Buses Involved in Fatal Accidents Factbook 2007



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 2007

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Center for National Truck and Bus Statistics

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This document presents aggre	gate statisti	cs on buses invo	lved in traffic accide	nts in 2007. The
statistics are derived from the				
University of Michigan Transpo				
buses involved in a fatal accid				
recorded in the Fatality Analys				
accident, and occupant record and operating authority of the			i about the physical	Configuration
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	APPROXIMATE (CONVERSION	IS TO SI UNITS			APPROXIMATE C	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 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	На	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	rnL	Milliliters	0.034	fluid ounces	fl oz	
gal	gallons	3.785	liters	L	L	Liters	0.264	Gallons	gal ft³	
gal ft³	cubic feet	0.028	cubic meters	m^3	m ³	cubic meters	35.71	cubic feet		
yd ³	cubic yards	0.765	cubic meters	m^3	m ³	cubic meters	1.307	cubic yards	yd ³	
NOTE: Vo	olumes 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	Mg	Mg	megagrams	1.103	short tons	Т	
			(or "metric ton")	(or "t")	(or "t")	(or "metric ton")		(2001 lb)		
	TEMP	ERATURE (exa	act)		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	
	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 ²	cd/m ²	Cd/m ²	candela/m ²	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 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 data documented in this report are the product of the dedicated efforts of many people. The project originated under the direction of Ken Campbell. Daniel Blower directs the current project. Daniel Hershberger managed the survey and edited the cases. Sue Nieuwenhuis served as interviewer. Her conscientious dedication to accuracy and completeness is greatly appreciated. In addition, the project would not have been possible without the willing cooperation of hundreds of bus owners, operators, and police officers across the country.

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 2007*, 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 2007 BIFA file is a census file, meaning there is one record for each of the 304 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 information about the physical configuration of the bus, the type of organization operating the bus, and the type of application the bus was used for. In addition, the BIFA survey determines the seating capacity of the bus; information regarding the driver; and several other details of the operations of the bus. 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* 2007.

Report overview

This report consists of four sections. The "Trends" section provides data on fatalities and fatal accident involvements from 2003 through 2007. 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 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.).

Introduction Page 3

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 49.

Trends, 2003-2007

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 2003-2007, an average of 318 buses were involved in a fatal traffic accident each year. In 2007 there was a decrease of 31 bus involvements (304 total) from 335 involvements in 2006.
- 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 32.9%.
- The number of school bus involvements (111) in 2007 decreased from 128 in 2006.
- California, New York, and Florida had the greatest number of bus involvements over the period 2003-2007.
- Total fatalities for 2007 showed an decrease of 5.3% from the 2006 figure of 374. In 2007 there were 354 persons killed in crashes involving a bus; 18 of them were bus drivers, and 31 were passengers on the bus. Other vehicle drivers and passengers represented the largest source of fatalities with 220 (62.1%), and non-motorists represented 85 (24.0%) of the fatalities.
- Of the non-motorist fatalities, 64 pedestrians and 21 bicyclists were killed during 2007 in accidents involving buses.



<u>Trends, 2003-2007</u> Page 7

Annual fatal involvements

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

	School	Transit	Intercity	Charter	Other	Unknown	Total
Accident year	N	N	N	N	N	N	N
2003	130	111	8	38	39	8	334
2004	125	96	8	42	34	2	307
2005	125	93	14	44	33	1	310
2006	128	119	6	37	42	3	335
2007	111	104	10	40	36	3	304
Total	619	523	46	201	184	17	1590

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

	2003		2004		2005		2006		2007		Total	
Bus operator type	N	%	N	%	Ν	%	N	%	Ν	%	N	%
School district	130	38.9	125	40.7	85	27.4	91	27.2	84	27.6	515	32.4
Urban transit authority	111	33.2	96	31.3	93	30.0	119	35.5	104	34.2	523	32.9
Scheduled intercity	8	2.4	8	2.6	14	4.5	6	1.8	10	3.3	46	2.9
Charter bus	38	11.4	42	13.7	44	14.2	37	11.0	40	13.2	201	12.6
Private company	4	1.2	2	0.7	2	0.6	2	0.6	0	0.0	10	0.6
Non-government organization	11	3.3	9	2.9	4	1.3	7	2.1	7	2.3	38	2.4
Non-educational unit of government	7	2.1	6	2.0	7	2.3	10	3.0	9	3.0	39	2.5
Private, for personal transportation	0	0.0	0	0.0	0	0.0	1	0.3	0	0.0	1	0.1
Contractor for school district*	0	0.0	0	0.0	40	12.9	37	11.0	27	8.9	104	6.5
Other	17	5.1	17	5.5	20	6.5	22	6.6	20	6.6	96	6.0
Unknown	8	2.4	2	0.7	1	0.3	3	0.9	3	1.0	17	1.1
Total	334	100.0	307	100.0	310	100.0	335	100.0	304	100.0	1590	100.0

^{* &}quot;Contractor for school district" is a new bus operator type, beginning with the 2005 data year. Such cases in previous years were included in the "school district" grouping.

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

Bus operator type	20	03	20	04	20	05	20	06	20	07	To	tal
Bus seating capacity	N	%	N	%	N	%	N	%	N	%	N	%
School district												
8-14	5	1.5	0	0.0	3	1.0	2	0.6	3	1.0	13	0.8
15-50	29	8.7	14	4.6	27	8.7	22	6.6	14	4.6	106	6.7
51-99	92	27.5	99	32.2	83	26.8	92	27.5	87	28.6	453	28.5
Estimated 15 or more	2	0.6	10	3.3	10	3.2	11	3.3	7	2.3	40	2.5
Unknown	2	0.6	2	0.7	2	0.6	1	0.3	0	0.0	7	0.4
Total school district	130	38.9	125	40.7	125	40.3	128	38.2	111	36.5	619	38.9
Transit bus authority												
8-14	5	1.5	5	1.6	5	1.6	1	0.3	6	2.0	22	1.4
15-50	91	27.2	69	22.5	74	23.9	93	27.8	76	25.0	403	25.3
51-99	7	2.1	3	1.0	7	2.3	10	3.0	5	1.6	32	2.0
Estimated 15 or more	7	2.1	18	5.9	4	1.3	13	3.9	17	5.6	59	3.7
Unknown	1	0.3	1	0.3	3	1.0	2	0.6	0	0.0	7	0.4
Total transit bus	111	33.2	96	31.3	93	30.0	119	35.5	104	34.2	523	32.9
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	3	0.9	4	1.3	4	1.3	2	0.6	8	2.6	21	1.3
51-99	5	1.5	4	1.3	9	2.9	2	0.6	1	0.3	21	1.3
Estimated 15 or more	0	0.0	0	0.0	1	0.3	2	0.6	1	0.3	4	0.3
Total intercity bus	8	2.4	8	2.6	14	4.5	6	1.8	10	3.3	46	2.9
Charter bus operator						_						
8-14	0	0.0	1	0.3	0	0.0	0	0.0	1	0.3	2	0.1
15-50	14	4.2	18	5.9	20	6.5	14	4.2	18	5.9	84	5.3
51-99	17	5.1	16	5.2	20	6.5	17	5.1	15	4.9	85	5.3
Estimated 15 or more	4	1.2	7	2.3	4	1.3	6	1.8	6	2.0	27	1.7
Unknown	3	0.9	0	0.0	0	0.0	0	0.0	0	0.0	3	0.2
Total charter bus	38	11.4	42	13.7	44	14.2	37	11.0	40	13.2	201	12.6
Other operator												
8-14	17	5.1	18	5.9	14	4.5	9	2.7	8	2.6	66	4.2
15-50	17	5.1	8	2.6	14	4.5	26	7.8	16	5.3	81	5.1
51-99	4	1.2	3	1.0	3	1.0	2	0.6	5	1.6	17	1.1
Estimated 15 or more	0	0.0	4	1.3	1	0.3	3	0.9	4	1.3	12	0.8
Unknown	1	0.3	1	0.3	1	0.3	2	0.6	3	1.0	8	0.5
Total other	39	11.7	34	11.1	33	10.6	42	12.5	36	11.8	184	11.6
Unknown operator type												
8-14	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
15-50	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1
51-99	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Estimated 15 or more	0	0.0	1	0.3	0	0.0	1	0.3	3	1.0	5	0.3
Unknown	7	2.1	1	0.3	1	0.3	2	0.6	0	0.0	11	0.7
Total unknown	8	2.4	2	0.7	1	0.3	3	0.9	3	1.0	17	1.1
Total	334	100.0	307	100.0	310	100.0	335	100.0	304	100.0	1590	100.0

Trends, 2003-2007 Page 9

Table 1-4 Fatal Bus Involvements by Year and State

	200	03	200	04	200	05	20	06	200	07	Tot	tal
State	N	%	N	%	N	%	N	%	Ν	%	Ν	%
Alabama	2	0.6	5	1.6	0	0.0	7	2.1	6	2.0	20	1.3
Alaska	0	0.0	1	0.3	0	0.0	0	0.0	3	1.0	4	0.3
Arizona	8	2.4	12	3.9	9	2.9	7	2.1	8	2.6	44	2.8
Arkansas	1	0.3	4	1.3	3	1.0	0	0.0	2	0.7	10	0.6
California	41	12.3	37	12.1	31	10.0	46	13.7	37	12.2	192	12.1
Colorado	9	2.7	4	1.3	3	1.0	4	1.2	2	0.7	22	1.4
Connecticut	1	0.3	2	0.7	5	1.6	4	1.2	2	0.7	14	0.9
Delaware	4	1.2	2	0.7	3	1.0	3	0.9	3	1.0	15	0.9
District of Columbia	2	0.6	1	0.3	3	1.0	3	0.9	3	1.0	12	0.8
Florida	21	6.3	26	8.5	31	10.0	33	9.9	29	9.5	140	8.8
Georgia	13	3.9	10	3.3	6	1.9	10	3.0	11	3.6	50	3.1
Hawaii	3	0.9	5	1.6	3	1.0	5	1.5	5	1.6	21	1.3
Idaho	1	0.3	1	0.3	1	0.3	0	0.0	0	0.0	3	0.2
Illinois	7	2.1	6	2.0	13	4.2	9	2.7	9	3.0	44	2.8
Indiana	4	1.2	3	1.0	6	1.9	7	2.1	8	2.6	28	1.8
lowa	3	0.9	4	1.3	5	1.6	0	0.0	3	1.0	15	0.9
Kansas	4	1.2	3	1.0	3	1.0	4	1.2	3	1.0	17	1.1
Kentucky	5	1.5	5	1.6	3	1.0	3	0.9	4	1.3	20	1.3
Louisiana	5	1.5	4	1.3	5	1.6	7	2.1	5	1.6	26	1.6
Maine	0	0.0	1	0.3	1	0.3	2	0.6	2	0.7	6	0.4
Maryland	12	3.6	10	3.3	10	3.2	8	2.4	5	1.6	45	2.8
Massachusetts	5	1.5	4	1.3	0	0.0	3	0.9	2	0.7	14	0.9
Michigan	6	1.8	10	3.3	9	2.9	11	3.3	8	2.6	44	2.8
Minnesota	6	1.8	4	1.3	8	2.6	4	1.2	11	3.6	33	2.1
Mississippi	1	0.3	2	0.7	0	0.0	3	0.9	1	0.3	7	0.4
Missouri	10	3.0	7	2.3	10	3.2	7	2.1	9	3.0	43	2.7
Montana	1	0.3	0	0.0	0	0.0	0	0.0	1	0.3	2	0.1
Nebraska	3	0.9	1	0.3	1	0.3	1	0.3	2	0.7	8	0.5
Nevada	6	1.8	2	0.7	4	1.3	3	0.9	5	1.6	20	1.3
New Hampshire	1	0.3	1	0.3	1	0.3	0	0.0	2	0.7	5	0.3
New Jersey	10	3.0	13	4.2	15	4.8	12	3.6	11	3.6	61	3.8
New Mexico	3	0.9	4	1.3	2	0.6	0	0.0	2	0.7	11	0.7
New York	32	9.6	25	8.1	24	7.7	40	11.9	25	8.2	146	9.2
North Carolina	9	2.7	8	2.6	8	2.6	2	0.6	9	3.0	36	2.3
North Dakota	3	0.9	0	0.0	0	0.0	0	0.0	0	0.0	3	0.2
Ohio	14	4.2	6	2.0	9	2.9	15	4.5	9	3.0	53	3.3
Oklahoma	5	1.5	3	1.0	2	0.6	1	0.3	1	0.3	12	8.0
Oregon	3	0.9	2	0.7	2	0.6	2	0.6	1	0.3	10	0.6
Pennsylvania	27	8.1	14	4.6	19	6.1	24	7.2	14	4.6	98	6.2
Rhode Island	0	0.0	1	0.3	0	0.0	3	0.9	2	0.7	6	0.4
South Carolina	0	0.0	6	2.0	6	1.9	8	2.4	3	1.0	23	1.4
South Dakota	0	0.0	0	0.0	1	0.3	0	0.0	0	0.0	1	0.1
Tennessee	5	1.5	7	2.3	4	1.3	6	1.8	5	1.6	27	1.7
Texas	17	5.1	18	5.9	15	4.8	12	3.6	8	2.6	70	4.4
Utah	2	0.6	4	1.3	1	0.3	0	0.0	1	0.3	8	0.5
Vermont	2	0.6	0	0.0	0	0.0	2	0.6	0	0.0	4	0.3
Virginia	4	1.2	9	2.9	12	3.9	3	0.9	7	2.3	35	2.2
Washington	6	1.8	2	0.7	6	1.9	4	1.2	7	2.3	25	1.6
West Virginia	1	0.3	2	0.7	1	0.3	2	0.6	2	0.7	8	0.5
Wisconsin	6	1.8	6	2.0	6	1.9	4	1.2	6	2.0	28	1.8
Wyoming	0	0.0	0	0.0	0	0.0	1	0.3	0	0.0	1	0.1
Total	334	100.0	307	100.0	310	100.0	335	100.0	304	100.0	1590	100.0

Annual fatalities

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

	200	03	200	04	200	05	200	06	200	07	To	otal
Vehicle/Person type	N	%	N	%	N	%	Ν	%	N	%	N	%
Bus												
Driver	9	2.3	12	3.4	12	3.2	9	2.4	18	5.1	60	3.2
Passenger	49	12.5	43	12.2	67	17.6	29	7.8	31	8.8	219	11.8
Unknown occupant type	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1
Bus total	59	15.1	55	15.6	79	20.8	38	10.2	49	13.8	280	15.1
Other vehicle												
Drivers	157	40.2	161	45.7	149	39.2	176	47.1	167	47.2	810	43.8
Passengers	73	18.7	40	11.4	44	11.6	58	15.5	53	15.0	268	14.5
Unknown occupant type	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1
Other vehicle total	231	59.1	201	57.1	193	50.8	234	62.6	220	62.1	1079	58.3
Non-motorists												
Pedestrian	93	23.8	89	25.3	89	23.4	89	23.8	64	18.1	424	22.9
Bicyclist	8	2.0	6	1.7	16	4.2	12	3.2	21	5.9	63	3.4
Other non-motorist	0	0.0	1	0.3	3	0.8	1	0.3	0	0.0	5	0.3
Non-motorist total	101	25.8	96	27.3	108	28.4	102	27.3	85	24.0	492	26.6
Total	391	100.0	352	100.0	380	100.0	374	100.0	354	100.0	1851	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 51% of fatal bus involvements occurred from 6:00 to 8:59 a.m. or from 2:00 to
 4:59 p.m., primarily involving school buses due to the hours school is in session.
- Overall, 78.6% of fatal involvements of buses occurred during the work week, but this varies by bus type. Transit buses experienced 25.0% of their involvements on the weekend (Saturday and Sunday), compared with 7.2% for school buses.
- The majority (87.2%) of fatal involvements occurred under "normal" weather conditions (i.e. no rain, snow, fog, or other adverse condition). Twenty-four or 7.9% of fatal involvements occurred under rain conditions.
- Overall, 63.5% of the fatal bus involvements occurred in daylight and 29.3% of the involvements occurred under dark or dark but lighted conditions. Charter buses had a high incidence of fatal involvements occurring during dark or dark but lighted conditions, accounting for 55.0% of the involvements.
- Local streets (township or municipality) accounted for 34.5% of fatal bus involvements, 22.7% of bus involvements were on state highways, and 20.4% were on county roads.
- Over fifty-eight 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 11.2% of involvements another vehicle crossed the center line of the road and struck the bus head on; and in 7.6% of involvements the bus struck the side of another vehicle. These proportions can differ dramatically by bus type.
- In 63.8% of fatal bus involvements the first harmful event was collision with a motor vehicle; 19.7% involved collision with a pedestrian. Transit buses had the highest incidence of collisions involving pedestrians, 31.7%.
- Over 25% of fatal bus involvements included a non-motorist fatality. Among school buses 73.7% of the non-motorist fatals were not passengers of the bus. For all bus types, the majority of non-motorists killed were not bus passengers.

• Florida and North Carolina each had 7.2% (8) of the school bus involvements in 2007, while 23.1% (24) of transit bus involvements were in California.

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Geographic distributions

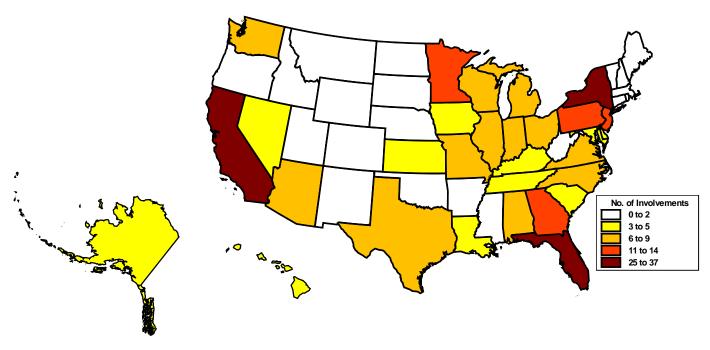


Figure 2-1: Fatal Bus Involvements by State

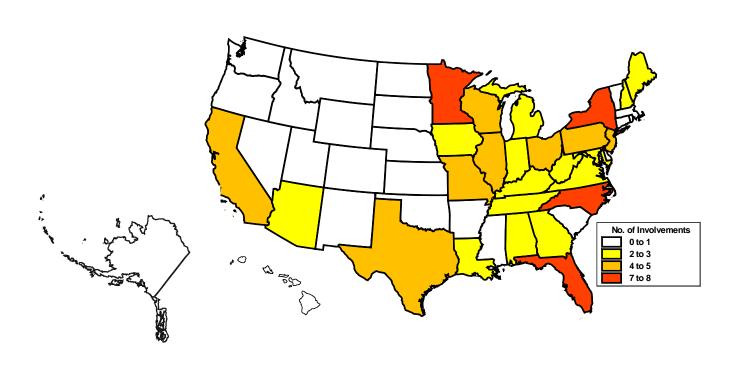


Figure 2-2: Fatal Bus Involvements by State – School Buses Only

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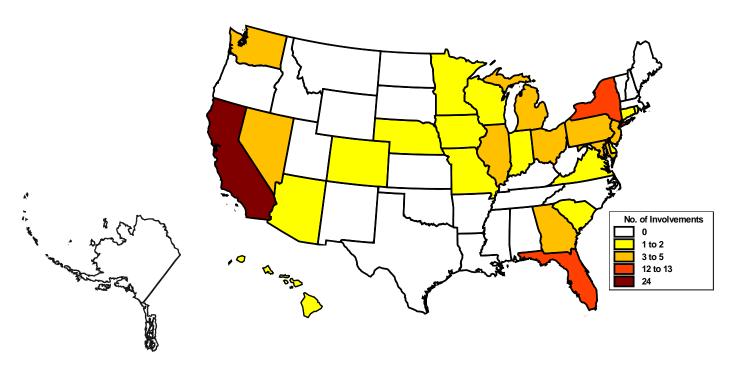


Figure 2-3: Fatal Bus Involvements by State – Transit Buses Only

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

	Sch	ool	Trar	nsit	Inter	city	Cha	rter	Oth	er	Unkn	own	To	tal
State	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Alabama	3	2.7	0	0.0	2	20.0	1	2.5	0	0.0	0	0.0	6	2.0
Alaska	1	0.9	0	0.0	0	0.0	2	5.0	0	0.0	0	0.0	3	1.0
Arizona	3	2.7	2	1.9	1	10.0	0	0.0	2	5.6	0	0.0	8	2.6
Arkansas	0	0.0	0	0.0	1	10.0	1	2.5	0	0.0	0	0.0	2	0.7
California	5	4.5	24	23.1	1	10.0	5	12.5	2	5.6	0	0.0	37	12.2
Colorado	0	0.0	1	1.0	0	0.0	0	0.0	1	2.8	0	0.0	2	0.7
Connecticut	0	0.0	1	1.0	0	0.0	0	0.0	1	2.8	0	0.0	2	0.7
Delaware	1	0.9	2	1.9	0	0.0	0	0.0	0	0.0	0	0.0	3	1.0
District of Columbia	0	0.0	3	2.9	0	0.0	0	0.0	0	0.0	0	0.0	3	1.0
Florida	8	7.2	13	12.5	0	0.0	5	12.5	3	8.3	0	0.0	29	9.5
Georgia	3	2.7	5	4.8	0	0.0	2	5.0	1	2.8	0	0.0	11	3.6
Hawaii	0	0.0	1	1.0	0	0.0	3	7.5	1	2.8	0	0.0	5	1.6
Idaho	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Illinois	4	3.6	3	2.9	1	10.0	0	0.0	1	2.8	0	0.0	9	3.0
Indiana	3	2.7	2	1.9	0	0.0	0	0.0	2	5.6	1	33.3	8	2.6
Iowa	2	1.8	1	1.0	0	0.0	0	0.0	0	0.0	0	0.0	3	1.0
Kansas	0	0.0	0	0.0	0	0.0	1	2.5	2	5.6	0	0.0	3	1.0
Kentucky	2	1.8	0	0.0	0	0.0	2	5.0	0	0.0	0	0.0	4	1.3
Louisiana	3	2.7	0	0.0	0	0.0	1	2.5	1	2.8	0	0.0	5	1.6
Maine	2	1.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.7
Maryland	2	1.8	3	2.9	0	0.0	0	0.0	0	0.0	0	0.0	5	1.6
Massachusetts	1	0.9	0	0.0	0	0.0	0	0.0	1	2.8	0	0.0	2	0.7
Michigan	3	2.7	3	2.9	0	0.0	1	2.5	1	2.8	0	0.0	8	2.6
Minnesota	7	6.3	2	1.9	0	0.0	0	0.0	2	5.6	0	0.0	11	3.6
Mississippi	0	0.0	0	0.0	0	0.0	0	0.0	1	2.8	0	0.0	1	0.3
Missouri	5	4.5	2	1.9	0	0.0	0	0.0	2	5.6	0	0.0	9	3.0
Montana	0	0.0	0	0.0	0	0.0	0	0.0	1	2.8	0	0.0	1	0.3
Nebraska	1	0.9	1	1.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.7
Nevada	1	0.9	3	2.9	0	0.0	1	2.5	0	0.0	0	0.0	5	1.6
New Hampshire	2	1.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.7
New Jersey	4	3.6	3	2.9	1	10.0	1	2.5	2	5.6	0	0.0	11	3.6
New Mexico	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	1	33.3	2	0.7
New York	7	6.3	12	11.5	0	0.0	4	10.0	1	2.8	1	33.3	25	8.2
North Carolina	8	7.2	0	0.0	0	0.0	0	0.0	1	2.8	0	0.0	9	3.0
North Dakota	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ohio	5	4.5	4	3.8	0	0.0	0	0.0	0	0.0	0	0.0	9	3.0
Oklahoma	0	0.0	0	0.0	0	0.0	0	0.0	1	2.8	0	0.0	1	0.3
Oregon	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Pennsylvania	4	3.6	5	4.8	1	10.0	4	10.0	0	0.0	0	0.0	14	4.6
Rhode Island	0	0.0	2	1.9	0	0.0	0	0.0	0	0.0	0	0.0	2	0.7
South Carolina	1	0.9	1	1.0	0	0.0	0	0.0	1	2.8	0	0.0	3	1.0
South Dakota	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Tennessee	3	2.7	0	0.0	0	0.0	1	2.5	1	2.8	0	0.0	5	1.6
Texas	5	4.5	0	0.0	1	10.0	1	2.5	1	2.8	0	0.0	8	2.6
Utah	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Vermont	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Virginia	3	2.7	1	1.0	0	0.0	1	2.5	2	5.6	0	0.0	7	2.3
Washington	0	0.0	3	2.9	1	10.0	2	5.0	1	2.8	0	0.0	7	2.3
West Virginia	2	1.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.7
Wisconsin	4	3.6	1	1.0	0	0.0	1	2.5	0	0.0	0	0.0		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	111	100.0		100.0	10		40	100.0	36	100.0		100.0	304	100.0

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Temporal distributions

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

Month of	Scl	nool	Tra	ınsit	Inte	rcity	Cha	arter	Ot	her	Unkı	nown	To	ıtal
accident	N	%	N	%	N	%	N	%	Ν	%	Ν	%	Ν	%
January	14	12.6	10	9.6	1	10.0	2	5.0	3	8.3	1	33.3	31	10.2
February	9	8.1	9	8.7	0	0.0	5	12.5	3	8.3	1	33.3	27	8.9
March	12	10.8	15	14.4	2	20.0	8	20.0	6	16.7	0	0.0	43	14.1
April	9	8.1	8	7.7	0	0.0	0	0.0	4	11.1	1	33.3	22	7.2
May	14	12.6	6	5.8	0	0.0	5	12.5	1	2.8	0	0.0	26	8.6
June	6	5.4	7	6.7	0	0.0	4	10.0	1	2.8	0	0.0	18	5.9
July	2	1.8	2	1.9	4	40.0	3	7.5	1	2.8	0	0.0	12	3.9
August	3	2.7	15	14.4	0	0.0	1	2.5	1	2.8	0	0.0	20	6.6
September	12	10.8	6	5.8	0	0.0	2	5.0	4	11.1	0	0.0	24	7.9
October	16	14.4	9	8.7	0	0.0	2	5.0	3	8.3	0	0.0	30	9.9
November	7	6.3	8	7.7	3	30.0	3	7.5	5	13.9	0	0.0	26	8.6
December	7	6.3	9	8.7	0	0.0	5	12.5	4	11.1	0	0.0	25	8.2
Total	111	100.0	104	100.0	10	100.0	40	100.0	36	100.0	3	100.0	304	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	Unk	nown	To	tal
Day of week	Ν	%	N	%	N	%	N	%	N	%	N	%	N	%
Sunday	2	1.8	14	13.5	1	10.0	14	35.0	2	5.6	0	0.0	33	10.9
Monday	16	14.4	14	13.5	1	10.0	5	12.5	6	16.7	0	0.0	42	13.8
Tuesday	22	19.8	15	14.4	0	0.0	3	7.5	5	13.9	1	33.3	46	15.1
Wednesday	24	21.6	17	16.3	2	20.0	5	12.5	6	16.7	0	0.0	54	17.8
Thursday	19	17.1	16	15.4	2	20.0	2	5.0	3	8.3	0	0.0	42	13.8
Friday	22	19.8	16	15.4	2	20.0	6	15.0	8	22.2	1	33.3	55	18.1
Saturday	6	5.4	12	11.5	2	20.0	5	12.5	6	16.7	1	33.3	32	10.5
Total	111	100.0	104	100.0	10	100.0	40	100.0	36	100.0	3	100.0	304	100.0

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

	Scl	nool	Tra	ınsit	Inte	rcity	Cha	arter	Ot	her	Unkı	nown	To	tal
Day type	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Work week	103	92.8	78	75.0	7	70.0	21	52.5	28	77.8	2	66.7	239	78.6
Weekend	8	7.2	26	25.0	3	30.0	19	47.5	8	22.2	1	33.3	65	21.4
Total	111	100.0	104	100.0	10	100.0	40	100.0	36	100.0	3	100.0	304	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	Sch	nool	Tra	nsit	Inte	rcity	Cha	arter	Ot	her	Unkı	nown	To	tal
accident	N	%	N	%	N	%	N	%	N	%	N	%	Ν	%
Midnight	0	0.0	5	4.8	0	0.0	0	0.0	1	2.8	0	0.0	6	2.0
1:00 AM	0	0.0	3	2.9	1	10.0	0	0.0	0	0.0	0	0.0	4	1.3
2:00 AM	0	0.0	0	0.0	1	10.0	2	5.0	0	0.0	1	33.3	4	1.3
3:00 AM	0	0.0	0	0.0	1	10.0	3	7.5	0	0.0	0	0.0	4	1.3
4:00 AM	0	0.0	3	2.9	1	10.0	2	5.0	0	0.0	0	0.0	6	2.0
5:00 AM	0	0.0	4	3.8	1	10.0	2	5.0	1	2.8	0	0.0	8	2.6
6:00 AM	15	13.5	8	7.7	1	10.0	0	0.0	4	11.1	0	0.0	28	9.2
7:00 AM	17	15.3	8	7.7	1	10.0	2	5.0	0	0.0	0	0.0	28	9.2
8:00 AM	6	5.4	4	3.8	0	0.0	0	0.0	1	2.8	0	0.0	11	3.6
9:00 AM	3	2.7	3	2.9	0	0.0	1	2.5	0	0.0	1	33.3	8	2.6
10:00 AM	1	0.9	1	1.0	0	0.0	1	2.5	4	11.1	0	0.0	7	2.3
11:00 AM	3	2.7	6	5.8	1	10.0	3	7.5	2	5.6	0	0.0	15	4.9
Noon	5	4.5	4	3.8	0	0.0	2	5.0	1	2.8	0	0.0	12	3.9
1:00 PM	2	1.8	3	2.9	0	0.0	1	2.5	0	0.0	0	0.0	6	2.0
2:00 PM	16	14.4	10	9.6	0	0.0	2	5.0	1	2.8	0	0.0	29	9.5
3:00 PM	23	20.7	1	1.0	0	0.0	1	2.5	4	11.1	0	0.0	29	9.5
4:00 PM	15	13.5	7	6.7	0	0.0	4	10.0	3	8.3	1	33.3	30	9.9
5:00 PM	0	0.0	3	2.9	1	10.0	1	2.5	2	5.6	0	0.0	7	2.3
6:00 PM	4	3.6	7	6.7	1	10.0	2	5.0	3	8.3	0	0.0	17	5.6
7:00 PM	0	0.0	6	5.8	0	0.0	2	5.0	3	8.3	0	0.0	11	3.6
8:00 PM	0	0.0	7	6.7	0	0.0	1	2.5	2	5.6	0	0.0	10	3.3
9:00 PM	0	0.0	2	1.9	0	0.0	1	2.5	2	5.6	0	0.0	5	1.6
10:00 PM	1	0.9	3	2.9	0	0.0	2	5.0	1	2.8	0	0.0	7	2.3
11:00 PM	0	0.0	5	4.8	0	0.0	5	12.5	1	2.8	0	0.0	11	3.6
Unknown	0	0.0	1	1.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Total	111	100.0	104	100.0	10	100.0	40	100.0	36	100.0	3	100.0	304	100.0

Note: 1:00 AM signifies 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	Tot	tal
accident	N	%	N	%	N	%
Midnight	3	1.3	3	4.6	6	2.0
1:00 AM	3	1.3	1	1.5	4	1.3
2:00 AM	3	1.3	1	1.5	4	1.3
3:00 AM	1	0.4	3	4.6	4	1.3
4:00 AM	4	1.7	2	3.1	6	2.0
5:00 AM	5	2.1	3	4.6	8	2.6
6:00 AM	24	10.0	4	6.2	28	9.2
7:00 AM	22	9.2	6	9.2	28	9.2
8:00 AM	8	3.3	3	4.6	11	3.6
9:00 AM	6	2.5	2	3.1	8	2.6
10:00 AM	5	2.1	2	3.1	7	2.3
11:00 AM	11	4.6	4	6.2	15	4.9
Noon	10	4.2	2	3.1	12	3.9
1:00 PM	5	2.1	1	1.5	6	2.0
2:00 PM	26	10.9	3	4.6	29	9.5
3:00 PM	28	11.7	1	1.5	29	9.5
4:00 PM	25	10.5	5	7.7	30	9.9
5:00 PM	7	2.9	0	0.0	7	2.3
6:00 PM	14	5.9	3	4.6	17	5.6
7:00 PM	8	3.3	3	4.6	11	3.6
8:00 PM	8	3.3	2	3.1	10	3.3
9:00 PM	4	1.7	1	1.5	5	1.6
10:00 PM	4	1.7	3	4.6	7	2.3
11:00 PM	5	2.1	6	9.2	11	3.6
Unknown	0	0.0	1	1.5	1	0.3
Total	239	100.0	65	100.0	304	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	То	ıtal
Land use	Ν	%	Ν	%	N	%	N	%	Ν	%	Ν	%	N	%
Urban	57	51.4	92	88.5	4	40.0	20	50.0	15	41.7	1	33.3	189	62.2
Rural	54	48.6	11	10.6	6	60.0	20	50.0	21	58.3	2	66.7	114	37.5
Unknown	0	0.0	1	1.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Total	111	100.0	104	100.0	10	100.0	40	100.0	36	100.0	3	100.0	304	100.0

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

	Sch	nool	Tra	nsit	Inte	rcity	Cha	arter	Ot	her	Unk	nown	To	tal
Light condition	Ν	%	N	%	N	%	N	%	N	%	N	%	N	%
Daylight	94	84.7	57	54.8	3	30.0	17	42.5	21	58.3	1	33.3	193	63.5
Dark	6	5.4	9	8.7	5	50.0	12	30.0	5	13.9	1	33.3	38	12.5
Dark but lighted	3	2.7	30	28.8	2	20.0	10	25.0	5	13.9	1	33.3	51	16.8
Dawn	6	5.4	5	4.8	0	0.0	0	0.0	2	5.6	0	0.0	13	4.3
Dusk	2	1.8	2	1.9	0	0.0	1	2.5	3	8.3	0	0.0	8	2.6
Unknown	0	0.0	1	1.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Total	111	100.0	104	100.0	10	100.0	40	100.0	36	100.0	3	100.0	304	100.0

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

Roadway surface	Scl	nool	Tra	nsit	Inte	rcity	Cha	arter	Ot	her	Unkı	nown	To	tal
condition	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Dry	88	79.3	88	84.6	9	90.0	31	77.5	32	88.9	1	33.3	249	81.9
Wet	16	14.4	13	12.5	0	0.0	8	20.0	3	8.3	1	33.3	41	13.5
Snow or slush	4	3.6	2	1.9	1	10.0	1	2.5	0	0.0	0	0.0	8	2.6
Ice/frost	3	2.7	1	1.0	0	0.0	0	0.0	1	2.8	1	33.3	6	2.0
Total	111	100.0	104	100.0	10	100.0	40	100.0	36	100.0	3	100.0	304	100.0

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

	Sch	nool	Tra	nsit	Inte	rcity	Cha	arter	Ot	her	Unkı	nown	To	otal
Weather conditon	Ν	%	N	%	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%
Clear/cloudy (no adverse conditions)	93	83.8	96	92.3	10	100.0	31	77.5	34	94.4	1	33.3	265	87.2
Rain	9	8.1	6	5.8	0	0.0	7	17.5	1	2.8	1	33.3	24	7.9
Sleet (hail)	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	1	33.3	2	0.7
Snow/blowing snow	4	3.6	2	1.9	0	0.0	1	2.5	1	2.8	0	0.0	8	2.6
Fog/smog/smoke	4	3.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4	1.3
Blowing sand/soil/dirt	0	0.0	0	0.0	0	0.0	1	2.5	0	0.0	0	0.0	1	0.3
Total	111	100.0	104	100.0	10	100.0	40	100.0	36	100.0	3	100.0	304	100.0

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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	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Urban														
Interstate	3	2.7	5	4.8	2	20.0	8	6.0	3	8.3	0	0.0	21	6.9
Freeway/expressway	2	1.8	2	1.9	0	0.0	2	5.0	0	0.0	0	0.0	6	2.0
Other principal artery	11	9.9	31	29.8	2	20.0	5	12.5	1	2.8	0	0.0	50	16.4
Minor artery	24	21.6	24	23.1	0	0.0	0	0.0	5	13.9	0	0.0	53	17.4
Collector	4	3.6	10	9.6	0	0.0	3	7.5	1	2.8	1	33.3	19	6.3
Local street	13	11.7	20	19.2	0	0.0	2	5.0	5	13.9	0	0.0	40	13.2
Total urban	57	51.4	92	88.5	4	40.0	20	50.0	15	41.7	1	33.3	189	62.2
Rural														
Interstate	0	0.0	0	0.0	4	40.0	11	27.5	6	16.7	1	33.3	22	7.2
Other principal artery	12	10.8	3	2.9	2	20.0	2	5.0	8	22.2	0	0.0	27	8.9
Minor artery	12	10.8	1	1.0	0	0.0	3	7.5	2	5.6	0	0.0	18	5.9
Major collector	9	8.1	1	1.0	0	0.0	1	2.5	4	11.1	0	0.0	15	4.9
Minor collector	7	6.3	1	1.0	0	0.0	0	0.0	0	0.0	0	0.0	8	2.6
Local road	14	12.6	5	4.8	0	0.0	3	7.5	0	0.0	1	33.3	23	7.6
Unknown rural	0	0.0	0	0.0	0	0.0	0	0.0	1	2.8	0	0.0	1	0.3
Total rural	54	48.6	11	10.6	6	60.0	20	50.0	21	58.3	2	66.7	114	37.5
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	111	100.0	104	100.0	10	100.0	40	100.0	36	100.0	3	100.0	304	100.0

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

	School		Transit		Intercity		Charter		Other		Unknown		Total	
Route signing	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Interstate	2	1.8	4	3.8	5	50.0	18	45.0	9	25.0	1	33.3	39	12.8
US highway	8	7.2	7	6.7	2	20.0	1	2.5	3	8.3	0	0.0	21	6.9
State highway	35	31.5	16	15.4	1	10.0	8	20.0	9	25.0	0	0.0	69	22.7
County road	34	30.6	20	19.2	0	0.0	5	12.5	2	5.6	1	33.3	62	20.4
Township	7	6.3	2	1.9	0	0.0	0	0.0	3	8.3	0	0.0	12	3.9
Municipality	24	21.6	54	51.9	1	10.0	6	15.0	7	19.4	1	33.3	93	30.6
Frontage road	0	0.0	0	0.0	0	0.0	0	0.0	1	2.8	0	0.0	1	0.3
Other	1	0.9	0	0.0	1	10.0	2	5.0	1	2.8	0	0.0	5	1.6
Unknown	0	0.0	1	1.0	0	0.0	0	0.0	1	2.8	0	0.0	2	0.7
Total	111	100.0	104	100.0	10	100.0	40	100.0	36	100.0	3	100.0	304	100.0

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

	Sch	nool	Tra	nsit	Inte	rcity	Cha	arter	Otl	her	Unkı	nown	To	otal
Relation to junction	N	%	N	%	N	%	N	%	N	%	Ν	%	N	%
Noninterchange														
Nonjunction	55	49.5	39	37.5	8	80.0	32	80.0	15	41.7	2	66.7	151	49.7
Intersection	43	38.7	48	46.2	0	0.0	4	10.0	15	41.7	1	33.3	111	36.5
Intersection related	8	7.2	13	12.5	0	0.0	1	2.5	3	8.3	0	0.0	25	8.2
Driveway, alley access, etc.	0	0.0	1	1.0	1	10.0	0	0.0	0	0.0	0	0.0	2	0.7
Entrance/exit ramp	1	0.9	1	1.0	0	0.0	1	2.5	0	0.0	0	0.0	3	1.0
Crossover related	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Driveway access related	1	0.9	1	1.0	0	0.0	0	0.0	1	2.8	0	0.0	3	1.0
Interchange area														
Intersection related	2	1.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.7
Entrance/exit ramp	0	0.0	1	1.0	1	10.0	0	0.0	0	0.0	0	0.0	2	0.7
Other location	0	0.0	0	0.0	0	0.0	0	0.0	1	2.8	0	0.0	1	0.3
Unknown	0	0.0	0	0.0	0	0.0	2	5.0	1	2.8	0	0.0	3	1.0
Total	111	100.0	104	100.0	10	100.0	40	100.0	36	100.0	3	100.0	304	100.0

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

Number of	Sch	nool	Tra	nsit	Inte	rcity	Cha	arter	Ot	her	Unkı	nown	To	tal
travel lanes	N	%	N	%	Ν	%	N	%	Ν	%	N	%	N	%
1	2	1.8	3	2.9	0	0.0	1	2.5	1	2.8	0	0.0	7	2.3
2	87	78.4	51	49.0	7	70.0	22	55.0	22	61.1	1	33.3	190	62.5
3	4	3.6	12	11.5	3	30.0	8	20.0	4	11.1	0	0.0	31	10.2
4	10	9.0	21	20.2	0	0.0	3	7.5	5	13.9	1	33.3	40	13.2
5	1	0.9	4	3.8	0	0.0	2	5.0	3	8.3	0	0.0	10	3.3
6	4	3.6	7	6.7	0	0.0	1	2.5	1	2.8	0	0.0	13	4.3
7 or more	0	0.0	1	1.0	0	0.0	1	2.5	0	0.0	0	0.0	2	0.7
Unknown	3	2.7	5	4.8	0	0.0	2	5.0	0	0.0	1	33.3	11	3.6
Total	111	100.0	104	100.0	10	100.0	40	100.0	36	100.0	3	100.0	304	100.0

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	tal
Trafficway flow	Ν	%	Ν	%	N	%	N	%	Ν	%	N	%	N	%
Not divided	84	75.7	64	61.5	1	10.0	12	30.0	17	47.2	1	33.3	179	58.9
Median – no barrier	15	13.5	17	16.3	6	60.0	15	37.5	8	22.2	1	33.3	62	20.4
Median with barrier	6	5.4	10	9.6	1	10.0	9	22.5	8	22.2	0	0.0	34	11.2
One-way traffic	3	2.7	6	5.8	1	10.0	0	0.0	0	0.0	0	0.0	10	3.3
Two-way left turn lane	1	0.9	2	1.9	1	10.0	1	2.5	2	5.6	0	0.0	7	2.3
Entrance/exit ramp	1	0.9	1	1.0	0	0.0	1	2.5	1	2.8	0	0.0	4	1.3
Unknown	1	0.9	4	3.8	0	0.0	2	5.0	0	0.0	1	33.3	8	2.6
Total	111	100.0	104	100.0	10	100.0	40	100.0	36	100.0	3	100.0	304	100.0

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

	Sch	nool	Tra	nsit	Inte	rcity	Cha	arter	Otl	her	Unkı	nown	To	tal
Speed limit	N	%	N	%	N	%	N	%	N	%	N	%	Ν	%
No stated limit	1	0.9	0	0.0	0	0.0	1	2.5	0	0.0	0	0.0	2	0.7
15	0	0.0	0	0.0	0	0.0	0	0.0	1	2.8	0	0.0	1	0.3
20	3	2.7	0	0.0	0	0.0	0	0.0	1	2.8	1	33.3	5	1.6
25	8	7.2	20	19.2	1	10.0	0	0.0	2	5.6	0	0.0	31	10.2
30	12	10.8	16	15.4	0	0.0	1	2.5	3	8.3	0	0.0	32	10.5
35	11	9.9	30	28.8	0	0.0	7	17.5	6	16.7	0	0.0	54	17.8
40	5	4.5	9	8.7	0	0.0	1	2.5	2	5.6	0	0.0	17	5.6
45	19	17.1	9	8.7	0	0.0	2	5.0	2	5.6	0	0.0	32	10.5
50	7	6.3	2	1.9	0	0.0	0	0.0	0	0.0	0	0.0	9	3.0
55	31	27.9	6	5.8	0	0.0	6	15.0	9	25.0	0	0.0	52	17.1
60	0	0.0	1	1.0	1	10.0	3	7.5	1	2.8	0	0.0	6	2.0
65	5	4.5	3	2.9	4	40.0	10	25.0	4	11.1	0	0.0	26	8.6
70	3	2.7	0	0.0	2	20.0	6	15.0	3	8.3	0	0.0	14	4.6
75	0	0.0	0	0.0	1	10.0	0	0.0	2	5.6	1	33.3	4	1.3
90	0	0.0	1	1.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Unknown	6	5.4	7	6.7	1	10.0	3	7.5	0	0.0	1	33.3	18	5.9
Total	111	100.0	104	100.0	10	100.0	40	100.0	36	100.0	3	100.0	304	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	Otl	ner	Unkı	nown	To	tal
Accident type	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Single vehicle														
Ran off road	2	1.8	2	1.9	1	10.0	6	15.0	3	8.3	0	0.0	14	4.6
Hit object in road	21	18.9	41	39.4	3	30.0	7	17.5	7	19.4	2	66.7	81	26.6
Same direction, same trafficwa	ay													
Rearend, bus striking	2	1.8	1	1.0	1	10.0	5	12.5	0	0.0	0	0.0	9	3.0
Rearend, bus struck	8	7.2	12	11.5	0	0.0	1	2.5	4	11.1	0	0.0	25	8.2
Sideswipe, in bus's lane	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Opposite direction, same traffi	cway													
Head-on, in other's lane	0	0.0	0	0.0	0	0.0	1	2.5	0	0.0	0	0.0	1	0.3
Head-on, in bus's lane	23	20.7	7	6.7	0	0.0	2	5.0	2	5.6	0	0.0	34	11.2
Sideswipe, in other lane	0	0.0	0	0.0	0	0.0	1	2.5	0	0.0	0	0.0	1	0.3
Sideswipe, in bus's lane	15	13.5	4	3.8	0	0.0	4	10.0	1	2.8	0	0.0	24	7.9
Change trafficway, one vehicle	e turnin	g												
Bus turn across path	6	5.4	4	3.8	0	0.0	2	5.0	1	2.8	0	0.0	13	4.3
Other turn across path	12	10.8	2	1.9	0	0.0	1	2.5	5	13.9	0	0.0	20	6.6
Intersecting paths, both going	straigh	t												
Bus into side of other	11	9.9	9	8.7	0	0.0	0	0.0	3	8.3	0	0.0	23	7.6
Other into side of bus	5	4.5	11	10.6	0	0.0	0	0.0	4	11.1	0	0.0	20	6.6
Other accident types														
Untripped rollover	0	0.0	0	0.0	0	0.0	1	2.5	0	0.0	1	33.3	2	0.7
Other	4	3.6	11	10.6	5	50.0	8	20.0	6	16.7	0	0.0	34	11.2
Unknown	1	0.9	0	0.0	0	0.0	1	2.5	0	0.0	0	0.0	2	0.7
Total	111	100.0	104	100.0	10	100.0	40	100.0	36	100.0	3	100.0	304	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	Ot	her	Unk	nown	To	tal
vehicles in crash	N	%	N	%	N	%	Ν	%	Ν	%	Ν	%	N	%
1	23	20.7	43	41.3	5	50.0	12	30.0	11	30.6	3	100.0	97	31.9
2	80	72.1	48	46.2	5	50.0	19	47.5	21	58.3	0	0.0	173	56.9
3	6	5.4	10	9.6	0	0.0	4	10.0	4	11.1	0	0.0	24	7.9
4	1	0.9	1	1.0	0	0.0	2	5.0	0	0.0	0	0.0	4	1.3
5	0	0.0	0	0.0	0	0.0	1	2.5	0	0.0	0	0.0	1	0.3
6	0	0.0	1	1.0	0	0.0	1	2.5	0	0.0	0	0.0	2	0.7
9	0	0.0	1	1.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
35	0	0.0	0	0.0	0	0.0	1	2.5	0	0.0	0	0.0	1	0.3
80	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Total	111	100.0	104	100.0	10	100.0	40	100.0	36	100.0	3	100.0	304	100.0

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

	Sch	nool	Tra	nsit	Inter	city	Cha	arter	Otl	her	Unk	nown	To	tal
First harmful event	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Noncollision event	R-													
Overturn/rollover	0	0.0	0	0.0	1	10.0	2	5.0	0	0.0	1	33.3	4	1.3
Fell/jumped from vehicle	0	0.0	0	0.0	0	0.0	1	2.5	0	0.0	0	0.0	1	0.3
Other noncollision	1	0.9	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	84	75.7	58	55.8	6	60.0	19	47.5	24	66.7	0	0.0	191	62.8
Motor vehicle in-transport on different roadway	1	0.9	0	0.0	0	0.0	1	2.5	0	0.0	0	0.0	2	0.7
Parked motor vehicle (not in-transport)	0	0.0	1	1.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Collision with nonfixed object														
Pedestrian	15	13.5	33	31.7	2	20.0	5	12.5	3	8.3	2	66.7	60	19.7
Pedalcycle	6	5.4	9	8.7	1	10.0	1	2.5	3	8.3	0	0.0	20	6.6
Live animal	0	0.0	0	0.0	0	0.0	0	0.0	1	2.8	0	0.0	1	0.3
Non-motorist on personal conveyance	0	0.0	0	0.0	0	0.0	1	2.5	0	0.0	0	0.0	1	0.3
Other object not fixed	1	0.9	0	0.0	0	0.0	1	2.5	0	0.0	0	0.0	2	0.7
Collision with fixed object														
Guardrail face	1	0.9	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	4	10.0	3	8.3	0	0.0	8	2.6
Other traffic barrier	0	0.0	0	0.0	0	0.0	1	2.5	0	0.0	0	0.0	1	0.3
Highway/traffic sign post/sign	1	0.9	0	0.0	0	0.0	1	2.5	0	0.0	0	0.0	2	0.7
Culvert	0	0.0	0	0.0	0	0.0	1	2.5	1	2.8	0	0.0	2	0.7
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	1	2.5	0	0.0	0	0.0	1	0.3
Wall	0	0.0	0	0.0	0	0.0	1	2.5	0	0.0	0	0.0	1	0.3
Standing tree	1	0.9	1	1.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.7
Other fixed object	0	0.0	0	0.0	0	0.0	0	0.0	1	2.8	0	0.0	1	0.3
Total	111	100.0	104	100.0	10	100.0	40	100.0	36	100.0	3	100.0	304	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	Ν	%	N	%	Ν	%	Ν	%	Ν	%	N	%	Ν	%
Non-collision	0	0.0	0	0.0	1	10.0	1	2.5	0	0.0	1	33.3	3	1.0
Striking	55	49.5	54	51.9	6	60.0	23	57.5	21	58.3	2	66.7	161	53.0
Struck	54	48.6	48	46.2	3	30.0	11	27.5	15	41.7	0	0.0	131	43.1
Both	2	1.8	2	1.9	0	0.0	3	7.5	0	0.0	0	0.0	7	2.3
Unknown	0	0.0	0	0.0	0	0.0	2	5.0	0	0.0	0	0.0	2	0.7
Total	111	100.0	104	100.0	10	100.0	40	100.0	36	100.0	3	100.0	304	100.0

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

	Sch	nool	Tra	nsit	Inte	rcity	Cha	arter	Ot	her	Unk	nown	To	otal
Manner of collision	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Not applicable	26	23.4	45	43.3	4	40.0	20	50.0	12	33.3	3	100.0	110	36.2
Rear-end	14	12.6	12	11.5	1	10.0	7	17.5	7	19.4	0	0.0	41	13.5
Head-on	26	23.4	7	6.7	4	40.0	6	15.0	2	5.6	0	0.0	45	14.8
Front-to-side: Same direction	1	0.9	1	1.0	0	0.0	0	0.0	1	2.8	0	0.0	3	1.0
Front-to-side: Opposite direction	11	9.9	4	3.8	0	0.0	3	7.5	2	5.6	0	0.0	20	6.6
Front-to-side: Right angle	29	26.1	26	25.0	1	10.0	3	7.5	11	30.6	0	0.0	70	23.0
Front-to-side: Unknown direction	0	0.0	1	1.0	0	0.0	0	0.0	1	2.8	0	0.0	2	0.7
Sideswipe: Same direction	1	0.9	2	1.9	0	0.0	0	0.0	0	0.0	0	0.0	3	1.0
Sideswipe: Opposite direction	1	0.9	3	2.9	0	0.0	1	2.5	0	0.0	0	0.0	5	1.6
Rear-to-side	0	0.0	3	2.9	0	0.0	0	0.0	0	0.0	0	0.0	3	1.0
Other	2	1.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.7
Total	111	100.0	104	100.0	10	100.0	40	100.0	36	100.0	3	100.0	304	100.0

Fatalities

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

	Sch	nool	Trai	nsit	Inte	rcity	Cha	ırter	Oth	ner	Unkr	nown	То	tal
Vehicle/Person type	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Bus														
Driver	3	2.3	3	2.8	0	0.0	10	17.9	1	2.3	1	33.3	18	5.1
Passenger	0	0.0	0	0.0	1	9.1	14	25.0	16	36.4	0	0.0	31	8.8
Bus total	3	2.3	3	2.8	1	9.1	24	42.9	17	38.6	1	33.3	49	13.8
Other vehicle						-								
Drivers	78	59.1	51	47.2	5	45.5	17	30.4	16	36.4	0	0.0	167	47.2
Passengers	28	21.2	11	10.2	1	9.1	8	14.3	5	11.4	0	0.0	53	15.0
Other vehicle total	106	80.3	62	57.4	6	54.5	25	44.6	21	47.7	0	0.0	220	62.1
Non-motorists														
Pedestrian	17	12.9	34	31.5	3	27.3	5	8.9	3	6.8	2	66.7	64	18.1
Bicyclist	6	4.5	9	8.3	1	9.1	2	3.6	3	6.8	0	0.0	21	5.9
Other 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	23	17.4	43	39.8	4	36.4	7	12.5	6	13.6	2	66.7	85	24.0
Total	132	100.0	108	100.0	11	100.0	56	100.0	44	100.0	3	100.0	354	100.0

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

Relationship of	Sch	nool	Tra	nsit	Inte	rcity	Cha	arter	Ot	her	Unkı	nown	To	otal
Non-Motorist to Bus	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Discharged passenger	4	3.6	4	3.8	0	0.0	1	2.5	0	0.0	1	33.3	10	3.3
Intended passenger	1	0.9	1	1.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.7
Not related to bus	14	12.6	35	33.7	4	40.0	6	15.0	6	16.7	1	33.3	66	21.7
No non-motorist involvement	92	82.9	64	61.5	6	60.0	33	82.5	30	83.3	1	33.3	226	74.3
Total	111	100.0	104	100.0	10	100.0	40	100.0	36	100.0	3	100.0	304	100.0

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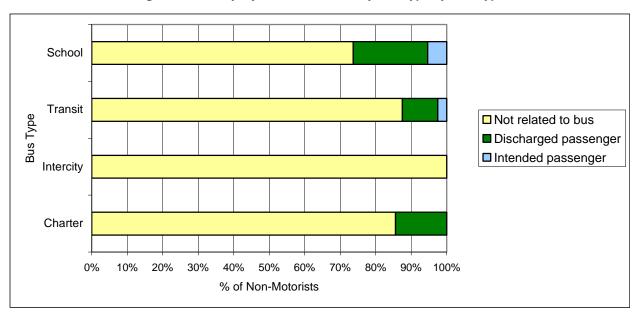


Figure 2-4: Fatally Injured Pedestrian/Bicyclist Type by Bus Type

Vehicle

This section provides statistics that describe the physical configuration of buses involved in a fatal accident during 2007. The tables cover bus body style, model year, seating capacity, and the type of carrier that operated the bus.

- Buses operated by school districts represented 36.5% of all buses involved in a fatal accident: transit buses accounted for 34.2% of the buses.
- Of the 111 school buses involved in fatal crashes, 79 were operated by public school districts and 24 were operated by a contracted carrier for the school district.
- School buses were predominantly Type C school buses (60.4%), followed by Type D (30.6%), and Type A (4.5%). 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 shuttle buses comprised the majority of buses in this category.
- 91.9% of the buses involved in a fatal crash were less than fifteen years old, and 75.4% were less than ten years old.
- School buses had a higher average seating capacity than other bus types, with 68.4% having a seating capacity of 61 or more.
- Buses operated by interstate for-hire carriers accounted for 19.7% of the fatal involvements, interstate government carriers represented 15.8%, and 46.7% of the involvements were buses operated by intrastate government carriers (primarily transit buses and school buses).
- 78.6% 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	N	%
School district		
Conventional-hood activities bus	1	0.3
Long-distance coach	1	0.3
School bus	97	31.9
Small school bus	3	1.0
Small shuttle bus	1	0.3
Special needs school bus	5	1.0
Special needs small school bus	3	1.0
Total school bus	111	36.
Transit bus authority		
Articulated electric trolley bus	1	0.3
Articulated heavy-duty bus	7	2.
Electric trolley bus	1	0.3
Heavy-duty bus	82	27.
Long-distance commuter coach	3	1.
Paratransit bus	6	2.
Small shuttle bus	1	0.
Trolley replica bus	3	1.
Total transit bus	104	34.
Intercity bus operator		<u> </u>
Large passenger van	1	0.
Long-distance coach	9	3.
Total intercity bus	10	3.
Charter bus operator		<u> </u>
Amphibious sightseeing bus	1	0.
Large passenger van	1	0.
Limousine bus	1	0.
Long-distance coach	31	10.
Long-distance executive coach	1	0.:
Recycled small school bus	1	0.
School bus	1	0.
Shuttle bus	2	0.
Small shuttle bus	1	0.
Total charter bus	40	13.
Other operator	70	10.
Conventional-hood bus	3	1.
Conventional-hood bus with wheelchair lift	2	0.
Heavy-duty transit bus	2	0.
Inmate security van	2	0.
Large passenger van	5	1.
Long-distance coach	4	1.
Paratransit bus	2	0.
Recycled school bus	2	0.
Retired school bus	1	0.
School bus	1	0.
Shuttle bus	5	1.
Small school bus	1	0.
Small shuttle bus	2	0.
Stretch limousine	3	1.
Trolley replica bus	1	0.
Total other operator		
	36	11.
Unknown operator type		0
Long distance seach	2	0.
Long-distance coach		^
Long-distance coach School bus Total unknown operator type	1 3	0. 1.

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	Ν	%
School district		
Charter school student transportation	1	0.3
Contracted carrier for school athletic activity	2	0.7
Contracted carrier for school day camp	1	0.3
Contracted carrier for school district	24	7.9
Debate team trip for public school district	1	0.3
Public school district	79	26.0
Public school state activities transportation	2	0.7
Public school district field trip	1	0.3
Total school bus	111	36.5
Transit bus authority		
Contracted carrier for transit authority	1	0.3
On-demand shuttle service of regional transit authority	1	0.3
Scheduled route & on-demand service regional area	2	0.7
Scheduled route & paratransit regional area	1	0.3
Scheduled route & paratransit regional urban area	3	1.0
Scheduled route regional area	2	0.7
Scheduled route regional urban area	89	29.3
Scheduled route urban area	5	1.6
Total transit bus	104	34.2
Intercity bus operator		
International & intercity passenger service	1	0.3
Interstate passenger & express freight	8	2.6
Interstate passenger service	1	0.3
Total intercity bus	10	3.3
Charter bus operator		
Charter service	31	10.2
Church group charter service	1	0.3
Contracted carrier for on-demand shuttle service	1	0.3
Diverted airplane passenger charter service	1	0.3
Family reunion charter service	1	0.3
Sightseeing charter service	3	1.0
Tourist shuttle charter service	1	0.3
University athletic team charter service	1	0.3
Total charter bus	40	13.2

(Continued on next page)

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Table 3-2 (continued)

Other operator		
Adult foster care facility resident transportation	1	0.3
After-school community center program	1	0.3
Airport shuttle service	1	0.3
Bicycle tour company transporting customers	1	0.3
Bus manufacturer sales operation transferring bus	1	0.3
Casino patron limousine service	1	0.3
Church use	3	1.0
Contracted carrier for department of corrections	1	0.3
Contracted carrier for employee shuttle service	3	1.0
Contracted carrier for private day care preschool	1	0.3
County department of corrections	1	0.3
County special mobility bus service	1	0.3
Dealer transporting used bus for resale	1	0.3
Farm labor transportation	3	1.0
Hotel guest shuttle service	1	0.3
Limousine service	2	0.7
Municipal shuttle service	2	0.7
Municipal transit service	3	1.0
Non-profit community service organization	1	0.3
Non-profit social services agency	2	0.7
Nursing home resident transportation	1	0.3
Parish department of corrections	1	0.3
Private day care center transportation	1	0.3
Shuttle service	1	0.3
State special mobility bus service	1	0.3
Total other operator	36	11.8
Unknown operator type	3	1.0
Total	304	100.0

Note: The operator authority records descriptions from respondents.

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

	Sch	nool	Tra	nsit	Inte	rcity	Cha	arter	Ot	her	Unkı	nown	To	otal
Bus body configuration	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Type A school bus	5	4.5	0	0.0	0	0.0	0	0.0	1	2.8	0	0.0	6	2.0
Type B school bus	2	1.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.7
Type C school bus	67	60.4	0	0.0	0	0.0	0	0.0	1	2.8	0	0.0	68	22.4
Type D school bus	34	30.6	0	0.0	0	0.0	1	2.5	0	0.0	1	33.3	36	11.8
Flat front	0	0.0	91	87.5	0	0.0	2	5.0	6	16.7	0	0.0	99	32.6
Big cowl and chassis	1	0.9	0	0.0	0	0.0	0	0.0	9	25.0	0	0.0	10	3.3
High platform	1	0.9	3	2.9	9	90.0	33	82.5	4	11.1	2	66.7	52	17.1
Small cowl and chassis	1	0.9	7	6.7	0	0.0	1	2.5	4	11.1	0	0.0	13	4.3
Van	0	0.0	0	0.0	1	10.0	1	2.5	7	19.4	0	0.0	9	3.0
Other	0	0.0	3	2.9	0	0.0	2	5.0	4	11.1	0	0.0	9	3.0
Total	111	100.0	104	100.0	10	100.0	40	100.0	36	100.0	3	100.0	304	100.0

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Table 3-4
Fatal Bus Involvements by Front of Bus Style and Bus Type

	Sch	School		ınsit	Inte	rcity	Charter		Other		Unk	nown	Total	
Front of bus	N	%	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%	N	%
Conventional hood	76	68.5	7	6.7	1	10.0	3	7.5	25	69.4	0	0.0	112	36.8
Flat front	35	31.5	94	90.4	9	90.0	36	90.0	10	27.8	3	100.0	187	61.5
Other	0	0.0	3	2.9	0	0.0	1	2.5	1	2.8	0	0.0	5	1.6
Total	111	100.0	104	100.0	10	100.0	40	100.0	36	100.0	3	100.0	304	100.0

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

	Conve	ntional	Flat	front	Oth	er	To	tal
Model year	N	%	N	%	N	%	N	%
1978	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	2	100.0	0	0.0	2	0.7
1983	0	0.0	1	100.0	0	0.0	1	0.3
1985	1	100.0	0	0.0	0	0.0	1	0.3
1987	0	0.0	1	100.0	0	0.0	1	0.3
1988	1	100.0	0	0.0	0	0.0	1	0.3
1989	2	20.0	8	80.0	0	0.0	10	3.3
1990	0	0.0	2	100.0	0	0.0	2	0.7
1991	1	100.0	0	0.0	0	0.0	1	0.3
1992	1	25.0	3	75.0	0	0.0	4	1.3
1993	2	66.7	1	33.3	0	0.0	3	1.0
1994	2	40.0	3	60.0	0	0.0	5	1.6
1995	4	30.8	9	69.2	0	0.0	13	4.3
1996	4	44.4	5	55.6	0	0.0	9	3.0
1997	6	30.0	13	65.0	1	5.0	20	6.6
1998	12	48.0	12	48.0	1	4.0	25	8.2
1999	8	36.4	14	63.6	0	0.0	22	7.2
2000	6	21.4	22	78.6	0	0.0	28	9.2
2001	6	17.6	27	79.4	1	2.9	34	11.2
2002	7	30.4	14	60.9	2	8.7	23	7.6
2003	15	51.7	14	48.3	0	0.0	29	9.5
2004	9	56.3	7	43.8	0	0.0	16	5.3
2005	6	30.0	14	70.0	0	0.0	20	6.6
2006	7	43.8	9	56.3	0	0.0	16	5.3
2007	8	61.5	5	38.5	0	0.0	13	4.3
2008	3	100.0	0	0.0	0	0.0	3	1.0
Total	112	36.8	187	61.5	5	1.6	304	100.0

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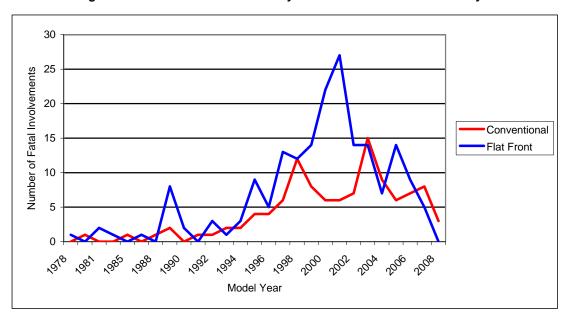


Figure 3-1: Fatal Bus Involvements by Model Year and Front of Bus Style

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Table 3-6 Fatal Bus Involvements by Model Year and Bus Type

	Sch	nool	Tra	nsit	Inte	rcity	Cha	arter	Ot	her	Unkr	nown	To	tal
Model year	N	%	N	%	N	%	N	%	Ν	%	N	%	N	%
1978	0	0.0	0	0.0	0	0.0	1	2.5	0	0.0	0	0.0	1	0.3
1980	0	0.0	0	0.0	0	0.0	0	0.0	1	2.8	0	0.0	1	0.3
1981	0	0.0	0	0.0	0	0.0	1	2.5	1	2.8	0	0.0	2	0.7
1983	0	0.0	0	0.0	0	0.0	1	2.5	0	0.0	0	0.0	1	0.3
1985	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
1987	0	0.0	0	0.0	0	0.0	1	2.5	0	0.0	0	0.0	1	0.3
1988	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
1989	3	2.7	2	1.9	0	0.0	3	7.5	2	5.6	0	0.0	10	3.3
1990	0	0.0	2	1.9	0	0.0	0	0.0	0	0.0	0	0.0	2	0.7
1991	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
1992	2	1.8	2	1.9	0	0.0	0	0.0	0	0.0	0	0.0	4	1.3
1993	2	1.8	0	0.0	0	0.0	0	0.0	1	2.8	0	0.0	3	1.0
1994	4	3.6	0	0.0	0	0.0	1	2.5	0	0.0	0	0.0	5	1.6
1995	4	3.6	4	3.8	1	10.0	2	5.0	2	5.6	0	0.0	13	4.3
1996	4	3.6	2	1.9	0	0.0	0	0.0	3	8.3	0	0.0	9	3.0
1997	5	4.5	9	8.7	0	0.0	4	10.0	2	5.6	0	0.0	20	6.6
1998	11	9.9	1	1.0	1	10.0	7	17.5	5	13.9	0	0.0	25	8.2
1999	6	5.4	8	7.7	4	40.0	1	2.5	2	5.6	1	33.3	22	7.2
2000	4	3.6	18	17.3	0	0.0	2	5.0	3	8.3	1	33.3	28	9.2
2001	7	6.3	20	19.2	2	20.0	4	10.0	1	2.8	0	0.0	34	11.2
2002	6	5.4	12	11.5	1	10.0	2	5.0	1	2.8	1	33.3	23	7.6
2003	14	12.6	8	7.7	1	10.0	3	7.5	3	8.3	0	0.0	29	9.5
2004	10	9.0	3	2.9	0	0.0	0	0.0	3	8.3	0	0.0	16	5.3
2005	4	3.6	10	9.6	0	0.0	5	12.5	1	2.8	0	0.0	20	6.6
2006	9	8.1	3	2.9	0	0.0	2	5.0	2	5.6	0	0.0	16	5.3
2007	10	9.0	0	0.0	0	0.0	0	0.0	3	8.3	0	0.0	13	4.3
2008	3	2.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	1.0
Total	111	100.0	104	100.0	10	100.0	40	100.0	36	100.0	3	100.0	304	100.0

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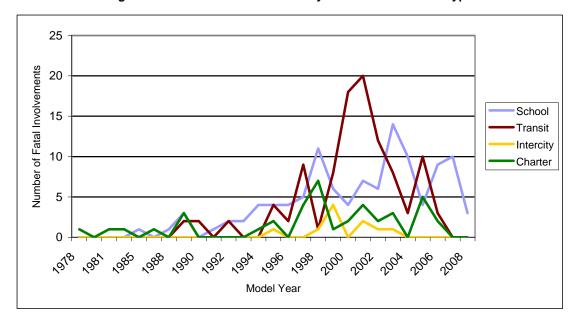


Figure 3-2: Fatal Bus Involvements by Model Year and Bus Type

Table 3-7
Fatal Bus Involvements by Number of Axles and Bus Type

	Sch	ool	Tra	nsit	Inte	Intercity		arter	Ot	her	Unkı	nown	Total	
Axles	Ν	%	N	%	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%
2 axles	110	99.1	93	89.4	1	10.0	8	20.0	31	86.1	1	33.3	244	80.3
3 axles	1	0.9	11	10.6	9	90.0	30	75.0	5	13.9	2	66.7	58	19.1
Unknown	0	0.0	0	0.0	0	0.0	2	5.0	0	0.0	0	0.0	2	0.7
Total	111	100.0	104	100.0	10	100.0	40	100.0	36	100.0	3	100.0	304	100.0

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Table 3-8
Fatal Bus Involvements by Passenger Seating Capacity (Excluding Driver) and Bus Type

	Sch	iool	Tra	nsit	Inte	rcity	Cha	arter	Ot	her	Unkı	nown	To	otal
Passenger seating capacity	Ν	%	N	%	Ν	%	Ν	%	N	%	N	%	Ν	%
8-14	3	2.7	6	5.8	0	0.0	1	2.5	8	22.2	0	0.0	18	5.9
15-20	1	0.9	1	1.0	0	0.0	0	0.0	4	11.1	0	0.0	6	2.0
21-25	4	3.6	2	1.9	0	0.0	2	5.0	1	2.8	0	0.0	9	3.0
26-30	0	0.0	10	9.6	0	0.0	1	2.5	6	16.7	0	0.0	17	5.6
31-35	0	0.0	8	7.7	0	0.0	2	5.0	1	2.8	0	0.0	11	3.6
36-40	2	1.8	33	31.7	0	0.0	0	0.0	0	0.0	0	0.0	35	11.5
41-45	2	1.8	16	15.4	0	0.0	1	2.5	2	5.6	0	0.0	21	6.9
46-50	5	4.5	6	5.8	0	0.0	12	30.0	2	5.6	0	0.0	25	8.2
51-55	5	4.5	0	0.0	8	80.0	7	17.5	1	2.8	0	0.0	21	6.9
56-60	6	5.4	3	2.9	0	0.0	7	17.5	3	8.3	0	0.0	19	6.3
61-65	19	17.1	2	1.9	0	0.0	0	0.0	0	0.0	0	0.0	21	6.9
66-70	13	11.7	0	0.0	0	0.0	0	0.0	1	2.8	0	0.0	14	4.6
71-75	20	18.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	20	6.6
76-80	11	9.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	11	3.6
81+	13	11.7	0	0.0	0	0.0	1	2.5	0	0.0	0	0.0	14	4.6
Estimated 8-14 seats	0	0.0	0	0.0	1	10.0	0	0.0	3	8.3	0	0.0	4	1.3
Estimated 15 or more seats	7	6.3	17	16.3	1	10.0	6	15.0	4	11.1	3	100.0	38	12.5
Total	111	100.0	104	100.0	10	100.0	40	100.0	36	100.0	3	100.0	304	100.0

Table 3-9
Fatal Bus Involvements by Carrier Type and Bus Type

	Sch	nool	Tra	nsit	Inte	rcity	Cha	arter	Ot	her	Unk	nown	To	otal
Carrier type	Ν	%	N	%	N	%	N	%	N	%	N	%	N	%
Interstate														
Private	0	0.0	0	0.0	0	0.0	0	0.0	4	11.1	0	0.0	4	1.3
For-hire	19	17.1	0	0.0	10	100.0	25	62.5	6	16.7	0	0.0	60	19.7
Government owned	32	28.8	13	12.5	0	0.0	0	0.0	3	8.3	0	0.0	48	15.8
Intrastate		-										-		
Private	0	0.0	0	0.0	0	0.0	0	0.0	7	19.4	0	0.0	7	2.3
For-hire	4	3.6	1	1.0	0	0.0	13	32.5	2	5.6	0	0.0	20	6.6
Government owned	49	44.1	87	83.7	0	0.0	0	0.0	6	16.7	0	0.0	142	46.7
Unknown	7	6.3	3	2.9	0	0.0	2	5.0	8	22.2	3	100.0	23	7.6
Total	111	100.0	104	100.0	10	100.0	40	100.0	36	100.0	3	100.0	304	100.0

Table 3-10 Fatal Bus Involvements by Trip Type and Bus Type

	Sch	nool	Tra	nsit	Inte	rcity	Cha	arter	Ot	her	Unkı	nown	To	tal
Trip type	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Local	101	91.0	98	94.2	0	0.0	13	32.5	27	75.0	0	0.0	239	78.6
51-100 miles	5	4.5	2	1.9	1	10.0	7	17.5	1	2.8	0	0.0	16	5.3
101-150 miles	0	0.0	0	0.0	1	10.0	2	5.0	2	5.6	0	0.0	5	1.6
151-200 miles	0	0.0	0	0.0	0	0.0	0	5.4	0	2.4	0	0.0	0	0.0
201-500 miles	2	1.8	0	0.0	6	60.0	7	17.5	1	2.8	0	0.0	16	5.3
Over 500 miles	0	0.0	0	0.0	2	20.0	6	15.0	1	2.8	0	0.0	9	3.0
Unknown over-the-road distance	0	0.0	0	0.0	0	0.0	1	2.5	1	2.8	0	0.0	2	0.7
Unknown	3	2.7	4	3.8	0	0.0	4	10.0	3	8.3	3	100.0	17	5.6
Total	111	100.0	104	100.0	10	100.0	40	100.0	36	100.0	3	100.0	304	100.0

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Table 3-11
Fatal Bus Involvements by Most Harmful Event and Bus Type

	Sch	nool	Tra	nsit	Inte	rcity	Cha	arter	Ot	her	Unk	nown	To	otal
Most harmful event	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Noncollision event														
Overturn/rollover	3	2.7	0	0.0	1	10.0	5	12.5	2	5.6	1	33.3	12	3.9
Fell/jumped from vehicle	0	0.0	0	0.0	0	0.0	1	2.5	0	0.0	0	0.0	1	0.3
Collision with motor vehicle														
Motor vehicle in-transport on same roadway	84	75.7	59	56.7	5	50.0	22	55.0	25	69.4	0	0.0	195	64.1
Motor vehicle in-transport on different roadway	0	0.0	0	0.0	0	0.0	2	5.0	0	0.0	0	0.0	2	0.7
Motor vehicle in-transport strikes/is struck by cargo/persons/objects set-in-motion from/by another motor vehicle in-transport	0	0.0	1	1.0	0	0.0	1	2.5	0	0.0	0	0.0	2	0.7
Collision with nonfixed object														
Pedestrian	15	13.5	33	31.7	3	30.0	5	12.5	3	8.3	2	66.7	61	20.1
Pedalcycle	6	5.4	9	8.7	1	10.0	1	2.5	3	8.3	0	0.0	20	6.6
Other object (not fixed)	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Collision with fixed object														
Bridge rail	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Concrete traffic barrier	0	0.0	0	0.0	0	0.0	2	5.0	2	5.6	0	0.0	4	1.3
Embankment earth	0	0.0	0	0.0	0	0.0	1	2.5	0	0.0	0	0.0	1	0.3
Tree (standing tree only)	1	0.9	2	1.9	0	0.0	0	0.0	0	0.0	0	0.0	3	1.0
Other fixed object	0	0.0	0	0.0	0	0.0	0	0.0	1	2.8	0	0.0	1	0.3
Total	111	100.0	104	100.0	10	100.0	40	100.0	36	100.0	3	100.0	304	100.0

Table 3-12 Fatal Bus Involvements by Rollover Status and Bus Type

Bus rollover	Scl	nool	Tra	ınsit	Inte	rcity	Cha	arter	Ot	her	Unk	nown	To	tal
status	N	%	Ν	%	N	%	Ν	%	Ν	%	N	%	N	%
No rollover	105	94.6	103	99.0	9	90.0	35	87.5	33	91.7	2	66.7	287	94.4
First event	0	0.0	0	0.0	1	10.0	1	2.5	0	0.0	1	33.3	3	1.0
Subsequent event	6	5.4	1	1.0	0	0.0	4	10.0	3	8.3	0	0.0	14	4.6
Total	111	100.0	104	100.0	10	100.0	40	100.0	36	100.0	3	100.0	304	100.0

Table 3-13
Fatal Bus Involvements by Fire Occurrence and Bus Type

Bus fire	Sch	nool	Transit		Inte	rcity	Cha	arter	Ot	her	Unkı	nown	To	tal
occurrence	Ν	%	N	%	N	%	Ν	%	N	%	N	%	Ν	%
No fire	109	98.2	104	100.0	10	100.0	38	95.0	36	100.0	3	100.0	300	98.7
Fire in vehicle	2	1.8	0	0.0	0	0.0	2	5.0	0	0.0	0	0.0	4	1.3
Total	111	100.0	104	100.0	10	100.0	40	100.0	36	100.0	3	100.0	304	100.0

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Data from Buses Involved in Fatal Accidents, 2007	
Data II UIII DUSES II IVUIVEU III Fatai AUGUEIILS. 2007	

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.

- Fourteen bus drivers were coded as inattentive, and three as drowsy or asleep at the time of the crash.
- Drinking was reported in 1.0% of the bus drivers.
- Just over one-third (33.9%) of bus drivers involved in a fatal crash were female. 56.8% of school bus drivers were female.
- Eighteen (5.9%) bus drivers were fatally injured in a traffic accident.
- 61.2% of involvements in which the bus driver suffered a fatal injury involved bus rollover, fire or driver ejection.
- Almost three-fourths (73.9%) of school bus drivers were paid by the hour, as were 84.6% of transit drivers and 80.0% of intercity drivers.
- Overall, 10.5% of bus drivers involved in a fatal crash had a previous speeding conviction. Drivers of buses in the "other" bus category had the highest percentage of previous speeding convictions, while transit bus drivers had the highest incidence of previous accidents (fatal and nonfatal).
- The vast majority (95.4%) of all bus drivers had a valid CDL license.
- Failure to yield was the most common driver factor (11.8%), followed by failure to keep in proper lane (5.6%), and driving too fast (5.3%).
- Over two-thirds (67.4%) 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

	Sch	nool	Tra	nsit	Inte	rcity	Cha	arter	Ot	her	Unk	nown	To	tal
Bus driver drinking	Ν	%	N	%	N	%	N	%	Ν	%	Ν	%	N	%
No drinking	110	99.1	103	99.0	10	100.0	39	97.5	36	100.0	3	100.0	301	99.0
Drinking	1	0.9	1	1.0	0	0.0	1	2.5	0	0.0	0	0.0	3	1.0
Total	111	100.0	104	100.0	10	100.0	40	100.0	36	100.0	3	100.0	304	100.0

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

	Sch	iool	Tra	nsit	Inte	rcity	Cha	rter	Oth	ner	Unkr	nown	To	tal
Bus driver drug use	N	%	N	%	Ν	%	Ν	%	N	%	Ν	%	N	%
No drugs	45	40.5	25	24.0	4	40.0	12	30.0	13	36.1	1	33.3	100	32.9
Not reported	62	55.9	76	73.1	6	60.0	23	57.5	22	61.1	2	66.7	191	62.8
Reported unknown	4	3.6	3	2.9	0	0.0	5	12.5	1	2.8	0	0.0	13	4.3
Total	111	100.0	104	100.0	10	100.0	40	100.0	36	100.0	3	100.0	304	100.0

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

	Sch	ool	Trai	nsit	Inter	city	Cha	rter	Oth	ner	Unkn	own	Tot	tal
Age (years)	Ν	%	Ν	%	N	%	N	%	N	%	N	%	N	%
18-21	2	1.8	0	0.0	0	0.0	0	0.0	1	2.8	0	0.0	3	1.0
22-25	2	1.8	3	2.9	0	0.0	0	0.0	1	2.8	0	0.0	6	2.0
26-30	6	5.4	7	6.7	1	10.0	3	7.5	7	19.4	0	0.0	24	7.9
31-35	7	6.3	17	16.3	1	10.0	1	2.5	2	5.6	0	0.0	28	9.2
36-40	12	10.8	15	14.4	1	10.0	3	7.5	4	11.1	0	0.0	35	11.5
41-45	11	9.9	13	12.5	2	20.0	6	15.0	4	11.1	0	0.0	36	11.8
46-50	16	14.4	12	11.5	1	10.0	5	12.5	5	13.9	0	0.0	39	12.8
51-55	11	9.9	17	16.3	2	20.0	6	15.0	4	11.1	0	0.0	40	13.2
56-60	21	18.9	14	13.5	2	20.0	6	15.0	4	11.1	2	66.7	49	16.1
61-65	12	10.8	2	1.9	0	0.0	4	10.0	1	2.8	0	0.0	19	6.3
66-70	9	8.1	1	1.0	0	0.0	3	7.5	2	5.6	1	33.3	16	5.3
71-75	2	1.8	0	0.0	0	0.0	1	2.5	1	2.8	0	0.0	4	1.3
> 75	0	0.0	0	0.0	0	0.0	1	2.5	0	0.0	0	0.0	1	0.3
Unknown	0	0.0	3	2.9	0	0.0	1	2.5	0	0.0	0	0.0	4	1.3
Total	111	100.0	104	100.0	10	100.0	40	100.0	36	100.0	3	100.0	304	100.0

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

	Sch	ool	Tra	nsit	Inte	rcity	Cha	rter	Oth	ner	Unkr	nown	To	tal
Driver sex	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%
Male	48	43.2	75	72.1	10	100.0	34	85.0	29	80.6	2	66.7	198	65.1
Female	63	56.8	27	26.0	0	0.0	5	12.5	7	19.4	1	33.3	103	33.9
Unknown	0	0.0	2	1.9	0	0.0	1	2.5	0	0.0	0	0.0	3	1.0
Total	111	100.0	104	100.0	10	100.0	40	100.0	36	100.0	3	100.0	304	100.0

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

	Sch	ool	Trai	nsit	Inte	rcity	Cha	rter	Oth	ner	Unkr	nown	То	tal
Driver restraint use	N	%	Ν	%	Ν	%	N	%	N	%	Ν	%	N	%
None used or not applicable	5	4.5	7	6.7	0	0.0	10	25.0	0	0.0	2	66.7	24	7.9
Lap belt	13	11.7	16	15.4	1	10.0	4	10.0	4	11.1	0	0.0	38	12.5
Lap and shoulder	82	73.9	61	58.7	8	80.0	22	55.0	29	80.6	1	33.3	203	66.8
Unknown	11	9.9	20	19.2	1	10.0	4	10.0	3	8.3	0	0.0	39	12.8
Total	111	100.0	104	100.0	10	100.0	40	100.0	36	100.0	3	100.0	304	100.0

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

	Sch	iool	Tra	nsit	Inte	rcity	Cha	ırter	Otl	ner	Unkr	nown	То	tal
Driver injury severity	Ν	%	N	%	Ν	%	Ν	%	N	%	Ν	%	Ν	%
Fatal injury (K)	3	2.7	3	2.9	0	0.0	10	25.0	1	2.8	1	33.3	18	5.9
Incapacitating (A)	8	7.2	1	1.0	2	20.0	1	2.5	3	8.3	0	0.0	15	4.9
Non-incapacitating (B)	15	13.5	9	8.7	0	0.0	3	7.5	3	8.3	0	0.0	30	9.9
Complaint of pain (C)	23	20.7	16	15.4	3	30.0	5	12.5	6	16.7	0	0.0	53	17.4
No injury (O)	62	55.9	73	70.2	5	50.0	19	47.5	23	63.9	2	66.7	184	60.5
Unknown	0	0.0	2	1.9	0	0.0	2	5.0	0	0.0	0	0.0	4	1.3
Total	111	100.0	104	100.0	10	100.0	40	100.0	36	100.0	3	100.0	304	100.0

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

					Nor)-	Comp	laint						
	Fatal inj	ury (K)	Incapacita	iting (A)	incapacita	ting (B)	of pair	n (C)	No injui	y (O)	Unkno	own	Tota	al
Rollover, fire, ejection	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Rollover only	2	11.1	2	13.3	5	16.7	1	1.9	2	1.1	1	25.0	13	4.3
Fire only	1	5.6	0	0.0	0	0.0	2	3.8	0	0.0	0	0.0	3	1.0
Ejection only	3	16.7	1	6.7	0	0.0	0	0.0	0	0.0	0	0.0	4	1.3
Rollover and ejection	4	22.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4	1.3
Fire and ejection	1	5.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
None	7	38.9	12	80.0	25	83.3	50	94.3	182	98.9	0	0.0	276	90.8
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	75.0	3	1.0
Total	18	100.0	15	100.0	30	100.0	53	100.0	184	100.0	4	100.0	304	100.0

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

	Sch	nool	Tra	nsit	Inte	rcity	Cha	ırter	Oth	ner	Unkr	nown	To	tal
Driver extrication	N	%	N	%	N	%	Ν	%	N	%	N	%	N	%
Not extricated	107	96.4	101	97.1	10	100.0	33	82.5	35	97.2	3	100.0	289	95.1
Extricated	3	2.7	1	1.0	0	0.0	5	12.5	1	2.8	0	0.0	10	3.3
Unknown	1	0.9	2	1.9	0	0.0	2	5.0	0	0.0	0	0.0	5	1.6
Total	111	100.0	104	100.0	10	100.0	40	100.0	36	100.0	3	100.0	304	100.0

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Table 4-9
Fatal Bus Involvements by Driver Compensation

Compensation	N	%
Driver owned only	1	0.3
Hourly only	210	69.1
Mileage only	3	1.0
Salary only	12	3.9
Driver volunteer	3	1.0
Mileage and other	2	0.7
Primary employment not a bus driver	3	1.0
Primary employment not a bus driver and driver owned	1	0.3
Primary employment not a bus driver and hourly	2	0.7
Primary employment not a bus driver and salary	1	0.3
Tips and other	1	0.3
Other	•	
Base salary plus hourly for hours over daily base	1	0.3
No driver, bus was parked	1	0.3
Paid by day	4	1.3
Paid by passengers per trip	1	0.3
Paid by route	3	1.0
Paid by run	2	0.7
Paid by trip	3	1.0
Unknown	50	16.4
Total	304	100.0

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

Operator type		
Compensation	Ν	%
School district		
Driver owned	1	0.9
Hourly only	82	73.9
Mileage and other	2	1.8
Mileage only	1	0.9
Salary only	9	8.1
Other		
Base salary plus hourly for hours over daily base	1	0.9
Paid by day	4	3.6
Paid by route	3	2.7
Paid by run	2	1.8
Unknown	6	5.4
Total school bus	111	100.0
Transit bus authority		
Hourly only	88	84.6
Unknown	16	15.4
Total transit bus	104	100.0
Intercity bus operator		
Hourly only	8	80.0
Unknown	2	20.0
Total intercity bus	10	100.0
Charter bus operator		
Hourly only	17	42.5
Mileage only	2	5.0
Salary only	1	2.5
Tips and other	1	2.5
Other		
No driver - bus was parked	1	2.5
Paid by passengers per trip	1	2.5
Paid by trip	3	7.5
Unknown	14	35.0
Total charter bus	40	100.0
Other operator		
Driver is a volunteer	3	8.3
Hourly only	15	41.7
Salary only	2	5.6
Primary employment not a bus driver	3	8.3
Primary employment not a bus driver and driver owner	1	2.8
Primary employment not a bus driver and hourly	2	5.6
Primary employment not a bus driver and salary	1	2.8
Unknown	9	25.0
Total other operator	36	100.0
Unknown operator type	3	100.0
Total	304	100.0
, o.u.,	504	100.0

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

	Sch	ool	Trai	nsit	Inter	city	Cha	rter	Oth	ner	Unkr	nown	То	tal
Hours driven	N	%	N	%	Ν	%	N	%	N	%	N	%	N	%
1 hour	34	30.6	9	8.7	0	0.0	6	15.0	8	22.2	0	0.0	57	18.8
2 hours	12	10.8	9	8.7	2	20.0	2	5.0	6	16.7	0	0.0	31	10.2
3 hours	24	21.6	10	9.6	2	20.0	5	12.5	3	8.3	0	0.0	44	14.5
4-5 hours	27	24.3	18	17.3	4	40.0	3	7.5	5	13.9	0	0.0	57	18.8
6-7 hours	8	7.2	18	17.3	1	10.0	5	12.5	2	5.6	0	0.0	34	11.2
8-9 hours	0	0.0	4	3.8	0	0.0	2	5.0	1	2.8	0	0.0	7	2.3
12 or more hours	0	0.0	1	1.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Unknown but legal	0	0.0	5	4.8	0	0.0	5	12.5	1	2.8	0	0.0	11	3.6
Unknown but over legal limit	0	0.0	0	0.0	0	0.0	1	2.5	0	0.0	0	0.0	1	0.3
Unoccupied	0	0.0	0	0.0	0	0.0	1	2.5	0	0.0	0	0.0	1	0.3
Unknown	6	5.4	30	28.8	1	10.0	10	25.0	10	27.8	3	100.0	60	19.7
Total	111	100.0	104	100.0	10	100.0	40	100.0	36	100.0	3	100.0	304	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	ool	Tran	sit	Inte	rcity	Cha	rter	Oth	ner	Unkr	nown	To	tal
Driver violations charged	N	%	N	%	N	%	N	%	N	%	N	%	N	%
None	101	91.0	93	89.4	8	100.0	36	90.0	33	91.7	3	100.0	274	90.1
Manslaughter or homicide	0	0.0	3	2.9	0	0.0	0	0.0	0	0.0	0	0.0	3	1.0
Willfull reckless driving	1	0.9	1	1.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.7
Unsafe reckless (not willful, wanton reckless)	0	0.0	1	1.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Inattentive, careless, improper driving	0	0.0	2	1.9	0	0.0	0	0.0	0	0.0	0	0.0	2	0.7
Hit-and-run, fail to stop after accident	0	0.0	1	1.0	0	0.0	0	0.0	1	2.8	0	0.0	2	0.7
Fail to give aid, information, wait for police	0	0.0	1	1.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Serious violation resulting in death	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Intoxicated	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Speed greater than reasonable	1	0.9	0	0.0	1	10.0	0	0.0	0	0.0	0	0.0	2	0.7
Violation of turn on red	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Fail to obey stop sign	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Improper method and position of turn	0	0.0	0	0.0	0	0.0	0	0.0	1	2.8	0	0.0	1	0.3
Fail to yield to emergency vehicle	2	1.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.7
Fail to yield, generally	3	2.7	4	3.8	0	0.0	2	5.0	2	5.6	0	0.0	11	3.6
Turn, yield, signaling violations, generally	0	0.0	1	1.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Lane violations, generally	0	0.0	0	0.0	2	20.0	1	2.5	0	0.0	0	0.0	3	1.0
Unknown violation	1	0.9	2	1.9	0	0.0	1	2.5	0	0.0	0	0.0	4	1.3
Total	111	100.0	104	100.0	10	100.0	40	100.0	36	100.0	3	100.0	304	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

Number of	Sch	ool	Tra	nsit	Inter	city	Cha	ırter	Oth	ner	Unkr	iown	To	tal
previous accidents*	N	%	Ν	%	Ν	%	N	%	N	%	N	%	N	%
0	88	79.3	65	62.5	6	60.0	30	75.0	25	69.4	1	33.3	215	70.7
1	15	13.5	20	19.2	0	0.0	5	12.5	7	19.4	0	0.0	47	15.5
2	4	3.6	9	8.7	0	0.0	2	5.0	0	0.0	0	0.0	15	4.9
3	0	0.0	2	1.9	0	0.0	1	2.5	0	0.0	0	0.0	3	1.0
Not reported	4	3.6	6	5.8	3	30.0	0	0.0	3	8.3	1	33.3	17	5.6
Unknown	0	0.0	2	1.9	1	10.0	2	5.0	1	2.8	1	33.3	7	2.3
Total	111	100.0	104	100.0	10	100.0	40	100.0	36	100.0	3	100.0	304	100.0

^{*}Reflects previous accidents occurring within three years of the current accident.

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

Number of	Sch	nool	Trai	nsit	Inte	city	Cha	rter	Oth	ner	Unkn	own	To	tal
previous suspensions*	N	%	N	%	N	%	N	%	N	%	N	%	N	%
0	106	95.5	99	95.2	9	90.0	36	90.0	30	83.3	2	66.7	282	92.8
1	4	3.6	1	1.0	0	0.0	1	2.5	3	8.3	0	0.0	9	3.0
2	0	0.0	2	1.9	0	0.0	1	2.5	2	5.6	0	0.0	5	1.6
4	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Unknown	0	0.0	2	1.9	1	10.0	2	5.0	1	2.8	1	33.3	7	2.3
Total	111	100.0	104	100.0	10	100.0	40	100.0	36	100.0	3	100.0	304	100.0

^{*}Reflects suspensions occurring within three years of the current accident.

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

Number of	Sch	nool	Tra	nsit	Inte	rcity	Cha	rter	Oth	ner	Unkr	nown	To	tal
previous speeding convictions*	N	%	Ν	%	Ν	%	Ν	%	N	%	N	%	Ν	%
0	106	95.5	92	88.5	8	80.0	32	80.0	25	69.4	2	66.7	265	87.2
1	5	4.5	10	9.6	0	0.0	5	12.5	8	22.2	0	0.0	28	9.2
2	0	0.0	0	0.0	1	10.0	1	2.5	1	2.8	0	0.0	3	1.0
4	0	0.0	0	0.0	0	0.0	0	0.0	1	2.8	0	0.0	1	0.3
Unknown	0	0.0	2	1.9	1	10.0	2	5.0	1	2.8	1	33.3	7	2.3
Total	111	100.0	104	100.0	10	100.0	40	100.0	36	100.0	3	100.0	304	100.0

^{*}Reflects speeding convictions 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

Number of	Sch	iool	Trai	nsit	Inte	rcity	Cha	rter	Oth	ner	Unkr	own	To	tal
previous moving convictions*	N	%	N	%	N	%	N	%	N	%	N	%	N	%
0	104	93.7	90	86.5	8	80.0	34	85.0	27	75.0	1	33.3	264	86.8
1	6	5.4	10	9.6	1	10.0	2	5.0	6	16.7	1	33.3	26	8.6
2	1	0.9	2	1.9	0	0.0	1	2.5	1	2.8	0	0.0	5	1.6
3	0	0.0	0	0.0	0	0.0	1	2.5	0	0.0	0	0.0	1	0.3
5	0	0.0	0	0.0	0	0.0	0	0.0	1	2.8	0	0.0	1	0.3
Unknown	0	0.0	2	1.9	1	10.0	2	5.0	1	2.8	1	33.3	7	2.3
Total	111	100.0	104	100.0	10	100.0	40	100.0	36	100.0	3	100.0	304	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

	Sch	iool	Tra	Transit		rcity	Cha	ırter	Oth	ner	Unkr	own	To	tal
License class compliance	N	%	N	%	Ν	%	Ν	%	N	%	N	%	N	%
Not valid	0	0.0	0	0.0	0	0.0	2	5.0	6	16.7	0	0.0	8	2.6
Valid	111	100.0	102	98.1	9	90.0	37	92.5	29	80.6	2	66.7	290	95.4
Unknown if CDL	0	0.0	0	0.0	1	10.0	0	0.0	0	0.0	0	0.0	1	0.3
Unknown	0	0.0	2	1.9	0	0.0	1	2.5	1	2.8	1	33.3	5	1.6
Total	111	100.0	104	100.0	10	100.0	40	100.0	36	100.0	3	100.0	304	100.0

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

Commerical driver	Sch	ool	Tra	nsit	Inte	rcity	Cha	arter	Oth	ner	Unkr	nown	To	tal
license status	N	%	N	%	N	%	N	%	N	%	N	%	N	%
No commerical driver license	1	0.9	2	1.9	1	10.0	2	5.0	12	33.3	0	0.0	18	5.9
Suspended	0	0.0	2	1.9	1	10.0	0	0.0	1	2.8	0	0.0	4	1.3
Revoked	0	0.0	0	0.0	0	0.0	1	2.5	0	0.0	0	0.0	1	0.3
Valid	108	97.3	97	93.3	7	70.0	36	90.0	22	61.1	2	66.7	272	89.5
Learner's permit	2	1.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.7
Unknown	0	0.0	3	2.9	1	10.0	1	2.5	1	2.8	1	33.3	7	2.3
Total	111	100.0	104	100.0	10	100.0	40	100.0	36	100.0	3	100.0	304	100.0

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

	Sch	ool	Tra	Transit		city	Cha	rter	Oth	ner	Unkr	nown	To	tal
License endorsements	N	%	Ν	%	N	%	Ν	%	N	%	N	%	Ν	%
No endorsements	17	15.3	24	23.1	3	30.0	9	22.5	18	50.0	1	33.3	72	23.7
Complied	74	66.7	62	59.6	5	50.0	24	60.0	11	30.6	1	33.3	177	58.2
Not complied	1	0.9	0	0.0	0	0.0	0	0.0	2	5.6	0	0.0	3	1.0
Compliance unknown	16	14.4	15	14.4	1	10.0	5	12.5	4	11.1	0	0.0	41	13.5
Unknown	3	2.7	3	2.9	1	10.0	2	5.0	1	2.8	1	33.3	11	3.6
Total	111	100.0	104	100.0	10	100.0	40	100.0	36	100.0	3	100.0	304	100.0

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

	Sch	ool	Trar		Inter	city	Char		Oth	ner	Unkn	own	To	
Driver-related factors	N	%	N	%	N	%	N	%	N	%	Ν	%	N	%
None	82	73.9	77	74.0	6	60.0	18	45.0	21	58.3	1	33.3	205	67.4
Physical/mental condition														
Drowsy, asleep	1	0.9	0	0.0	0	0.0	1	2.5	1	2.8	0	0.0	3	1.0
III, blackout	1	0.9	1	1.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.7
Other drugs	2	1.8	0	0.0	0	0.0	1	2.5	0	0.0	0	0.0	3	1.0
Inattentive	4	3.6	5	4.8	0	0.0	3	7.5	1	2.8	1	33.3	14	4.6
Other physical impairment	0	0.0	0	0.0	0	0.0	0	0.0	1	2.8	0	0.0	1	0.3
Miscellaneous causes												-		
Law enforcement officer	0	0.0	0	0.0	0	0.0	0	0.0	1	2.8	0	0.0	1	0.3
Vehicle unattended	0	0.0	2	1.9	0	0.0	1	2.5	0	0.0	0	0.0	3	1.0
Improper loading	0	0.0	0	0.0	0	0.0	1	2.5	0	0.0	0	0.0	1	0.3
Operating without required equipment	0	0.0	0	0.0	0	0.0	1	2.5	0	0.0	0	0.0	1	0.3
Following improperly	0	0.0	0	0.0	0	0.0	2	5.0	0	0.0	0	0.0	2	0.7
Failure to keep in proper lane	2	1.8	3	2.9	0	0.0	8	20.0	3	8.3	1	33.3	17	5.6
Improper starting or backing	1	0.9	1	1.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.7
Erratic/reckless	0	0.0	1	1.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Failure to yield	14	12.6	14	13.5	2	20.0	3	7.5	3	8.3	0	0.0	36	11.8
Failure to obey signs	2	1.8	1	1.0	0	0.0	0	0.0	1	2.8	0	0.0	4	1.3
Passing through or around barrier	0	0.0	0	0.0	1	10.0	0	0.0	0	0.0	0	0.0	1	0.3
Failure to observe warnings	1	0.9	0	0.0	1	10.0	0	0.0	0	0.0	0	0.0	2	0.7
Driving too fast	3	2.7	2	1.9	1	10.0	6	15.0	3	8.3	1	33.3	16	5.3
Other improper turn	4	3.6	1	1.0	1	10.0	1	2.5	1	2.8	0	0.0	8	2.6
Unfamiliar with road	0	0.0	0	0.0	0	0.0	1	2.5	0	0.0	0	0.0	1	0.3
Stopping in road	1	0.9	0	0.0	0	0.0	0	0.0	1	2.8	0	0.0	2	0.7
Overcorrecting	1	0.9	0	0.0	0	0.0	3	7.5	0	0.0	0	0.0	4	1.3
Vision obscured by														
Weather	1	0.9	0	0.0	0	0.0	1	2.5	0	0.0	0	0.0	2	0.7
Glare	0	0.0	1	1.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Curve, hill, or other design features	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Motor vehicle (including load)	2	1.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.7
Avoiding, swerving due to														
Debris in road	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Live animal	0	0.0	0	0.0	0	0.0	0	0.0	1	2.8	0	0.0	1	0.3
Pedestrian	2	1.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.7
Water, snow, oil	0	0.0	0	0.0	1	10.0	1	2.5	0	0.0	0	0.0	2	0.7
Other misc. factors														
Driver noncompliance with restrictions	0	0.0	0	0.0	0	0.0	0	0.0	1	2.8	0	0.0	1	0.3
Hit and run vehicle driver	0	0.0	1	1.0	0	0.0	0	0.0	1	2.8	0	0.0	2	0.7
Other non-moving violation	0	0.0	1	1.0	0	0.0	0	0.0	1	2.8	0	0.0	2	0.7
Possible distractions	<u> </u>		•			2.0		2.3		0		2.0		
Cellular phone in vehicle	0	0.0	0	0.0	0	0.0	1	2.5	1	2.8	0	0.0	2	0.7
Unknown	0	0.0	1	1.0	0	0.0	2	5.0	0	0.0	0	0.0	3	1.0
Total		100.0		100.0		100.0		100.0		100.0		100.0		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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