0   | 0    | 0.0   | 2   | 4.8   | 13  | 38.2  | 0    | 0.0   | 15  | 4.9   |
| Total                  | 125 | 100.0 | 96      | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2    | 100.0 | 307 | 100.0 |

Table 3-5
Fatal Bus Involvements by Front of Bus Style and Bus Type

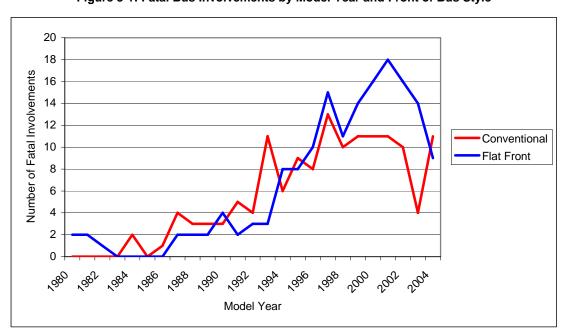
|                   | School |       | Transit |       | Intercity |       | Charter |       | Other |       | Unknown |       | Total |       |
|-------------------|--------|-------|---------|-------|-----------|-------|---------|-------|-------|-------|---------|-------|-------|-------|
| Front of bus      | No.    | Pct.  | No.     | Pct.  | No.       | Pct.  | No.     | Pct.  | No.   | Pct.  | No.     | Pct.  | No.   | Pct.  |
| Conventional hood | 101    | 80.8  | 8       | 8.3   | 0         | 0.0   | 4       | 9.5   | 27    | 79.4  | 2       | 100.0 | 142   | 46.3  |
| Flat front        | 24     | 19.2  | 88      | 91.7  | 8         | 100.0 | 37      | 88.1  | 7     | 20.6  | 0       | 0.0   | 164   | 53.4  |
| Other             | 0      | 0.0   | 0       | 0.0   | 0         | 0.0   | 1       | 2.4   | 0     | 0.0   | 0       | 0.0   | 1     | 0.3   |
| Total             | 125    | 100.0 | 96      | 100.0 | 8         | 100.0 | 42      | 100.0 | 34    | 100.0 | 2       | 100.0 | 307   | 100.0 |

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Table 3-6
Fatal Bus Involvements by Model Year and Front of Bus Style

|            | Conve | ntional | Flat | front |     | nown | To  | tal   |
|------------|-------|---------|------|-------|-----|------|-----|-------|
| Model year | No.   | Pct.    | No.  | Pct.  | No. | Pct. | No. | Pct.  |
| 1980       | 0     | 0.0     | 2    | 100.0 | 0   | 0.0  | 2   | 0.7   |
| 1981       | 0     | 0.0     | 2    | 100.0 | 0   | 0.0  | 2   | 0.7   |
| 1982       | 0     | 0.0     | 1    | 100.0 | 0   | 0.0  | 1   | 0.3   |
| 1983       | 0     | 0.0     | 0    | 0.0   | 0   | 0.0  | 0   | 0.0   |
| 1984       | 2     | 100.0   | 0    | 0.0   | 0   | 0.0  | 2   | 0.7   |
| 1985       | 0     | 0.0     | 0    | 0.0   | 0   | 0.0  | 0   | 0.0   |
| 1986       | 1     | 100.0   | 0    | 0.0   | 0   | 0.0  | 1   | 0.3   |
| 1987       | 4     | 66.7    | 2    | 33.3  | 0   | 0.0  | 6   | 2.0   |
| 1988       | 3     | 60.0    | 2    | 40.0  | 0   | 0.0  | 5   | 1.6   |
| 1989       | 3     | 60.0    | 2    | 40.0  | 0   | 0.0  | 5   | 1.6   |
| 1990       | 3     | 42.9    | 4    | 57.1  | 0   | 0.0  | 7   | 2.3   |
| 1991       | 5     | 71.4    | 2    | 28.6  | 0   | 0.0  | 7   | 2.3   |
| 1992       | 4     | 57.1    | 3    | 42.9  | 0   | 0.0  | 7   | 2.3   |
| 1993       | 11    | 78.6    | 3    | 21.4  | 0   | 0.0  | 14  | 4.6   |
| 1994       | 6     | 42.9    | 8    | 57.1  | 0   | 0.0  | 14  | 4.6   |
| 1995       | 9     | 52.9    | 8    | 47.1  | 0   | 0.0  | 17  | 5.5   |
| 1996       | 8     | 44.4    | 10   | 55.6  | 0   | 0.0  | 18  | 5.9   |
| 1997       | 13    | 46.4    | 15   | 53.6  | 0   | 0.0  | 28  | 9.1   |
| 1998       | 10    | 47.6    | 11   | 52.4  | 0   | 0.0  | 21  | 6.8   |
| 1999       | 11    | 44.0    | 14   | 56.0  | 0   | 0.0  | 25  | 8.1   |
| 2000       | 11    | 40.7    | 16   | 59.3  | 0   | 0.0  | 27  | 8.8   |
| 2001       | 11    | 36.7    | 18   | 60.0  | 1   | 3.3  | 30  | 9.8   |
| 2002       | 10    | 38.5    | 16   | 61.5  | 0   | 0.0  | 26  | 8.5   |
| 2003       | 4     | 22.2    | 14   | 77.8  | 0   | 0.0  | 18  | 5.9   |
| 2004       | 11    | 55.0    | 9    | 45.0  | 0   | 0.0  | 20  | 6.5   |
| 2005       | 2     | 50.0    | 2    | 50.0  | 0   | 0.0  | 4   | 1.3   |
| Total      | 142   | 46.3    | 164  | 53.4  | 1   | 0.3  | 307 | 100.0 |

Figure 3-1: Fatal Bus Involvements by Model Year and Front of Bus Style

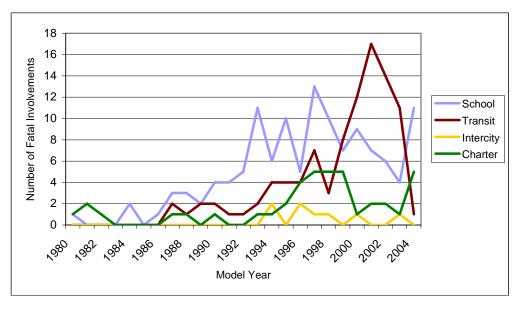


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Table 3-7
Fatal Bus Involvements by Model Year and Bus Type

|            | Sch | nool  | Tra | nsit  | Inte | rcity | Cha | arter | Otl | ner   | Unkr | nown  | To  | tal   |
|------------|-----|-------|-----|-------|------|-------|-----|-------|-----|-------|------|-------|-----|-------|
| Model year | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  |
| 1980       | 1   | 0.8   | 0   | 0.0   | 0    | 0.0   | 1   | 2.4   | 0   | 0.0   | 0    | 0.0   | 2   | 0.7   |
| 1981       | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 2   | 4.8   | 0   | 0.0   | 0    | 0.0   | 2   | 0.7   |
| 1982       | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 2.4   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| 1983       | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   |
| 1984       | 2   | 1.6   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 2   | 0.7   |
| 1985       | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   |
| 1986       | 1   | 0.8   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| 1987       | 3   | 2.4   | 2   | 2.1   | 0    | 0.0   | 1   | 2.4   | 0   | 0.0   | 0    | 0.0   | 6   | 2.0   |
| 1988       | 3   | 2.4   | 1   | 1.0   | 0    | 0.0   | 1   | 2.4   | 0   | 0.0   | 0    | 0.0   | 5   | 1.6   |
| 1989       | 2   | 1.6   | 2   | 2.1   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 1    | 50.0  | 5   | 1.6   |
| 1990       | 4   | 3.2   | 2   | 2.1   | 0    | 0.0   | 1   | 2.4   | 0   | 0.0   | 0    | 0.0   | 7   | 2.3   |
| 1991       | 4   | 3.2   | 1   | 1.0   | 0    | 0.0   | 0   | 0.0   | 2   | 5.9   | 0    | 0.0   | 7   | 2.3   |
| 1992       | 5   | 4.0   | 1   | 1.0   | 0    | 0.0   | 0   | 0.0   | 1   | 2.9   | 0    | 0.0   | 7   | 2.3   |
| 1993       | 11  | 8.8   | 2   | 2.1   | 0    | 0.0   | 1   | 2.4   | 0   | 0.0   | 0    | 0.0   | 14  | 4.6   |
| 1994       | 6   | 4.8   | 4   | 4.2   | 2    | 25.0  | 1   | 2.4   | 1   | 2.9   | 0    | 0.0   | 14  | 4.6   |
| 1995       | 10  | 8.0   | 4   | 4.2   | 0    | 0.0   | 2   | 4.8   | 1   | 2.9   | 0    | 0.0   | 17  | 5.5   |
| 1996       | 5   | 4.0   | 4   | 4.2   | 2    | 25.0  | 4   | 9.5   | 3   | 8.8   | 0    | 0.0   | 18  | 5.9   |
| 1997       | 13  | 10.4  | 7   | 7.3   | 1    | 12.5  | 5   | 11.9  | 2   | 5.9   | 0    | 0.0   | 28  | 9.1   |
| 1998       | 10  | 8.0   | 3   | 3.1   | 1    | 12.5  | 5   | 11.9  | 2   | 5.9   | 0    | 0.0   | 21  | 6.8   |
| 1999       | 7   | 5.6   | 8   | 8.3   | 0    | 0.0   | 5   | 11.9  | 5   | 14.7  | 0    | 0.0   | 25  | 8.1   |
| 2000       | 9   | 7.2   | 12  | 12.5  | 1    | 12.5  | 1   | 2.4   | 4   | 11.8  | 0    | 0.0   | 27  | 8.8   |
| 2001       | 7   | 5.6   | 17  | 17.7  | 0    | 0.0   | 2   | 4.8   | 3   | 8.8   | 1    | 50.0  | 30  | 9.8   |
| 2002       | 6   | 4.8   | 14  | 14.6  | 0    | 0.0   | 2   | 4.8   | 4   | 11.8  | 0    | 0.0   | 26  | 8.5   |
| 2003       | 4   | 3.2   | 11  | 11.5  | 1    | 12.5  | 1   | 2.4   | 1   | 2.9   | 0    | 0.0   | 18  | 5.9   |
| 2004       | 11  | 8.8   | 1   | 1.0   | 0    | 0.0   | 5   | 11.9  | 3   | 8.8   | 0    | 0.0   | 20  | 6.5   |
| 2005       | 1   | 0.8   | 0   | 0.0   | 0    | 0.0   | 1   | 2.4   | 2   | 5.9   | 0    | 0.0   | 4   | 1.3   |
| Total      | 125 | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2    | 100.0 | 307 | 100.0 |

Figure 3-2: Fatal Bus Involvements by Model Year and Bus Type



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Table 3-8 Fatal Bus Involvements by Bus Length and Bus Type

| Bus           | Sch | nool  | Tra | nsit  | Inte | rcity | Cha | arter | Ot  | her   | Unkı | nown  | To  | tal   |
|---------------|-----|-------|-----|-------|------|-------|-----|-------|-----|-------|------|-------|-----|-------|
| length (feet) | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  |
| 16-20         | 4   | 3.2   | 1   | 1.0   | 0    | 0.0   | 1   | 2.4   | 13  | 38.2  | 0    | 0.0   | 19  | 6.2   |
| 21-25         | 2   | 1.6   | 4   | 4.2   | 0    | 0.0   | 0   | 0.0   | 9   | 26.5  | 0    | 0.0   | 15  | 4.9   |
| 26-30         | 3   | 2.4   | 4   | 4.2   | 0    | 0.0   | 2   | 4.8   | 1   | 2.9   | 0    | 0.0   | 10  | 3.3   |
| 31-35         | 30  | 24.0  | 9   | 9.4   | 0    | 0.0   | 0   | 0.0   | 3   | 8.8   | 0    | 0.0   | 42  | 13.7  |
| 36-40         | 80  | 64.0  | 59  | 61.5  | 4    | 50.0  | 13  | 31.0  | 6   | 17.6  | 0    | 0.0   | 162 | 52.8  |
| 41-45         | 1   | 0.8   | 3   | 3.1   | 4    | 50.0  | 25  | 59.5  | 0   | 0.0   | 0    | 0.0   | 33  | 10.7  |
| 56-60         | 0   | 0.0   | 3   | 3.1   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 3   | 1.0   |
| Unknown       | 5   | 4.0   | 13  | 13.5  | 0    | 0.0   | 1   | 2.4   | 2   | 5.9   | 2    | 100.0 | 23  | 7.5   |
| Total         | 125 | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2    | 100.0 | 307 | 100.0 |

Table 3-9
Fatal Bus Involvements by Bus Empty Weight and Bus Type

|                | Sch | nool  | Tra | nsit  | Inte | rcity | Cha | arter | Ot  | her   | Unkı | nown  | To  | tal   |
|----------------|-----|-------|-----|-------|------|-------|-----|-------|-----|-------|------|-------|-----|-------|
| Empty wt (lbs) | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  |
| 4,000-6,000    | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 3   | 8.8   | 0    | 0.0   | 3   | 1.0   |
| 6,001-10,000   | 2   | 1.6   | 3   | 3.1   | 0    | 0.0   | 2   | 4.8   | 12  | 35.3  | 0    | 0.0   | 19  | 6.2   |
| 10,001-15,000  | 7   | 5.6   | 2   | 2.1   | 0    | 0.0   | 1   | 2.4   | 8   | 23.5  | 0    | 0.0   | 18  | 5.9   |
| 15,001-20,000  | 108 | 86.4  | 3   | 3.1   | 0    | 0.0   | 1   | 2.4   | 8   | 23.5  | 0    | 0.0   | 120 | 39.1  |
| 20,001-25,000  | 3   | 2.4   | 2   | 2.1   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 5   | 1.6   |
| 25,001-30,000  | 0   | 0.0   | 56  | 58.3  | 0    | 0.0   | 10  | 23.8  | 1   | 2.9   | 0    | 0.0   | 67  | 21.8  |
| 30,001-35,000  | 0   | 0.0   | 13  | 13.5  | 3    | 37.5  | 18  | 42.9  | 0   | 0.0   | 0    | 0.0   | 34  | 11.1  |
| 35,001-40,000  | 0   | 0.0   | 3   | 3.1   | 5    | 62.5  | 7   | 16.7  | 0   | 0.0   | 0    | 0.0   | 15  | 4.9   |
| 40,001-46,000  | 0   | 0.0   | 1   | 1.0   | 0    | 0.0   | 2   | 4.8   | 0   | 0.0   | 0    | 0.0   | 3   | 1.0   |
| Unknown        | 5   | 4.0   | 13  | 13.5  | 0    | 0.0   | 1   | 2.4   | 2   | 5.9   | 2    | 100.0 | 23  | 7.5   |
| Total          | 125 | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2    | 100.0 | 307 | 100.0 |

Table 3-10 Fatal Bus Involvements by Gross Vehicle Weight Rating and Bus Type

| Gross vehicle weight    | Sch | nool  | Tra | ınsit | Inte | rcity | Cha | arter | Ot  | her   | Unk | nown  | To  | tal   |
|-------------------------|-----|-------|-----|-------|------|-------|-----|-------|-----|-------|-----|-------|-----|-------|
| rating                  | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No. | Pct.  | No. | Pct.  |
| Class 2: 6,001-10,000   | 5   | 4.0   | 1   | 1.0   | 0    | 0.0   | 1   | 2.4   | 11  | 32.4  | 0   | 0.0   | 18  | 5.9   |
| Class 3: 10,001-14,000  | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 7   | 20.6  | 0   | 0.0   | 7   | 2.3   |
| Class 4: 14,001-16,000  | 1   | 0.8   | 7   | 7.3   | 0    | 0.0   | 1   | 2.4   | 4   | 11.8  | 1   | 50.0  | 14  | 4.6   |
| Class 5: 16,001-19,500  | 2   | 1.6   | 0   | 0.0   | 0    | 0.0   | 1   | 2.4   | 0   | 0.0   | 0   | 0.0   | 3   | 1.0   |
| Class 6: 19,501-26,000  | 11  | 8.8   | 0   | 0.0   | 0    | 0.0   | 1   | 2.4   | 2   | 5.9   | 0   | 0.0   | 14  | 4.6   |
| Class 7: 26,001-33,000  | 84  | 67.2  | 1   | 1.0   | 0    | 0.0   | 1   | 2.4   | 4   | 11.8  | 1   | 50.0  | 91  | 29.6  |
| Class 8: 33,001 or more | 1   | 0.8   | 56  | 58.3  | 8    | 100.0 | 37  | 88.1  | 0   | 0.0   | 0   | 0.0   | 102 | 33.2  |
| Unknown                 | 21  | 16.8  | 31  | 32.3  | 0    | 0.0   | 0   | 0.0   | 6   | 17.6  | 0   | 0.0   | 58  | 18.9  |
| Total                   | 125 | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2   | 100.0 | 307 | 100.0 |

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Table 3-11 Fatal Bus Involvements by Number of Axles and Bus Type

|         | Sch | ool   | Tra | nsit  | Inte | rcity | Cha | arter | Ot  | her   | Unkı | nown  | To  | tal   |
|---------|-----|-------|-----|-------|------|-------|-----|-------|-----|-------|------|-------|-----|-------|
| Axles   | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  |
| 2 axles | 124 | 99.2  | 82  | 85.4  | 0    | 0.0   | 5   | 11.9  | 34  | 100.0 | 2    | 100.0 | 247 | 80.5  |
| 3 axles | 1   | 0.8   | 8   | 8.3   | 8    | 100.0 | 37  | 88.1  | 0   | 0.0   | 0    | 0.0   | 54  | 17.6  |
| Unknown | 0   | 0.0   | 6   | 6.3   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 6   | 2.0   |
| Total   | 125 | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2    | 100.0 | 307 | 100.0 |

Table 3-12
Fatal Bus Involvements by Passenger Seating Capacity (Excluding Driver) and Bus Type

| Passenger        | Sch | nool  | Tra | nsit  | Inte | rcity | Cha | arter | Otl | her   | Unkı | nown  | To  | otal  |
|------------------|-----|-------|-----|-------|------|-------|-----|-------|-----|-------|------|-------|-----|-------|
| seating capacity | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  |
| 8-14             | 0   | 0.0   | 5   | 5.2   | 0    | 0.0   | 1   | 2.4   | 18  | 52.9  | 0    | 0.0   | 24  | 7.8   |
| 15-20            | 6   | 4.8   | 1   | 1.0   | 0    | 0.0   | 0   | 0.0   | 2   | 5.9   | 0    | 0.0   | 9   | 2.9   |
| 21-25            | 1   | 0.8   | 2   | 2.1   | 0    | 0.0   | 1   | 2.4   | 2   | 5.9   | 0    | 0.0   | 6   | 2.0   |
| 26-30            | 0   | 0.0   | 6   | 6.3   | 0    | 0.0   | 1   | 2.4   | 2   | 5.9   | 0    | 0.0   | 9   | 2.9   |
| 31-35            | 3   | 2.4   | 4   | 4.2   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 7   | 2.3   |
| 36-40            | 1   | 0.8   | 25  | 26.0  | 0    | 0.0   | 1   | 2.4   | 1   | 2.9   | 0    | 0.0   | 28  | 9.1   |
| 41-45            | 1   | 0.8   | 24  | 25.0  | 0    | 0.0   | 3   | 7.1   | 1   | 2.9   | 0    | 0.0   | 29  | 9.4   |
| 46-50            | 2   | 1.6   | 7   | 7.3   | 4    | 50.0  | 12  | 28.6  | 0   | 0.0   | 0    | 0.0   | 25  | 8.1   |
| 51-55            | 6   | 4.8   | 1   | 1.0   | 4    | 50.0  | 8   | 19.0  | 1   | 2.9   | 0    | 0.0   | 20  | 6.5   |
| 56-60            | 9   | 7.2   | 1   | 1.0   | 0    | 0.0   | 8   | 19.0  | 0   | 0.0   | 0    | 0.0   | 18  | 5.9   |
| 61-65            | 20  | 16.0  | 1   | 1.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 21  | 6.8   |
| 66-70            | 12  | 9.6   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 2   | 5.9   | 0    | 0.0   | 14  | 4.6   |
| 71-75            | 36  | 28.8  | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 36  | 11.7  |
| 76-80            | 10  | 8.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 10  | 3.3   |
| 81+              | 6   | 4.8   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 6   | 2.0   |
| Est. 15 or more  | 10  | 8.0   | 18  | 18.8  | 0    | 0.0   | 7   | 16.7  | 4   | 11.8  | 1    | 50.0  | 40  | 13.0  |
| Unknown          | 2   | 1.6   | 1   | 1.0   | 0    | 0.0   | 0   | 0.0   | 1   | 2.9   | 1    | 50.0  | 5   | 1.6   |
| Total            | 125 | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2    | 100.0 | 307 | 100.0 |

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Table 3-13
Fatal Bus Involvements by Number of Passengers and Bus Type

|                   | Sch | nool  | Tra | nsit  | Inte | rcity | Cha | arter | Ot  | her   | Unkı | nown  | To  | tal   |
|-------------------|-----|-------|-----|-------|------|-------|-----|-------|-----|-------|------|-------|-----|-------|
| No. of passengers | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  |
| None              | 40  | 32.0  | 18  | 18.8  | 2    | 25.0  | 9   | 21.4  | 6   | 17.6  | 0    | 0.0   | 75  | 24.4  |
| 1-3               | 14  | 11.2  | 14  | 14.6  | 0    | 0.0   | 1   | 2.4   | 6   | 17.6  | 0    | 0.0   | 35  | 11.4  |
| 4-6               | 6   | 4.8   | 12  | 12.5  | 0    | 0.0   | 1   | 2.4   | 2   | 5.9   | 1    | 50.0  | 22  | 7.2   |
| 7-10              | 14  | 11.2  | 11  | 11.5  | 0    | 0.0   | 2   | 4.8   | 7   | 20.6  | 0    | 0.0   | 34  | 11.1  |
| 11-15             | 5   | 4.0   | 10  | 10.4  | 0    | 0.0   | 6   | 14.3  | 5   | 14.7  | 0    | 0.0   | 26  | 8.5   |
| 16-20             | 11  | 8.8   | 4   | 4.2   | 0    | 0.0   | 2   | 4.8   | 1   | 2.9   | 0    | 0.0   | 18  | 5.9   |
| 21-25             | 7   | 5.6   | 2   | 2.1   | 1    | 12.5  | 2   | 4.8   | 4   | 11.8  | 1    | 50.0  | 17  | 5.5   |
| 26-30             | 7   | 5.6   | 1   | 1.0   | 1    | 12.5  | 4   | 9.5   | 1   | 2.9   | 0    | 0.0   | 14  | 4.6   |
| 31-35             | 2   | 1.6   | 0   | 0.0   | 2    | 25.0  | 1   | 2.4   | 0   | 0.0   | 0    | 0.0   | 5   | 1.6   |
| 36-40             | 4   | 3.2   | 1   | 1.0   | 0    | 0.0   | 3   | 7.1   | 0   | 0.0   | 0    | 0.0   | 8   | 2.6   |
| 41-45             | 4   | 3.2   | 2   | 2.1   | 1    | 12.5  | 3   | 7.1   | 0   | 0.0   | 0    | 0.0   | 10  | 3.3   |
| 46-50             | 3   | 2.4   | 0   | 0.0   | 0    | 0.0   | 1   | 2.4   | 0   | 0.0   | 0    | 0.0   | 4   | 1.3   |
| 51+               | 2   | 1.6   | 0   | 0.0   | 0    | 0.0   | 2   | 4.8   | 0   | 0.0   | 0    | 0.0   | 4   | 1.3   |
| Unknown           | 6   | 4.8   | 21  | 21.9  | 1    | 12.5  | 5   | 11.9  | 2   | 5.9   | 0    | 0.0   | 35  | 11.4  |
| Total             | 125 | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2    | 100.0 | 307 | 100.0 |

Table 3-14
Fatal Bus Involvements by Type of Passenger Restraints Available (Excluding Driver) and Bus Type

| Type of passenger      | Sch | nool  | Tra | nsit  | Inte | rcity | Cha | arter | Ot  | her   | Unkı | nown  | To  | tal   |
|------------------------|-----|-------|-----|-------|------|-------|-----|-------|-----|-------|------|-------|-----|-------|
| restraint              | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  |
| None                   | 102 | 81.6  | 78  | 81.3  | 7    | 87.5  | 26  | 61.9  | 10  | 29.4  | 0    | 0.0   | 223 | 72.6  |
| Lap belts              | 15  | 12.0  | 2   | 2.1   | 0    | 0.0   | 4   | 9.5   | 9   | 26.5  | 0    | 0.0   | 30  | 9.8   |
| Lap and shoulder belts | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 8   | 23.5  | 0    | 0.0   | 8   | 2.6   |
| Lap belts, front only  | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 2   | 4.8   | 0   | 0.0   | 0    | 0.0   | 2   | 0.7   |
| Other                  | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 2.4   | 3   | 8.8   | 0    | 0.0   | 4   | 1.3   |
| Unknown                | 8   | 6.4   | 16  | 16.7  | 1    | 12.5  | 9   | 21.4  | 4   | 11.8  | 2    | 100.0 | 40  | 13.0  |
| Total                  | 125 | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2    | 100.0 | 307 | 100.0 |

Table 3-15
Fatal Bus Involvements by Carrier Type and Bus Type

|                  | Sch | nool  | Tra | ınsit | Inte | rcity | Cha | arter | Otl | her   | Unkı | nown  | To  | otal  |
|------------------|-----|-------|-----|-------|------|-------|-----|-------|-----|-------|------|-------|-----|-------|
| Carrier type     | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  |
| Interstate       |     |       |     |       |      |       |     |       |     |       |      |       |     |       |
| Private          | 1   | 0.8   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 2   | 5.9   | 0    | 0.0   | 3   | 1.0   |
| For-hire         | 12  | 9.6   | 2   | 2.1   | 8    | 100.0 | 37  | 88.1  | 2   | 5.9   | 0    | 0.0   | 61  | 19.9  |
| Government owned | 39  | 31.2  | 10  | 10.4  | 0    | 0.0   | 0   | 0.0   | 6   | 17.6  | 0    | 0.0   | 55  | 17.9  |
| Intrastate       | -   |       |     |       |      |       |     |       |     |       |      |       |     |       |
| Private          | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 5   | 14.7  | 0    | 0.0   | 5   | 1.6   |
| For-hire         | 11  | 8.8   | 3   | 3.1   | 0    | 0.0   | 4   | 9.5   | 5   | 14.7  | 0    | 0.0   | 23  | 7.5   |
| Government owned | 43  | 34.4  | 78  | 81.3  | 0    | 0.0   | 0   | 0.0   | 2   | 5.9   | 0    | 0.0   | 123 | 40.1  |
| Unknown          | 19  | 15.2  | 3   | 3.1   | 0    | 0.0   | 1   | 2.4   | 12  | 35.3  | 2    | 100.0 | 37  | 12.1  |
| Total            | 125 | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2    | 100.0 | 307 | 100.0 |

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Table 3-16 Fatal Bus Involvements by Trip Type and Bus Type

|              | Sch | iool  | Tra | ınsit | Inte | rcity | Cha | arter | Ot  | her   | Unkı | nown  | To  | tal   |
|--------------|-----|-------|-----|-------|------|-------|-----|-------|-----|-------|------|-------|-----|-------|
| Trip type    | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  |
| Local        | 110 | 88.0  | 74  | 77.1  | 1    | 12.5  | 10  | 23.8  | 16  | 47.1  | 0    | 0.0   | 211 | 68.7  |
| 51-100 miles | 6   | 4.8   | 3   | 3.1   | 1    | 12.5  | 8   | 19.0  | 6   | 17.6  | 0    | 0.0   | 24  | 7.8   |
| 101-200      | 1   | 0.8   | 0   | 0.0   | 0    | 0.0   | 7   | 16.7  | 5   | 14.7  | 0    | 0.0   | 13  | 4.2   |
| 201-500      | 0   | 0.0   | 0   | 0.0   | 6    | 75.0  | 6   | 14.3  | 2   | 5.9   | 0    | 0.0   | 14  | 4.6   |
| Over 500     | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 5   | 11.9  | 2   | 5.9   | 0    | 0.0   | 7   | 2.3   |
| Unknown      | 8   | 6.4   | 19  | 19.8  | 0    | 0.0   | 6   | 14.3  | 3   | 8.8   | 2    | 100.0 | 38  | 12.4  |
| Total        | 125 | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2    | 100.0 | 307 | 100.0 |

Table 3-17
Fatal Bus Involvements by Most Harmful Event and Bus Type

|                                                    | Scl | nool  | Tra | nsit  | Inte | rcity | Cha | arter | Otl | her   | Unkı | nown  | To  | otal  |
|----------------------------------------------------|-----|-------|-----|-------|------|-------|-----|-------|-----|-------|------|-------|-----|-------|
| Most harmful event                                 | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  |
| Noncollision event                                 |     |       |     |       |      |       |     |       |     |       |      |       |     |       |
| Overturn/rollover                                  | 3   | 2.4   | 0   | 0.0   | 1    | 12.5  | 1   | 2.4   | 4   | 11.8  | 0    | 0.0   | 9   | 2.9   |
| Immersion                                          | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 1   | 2.9   | 0    | 0.0   | 1   | 0.3   |
| Injured in vehicle (other than cargo loss/shift)   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 2   | 5.9   | 0    | 0.0   | 2   | 0.7   |
| Other noncollision                                 | 0   | 0.0   | 1   | 1.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| Vehicle occupant struck or run over by own vehicle | 1   | 0.8   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| Collision with motor vehicle                       |     |       |     |       |      |       |     |       |     |       |      |       |     |       |
| Motor vehicle in transport on same roadway         | 86  | 68.8  | 46  | 47.9  | 4    | 50.0  | 36  | 85.7  | 19  | 55.9  | 1    | 50.0  | 192 | 62.5  |
| Motor vehicle in transport on other roadway        | 0   | 0.0   | 2   | 2.1   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 2   | 0.7   |
| Parked motor vehicle (not in transport)            | 1   | 8.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| Working construction, maintenance, utility vehicle | 1   | 0.8   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| Collision with nonfixed object                     |     |       |     |       |      |       |     |       |     |       |      |       |     |       |
| Pedestrian                                         | 28  | 22.4  | 43  | 44.8  | 3    | 37.5  | 3   | 7.1   | 6   | 17.6  | 1    | 50.0  | 84  | 27.4  |
| Pedalcycle                                         | 3   | 2.4   | 2   | 2.1   | 0    | 0.0   | 1   | 2.4   | 0   | 0.0   | 0    | 0.0   | 6   | 2.0   |
| Non-motorist on personal conveyance                | 1   | 0.8   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| Collision with fixed object                        |     |       |     |       |      |       |     |       |     |       |      |       |     |       |
| Building                                           | 0   | 0.0   | 2   | 2.1   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 2   | 0.7   |
| Fence                                              | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 1   | 2.9   | 0    | 0.0   | 1   | 0.3   |
| Tree                                               | 1   | 0.8   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 1   | 2.9   | 0    | 0.0   | 2   | 0.7   |
| Other fixed object                                 | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 2.4   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| Total                                              | 125 | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2    | 100.0 | 307 | 100.0 |

Table 3-18
Fatal Bus Involvements by Rollover Status and Bus Type

| Bus rollover     | Sch | nool  | Tra | nsit  | Inte | rcity | Cha | arter | Ot  | her   | Unkı | nown  | To  | tal   |
|------------------|-----|-------|-----|-------|------|-------|-----|-------|-----|-------|------|-------|-----|-------|
| status           | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  |
| No rollover      | 121 | 96.8  | 96  | 100.0 | 7    | 87.5  | 41  | 97.6  | 28  | 82.4  | 2    | 100.0 | 295 | 96.1  |
| First event      | 0   | 0.0   | 0   | 0.0   | 1    | 12.5  | 0   | 0.0   | 3   | 8.8   | 0    | 0.0   | 4   | 1.3   |
| Subsequent event | 4   | 3.2   | 0   | 0.0   | 0    | 0.0   | 1   | 2.4   | 3   | 8.8   | 0    | 0.0   | 8   | 2.6   |
| Total            | 125 | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2    | 100.0 | 307 | 100.0 |

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Table 3-19
Fatal Bus Involvements by Number of Quarter Turns and Direction of Roll

| Number of     | Roll | left  | Roll | right | No  | ne    | To  | tal   |
|---------------|------|-------|------|-------|-----|-------|-----|-------|
| quarter turns | No.  | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  |
| 1             | 3    | 42.9  | 6    | 66.7  | 0   | 0.0   | 9   | 2.9   |
| 2             | 2    | 28.6  | 0    | 0.0   | 0   | 0.0   | 2   | 0.7   |
| 3             | 0    | 0.0   | 1    | 11.1  | 0   | 0.0   | 1   | 0.3   |
| 4             | 0    | 0.0   | 1    | 11.1  | 0   | 0.0   | 1   | 0.3   |
| 5             | 1    | 14.3  | 0    | 0.0   | 0   | 0.0   | 1   | 0.3   |
| 10            | 0    | 0.0   | 1    | 11.1  | 0   | 0.0   | 1   | 0.3   |
| 18            | 1    | 14.3  | 0    | 0.0   | 0   | 0.0   | 1   | 0.3   |
| None          | 0    | 0.0   | 0    | 0.0   | 291 | 100.0 | 291 | 94.8  |
| Total         | 7    | 100.0 | 9    | 100.0 | 291 | 100.0 | 307 | 100.0 |

Note: The BIFA Survey found four more rollovers than FARS reported.

Table 3-20 Fatal Bus Involvements by Fire Occurrence and Bus Type

| Bus fire        | Sch | nool  | Tra | nsit  | Inte | rcity | Cha | arter | Ot  | her   | Unkı | nown  | To  | tal   |
|-----------------|-----|-------|-----|-------|------|-------|-----|-------|-----|-------|------|-------|-----|-------|
| occurrence      | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  |
| No fire         | 125 | 100.0 | 96  | 100.0 | 7    | 87.5  | 42  | 100.0 | 34  | 100.0 | 2    | 100.0 | 306 | 99.7  |
| Fire in vehicle | 0   | 0.0   | 0   | 0.0   | 1    | 12.5  | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| Total           | 125 | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2    | 100.0 | 307 | 100.0 |

# Driver

This section provides statistics on the drivers of buses involved in fatal traffic accidents. Tables cover driver age, sex, alcohol or drug use, safety belt use, driver injury, licensing, previous driving record, compensation, and other driver factors related to the accident.

- Thirteen bus drivers were coded as inattentive, and two as fatigued at the time of the crash.
- Drinking was reported for less than 1.0% of the bus drivers.
- Just under one-third (31.6%) of bus drivers involved in a fatal crash were female.
   Over 50% of school bus drivers were female.
- Twelve (3.9%) bus drivers were fatally injured in a traffic accident.
- One-third (33.3%) of involvements in which the bus driver suffered a fatal injury involved bus rollover, fire or driver ejection.
- Over half (57.6%) of school bus drivers were paid by the hour, as were 75.0% of transit drivers and 75.0% of intercity drivers.
- Overall, 8.5% of bus drivers involved in a fatal crash had a previous speeding conviction. Charter bus drivers had the highest percentage of previous speeding convictions. Transit bus drivers had the highest incidence of previous accidents (fatal and nonfatal).
- The vast majority (96.4%) of all bus drivers had a valid CDL license.
- Failure to yield was the most common driver factor (12.7%), followed by not in lane (4.6%), inattentive (4.2%) and driving too fast (4.2%).
- Over two-thirds (67.1%) of bus drivers had no driver factors recorded.



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Table 4-1 Fatal Bus Involvements by Driver Drinking Status and Bus Type

| Bus driver  | Sch | nool  | Tra | nsit  | Inte | rcity | Cha | arter | Ot  | her   | Unk | nown  | To  | tal   |
|-------------|-----|-------|-----|-------|------|-------|-----|-------|-----|-------|-----|-------|-----|-------|
| drinking    | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No. | Pct.  | No. | Pct.  |
| No drinking | 125 | 100.0 | 95  | 99.0  | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2   | 100.0 | 306 | 99.7  |
| Drinking    | 0   | 0.0   | 1   | 1.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0   | 0.0   | 1   | 0.3   |
| Total       | 125 | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2   | 100.0 | 307 | 100.0 |

Table 4-2 Fatal Bus Involvements by Driver Drug Use and Bus Type

| Bus driver     | Sch | nool  | Tra | nsit  | Inte | rcity | Cha | arter | Ot  | her   | Unkı | nown  | To  | tal   |
|----------------|-----|-------|-----|-------|------|-------|-----|-------|-----|-------|------|-------|-----|-------|
| drug use       | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  |
| No drugs       | 39  | 31.2  | 21  | 21.9  | 5    | 62.5  | 9   | 21.4  | 9   | 26.5  | 0    | 0.0   | 83  | 27.0  |
| Drugs involved | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   |
| Not reported   | 83  | 66.4  | 74  | 77.1  | 2    | 25.0  | 33  | 78.6  | 21  | 61.8  | 2    | 100.0 | 215 | 70.0  |
| Reported unk.  | 3   | 2.4   | 1   | 1.0   | 1    | 12.5  | 0   | 0.0   | 4   | 11.8  | 0    | 0.0   | 9   | 2.9   |
| Total          | 125 | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2    | 100.0 | 307 | 100.0 |

Table 4-3 Fatal Bus Involvements by Driver Age and Bus Type

|             | Sch | nool  | Tra | nsit  | Inte | rcity | Cha | arter | Ot  | her   | Unkr | nown  | To  | tal   |
|-------------|-----|-------|-----|-------|------|-------|-----|-------|-----|-------|------|-------|-----|-------|
| Age (years) | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  |
| 18-21       | 0   | 0.0   | 1   | 1.0   | 0    | 0.0   | 1   | 2.4   | 2   | 5.9   | 0    | 0.0   | 4   | 1.3   |
| 22-25       | 0   | 0.0   | 1   | 1.0   | 0    | 0.0   | 0   | 0.0   | 2   | 5.9   | 0    | 0.0   | 3   | 1.0   |
| 26-30       | 7   | 5.6   | 5   | 5.2   | 0    | 0.0   | 3   | 7.1   | 2   | 5.9   | 0    | 0.0   | 17  | 5.5   |
| 31-35       | 8   | 6.4   | 6   | 6.3   | 0    | 0.0   | 0   | 0.0   | 3   | 8.8   | 0    | 0.0   | 17  | 5.5   |
| 36-40       | 13  | 10.4  | 15  | 15.6  | 0    | 0.0   | 1   | 2.4   | 6   | 17.6  | 2    | 100.0 | 37  | 12.1  |
| 41-45       | 20  | 16.0  | 14  | 14.6  | 0    | 0.0   | 8   | 19.0  | 4   | 11.8  | 0    | 0.0   | 46  | 15.0  |
| 46-50       | 19  | 15.2  | 22  | 22.9  | 3    | 37.5  | 4   | 9.5   | 3   | 8.8   | 0    | 0.0   | 51  | 16.6  |
| 51-55       | 13  | 10.4  | 12  | 12.5  | 1    | 12.5  | 5   | 11.9  | 4   | 11.8  | 0    | 0.0   | 35  | 11.4  |
| 56-60       | 12  | 9.6   | 9   | 9.4   | 1    | 12.5  | 10  | 23.8  | 4   | 11.8  | 0    | 0.0   | 36  | 11.7  |
| 61-65       | 16  | 12.8  | 5   | 5.2   | 1    | 12.5  | 3   | 7.1   | 0   | 0.0   | 0    | 0.0   | 25  | 8.1   |
| 66-70       | 12  | 9.6   | 4   | 4.2   | 1    | 12.5  | 3   | 7.1   | 2   | 5.9   | 0    | 0.0   | 22  | 7.2   |
| 71-75       | 4   | 3.2   | 1   | 1.0   | 0    | 0.0   | 2   | 4.8   | 1   | 2.9   | 0    | 0.0   | 8   | 2.6   |
| > 75        | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 1   | 2.9   | 0    | 0.0   | 1   | 0.3   |
| Unknown     | 1   | 0.8   | 1   | 1.0   | 1    | 12.5  | 2   | 4.8   | 0   | 0.0   | 0    | 0.0   | 5   | 1.6   |
| Total       | 125 | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2    | 100.0 | 307 | 100.0 |

Table 4-4
Fatal Bus Involvements by Driver Sex and Bus Type

|            | Sch | nool  | Tra | nsit  | Inte | rcity | Cha | arter | Otl | her   | Unkı | nown  | To  | tal   |
|------------|-----|-------|-----|-------|------|-------|-----|-------|-----|-------|------|-------|-----|-------|
| Driver sex | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  |
| Male       | 61  | 48.8  | 72  | 75.0  | 6    | 75.0  | 40  | 95.2  | 27  | 79.4  | 2    | 100.0 | 208 | 67.8  |
| Female     | 63  | 50.4  | 24  | 25.0  | 1    | 12.5  | 2   | 4.8   | 7   | 20.6  | 0    | 0.0   | 97  | 31.6  |
| Unknown    | 1   | 0.8   | 0   | 0.0   | 1    | 12.5  | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 2   | 0.7   |
| Total      | 125 | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2    | 100.0 | 307 | 100.0 |

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Table 4-5
Fatal Bus Involvements by Driver Restraint Use and Bus Type

|                      | Sch | nool  | Tra | nsit  | Inte | rcity | Cha | arter | Ot  | her   | Unkı | nown  | To  | tal   |
|----------------------|-----|-------|-----|-------|------|-------|-----|-------|-----|-------|------|-------|-----|-------|
| Driver restraint use | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  |
| None used or N/A     | 11  | 8.8   | 13  | 13.5  | 0    | 0.0   | 4   | 9.5   | 4   | 11.8  | 0    | 0.0   | 32  | 10.4  |
| Shoulder belt        | 0   | 0.0   | 1   | 1.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| Lap belt             | 16  | 12.8  | 15  | 15.6  | 1    | 12.5  | 5   | 11.9  | 0   | 0.0   | 0    | 0.0   | 37  | 12.1  |
| Lap and shoulder     | 84  | 67.2  | 51  | 53.1  | 5    | 62.5  | 30  | 71.4  | 25  | 73.5  | 1    | 50.0  | 196 | 63.8  |
| Used, type unk       | 1   | 0.8   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| Unknown              | 13  | 10.4  | 16  | 16.7  | 2    | 25.0  | 3   | 7.1   | 5   | 14.7  | 1    | 50.0  | 40  | 13.0  |
| Total                | 125 | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2    | 100.0 | 307 | 100.0 |

Table 4-6
Fatal Bus Involvements by Driver Injury Severity and Bus Type

| Driver injury          | Sch | nool  | Tra | nsit  | Inte | rcity | Cha | arter | Ot  | her   | Unk | nown  | To  | otal  |
|------------------------|-----|-------|-----|-------|------|-------|-----|-------|-----|-------|-----|-------|-----|-------|
| severity               | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No. | Pct.  | No. | Pct.  |
| Fatal injury (K)       | 2   | 1.6   | 1   | 1.0   | 1    | 12.5  | 5   | 11.9  | 3   | 8.8   | 0   | 0.0   | 12  | 3.9   |
| Incapacitating (A)     | 6   | 4.8   | 3   | 3.1   | 0    | 0.0   | 2   | 4.8   | 5   | 14.7  | 0   | 0.0   | 16  | 5.2   |
| Non-incapacitating (B) | 13  | 10.4  | 6   | 6.3   | 1    | 12.5  | 2   | 4.8   | 5   | 14.7  | 1   | 50.0  | 28  | 9.1   |
| Complaint of pain (C)  | 20  | 16.0  | 11  | 11.5  | 1    | 12.5  | 5   | 11.9  | 5   | 14.7  | 0   | 0.0   | 42  | 13.7  |
| No injury (O)          | 82  | 65.6  | 74  | 77.1  | 4    | 50.0  | 28  | 66.7  | 16  | 47.1  | 1   | 50.0  | 205 | 66.8  |
| Unknown                | 2   | 1.6   | 1   | 1.0   | 1    | 12.5  | 0   | 0.0   | 0   | 0.0   | 0   | 0.0   | 4   | 1.3   |
| Total                  | 125 | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2   | 100.0 | 307 | 100.0 |

Table 4-7
Fatal Bus Involvements by Driver Injury Severity and Rollover, Fire, Ejection Status

|                       | Fa    | atal  | Inca  | paci- | Non-ir  | псара- | Com   | olaint | Ν     | lo    |      |       |     |       |
|-----------------------|-------|-------|-------|-------|---------|--------|-------|--------|-------|-------|------|-------|-----|-------|
| Rollover, fire        | injur | y (K) | tatin | g (A) | citatir | ng (B) | of pa | in (C) | injur | y (O) | Unkı | nown  | To  | tal   |
| ejection              | No.   | Pct.  | No.   | Pct.  | No.     | Pct.   | No.   | Pct.   | No.   | Pct.  | No.  | Pct.  | No. | Pct.  |
| Rollover only         | 1     | 8.3   | 2     | 12.5  | 2       | 7.1    | 2     | 4.8    | 1     | 0.5   | 1    | 25.0  | 9   | 2.9   |
| Fire only             | 0     | 0.0   | 0     | 0.0   | 0       | 0.0    | 0     | 0.0    | 0     | 0.0   | 0    | 0.0   | 0   | 0.0   |
| Ejection only         | 1     | 8.3   | 0     | 0.0   | 0       | 0.0    | 0     | 0.0    | 0     | 0.0   | 0    | 0.0   | 1   | 0.3   |
| Rollover and ejection | 2     | 16.7  | 1     | 6.3   | 0       | 0.0    | 0     | 0.0    | 0     | 0.0   | 0    | 0.0   | 3   | 1.0   |
| None                  | 8     | 66.7  | 13    | 81.3  | 26      | 92.9   | 40    | 95.2   | 203   | 99.0  | 1    | 25.0  | 291 | 94.8  |
| Unknown               | 0     | 0.0   | 0     | 0.0   | 0       | 0.0    | 0     | 0.0    | 1     | 0.5   | 2    | 50.0  | 3   | 1.0   |
| Total                 | 12    | 100.0 | 16    | 100.0 | 28      | 100.0  | 42    | 100.0  | 205   | 100.0 | 4    | 100.0 | 307 | 100.0 |

Table 4-8
Fatal Bus Involvements by Bus Type and Driver Extrication

|                    | Sch | nool  | Tra | ınsit | Inte | rcity | Cha | arter | Ot  | her   | Unk | nown  | To  | tal   |
|--------------------|-----|-------|-----|-------|------|-------|-----|-------|-----|-------|-----|-------|-----|-------|
| Driver extrication | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No. | Pct.  | No. | Pct.  |
| Not extricated     | 122 | 97.6  | 96  | 100.0 | 6    | 75.0  | 40  | 95.2  | 32  | 94.1  | 2   | 100.0 | 298 | 97.1  |
| Extricated         | 1   | 0.8   | 0   | 0.0   | 1    | 12.5  | 2   | 4.8   | 2   | 5.9   | 0   | 0.0   | 6   | 2.0   |
| Unknown            | 2   | 1.6   | 0   | 0.0   | 1    | 12.5  | 0   | 0.0   | 0   | 0.0   | 0   | 0.0   | 3   | 1.0   |
| Total              | 125 | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2   | 100.0 | 307 | 100.0 |

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Table 4-9
Fatal Bus Involvements by Driver Compensation

| Compensation                                             | No. | Pct.  |
|----------------------------------------------------------|-----|-------|
| Hourly only                                              | 176 | 57.3  |
| Mileage only                                             | 5   | 1.6   |
| Salary only                                              | 18  | 5.9   |
| Driver owned only                                        | 2   | 0.7   |
| Driver owned and tips                                    | 1   | 0.3   |
| Hourly and mileage                                       | 3   | 1.0   |
| Hourly and tips                                          | 2   | 0.7   |
| Hourly, mileage and tips                                 | 1   | 0.3   |
| Salary, primary employment not a bus driver              | 2   | 0.7   |
| Driver is volunteer                                      | 3   | 1.0   |
| Driver is volunteer, primary employment not a bus driver | 1   | 0.3   |
| Hourly, primary employment not a bus driver              | 1   | 0.3   |
| Other and tips                                           | 1   | 0.3   |
| Primary employment not a bus driver                      | 4   | 1.3   |
| Other                                                    |     |       |
| Paid by trip/route                                       | 11  | 3.6   |
| Paid by day                                              | 2   | 0.7   |
| Paid flat rate                                           | 2   | 0.7   |
| Paid by bid                                              | 1   | 0.3   |
| Driver related to owner                                  | 1   | 0.3   |
| Driver also a member of National Armed Services          | 2   | 0.7   |
| No driver, bus was parked                                | 1   | 0.3   |
| Unknown                                                  | 67  | 21.8  |
| Total                                                    | 307 | 100.0 |

Table 4-10 Fatal Bus Involvements by Driver Compensation and Bus Type

| Operator type                                  |                                                  |       |
|------------------------------------------------|--------------------------------------------------|-------|
| Compensation                                   | No.                                              | Pct.  |
| School district                                |                                                  |       |
| Hourly only                                    | 72                                               | 57.6  |
| Salary only                                    | 16                                               | 12.8  |
| Mileage only                                   | 1                                                | 0.8   |
| Hourly and mileage                             | 1                                                | 0.8   |
| Hourly, primary employment not a bus driver    | 1                                                | 0.8   |
| Salary, primary employment not a bus driver    | 1                                                | 0.8   |
| Volunteer, primary employment not a bus driver | 1                                                | 0.8   |
| Other                                          | <del>†                                    </del> | 0.0   |
| Paid by day                                    | 2                                                | 1.6   |
| Paid by trip/route                             | 8                                                | 6.4   |
| Paid flat rate                                 | 1                                                | 0.8   |
| Driver related to owner                        | 1                                                | 0.8   |
| No driver, bus was parked                      | 1                                                | 0.8   |
| Unknown                                        | 19                                               | 15.2  |
| Total school bus                               | 125                                              | 100.0 |
| Transit bus authority                          | 120                                              | 100.0 |
| Hourly only                                    | 72                                               | 75.0  |
| Salary only                                    | 1                                                | 1.0   |
| Unknown                                        | 23                                               | 24.0  |
| Total transit bus                              | 96                                               | 100.0 |
|                                                | 90                                               | 100.0 |
| Intercity bus operator                         | T 6                                              | 75.0  |
| Hourly only                                    | 6                                                | 75.0  |
| Other                                          | + 4                                              | 40.5  |
| Paid by route                                  | 1                                                | 12.5  |
| Unknown                                        | 1                                                | 12.5  |
| Total intercity bus                            | 8                                                | 100.0 |
| Charter bus operator                           | 1 44                                             | 00.0  |
| Hourly only                                    | 14                                               | 33.3  |
| Mileage only                                   | 3                                                | 7.1   |
| Salary only                                    | 1                                                | 2.4   |
| Hourly and tips                                | 1                                                | 2.4   |
| Hourly and mileage                             | 2                                                | 0.7   |
| Hourly, mileage and tips                       | 1                                                | 2.4   |
| Driver owned                                   | 2                                                | 4.8   |
| Tips and other                                 | 1                                                | 2.4   |
| Other                                          |                                                  |       |
| Paid by trip                                   | 2                                                | 4.8   |
| Paid flat rate                                 | 1                                                | 2.4   |
| Paid by bid                                    | 1                                                | 0.3   |
| Unknown                                        | 13                                               | 31.0  |
| Total charter bus                              | 42                                               | 100.0 |
| Other operator                                 |                                                  |       |
| Hourly only                                    | 12                                               | 35.3  |
| Mileage only                                   | 1                                                | 0.3   |
| Hourly and tips                                | 1                                                |       |
| Salary, primary employment not a bus driver    | 1                                                | 0.3   |
| Driver is volunteer                            | 3                                                | 8.8   |
| Driver owned and tips                          | 1                                                |       |
| Primary employment not a bus driver            | 4                                                | 11.8  |
| Other                                          |                                                  |       |
| Driver is member of National Armed Services    | 2                                                | 0.7   |
| Unknown                                        | 9                                                | 26.5  |
| Total other operator                           | 34                                               | 100.0 |
| Unknown operator type                          | 2                                                | 100.0 |
| Total                                          | 307                                              | 100.0 |
| ı otur                                         | 307                                              | 100.0 |

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Table 4-11 Fatal Bus Involvements by Reported Hours Driven and Bus Type

|                              | Sch | nool  | Tra | nsit  | Inte | rcity | Cha | arter | Ot  | her   | Unkı | nown  | To  | otal  |
|------------------------------|-----|-------|-----|-------|------|-------|-----|-------|-----|-------|------|-------|-----|-------|
| Hours driven                 | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  |
| 1 hr                         | 61  | 48.8  | 6   | 6.3   | 1    | 12.5  | 11  | 26.2  | 9   | 26.5  | 0    | 0.0   | 88  | 28.7  |
| 2 hrs                        | 18  | 14.4  | 7   | 7.3   | 1    | 12.5  | 6   | 14.3  | 4   | 11.8  | 0    | 0.0   | 36  | 11.7  |
| 3 hrs                        | 13  | 10.4  | 3   | 3.1   | 1    | 12.5  | 2   | 4.8   | 5   | 14.7  | 0    | 0.0   | 24  | 7.8   |
| 4-5 hrs                      | 6   | 4.8   | 12  | 12.5  | 3    | 37.5  | 4   | 9.5   | 2   | 5.9   | 0    | 0.0   | 27  | 8.8   |
| 6-7 hrs                      | 3   | 2.4   | 9   | 9.4   | 1    | 12.5  | 3   | 7.1   | 0   | 0.0   | 0    | 0.0   | 16  | 5.2   |
| 8-9 hrs                      | 0   | 0.0   | 4   | 4.2   | 0    | 0.0   | 2   | 4.8   | 0   | 0.0   | 0    | 0.0   | 6   | 2.0   |
| 10-11 hrs                    | 0   | 0.0   | 3   | 3.1   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 3   | 1.0   |
| Unknown but legal            | 3   | 2.4   | 1   | 1.0   | 0    | 0.0   | 1   | 2.4   | 0   | 0.0   | 0    | 0.0   | 5   | 1.6   |
| Unknown but over legal limit | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 1   | 2.9   | 0    | 0.0   | 1   | 0.3   |
| Unoccupied                   | 1   | 8.0   | 1   | 1.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 2   | 0.7   |
| Unknown                      | 20  | 16.0  | 50  | 52.1  | 1    | 12.5  | 13  | 31.0  | 13  | 38.2  | 2    | 100.0 | 99  | 32.2  |
| Total                        | 125 | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2    | 100.0 | 307 | 100.0 |

Note: Reflects actual driving time since driver's last 8 hour rest period.

Table 4-12
Fatal Bus Involvements by Driver Violations Charged and Bus Type

|                             | Sch | nool  | Tra | nsit  | Inte | rcity | Cha | arter | Ot  | her   | Unkı | nown  | To  | otal  |
|-----------------------------|-----|-------|-----|-------|------|-------|-----|-------|-----|-------|------|-------|-----|-------|
| Driver violations charged   | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  |
| None                        | 111 | 88.8  | 91  | 94.8  | 6    | 75.0  | 42  | 100.0 | 31  | 91.2  | 2    | 100.0 | 283 | 92.2  |
| Manslaughter/homicide       | 1   | 0.8   | 0   | 0.0   | 1    | 12.5  | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 2   | 0.7   |
| Unsafe reckless             | 1   | 0.8   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| Inattentive                 | 1   | 0.8   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 2   | 5.9   | 0    | 0.0   | 3   | 1.0   |
| Speeding                    | 1   | 0.8   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| Unreasonable speed          | 1   | 0.8   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| Failure to stop, red signal | 1   | 0.8   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| Failure to obey stop sign   | 0   | 0.0   | 1   | 1.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| Failure to signal           | 1   | 0.8   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| Failure to yield            | 2   | 1.6   | 2   | 2.1   | 1    | 12.5  | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 5   | 1.6   |
| Any non-moving violation    | 1   | 0.8   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| Any equipment violation     | 1   | 0.8   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| Unknown violation           | 5   | 4.0   | 1   | 1.0   | 1    | 12.5  | 0   | 0.0   | 1   | 0.0   | 0    | 0.0   | 8   | 2.6   |
| Total                       | 125 | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2    | 100.0 | 307 | 100.0 |

Note: Since "driver violations charged" is a multiple-response variable, more than one driver violation can be coded per driver. Percentages are calculated based on total drivers, not total violations.

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Table 4-13
Fatal Bus Involvements by Number of Previous Accidents (fatal and nonfatal) and Bus Type

| No. of previous | Sch | nool  | Tra | nsit  | Inte | rcity | Cha | arter | Ot  | her   | Unk | nown  | To  | tal   |
|-----------------|-----|-------|-----|-------|------|-------|-----|-------|-----|-------|-----|-------|-----|-------|
| accidents*      | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No. | Pct.  | No. | Pct.  |
| 0               | 99  | 79.2  | 61  | 63.5  | 5    | 62.5  | 32  | 76.2  | 30  | 88.2  | 2   | 100.0 | 229 | 74.6  |
| 1               | 15  | 12.0  | 14  | 14.6  | 0    | 0.0   | 7   | 16.7  | 2   | 5.9   | 0   | 0.0   | 38  | 12.4  |
| 2               | 4   | 3.2   | 12  | 12.5  | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0   | 0.0   | 16  | 5.2   |
| 3               | 0   | 0.0   | 1   | 1.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0   | 0.0   | 1   | 0.3   |
| 4               | 1   | 0.8   | 1   | 1.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0   | 0.0   | 2   | 0.7   |
| Not reported    | 5   | 4.0   | 7   | 7.3   | 2    | 25.0  | 2   | 4.8   | 1   | 2.9   | 0   | 0.0   | 17  | 5.5   |
| Unknown         | 1   | 0.8   | 0   | 0.0   | 1    | 12.5  | 1   | 2.4   | 1   | 2.9   | 0   | 0.0   | 4   | 1.3   |
| Total           | 125 | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2   | 100.0 | 307 | 100.0 |

Table 4-14
Fatal Bus Involvements by Number of Previous Suspensions and Bus Type

| No. of previous | Sch | nool  | Tra | ınsit | Inte | rcity | Cha | arter | Ot  | her   | Unkr | nown  | To  | tal   |
|-----------------|-----|-------|-----|-------|------|-------|-----|-------|-----|-------|------|-------|-----|-------|
| suspensions*    | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  |
| 0               | 121 | 96.8  | 91  | 94.8  | 7    | 87.5  | 40  | 95.2  | 30  | 88.2  | 1    | 50.0  | 290 | 94.5  |
| 1               | 3   | 2.4   | 2   | 2.1   | 0    | 0.0   | 1   | 2.4   | 1   | 2.9   | 1    | 50.0  | 8   | 2.6   |
| 3               | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   |
| 2               | 0   | 0.0   | 3   | 3.1   | 0    | 0.0   | 0   | 0.0   | 1   | 2.9   | 0    | 0.0   | 4   | 1.3   |
| 4               | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   |
| 5               | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 1   | 2.9   | 0    | 0.0   | 1   | 0.3   |
| Unknown         | 1   | 0.8   | 0   | 0.0   | 1    | 12.5  | 1   | 2.4   | 1   | 2.9   | 0    | 0.0   | 4   | 1.3   |
| Total           | 125 | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2    | 100.0 | 307 | 100.0 |

Table 4-15
Fatal Bus Involvements by Number of Previous Speeding Convictions and Bus Type

| No. of previous  | Sch | nool  | Tra | nsit  | Inte | rcity | Cha | arter | Ot  | her   | Unk | nown  | To  | otal  |
|------------------|-----|-------|-----|-------|------|-------|-----|-------|-----|-------|-----|-------|-----|-------|
| speeding convs.* | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No. | Pct.  | No. | Pct.  |
| 0                | 116 | 92.8  | 88  | 91.7  | 6    | 75.0  | 35  | 83.3  | 30  | 88.2  | 2   | 100.0 | 277 | 90.2  |
| 1                | 7   | 5.6   | 7   | 7.3   | 1    | 12.5  | 4   | 9.5   | 1   | 2.9   | 0   | 0.0   | 20  | 6.5   |
| 2                | 0   | 0.0   | 1   | 1.0   | 0    | 0.0   | 1   | 2.4   | 1   | 2.9   | 0   | 0.0   | 3   | 1.0   |
| 3                | 1   | 0.8   | 0   | 0.0   | 0    | 0.0   | 1   | 2.4   | 0   | 0.0   | 0   | 0.0   | 2   | 0.7   |
| 4                | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0   | 0.0   | 0   | 0.0   |
| 5                | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0   | 0.0   | 0   | 0.0   |
| 6                | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 1   | 2.9   | 0   | 0.0   | 1   | 0.3   |
| Unknown          | 1   | 0.8   | 0   | 0.0   | 1    | 12.5  | 1   | 2.4   | 1   | 2.9   | 0   | 0.0   | 4   | 1.3   |
| Total            | 125 | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2   | 100.0 | 307 | 100.0 |

<sup>\*</sup> Reflects events occurring within three years of the current accident.

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Table 4-16
Fatal Bus Involvements by Previous Other Moving Convictions and Bus Type

| No. prev. other | Sch | nool  | Tra | ınsit | Inte | rcity | Cha | arter | Ot  | her   | Unkr | nown  | To  | tal   |
|-----------------|-----|-------|-----|-------|------|-------|-----|-------|-----|-------|------|-------|-----|-------|
| moving convs.*  | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  |
| 0               | 110 | 88.0  | 85  | 88.5  | 6    | 75.0  | 32  | 76.2  | 29  | 85.3  | 1    | 50.0  | 263 | 85.7  |
| 1               | 12  | 9.6   | 8   | 8.3   | 0    | 0.0   | 9   | 21.4  | 2   | 5.9   | 0    | 0.0   | 31  | 10.1  |
| 2               | 0   | 0.0   | 2   | 2.1   | 1    | 12.5  | 0   | 0.0   | 2   | 5.9   | 0    | 0.0   | 5   | 1.6   |
| 3               | 1   | 0.8   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| 4               | 1   | 0.8   | 1   | 1.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 2   | 0.7   |
| 5               | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 1    | 50.0  | 1   | 0.3   |
| Unknown         | 1   | 0.8   | 0   | 0.0   | 1    | 12.5  | 1   | 2.4   | 1   | 2.9   | 0    | 0.0   | 4   | 1.3   |
| Total           | 125 | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2    | 100.0 | 307 | 100.0 |

<sup>\*</sup> Reflects moving convictions occurring within three years of the current accident.

Table 4-17
Fatal Bus Involvements by License Class Compliance and Bus Type

| License class  | Sch | nool  | Tra | nsit  | Inte | rcity | Cha | arter | Ot  | her   | Unkı | nown  | To  | tal   |
|----------------|-----|-------|-----|-------|------|-------|-----|-------|-----|-------|------|-------|-----|-------|
| compliance     | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  |
| Not licensed   | 1   | 0.8   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| Not valid      | 0   | 0.0   | 2   | 2.1   | 0    | 0.0   | 2   | 4.8   | 1   | 2.9   | 0    | 0.0   | 5   | 1.6   |
| Valid          | 123 | 98.4  | 94  | 97.9  | 7    | 87.5  | 38  | 90.5  | 32  | 94.1  | 2    | 100.0 | 296 | 96.4  |
| Unknown if CDL | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 2.4   | 0   | 0.0   | 0    | 0.0   | 1   | 0.3   |
| Unknown        | 1   | 0.8   | 0   | 0.0   | 1    | 12.5  | 1   | 2.4   | 1   | 2.9   | 0    | 0.0   | 4   | 1.3   |
| Total          | 125 | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2    | 100.0 | 307 | 100.0 |

Table 4-18
Fatal Bus Involvements by CDL License Status and Bus Type

| CDL license       | Sch | nool  | Tra | nsit  | Inte | rcity | Cha | arter | Ot  | her   | Unk | nown  | To  | tal   |
|-------------------|-----|-------|-----|-------|------|-------|-----|-------|-----|-------|-----|-------|-----|-------|
| status            | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No. | Pct.  | No. | Pct.  |
| No CDL            | 1   | 0.8   | 0   | 0.0   | 0    | 0.0   | 1   | 2.4   | 19  | 55.9  | 0   | 0.0   | 21  | 6.8   |
| Suspended         | 0   | 0.0   | 1   | 1.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0   | 0.0   | 1   | 0.3   |
| Expired           | 1   | 0.8   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0   | 0.0   | 1   | 0.3   |
| Cancelled/denied  | 0   | 0.0   | 1   | 1.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0   | 0.0   | 1   | 0.3   |
| Valid             | 122 | 97.6  | 93  | 96.9  | 7    | 87.5  | 38  | 90.5  | 14  | 41.2  | 2   | 100.0 | 276 | 89.9  |
| Other - not valid | 0   | 0.0   | 1   | 1.0   | 0    | 0.0   | 1   | 2.4   | 0   | 0.0   | 0   | 0.0   | 2   | 0.7   |
| Unknown           | 1   | 0.8   | 0   | 0.0   | 1    | 12.5  | 2   | 4.8   | 1   | 2.9   | 0   | 0.0   | 5   | 1.6   |
| Total             | 125 | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2   | 100.0 | 307 | 100.0 |

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Table 4-19
Fatal Bus Involvements by License Endorsements and Bus Type

| License         | Sch | nool  | Tra | nsit  | Inte | rcity | Cha | arter | Ot  | her   | Unk | nown  | To  | tal   |
|-----------------|-----|-------|-----|-------|------|-------|-----|-------|-----|-------|-----|-------|-----|-------|
| endorsements    | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No. | Pct.  | No. | Pct.  |
| No endorsements | 5   | 4.0   | 13  | 13.5  | 0    | 0.0   | 4   | 9.5   | 22  | 64.7  | 0   | 0.0   | 44  | 14.3  |
| Complied        | 89  | 71.2  | 65  | 67.7  | 7    | 87.5  | 26  | 61.9  | 8   | 23.5  | 1   | 50.0  | 196 | 63.8  |
| Not complied    | 1   | 0.8   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 1   | 2.9   | 0   | 0.0   | 2   | 0.7   |
| Compliance unk  | 27  | 21.6  | 16  | 16.7  | 0    | 0.0   | 7   | 16.7  | 1   | 2.9   | 1   | 50.0  | 52  | 16.9  |
| Unknown         | 3   | 2.4   | 2   | 2.1   | 1    | 12.5  | 5   | 11.9  | 2   | 5.9   | 0   | 0.0   | 13  | 4.2   |
| Total           | 125 | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2   | 100.0 | 307 | 100.0 |

Table 4-20 Fatal Bus Involvements by Driver-Related Factors and Bus Type

|                               | Sch | nool  | Tra | nsit  | Inte | rcity | Cha | arter | Otl | ner   | Unk | nown  | To  | otal  |
|-------------------------------|-----|-------|-----|-------|------|-------|-----|-------|-----|-------|-----|-------|-----|-------|
| Driver-related factors        | No. | Pct.  | No. | Pct.  | No.  | Pct.  | No. | Pct.  | No. | Pct.  | No. | Pct.  | No. | Pct.  |
| None                          | 81  | 64.8  | 70  | 72.9  | 3    | 37.5  | 34  | 81.0  | 16  | 47.1  | 2   | 100.0 | 206 | 67.1  |
| Physical/mental condition     |     | •     |     |       |      |       | •   | '     |     |       |     |       |     |       |
| Drowsy, asleep                | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 2.4   | 1   | 2.9   | 0   | 0.0   | 2   | 0.7   |
| Inattentive                   | 9   | 7.2   | 3   | 3.1   | 0    | 0.0   | 0   | 0.0   | 1   | 2.9   | 0   | 0.0   | 13  | 4.2   |
| Miscellaneous causes          |     |       |     |       |      |       |     |       |     |       |     |       |     |       |
| Improper tailing              | 0   | 0.0   | 0   | 0.0   | 1    | 12.5  | 0   | 0.0   | 0   | 0.0   | 0   | 0.0   | 1   | 0.3   |
| Improper lane change          | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 1   | 2.4   | 0   | 0.0   | 0   | 0.0   | 1   | 0.3   |
| Not in lane                   | 5   | 4.0   | 2   | 2.1   | 0    | 0.0   | 3   | 7.1   | 4   | 11.8  | 0   | 0.0   | 14  | 4.6   |
| Improper starting or backing  | 2   | 1.6   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0   | 0.0   | 2   | 0.7   |
| Erratic/reckless              | 1   | 0.8   | 1   | 1.0   | 0    | 0.0   | 0   | 0.0   | 3   | 8.8   | 0   | 0.0   | 5   | 1.6   |
| Failure to yield              | 20  | 16.0  | 13  | 13.5  | 1    | 12.5  | 0   | 0.0   | 5   | 14.7  | 0   | 0.0   | 39  | 12.7  |
| Failure to obey signs         | 3   | 2.4   | 1   | 1.0   | 0    | 0.0   | 1   | 2.4   | 0   | 0.0   | 0   | 0.0   | 5   | 1.6   |
| Driving too fast              | 4   | 3.2   | 2   | 2.1   | 1    | 12.5  | 2   | 4.8   | 4   | 11.8  | 0   | 0.0   | 13  | 4.2   |
| Other improper turn           | 0   | 0.0   | 2   | 2.1   | 0    | 0.0   | 0   | 0.0   | 2   | 5.9   | 0   | 0.0   | 4   | 1.3   |
| Wrong side of road            | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 1   | 2.9   | 0   | 0.0   | 1   | 0.3   |
| Stopping in road              | 0   | 0.0   | 0   | 0.0   | 1    | 12.5  | 0   | 0.0   | 0   | 0.0   | 0   | 0.0   | 1   | 0.3   |
| Over correcting               | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 3   | 8.8   | 0   | 0.0   | 3   | 1.0   |
| Vision obscured by            |     |       |     |       |      |       |     |       |     |       |     |       |     |       |
| Weather                       | 2   | 1.6   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0   | 0.0   | 2   | 0.7   |
| Glare                         | 1   | 0.8   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0   | 0.0   | 1   | 0.3   |
| Parked vehicle                | 1   | 0.8   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0   | 0.0   | 1   | 0.3   |
| Inadequate defroster          | 0   | 0.0   | 1   | 1.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0   | 0.0   | 1   | 0.3   |
| Obstructing angles on vehicle | 0   | 0.0   | 0   | 0.0   | 1    | 12.5  | 0   | 0.0   | 0   | 0.0   | 0   | 0.0   | 1   | 0.3   |
| Other obstruction             | 1   | 0.8   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0   | 0.0   | 1   | 0.3   |
| Avoiding, swerving due to     |     |       |     |       |      |       |     |       |     |       |     |       |     |       |
| Slippery surface              | 1   | 0.8   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0   | 0.0   | 1   | 0.3   |
| Flat tire                     | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 1   | 2.9   | 0   | 0.0   | 1   | 0.3   |
| Vehicle in road               | 0   | 0.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 1   | 2.9   | 0   | 0.0   | 1   | 0.3   |
| Pedestrian                    | 1   | 8.0   | 1   | 1.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0   | 0.0   | 2   | 0.7   |
| Water, snow, oil              | 3   | 2.4   | 0   | 0.0   | 1    | 12.5  | 0   | 0.0   | 1   | 2.9   | 0   | 0.0   | 5   | 1.6   |
| Other misc. factors           |     |       |     |       |      |       |     |       |     |       |     |       |     |       |
| Homicide                      | 1   | 8.0   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0   | 0.0   | 1   | 0.3   |
| Other nonmoving violation     | 1   | 0.8   | 0   | 0.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0   | 0.0   | 1   | 0.3   |
| Possible distractions         |     |       |     |       |      |       |     |       |     |       |     |       |     |       |
| Cellular phone in vehicle     | 1   | 8.0   | 4   | 4.2   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0   | 0.0   | 5   | 1.6   |
| Cellular phone in use         | 0   | 0.0   | 1   | 1.0   | 0    | 0.0   | 0   | 0.0   | 0   | 0.0   | 0   | 0.0   | 1   | 0.3   |
| Unknown                       | 2   | 1.6   | 4   | 4.2   | 0    | 0.0   | 1   | 2.4   | 0   | 0.0   | 0   | 0.0   | 7   | 2.3   |
| Total                         | 125 | 100.0 | 96  | 100.0 | 8    | 100.0 | 42  | 100.0 | 34  | 100.0 | 2   | 100.0 | 307 | 100.0 |

Note: Since "driver-related factors" is a multiple-response variable, more than one driver factor can be coded per driver. Percentages are calculated based on total drivers, not total factors.

# Glossary and abbreviations

# Glossary

### **Bus Operator Types**

#### School

Any public or private school or district, or contracted carrier operating on behalf of the entity, providing transportation for pupils.

#### Transit

An entity providing passenger transportation over fixed, scheduled routes, primarily within urban geographical areas.

#### Intercity

A company providing for-hire, long-distance passenger transportation between cities over fixed routes with regular schedules.

#### Charter

Companies that operate buses on a for-hire basis, usually providing round-trip service for a tour group or an outing, either on an ad hoc or scheduled basis.

#### Other operator type

This category includes buses operated by private companies (primary business other than passenger transportation), non-governmental organizations (such as churches and non-profit organizations), non-educational units of government (such as departments of corrections or highway departments), and private individuals (entertainers, sports teams, etc.).

#### Unknown operator type

In cases where sufficient information could not be obtained about the operator type, "unknown" was assigned.

#### **Bus Definitions**

#### Big cowl and chassis

A truck-based bus, where a coach has been fitted onto a large, front-engine chassis, with a conventional hood/cowl in front of the windshield.

#### Bus

Motor vehicles with seating for nine or more, including the driver, that are not

operated as personal transportation, and all motor vehicles with seating for 16 or more.

#### **Heavy-duty bus**

A heavy-duty vehicle such as a transit bus, manufactured to withstand the demands of severe duty cycles; typically 40 feet in length, but shorter lengths of 35 or 30 may be found. Articulated models are typically 60 feet in length, with the two vehicle sections connected by a joint mechanism which allows the bus to negotiate sharp turns and still have a continuous interior compartment.

#### **Heavy-duty with lift**

A heavy-duty bus with a wheelchair lift.

#### **High platform**

Typically intercity or touring coaches, often with cargo holds below the seating deck as well as a lavatory. These buses are designed for long distance travel.

#### Jitney .

A small bus operated on a fixed route as demand warrants without fixed schedules or fixed stops.

#### Large passenger van

A full-size vehicle manufactured as a complete unit (unlike a cutaway cab fitted with a coach), seating up to 15 people.

#### Long-distance coach

Refers to the typical cross-country, heavy duty bus.

#### Low platform

Flat front transit buses with no cargo storage capacity below the passenger compartment. Flat front transit-style school buses have also been included in this category.

#### Mini van

A smaller vehicle manufactured as a complete unit, seating 7 – 10 people.

#### **Passengers**

Individuals being transported, excluding the driver.

#### Shuttle bus

A smaller bus intended for short, local trips.

#### Small cowl and chassis .

A van-based bus, where a coach has been fitted onto a smaller front-engine chassis, usually below Class 5 GVWR. Shuttle buses and some school buses fall into this category.

#### Special needs bus

A bus containing a wheelchair lift and tie downs (locks to immobilize the wheelchair, and/or a belt for the occupant and chair).

#### Transit-style bus

A school bus or other bus with a flat front similar to a transit bus.

#### Type A school bus

A van conversion or bus constructed utilizing a small cowl and chassis, van-based cutaway. Has a nose and grille like a typical van, a regular driver's door (on the left side of vehicle), and the passenger entrance door curbside, behind the front wheel. Front engine location.

#### Type B school bus

A school bus constructed on a stripped van or truck chassis, perhaps resembling a step-van type of front. Full coach body, with only one door, curbside, behind the front wheels. Front engine location.

### Type C school bus .

Conventional school bus consisting of a coach body mounted on a truck-based, flat back cowl (big cowl and chassis – hood and fender assembly). Varying lengths and some have wheelchair lifts. One entrance door located behind the front wheels. Front engine location.

#### Type D school bus

Transit-style school bus. Flat front, full coach body mounted on stripped bus chassis. Can be either front (forward control, FE) or rear engine (RE). Varying lengths, can have wheelchair lift and small storage compartments under passenger floor (accessed through small hatch doors on side of bus).

## Tables of abbreviations

| Abbreviation | Definition                  |
|--------------|-----------------------------|
| CDL          | Commercial driver's license |
| Convs        | Convictions                 |
| Misc         | Miscellaneous               |
| Орр          | Opposite                    |
| Prev         | Previous                    |
| Stat         | Statutory                   |
| Unk          | Unknown                     |
| Veh          | Vehicle                     |
| WO           | Without                     |

| Injuries are classified according to severity under the following levels: |                                |  |  |  |  |  |  |  |
|---------------------------------------------------------------------------|--------------------------------|--|--|--|--|--|--|--|
| K                                                                         | Fatal injury                   |  |  |  |  |  |  |  |
| Α                                                                         | Incapacitating injury          |  |  |  |  |  |  |  |
| В                                                                         | Evident but not incapacitating |  |  |  |  |  |  |  |
| С                                                                         | Complaint of pain              |  |  |  |  |  |  |  |
| 0                                                                         | No injury                      |  |  |  |  |  |  |  |

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