

BUSES INVOLVED IN FATAL ACCIDENTS FACTBOOK 2003



Center for National Truck and Bus Statistics
University of Michigan Transportation Research Institute
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16. Abstract <p>This document presents aggregate statistics on buses involved in traffic accidents in 2003. The statistics are derived from the Buses Involved in Fatal Accidents (BIFA) file, compiled by the University of Michigan Transportation Research Institute. The BIFA database is a census of all buses involved in a fatal accident in the United States, and provides coverage of buses recorded in the Fatality Analysis Reporting System (FARS) file. BIFA combines vehicle, accident, and occupant records from FARS with information about the physical configuration and operating authority of the bus from the BIFA survey.</p>					
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SI* (MODERN METRIC) CONVERSION FACTORS

APPROXIMATE CONVERSIONS TO SI UNITS					APPROXIMATE CONVERSIONS FROM SI UNITS				
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 ²	square inches	645.2	square millimeters	mm ²	mm ²	square millimeters	0.0016	square inches	in ²
ft ²	square feet	0.093	square meters	m ²	m ²	square meters	10.764	square feet	ft ²
yd ²	square yards	0.836	square meters	m ²	m ²	square meters	1.195	square yards	yd ²
ac	acres	0.405	hectares	ha	Ha	Hectares	2.47	acres	ac
mi ²	square miles	2.59	square kilometers	km ²	Km ²	square kilometers	0.386	square miles	mi ²
VOLUME					VOLUME				
fl oz	fluid ounces	29.57	milliliters	mL	mL	Milliliters	0.034	fluid ounces	fl oz
gal	gallons	3.785	liters	L	L	Liters	0.264	gallons	gal
ft ³	cubic feet	0.028	cubic meters	m ³	m ³	cubic meters	35.71	cubic feet	ft ³
yd ³	cubic yards	0.765	cubic meters	m ³	m ³	cubic meters	1.307	cubic yards	yd ³
NOTE: Volumes greater than 1000 L shall be shown in m ³ .									
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
T	short tons (2001 lb)	0.907	megagrams (or "metric ton")	Mg (or "t")	Mg (or "t")	megagrams (or "metric ton")	1.103	short tons (2001 lb)	T
TEMPERATURE (exact)					TEMPERATURE (exact)				
°F	Fahrenheit temperature	5(F-32)/9 or (F-32)/1.8	Celcius temperature	°C	°C	Celcius temperature	1.8C + 32	Fahrenheit temperature	°F
ILLUMINATION					ILLUMINATION				
fc	foot-candles	10.76	lux	lx	Lx	Lux	0.0929	foot-candles	fc
fl	foot-Lamberts	3.426	candela/m ²	cd/m ²	Cd/m ²	candela/m ²	0.2919	foot-lamberts	fl
FORCE and PRESSURE or STRESS					FORCE and PRESSURE or STRESS				
lbf	poundforce	4.45	newtons	N	N	Newtons	0.225	poundforce	lbf
lbf/in ²	poundforce per square inch	6.89	kilopascals	kPa	kPa	Kilopascals	0.145	poundforce per square inch	lbf/in ²

* 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 2003*, 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 2003 BIFA file is a census file, meaning there is one record for each of the 334 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 2003*.

Report overview

This report consists of four sections. The “Trends” section provides data on fatalities, and fatal accident involvements from 1999 through 2003. 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” are sometimes converted to private use, and 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.).

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, 1999-2003

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 1999-2003, an average of 327 buses were involved in a fatal traffic accident each year. In 2003 there was an increase of 36 bus involvements (334 total) from 298 involvements in 2002.
- Buses owned or operated for a school district were the most common operator type, accounting for 39.6% 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 33.1%.
- 2003 experienced a significant increase in school bus involvements (130 in 2003 compared to 102 in 2002), however, the unknown bus type category was significantly lower in 2003 than 2002 (8 compared to 35 respectively). It is suspected that some school buses could not be identified in the previous year.
- California, New York, and Florida had the greatest number of bus involvements over the period 1999-2003.
- Total fatalities for 2003 showed an increase of 8.9% over the 2002 figure of 359. In 2003 there were 391 persons killed in crashes involving a bus; 9 of them were bus drivers, and 49 were passengers on the bus. Other vehicle drivers and passengers represented the largest source of fatalities with 230 (58.8%) and non-motorists represented 101 (25.8%) of the fatalities.
- Of the non-motorist fatalities, 93 pedestrians and 8 bicyclists were killed during 2003 in accidents involving buses.

Annual fatal involvements

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

Accident year	School	Transit	Intercity	Charter	Other	Unknown	Total
	No.	No.	No.	No.	No.	No.	No.
1999	146	104	13	35	22	13	333
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
Total	647	542	61	170	144	71	1635

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

Bus Operator Type	1999		2000		2001		2002		2003		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
School district	146	43.8	138	38.5	131	42.0	102	34.2	130	38.9	647	39.6
Urban transit authority	104	31.2	133	37.2	96	30.8	98	32.9	111	33.2	542	33.1
Scheduled intercity	13	3.9	15	4.2	15	4.8	10	3.4	8	2.4	61	3.7
Charter bus	35	10.5	31	8.7	37	11.9	29	9.7	38	11.4	170	10.4
Private company	5	1.5	3	0.8	2	0.6	2	0.7	4	1.2	16	1.0
Non-government organization	7	2.1	12	3.4	9	2.9	10	3.4	11	3.3	49	3.0
Non-educational unit of government	2	0.6	6	1.7	1	0.3	4	1.3	7	2.1	20	1.2
Private, for personal transportation	1	0.3	0	0.0	1	0.3	1	0.3	0	0.0	3	0.2
Other	7	2.1	15	4.2	10	3.2	7	2.3	17	5.1	56	3.4
Unknown	13	3.9	5	1.4	10	3.2	35	11.7	8	2.4	71	4.3
Total	333	100.0	358	100.0	312	100.0	298	100.0	334	100.0	1635	100.0

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

Bus operator type Bus seating capacity	1999		2000		2001		2002		2003		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
School district												
8-14	4	1.2	3	0.8	3	1.0	3	1.0	5	1.5	18	1.1
15-50	27	8.1	27	7.5	18	5.8	23	7.7	29	8.7	124	7.6
51-99	92	27.6	100	27.9	107	34.3	74	24.8	92	27.5	465	28.4
Est. 15 or more	0	0.0	2	0.6	1	0.3	2	0.7	2	0.6	7	0.4
Unknown	23	6.9	6	1.7	2	0.6	0	0.0	2	0.6	33	2.0
<i>Total school district</i>	146	43.8	138	38.5	131	42.0	102	34.2	130	38.9	647	39.6
Transit bus authority												
8-14	0	0.0	4	1.1	1	0.3	2	0.7	5	1.5	12	0.7
15-50	76	22.8	115	32.1	81	26.0	89	29.9	91	27.2	452	27.6
51-99	8	2.4	10	2.8	13	4.2	5	1.7	7	2.1	43	2.6
Est. 15 or more	0	0.0	2	0.6	0	0.0	1	0.3	7	2.1	10	0.6
Unknown	20	6.0	2	0.6	1	0.3	1	0.3	1	0.3	25	1.5
<i>Total transit bus</i>	104	31.2	133	37.2	96	30.8	98	32.9	111	33.2	542	33.1
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	11	3.3	9	2.5	10	3.2	7	2.3	3	0.9	40	2.4
51-99	1	0.3	6	1.7	5	1.6	3	1.0	5	1.5	20	1.2
Unknown	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1
<i>Total intercity bus</i>	13	3.9	15	4.2	15	4.8	10	3.4	8	2.4	61	3.7
Charter bus operator												
8-14	1	0.3	1	0.3	0	0.0	0	0.0	0	0.0	2	0.1
15-50	19	5.7	11	3.1	18	5.8	14	4.7	14	4.2	76	4.6
51-99	13	3.9	13	3.6	8	2.6	7	2.3	17	5.1	58	3.5
Est. 15 or more	0	0.0	4	1.1	9	2.9	8	2.7	4	1.2	25	1.5
Unknown	2	0.6	2	0.6	2	0.6	0	0.0	3	0.9	9	0.6
<i>Total charter bus</i>	35	10.5	31	8.7	37	11.9	29	9.7	38	11.4	170	10.4
Other operator												
8-14	1	0.3	11	3.1	3	1.0	6	2.0	17	5.1	38	2.3
15-50	7	2.1	21	5.9	14	4.5	12	4.0	17	5.1	71	4.3
51-99	8	2.4	2	0.6	4	1.3	3	1.0	4	1.2	21	1.3
Est. 15 or more	0	0.0	2	0.6	1	0.3	3	1.0	0	0.0	6	0.4
Unknown	6	1.8	0	0.0	1	0.3	0	0.0	1	0.3	8	0.5
<i>Total other</i>	22	6.6	36	10.1	23	7.4	24	8.1	39	11.7	144	8.8
Unknown operator type												
8-14	0	0.0	1	0.3	0	0.0	0	0.0	0	0.0	1	0.1
15-50	3	0.9	3	0.8	0	0.0	3	1.0	1	0.3	10	0.6
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	0	0.0	3	1.0	0	0.0	3	0.2
Unknown	10	3.0	1	0.3	10	3.2	29	9.7	7	2.1	57	3.5
<i>Total unknown</i>	13	3.9	5	1.4	10	3.2	35	11.7	8	2.4	71	4.3
Total	333	100.0	358	100.0	312	100.0	298	100.0	334	100.0	1635	100.0

Table 1-4: Fatal Bus Involvements by Year and State

State	1999		2000		2001		2002		2003		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Alabama	2	0.6	3	0.8	4	1.3	1	0.3	2	0.6	12	0.7
Alaska	0	0.0	3	0.8	3	1.0	0	0.0	0	0.0	6	0.4
Arizona	6	1.8	7	2.0	6	1.9	8	2.7	8	2.4	35	2.1
Arkansas	3	0.9	1	0.3	7	2.2	3	1.0	1	0.3	15	0.9
California	45	13.5	38	10.6	38	12.2	38	12.8	41	12.3	200	12.2
Colorado	5	1.5	8	2.2	6	1.9	6	2.0	9	2.7	34	2.1
Connecticut	4	1.2	2	0.6	0	0.0	3	1.0	1	0.3	10	0.6
Delaware	3	0.9	1	0.3	0	0.0	1	0.3	4	1.2	9	0.6
Dist of Columbia	2	0.6	3	0.8	2	0.6	1	0.3	2	0.6	10	0.6
Florida	26	7.8	38	10.6	21	6.7	22	7.4	21	6.3	128	7.8
Georgia	8	2.4	12	3.4	9	2.9	8	2.7	13	3.9	50	3.1
Hawaii	1	0.3	4	1.1	5	1.6	5	1.7	3	0.9	18	1.1
Idaho	2	0.6	0	0.0	4	1.3	2	0.7	1	0.3	9	0.6
Illinois	12	3.6	13	3.6	13	4.2	7	2.3	7	2.1	52	3.2
Indiana	6	1.8	4	1.1	4	1.3	1	0.3	4	1.2	19	1.2
Iowa	1	0.3	5	1.4	3	1.0	3	1.0	3	0.9	15	0.9
Kansas	4	1.2	4	1.1	2	0.6	3	1.0	4	1.2	17	1.0
Kentucky	1	0.3	4	1.1	2	0.6	5	1.7	5	1.5	17	1.0
Louisiana	4	1.2	2	0.6	8	2.6	3	1.0	5	1.5	22	1.3
Maine	1	0.3	0	0.0	2	0.6	0	0.0	0	0.0	3	0.2
Maryland	8	2.4	4	1.1	5	1.6	5	1.7	12	3.6	34	2.1
Massachusetts	2	0.6	3	0.8	3	1.0	6	2.0	5	1.5	19	1.2
Michigan	9	2.7	17	4.7	9	2.9	11	3.7	6	1.8	52	3.2
Minnesota	5	1.5	10	2.8	5	1.6	4	1.3	6	1.8	30	1.8
Mississippi	2	0.6	3	0.8	2	0.6	1	0.3	1	0.3	9	0.6
Missouri	7	2.1	8	2.2	6	1.9	8	2.7	10	3.0	39	2.4
Montana	1	0.3	0	0.0	0	0.0	1	0.3	1	0.3	3	0.2
Nebraska	0	0.0	0	0.0	2	0.6	1	0.3	3	0.9	6	0.4
Nevada	4	1.2	6	1.7	5	1.6	6	2.0	6	1.8	27	1.7
New Hampshire	0	0.0	1	0.3	0	0.0	0	0.0	1	0.3	2	0.1
New Jersey	17	5.1	13	3.6	10	3.2	12	4.0	10	3.0	62	3.8
New Mexico	5	1.5	5	1.4	3	1.0	5	1.7	3	0.9	21	1.3
New York	36	10.8	33	9.2	39	12.5	26	8.7	32	9.6	166	10.2
North Carolina	4	1.2	7	2.0	2	0.6	6	2.0	9	2.7	28	1.7
North Dakota	0	0.0	1	0.3	0	0.0	1	0.3	3	0.9	5	0.3
Ohio	12	3.6	9	2.5	6	1.9	9	3.0	14	4.2	50	3.1
Oklahoma	3	0.9	8	2.2	4	1.3	4	1.3	5	1.5	24	1.5
Oregon	6	1.8	0	0.0	2	0.6	3	1.0	3	0.9	14	0.9
Pennsylvania	23	6.9	17	4.7	12	3.8	15	5.0	27	8.1	94	5.7
Rhode Island	1	0.3	2	0.6	1	0.3	2	0.7	0	0.0	6	0.4
South Carolina	6	1.8	2	0.6	7	2.2	5	1.7	0	0.0	20	1.2
South Dakota	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Tennessee	2	0.6	7	2.0	6	1.9	3	1.0	5	1.5	23	1.4
Texas	18	5.4	28	7.8	16	5.1	24	8.1	17	5.1	103	6.3
Utah	3	0.9	4	1.1	2	0.6	2	0.7	2	0.6	13	0.8
Vermont	0	0.0	0	0.0	1	0.3	1	0.3	2	0.6	4	0.2
Virginia	7	2.1	4	1.1	5	1.6	6	2.0	4	1.2	26	1.6
Washington	10	3.0	4	1.1	10	3.2	3	1.0	6	1.8	33	2.0
West Virginia	2	0.6	0	0.0	2	0.6	3	1.0	1	0.3	8	0.5
Wisconsin	4	1.2	7	2.0	8	2.6	5	1.7	6	1.8	30	1.8
Wyoming	0	0.0	3	0.8	0	0.0	0	0.0	0	0.0	3	0.2
Total	333	100.0	358	100.0	312	100.0	298	100.0	334	100.0	1635	100.0

Annual fatalities

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

Vehicle/Person type	1999		2000		2001		2002		2003		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
<i>Bus</i>												
Driver	18	4.5	15	3.8	12	3.4	11	3.1	9	2.3	65	3.4
Passenger	47	11.9	26	6.6	25	7.0	44	12.3	49	12.5	191	10.1
Unknown occupant type	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	1	0.1
<i>Bus total</i>	65	16.4	41	10.4	37	10.4	55	15.3	59	15.1	257	13.5
<i>Other vehicle</i>												
Drivers	175	44.2	190	48.1	153	43.0	151	42.1	157	40.2	826	43.5
Passengers	63	15.9	61	15.4	60	16.9	56	15.6	73	18.7	313	16.5
Unknown occupant type	0	0.0	3	0.8	0	0.0	0	0.0	1	0.3	4	0.2
<i>Other vehicle total</i>	238	60.1	254	64.3	213	59.8	207	57.7	231	59.1	1143	60.3
<i>Non-motorists</i>												
In parked vehicle	2	0.5	0	0.0	0	0.0	0	0.0	0	0.0	2	0.1
Pedestrian	82	20.7	91	23.0	92	25.8	83	23.1	93	23.8	441	23.2
Bicyclist	9	2.3	9	2.3	14	3.9	13	3.6	8	2.0	53	2.8
Unknown non-motorist	0	0.0	0	0.0	0	0.0	1	0.3	0	0.0	1	0.1
<i>Non-motorist total</i>	93	23.5	100	25.3	106	29.8	97	27.0	101	25.8	497	26.2
Total	396	100.0	395	100.0	356	100.0	359	100.0	391	100.0	1897	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 53% 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, 82.3% of fatal involvements of buses occurred during the work week, but this varies by bus type. Transit buses experienced 25% of their involvements on the weekend (Saturday and Sunday), compared with only 3% for school buses.
- The majority (85%) of fatal involvements occurred under “normal” weather conditions (i.e. no rain, snow, fog, or other adverse condition). Twenty-one or 6.3% of fatal involvements occurred under rain conditions.
- Overall, 73.1% of the fatal bus involvements occurred in daylight and 21.3% of the involvements occurred under dark and dark but lighted conditions. Charter buses (the third most frequent bus type) had the highest incidence of fatal involvements occurring during dark and dark but lighted conditions, accounting for 16 or 42.1% of their 38 involvements.
- Local streets (township or municipality) accounted for 40.4% of fatal bus involvements, 27.2% of bus involvements were on state highways, and 10.5% were on county roads.
- Over sixty percent of the fatal involvements of buses occurred on undivided roads with two-way traffic.
- In 26.6% of fatal involvements, the bus hit an object in the road (often a pedestrian or other non-motorist); in 11.1% of involvements another vehicle crossed the center line of the road and struck the bus head on; and in 8.1% of involvements the bus struck the side of another vehicle. These proportions can differ dramatically by bus type.
- In 61.7% of fatal bus involvements the first harmful event was collision with a motor vehicle; 25.4% involved collision with a pedestrian. Transit and charter buses had the highest incidence of collisions involving pedestrians, with 36.9% and 23.7% respectively.

- Over 23% of fatal bus involvements included a non-motorist fatality. Among school buses 23.1% of the non-motorist fatalities were passengers discharged from the bus. For all bus types, the majority of non-motorists killed were not bus passengers.

Geographic distributions

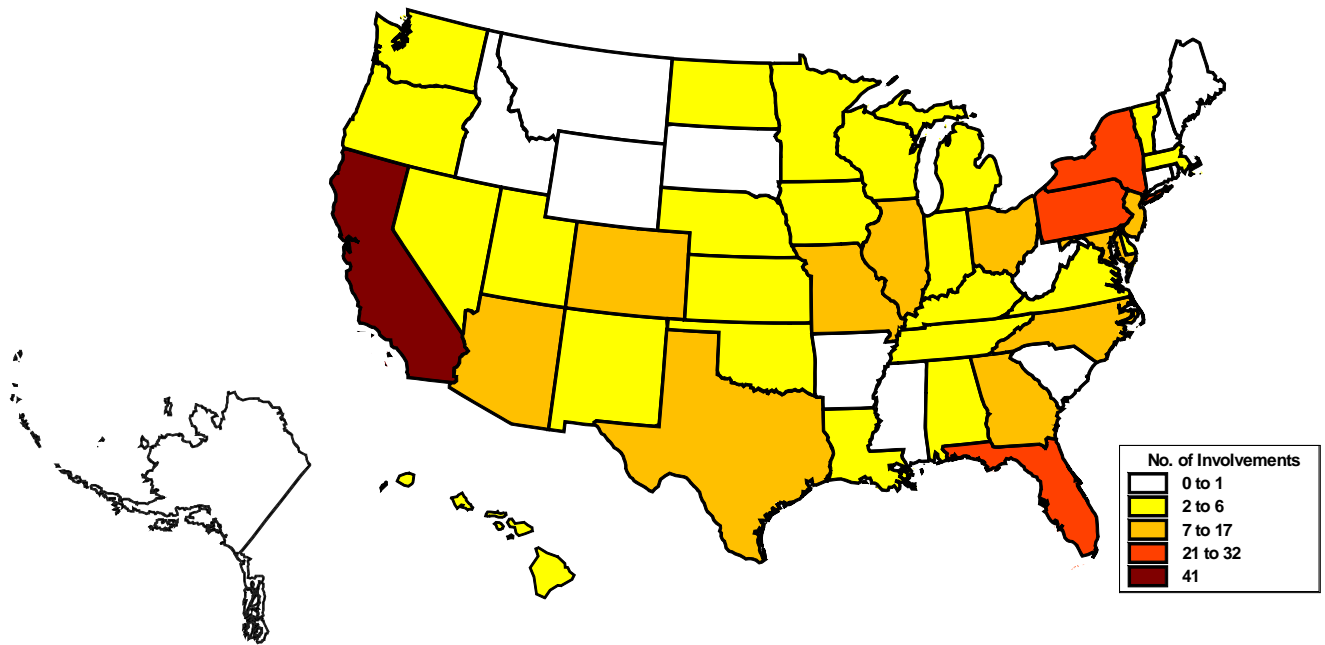


Figure 2-1: Fatal Bus Involvements by State

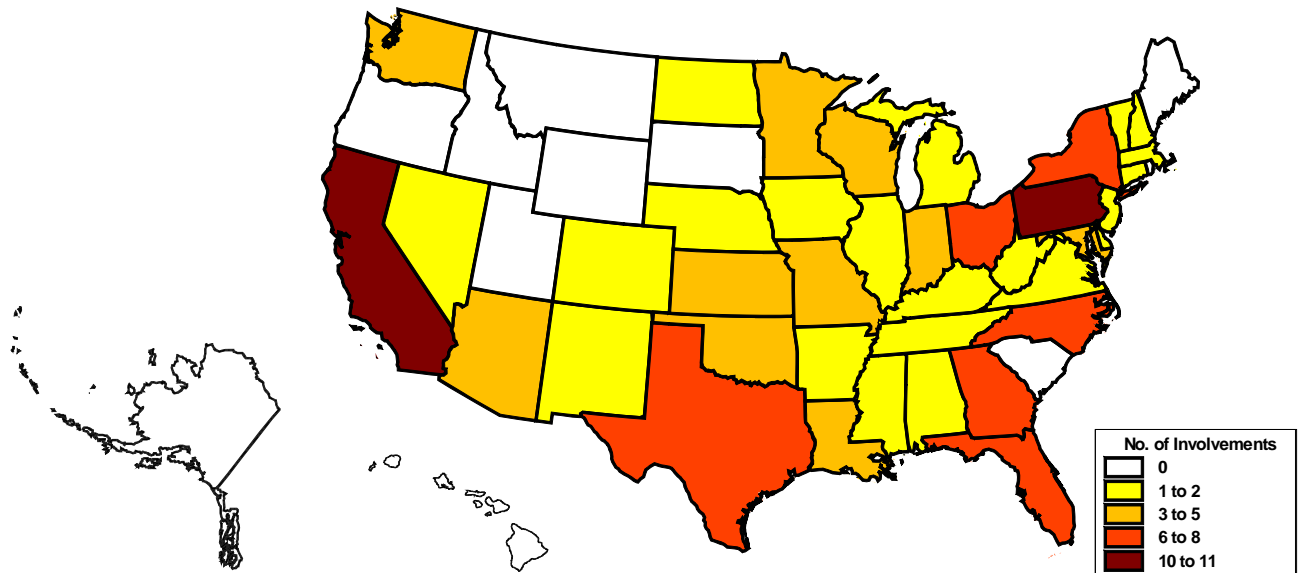


Figure 2-2: Fatal Bus Involvements by State – School Buses Only

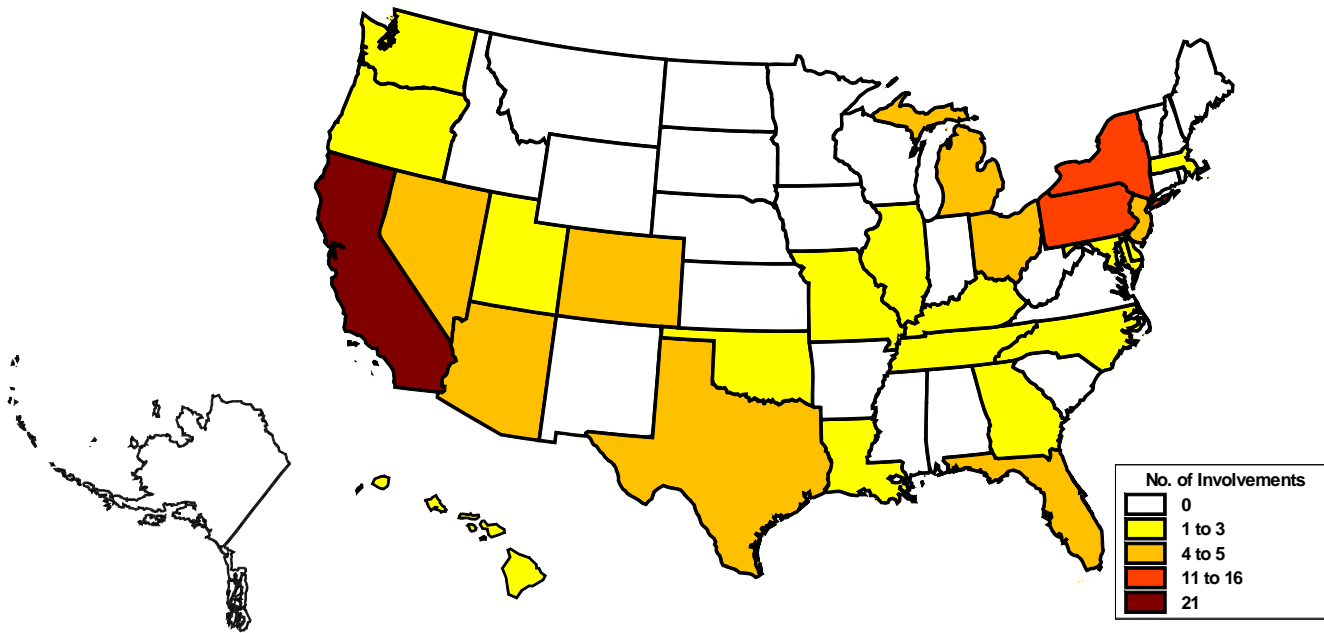


Figure 2-3: Fatal Bus Involvements by State – Transit Buses Only

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

State	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Alabama	1	0.8	0	0.0	0	0.0	0	0.0	1	2.6	0	0.0	2	0.6
Alaska	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Arizona	3	2.3	4	3.6	0	0.0	0	0.0	1	2.6	0	0.0	8	2.4
Arkansas	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
California	10	7.7	21	18.9	1	12.5	3	7.9	6	15.4	0	0.0	41	12.3
Colorado	1	0.8	5	4.5	0	0.0	3	7.9	0	0.0	0	0.0	9	2.7
Connecticut	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Delaware	2	1.5	1	0.9	1	12.5	0	0.0	0	0.0	0	0.0	4	1.2
Dist of Columbia	0	0.0	1	0.9	0	0.0	1	2.6	0	0.0	0	0.0	2	0.6
Florida	7	5.4	4	3.6	0	0.0	5	13.2	4	10.3	1	12.5	21	6.3
Georgia	7	5.4	2	1.8	0	0.0	2	5.3	2	5.1	0	0.0	13	3.9
Hawaii	0	0.0	2	1.8	0	0.0	1	2.6	0	0.0	0	0.0	3	0.9
Idaho	0	0.0	0	0.0	0	0.0	1	2.6	0	0.0	0	0.0	1	0.3
Illinois	2	1.5	3	2.7	0	0.0	1	2.6	0	0.0	1	12.5	7	2.1
Indiana	4	3.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4	1.2
Iowa	2	1.5	0	0.0	1	12.5	0	0.0	0	0.0	0	0.0	3	0.9
Kansas	3	2.3	0	0.0	0	0.0	1	2.6	0	0.0	0	0.0	4	1.2
Kentucky	2	1.5	1	0.9	0	0.0	1	2.6	1	2.6	0	0.0	5	1.5
Louisiana	3	2.3	1	0.9	0	0.0	0	0.0	1	2.6	0	0.0	5	1.5
Maine	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Maryland	4	3.1	2	1.8	0	0.0	3	7.9	3	7.7	0	0.0	12	3.6
Massachusetts	2	1.5	3	2.7	0	0.0	0	0.0	0	0.0	0	0.0	5	1.5
Michigan	2	1.5	4	3.6	0	0.0	0	0.0	0	0.0	0	0.0	6	1.8
Minnesota	3	2.3	0	0.0	0	0.0	1	2.6	2	5.1	0	0.0	6	1.8
Mississippi	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Missouri	5	3.8	2	1.8	0	0.0	0	0.0	3	7.7	0	0.0	10	3.0
Montana	0	0.0	0	0.0	0	0.0	1	2.6	0	0.0	0	0.0	1	0.3
Nebraska	1	0.8	0	0.0	0	0.0	2	5.3	0	0.0	0	0.0	3	0.9
Nevada	2	1.5	4	3.6	0	0.0	0	0.0	0	0.0	0	0.0	6	1.8
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	1	0.8	4	3.6	0	0.0	1	2.6	0	0.0	4	50.0	10	3.0
New Mexico	1	0.8	0	0.0	0	0.0	0	0.0	1	2.6	1	12.5	3	0.9
New York	8	6.2	16	14.4	2	25.0	3	7.9	2	5.1	1	12.5	32	9.6
North Carolina	6	4.6	1	0.9	1	12.5	1	2.6	0	0.0	0	0.0	9	2.7
North Dakota	2	1.5	0	0.0	1	12.5	0	0.0	0	0.0	0	0.0	3	0.9
Ohio	7	5.4	4	3.6	0	0.0	0	0.0	3	7.7	0	0.0	14	4.2
Oklahoma	3	2.3	1	0.9	0	0.0	1	2.6	0	0.0	0	0.0	5	1.5
Oregon	0	0.0	3	2.7	0	0.0	0	0.0	0	0.0	0	0.0	3	0.9
Pennsylvania	11	8.5	11	9.9	1	12.5	3	7.9	1	2.6	0	0.0	27	8.1
Rhode Island	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
South Carolina	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
South Dakota	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Tennessee	2	1.5	2	1.8	0	0.0	0	0.0	1	2.6	0	0.0	5	1.5
Texas	7	5.4	5	4.5	0	0.0	2	5.3	3	7.7	0	0.0	17	5.1
Utah	0	0.0	2	1.8	0	0.0	0	0.0	0	0.0	0	0.0	2	0.6
Vermont	2	1.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.6
Virginia	2	1.5	0	0.0	0	0.0	1	2.6	1	2.6	0	0.0	4	1.2
Washington	3	2.3	2	1.8	0	0.0	0	0.0	1	2.6	0	0.0	6	1.8
West Virginia	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Wisconsin	4	3.1	0	0.0	0	0.0	0	0.0	2	5.1	0	0.0	6	1.8
Wyoming	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

Temporal distributions

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

Month of accident	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
January	13	10.0	16	14.4	1	12.5	3	7.9	1	2.6	2	25.0	36	10.8
February	8	6.2	11	9.9	1	12.5	4	10.5	4	10.3	1	12.5	29	8.7
March	10	7.7	4	3.6	0	0.0	4	10.5	1	2.6	0	0.0	19	5.7
April	10	7.7	4	3.6	0	0.0	2	5.3	6	15.4	0	0.0	22	6.6
May	17	13.1	7	6.3	1	12.5	6	15.8	3	7.7	2	25.0	36	10.8
June	1	0.8	7	6.3	0	0.0	1	2.6	3	7.7	0	0.0	12	3.6
July	1	0.8	10	9.0	1	12.5	2	5.3	5	12.8	1	12.5	20	6.0
August	8	6.2	9	8.1	0	0.0	3	7.9	4	10.3	0	0.0	24	7.2
September	15	11.5	5	4.5	1	12.5	3	7.9	1	2.6	1	12.5	26	7.8
October	18	13.8	15	13.5	2	25.0	2	5.3	5	12.8	0	0.0	42	12.6
November	17	13.1	12	10.8	1	12.5	6	15.8	2	5.1	0	0.0	38	11.4
December	12	9.2	11	9.9	0	0.0	2	5.3	4	10.3	1	12.5	30	9.0
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

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

Day of week	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Sunday	2	1.5	5	4.5	3	37.5	6	15.8	4	10.3	0	0.0	20	6.0
Monday	30	23.1	15	13.5	1	12.5	1	2.6	7	17.9	2	25.0	56	16.8
Tuesday	25	19.2	17	15.3	0	0.0	5	13.2	5	12.8	1	12.5	53	15.9
Wednesday	29	22.3	17	15.3	0	0.0	6	15.8	6	15.4	1	12.5	59	17.7
Thursday	25	19.2	15	13.5	2	25.0	7	18.4	6	15.4	0	0.0	55	16.5
Friday	17	13.1	19	17.1	1	12.5	6	15.8	6	15.4	3	37.5	52	15.6
Saturday	2	1.5	23	20.7	1	12.5	7	18.4	5	12.8	1	12.5	39	11.7
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

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

Day type	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Work week	126	96.9	83	74.8	4	50.0	25	65.8	30	76.9	7	87.5	275	82.3
Weekend	4	3.1	28	25.2	4	50.0	13	34.2	9	23.1	1	12.5	59	17.7
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

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

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

Time of accident	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Midnight	0	0.0	2	1.8	0	0.0	3	7.9	1	2.6	0	0.0	6	1.8
1:00 AM	0	0.0	0	0.0	0	0.0	0	0.0	1	2.6	0	0.0	1	0.3
2:00 AM	0	0.0	1	0.9	1	12.5	0	0.0	1	2.6	0	0.0	3	0.9
3:00 AM	0	0.0	0	0.0	0	0.0	1	2.6	0	0.0	0	0.0	1	0.3
4:00 AM	0	0.0	1	0.9	0	0.0	2	5.3	0	0.0	0	0.0	3	0.9
5:00 AM	0	0.0	3	2.7	1	12.5	1	2.6	1	2.6	0	0.0	6	1.8
6:00 AM	8	6.2	4	3.6	1	12.5	0	0.0	2	5.1	0	0.0	15	4.5
7:00 AM	20	15.4	6	5.4	0	0.0	0	0.0	4	10.3	1	12.5	31	9.3
8:00 AM	12	9.2	9	8.1	0	0.0	2	5.3	2	5.1	0	0.0	25	7.5
9:00 AM	5	3.8	5	4.5	0	0.0	4	10.5	1	2.6	0	0.0	15	4.5
10:00 AM	2	1.5	3	2.7	0	0.0	1	2.6	2	5.1	0	0.0	8	2.4
11:00 AM	4	3.1	9	8.1	0	0.0	4	10.5	0	0.0	1	12.5	18	5.4
Noon	3	2.3	4	3.6	0	0.0	1	2.6	0	0.0	1	12.5	9	2.7
1:00 PM	4	3.1	6	5.4	0	0.0	1	2.6	4	10.3	1	12.5	16	4.8
2:00 PM	22	16.9	4	3.6	1	12.5	2	5.3	6	15.4	1	12.5	36	10.8
3:00 PM	29	22.3	9	8.1	1	12.5	2	5.3	4	10.3	2	25.0	47	14.1
4:00 PM	14	10.8	8	7.2	0	0.0	0	0.0	1	2.6	1	12.5	24	7.2
5:00 PM	3	2.3	9	8.1	1	12.5	0	0.0	3	7.7	0	0.0	16	4.8
6:00 PM	2	1.5	4	3.6	0	0.0	4	10.5	5	12.8	0	0.0	15	4.5
7:00 PM	0	0.0	4	3.6	2	25.0	3	7.9	0	0.0	0	0.0	9	2.7
8:00 PM	1	0.8	4	3.6	0	0.0	3	7.9	0	0.0	0	0.0	8	2.4
9:00 PM	1	0.8	4	3.6	0	0.0	0	0.0	0	0.0	0	0.0	5	1.5
10:00 PM	0	0.0	6	5.4	0	0.0	3	7.9	0	0.0	0	0.0	9	2.7
11:00 PM	0	0.0	4	3.6	0	0.0	1	2.6	1	2.6	0	0.0	6	1.8
Unknown	0	0.0	2	1.8	0	0.0	0	0.0	0	0.0	0	0.0	2	0.6
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

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

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

Time of accident	Work week		Weekend		Total	
	No.	Pct.	No.	Pct.	No.	Pct.
Midnight	4	1.5	2	3.4	6	1.8
1:00 AM	1	0.4	0	0.0	1	0.3
2:00 AM	1	0.4	2	3.4	3	0.9
3:00 AM	0	0.0	1	1.7	1	0.3
4:00 AM	2	0.7	1	1.7	3	0.9
5:00 AM	4	1.5	2	3.4	6	1.8
6:00 AM	13	4.7	2	3.4	15	4.5
7:00 AM	28	10.2	3	5.1	31	9.3
8:00 AM	21	7.6	4	6.8	25	7.5
9:00 AM	11	4.0	4	6.8	15	4.5
10:00 AM	7	2.5	1	1.7	8	2.4
11:00 AM	14	5.1	4	6.8	18	5.4
Noon	9	3.3	0	0.0	9	2.7
1:00 PM	15	5.5	1	1.7	16	4.8
2:00 PM	32	11.6	4	6.8	36	10.8
3:00 PM	43	15.6	4	6.8	47	14.1
4:00 PM	22	8.0	2	3.4	24	7.2
5:00 PM	14	5.1	2	3.4	16	4.8
6:00 PM	12	4.4	3	5.1	15	4.5
7:00 PM	7	2.5	2	3.4	9	2.7
8:00 PM	3	1.1	5	8.5	8	2.4
9:00 PM	2	0.7	3	5.1	5	1.5
10:00 PM	6	2.2	3	5.1	9	2.7
11:00 PM	2	0.7	4	6.8	6	1.8
Unknown	2	0.7	0	0.0	2	0.6
Total	275	100.0	59	100.0	334	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.

Environmental distributions

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

Land use	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Urban	61	46.9	107	96.4	5	62.5	21	55.3	21	53.8	5	62.5	220	65.9
Rural	69	53.1	4	3.6	3	37.5	16	42.1	18	46.2	3	37.5	113	33.8
Unknown	0	0.0	0	0.0	0	0.0	1	2.6	0	0.0	0	0.0	1	0.3
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

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

Light condition	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Daylight	114	87.7	68	61.3	3	37.5	22	57.9	29	74.4	8	100.0	244	73.1
Dark	3	2.3	6	5.4	3	37.5	7	18.4	4	10.3	0	0.0	23	6.9
Dark but lighted	5	3.8	29	26.1	0	0.0	9	23.7	5	12.8	0	0.0	48	14.4
Dawn	8	6.2	2	1.8	1	12.5	0	0.0	0	0.0	0	0.0	11	3.3
Dusk	0	0.0	4	3.6	1	12.5	0	0.0	1	2.6	0	0.0	6	1.8
Unkown	0	0.0	2	1.8	0	0.0	0	0.0	0	0.0	0	0.0	2	0.6
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

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

Roadway surface condition	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Dry	103	79.2	90	81.1	7	87.5	30	78.9	31	79.5	7	87.5	268	80.2
Wet	20	15.4	16	14.4	1	12.5	6	15.8	6	15.4	0	0.0	49	14.7
Snow or slush	6	4.6	4	3.6	0	0.0	2	5.3	1	2.6	1	12.5	14	4.2
Ice	1	0.8	0	0.0	0	0.0	0	0.0	1	2.6	0	0.0	2	0.6
Unknown	0	0.0	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

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

Weather condition	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Normal	108	83.1	97	87.4	7	87.5	31	81.6	33	84.6	8	100.0	284	85.0
Rain	10	7.7	5	4.5	0	0.0	4	10.5	2	5.1	0	0.0	21	6.3
Sleet	1	0.8	1	0.9	0	0.0	1	2.6	1	2.6	0	0.0	4	1.2
Snow	4	3.1	5	4.5	1	12.5	1	2.6	2	5.1	0	0.0	13	3.9
Fog	6	4.6	1	0.9	0	0.0	1	2.6	0	0.0	0	0.0	8	2.4
Other	1	0.8	1	0.9	0	0.0	0	0.0	1	2.6	0	0.0	3	0.9
Unknown	0	0.0	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

Roadway distributions

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

Road function class	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
<i>Urban</i>														
Interstate	2	1.5	1	0.9	1	12.5	6	15.8	0	0.0	1	12.5	11	3.3
Freeway/expressway	2	1.5	6	5.4	1	12.5	1	2.6	1	2.6	1	12.5	12	3.6
Other principal artery	17	13.1	37	33.3	1	12.5	9	23.7	10	25.6	2	25.0	76	22.8
Minor artery	16	12.3	29	26.1	1	12.5	3	7.9	4	10.3	0	0.0	53	15.9
Collector	3	2.3	7	6.3	0	0.0	0	0.0	1	2.6	1	12.5	12	3.6
Local street	20	15.4	25	22.5	1	12.5	2	5.3	5	12.8	0	0.0	53	15.9
Unknown urban	1	0.8	2	1.8	0	0.0	0	0.0	0	0.0	0	0.0	3	0.9
<i>Total urban</i>	61	46.9	107	96.4	5	62.5	21	55.3	21	53.8	5	62.5	220	65.9
<i>Rural</i>														
Interstate	0	0.0	0	0.0	2	25.0	3	7.9	8	20.5	1	12.5	14	4.2
Other principal artery	15	11.5	1	0.9	1	12.5	7	18.4	2	5.1	1	12.5	27	8.1
Minor artery	21	16.2	0	0.0	0	0.0	1	2.6	3	7.7	0	0.0	25	7.5
Major collector	17	13.1	1	0.9	0	0.0	2	5.3	3	7.7	1	12.5	24	7.2
Minor collector	5	3.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	5	1.5
Local road	11	8.5	2	1.8	0	0.0	3	7.9	1	2.6	0	0.0	17	5.1
Unknown rural	0	0.0	0	0.0	0	0.0	0	0.0	1	2.6	0	0.0	1	0.3
<i>Total rural</i>	69	53.1	4	3.6	3	37.5	16	42.1	18	46.2	3	37.5	113	33.8
<i>Unknown</i>	0	0.0	0	0.0	0	0.0	1	2.6	0	0.0	0	0.0	1	0.3
<i>Total urban and rural</i>	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

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

Route signing	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Interstate	2	1.5	1	0.9	3	37.5	8	21.1	8	20.5	2	25.0	24	7.2
US highway	16	12.3	1	0.9	2	25.0	7	18.4	5	12.8	0	0.0	31	9.3
State highway	49	37.7	22	19.8	1	12.5	12	31.6	5	12.8	2	25.0	91	27.2
County road	25	19.2	3	2.7	0	0.0	1	2.6	5	12.8	1	12.5	35	10.5
Township	4	3.1	8	7.2	0	0.0	1	2.6	2	5.1	0	0.0	15	4.5
Municipality	27	20.8	70	63.1	2	25.0	6	15.8	13	33.3	2	25.0	120	35.9
Frontage road	0	0.0	0	0.0	0	0.0	1	2.6	0	0.0	0	0.0	1	0.3
Other	7	5.4	6	5.4	0	0.0	1	2.6	1	2.6	1	12.5	16	4.8
Unknown	0	0.0	0	0.0	0	0.0	1	2.6	0	0.0	0	0.0	1	0.3
<i>Total</i>	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

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

Relation to junction	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
<i>Noninterchange</i>														
Nonjunction	74	56.9	39	35.1	4	50.0	21	55.3	21	53.8	4	50.0	163	48.8
Intersection	38	29.2	49	44.1	3	37.5	12	31.6	12	30.8	2	25.0	116	34.7
Intersection related	12	9.2	16	14.4	0	0.0	3	7.9	3	7.7	1	12.5	35	10.5
Driveway, alley, etc.	4	3.1	1	0.9	0	0.0	1	2.6	0	0.0	0	0.0	6	1.8
Entrance/exit ramp	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	12.5	1	0.3
Rail grade crossing	0	0.0	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Driveway access related	1	0.8	1	0.9	0	0.0	0	0.0	1	2.6	0	0.0	3	0.9
<i>Interchange area</i>														
Intersection	0	0.0	2	1.8	0	0.0	1	2.6	0	0.0	0	0.0	3	0.9
Entrance/exit ramp	1	0.8	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	2	0.6
Other location	0	0.0	1	0.9	1	12.5	0	0.0	2	5.1	0	0.0	4	1.2
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

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

No. of travel lanes	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
1	1	0.8	2	1.8	0	0.0	0	0.0	0	0.0	1	12.5	4	1.2
2	101	77.7	56	50.5	4	50.0	21	55.3	24	61.5	3	37.5	209	62.6
3	2	1.5	13	11.7	2	25.0	7	18.4	5	12.8	2	25.0	31	9.3
4	21	16.2	27	24.3	2	25.0	4	10.5	8	20.5	2	25.0	64	19.2
5	1	0.8	3	2.7	0	0.0	3	7.9	1	2.6	0	0.0	8	2.4
6	2	1.5	2	1.8	0	0.0	3	7.9	1	2.6	0	0.0	8	2.4
7	1	0.8	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	2	0.6
9	1	0.8	7	6.3	0	0.0	0	0.0	0	0.0	0	0.0	8	2.4
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

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

Trafficway flow	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Not divided	96	73.8	63	56.8	2	25.0	23	60.5	19	48.7	3	37.5	206	61.7
Median – no barrier	19	14.6	19	17.1	5	62.5	7	18.4	17	43.6	2	25.0	69	20.7
Median w/barrier	4	3.1	11	9.9	1	12.5	5	13.2	0	0.0	2	25.0	23	6.9
One-way traffic	2	1.5	2	1.8	0	0.0	1	2.6	1	2.6	0	0.0	6	1.8
Two-way left turn lane	7	5.4	9	8.1	0	0.0	2	5.3	1	2.6	0	0.0	19	5.7
Entrance/exit ramp	1	0.8	1	0.9	0	0.0	0	0.0	0	0.0	1	12.5	3	0.9
Unknown	1	0.8	6	5.4	0	0.0	0	0.0	1	2.6	0	0.0	8	2.4
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

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

Speed limit	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
No statutory limit	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
10	0	0.0	0	0.0	0	0.0	1	2.6	0	0.0	0	0.0	1	0.3
15	1	0.8	0	0.0	0	0.0	1	2.6	0	0.0	0	0.0	2	0.6
20	0	0.0	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
25	10	7.7	16	14.4	1	12.5	3	7.9	2	5.1	0	0.0	32	9.6
30	17	13.1	20	18.0	0	0.0	1	2.6	4	10.3	1	12.5	43	12.9
35	16	12.3	28	25.2	0	0.0	4	10.5	11	28.2	0	0.0	59	17.7
40	8	6.2	13	11.7	0	0.0	2	5.3	0	0.0	1	12.5	24	7.2
45	13	10.0	8	7.2	1	12.5	6	15.8	4	10.3	1	12.5	33	9.9
50	11	8.5	0	0.0	0	0.0	0	0.0	4	10.3	1	12.5	16	4.8
55	40	30.8	6	5.4	3	37.5	10	26.3	5	12.8	0	0.0	64	19.2
60	1	0.8	0	0.0	0	0.0	2	5.3	0	0.0	0	0.0	3	0.9
65	6	4.6	0	0.0	3	37.5	3	7.9	0	0.0	2	25.0	14	4.2
70	3	2.3	0	0.0	0	0.0	1	2.6	6	15.4	0	0.0	10	3.0
75	0	0.0	0	0.0	0	0.0	1	2.6	2	5.1	0	0.0	3	0.9
Unknown	3	2.3	19	17.1	0	0.0	3	7.9	1	2.6	2	25.0	28	8.4
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

Accident description

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

Accident type	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
<i>Single vehicle</i>														
Ran off road	3	2.3	0	0.0	0	0.0	1	2.6	1	2.6	0	0.0	5	1.5
Hit object in road	28	21.5	42	37.8	1	12.5	9	23.7	8	20.5	1	12.5	89	26.6
<i>Same direction, same trafficway</i>														
Rearend, bus striking	2	1.5	1	0.9	1	12.5	0	0.0	1	2.6	0	0.0	5	1.5
Rearend, bus struck	16	12.3	8	7.2	0	0.0	4	10.5	1	2.6	0	0.0	29	8.7
Sideswipe, in other lane	0	0.0	0	0.0	0	0.0	1	2.6	0	0.0	0	0.0	1	0.3
Sideswipe, in bus's lane	1	0.8	1	0.9	1	12.5	0	0.0	0	0.0	0	0.0	3	0.9
<i>Opposite direction, same trafficway</i>														
Head-on, in other's lane	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Head-on, in bus's lane	20	15.4	7	6.3	1	12.5	6	15.8	3	7.7	0	0.0	37	11.1
Sideswipe, in other lane	0	0.0	0	0.0	0	0.0	1	2.6	0	0.0	0	0.0	1	0.3
Sideswipe, in bus's lane	13	10.0	3	2.7	0	0.0	4	10.5	7	17.9	0	0.0	27	8.1
<i>Change trafficway, one vehicle turning</i>														
Bus turn across path	9	6.9	5	4.5	0	0.0	0	0.0	3	7.7	0	0.0	17	5.1
Other turn across path	3	2.3	6	5.4	0	0.0	1	2.6	2	5.1	0	0.0	12	3.6
<i>Intersecting paths, both going straight</i>														
Bus into side of other	8	6.2	11	9.9	0	0.0	5	13.2	3	7.7	0	0.0	27	8.1
Other into side of bus	7	5.4	7	6.3	1	12.5	0	0.0	2	5.1	0	0.0	17	5.1
<i>Other accident types</i>														
Untripped rollover	2	1.5	0	0.0	0	0.0	0	0.0	3	7.7	0	0.0	5	1.5
Other	13	10.0	15	13.5	3	37.5	5	13.2	3	7.7	1	12.5	40	12.0
Unknown	4	3.1	5	4.5	0	0.0	1	2.6	2	5.1	6	75.0	18	5.4
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

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

Number of motor vehicles in crash	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
1	34	26.2	45	40.5	1	12.5	10	26.3	14	35.9	5	62.5	109	32.6
2	76	58.5	52	46.8	5	62.5	21	55.3	22	56.4	1	12.5	177	53.0
3	16	12.3	8	7.2	0	0.0	4	10.5	3	7.7	2	25.0	33	9.9
4	3	2.3	3	2.7	2	25.0	0	0.0	0	0.0	0	0.0	8	2.4
5	0	0.0	3	2.7	0	0.0	1	2.6	0	0.0	0	0.0	4	1.2
7	1	0.8	0	0.0	0	0.0	2	5.3	0	0.0	0	0.0	3	0.9
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

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

First harmful event	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
<i>Noncollision event</i>														
Overturn	4	3.1	0	0.0	0	0.0	0	0.0	3	7.7	2	25.0	9	2.7
Fire/explosion	0	0.0	0	0.0	0	0.0	0	0.0	1	2.6	0	0.0	1	0.3
Fell from vehicle	0	0.0	1	0.9	0	0.0	0	0.0	1	2.6	0	0.0	2	0.6
Injured in vehicle	0	0.0	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Other noncollision	0	0.0	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
<i>Collision with nonfixed object</i>														
Pedestrian	24	18.5	41	36.9	1	12.5	9	23.7	8	20.5	2	25.0	85	25.4
Pedalcycle	3	2.3	4	3.6	1	12.5	0	0.0	0	0.0	0	0.0	8	2.4
Railway train	0	0.0	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Motor vehicle in transport	92	70.8	59	53.2	4	50.0	26	68.4	22	56.4	3	37.5	206	61.7
Veh. in transport – other roadway	1	0.8	1	0.9	0	0.0	2	5.3	1	2.6	0	0.0	5	1.5
Parked motor vehicle	1	0.8	0	0.0	0	0.0	0	0.0	1	2.6	0	0.0	2	0.6
<i>Collision with fixed object</i>														
Bridgerail	0	0.0	0	0.0	1	12.5	0	0.0	0	0.0	0	0.0	1	0.3
Guardrail	2	1.5	1	0.9	1	12.5	0	0.0	0	0.0	0	0.0	4	1.2
Concrete traffic barrier	0	0.0	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Highway/traffic sign post	0	0.0	0	0.0	0	0.0	1	2.6	0	0.0	0	0.0	1	0.3
Curb	0	0.0	0	0.0	0	0.0	0	0.0	1	2.6	0	0.0	1	0.3
Embankment - earth	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Fence	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Tree	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	1	12.5	2	0.6
Other fixed object	0	0.0	0	0.0	0	0.0	0	0.0	1	2.6	0	0.0	1	0.3
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

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

Vehicle role	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Non-collision	2	1.5	2	1.8	0	0.0	0	0.0	5	12.8	1	12.5	10	3.0
Striking	60	46.2	67	60.4	2	25.0	23	60.5	18	46.2	5	62.5	175	52.4
Struck	64	49.2	40	36.0	5	62.5	14	36.8	12	30.8	2	25.0	137	41.0
Both	3	2.3	2	1.8	1	12.5	1	2.6	4	10.3	0	0.0	11	3.3
Unknown	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

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

Manner of collision	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Not applicable	37	28.5	51	45.9	4	50.0	10	26.3	16	41.0	5	62.5	123	36.8
Rear-end	23	17.7	16	14.4	1	12.5	7	18.4	2	5.1	0	0.0	49	14.7
Head-on	27	20.8	9	8.1	2	25.0	7	18.4	3	7.7	0	0.0	48	14.4
Front-to-side: Same direction	2	1.5	1	0.9	0	0.0	1	2.6	0	0.0	1	12.5	5	1.5
Front-to-side: Opp. direction	19	14.6	8	7.2	0	0.0	10	26.3	4	10.3	1	12.5	42	12.6
Front-to-side: Right angle	15	11.5	23	20.7	1	12.5	3	7.9	11	28.2	1	12.5	54	16.2
Front-to-side: Other	1	0.8	0	0.0	0	0.0	0	0.0	1	2.6	0	0.0	2	0.6
Sideswipe: Same direction	2	1.5	2	1.8	0	0.0	0	0.0	1	2.6	0	0.0	5	1.5
Sideswipe: Opp. direction	2	1.5	1	0.9	0	0.0	0	0.0	1	2.6	0	0.0	4	1.2
Rear-to-side	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Other	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

Fatalities

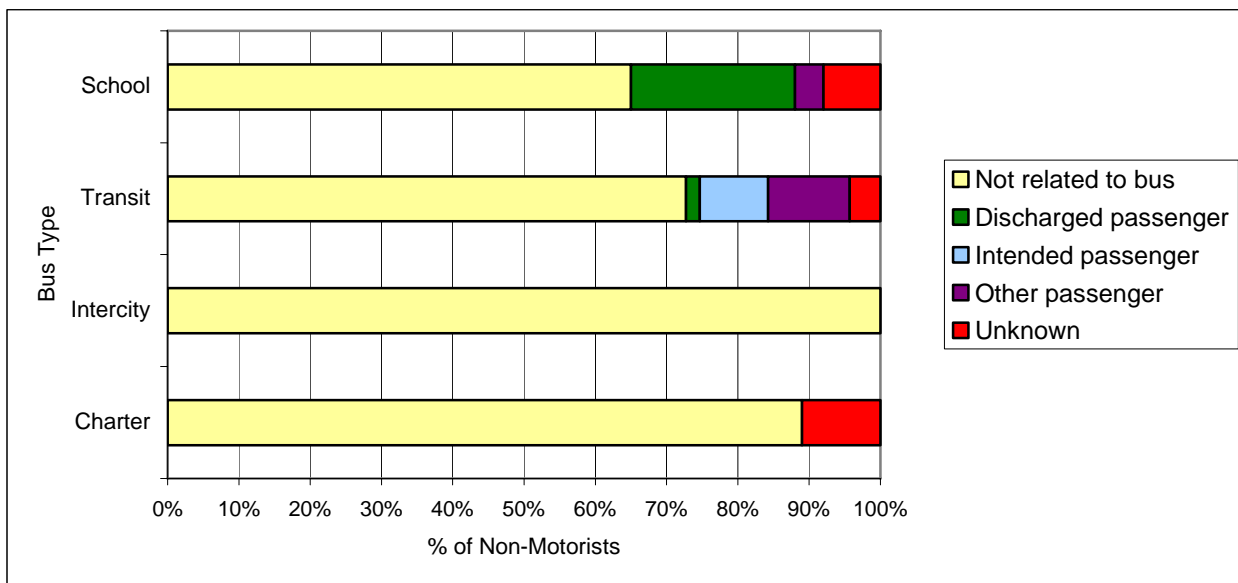
Table 2-22
Fatalities in Bus Involvements by Person Type and Bus Type

Vehicle/Person type	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
<i>Bus</i>														
Driver	4	2.9	0	0.0	1	6.3	1	1.9	3	5.4	0	0.0	9	2.3
Passenger	5	3.6	4	3.4	0	0.0	14	25.9	21	37.5	5	50.0	49	12.5
Unknown occupant	1	0.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
<i>Bus total</i>	10	7.2	4	3.4	1	6.3	15	27.8	24	42.9	5	50.0	59	15.1
<i>Other vehicle</i>														
Drivers	77	55.8	46	39.3	3	18.8	19	35.2	11	19.6	1	10.0	157	40.2
Passengers	21	15.2	18	15.4	10	62.5	11	20.4	12	21.4	1	10.0	73	18.7
Unknown occupant	0	0.0	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
<i>Other vehicle total</i>	98	71.0	65	55.6	13	81.3	30	55.6	23	41.1	2	20.0	231	59.1
<i>Non-motorists</i>														
Pedestrian	27	19.6	44	37.6	1	6.3	9	16.7	9	16.1	3	30.0	93	23.8
Bicyclist	3	2.2	4	3.4	1	6.3	0	0.0	0	0.0	0	0.0	8	2.0
<i>Non-motorist total</i>	30	21.7	48	41.0	2	12.5	9	16.7	9	16.1	3	30.0	101	25.8
Total	138	100.0	117	100.0	16	100.0	54	100.0	56	100.0	10	100.0	391	100.0

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

Relationship of Non-Motorist to Bus	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Discharged passenger	6	4.6	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	7	2.1
Intended passenger	0	0.0	4	3.6	0	0.0	0	0.0	1	2.6	0	0.0	5	1.5
Not related to bus	17	13.1	32	28.8	1	12.5	8	21.1	6	15.4	1	12.5	65	19.5
No non-motorist involvement	104	80.0	69	62.2	7	87.5	29	76.3	32	82.1	7	87.5	248	74.3
Other	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Unknown	2	1.5	5	4.5	0	0.0	1	2.6	0	0.0	0	0.0	8	2.4
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

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



Vehicle

This section provides statistics that describe the physical configuration of buses involved in a fatal accident during 2003. 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 38.9% of all buses involved in a fatal accident; transit buses accounted for 33.2% of the buses.
- Of the 130 school buses involved in fatal crashes, 86 were operated by public school districts and 40 were operated by a contracted carrier for the school district.
- The majority of the school buses (63 of the 130) were 36 to 40 feet in length. School buses were predominantly Type C school buses (64.6%), followed by Type D (24.6%), and Type A (8.5%). 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/medium shuttle buses comprised the majority of buses in this category.
- Over 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, 63.8% of the buses were 31-40 feet in length, and 67.7% 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 64.5% having a seating capacity of 61 or more.
- Roughly one-quarter or 27.8% 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 18.6% of the fatal involvements, interstate government carriers represented 16.2%, and 41.3% of the involvements were buses operated by intrastate government carriers (primarily transit buses and school buses).
- Almost 77% of the buses were on local trips (within 50 miles of base) when involved in the fatal accident.

**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)	9	2.7
Mid-size (27-34 feet length)	21	6.3
Full-size (35-40 feet length)	81	24.3
School bus	2	0.6
Short school bus on truck-based chassis	1	0.3
Small school bus of unknown length	1	0.3
Special needs	12	3.6
Large passenger van	3	0.9
<i>Total school bus</i>	130	38.9
Transit bus authority		
Alternative fuel articulated heavy-duty	1	0.3
Alternative fuel heavy-duty	11	3.3
Alternative fuel shorter	1	0.3
Articulated heavy-duty	3	0.9
Commuter coach with wheelchair lift	1	0.3
Electric trolley	1	0.3
Heavy-duty	62	18.6
Heavy-duty with wheelchairlift	1	0.3
Hybrid electric pedestrian mall shuttle	1	0.3
Long-distance coach	3	0.9
Mid-size shuttle	1	0.3
Mid-size shuttle with wheelchair lift	2	0.6
Shorter transit bus	14	4.2
Shuttle bus on van-based chassis	1	0.3
Small paratransit	1	0.3
Small shuttle	1	0.3
Small shuttle bus on van-based chassis	1	0.3
Small shuttle bus with wheelchair lift	3	0.9
Special needs small shuttle	1	0.3
Trolley replica bus	1	0.3
<i>Total transit bus</i>	111	33.2
Intercity bus operator		
Long-distance coach	7	2.1
Long-distance coach with wheelchair lift	1	0.3
<i>Total intercity bus</i>	8	2.4
Charter bus operator		
Long-distance coach	33	9.9
Mid-size conventional hood bus	1	0.3
Retired full-size school bus	1	0.3
Small shuttle bus on stripped chassis	1	0.3
Small shuttle bus on van-based chassis	1	0.3
Unknown	1	0.3
<i>Total charter bus</i>	38	11.4

(Continued on next page)

Table 3-1 (continued)

Other operator		
Alternative fuel mid-size shuttle bus	1	0.3
Conventional-hood bus	1	0.3
Full-size school bus	3	0.9
Large passenger van	6	1.8
Large passenger van equipped for inmate security	1	0.3
Large passenger van with trailer	1	0.3
Long-distance coach	2	0.6
Mid-size conventional hood bud	1	0.3
Mid-size shuttle bus	2	0.6
Mid-size shuttle bus on van-based chassis	3	0.9
Mid-size shuttle bus with wheelchair lift	4	1.2
Shuttle bus	1	0.3
Small school bus	2	0.6
Small shuttle bus	1	0.3
Small shuttle bus on van-based chassis	7	2.1
Small shuttle bus with wheelchair lift	2	0.6
Special needs small shuttle bus	1	0.3
<i>Total other operator</i>	39	11.7
Unknown operator type		
Mid-size shuttle bus on truck-based chassis	1	0.3
Shuttle bus on van-based chassis	1	0.3
Unknown	6	1.8
<i>Total unknown operator type</i>	8	2.4
Total	334	100.0

Note: Bus vehicle description records descriptions from respondents.

**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	39	11.7
Contracted carrier for school transportation	1	0.3
Private school	4	1.2
Public school district	86	25.7
<i>Total school bus</i>	130	38.9
Transit bus authority		
Contracted carrier for transit authority	5	1.5
Contracted paratransit carrier for transit authority	1	0.3
Scheduled route & on-demand shuttle regional area	1	0.3
Scheduled route & paratransit regional urban area	4	1.2
Scheduled route & paratransit urban area	1	0.3
Scheduled route regional urban area	73	21.9
Scheduled route urban area	26	7.8
<i>Total transit bus</i>	111	33.2
Intercity bus operator		
Interprovincial passenger & express freight	1	0.3
Interstate passenger & express freight	3	0.9
Interstate passenger service	1	0.3
Regional intercity passenger service	3	0.9
<i>Total intercity bus</i>	8	2.4
Charter bus operator		
Charter & airport shuttle service	1	0.3
Charter & intercity passenger service	1	0.3
Charter & shuttle service	1	0.3
Charter service	34	10.2
Shuttle service for ski area	1	0.3
<i>Total charter bus</i>	38	11.4

(Continued on next page)

Table 3-2 (continued)

Other operator		
Bus sales company transporting used buses	2	0.6
Child development center	1	0.3
Church use	3	0.9
Church use of rental van	2	0.6
Commuter service	1	0.3
Contracted carrier for city bus service	1	0.3
Contracted carrier for employee shuttle service	1	0.3
Contracted carrier for special needs program	1	0.3
Contracted carrier for transit authority	1	0.3
Contracted carrier shuttle for ski resort	1	0.3
Employee transportation	1	0.3
Employee transportation for construction company	1	0.3
Farm labor contractor employee transportation	1	0.3
Farmworker transportation	2	0.6
Federal law enforcement agency	1	0.3
For-hire shuttle for transportation to school	1	0.3
Hospital patient transportation	1	0.3
Municipal airport shuttle service	1	0.3
Municipal law enforcement agency	1	0.3
National armed services	1	0.3
Non-profit community action organization preschool	1	0.3
Non-profit organization for people with disability	2	0.6
Non-profit organization for vocational assistance	1	0.3
Non-profit social services & rehabilitation organization	1	0.3
Nursing facility resident transportation	2	0.6
On-demand paratransit & shuttle service	1	0.3
Private university	1	0.3
Property development company shuttle service	1	0.3
Rural county public transportation program	1	0.3
Senior citizen residential community	1	0.3
Shuttle service	2	0.6
<i>Total other operator</i>	39	11.7
Unknown operator type	8	2.4
Total	334	100.0

Note: The operator authority records descriptions from respondents.

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

Bus body style	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Bus	127	97.7	110	99.1	8	100.0	38	100.0	31	79.5	2	25.0	316	94.6
Large van	3	2.3	0	0.0	0	0.0	0	0.0	8	20.5	0	0.0	11	3.3
Other	0	0.0	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	6	75.0	6	1.8
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

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

Bus body configuration	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Type A school bus	11	8.5	0	0.0	0	0.0	0	0.0	2	5.1	0	0.0	13	3.9
Type C school bus	84	64.6	0	0.0	0	0.0	0	0.0	3	7.7	0	0.0	87	26.0
Type D school bus	32	24.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	32	9.6
Flat front	0	0.0	97	87.4	0	0.0	1	2.6	5	12.8	0	0.0	103	30.8
Big cowl and chassis	0	0.0	0	0.0	0	0.0	2	5.3	2	5.1	1	12.5	5	1.5
High platform	0	0.0	4	3.6	8	100.0	33	86.8	2	5.1	0	0.0	47	14.1
Small cowl and chassis	0	0.0	9	8.1	0	0.0	1	2.6	17	43.6	1	12.5	28	8.4
Other	3	2.3	1	0.9	0	0.0	0	0.0	8	20.5	0	0.0	12	3.6
Unknown	0	0.0	0	0.0	0	0.0	1	2.6	0	0.0	6	75.0	7	2.1
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

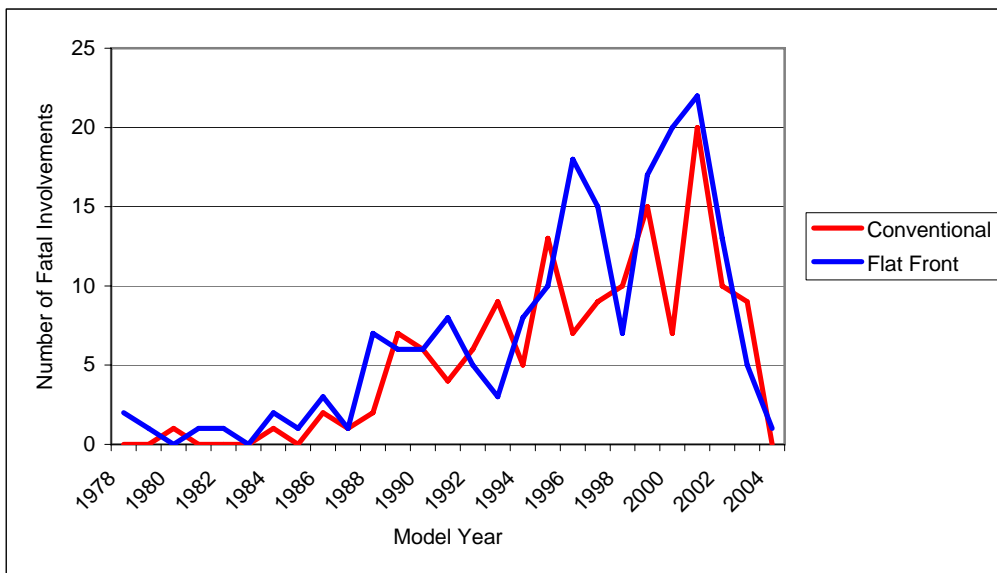
**Table 3-5
Fatal Bus Involvements by Front of Bus Style and Bus Type**

Front of bus	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Conventional hood	98	75.4	9	8.1	0	0.0	3	7.9	32	82.1	2	25.0	144	43.1
Flat front	32	24.6	101	91.0	8	100.0	35	92.1	7	17.9	0	0.0	183	54.8
Other	0	0.0	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	6	75.0	6	1.8
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

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

Model year	Conventional		Flat front		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
1978	0	0.0	2	100.0	0	0.0	2	0.6
1979	0	0.0	1	100.0	0	0.0	1	0.3
1980	1	100.0	0	0.0	0	0.0	1	0.3
1981	0	0.0	1	100.0	0	0.0	1	0.3
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	1	33.3	2	66.7	0	0.0	3	0.9
1985	0	0.0	1	100.0	0	0.0	1	0.3
1986	2	40.0	3	60.0	0	0.0	5	1.5
1987	1	50.0	1	50.0	0	0.0	2	0.6
1988	2	22.2	7	77.8	0	0.0	9	2.7
1989	7	53.8	6	46.2	0	0.0	13	3.9
1990	6	50.0	6	50.0	0	0.0	12	3.6
1991	4	33.3	8	66.7	0	0.0	12	3.6
1992	6	54.5	5	45.5	0	0.0	11	3.3
1993	9	75.0	3	25.0	0	0.0	12	3.6
1994	5	38.5	8	61.5	0	0.0	13	3.9
1995	13	56.5	10	43.5	0	0.0	23	6.9
1996	7	28.0	18	72.0	0	0.0	25	7.5
1997	9	37.5	15	62.5	0	0.0	24	7.2
1998	10	58.8	7	41.2	0	0.0	17	5.1
1999	15	46.9	17	53.1	0	0.0	32	9.6
2000	7	25.9	20	74.1	0	0.0	27	8.1
2001	20	47.6	22	52.4	0	0.0	42	12.6
2002	10	41.7	13	54.2	1	4.2	24	7.2
2003	9	64.3	5	35.7	0	0.0	14	4.2
2004	0	0.0	1	100.0	0	0.0	1	0.3
Unknown	0	0.0	0	0.0	6	0.0	6	1.8
Total	144	100.0	183	100.0	7	100.0	334	100.0

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



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

Model year	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
1978	0	0.0	0	0.0	0	0.0	1	2.6	1	2.6	0	0.0	2	0.6
1979	0	0.0	0	0.0	0	0.0	1	2.6	0	0.0	0	0.0	1	0.3
1980	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
1981	0	0.0	0	0.0	0	0.0	1	2.6	0	0.0	0	0.0	1	0.3
1982	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
1983	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
1984	0	0.0	1	0.9	0	0.0	1	2.6	1	2.6	0	0.0	3	0.9
1985	0	0.0	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
1986	2	1.5	3	2.7	0	0.0	0	0.0	0	0.0	0	0.0	5	1.5
1987	1	0.8	0	0.0	0	0.0	1	2.6	0	0.0	0	0.0	2	0.6
1988	4	3.1	2	1.8	0	0.0	2	5.3	1	2.6	0	0.0	9	2.7
1989	7	5.4	1	0.9	1	12.5	1	2.6	3	7.7	0	0.0	13	3.9
1990	6	4.6	6	5.4	0	0.0	0	0.0	0	0.0	0	0.0	12	3.6
1991	7	5.4	3	2.7	0	0.0	1	2.6	1	2.6	0	0.0	12	3.6
1992	3	2.3	4	3.6	0	0.0	0	0.0	4	10.3	0	0.0	11	3.3
1993	8	6.2	1	0.9	1	12.5	2	5.3	0	0.0	0	0.0	12	3.6
1994	6	4.6	4	3.6	0	0.0	1	2.6	2	5.1	0	0.0	13	3.9
1995	12	9.2	5	4.5	0	0.0	4	10.5	2	5.1	0	0.0	23	6.9
1996	11	8.5	9	8.1	1	12.5	4	10.5	0	0.0	0	0.0	25	7.5
1997	9	6.9	10	9.0	1	12.5	2	5.3	2	5.1	0	0.0	24	7.2
1998	5	3.8	6	5.4	0	0.0	2	5.3	4	10.3	0	0.0	17	5.1
1999	14	10.8	12	10.8	0	0.0	4	10.5	2	5.1	0	0.0	32	9.6
2000	8	6.2	9	8.1	2	25.0	5	13.2	3	7.7	0	0.0	27	8.1
2001	11	8.5	19	17.1	1	12.5	3	7.9	7	17.9	1	12.5	42	12.6
2002	8	6.2	13	11.7	1	12.5	0	0.0	2	5.1	0	0.0	24	7.2
2003	6	4.6	2	1.8	0	0.0	1	2.6	4	10.3	1	12.5	14	4.2
2004	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	0	0.0	0	0.0	0	0.0	0	0.0	6	75.0	6	1.8
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

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

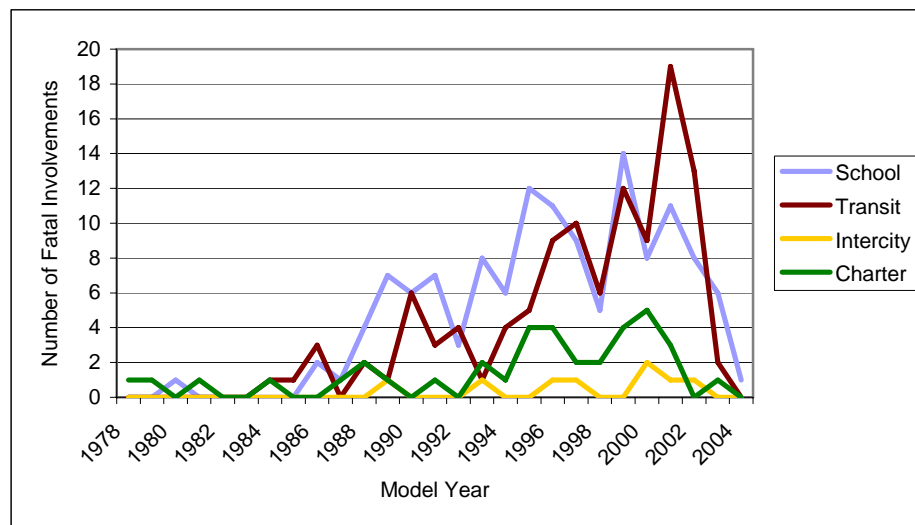


Table 3-8
Fatal Bus Involvements by Bus Length and Bus Type

Bus length (feet)	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
16-20	9	6.9	1	0.9	0	0.0	0	0.0	14	35.9	0	0.0	24	7.2
21-25	5	3.8	6	5.4	0	0.0	2	5.3	7	17.9	0	0.0	20	6.0
26-30	17	13.1	9	8.1	0	0.0	1	2.6	7	17.9	0	0.0	34	10.2
31-35	33	25.4	10	9.0	0	0.0	1	2.6	4	10.3	1	12.5	49	14.7
36-40	63	48.5	75	67.6	3	37.5	18	47.4	5	12.8	0	0.0	164	49.1
41-45	0	0.0	5	4.5	5	62.5	14	36.8	0	0.0	0	0.0	24	7.2
56-60	0	0.0	4	3.6	0	0.0	0	0.0	0	0.0	0	0.0	4	1.2
Est. <= 35	0	0.0	0	0.0	0	0.0	1	2.6	0	0.0	0	0.0	1	0.3
Unknown	3	2.3	1	0.9	0	0.0	1	2.6	2	5.1	7	87.5	14	4.2
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

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

Empty wt (lbs)	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
4,000-6,000	3	2.3	0	0.0	0	0.0	0	0.0	3	7.7	0	0.0	6	1.8
6,001-10,000	9	6.9	1	0.9	0	0.0	1	2.6	15	38.5	0	0.0	26	7.8
10,001-15,000	10	7.7	8	7.2	0	0.0	2	5.3	8	20.5	0	0.0	28	8.4
15,001-20,000	100	76.9	2	1.8	0	0.0	2	5.3	9	23.1	1	12.5	114	34.1
20,001-25,000	5	3.8	5	4.5	0	0.0	0	0.0	0	0.0	0	0.0	10	3.0
25,001-30,000	0	0.0	76	68.5	3	37.5	11	28.9	2	5.1	0	0.0	92	27.5
30,001-35,000	0	0.0	12	10.8	3	37.5	14	36.8	0	0.0	0	0.0	29	8.7
35,001-40,000	0	0.0	4	3.6	2	25.0	6	15.8	0	0.0	0	0.0	12	3.6
40,001-46,000	0	0.0	2	1.8	0	0.0	0	0.0	0	0.0	0	0.0	2	0.6
Unknown	3	2.3	1	0.9	0	0.0	2	5.3	2	5.1	7	87.5	15	4.5
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

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

Gross vehicle weight rating	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Class 2: 6,001-10,000	10	7.7	1	0.9	0	0.0	0	0.0	9	23.1	0	0.0	20	6.0
Class 3: 10,001-14,000	3	2.3	0	0.0	0	0.0	1	2.6	6	15.4	0	0.0	10	3.0
Class 4: 14,001-16,000	0	0.0	7	6.3	0	0.0	1	2.6	10	25.6	1	12.5	19	5.7
Class 5: 16,001-19,000	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	12.5	1	0.3
Class 6: 19,501-26,000	15	11.5	1	0.9	0	0.0	1	2.6	2	5.1	0	0.0	19	5.7
Class 7: 26,001-33,000	71	54.6	1	0.9	0	0.0	1	2.6	4	10.3	0	0.0	77	23.1
Class 8: 33,001 or more	1	0.8	87	78.4	8	100.0	32	84.2	2	5.1	0	0.0	130	38.9
Unknown	30	23.1	14	12.6	0	0.0	2	5.3	6	15.4	6	75.0	58	17.4
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

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

Axles	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
2 axles	130	100.0	103	92.8	0	0.0	5	13.2	36	92.3	2	25.0	276	82.6
3 axles	0	0.0	8	7.2	8	100.0	32	84.2	3	7.7	0	0.0	51	15.3
Unknown	0	0.0	0	0.0	0	0.0	1	2.6	0	0.0	6	75.0	7	2.1
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

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

Passenger seating capacity	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
8-14	5	3.8	5	4.5	0	0.0	0	0.0	17	43.6	0	0.0	27	8.1
15-20	9	6.9	5	4.5	0	0.0	1	2.6	6	15.4	0	0.0	21	6.3
21-25	5	3.8	2	1.8	0	0.0	0	0.0	4	10.3	1	12.5	12	3.6
26-30	5	3.8	8	7.2	0	0.0	0	0.0	2	5.1	0	0.0	15	4.5
31-35	0	0.0	5	4.5	0	0.0	0	0.0	1	2.6	0	0.0	6	1.8
36-40	2	1.5	40	36.0	0	0.0	1	2.6	0	0.0	0	0.0	43	12.9
41-45	3	2.3	26	23.4	0	0.0	0	0.0	0	0.0	0	0.0	29	8.7
46-50	5	3.8	5	4.5	3	37.5	12	31.6	4	10.3	0	0.0	29	8.7
51-55	0	0.0	3	2.7	5	62.5	9	23.7	1	2.6	0	0.0	18	5.4
56-60	8	6.2	3	2.7	0	0.0	6	15.8	0	0.0	0	0.0	17	5.1
61-65	13	10.0	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	14	4.2
66-70	13	10.0	0	0.0	0	0.0	1	2.6	1	2.6	0	0.0	15	4.5
71-75	31	23.8	0	0.0	0	0.0	0	0.0	2	5.1	0	0.0	33	9.9
76-80	9	6.9	0	0.0	0	0.0	1	2.6	0	0.0	0	0.0	10	3.0
81+	18	13.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	18	5.4
Est. 15 or more	2	1.5	7	6.3	0	0.0	4	10.5	0	0.0	0	0.0	13	3.9
Unknown	2	1.5	1	0.9	0	0.0	3	7.9	1	2.6	7	87.5	14	4.2
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

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

No. of passengers	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
None	43	33.1	20	18.0	2	25.0	16	42.1	12	30.8	0	0.0	93	27.8
1-3	17	13.1	21	18.9	0	0.0	0	0.0	7	17.9	1	12.5	46	13.8
4-6	9	6.9	11	9.9	0	0.0	2	5.3	5	12.8	0	0.0	27	8.1
7-10	6	4.6	6	5.4	0	0.0	0	0.0	5	12.8	0	0.0	17	5.1
11-15	10	7.7	11	9.9	2	25.0	1	2.6	7	17.9	0	0.0	31	9.3
16-20	10	7.7	5	4.5	2	25.0	4	10.5	1	2.6	0	0.0	22	6.6
21-25	6	4.6	3	2.7	0	0.0	1	2.6	0	0.0	0	0.0	10	3.0
26-30	5	3.8	5	4.5	0	0.0	1	2.6	0	0.0	0	0.0	11	3.3
31-35	5	3.8	0	0.0	0	0.0	3	7.9	0	0.0	0	0.0	8	2.4
36-40	6	4.6	0	0.0	1	12.5	0	0.0	0	0.0	0	0.0	7	2.1
41-45	3	2.3	1	0.9	0	0.0	1	2.6	0	0.0	0	0.0	5	1.5
46-50	1	0.8	0	0.0	1	12.5	0	0.0	0	0.0	0	0.0	2	0.6
51+	1	0.8	2	1.8	0	0.0	1	2.6	0	0.0	0	0.0	4	1.2
Unknown	8	6.2	26	23.4	0	0.0	8	21.1	2	5.1	7	87.5	51	15.3
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

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

Type of passenger restraint	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
None	96	73.8	102	91.9	8	100.0	25	65.8	14	35.9	0	0.0	245	73.4
Lap belts	20	15.4	4	3.6	0	0.0	0	0.0	12	30.8	0	0.0	36	10.8
Lap and shoulder belts	6	4.6	3	2.7	0	0.0	0	0.0	8	20.5	0	0.0	17	5.1
Lap belts, front only	0	0.0	1	0.9	0	0.0	1	2.6	0	0.0	0	0.0	2	0.6
Other	2	1.5	0	0.0	0	0.0	3	7.9	1	2.6	0	0.0	6	1.8
Unknown	6	4.6	1	0.9	0	0.0	9	23.7	4	10.3	8	100.0	28	8.4
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

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

Carrier type	School		Transit		Intercity		Charter		Other		Unknown		Total	
	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	5	12.8	0	0.0	6	1.8
For-hire	17	13.1	2	1.8	8	100.0	30	78.9	4	10.3	1	12.5	62	18.6
Government owned	38	29.2	12	10.8	0	0.0	0	0.0	4	10.3	0	0.0	54	16.2
Intrastate														
Private	1	0.8	0	0.0	0	0.0	0	0.0	10	25.6	0	0.0	11	3.3
For-hire	20	15.4	5	4.5	0	0.0	5	13.2	5	12.8	0	0.0	35	10.5
Government owned	45	34.6	91	82.0	0	0.0	0	0.0	2	5.1	0	0.0	138	41.3
Unknown	8	6.2	1	0.9	0	0.0	3	7.9	9	23.1	7	87.5	28	8.4
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

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

Trip type	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Local	116	89.2	101	91.0	0	0.0	14	36.8	26	66.7	0	0.0	257	76.9
51-100 miles	6	4.6	1	0.9	1	12.5	5	13.2	3	7.7	0	0.0	16	4.8
101-200	3	2.3	0	0.0	2	25.0	6	15.8	3	7.7	0	0.0	14	4.2
201-500	0	0.0	0	0.0	4	50.0	5	13.2	2	5.1	0	0.0	11	3.3
Over 500	0	0.0	0	0.0	0	0.0	0	0.0	3	7.7	0	0.0	3	0.9
Unknown	5	3.8	9	8.1	1	12.5	8	21.1	2	5.1	8	100.0	33	9.9
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

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

Most harmful event	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
<i>Noncollision event</i>														
Overturn	6	4.6	0	0.0	0	0.0	1	2.6	5	12.8	1	12.5	13	3.9
Fire/explosion	0	0.0	0	0.0	0	0.0	0	0.0	1	2.6	0	0.0	1	0.3
Injured in vehicle	0	0.0	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Other noncollision	0	0.0	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Thrown or falling object	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Vehicle occupant struck by own vehicle	0	0.0	0	0.0	0	0.0	0	0.0	1	2.6	0	0.0	1	0.3
<i>Collision with nonfixed object</i>														
Pedestrian	22	16.9	41	36.9	1	12.5	9	23.7	8	20.5	2	25.0	83	24.9
Pedalcycle	5	3.8	4	3.6	1	12.5	0	0.0	0	0.0	0	0.0	10	3.0
Vehicle in transport	90	69.2	64	57.7	6	75.0	27	71.1	22	56.4	3	37.5	212	63.5
Parked motor vehicle	1	0.8	0	0.0	0	0.0	0	0.0	1	2.6	0	0.0	2	0.6
<i>Collision with fixed object</i>														
Guardrail	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Highway/traffic sign post	0	0.0	0	0.0	0	0.0	1	2.6	0	0.0	0	0.0	1	0.3
Utility pole	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Tree	3	2.3	0	0.0	0	0.0	0	0.0	0	0.0	2	25.0	5	1.5
Other fixed object	0	0.0	0	0.0	0	0.0	0	0.0	1	2.6	0	0.0	1	0.3
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

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

Bus rollover status	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
No rollover	119	91.5	111	100.0	8	100.0	37	97.4	33	84.6	6	75.0	314	94.0
First event	3	2.3	0	0.0	0	0.0	0	0.0	3	7.7	2	25.0	8	2.4
Subsequent event	8	6.2	0	0.0	0	0.0	1	2.6	3	7.7	0	0.0	12	3.6
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

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

Number of quarter turns	Roll left		Roll right		No rollover		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
1	5	71.4	8	72.7	0	0.0	0	0.0	13	3.9
2	1	14.3	0	0.0	0	0.0	0	0.0	1	0.3
4	0	0.0	1	9.1	0	0.0	0	0.0	1	0.3
12	0	0.0	1	9.1	0	0.0	0	0.0	1	0.3
36	1	14.3	0	0.0	0	0.0	0	0.0	1	0.3
NA	0	0.0	0	0.0	310	100.0	0	0.0	310	92.8
Unknown	0	0.0	1	9.1	0	0.0	6	100.0	7	2.1
Total	7	100.0	11	100.0	310	100.0	6	100.0	334	100.0

Note: The BIFA Survey found two fewer rollovers than FARS reported.

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

Bus fire occurrence	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
No fire	130	100.0	111	100.0	7	87.5	38	100.0	38	97.4	8	100.0	332	99.4
Fire in vehicle	0	0.0	0	0.0	1	12.5	0	0.0	1	2.6	0	0.0	2	0.6
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	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.

- No bus drivers were coded as fatigued at the time of the crash.
- Drinking was reported for less than 1.0% of the bus drivers.
- Just over one-third (33.5%) of bus drivers involved in a fatal crash were female. Over 59% of school bus drivers were female.
- Nine (2.7%) bus drivers were fatally injured in a traffic accident.
- Over 55% of involvements in which the bus driver suffered a fatal injury involved bus rollover, fire or driver ejection.
- Over two-thirds (68.0%) of school bus drivers were paid by the hour, as were 93.7% of transit drivers and 62.5% of intercity drivers.
- Overall, 12.3% 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 (91.0%) of all bus drivers had a valid CDL license.
- Failure to yield was the most common driver factor (9.3%), followed by inattentive (5.4%), and ran off road (4.2%).
- Nearly two-thirds (65.3%) of bus drivers had no driver factors recorded.

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

Bus driver drinking	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
No drinking	129	99.2	111	100.0	8	100.0	36	94.7	39	100.0	8	100.0	331	99.1
Drinking	1	0.8	0	0.0	0	0.0	2	5.3	0	0.0	0	0.0	3	0.9
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

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

Bus driver drug use	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
No drugs	46	35.4	35	31.5	2	25.0	15	39.5	14	35.9	2	25.0	114	34.1
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	79	60.8	72	64.9	6	75.0	22	57.9	22	56.4	6	75.0	207	62.0
Reported unk.	5	3.8	4	3.6	0	0.0	1	2.6	3	7.7	0	0.0	13	3.9
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

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

Age (years)	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
18-21	0	0.0	0	0.0	0	0.0	0	0.0	3	7.7	0	0.0	3	0.9
22-25	2	1.5	6	5.4	0	0.0	0	0.0	0	0.0	1	12.5	9	2.7
26-30	10	7.7	8	7.2	2	25.0	1	2.6	2	5.1	0	0.0	23	6.9
31-35	14	10.8	9	8.1	1	12.5	4	10.5	5	12.8	1	12.5	34	10.2
36-40	25	19.2	15	13.5	1	12.5	5	13.2	3	7.7	1	12.5	50	15.0
41-45	16	12.3	20	18.0	0	0.0	3	7.9	5	12.8	3	37.5	47	14.1
46-50	18	13.8	19	17.1	2	25.0	6	15.8	4	10.3	0	0.0	49	14.7
51-55	17	13.1	14	12.6	0	0.0	4	10.5	3	7.7	1	12.5	39	11.7
56-60	13	10.0	11	9.9	2	25.0	7	18.4	9	23.1	0	0.0	42	12.6
61-65	4	3.1	6	5.4	0	0.0	4	10.5	3	7.7	1	12.5	18	5.4
66-70	6	4.6	2	1.8	0	0.0	3	7.9	1	2.6	0	0.0	12	3.6
71-75	4	3.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4	1.2
Unknown	1	0.8	1	0.9	0	0.0	1	2.6	1	2.6	0	0.0	4	1.2
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

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

Driver sex	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Male	52	40.0	88	79.3	7	87.5	34	89.5	32	82.1	7	87.5	220	65.9
Female	77	59.2	22	19.8	1	12.5	4	10.5	7	17.9	1	12.5	112	33.5
Unknown	1	0.8	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	2	0.6
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

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

Driver restraint use	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
None used or N/A	9	6.9	10	9.0	1	12.5	3	7.9	6	15.4	0	0.0	29	8.7
Shoulder belt	0	0.0	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Lap belt	32	24.6	27	24.3	1	12.5	8	21.1	5	12.8	1	12.5	74	22.2
Lap and shoulder	78	60.0	46	41.4	5	62.5	20	52.6	25	64.1	5	62.5	179	53.6
Used, type unk	2	1.5	8	7.2	0	0.0	1	2.6	0	0.0	1	12.5	12	3.6
Unknown	9	6.9	19	17.1	1	12.5	6	15.8	3	7.7	1	12.5	39	11.7
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

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

Driver injury severity	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Fatal injury (K)	4	3.1	0	0.0	1	12.5	1	2.6	3	7.7	0	0.0	9	2.7
Incapacitating (A)	9	6.9	3	2.7	0	0.0	2	5.3	5	12.8	2	25.0	21	6.3
Non-incapacitating (B)	13	10.0	7	6.3	1	12.5	4	10.5	3	7.7	0	0.0	28	8.4
Complaint of pain (C)	24	18.5	19	17.1	0	0.0	7	18.4	8	20.5	1	12.5	59	17.7
No injury (O)	79	60.8	81	73.0	6	75.0	24	63.2	20	51.3	4	50.0	214	64.1
Unknown	1	0.8	1	0.9	0	0.0	0	0.0	0	0.0	1	12.5	3	0.9
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

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

Rollover, fire ejection	Fatal injury (K)		Incapaci- tating (A)		Non-incapa- citating (B)		Complaint of pain (C)		No injury (O)		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Rollover only	0	0.0	11	52.4	2	7.1	3	5.1	1	0.5	0	0.0	17	5.1
Fire only	0	0.0	0	0.0	0	0.0	0	0.0	2	0.9	0	0.0	2	0.6
Ejection only	3	33.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	0.9
Rollover and ejection	2	22.2	1	4.8	0	0.0	0	0.0	0	0.0	0	0.0	3	0.9
None	4	44.4	9	42.9	26	92.9	56	94.9	211	98.6	2	66.7	308	92.2
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	33.3	1	0.3
Total	9	100.0	21	100.0	28	100.0	59	100.0	214	100.0	3	100.0	334	100.0

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

Driver extrication	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Not extricated	127	97.7	111	100.0	7	87.5	37	97.4	39	100.0	8	100.0	329	98.5
Extricated	2	1.5	0	0.0	1	12.5	1	2.6	0	0.0	0	0.0	4	1.2
Unknown	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

Table 4-9
Fatal Bus Involvements by Driver Compensation

Compensation	No.	Pct.
Hourly only	225	67.4
Mileage only	8	2.4
Salary only	12	3.6
Driver owned only	6	1.8
Driver owned and other	1	0.3
Hourly and mileage	1	0.3
Hourly and tips	1	0.3
Hourly and salary	2	0.6
Mileage and other	1	0.3
Salary, not a driver	1	0.3
Driver is volunteer	5	1.5
Hourly, not a driver	3	0.9
Other, not a driver	1	0.3
Not a driver	2	0.6
Other		
Paid by trip/route	8	2.4
Paid by day	4	1.2
Miscellaneous	4	1.2
Unknown	49	14.7
Total	334	100.0

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

Operator type	No.	Pct.
Compensation		
School district		
Hourly only	87	66.9
Salary only	11	8.5
Hourly and salary	2	0.6
Mileage and other	1	0.8
Driver has other primary employment	2	1.5
Driver owned and other	1	0.8
Not a driver	1	0.8
Not a driver and other	1	0.8
Other		
Paid by day	3	2.3
Paid by trip/route	4	3.1
Paid by run	1	0.8
Unknown	16	12.3
Total school bus	130	100.0
Transit bus authority		
Hourly only	104	93.7
Unknown	7	6.3
Total transit bus	111	100.0
Intercity bus operator		
Hourly only	5	62.5
Mileage only	3	37.5
Total intercity bus	8	100.0
Charter bus operator		
Hourly only	12	31.6
Mileage only	3	7.9
Hourly and tips	1	2.6
Hourly and mileage	1	0.3
Driver owned	3	7.9
Other		
Driver not compensated, mechanic	1	2.6
Paid by trip	4	10.5
Paid by day	2	5.3
Paid by half day	1	0.3
Unknown	10	26.3
Total charter bus	38	100.0
Other operator		
Hourly only	17	43.6
Hourly, not a driver	1	0.3
Mileage only	2	0.6
Salary, not a driver	1	0.3
Salary only	1	2.6
Driver owned	3	7.7
Driver is volunteer	5	12.8
Driver has other primary employment	1	2.6
Miscellaneous/unknown	8	20.5
Total other operator	39	100.0
Unknown operator type	8	100.0
Total	334	100.0

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

Hours driven	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
1 hr	40	30.8	6	5.4	0	0.0	7	18.4	8	20.5	0	0.0	61	18.3
2 hrs	37	28.5	6	5.4	1	12.5	5	13.2	4	10.3	0	0.0	53	15.9
3 hrs	14	10.8	7	6.3	3	37.5	1	2.6	2	5.1	0	0.0	27	8.1
4-5 hrs	19	14.6	11	9.9	3	37.5	7	18.4	6	15.4	0	0.0	46	13.8
6-7 hrs	3	2.3	12	10.8	1	12.5	3	7.9	6	15.4	0	0.0	25	7.5
8-9 hrs	2	1.5	8	7.2	0	0.0	0	0.0	0	0.0	0	0.0	10	3.0
10-11 hrs	1	0.8	2	1.8	0	0.0	0	0.0	0	0.0	0	0.0	3	0.9
12 or more	0	0.0	2	1.8	0	0.0	0	0.0	1	2.6	0	0.0	3	0.9
Unknown, legal	0	0.0	4	3.6	0	0.0	0	0.0	1	2.6	0	0.0	5	1.5
Unknown/NA	14	10.8	53	47.7	0	0.0	15	39.5	11	28.2	8	100.0	101	30.2
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	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

Driver violations charged	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
None	115	88.5	102	91.9	8	100.0	35	92.1	35	89.7	6	75.0	301	90.1
Manslaughter/homicide	3	2.3	2	1.8	0	0.0	1	2.6	0	0.0	0	0.0	6	1.8
Willfull reckless driving	0	0.0	1	0.9	0	0.0	1	2.6	0	0.0	0	0.0	2	0.6
Unsafe reckless	0	0.0	0	0.0	0	0.0	0	0.0	1	2.6	0	0.0	1	0.3
Inattentive	2	1.5	3	2.7	0	0.0	0	0.0	2	5.1	1	12.5	8	2.4
Hit-and-run	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Serious violation	0	0.0	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Speeding	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	12.5	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
Speed related violation	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	12.5	1	0.3
Improper turn on red	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Disobey signal	0	0.0	0	0.0	0	0.0	1	2.6	0	0.0	0	0.0	1	0.3
Failure to obey traffic device	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	1.5	1	0.9	0	0.0	2	5.3	0	0.0	0	0.0	5	1.5
Any lane violations	0	0.0	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
CDL license violation	1	0.8	0	0.0	0	0.0	0	0.0	1	2.6	0	0.0	2	0.6
Failure to require restraint use	2	1.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.6
Theft/unauthorized use	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Other moving violation	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Unknown violation	4	3.1	2	1.8	0	0.0	0	0.0	0	0.0	0	0.0	6	1.8
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	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.

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

No. of previous accidents*	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
0	106	81.5	75	67.6	7	87.5	33	86.8	33	84.6	7	87.5	261	78.1
1	10	7.7	24	21.6	0	0.0	3	7.9	3	7.7	0	0.0	40	12.0
2	1	0.8	8	7.2	0	0.0	1	2.6	0	0.0	0	0.0	10	3.0
3	2	1.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.6
4	0	0.0	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Not reported	9	6.9	2	1.8	0	0.0	1	2.6	2	5.1	1	12.5	15	4.5
Unknown	2	1.5	1	0.9	1	12.5	0	0.0	1	2.6	0	0.0	5	1.5
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

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

No. of previous suspensions*	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
0	126	96.9	107	96.4	7	87.5	38	100.0	37	94.9	8	100.0	323	96.7
1	1	0.8	2	1.8	0	0.0	0	0.0	1	2.6	0	0.0	4	1.2
2	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
3	0	0.0	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Unknown	2	1.5	1	0.9	1	12.5	0	0.0	1	2.6	0	0.0	5	1.5
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

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

No. of previous speeding convs.*	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
0	119	91.5	97	87.4	7	87.5	33	86.8	30	76.9	7	87.5	293	87.7
1	7	5.4	11	9.9	0	0.0	4	10.5	7	17.9	1	12.5	30	9.0
2	1	0.8	2	1.8	0	0.0	0	0.0	1	2.6	0	0.0	4	1.2
3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
4	0	0.0	0	0.0	0	0.0	1	2.6	0	0.0	0	0.0	1	0.3
5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
6	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Unknown	2	1.5	1	0.9	1	12.5	0	0.0	1	2.6	0	0.0	5	1.5
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

* Reflects events occurring within three years of the current accident.

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

No. prev. other moving convs.*	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
0	120	92.3	96	86.5	6	75.0	35	92.1	35	89.7	5	62.5	297	88.9
1	7	5.4	11	9.9	1	12.5	3	7.9	2	5.1	2	25.0	26	7.8
2	1	0.8	3	2.7	0	0.0	0	0.0	1	2.6	1	12.5	6	1.8
Unknown	2	1.5	1	0.9	1	12.5	0	0.0	1	2.6	0	0.0	5	1.5
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

* 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 compliance	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Not valid	1	0.8	2	1.8	0	0.0	1	2.6	1	2.6	1	12.5	6	1.8
Valid	127	97.7	107	96.4	7	87.5	37	97.4	37	94.9	6	75.0	321	96.1
Unknown if CDL	0	0.0	1	0.9	0	0.0	0	0.0	0	0.0	1	12.5	2	0.6
Unknown	2	1.5	1	0.9	1	12.5	0	0.0	1	2.6	0	0.0	5	1.5
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

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

CDL license status	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
No CDL	1	0.8	4	3.6	0	0.0	1	2.6	16	41.0	2	25.0	24	7.2
Expired	0	0.0	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Valid	127	97.7	105	94.6	7	87.5	37	97.4	22	56.4	6	75.0	304	91.0
Unknown	2	1.5	1	0.9	1	12.5	0	0.0	1	2.6	0	0.0	5	1.5
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

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

License endorsements	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
No endorsements	15	11.5	18	16.2	2	25.0	9	23.7	26	66.7	4	50.0	74	22.2
Complied	94	72.3	73	65.8	4	50.0	21	55.3	9	23.1	2	25.0	203	60.8
Not complied	1	0.8	3	2.7	0	0.0	0	0.0	0	0.0	0	0.0	4	1.2
Compliance unk	15	11.5	15	13.5	0	0.0	8	21.1	3	7.7	2	25.0	43	12.9
Unknown	5	3.8	2	1.8	2	25.0	0	0.0	1	2.6	0	0.0	10	3.0
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	100.0

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

Driver-related factors	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
None	77	59.2	78	70.3	6	75.0	29	76.3	24	61.5	4	50.0	218	65.3
<i>Physical/mental condition</i>														
Ill, blackout	0	0.0	0	0.0	0	0.0	1	2.6	0	0.0	0	0.0	1	0.3
Under the influence alcohol/drugs/medication	0	0.0	0	0.0	0	0.0	0	0.0	1	2.6	0	0.0	1	0.3
Inattentive	9	6.9	5	4.5	2	25.0	1	2.6	0	0.0	1	12.5	18	5.4
<i>Miscellaneous causes</i>														
Ran off road/lane	7	5.4	1	0.9	0	0.0	1	2.6	4	10.3	1	12.5	14	4.2
Vehicle unattended	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Improper loading	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	12.5	1	0.3
Improper tailing	0	0.0	1	0.9	1	12.5	0	0.0	0	0.0	0	0.0	2	0.6
Not in lane	2	1.5	1	0.9	0	0.0	0	0.0	1	2.6	0	0.0	4	1.2
Driving on shoulder	0	0.0	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Improper passing	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Erratic/reckless	1	0.8	0	0.0	0	0.0	1	2.6	1	2.6	2	25.0	5	1.5
Failure to yield	14	10.8	9	8.1	0	0.0	4	10.5	4	10.3	0	0.0	31	9.3
Failure to obey signs	1	0.8	2	1.8	0	0.0	1	2.6	1	2.6	0	0.0	5	1.5
Driving too fast	3	2.3	0	0.0	1	12.5	2	5.3	0	0.0	3	37.5	9	2.7
Other improper turn	0	0.0	1	0.9	0	0.0	0	0.0	2	5.1	0	0.0	3	0.9
Over correcting	2	1.5	0	0.0	0	0.0	0	0.0	2	5.1	1	12.5	5	1.5
<i>Vision obscured by</i>														
Weather	2	1.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.6
Glare	0	0.0	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Curve, hill, etc	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Tree/plants	0	0.0	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Moving vehicle	2	1.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.6
Parked vehicle	0	0.0	1	0.9	0	0.0	0	0.0	1	2.6	0	0.0	2	0.6
Obstructing angles on vehicle	0	0.0	3	2.7	0	0.0	0	0.0	0	0.0	0	0.0	3	0.9
Other obstruction	0	0.0	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
<i>Avoiding, swerving due to</i>														
Flat tire	1	0.8	0	0.0	0	0.0	0	0.0	2	5.1	0	0.0	3	0.9
Live animal	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Vehicle in road	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Pedestrian	1	0.8	0	0.0	0	0.0	1	2.6	0	0.0	0	0.0	2	0.6
Water, snow, oil	5	3.8	0	0.0	0	0.0	0	0.0	1	2.6	0	0.0	6	1.8
<i>Other misc. factors</i>														
Record or license in two or more states	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Hit and run driver	1	0.8	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	2	0.6
Homicide	2	1.5	1	0.9	0	0.0	1	2.6	0	0.0	0	0.0	4	1.2
Other nonmoving violation	0	0.0	0	0.0	0	0.0	1	2.6	2	5.1	0	0.0	3	0.9
<i>Possible distractions</i>														
Cellphone	7	5.4	5	4.5	0	0.0	0	0.0	1	2.6	0	0.0	13	3.9
Head-up display	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Unknown	4	3.1	3	2.7	0	0.0	0	0.0	0	0.0	0	0.0	7	2.1
Total	130	100.0	111	100.0	8	100.0	38	100.0	39	100.0	8	100.0	334	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
Opp	Opposite
Prev	Previous
Stat	Statutory
Unk	Unknown
Veh	Vehicle
WO	Without

Injuries are classified according to severity under the following levels:	
K	Fatal injury
A	Incapacitating injury
B	Evident but not incapacitating
C	Complaint of pain
O	No injury

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