

# BUSES INVOLVED IN FATAL ACCIDENTS FACTBOOK 2000



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 2000**

**Anne Matteson**

**Daniel Blower**

**Daniel Hershberger**

April 2004

Center for National Truck and Bus Statistics

The University of Michigan  
Transportation Research Institute  
Ann Arbor, Michigan 48109-2150

The research reported herein was conducted under general research funds provided by the Federal Motor Carrier Safety Administration and the Affiliates Program for the Center for National Truck and Bus Statistics. The opinions, findings, and conclusions expressed in this publication are those of the authors and not necessarily those of the U.S. Department of Transportation, the Federal Motor Carrier Safety Administration, or the sponsors of the Affiliates Program.

1. Report No. <b>UMTRI-2004-11</b>	2. Government Accession No.	3. Recipient's Catalog No.	
4. Title and Subtitle <b>Buses Involved in Fatal Accidents Factbook 2000</b>		5. Report Date <b>April 2004</b>	
		6. Performing Organization Code	
7. Authors <b>Anne Matteson, Daniel Blower, Daniel Hershberger</b>		8. Performing Organization Report No. <b>UMTRI-2004-11</b>	
9. Performing Organization Name and Address <b>Transportation Research Institute 2901 Baxter Road  University of Michigan Ann Arbor, Michigan 48109-2150</b>		10. Work Unit No. <b>080638</b>	
		11. Contract or Grant No. <b>DTMC75-02-R-00090</b>	
12. Sponsoring Agency Name and Address		13. Type of Report and Period Covered <b>Special report</b>	
		14. Sponsoring Agency Code	
15. Supplementary Notes <b>Funds provided by: Federal Motor Carrier Safety Administration Washington DC 20590; and, Affiliates Program, Center for National Truck and Bus Statistics</b>			
16. Abstract  <b>This document presents aggregate statistics on buses involved in traffic accidents in 2000. 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.</b>			
17. Key Words <b>Buses, accident statistics, fatal accident data</b>		18. Distribution Statement <b>Unlimited</b>	
19. Security Classification (of this report) <b>Unclassified</b>	20. Security Classification (of this page) <b>Unclassified</b>	21. No. of Pages <b>66</b>	22. Price

Reproduction of completed page authorized

## 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
<b>LENGTH</b>					<b>LENGTH</b>				
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
<b>AREA</b>					<b>AREA</b>				
in <sup>2</sup>	square inches	645.2	square millimeters	mm <sup>2</sup>	mm <sup>2</sup>	square millimeters	0.0016	square inches	in <sup>2</sup>
ft <sup>2</sup>	square feet	0.093	square meters	m <sup>2</sup>	m <sup>2</sup>	square meters	10.764	square feet	ft <sup>2</sup>
yd <sup>2</sup>	square yards	0.836	square meters	m <sup>2</sup>	m <sup>2</sup>	square meters	1.195	square yards	yd <sup>2</sup>
ac	acres	0.405	hectares	ha	ha	hectares	2.47	acres	ac
mi <sup>2</sup>	square miles	2.59	square kilometers	km <sup>2</sup>	km <sup>2</sup>	square kilometers	0.386	square miles	mi <sup>2</sup>
<b>VOLUME</b>					<b>VOLUME</b>				
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 <sup>3</sup>	cubic feet	0.028	cubic meters	m <sup>3</sup>	m <sup>3</sup>	cubic meters	35.71	cubic feet	ft <sup>3</sup>
yd <sup>3</sup>	cubic yards	0.765	cubic meters	m <sup>3</sup>	m <sup>3</sup>	cubic meters	1.307	cubic yards	yd <sup>3</sup>
NOTE: Volumes greater than 1000 L shall be shown in m <sup>3</sup> .									
<b>MASS</b>					<b>MASS</b>				
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 (2000 lb)	0.907	megagrams (or "metric ton")	Mg (or "t")	Mg (or "t")	megagrams (or "metric ton")	1.103	short tons (2000 lb)	T
<b>TEMPERATURE (exact)</b>					<b>TEMPERATURE (exact)</b>				
°F	Fahrenheit temperature	5(F-32)/9 or (F-32)/1.8	Celcius temperature	°C	°C	Celcius temperature	<b>1.8C + 32</b>	Fahrenheit temperature	°F
<b>ILLUMINATION</b>					<b>ILLUMINATION</b>				
fc	foot-candles	10.76	lux	lx	lx	lux	0.0929	foot-candles	fc
fl	foot-Lamberts	3.426	candela/m <sup>2</sup>	cd/m <sup>2</sup>	cd/m <sup>2</sup>	candela/m <sup>2</sup>	0.2919	foot-lamberts	fl
<b>FORCE and PRESSURE or STRESS</b>					<b>FORCE and PRESSURE or STRESS</b>				
lbf	poundforce	4.45	newtons	N	N	newtons	0.225	poundforce	lbf
lbf/in <sup>2</sup>	poundforce per square inch	6.89	kilopascals	kPa	kPa	kilopascals	0.145	poundforce per square inch	lbf/in <sup>2</sup>

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

(Revised September 1993)

## Acknowledgments

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 Hershberger managed the survey and edited the cases. Stuart Snyder, Ariana Raymond, and Robert Allen served as interviewers. Their 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 with support from the Affiliates Program for the CNTBS. The preparation of the data file and codebook was supported by the Federal Motor Carrier Safety Administration.



# Table of contents

<b>Figures</b> .....	<b>ix</b>
<b>Tables</b> .....	<b>xi</b>
<b>Introduction</b> .....	<b>1</b>
Report overview .....	1
<b>Overview</b> .....	<b>3</b>
Fatal involvements .....	5
Fatalities .....	8
<b>Accident conditions</b> .....	<b>9</b>
Temporal distributions .....	11
Environmental distributions .....	13
Roadway distributions .....	15
Accident description .....	18
<b>Vehicle</b> .....	<b>23</b>
<b>Driver</b> .....	<b>35</b>
<b>Glossary and Abbreviations</b> .....	<b>47</b>
<b>Index</b> .....	<b>51</b>





# ***Figures***

Figure 1-1: Fatal Bus Involvements by State, BIFA 2000 .....	5
Figure 1-2: Fatal Bus Involvements by State – School Buses Only, BIFA 2000.....	6
Figure 1-3: Fatal Bus Involvements by State – Transit Buses Only, BIFA 2000.....	6



# Tables

## Overview

Table 1-1 Fatal Bus Involvements by Operator Type, BIFA 2000 .....	5
Table 1-2 Fatal Bus Involvements by State and Bus Type, BIFA 2000 .....	7
Table 1-3 Fatalities in Bus Involvements by Person Type and Bus Type, BIFA 2000 .....	8

## Accident conditions

Table 2-1 Fatal Bus Involvements by Month and Bus Type, BIFA 2000.....	11
Table 2-2 Fatal Bus Involvements by Day of Week and Bus Type, BIFA 2000.....	11
Table 2-3 Fatal Bus Involvements by Day Type and Bus Type, BIFA 2000 .....	11
Table 2-4 Fatal Bus Involvements by Time of Accident and Bus Type, BIFA 2000.....	12
Table 2-5 Fatal Bus Involvements by Time of Accident and Day Type, BIFA 2000.....	13
Table 2-6 Fatal Bus Involvements by Land Use and Bus Type, BIFA 2000 .....	13
Table 2-7 Fatal Bus Involvements by Light Condition and Bus Type, BIFA 2000.....	14
Table 2-8 Fatal Bus Involvements by Roadway Surface Condition and Bus Type, BIFA 2000.....	14
Table 2-9 Fatal Bus Involvements by Weather Condition and Bus Type, BIFA 2000.....	14
Table 2-10 Fatal Bus Involvements by Roadway Function Class and Bus Type, BIFA 2000.....	15
Table 2-11 Fatal Bus Involvements by Route Signing and Bus Type, BIFA 2000 .....	15
Table 2-12 Fatal Bus Involvements by Relation to Junction and Bus Type, BIFA 2000 .....	16
Table 2-13 Fatal Bus Involvements by Number of Travel Lanes and Bus Type, BIFA 2000.....	16
Table 2-14 Fatal Bus Involvements by Trafficway Flow and Bus Type, BIFA 2000.....	16
Table 2-15 Fatal Bus Involvements by Speed Limit and Bus Type, BIFA 2000.....	17

Table 2-16 Fatal Bus Involvements by Accident Type and Bus Type, BIFA 2000.....	18
Table 2-17 Fatal Bus Involvements by First Harmful Event and Bus Type, BIFA 2000.....	19
Table 2-18 Fatal Bus Involvements by Vehicle Role in Accident and Bus Type, BIFA 2000.....	19
Table 2-19 Fatal Bus Involvements by Manner of Collision and Bus Type, BIFA 2000.....	20
Table 2-20 Fatal Bus Involvements by Rollover Status and Bus Type, BIFA 2000 .....	20
Table 2-21 Fatal Bus Involvements by Number of Quarter Turns and Direction of Roll, BIFA 2000.....	20
Table 2-22 Fatal Bus Involvements by Fire Occurrence and Bus Type, BIFA 2000.....	21

## **Vehicle**

Table 3-1 Fatal Bus Involvements by Operator Type and Bus Vehicle Description, BIFA 2000.....	25
Table 3-2 Fatal Bus Involvements by Operator Type and Bus Operator Description, BIFA 2000 .....	26
Table 3-3 Fatal Bus Involvements by Bus Body Style and Bus Type, BIFA 2000 .....	27
Table 3-4 Fatal Bus Involvements by Bus Body Configuration and Bus Type, BIFA 2000.....	27
Table 3-5 Fatal Bus Involvements by Front of Bus Style and Bus Type, BIFA 2000.....	27
Table 3-6 Fatal Bus Involvements by Model Year and Front of Bus Style, BIFA 2000.....	28
Table 3-7 Fatal Bus Involvements by Model Year and Bus Type, BIFA 2000 .....	29
Table 3-8 Fatal Bus Involvements by Bus Length and Bus Type, BIFA 2000 .....	29
Table 3-9 Fatal Bus Involvements by Bus Empty Weight and Bus Type, BIFA 2000 .....	30
Table 3-10 Fatal Bus Involvements by Gross Vehicle Weight Rating and Bus Type, BIFA 2000 .....	30
Table 3-11 Fatal Bus Involvements by Number of Axles and Bus Type, BIFA 2000.....	30
Table 3-12 Fatal Bus Involvements by Passenger Seating Capacity (Excluding Driver) and Bus Type, BIFA 2000.....	31
Table 3-13 Fatal Bus Involvements by Number of Passengers and Bus Type, BIFA 2000.....	31

Table 3-14 Fatal Bus Involvements by Passenger Restraint (Excluding Driver) and Bus Type, BIFA 2000.....	32
Table 3-15 Fatal Bus Involvements by Carrier Type and Bus Type, BIFA 2000.....	32
Table 3-16 Fatal Bus Involvements by Trip Type and Bus Type, BIFA 2000 .....	32
Table 3-17 Fatal Bus Involvements by Most Harmful Event and Bus Type, BIFA 2000.....	33

## **Driver**

Table 4-1 Fatal Bus Involvements by Driver Drinking Status and Bus Type, BIFA 2000.....	37
Table 4-2 Fatal Bus Involvements by Driver Drug Use and Bus Type, BIFA 2000.....	37
Table 4-3 Fatal Bus Involvements by Driver Age and Bus Type, BIFA 2000.....	37
Table 4-4 Fatal Bus Involvements by Driver Sex and Bus Type, BIFA 2000.....	38
Table 4-5 Fatal Bus Involvements by Driver Restraint Use and Bus Type, BIFA 2000 .....	38
Table 4-6 Fatal Bus Involvements by Driver Injury Severity and Bus Type, BIFA 2000 .....	38
Table 4-7 Fatal Bus Involvements by Driver Injury Severity and Rollover, Fire, Ejection Status, BIFA 2000.....	39
Table 4-8 Fatal Bus Involvements by Driver Extrication and Bus Type, BIFA 2000 .....	39
Table 4-9 Fatal Bus Involvements by Driver Compensation, BIFA 2000.....	39
Table 4-10 Fatal Bus Involvements by Driver Compensation and Bus Type, BIFA 2000.....	40
Table 4-11 Fatal Bus Involvements by Reported Hours Driven and Bus Type, BIFA 2000.....	41
Table 4-12 Fatal Bus Involvements by Driver Violations Charged and Bus Type, BIFA 2000....	41
Table 4-13 Fatal Bus Involvements by Number of Previous Accidents (fatal and nonfatal) and Bus Type, BIFA 2000.....	42
Table 4-14 Fatal Bus Involvements by Number of Previous Suspensions and Bus Type, BIFA 2000 .....	42
Table 4-15 Fatal Bus Involvements by Number of Previous Speeding Convictions and Bus Type, BIFA 2000.....	42
Table 4-16 Fatal Bus Involvements by Previous Other Moving Convictions and Bus Type, BIFA 2000 .....	43

Table 4-17 Fatal Bus Involvements by License Class Compliance and Bus Type, BIFA 2000 ..43

Table 4-18 Fatal Bus Involvements by CDL License Status and Bus Type, BIFA 2000..... 43

Table 4-19 Fatal Bus Involvements by License Endorsements and Bus Type, BIFA 2000 ..... 44

Table 4-20 Fatal Bus Involvements by Driver-related Factors and Bus Type, BIFA 2000..... 45

## ***Introduction***

This report, *Buses Involved in Fatal Accidents Factbook 2000*, 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, recently initiated 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 records extracted 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 2000 BIFA file is a census file, meaning there is one record for each of the 358 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. Editors review 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 is altered or corrected. The BIFA variables supplement the FARS data with extensive detail on the bus, including the bus's seating capacity; its weight, length and width; 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 2000*.

## ***Report overview***

This report consists of four sections. The "Overview" section provides data on fatalities, and national and state distributions of fatal accident involvements. The "Accident conditions" section



provides information about the accidents the buses were involved in, including 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, counts 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 typically used as school buses, but which are 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 47.

# Overview

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

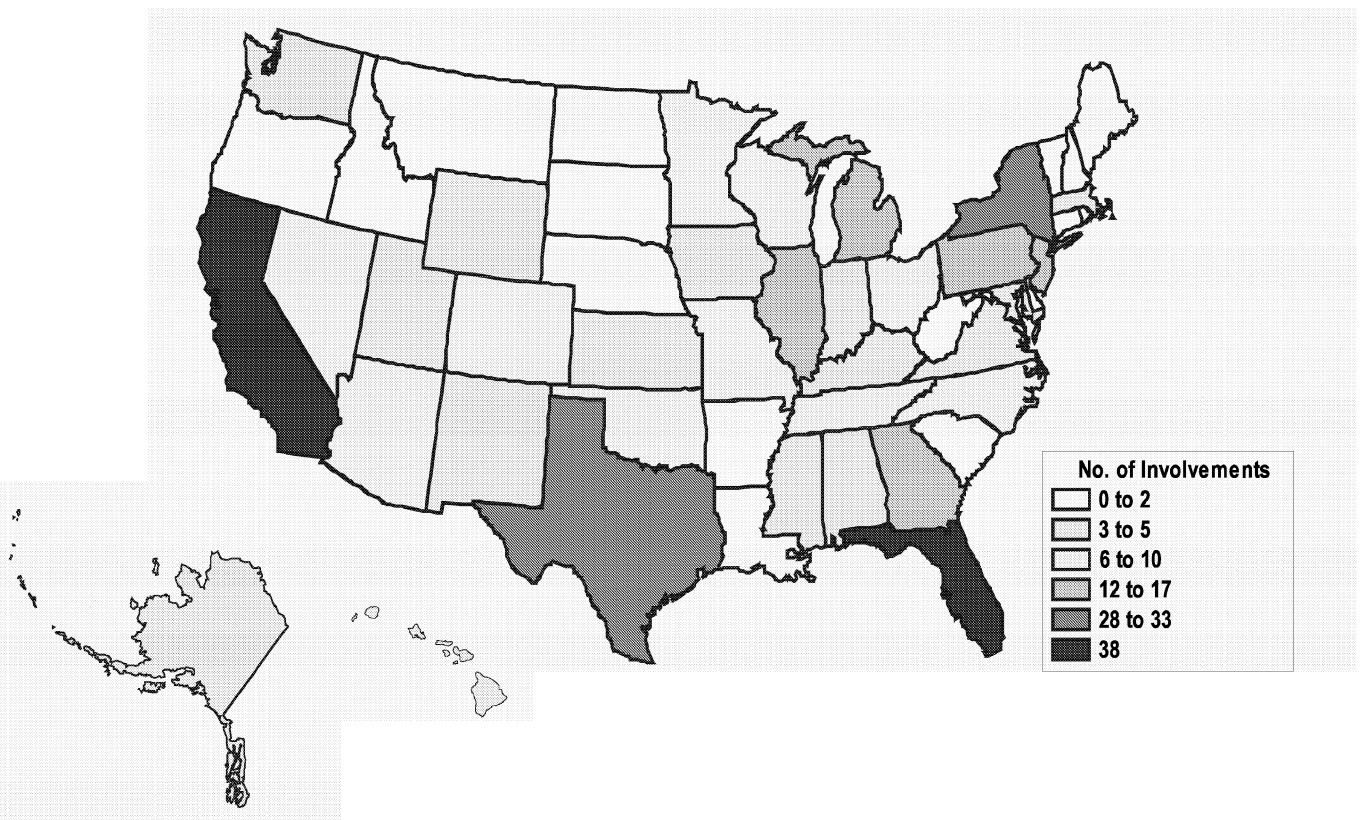
- 358 buses were involved in a fatal traffic accident during 2000.
- Buses owned by a school district were the most common type, accounting for about 38.5% of all buses involved in a fatal crash.
- California, Florida, New York, and Texas had the greatest number of bus involvements during 2000.
- There were 395 persons killed in crashes involving a bus; 15 of them were bus drivers, and 26 were passengers on the bus.
- 91 pedestrians and 9 bicyclists were killed during 2000 in accidents involving buses.



## Fatal involvements

**Table 1-1**  
**Fatal Bus Involvements by Operator Type**  
**BIFA 2000**

Bus Operator Type	No.	Pct.
School district	138	38.5
Urban transit authority	133	37.2
Scheduled intercity	15	4.2
Charter bus	31	8.7
Private company	3	0.8
Non-government organization	12	3.4
Non-educational unit of government	6	1.7
Other	15	4.2
Unknown	5	1.4
<b>Total</b>	<b>358</b>	<b>100.0</b>



**Figure 1-1: Fatal Bus Involvements by State, BIFA 2000**



Figure 1-2: Fatal Bus Involvements by State – School Buses Only, BIFA 2000

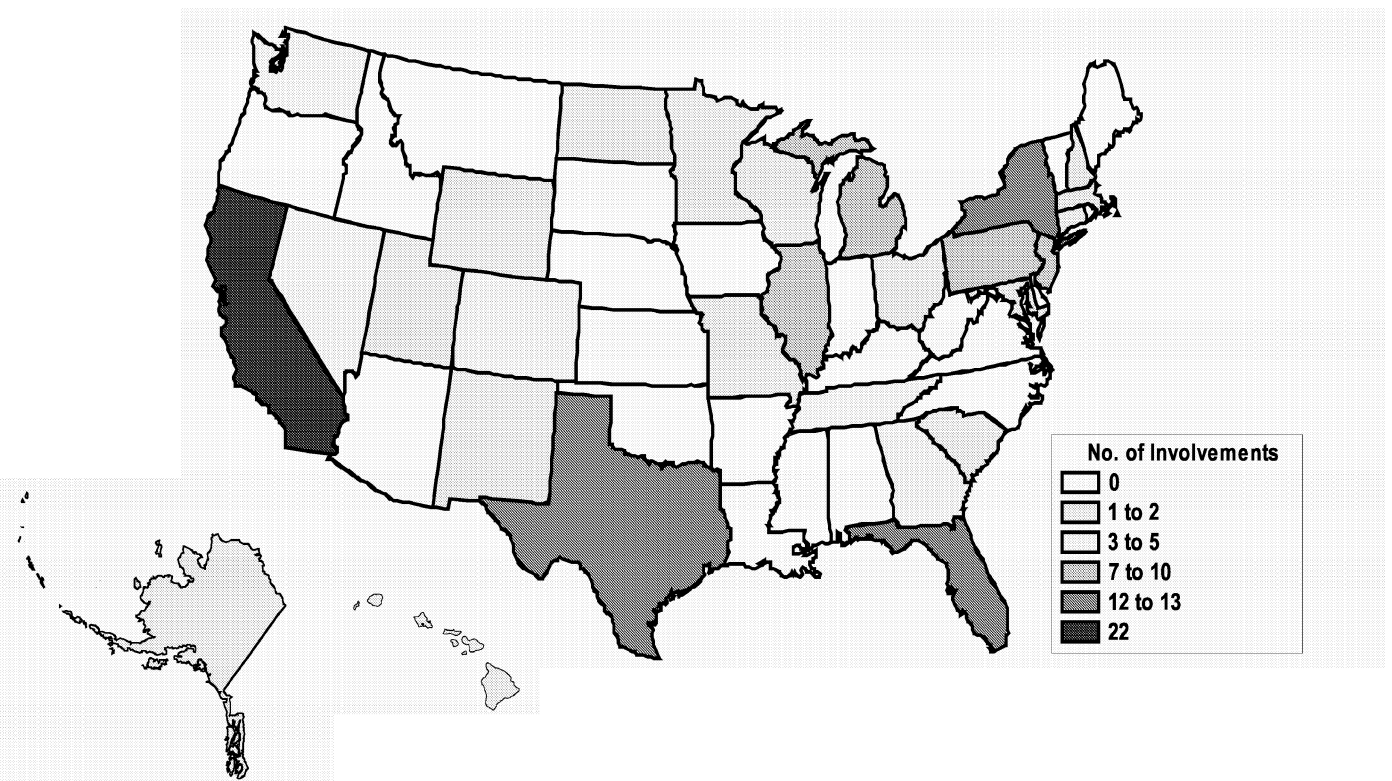


Figure 1-3: Fatal Bus Involvements by State – Transit Buses Only, BIFA 2000

Table 1-2: Fatal Bus Involvements by State and Bus Type, BIFA 2000

State	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Alabama	3	2.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	0.8
Alaska	1	0.7	2	1.5	0	0.0	0	0.0	0	0.0	0	0.0	3	0.8
Arizona	5	3.6	0	0.0	0	0.0	2	6.5	0	0.0	0	0.0	7	2.0
Arkansas	1	0.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
California	5	3.6	22	16.5	7	46.7	2	6.5	2	5.6	0	0.0	38	10.6
Colorado	2	1.4	4	3.0	0	0.0	1	3.2	1	2.8	0	0.0	8	2.2
Connecticut	1	0.7	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	2	0.6
Delaware	0	0.0	0	0.0	0	0.0	1	3.2	0	0.0	0	0.0	1	0.3
Dist of Columbia	0	0.0	3	2.3	0	0.0	0	0.0	0	0.0	0	0.0	3	0.8
Florida	14	10.1	13	9.8	0	0.0	4	12.9	7	19.4	0	0.0	38	10.6
Georgia	3	2.2	5	3.8	2	13.3	1	3.2	1	2.8	0	0.0	12	3.4
Hawaii	0	0.0	2	1.5	0	0.0	2	6.5	0	0.0	0	0.0	4	1.1
Idaho	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Illinois	5	3.6	7	5.3	0	0.0	1	3.2	0	0.0	0	0.0	13	3.6
Indiana	3	2.2	0	0.0	1	6.7	0	0.0	0	0.0	0	0.0	4	1.1
Iowa	5	3.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	5	1.4
Kansas	3	2.2	0	0.0	0	0.0	0	0.0	1	2.8	0	0.0	4	1.1
Kentucky	2	1.4	0	0.0	0	0.0	0	0.0	2	5.6	0	0.0	4	1.1
Louisiana	1	0.7	0	0.0	0	0.0	1	3.2	0	0.0	0	0.0	2	0.6
Maine	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Maryland	3	2.2	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	4	1.1
Massachusetts	1	0.7	1	0.8	0	0.0	0	0.0	0	0.0	1	20.0	3	0.8
Michigan	6	4.3	7	5.3	0	0.0	0	0.0	4	11.1	0	0.0	17	4.7
Minnesota	4	2.9	2	1.5	1	6.7	1	3.2	2	5.6	0	0.0	10	2.8
Mississippi	2	1.4	0	0.0	0	0.0	1	3.2	0	0.0	0	0.0	3	0.8
Missouri	3	2.2	1	0.8	0	0.0	2	6.5	2	5.6	0	0.0	8	2.2
Montana	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Nebraska	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Nevada	1	0.7	5	3.8	0	0.0	0	0.0	0	0.0	0	0.0	6	1.7
New Hampshire	0	0.0	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
New Jersey	4	2.9	7	5.3	0	0.0	0	0.0	2	5.6	0	0.0	13	3.6
New Mexico	2	1.4	1	0.8	0	0.0	0	0.0	2	5.6	0	0.0	5	1.4
New York	10	7.2	13	9.8	2	13.3	5	16.1	1	2.8	2	40.0	33	9.2
North Carolina	5	3.6	0	0.0	0	0.0	0	0.0	1	2.8	1	20.0	7	2.0
North Dakota	0	0.0	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Ohio	6	4.3	2	1.5	0	0.0	1	3.2	0	0.0	0	0.0	9	2.5
Oklahoma	8	5.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	8	2.2
Oregon	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pennsylvania	5	3.6	10	7.5	0	0.0	1	3.2	1	2.8	0	0.0	17	4.7
Rhode Island	2	1.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.6
South Carolina	1	0.7	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	2	0.6
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	2.2	3	2.3	0	0.0	1	3.2	0	0.0	0	0.0	7	2.0
Texas	7	5.1	12	9.0	2	13.3	2	6.5	4	11.1	1	20.0	28	7.8
Utah	1	0.7	1	0.8	0	0.0	1	3.2	1	2.8	0	0.0	4	1.1
Vermont	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Virginia	3	2.2	0	0.0	0	0.0	1	3.2	0	0.0	0	0.0	4	1.1
Washington	1	0.7	3	2.3	0	0.0	0	0.0	0	0.0	0	0.0	4	1.1
West Virginia	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Wisconsin	5	3.6	1	0.8	0	0.0	0	0.0	1	2.8	0	0.0	7	2.0
Wyoming	1	0.7	1	0.8	0	0.0	0	0.0	1	2.8	0	0.0	3	0.8
Total	138	100.0	133	100.0	15	100.0	31	100.0	36	100.0	5	100.0	358	100.0

## Fatalities

**Table 1-3**  
**Fatalities in Bus Involvements by Person Type and Bus Type**  
**BIFA 2000**

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	8	5.3	1	0.7	0	0.0	2	4.9	4	9.5	0	0.0	15	3.8
Passenger	13	8.6	2	1.4	1	5.6	1	2.4	9	21.4	0	0.0	26	6.6
Bus total	21	13.9	3	2.2	1	5.6	3	7.3	13	31.0	0	0.0	41	10.4
<i>Other vehicle</i>														
Drivers	84	55.6	61	44.2	8	44.4	20	48.8	14	33.3	3	60.0	190	48.1
Passengers	21	13.9	19	13.8	3	16.7	9	22.0	9	21.4	0	0.0	61	15.4
Unknown occ. type	0	0.0	0	0.0	0	0.0	3	7.3	0	0.0	0	0.0	3	0.8
Other vehicle total	105	69.5	80	58.0	11	61.1	32	78.0	23	54.8	3	60.0	254	64.3
<i>Non-motorists</i>														
Pedestrian	23	15.2	50	36.2	4	22.2	6	14.6	6	14.3	2	40.0	91	23.0
Bicyclist	2	1.3	5	3.6	2	11.1	0	0.0	0	0.0	0	0.0	9	2.3
Non-motorist total	25	16.6	55	39.9	6	33.3	6	14.6	6	14.3	2	40.0	100	25.3
Total	151	100.0	138	100.0	18	100.0	41	100.0	42	100.0	5	100.0	395	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 37% of fatal bus involvements occur from 7:00 to 8:59 a.m. or from 3:00 to 4:59 p.m., primarily due to school buses.
- Overall, 86% of fatal involvements of buses occur during the work week, but this varies by bus type. Over 48% of charter bus involvements occur on the weekend (Saturday and Sunday), compared with only 2.9% for school buses.
- Over 78% of fatal involvements occur on dry roads under “normal” weather conditions (i.e. no rain, snow, fog, or other adverse condition).
- About 70% of the fatal involvements of buses occur in daylight.
- 34.6% of fatal bus involvements occur on local streets (township or municipality), 22.1% on state highways, and 12.8% on county roads.
- Over half of the fatal involvements of buses occur on undivided roads with two-way traffic.
- In 25% of fatal involvements, the bus hit an object in the road; in 11.5% of involvements another vehicle crossed the center line of the road and struck the bus head on; and in 11.5% the bus was struck in the rear by another vehicle. These proportions can differ dramatically by bus type.
- In 63.1% of fatal bus involvements the first harmful event was collision with a motor vehicle; 25.1% involved collision with a pedestrian.
- Of buses that rolled over, eleven rolled to the left and four rolled to the right.





## Temporal distributions

**Table 2-1**  
**Fatal Bus Involvements by Month and Bus Type**  
**BIFA 2000**

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	24	17.4	18	13.5	0	0.0	1	3.2	0	0.0	0	0.0	43	12.0
February	16	11.6	7	5.3	1	6.7	2	6.5	3	8.3	0	0.0	29	8.1
March	16	11.6	15	11.3	1	6.7	2	6.5	5	13.9	0	0.0	39	10.9
April	14	10.1	7	5.3	1	6.7	4	12.9	2	5.6	1	20.0	29	8.1
May	15	10.9	9	6.8	1	6.7	3	9.7	4	11.1	1	20.0	33	9.2
June	3	2.2	17	12.8	5	33.3	1	3.2	6	16.7	1	20.0	33	9.2
July	1	0.7	10	7.5	0	0.0	2	6.5	4	11.1	0	0.0	17	4.7
August	2	1.4	9	6.8	1	6.7	3	9.7	3	8.3	1	20.0	19	5.3
September	12	8.7	7	5.3	2	13.3	1	3.2	2	5.6	0	0.0	24	6.7
October	11	8.0	9	6.8	2	13.3	4	12.9	3	8.3	0	0.0	29	8.1
November	14	10.1	12	9.0	0	0.0	1	3.2	1	2.8	0	0.0	28	7.8
December	10	7.2	13	9.8	1	6.7	7	22.6	3	8.3	1	20.0	35	9.8
<b>Total</b>	<b>138</b>	<b>100.0</b>	<b>133</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>

**Table 2-2**  
**Fatal Bus Involvements by Day of Week and Bus Type**  
**BIFA 2000**

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	1	0.7	6	4.5	2	13.3	8	25.8	2	5.6	0	0.0	19	5.3
Monday	24	17.4	18	13.5	5	33.3	6	19.4	8	22.2	0	0.0	61	17.0
Tuesday	24	17.4	23	17.3	2	13.3	2	6.5	6	16.7	1	20.0	58	16.2
Wednesday	23	16.7	30	22.6	2	13.3	1	3.2	6	16.7	0	0.0	62	17.3
Thursday	29	21.0	21	15.8	1	6.7	2	6.5	1	2.8	3	60.0	57	15.9
Friday	34	24.6	21	15.8	1	6.7	5	16.1	8	22.2	1	20.0	70	19.6
Saturday	3	2.2	14	10.5	2	13.3	7	22.6	5	13.9	0	0.0	31	8.7
<b>Total</b>	<b>138</b>	<b>100.0</b>	<b>133</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>

**Table 2-3**  
**Fatal Bus Involvements by Day Type and Bus Type**  
**BIFA 2000**

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	134	97.1	113	85.0	11	73.3	16	51.6	29	80.6	5	100.0	308	86.0
Weekend	4	2.9	20	15.0	4	26.7	15	48.4	7	19.4	0	0.0	50	14.0
<b>Total</b>	<b>138</b>	<b>100.0</b>	<b>133</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>

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

**Table 2-4**  
**Fatal Bus Involvements by Time of Accident and Bus Type**  
**BIFA 2000**

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	3	2.3	1	6.7	4	12.9	0	0.0	0	0.0	8	2.2
1:00 AM	0	0.0	0	0.0	2	13.3	0	0.0	1	2.8	1	20.0	4	1.1
2:00 AM	0	0.0	1	0.8	1	6.7	1	3.2	0	0.0	0	0.0	3	0.8
3:00 AM	0	0.0	2	1.5	1	6.7	1	3.2	0	0.0	0	0.0	4	1.1
4:00 AM	0	0.0	1	0.8	0	0.0	2	6.5	0	0.0	0	0.0	3	0.8
5:00 AM	2	1.4	8	6.0	0	0.0	2	6.5	3	8.3	0	0.0	15	4.2
6:00 AM	10	7.2	10	7.5	0	0.0	2	6.5	4	11.1	0	0.0	26	7.3
7:00 AM	24	17.4	6	4.5	0	0.0	0	0.0	2	5.6	0	0.0	32	8.9
8:00 AM	20	14.5	8	6.0	1	6.7	3	9.7	6	16.7	0	0.0	38	10.6
9:00 AM	5	3.6	5	3.8	2	13.3	2	6.5	1	2.8	0	0.0	15	4.2
10:00 AM	1	0.7	3	2.3	0	0.0	2	6.5	2	5.6	0	0.0	8	2.2
11:00 AM	4	2.9	6	4.5	0	0.0	1	3.2	2	5.6	0	0.0	13	3.6
Noon	4	2.9	7	5.3	0	0.0	0	0.0	1	2.8	0	0.0	12	3.4
1:00 PM	3	2.2	3	2.3	1	6.7	0	0.0	4	11.1	1	20.0	12	3.4
2:00 PM	12	8.7	5	3.8	2	13.3	1	3.2	2	5.6	1	20.0	23	6.4
3:00 PM	26	18.8	10	7.5	0	0.0	1	3.2	2	5.6	0	0.0	39	10.9
4:00 PM	14	10.1	7	5.3	0	0.0	1	3.2	1	2.8	0	0.0	23	6.4
5:00 PM	3	2.2	9	6.8	3	20.0	1	3.2	3	8.3	0	0.0	19	5.3
6:00 PM	5	3.6	16	12.0	0	0.0	3	9.7	0	0.0	1	20.0	25	7.0
7:00 PM	0	0.0	10	7.5	1	6.7	1	3.2	1	2.8	0	0.0	13	3.6
8:00 PM	0	0.0	3	2.3	0	0.0	1	3.2	0	0.0	1	20.0	5	1.4
9:00 PM	4	2.9	4	3.0	0	0.0	1	3.2	0	0.0	0	0.0	9	2.5
10:00 PM	0	0.0	2	1.5	0	0.0	1	3.2	0	0.0	0	0.0	3	0.8
11:00 PM	1	0.7	4	3.0	0	0.0	0	0.0	1	2.8	0	0.0	6	1.7
<b>Total</b>	<b>138</b>	<b>100.0</b>	<b>133</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>

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

**Table 2-5**  
**Fatal Bus Involvements by Time of Accident and Day Type**  
**BIFA 2000**

Time of accident	Work week		Weekend		Total	
	No.	Pct.	No.	Pct.	No.	Pct.
Midnight	5	1.6	3	6.0	8	2.2
1:00 AM	1	0.3	3	6.0	4	1.1
2:00 AM	2	0.6	1	2.0	3	0.8
3:00 AM	3	1.0	1	2.0	4	1.1
4:00 AM	2	0.6	1	2.0	3	0.8
5:00 AM	13	4.2	2	4.0	15	4.2
6:00 AM	23	7.5	3	6.0	26	7.3
7:00 AM	32	10.4	0	0.0	32	8.9
8:00 AM	33	10.7	5	10.0	38	10.6
9:00 AM	13	4.2	2	4.0	15	4.2
10:00 AM	4	1.3	4	8.0	8	2.2
11:00 AM	11	3.6	2	4.0	13	3.6
Noon	11	3.6	1	2.0	12	3.4
1:00 PM	11	3.6	1	2.0	12	3.4
2:00 PM	20	6.5	3	6.0	23	6.4
3:00 PM	36	11.7	3	6.0	39	10.9
4:00 PM	21	6.8	2	4.0	23	6.4
5:00 PM	17	5.5	2	4.0	19	5.3
6:00 PM	20	6.5	5	10.0	25	7.0
7:00 PM	11	3.6	2	4.0	13	3.6
8:00 PM	4	1.3	1	2.0	5	1.4
9:00 PM	7	2.3	2	4.0	9	2.5
10:00 PM	3	1.0	0	0.0	3	0.8
11:00 PM	5	1.6	1	2.0	6	1.7
Total	308	100.0	50	100.0	358	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 2-6**  
**Fatal Bus Involvements by Land Use and Bus Type**  
**BIFA 2000**

Land use	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Urban	62	44.9	115	86.5	10	66.7	11	35.5	16	44.4	4	80.0	218	60.9
Rural	69	50.0	18	13.5	5	33.3	19	61.3	20	55.6	1	20.0	132	36.9
Unknown	7	5.1	0	0.0	0	0.0	1	3.2	0	0.0	0	0.0	8	2.2
Total	138	100.0	133	100.0	15	100.0	31	100.0	36	100.0	5	100.0	358	100.0

**Table 2-7  
Fatal Bus Involvements by Light Condition and Bus Type  
BIFA 2000**

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	82.6	81	60.9	9	60.0	14	45.2	28	77.8	3	60.0	249	69.6
Dark	7	5.1	5	3.8	3	20.0	12	38.7	3	8.3	1	20.0	31	8.7
Dark but lighted	5	3.6	41	30.8	3	20.0	3	9.7	3	8.3	1	20.0	56	15.6
Dawn	10	7.2	4	3.0	0	0.0	1	3.2	1	2.8	0	0.0	16	4.5
Dusk	2	1.4	2	1.5	0	0.0	0	0.0	1	2.8	0	0.0	5	1.4
Unknown	0	0.0	0	0.0	0	0.0	1	3.2	0	0.0	0	0.0	1	0.3
<b>Total</b>	<b>138</b>	<b>100.0</b>	<b>133</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>

**Table 2-8  
Fatal Bus Involvements by Roadway Surface Condition and Bus Type  
BIFA 2000**

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	111	80.4	100	75.2	13	86.7	24	77.4	28	77.8	5	100.0	281	78.5
Wet	20	14.5	27	20.3	2	13.3	5	16.1	4	11.1	0	0.0	58	16.2
Snow or slush	3	2.2	3	2.3	0	0.0	0	0.0	2	5.6	0	0.0	8	2.2
Ice	3	2.2	3	2.3	0	0.0	2	6.5	2	5.6	0	0.0	10	2.8
Sand, dirt, oil	1	0.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
<b>Total</b>	<b>138</b>	<b>100.0</b>	<b>133</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>

**Table 2-9  
Fatal Bus Involvements by Weather Condition and Bus Type  
BIFA 2000**

Weather condition	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Normal	120	87.0	113	85.0	13	86.7	26	83.9	32	88.9	5	100.0	309	86.3
Rain	8	5.8	13	9.8	2	13.3	1	3.2	2	5.6	0	0.0	26	7.3
Sleet	1	0.7	0	0.0	0	0.0	1	3.2	0	0.0	0	0.0	2	0.6
Snow	3	2.2	3	2.3	0	0.0	0	0.0	1	2.8	0	0.0	7	2.0
Fog	6	4.3	4	3.0	0	0.0	1	3.2	0	0.0	0	0.0	11	3.1
Other	0	0.0	0	0.0	0	0.0	1	3.2	1	2.8	0	0.0	2	0.6
Unknown	0	0.0	0	0.0	0	0.0	1	3.2	0	0.0	0	0.0	1	0.3
<b>Total</b>	<b>138</b>	<b>100.0</b>	<b>133</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>

## Roadway distributions

**Table 2-10**  
**Fatal Bus Involvements by Roadway Function Class and Bus Type**  
**BIFA 2000**

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	4	2.9	5	3.8	2	13.3	3	9.7	1	2.8	2	40.0	17	4.7
Freeway/expressway	2	1.4	7	5.3	0	0.0	1	3.2	1	2.8	0	0.0	11	3.1
Other principal artery	18	13.0	36	27.1	4	26.7	2	6.5	7	19.4	2	40.0	69	19.3
Minor artery	18	13.0	27	20.3	3	20.0	2	6.5	3	8.3	0	0.0	53	14.8
Collector	5	3.6	5	3.8	0	0.0	0	0.0	0	0.0	0	0.0	10	2.8
Local street	14	10.1	32	24.1	1	6.7	3	9.7	3	8.3	0	0.0	53	14.8
Unknown urban	1	0.7	3	2.3	0	0.0	0	0.0	1	2.8	0	0.0	5	1.4
Total urban	62	44.9	115	86.5	10	66.7	11	35.5	16	44.4	4	80.0	218	60.9
<i>Rural</i>														
Interstate	0	0.0	0	0.0	3	20.0	10	32.3	6	16.7	0	0.0	19	5.3
Other principal artery	10	7.2	5	3.8	1	6.7	5	16.1	6	16.7	0	0.0	27	7.5
Minor artery	18	13.0	5	3.8	1	6.7	2	6.5	3	8.3	1	20.0	30	8.4
Major collector	15	10.9	3	2.3	0	0.0	2	6.5	0	0.0	0	0.0	20	5.6
Minor collector	5	3.6	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	6	1.7
Local road	18	13.0	4	3.0	0	0.0	0	0.0	4	11.1	0	0.0	26	7.3
Unknown rural	3	2.2	0	0.0	0	0.0	0	0.0	1	2.8	0	0.0	4	1.1
Total rural	69	50.0	18	13.5	5	33.3	19	61.3	20	55.6	1	20.0	132	36.9
<i>Unknown</i>	7	5.1	0	0.0	0	0.0	1	3.2	0	0.0	0	0.0	8	2.2
Total urban and rural	138	100.0	133	100.0	15	100.0	31	100.0	36	100.0	5	100.0	358	100.0

**Table 2-11**  
**Fatal Bus Involvements by Route Signing and Bus Type**  
**BIFA 2000**

Route signing	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Interstate	4	2.9	4	3.0	4	26.7	13	41.9	7	19.4	2	40.0	34	9.5
US highway	20	14.5	15	11.3	2	13.3	3	9.7	8	22.2	1	20.0	49	13.7
State highway	35	25.4	27	20.3	1	6.7	8	25.8	8	22.2	0	0.0	79	22.1
County road	29	21.0	9	6.8	0	0.0	1	3.2	7	19.4	0	0.0	46	12.8
Township	4	2.9	12	9.0	1	6.7	0	0.0	1	2.8	0	0.0	18	5.0
Municipality	34	24.6	57	42.9	6	40.0	5	16.1	2	5.6	2	40.0	106	29.6
Frontage road	1	0.7	2	1.5	1	6.7	0	0.0	0	0.0	0	0.0	4	1.1
Other	8	5.8	6	4.5	0	0.0	0	0.0	2	5.6	0	0.0	16	4.5
Unknown	3	2.2	1	0.8	0	0.0	1	3.2	1	2.8	0	0.0	6	1.7
Total	138	100.0	133	100.0	15	100.0	31	100.0	36	100.0	5	100.0	358	100.0

**Table 2-12**  
**Fatal Bus Involvements by Relation to Junction and Bus Type**  
**BIFA 2000**

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	79	57.2	75	56.4	6	40.0	20	64.5	21	58.3	4	80.0	205	57.3
Intersection	40	29.0	41	30.8	6	40.0	8	25.8	10	27.8	1	20.0	106	29.6
Intersection related	7	5.1	14	10.5	3	20.0	0	0.0	4	11.1	0	0.0	28	7.8
Driveway, alley, etc.	3	2.2	1	0.8	0	0.0	0	0.0	1	2.8	0	0.0	5	1.4
Entrance/exit ramp	0	0.0	0	0.0	0	0.0	1	3.2	0	0.0	0	0.0	1	0.3
Rail grade crossing	2	1.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.6
<i>Interchange area</i>														
Intersection	6	4.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	6	1.7
Entrance/exit ramp	1	0.7	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	2	0.6
In crossover	0	0.0	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Other location	0	0.0	0	0.0	0	0.0	2	6.5	0	0.0	0	0.0	2	0.6
<b>Total</b>	<b>138</b>	<b>100.0</b>	<b>133</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>

**Table 2-13**  
**Fatal Bus Involvements by Number of Travel Lanes and Bus Type**  
**BIFA 2000**

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	3	2.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	0.8
2	106	76.8	75	56.4	7	46.7	18	58.1	27	75.0	3	60.0	236	65.9
3	7	5.1	20	15.0	5	33.3	4	12.9	4	11.1	0	0.0	40	11.2
4	15	10.9	28	21.1	2	13.3	6	19.4	5	13.9	2	40.0	58	16.2
5	2	1.4	0	0.0	1	6.7	0	0.0	0	0.0	0	0.0	3	0.8
6	2	1.4	5	3.8	0	0.0	2	6.5	0	0.0	0	0.0	9	2.5
9	3	2.2	5	3.8	0	0.0	1	3.2	0	0.0	0	0.0	9	2.5
<b>Total</b>	<b>138</b>	<b>100.0</b>	<b>133</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>

**Table 2-14**  
**Fatal Bus Involvements by Trafficway Flow and Bus Type**  
**BIFA 2000**

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	99	71.7	64	48.1	4	26.7	11	35.5	19	52.8	3	60.0	200	55.9
Median – no barrier	25	18.1	45	33.8	5	33.3	14	45.2	16	44.4	0	0.0	105	29.3
Median w/barrier	6	4.3	12	9.0	1	6.7	4	12.9	1	2.8	2	40.0	26	7.3
One-way traffic	5	3.6	10	7.5	5	33.3	1	3.2	0	0.0	0	0.0	21	5.9
Unknown	3	2.2	2	1.5	0	0.0	1	3.2	0	0.0	0	0.0	6	1.7
<b>Total</b>	<b>138</b>	<b>100.0</b>	<b>133</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>

**Table 2-15**  
**Fatal Bus Involvements by Speed Limit and Bus Type**  
**BIFA 2000**

Speed limit	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
No stat. limit	0	0.0	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
15	2	1.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.6
20	0	0.0	0	0.0	0	0.0	0	0.0	1	2.8	0	0.0	1	0.3
25	10	7.2	17	12.8	2	13.3	0	0.0	2	5.6	0	0.0	31	8.7
30	9	6.5	22	16.5	3	20.0	3	9.7	1	2.8	2	40.0	40	11.2
35	17	12.3	35	26.3	1	6.7	3	9.7	4	11.1	0	0.0	60	16.8
40	12	8.7	14	10.5	0	0.0	1	3.2	1	2.8	0	0.0	28	7.8
45	22	15.9	20	15.0	1	6.7	1	3.2	9	25.0	0	0.0	53	14.8
50	11	8.0	5	3.8	0	0.0	1	3.2	1	2.8	0	0.0	18	5.0
55	37	26.8	8	6.0	1	6.7	7	22.6	4	11.1	2	40.0	59	16.5
60	4	2.9	1	0.8	0	0.0	0	0.0	3	8.3	0	0.0	8	2.2
65	8	5.8	5	3.8	2	13.3	5	16.1	4	11.1	1	20.0	25	7.0
70	2	1.4	0	0.0	3	20.0	7	22.6	3	8.3	0	0.0	15	4.2
75	0	0.0	0	0.0	0	0.0	2	6.5	2	5.6	0	0.0	4	1.1
Unknown	4	2.9	5	3.8	2	13.3	1	3.2	1	2.8	0	0.0	13	3.6
<b>Total</b>	<b>138</b>	<b>100.0</b>	<b>133</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>



## Accident description

**Table 2-16**  
**Fatal Bus Involvements by Accident Type and Bus Type**  
**BIFA 2000**

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	4	2.9	0	0.0	0	0.0	0	0.0	8	22.2	0	0.0	12	3.4
Hit object in road	23	16.7	48	36.1	5	33.3	5	16.1	5	13.9	2	40.0	88	24.6
<i>Same direction, same trafficway</i>														
Rearend, bus striking	1	0.7	1	0.8	0	0.0	3	9.7	1	2.8	1	20.0	7	2.0
Rearend, bus struck	18	13.0	18	13.5	0	0.0	3	9.7	2	5.6	0	0.0	41	11.5
Sideswipe, in other's lane	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Sideswipe, in bus's lane	2	1.4	2	1.5	0	0.0	1	3.2	0	0.0	0	0.0	5	1.4
<i>Opposite direction, same trafficway</i>														
Head-on, in other's lane	3	2.2	0	0.0	0	0.0	1	3.2	1	2.8	0	0.0	5	1.4
Head-on, in bus's lane	24	17.4	12	9.0	1	6.7	2	6.5	1	2.8	1	20.0	41	11.5
Sideswipe, in other's lane	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Sideswipe, in bus's lane	5	3.6	1	0.8	0	0.0	0	0.0	1	2.8	0	0.0	7	2.0
<i>Change trafficway, one vehicle turning</i>														
Bus turn across path	10	7.2	4	3.0	1	6.7	1	3.2	1	2.8	0	0.0	17	4.7
Other turn across path	7	5.1	7	5.3	0	0.0	0	0.0	3	8.3	1	20.0	18	5.0
<i>Intersecting paths, both going straight</i>														
Bus into side of other	9	6.5	9	6.8	2	13.3	2	6.5	3	8.3	0	0.0	25	7.0
Other into side of bus	9	6.5	2	1.5	2	13.3	1	3.2	1	2.8	0	0.0	15	4.2
<i>Other accident types</i>														
Other	16	11.6	14	10.5	4	26.7	11	35.5	7	19.4	0	0.0	52	14.5
Unknown	7	5.1	15	11.3	0	0.0	1	3.2	2	5.6	0	0.0	25	7.0
<b>Total</b>	<b>138</b>	<b>100.0</b>	<b>133</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>

**Table 2-17  
Fatal Bus Involvements by First Harmful Event and Bus Type  
BIFA 2000**

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	2	1.4	0	0.0	0	0.0	0	0.0	2	5.6	0	0.0	4	1.1
Fell from vehicle	3	2.2	0	0.0	0	0.0	1	3.2	0	0.0	0	0.0	4	1.1
Injured in vehicle	0	0.0	2	1.5	0	0.0	0	0.0	1	2.8	0	0.0	3	0.8
Other noncollision	1	0.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
<i>Collision with nonfixed object</i>														
Pedestrian	24	17.4	49	36.8	4	26.7	6	19.4	5	13.9	2	40.0	90	25.1
Pedalcycle	2	1.4	5	3.8	2	13.3	0	0.0	0	0.0	0	0.0	9	2.5
Railway train	1	0.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Motor vehicle in transport	97	70.3	72	54.1	7	46.7	18	58.1	21	58.3	3	60.0	218	60.9
Veh. in transport – other roadway	3	2.2	1	0.8	1	6.7	2	6.5	1	2.8	0	0.0	8	2.2
Parked motor vehicle	0	0.0	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Other type nonmotorist	0	0.0	0	0.0	0	0.0	0	0.0	1	2.8	0	0.0	1	0.3
Other nonfixed object	0	0.0	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
<i>Collision with fixed object</i>														
Guardrail	0	0.0	0	0.0	0	0.0	2	6.5	1	2.8	0	0.0	3	0.8
Concrete traffic barrier	0	0.0	0	0.0	0	0.0	1	3.2	0	0.0	0	0.0	1	0.3
Highway/traffic sign post	1	0.7	0	0.0	0	0.0	1	3.2	1	2.8	0	0.0	3	0.8
Utility pole	1	0.7	0	0.0	0	0.0	0	0.0	1	2.8	0	0.0	2	0.6
Culvert	1	0.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Curb	0	0.0	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Ditch	1	0.7	0	0.0	0	0.0	0	0.0	2	5.6	0	0.0	3	0.8
Tree	1	0.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Other fixed object	0	0.0	1	0.8	1	6.7	0	0.0	0	0.0	0	0.0	2	0.6
<b>Total</b>	<b>138</b>	<b>100.0</b>	<b>133</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>

**Table 2-18  
Fatal Bus Involvements by Vehicle Role in Accident and Bus Type  
BIFA 2000**

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	5	3.6	2	1.5	0	0.0	1	3.2	3	8.3	0	0.0	11	3.1
Striking	79	57.2	87	65.4	12	80.0	20	64.5	21	58.3	5	100.0	224	62.6
Struck	52	37.7	43	32.3	3	20.0	10	32.3	12	33.3	0	0.0	120	33.5
Both	2	1.4	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	3	0.8
<b>Total</b>	<b>138</b>	<b>100.0</b>	<b>133</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>

**Table 2-19**  
**Fatal Bus Involvements by Manner of Collision and Bus Type**  
**BIFA 2000**

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	38	27.5	60	45.1	7	46.7	11	35.5	14	38.9	2	40.0	132	36.9
Rear-end	21	15.2	24	18.0	0	0.0	7	22.6	6	16.7	2	40.0	60	16.8
Head-on	32	23.2	16	12.0	2	13.3	4	12.9	5	13.9	1	20.0	60	16.8
Angle	44	31.9	28	21.1	6	40.0	8	25.8	10	27.8	0	0.0	96	26.8
Sideswipe: same direction	2	1.4	4	3.0	0	0.0	1	3.2	0	0.0	0	0.0	7	2.0
Sideswipe: opp. direction	0	0.0	1	0.8	0	0.0	0	0.0	1	2.8	0	0.0	2	0.6
Unknown	1	0.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
<b>Total</b>	<b>138</b>	<b>100.0</b>	<b>133</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>

**Table 2-20**  
**Fatal Bus Involvements by Rollover Status and Bus Type**  
**BIFA 2000**

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	132	95.7	132	99.2	15	100.0	30	96.8	31	86.1	5	100.0	345	96.4
First event	2	1.4	0	0.0	0	0.0	0	0.0	2	5.6	0	0.0	4	1.1
Subsequent event	4	2.9	1	0.8	0	0.0	1	3.2	3	8.3	0	0.0	9	2.5
<b>Total</b>	<b>138</b>	<b>100.0</b>	<b>133</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>

**Table 2-21**  
**Fatal Bus Involvements by Number of Quarter Turns and Direction of Roll**  
**BIFA 2000**

Number of quarter turns	Roll left		Roll right		Total	
	No.	Pct.	No.	Pct.	No.	Pct.
1	7	63.6	2	50.0	9	60.0
4	2	18.2	0	0.0	2	13.3
5	0	0.0	2	50.0	2	13.3
8	1	9.1	0	0.0	1	6.7
9	1	9.1	0	0.0	1	6.7
<b>Total</b>	<b>11</b>	<b>100.0</b>	<b>4</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>

Note: The BIFA survey found two more rollovers than FARS reported.

**Table 2-22**  
**Fatal Bus Involvements by Fire Occurrence and Bus Type**  
**BIFA 2000**

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	138	100.0	132	99.2	15	100.0	31	100.0	36	100.0	5	100.0	357	99.7
Fire in vehicle	0	0.0	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
<b>Total</b>	<b>138</b>	<b>100.0</b>	<b>133</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>



# Vehicle

This section provides statistics that describe the physical configuration of buses involved in a fatal accident during 2000. 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 38.5% of all buses involved in a fatal accident; transit buses accounted for 37.2% of the buses.
- Over 91% of the buses involved in a fatal crash were less than fifteen years old, and 69.6% were less than 10 years old.
- Two-thirds of the buses were 31-40 feet in length, and almost three-quarters had a Gross Vehicle Weight Rating (GVWR) of Class 6 to Class 8.
- School buses had a larger average seating capacity than other bus types, with 63% having a seating capacity of 61 or more.
- 20.7% of buses involved in fatal accidents were not carrying any passengers at the time of the accident.
- 14.0% of the buses were operated by interstate for-hire carriers, 15.1% by interstate government carriers, and 48.6% by intrastate government carriers (primarily transit buses and school buses).
- Almost 75% 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  
BIFA 2000**

<b>Operator type</b>		
Bus vehicle description	No.	Pct.
<b>School</b>		
Small (17-25 feet length)	8	2.2
Mid-size (27-34 feet length)	12	3.4
Full-size (35-45 feet length)	66	18.4
Conventional school bus	5	1.4
Transit-style	36	10.1
Special needs	7	2.0
Large passenger van	2	0.6
Other/unknown type	2	0.6
<i>Total school bus</i>	138	38.5
<b>Transit</b>		
Heavy-duty	94	26.3
Articulated heavy-duty	6	1.7
Long-distance coach	7	2.0
Small shuttle bus	6	1.7
Special needs	5	1.4
Shorter transit bus	2	0.6
Other	13	3.6
<i>Total transit bus</i>	133	37.2
<b>Intercity</b>		
Long-distance coach	14	3.9
Heavy-duty	1	0.3
<i>Total intercity bus</i>	15	4.2
<b>Charter</b>		
Long-distance coach	24	6.7
Touring coach	2	0.6
Double-decked sightseeing bus	1	0.3
Other	4	1.1
<i>Total charter bus</i>	31	8.7
<b>Other</b>		
School bus	3	0.8
Small shuttle bus	10	2.8
Small jitney bus	1	0.3
Special needs	1	0.3
Transit-style bus	5	1.4
Large passenger van	8	2.2
Long-distance coach	3	0.8
Prison coach	1	0.3
Other/unknown type	4	1.1
<i>Total other operator type</i>	36	10.1
<b>Unknown</b>		
Large passenger van	1	0.3
Long-distance coach	3	0.8
Other	1	0.3
<i>Total unknown operator type</i>	5	1.4
<b>Total</b>	<b>358</b>	<b>100.0</b>

Note: Bus vehicle description records descriptions from respondents.



**Table 3-2**  
**Fatal Bus Involvements by Operator Type and Bus Operator Description**  
**BIFA 2000**

<b>Operator type</b>	<b>No.</b>	<b>Pct.</b>
Operating authority description		
<b>School</b>		
Contracted carrier for school district	39	10.9
Indian reservation school district	1	0.3
Non-profit charter school	1	0.3
Private school	2	0.6
Public school district	93	26.0
Special needs school student transportation	1	0.3
Student transportation by church	1	0.3
<i>Total school bus</i>	138	38.5
<b>Transit</b>		
Contracted carrier for transit authority	3	0.8
Contracted carrier for transit-paratransit system	1	0.3
Contracted carrier for urban transit authority	1	0.3
Scheduled route & on-demand paratransit urban area	1	0.3
Scheduled route & paratransit regional urban area	1	0.3
Scheduled route regional area	4	1.1
Scheduled route regional urban area	81	22.6
Scheduled route urban area	41	11.5
<i>Total transit bus</i>	133	37.2
<b>Intercity</b>		
Interstate passenger & express freight	13	3.6
Scheduled route intercity service	1	0.3
Scheduled route regional urban area	1	0.3
<i>Total intercity bus</i>	15	4.2
<b>Charter</b>		
Charter service	31	8.7
<i>Total charter bus</i>	31	8.7
<b>Other</b>		
Church use	7	2.0
Coach leasing to entertainment industry	1	0.3
Contracted carrier for county council on aging	1	0.3
Day care center	1	0.3
Department of youth authority	1	0.3
Drive away company delivering new bus	2	0.6
Drive away delivery of used bus	1	0.3
Employee transportation	2	0.6
Family resource agency	1	0.3
Farm worker transportation	1	0.3
Hospital patient transportation	1	0.3
Hotel shuttle service	1	0.3
Local jitney association	1	0.3
Non-profit charitable organization	2	0.6
Non-profit sheltered workshop organization	1	0.3
On-demand municipal shuttle service	2	0.6
On-demand shuttle service	1	0.3
Paid carrier for farm worker transport	1	0.3
Property management customer shuttle service	1	0.3
Resort guest shuttle service	1	0.3
Scheduled route regional rural area	1	0.3
Scheduled route university transit	1	0.3
Senior citizen community transportation	1	0.3
Special needs employment and training center	1	0.3
State department of corrections	1	0.3
Unknown	1	0.3
<i>Total other operator type</i>	36	10.1
<b>Unknown</b>	5	1.4
<b>Total</b>	358	100.0

Note: The operator authority records descriptions from respondents.

**Table 3-3  
Fatal Bus Involvements by Bus Body Style and Bus Type  
BIFA 2000**

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	135	97.8	132	99.2	15	100.0	30	96.8	28	77.8	4	80.0	344	96.1
Large van	2	1.4	0	0.0	0	0.0	1	3.2	8	22.2	1	20.0	12	3.4
Other	1	0.7	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	2	0.6
<b>Total</b>	<b>138</b>	<b>100.0</b>	<b>133</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>

**Table 3-4  
Fatal Bus Involvements by Bus Body Configuration and Bus Type  
BIFA 2000**

Bus body configuration	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Big cowl and chassis	93	67.4	1	0.8	0	0.0	0	0.0	6	16.7	0	0.0	100	27.9
Low platform	36	26.1	117	88.0	1	6.7	1	3.2	7	19.4	0	0.0	162	45.3
High platform	0	0.0	7	5.3	14	93.3	26	83.9	4	11.1	3	60.0	54	15.1
Small cowl and chassis	6	4.3	6	4.5	0	0.0	2	6.5	10	27.8	1	20.0	25	7.0
Other	3	2.2	1	0.8	0	0.0	2	6.5	9	25.0	1	20.0	16	4.5
Unknown	0	0.0	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
<b>Total</b>	<b>138</b>	<b>100.0</b>	<b>133</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>

**Table 3-5  
Fatal Bus Involvements by Front of Bus Style and Bus Type  
BIFA 2000**

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	102	73.9	8	6.0	0	0.0	3	9.7	25	69.4	2	40.0	140	39.1
Flat front	36	26.1	124	93.2	15	100.0	28	90.3	11	30.6	3	60.0	217	60.6
Unknown	0	0.0	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
<b>Total</b>	<b>138</b>	<b>100.0</b>	<b>133</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>

**Table 3-6**  
**Fatal Bus Involvements by Model Year and Front of Bus Style**  
**BIFA 2000**

Model year	Conventional		Flat front		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
1975	1	0.7	0	0.0	0	0.0	1	0.3
1981	2	1.4	1	0.5	0	0.0	3	0.8
1982	1	0.7	3	1.4	0	0.0	4	1.1
1983	0	0.0	4	1.8	0	0.0	4	1.1
1984	3	2.1	4	1.8	0	0.0	7	2.0
1985	3	2.1	7	3.2	0	0.0	10	2.8
1986	7	5.0	4	1.8	0	0.0	11	3.1
1987	5	3.6	11	5.1	0	0.0	16	4.5
1988	2	1.4	13	6.0	0	0.0	15	4.2
1989	5	3.6	17	7.8	0	0.0	22	6.1
1990	4	2.9	10	4.6	0	0.0	14	3.9
1991	12	8.6	8	3.7	0	0.0	20	5.6
1992	9	6.4	10	4.6	1	100.0	20	5.6
1993	5	3.6	17	7.8	0	0.0	22	6.1
1994	6	4.3	8	3.7	0	0.0	14	3.9
1995	13	9.3	7	3.2	0	0.0	20	5.6
1996	7	5.0	17	7.8	0	0.0	24	6.7
1997	14	10.0	18	8.3	0	0.0	32	8.9
1998	17	12.1	16	7.4	0	0.0	33	9.2
1999	17	12.1	25	11.5	0	0.0	42	11.7
2000	5	3.6	17	7.8	0	0.0	22	6.1
2001	2	1.4	0	0.0	0	0.0	2	0.6
<b>Total</b>	<b>140</b>	<b>100.0</b>	<b>217</b>	<b>100.0</b>	<b>1</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>

**Table 3-7  
Fatal Bus Involvements by Model Year and Bus Type  
BIFA 2000**

Model year	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
1975	1	0.7	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	3.2	2	5.6	0	0.0	3	0.8
1982	1	0.7	2	1.5	0	0.0	1	3.2	0	0.0	0	0.0	4	1.1
1983	1	0.7	2	1.5	0	0.0	1	3.2	0	0.0	0	0.0	4	1.1
1984	1	0.7	1	0.8	0	0.0	3	9.7	2	5.6	0	0.0	7	2.0
1985	2	1.4	5	3.8	0	0.0	1	3.2	2	5.6	0	0.0	10	2.8
1986	7	5.1	3	2.3	1	6.7	0	0.0	0	0.0	0	0.0	11	3.1
1987	3	2.2	8	6.0	0	0.0	2	6.5	3	8.3	0	0.0	16	4.5
1988	0	0.0	12	9.0	0	0.0	1	3.2	2	5.6	0	0.0	15	4.2
1989	9	6.5	9	6.8	1	6.7	1	3.2	2	5.6	0	0.0	22	6.1
1990	5	3.6	8	6.0	0	0.0	0	0.0	1	2.8	0	0.0	14	3.9
1991	13	9.4	5	3.8	0	0.0	0	0.0	2	5.6	0	0.0	20	5.6
1992	8	5.8	11	8.3	0	0.0	0	0.0	1	2.8	0	0.0	20	5.6
1993	6	4.3	11	8.3	3	20.0	1	3.2	1	2.8	0	0.0	22	6.1
1994	6	4.3	5	3.8	1	6.7	1	3.2	0	0.0	1	20.0	14	3.9
1995	11	8.0	4	3.0	0	0.0	2	6.5	1	2.8	2	40.0	20	5.6
1996	5	3.6	13	9.8	1	6.7	3	9.7	2	5.6	0	0.0	24	6.7
1997	15	10.9	13	9.8	1	6.7	2	6.5	1	2.8	0	0.0	32	8.9
1998	16	11.6	7	5.3	1	6.7	4	12.9	5	13.9	0	0.0	33	9.2
1999	17	12.3	12	9.0	3	20.0	5	16.1	4	11.1	1	20.0	42	11.7
2000	9	6.5	2	1.5	3	20.0	2	6.5	5	13.9	1	20.0	22	6.1
2001	2	1.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.6
<b>Total</b>	<b>138</b>	<b>100.0</b>	<b>133</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>

**Table 3-8  
Fatal Bus Involvements by Bus Length and Bus Type  
BIFA 2000**

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	7	5.1	1	0.8	0	0.0	1	3.2	10	27.8	1	20.0	20	5.6
21-25	5	3.6	7	5.3	0	0.0	0	0.0	7	19.4	0	0.0	19	5.3
26-30	6	4.3	7	5.3	0	0.0	2	6.5	4	11.1	0	0.0	19	5.3
31-35	34	24.6	11	8.3	0	0.0	2	6.5	1	2.8	0	0.0	48	13.4
36-40	70	50.7	89	66.9	9	60.0	14	45.2	7	19.4	2	40.0	191	53.4
41-45	5	3.6	9	6.8	6	40.0	8	25.8	2	5.6	0	0.0	30	8.4
46-50	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0.0	0.0
51-55	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0.0	0.0
56-60	0	0.0	6	4.5	0	0.0	0	0.0	0	0.0	0	0.0	6	1.7
Est. <= 35	1	0.7	0	0.0	0	0.0	0	0.0	2	5.6	0	0.0	3	0.8
Est. > 35	3	2.2	0	0.0	0	0.0	1	3.2	1	2.8	0	0.0	5	1.4
Unknown	7	5.1	3	2.3	0	0.0	3	9.7	2	5.6	2	40.0	17	4.7
<b>Total</b>	<b>138</b>	<b>100.0</b>	<b>133</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>

**Table 3-9**  
**Fatal Bus Involvements by Bus Empty Weight and Bus Type**  
**BIFA 2000**

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	2.2	0	0.0	0	0.0	0	0.0	5	13.9	0	0.0	8	2.2
6,001-10,000	6	4.3	7	5.3	0	0.0	1	3.2	11	30.6	1	20.0	26	7.3
10,001-15,000	9	6.5	2	1.5	0	0.0	1	3.2	3	8.3	0	0.0	15	4.2
15,001-20,000	104	75.4	2	1.5	0	0.0	2	6.5	5	13.9	0	0.0	113	31.6
20,001-25,000	8	5.8	5	3.8	0	0.0	1	3.2	2	5.6	0	0.0	16	4.5
25,001-30,000	1	0.7	102	76.7	9	60.0	15	48.4	3	8.3	0	0.0	130	36.3
30,001-35,000	0	0.0	4	3.0	0	0.0	5	16.1	1	2.8	2	40.0	12	3.4
35,001-40,000	0	0.0	4	3.0	6	40.0	2	6.5	1	2.8	0	0.0	13	3.6
40,001-46,000	0	0.0	4	3.0	0	0.0	0	0.0	0	0.0	0	0.0	4	1.1
Unknown	7	5.1	3	2.3	0	0.0	4	12.9	5	13.9	2	40.0	21	5.9
<b>Total</b>	<b>138</b>	<b>100.0</b>	<b>133</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>

**Table 3-10**  
**Fatal Bus Involvements by Gross Vehicle Weight Rating and Bus Type**  
**BIFA 2000**

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	8	5.8	1	0.8	0	0.0	1	3.2	7	19.4	1	20.0	18	5.0
Class 3: 10,001-14,000	0	0.0	4	3.0	0	0.0	1	3.2	8	22.2	1	20.0	14	3.9
Class 4: 14,001-16,000	0	0.0	2	1.5	0	0.0	1	3.2	2	5.6	0	0.0	5	1.4
Class 5: 16,001-19,500	1	0.7	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	2	0.6
Class 6: 19,501-26,000	20	14.5	1	0.8	0	0.0	1	3.2	4	11.1	0	0.0	26	7.3
Class 7: 26,001-33,000	75	54.3	0	0.0	0	0.0	0	0.0	2	5.6	0	0.0	77	21.5
Class 8: 33,001 or more	5	3.6	108	81.2	15	100.0	24	77.4	7	19.4	3	60.0	162	45.3
Unknown	29	21.0	16	12.0	0	0.0	3	9.7	6	16.7	0	0.0	54	15.1
<b>Total</b>	<b>138</b>	<b>100.0</b>	<b>133</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>

**Table 3-11**  
**Fatal Bus Involvements by Number of Axles and Bus Type**  
**BIFA 2000**

Axles	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
2 axles	138	100.0	119	89.5	1	6.7	8	25.8	32	88.9	2	40.0	300	83.8
3 axles	0	0.0	13	9.8	14	93.3	23	74.2	4	11.1	3	60.0	57	15.9
Unknown	0	0.0	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
<b>Total</b>	<b>138</b>	<b>100.0</b>	<b>133</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>

**Table 3-12**  
**Fatal Bus Involvements by Passenger Seating Capacity (Excluding Driver) and Bus Type**  
**BIFA 2000**

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	3	2.2	4	3.0	0	0.0	1	3.2	11	30.6	1	20.0	20	5.6
15-20	5	3.6	4	3.0	0	0.0	0	0.0	6	16.7	0	0.0	15	4.2
21-25	3	2.2	1	0.8	0	0.0	1	3.2	5	13.9	1	20.0	11	3.1
26-30	1	0.7	9	6.8	0	0.0	1	3.2	2	5.6	0	0.0	13	3.6
31-35	2	1.4	4	3.0	0	0.0	1	3.2	2	5.6	0	0.0	9	2.5
36-40	2	1.4	29	21.8	1	6.7	1	3.2	1	2.8	0	0.0	34	9.5
41-45	3	2.2	48	36.1	0	0.0	0	0.0	2	5.6	1	20.0	54	15.1
46-50	11	8.0	20	15.0	8	53.3	7	22.6	3	8.3	1	20.0	50	14.0
51-55	5	3.6	3	2.3	6	40.0	7	22.6	0	0.0	0	0.0	21	5.9
56-60	8	5.8	3	2.3	0	0.0	5	16.1	1	2.8	0	0.0	17	4.7
61-65	25	18.1	3	2.3	0	0.0	1	3.2	0	0.0	0	0.0	29	8.1
66-70	10	7.2	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	11	3.1
71-75	36	26.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	36	10.1
76-80	4	2.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4	1.1
81+	12	8.7	0	0.0	0	0.0	0	0.0	1	2.8	0	0.0	13	3.6
Est. 8-14	0	0.0	0	0.0	0	0.0	1	3.2	0	0.0	0	0.0	1	0.3
Est. 15 or more	2	1.4	2	1.5	0	0.0	4	12.9	2	5.6	0	0.0	10	2.8
Unknown	6	4.3	2	1.5	0	0.0	1	3.2	0	0.0	1	20.0	10	2.8
<b>Total</b>	<b>138</b>	<b>100.0</b>	<b>133</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>

**Table 3-13**  
**Fatal Bus Involvements by Number of Passengers and Bus Type**  
**BIFA 2000**

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	38	27.5	20	15.0	3	20.0	5	16.1	7	19.4	1	20.0	74	20.7
1-3	18	13.0	25	18.8	0	0.0	1	3.2	7	19.4	2	40.0	53	14.8
4-6	10	7.2	15	11.3	2	13.3	1	3.2	7	19.4	0	0.0	35	9.8
7-10	13	9.4	13	9.8	0	0.0	2	6.5	4	11.1	0	0.0	32	8.9
11-15	9	6.5	7	5.3	1	6.7	1	3.2	4	11.1	0	0.0	22	6.1
16-20	9	6.5	8	6.0	2	13.3	2	6.5	2	5.6	0	0.0	23	6.4
21-25	12	8.7	5	3.8	0	0.0	2	6.5	2	5.6	0	0.0	21	5.9
26-30	6	4.3	1	0.8	0	0.0	4	12.9	0	0.0	0	0.0	11	3.1
31-35	3	2.2	0	0.0	1	6.7	2	6.5	1	2.8	0	0.0	7	2.0
36-40	3	2.2	1	0.8	2	13.3	3	9.7	1	2.8	0	0.0	10	2.8
41-45	2	1.4	2	1.5	3	20.0	1	3.2	0	0.0	0	0.0	8	2.2
46-50	2	1.4	2	1.5	0	0.0	0	0.0	0	0.0	0	0.0	4	1.1
51+	6	4.3	0	0.0	1	6.7	2	6.5	0	0.0	0	0.0	9	2.5
Est. <15	1	0.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Est. 15 or more	2	1.4	1	0.8	0	0.0	1	3.2	0	0.0	0	0.0	4	1.1
Unknown	4	2.9	33	24.8	0	0.0	4	12.9	1	2.8	2	40.0	44	12.3
<b>Total</b>	<b>138</b>	<b>100.0</b>	<b>133</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>

**Table 3-14**  
**Fatal Bus Involvements by Type of Passenger Restraints Available (Excluding Driver) and Bus Type**  
**BIFA 2000**

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.
Lap	20	14.5	8	6.0	0	0.0	3	9.7	12	33.3	1	20.0	44	12.3
Lap & shoulder	5	3.6	2	1.5	0	0.0	1	3.2	7	19.4	0	0.0	15	4.2
None	105	76.1	119	89.5	15	100.0	25	80.6	16	44.4	2	40.0	282	78.8
Unknown	8	5.8	4	3.0	0	0.0	2	6.5	1	2.8	2	40.0	17	4.7
<b>Total</b>	<b>138</b>	<b>100.0</b>	<b>133</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>

**Table 3-15**  
**Fatal Bus Involvements by Carrier Type and Bus Type**  
**BIFA 2000**

Carrier type	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
<b>Interstate</b>														
Private	0	0.0	0	0.0	0	0.0	0	0.0	9	25.0	0	0.0	9	2.5
For-hire	11	8.0	0	0.0	13	86.7	23	74.2	0	0.0	3	60.0	50	14.0
Government owned	33	23.9	20	15.0	1	6.7	0	0.0	0	0.0	0	0.0	54	15.1
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	20.0	1	0.3
<b>Intrastate</b>														
Private	4	2.9	0	0.0	0	0.0	0	0.0	9	25.0	0	0.0	13	3.6
For-hire	24	17.4	6	4.5	0	0.0	4	12.9	6	16.7	0	0.0	40	11.2
Government owned	60	43.5	107	80.5	1	6.7	0	0.0	6	16.7	0	0.0	174	48.6
Unknown	6	4.3	0	0.0	0	0.0	4	12.9	6	16.7	1	20.0	17	4.7
<b>Total</b>	<b>138</b>	<b>100.0</b>	<b>133</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>

**Table 3-16**  
**Fatal Bus Involvements by Trip Type and Bus Type**  
**BIFA 2000**

Trip type	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Local	123	89.1	112	84.2	2	13.3	6	19.4	22	61.1	1	20.0	266	74.3
51-100 miles	4	2.9	7	5.3	0	0.0	4	12.9	2	5.6	1	20.0	18	5.0
101-200	0	0.0	4	3.0	0	0.0	3	9.7	0	0.0	0	0.0	7	2.0
201-500	2	1.4	3	2.3	12	80.0	9	29.0	4	11.1	1	20.0	31	8.7
Over 500	0	0.0	0	0.0	0	0.0	3	9.7	5	13.9	0	0.0	8	2.2
Unk. over-the-road distance	0	0.0	0	0.0	1	6.7	1	3.2	0	0.0	0	0.0	2	0.6
Unknown	9	6.5	7	5.3	0	0.0	5	16.1	3	8.3	2	40.0	26	7.3
<b>Total</b>	<b>138</b>	<b>100.0</b>	<b>133</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>

**Table 3-17**  
**Fatal Bus Involvements by Most Harmful Event and Bus Type**  
**BIFA 2000**

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	2	1.4	0	0.0	0	0.0	1	3.2	4	11.1	0	0.0	7	2.0
Fell from vehicle	3	2.2	0	0.0	0	0.0	1	3.2	0	0.0	0	0.0	4	1.1
Injured in vehicle	0	0.0	2	1.5	0	0.0	0	0.0	1	2.8	0	0.0	3	0.8
Veh. occupant struck	0	0.0	0	0.0	0	0.0	0	0.0	1	2.8	0	0.0	1	0.3
<i>Collision with nonfixed object</i>														
Pedestrian	23	16.7	48	36.1	4	26.7	6	19.4	5	13.9	2	40.0	88	24.6
Pedalcycle	2	1.4	5	3.8	2	13.3	0	0.0	0	0.0	0	0.0	9	2.5
Railway train	1	0.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Vehicle in transport	101	73.2	78	58.6	9	60.0	23	74.2	22	61.1	3	60.0	236	65.9
Veh. in transport-other	2	1.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.6
Other type nonmotorist	0	0.0	0	0.0	0	0.0	0	0.0	1	2.8	0	0.0	1	0.3
<i>Collision with fixed object</i>														
Utility pole	1	0.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Ditch	1	0.7	0	0.0	0	0.0	0	0.0	1	2.8	0	0.0	2	0.6
Embankment - earth	0	0.0	0	0.0	0	0.0	0	0.0	1	2.8	0	0.0	1	0.3
Embankment - type unknown	1	0.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Tree	1	0.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
<b>Total</b>	<b>138</b>	<b>100.0</b>	<b>133</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>





# ***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.

- Only 0.6% of bus drivers involved in a fatal traffic accident had been drinking; drug use was not reported for any of the drivers.
- 29.6% of bus drivers involved in a fatal crash were female.
- 15 (4.2%) bus drivers were fatally injured in a traffic accident.
- 60% of involvements in which the bus driver suffered a fatal injury did not involve bus rollover or fire, or driver ejection.
- Two-thirds of school bus drivers were paid by the hour, as were 91.0% of transit drivers and 93.3% of intercity drivers.
- 12.3% of bus drivers involved in a fatal crash had a previous speeding conviction.
- Failure to yield was the most common driver factor (8.9%), followed by inattention (5.6%), and driving too fast (2.2%). 1.7% of drivers were coded as drowsy or asleep.
- 71.2% of bus drivers had no driver factors recorded.



**Table 4-1  
Fatal Bus Involvements by Driver Drinking Status and Bus Type  
BIFA 2000**

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	138	100.0	131	98.5	15	100.0	31	100.0	36	100.0	5	100.0	356	99.4
Drinking	0	0.0	2	1.5	0	0.0	0	0.0	0	0.0	0	0.0	2	0.6
<b>Total</b>	<b>138</b>	<b>100.0</b>	<b>133</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>

**Table 4-2  
Fatal Bus Involvements by Driver Drug Use and Bus Type  
BIFA 2000**

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	58	42.0	53	39.8	4	26.7	14	45.2	18	50.0	2	40.0	149	41.6
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	77	55.8	75	56.4	11	73.3	16	51.6	17	47.2	3	60.0	199	55.6
Reported unk.	3	2.2	5	3.8	0	0.0	1	3.2	1	2.8	0	0.0	10	2.8
<b>Total</b>	<b>138</b>	<b>100.0</b>	<b>133</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>

**Table 4-3  
Fatal Bus Involvements by Driver Age and Bus Type  
BIFA 2000**

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	3	2.2	1	0.8	0	0.0	0	0.0	2	5.6	0	0.0	6	1.7
22-25	3	2.2	2	1.5	0	0.0	2	6.5	3	8.3	1	20.0	11	3.1
26-30	6	4.3	10	7.5	0	0.0	1	3.2	2	5.6	0	0.0	19	5.3
31-35	17	12.3	15	11.3	1	6.7	2	6.5	3	8.3	0	0.0	38	10.6
36-40	15	10.9	15	11.3	2	13.3	1	3.2	3	8.3	1	20.0	37	10.3
41-45	19	13.8	18	13.5	2	13.3	3	9.7	2	5.6	0	0.0	44	12.3
46-50	21	15.2	19	14.3	2	13.3	4	12.9	4	11.1	0	0.0	50	14.0
51-55	26	18.8	30	22.6	1	6.7	6	19.4	2	5.6	2	40.0	67	18.7
56-60	13	9.4	15	11.3	6	40.0	5	16.1	4	11.1	1	20.0	44	12.3
61-65	9	6.5	3	2.3	0	0.0	3	9.7	2	5.6	0	0.0	17	4.7
66-70	3	2.2	2	1.5	0	0.0	2	6.5	3	8.3	0	0.0	10	2.8
71-75	2	1.4	0	0.0	0	0.0	1	3.2	5	13.9	0	0.0	8	2.2
over 75	0	0.0	0	0.0	0	0.0	0	0.0	1	2.8	0	0.0	1	0.3
Unknown	1	0.7	3	2.3	1	6.7	1	3.2	0	0.0	0	0.0	6	1.7
<b>Total</b>	<b>138</b>	<b>100.0</b>	<b>133</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>

**Table 4-4**  
**Fatal Bus Involvements by Driver Sex and Bus Type**  
**BIFA 2000**

Driver sex	School		Transit		Intercity		Charter		Other		Unknown		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Male	64	46.4	106	79.7	12	80.0	29	93.5	32	88.9	5	100.0	248	69.3
Female	74	53.6	25	18.8	2	13.3	1	3.2	4	11.1	0	0.0	106	29.6
Unknown	0	0.0	2	1.5	1	6.7	1	3.2	0	0.0	0	0.0	4	1.1
<b>Total</b>	<b>138</b>	<b>100.0</b>	<b>133</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>

**Table 4-5**  
**Fatal Bus Involvements by Driver Restraint Use and Bus Type**  
**BIFA 2000**

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	12	8.7	20	15.0	2	13.3	4	12.9	5	13.9	0	0.0	43	12.0
Shoulder belt	1	0.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Lap belt	25	18.1	27	20.3	4	26.7	9	29.0	9	25.0	0	0.0	74	20.7
Lap and shoulder	77	55.8	55	41.4	7	46.7	13	41.9	19	52.8	4	80.0	175	48.9
Used, type unk	12	8.7	15	11.3	0	0.0	1	3.2	0	0.0	1	20.0	29	8.1
Unknown	11	8.0	16	12.0	2	13.3	4	12.9	3	8.3	0	0.0	36	10.1
<b>Total</b>	<b>138</b>	<b>100.0</b>	<b>133</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>

**Table 4-6**  
**Fatal Bus Involvements by Driver Injury Severity and Bus Type**  
**BIFA 2000**

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)	8	5.8	1	0.8	0	0.0	2	6.5	4	11.1	0	0.0	15	4.2
Incapacitating (A)	9	6.5	1	0.8	2	13.3	1	3.2	2	5.6	1	20.0	16	4.5
Non-incapacitating (B)	19	13.8	13	9.8	2	13.3	1	3.2	4	11.1	0	0.0	39	10.9
Complaint of pain (C)	20	14.5	14	10.5	1	6.7	3	9.7	4	11.1	0	0.0	42	11.7
No injury (O)	82	59.4	99	74.4	10	66.7	23	74.2	22	61.1	4	80.0	240	67.0
Unknown	0	0.0	5	3.8	0	0.0	1	3.2	0	0.0	0	0.0	6	1.7
<b>Total</b>	<b>138</b>	<b>100.0</b>	<b>133</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>

**Table 4-7**  
**Fatal Bus Involvements by Driver Injury Severity and Rollover, Fire, Ejection Status**  
**BIFA 2000**

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	3	20.0	3	18.8	1	2.6	2	4.8	3	1.3	0	0.0	12	3.4
Fire only	0	0.0	0	0.0	0	0.0	0	0.0	1	0.4	0	0.0	1	0.3
Ejection only	2	13.3	1	6.3	0	0.0	1	2.4	0	0.0	0	0.0	4	1.1
Rollover and ejection	1	6.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
None	9	60.0	12	75.0	38	97.4	39	92.9	236	98.3	3	50.0	337	94.1
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	50.0	3	0.8
<b>Total</b>	<b>15</b>	<b>100.0</b>	<b>16</b>	<b>100.0</b>	<b>39</b>	<b>100.0</b>	<b>42</b>	<b>100.0</b>	<b>240</b>	<b>100.0</b>	<b>6</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>

**Table 4-8**  
**Fatal Bus Involvements by Driver Extrication and Bus Type**  
**BIFA 2000**

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	133	96.4	130	97.7	15	100.0	30	96.8	35	97.2	5	100.0	348	97.2
Extricated	5	3.6	1	0.8	0	0.0	0	0.0	1	2.8	0	0.0	7	2.0
Unknown	0	0.0	2	1.5	0	0.0	1	3.2	0	0.0	0	0.0	3	0.8
<b>Total</b>	<b>138</b>	<b>100.0</b>	<b>133</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>

**Table 4-9**  
**Fatal Bus Involvements by Driver Compensation**  
**BIFA 2000**

Compensation	No.	Pct.
Hourly only	253	70.7
Mileage only	6	1.7
Salary only	23	6.4
Driver owned only	2	0.6
Tips only	1	0.3
Hourly and mileage	2	0.6
Hourly and tips	1	0.3
Salary and other	2	0.6
Driver owned and other	1	0.3
Other		
Church volunteer	4	1.1
Daily wage plus bonus	1	0.3
Driver employed in another capacity by operator	7	2.0
Paid by day	4	1.1
Paid by trip/route	11	3.1
Volunteer driver	1	0.3
Unknown	39	10.9
<b>Total</b>	<b>358</b>	<b>100.0</b>

**Table 4-10**  
**Fatal Bus Involvements by Driver Compensation and Bus Type**  
**BIFA 2000**

<b>Operator type</b>	<b>No.</b>	<b>Pct.</b>
Compensation		
<b>School</b>		
Hourly only	92	66.7
Salary only	14	10.1
Salary and other	2	1.4
Tips only	1	0.7
Driver owned	1	0.7
Other		
Employed in another capacity by operator	4	2.9
Paid by day	3	2.2
Paid by trip/route	7	5.1
Unknown	14	10.1
<i>Total</i>	138	100.0
<b>Transit</b>		
Hourly only	121	91.0
Salary only	7	5.3
Paid by trip	1	0.8
Unknown	4	3.0
<i>Total</i>	133	100.0
<b>Intercity</b>		
Hourly only	14	93.3
Hourly and mileage	1	6.7
<i>Total</i>	15	100.0
<b>Charter</b>		
Hourly only	10	32.3
Mileage only	1	3.2
Salary only	1	3.2
Hourly and mileage	1	3.2
Other		0.0
Paid by trip	2	6.5
Paid by day	1	3.2
Daily wage plus bonus	1	3.2
Unknown	14	45.2
<i>Total</i>	31	100.0
<b>Other operator type</b>		
Hourly only	16	44.4
Mileage only	3	8.3
Salary only	1	2.8
Miscellaneous/unknown	16	44.4
<i>Total</i>	36	100.0
<b>Unknown operator type</b>	5	100.0
<b>Total</b>	358	100.0

**Table 4-11  
Fatal Bus Involvements by Reported Hours Driven and Bus Type  
BIFA 2000**

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	50	36.2	11	8.3	0	0.0	4	12.9	8	22.2	0	0.0	73	20.4
2 hrs	23	16.7	10	7.5	1	6.7	4	12.9	8	22.2	0	0.0	46	12.8
3 hrs	18	13.0	10	7.5	1	6.7	3	9.7	3	8.3	0	0.0	35	9.8
4-5 hrs	19	13.8	20	15.0	4	26.7	5	16.1	4	11.1	0	0.0	52	14.5
6-7 hrs	8	5.8	12	9.0	3	20.0	3	9.7	1	2.8	1	20.0	28	7.8
8-10 hrs	0	0.0	6	4.5	0	0.0	2	6.5	0	0.0	0	0.0	8	2.2
Unknown, legal	1	0.7	1	0.8	1	6.7	0	0.0	1	2.8	0	0.0	4	1.1
Unknown/NA	19	13.8	63	47.4	5	33.3	10	32.3	11	30.6	4	80.0	112	31.3
<b>Total</b>	<b>138</b>	<b>100.0</b>	<b>133</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>

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  
BIFA 2000**

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	120	87.0	118	88.7	14	93.3	26	83.9	33	91.7	4	80.0	315	88.0
Manslaughter/homicide	1	0.7	1	0.8	1	6.7	0	0.0	0	0.0	0	0.0	3	0.8
Unsafe reckless driving	1	0.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Inattentive	1	0.7	0	0.0	0	0.0	0	0.0	1	2.8	0	0.0	2	0.6
Hit-and-run	1	0.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Intoxicated	0	0.0	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Unreasonable speed	0	0.0	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Failure to obey stop sign	2	1.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.6
Failure to yield	2	1.4	3	2.3	0	0.0	0	0.0	0	0.0	0	0.0	5	1.4
Turn/yield/signaling violation	0	0.0	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Driving on wrong side of road	1	0.7	0	0.0	0	0.0	0	0.0	1	2.8	0	0.0	2	0.6
Following too closely	0	0.0	0	0.0	0	0.0	1	3.2	0	0.0	0	0.0	1	0.3
Other license violation	3	2.2	1	0.8	0	0.0	1	3.2	0	0.0	0	0.0	5	1.4
Lamp violation	1	0.7	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	2	0.6
Failure to require restraint use	1	0.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Any equipment violation	1	0.7	1	0.8	0	0.0	0	0.0	0	0.0	1	20.0	3	0.8
Unknown violation	6	4.3	6	4.5	0	0.0	3	9.7	1	2.8	0	0.0	16	4.5
<b>Total</b>	<b>138</b>	<b>100.0</b>	<b>133</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>

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**  
**BIFA 2000**

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	76.8	92	69.2	9	60.0	21	67.7	29	80.6	3	60.0	260	72.6
1	21	15.2	25	18.8	4	26.7	8	25.8	2	5.6	1	20.0	61	17.0
2	2	1.4	3	2.3	0	0.0	0	0.0	1	2.8	0	0.0	6	1.7
3	1	0.7	0	0.0	1	6.7	0	0.0	1	2.8	0	0.0	3	0.8
5	0	0.0	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Not reported	6	4.3	7	5.3	0	0.0	1	3.2	2	5.6	0	0.0	16	4.5
Unknown	2	1.4	5	3.8	1	6.7	1	3.2	1	2.8	1	20.0	11	3.1
<b>Total</b>	<b>138</b>	<b>100.0</b>	<b>133</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>

**Table 4-14**  
**Fatal Bus Involvements by Number of Previous Suspensions\* and Bus Type**  
**BIFA 2000**

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	91.3	124	93.2	14	93.3	27	87.1	31	86.1	4	80.0	326	91.1
1	5	3.6	3	2.3	0	0.0	1	3.2	3	8.3	0	0.0	12	3.4
2	4	2.9	0	0.0	0	0.0	1	3.2	1	2.8	0	0.0	6	1.7
3	1	0.7	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	2	0.6
6	0	0.0	0	0.0	0	0.0	1	3.2	0	0.0	0	0.0	1	0.3
Unknown	2	1.4	5	3.8	1	6.7	1	3.2	1	2.8	1	20.0	11	3.1
<b>Total</b>	<b>138</b>	<b>100.0</b>	<b>133</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>

**Table 4-15**  
**Fatal Bus Involvements by Number of Previous Speeding Convictions\* and Bus Type**  
**BIFA 2000**

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	120	87.0	109	82.0	14	93.3	24	77.4	32	88.9	4	80.0	303	84.6
1	15	10.9	17	12.8	0	0.0	4	12.9	3	8.3	0	0.0	39	10.9
2	1	0.7	1	0.8	0	0.0	1	3.2	0	0.0	0	0.0	3	0.8
3	0	0.0	1	0.8	0	0.0	1	3.2	0	0.0	0	0.0	2	0.6
Unknown	2	1.4	5	3.8	1	6.7	1	3.2	1	2.8	1	20.0	11	3.1
<b>Total</b>	<b>138</b>	<b>100.0</b>	<b>133</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>

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

**Table 4-16**  
**Fatal Bus Involvements by Previous Other Moving Convictions\* and Bus Type**  
**BIFA 2000**

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	119	86.2	111	83.5	12	80.0	28	90.3	31	86.1	2	40.0	303	84.6
1	11	8.0	6	4.5	2	13.3	2	6.5	4	11.1	0	0.0	25	7.0
2	4	2.9	8	6.0	0	0.0	0	0.0	0	0.0	2	40.0	14	3.9
3	0	0.0	3	2.3	0	0.0	0	0.0	0	0.0	0	0.0	3	0.8
5	1	0.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
6	1	0.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Unknown	2	1.4	5	3.8	1	6.7	1	3.2	1	2.8	1	20.0	11	3.1
<b>Total</b>	<b>138</b>	<b>100.0</b>	<b>133</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>

\* Reflects moving convictions occurring within three years of the current accident.

**Table 4-17**  
**Fatal Bus Involvements by License Class Compliance and Bus Type**  
**BIFA 2000**

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	0.7	0	0.0	0	0.0	1	3.2	0	0.0	0	0.0	2	0.6
Valid	135	97.8	130	97.7	14	93.3	29	93.5	35	97.2	4	80.0	347	96.9
Unknown	2	1.4	3	2.3	1	6.7	1	3.2	1	2.8	1	20.0	9	2.5
<b>Total</b>	<b>138</b>	<b>100.0</b>	<b>133</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>

**Table 4-18**  
**Fatal Bus Involvements by CDL License Status and Bus Type**  
**BIFA 2000**

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	3	2.2	1	0.8	0	0.0	1	3.2	9	25.0	0	0.0	14	3.9
Suspended	0	0.0	0	0.0	0	0.0	1	3.2	0	0.0	0	0.0	1	0.3
Expired	1	0.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Valid	132	95.7	129	97.0	14	93.3	28	90.3	26	72.2	4	80.0	333	93.0
Unknown	2	1.4	3	2.3	1	6.7	1	3.2	1	2.8	1	20.0	9	2.5
<b>Total</b>	<b>138</b>	<b>100.0</b>	<b>133</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>

**Table 4-19  
Fatal Bus Involvements by License Endorsements and Bus Type  
BIFA 2000**

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	16	11.6	9	6.8	4	26.7	5	16.1	15	41.7	0	0.0	49	13.7
Complied	92	66.7	101	75.9	9	60.0	20	64.5	13	36.1	2	40.0	237	66.2
Not complied	1	0.7	1	0.8	1	6.7	0	0.0	0	0.0	0	0.0	3	0.8
Compliance unk	24	17.4	18	13.5	0	0.0	5	16.1	7	19.4	2	40.0	56	15.6
Unknown	5	3.6	4	3.0	1	6.7	1	3.2	1	2.8	1	20.0	13	3.6
<b>Total</b>	<b>138</b>	<b>100.0</b>	<b>133</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>

**Table 4-20  
Fatal Bus Involvements by Driver-Related Factors and Bus Type  
BIFA 2000**

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	97	70.3	103	77.4	10	66.7	22	71.0	20	55.6	3	60.0	255	71.2
<i>Physical/mental condition</i>														
Drowsy, asleep	1	0.7	0	0.0	0	0.0	0	0.0	4	11.1	1	20.0	6	1.7
Inattentive	7	5.1	4	3.0	0	0.0	3	9.7	5	13.9	1	20.0	20	5.6
Other physical impairment	1	0.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
<i>Miscellaneous causes</i>														
Ran off road/lane	2	1.4	1	0.8	0	0.0	0	0.0	4	11.1	0	0.0	7	2.0
Vehicle unattended	0	0.0	2	1.5	0	0.0	1	3.2	0	0.0	0	0.0	3	0.8
W/O required equipment	1	0.7	0	0.0	0	0.0	0	0.0	1	2.8	0	0.0	2	0.6
Unlawful noise	1	0.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Improper tailing	0	0.0	1	0.8	0	0.0	1	3.2	0	0.0	0	0.0	2	0.6
Not in lane	5	3.6	0	0.0	0	0.0	0	0.0	2	5.6	0	0.0	7	2.0
Erratic/reckless	4	2.9	0	0.0	0	0.0	0	0.0	1	2.8	0	0.0	5	1.4
Failure to yield	15	10.9	11	8.3	3	20.0	1	3.2	2	5.6	0	0.0	32	8.9
Failure to obey signs	5	3.6	1	0.8	0	0.0	1	3.2	0	0.0	0	0.0	7	2.0
Driving too fast	1	0.7	2	1.5	0	0.0	2	6.5	2	5.6	1	20.0	8	2.2
Other improper turn	0	0.0	1	0.8	0	0.0	0	0.0	1	2.8	0	0.0	2	0.6
Wrong side of road	0	0.0	0	0.0	0	0.0	0	0.0	2	5.6	0	0.0	2	0.6
Stopping in roadway	0	0.0	3	2.3	0	0.0	1	3.2	0	0.0	0	0.0	4	1.1
Locked wheel	0	0.0	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Over correcting	1	0.7	0	0.0	0	0.0	0	0.0	1	2.8	0	0.0	2	0.6
<i>Vision obscured by</i>														
Inclement weather	1	0.7	2	1.5	0	0.0	0	0.0	0	0.0	0	0.0	3	0.8
Glare	1	0.7	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	2	0.6
Motor vehicle	1	0.7	0	0.0	1	6.7	0	0.0	0	0.0	0	0.0	2	0.6
Parked vehicle	0	0.0	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Obstructing angles on vehicle	0	0.0	1	0.8	0	0.0	0	0.0	0	0.0	1	20.0	2	0.6
Other obstruction	1	0.7	3	2.3	0	0.0	0	0.0	0	0.0	0	0.0	4	1.1
<i>Avoiding, swerving due to</i>														
Rut in road	0	0.0	0	0.0	0	0.0	0	0.0	1	2.8	0	0.0	1	0.3
Vehicle in road	0	0.0	0	0.0	1	6.7	0	0.0	0	0.0	0	0.0	1	0.3
Phantom vehicle	0	0.0	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
<i>Other misc. factors</i>														
Hit and run driver	2	1.4	0	0.0	1	6.7	0	0.0	0	0.0	0	0.0	3	0.8
Homicide	1	0.7	2	1.5	0	0.0	0	0.0	0	0.0	0	0.0	3	0.8
Other nonmoving violation	5	3.6	3	2.3	0	0.0	0	0.0	0	0.0	0	0.0	8	2.2
<i>Possible distractions</i>														
Cellular phone	1	0.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Unknown	3	2.2	3	2.3	0	0.0	1	3.2	1	2.8	0	0.0	8	2.2
<b>Total</b>	<b>138</b>	<b>100.0</b>	<b>133</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>31</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>358</b>	<b>100.0</b>

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, 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 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.

**Table of Abbreviations**

<b>Abbreviation</b>	<b>Definition</b>
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





# Index

<b>A</b>	
accident conditions.....	9
accident description .....	18
accident type .....	18
age .....	37
annual fatalities .....	8
axles.....	30
<b>B</b>	
big cowl and chassis, definition.....	24
body style .....	27
bus body configuration.....	27
bus body style .....	27
bus descriptions .....	2, 23
bus length.....	29
bus vehicle description.....	25
bus, definition .....	1
<b>C</b>	
carrier type .....	32
CDL license status .....	43
Center for National Truck and Bus Statistics .....	1
charter bus, definition.....	2
classification of buses .....	2
CNTBS .....	1
compensation.....	39, 40
<b>D</b>	
day of week .....	11
day type.....	11, 13
direction of roll.....	20
drinking status .....	37
driver .....	35
driver age .....	37
driver compensation.....	39, 40
driver extrication.....	39
driver factors .....	45
driver injury severity .....	38, 39
driver violations charged .....	41
driver-related factors.....	45
drug use.....	37
<b>E</b>	
ejection.....	39
empty weight.....	30
environmental distributions .....	13
<b>F</b>	
FARS .....	1
fatal involvements by state .....	5, 6, 7
fatalities.....	8
fire .....	39
fire occurrence .....	21
first harmful event .....	19
front of bus style.....	27, 28
<b>G</b>	
gross vehicle weight rating .....	30
<b>H</b>	
harmful event .....	19
heavy-duty bus, definition.....	24
heavy-duty with lift, definition.....	24
high platform, definition.....	24
hours driven .....	41
<b>I</b>	
injury severity .....	38
injury severity categories, definition.....	35
intercity bus, definition .....	2
involvements, definition .....	2
<b>J</b>	
jitney, definition .....	24
junction, relation to.....	16
<b>L</b>	
land use .....	13

large van, definition .....24  
length.....29  
license class compliance.....43  
license endorsements .....44  
license status .....43  
light condition .....14  
long-distance coach, definition.....24  
low platform, definition .....24

**M**

manner of collision .....20  
mini van, definition .....24  
model year.....28, 29  
month .....11  
most harmful event.....33  
moving convictions.....43

**N**

number of passengers .....31

**O**

operating authority description .....26  
operator description .....26  
operator type .....5  
other bus, definition.....2  
overview .....3

**P**

passenger restraint .....32  
person type .....8  
previous accidents .....42  
previous moving convictions .....43  
previous other moving convictions.....43  
previous speeding convictions .....42  
previous suspensions.....42

**Q**

quarter turns .....20

**R**

reported hours driven .....41  
restraint use .....38  
road function class .....15  
roadway distributions .....15

roadway surface condition .....14  
rollover status.....20, 39  
route signing .....15

**S**

school bus, definition .....2  
school buses .....6  
seating capacity .....31  
sex .....38  
shuttle bus, definition .....24  
small cowl and chassis, definition.....24  
special-needs bus, definition .....23  
speed limit.....17  
state .....5  
survey methodology.....1  
suspensions .....42

**T**

temporal distributions.....11  
TIFA .....1  
time of accident.....12, 13  
trafficway flow .....16  
transit bus, definition.....2  
transit buses.....6  
transit-style bus, definition .....23  
travel lanes.....16  
trip type .....32  
Trucks Involved in Fatal Accidents .....1

**U**

UMTRI.....1  
University of Michigan Transportation Research  
Institute .....1

**V**

vehicle.....23  
vehicle role in accident .....19  
violations charged .....41

**W**

weather condition.....14  
weekend.....11, 13  
weight.....30  
work week.....11, 13

