

## PLEASE NOTE

# TRAFFIC SAFETY FACTS 2009

The *Traffic Safety Facts* annual report contains exposure data (i.e., vehicle miles traveled, registered vehicles, licensed drivers) and other data points that customarily are not available until later. Instead of withholding the entire report until those data are available, this Early Edition is produced to allow customers access to the statistics that are currently available.

This Early Edition does not include the following 2009 data:

- Vehicle miles traveled and fatality rates per vehicle miles traveled by State
- Registered vehicles and fatality rates per registered vehicle by State
- Vehicle miles traveled for the various vehicle types (passenger cars, light trucks, motorcycles, large trucks, buses)
- Registered vehicles for the following vehicle types: motorcycles, large trucks, buses, and total
- Licensed drivers
- Key provisions of occupant restraint laws.

Tables containing these data will be updated in the final edition of the *Traffic Safety Facts 2009* annual report.

*A Compilation of Motor Vehicle Crash Data from the  
Fatality Analysis Reporting System and the General Estimates System*



EARLY EDITION

# TRAFFIC SAFETY FACTS 2009



*A Compilation of Motor Vehicle Crash Data from the  
Fatality Analysis Reporting System and the General Estimates System*

EARLY EDITION

# 2009 NATIONAL STATISTICS

## POLICE-REPORTED MOTOR VEHICLE TRAFFIC CRASHES

Fatal .....	30,797
Injury .....	1,517,000
Property Damage Only .....	3,957,000
<b>Total .....</b>	<b>5,505,000</b>

## TRAFFIC CRASH VICTIMS

	<b>Killed</b>	<b>Injured</b>
<b>Occupants .....</b>	<b>24,474</b>	<b>2,011,000</b>
Drivers .....	17,640	1,395,000
Passengers .....	6,770	616,000
Unknown .....	64	<500
<b>Motorcyclists .....</b>	<b>4,462</b>	<b>90,000</b>
<b>Nonoccupants .....</b>	<b>4,872</b>	<b>116,000</b>
Pedestrians .....	4,092	59,000
Pedalcyclists .....	630	51,000
Other/Unknown .....	150	7,000
<b>Total .....</b>	<b>33,808</b>	<b>2,217,000</b>

## OTHER NATIONAL STATISTICS

Vehicle Miles Traveled .....	2,979,321,000,000
Resident Population .....	307,006,550
Registered Vehicles .....	NA
Licensed Drivers .....	NA
Economic Cost of Traffic Crashes (2000) (estimate for reported and unreported crashes) .....	\$230.6 billion

## NATIONAL RATES: FATALITIES

Fatalities per 100 Million Vehicle Miles Traveled .....	1.13
Fatalities per 100,000 Population .....	11.01
Fatalities per 100,000 Registered Vehicles .....	NA
Fatalities per 100,000 Licensed Drivers .....	NA

## NATIONAL RATES: INJURED PERSONS

Injured Persons per 100 Million Vehicle Miles Traveled .....	74
Injured Persons per 100,000 Population .....	722
Injured Persons per 100,000 Registered Vehicles .....	NA
Injured Persons per 100,000 Licensed Drivers .....	NA

Sources: Crashes, Fatalities, Injuries, and Costs—National Highway Traffic Safety Administration.  
Population—U.S. Bureau of the Census.  
Vehicle Miles Traveled—Federal Highway Administration.  
Registered Vehicles—R.L. Polk & Co. and Federal Highway Administration.

EARLY EDITION



DOT HS 811 402

# Traffic Safety Facts 2009

*A Compilation of Motor Vehicle Crash Data from the  
Fatality Analysis Reporting System and the General Estimates System*

*National Highway Traffic Safety Administration  
National Center for Statistics and Analysis  
U.S. Department of Transportation  
Washington, DC 20590*

## FOR MORE INFORMATION

Information on traffic fatalities is available from the National Center for Statistics and Analysis, NVS-424, 1200 New Jersey Avenue, SE, Washington, DC 20590. NCSA can be contacted by telephone at 800-934-8517. Fax messages should be sent to 202-366-7078. General information on highway traffic safety can be accessed by Internet users at <http://www.nhtsa.gov/NCSA>. To report a safety-related problem or to inquire about motor vehicle safety information, contact the Vehicle Safety Hotline at 888-327-4236. Fact sheets available from the National Center for Statistics and Analysis are Overview, Alcohol, African American, Bicyclists and Other Cyclists, Children, Hispanic, Large Trucks, Motorcycles, Occupant Protection, Older Population, Pedestrians, Race and Ethnicity, Rural/Urban Comparisons, School Transportation-Related Crashes, Speeding, State Alcohol Estimates, State Traffic Data, and Young Drivers. The fact sheets and annual Traffic Safety Facts reports can be accessed online at <http://www-nrd.nhtsa.dot.gov/CATS/index.aspx>.

EARLY EDITION



# TABLE OF CONTENTS

<b>Introduction</b>	<b>1</b>
<b>FARS Operations</b>	<b>3</b>
<b>GES Operations</b>	<b>5</b>
<b>About This Report</b>	<b>7</b>
<b>Data Availability</b>	<b>9</b>
<b>1. Trends</b>	<b>13</b>
<b>2. Crashes</b>	<b>45</b>
<b>3. Vehicles</b>	<b>63</b>
<b>4. People</b>	<b>87</b>
<b>5. States</b>	<b>143</b>
<b>Appendix A. FARS Data Elements</b>	<b>199</b>
Crash Level	199
Vehicle Level	199
Driver Level	200
Person Level	200
<b>Appendix B. GES Data Elements</b>	<b>201</b>
Crash Level	201
Vehicle/Driver Level	201
Person Level	202
<b>Appendix C. GES Technical Notes</b>	<b>203</b>
Standard Errors	203
Unknowns	205
<b>Glossary</b>	<b>207</b>
<b>Index</b>	<b>211</b>



# Table of Contents

## TRENDS: General

1. Crashes by Crash Severity, 1988-2009 ..... 14
2. Persons Killed or Injured and Fatality and Injury Rates per Population, Licensed Drivers, Registered Vehicles, and Vehicle Miles Traveled, 1966-2009 ..... 15
3. Vehicles Involved in Crashes and Involvement Rates per Vehicle Miles of Travel and per Registered Vehicle by Vehicle Type and Crash Severity, 1975-2009 ..... 17
4. Persons Killed or Injured by Person Type and Vehicle Type, 1975-2009 ..... 18
5. Drivers Involved in Crashes and Involvement Rates per Licensed Driver by Sex and Crash Severity, 1975-2009 ..... 19

## TRENDS: Occupants

6. Motor Vehicle Occupant and Motorcyclist Fatality and Injury Rates per Population by Age Group, 1975-2009 ..... 21
7. Passenger Car Occupants Killed or Injured and Fatality and Injury Rates per Registered Vehicle and Vehicle Miles of Travel, 1975-2009 ..... 22
8. Light Truck Occupants Killed or Injured and Fatality and Injury Rates per Registered Vehicle and Vehicle Miles of Travel, 1975-2009 ..... 24
9. Large Truck Occupants Killed or Injured and Fatality and Injury Rates per Registered Vehicle and Vehicle Miles of Travel, 1975-2009 ..... 26
10. Motorcyclists Killed or Injured and Fatality and Injury Rates per Registered Vehicle and Vehicle Miles of Travel, 1975-2009 ..... 28

## TRENDS: Large Truck Related

11. Persons Killed or Injured in Crashes Involving a Large Truck by Person Type and Crash Type, 1975-2009 ..... 30

## TRENDS: Nonoccupants

12. Nonoccupant Fatality and Injury Rates per Population by Age Group, 1975-2009 ..... 31

## TRENDS: Alcohol

13. Persons Killed, by Highest Driver Blood Alcohol Concentration (BAC) in the Crash, 1982-2009 ... 32
14. Persons Killed and Percent Alcohol-Impaired Driving During Holiday Periods, 1982-2009 ..... 33
15. Drivers in Fatal Crashes by Blood Alcohol Concentration (BAC) and Time of Day, 1982-2009 ..... 34
16. Drivers in Fatal Crashes by Blood Alcohol Concentration (BAC) and Sex, 1982-2009 ..... 34
17. Drivers in Fatal Crashes by Blood Alcohol Concentration (BAC) and Vehicle Type, 1982-2009 ... 35
18. Drivers in Fatal Crashes by Blood Alcohol Concentration (BAC) and Age, 1982-2009 ..... 36
19. Drivers in Fatal Crashes by Blood Alcohol Concentration (BAC) and Survival Status, 1982-2009 ... 38
20. Pedestrians Killed, 14 Years and Older, by Blood Alcohol Concentration (BAC), 1982-2009 ..... 38

## TRENDS: Restraints

21. Drivers of Passenger Cars and Light Trucks in Crashes by Crash Severity and Restraint Use, 1975-2009 ..... 39
22. Occupants of Passenger Cars and Light Trucks Killed or Injured, by Restraint Use, 1975-2009 ..... 40

## TRENDS: Rollover

23. Passenger Car and Light Truck Occupants Killed, by Vehicle Type and Rollover Occurrence, 1982-2009 ..... 41



# Table of Contents

## CRASHES: Time

24. Crashes and Crash Rates by Month and Crash Severity .....	46
25. Crashes by Time of Day, Day of Week, and Crash Severity .....	47
26. Crashes by Weather Condition, Light Condition, and Crash Severity .....	49
27. Fatal Crashes by Emergency Medical Services (EMS) Response Times Within Designated Minutes and by Land Use .....	50

## CRASHES: Location

28. Crashes by Crash Type, Relation to Roadway, and Crash Severity .....	51
29. Crashes by Relation to Junction, Traffic Control Device, and Crash Severity .....	52
30. Crashes by Speed Limit, Crash Type, and Crash Severity .....	53
31. Fatal Crashes by Speed Limit and Land Use .....	54
32. Crashes by Number of Lanes, Trafficway Flow, and Crash Severity .....	55

## CRASHES: Circumstances

33. Crashes by First Harmful Event, Manner of Collision, and Crash Severity .....	56
34. Two-Vehicle Crashes by Vehicle Type and Crash Severity .....	57

## CRASHES: Alcohol

35. Fatal Crashes and Percent Alcohol-Impaired Driving, by Time of Day and Crash Type .....	58
---	----

## VEHICLES: All Vehicles

36. Vehicles Involved in Crashes by Vehicle Type and Crash Severity .....	64
37. Vehicles Involved in Fatal Crashes by Body Type .....	65
38. Vehicles Involved in Crashes by Vehicle Type, Rollover Occurrence, and Crash Severity .....	66
39. Vehicles Involved in Crashes by Vehicle Type, Fire Occurrence, and Crash Severity .....	68
40. Vehicles Involved in Single- and Two-Vehicle Crashes by Vehicle Maneuver and Crash Severity ....	69
41. Vehicles Involved in Fatal Crashes by Roadway Function Class, Crash Type, and Hazardous Cargo .....	70

## VEHICLES: Passenger Cars

42. Passenger Cars Involved in Crashes by Most Harmful Event and Crash Severity .....	73
43. Passenger Cars Involved in Crashes by Initial Point of Impact, Crash Severity, and Crash Type ....	74

## VEHICLES: Light Trucks

44. Light Trucks Involved in Crashes by Most Harmful Event and Crash Severity .....	75
45. Light Trucks Involved in Crashes by Initial Point of Impact, Crash Severity, and Crash Type .....	76

## VEHICLES: Large Trucks

46. Large Trucks Involved in Crashes by Most Harmful Event and Crash Severity .....	77
47. Large Trucks Involved in Crashes by Initial Point of Impact, Crash Severity, and Crash Type .....	78
48. Large Trucks Involved in Crashes by Truck Type, Rollover Occurrence, and Crash Severity .....	79
49. Truck Tractors with Trailers Involved in Crashes by Number of Trailers, Jackknife Occurrence, and Crash Severity .....	80

# Table of Contents

## VEHICLES: Motorcycles

- 50. Motorcycles Involved in Crashes by Most Harmful Event and Crash Severity ..... 81
- 51. Motorcycles Involved in Crashes by Initial Point of Impact, Crash Severity, and Crash Type..... 82

## VEHICLES: Buses

- 52. Buses Involved in Crashes by Most Harmful Event and Crash Severity..... 83
- 53. Buses Involved in Crashes by Initial Point of Impact, Crash Severity, and Crash Type..... 84

## PEOPLE: All Victims

- 54. Persons Killed or Injured, by Person Type and Injury Severity ..... 88
- 55. Persons Killed or Injured, by Age and Injury Severity ..... 88
- 56. Persons Killed or Injured, by Sex and Injury Severity ..... 88
- 57. Persons Killed or Injured and Fatality and Injury Rates per 100,000 Population, by Age and Sex .... 90
- 58. Persons Killed or Injured in Crashes, by Weather Condition and Light Condition..... 92
- 59. Persons Killed or Injured in Crashes, by Speed Limit and Crash Type ..... 92
- 60. Persons Killed in Crashes, by Speed Limit and Land Use..... 93
- 61. Persons Killed in Crashes and Percent Alcohol-Impaired Driving Fatalities,  
by Time of Day and Crash Type ..... 94
- 62. Persons Killed in Construction/Maintenance Zones, by Roadway Function Class  
and Person Type..... 96
- 63. Persons Killed in Crashes Involving Emergency Vehicles, by Person Type, Crash Type,  
and Vehicle Type ..... 96

## PEOPLE: Drivers

- 64. Driver Involvement Rates per 100,000 Licensed Drivers, by Age, Sex, and Crash Severity.....100
- 65. Drivers and Motorcycle Riders Involved in Fatal Crashes, by Previous Driving Record  
and License Type Compliance .....102
- 66. Related Factors for Drivers and Motorcycle Riders Involved in Fatal Crashes .....102

## PEOPLE: Occupants

- 67. Vehicle Occupants Killed or Injured, by Vehicle Type, Person Type, and Injury Severity.....103
- 68. Vehicle Occupants Killed or Injured, by Sex and Vehicle Type .....104
- 69. Vehicle Occupants Killed or Injured, by Age and Vehicle Type .....105
- 70. Vehicle Occupants Killed or Injured, by Age, Person Type, and Sex .....106
- 71. Vehicle Occupants Killed or Injured, by Vehicle Type and Most Harmful Event .....107
- 72. Vehicle Occupants Killed or Injured, by Initial Point of Impact and Vehicle Type.....108
- 73. Vehicle Occupants Killed or Injured, by Vehicle Type and Ejection .....109
- 74. Occupants Killed or Injured in Two-Vehicle Crashes, by Vehicle Types Involved .....110
- 75. Occupants Involved in Fatal Crashes and Occupant Fatalities, by Vehicle Body Type .....111
- 76. Passenger Car Occupants Involved in Fatal Crashes and Occupants Killed, by Car Wheelbase Size ..112

# Table of Contents

## PEOPLE: Alcohol

77. Persons Killed and Alcohol-Impaired Driving Fatalities, by Person Type .....	113
78. Drivers and Motorcycle Riders Involved in Fatal Crashes, by Age and Driver's Blood Alcohol Concentration (BAC).....	114
79. Drivers and Motorcycle Riders Killed in Crashes, by Time of Day, Day of Week, Age, Alcohol Impairment, and Crash Type .....	116
80. Drivers and Motorcycle Riders Killed in Crashes, by Age and Driver's Blood Alcohol Concentration (BAC).....	116
81. Drivers and Motorcycle Riders Involved in Fatal Crashes, by Vehicle Type and Driver's Blood Alcohol Concentration (BAC).....	118
82. Persons Killed, by Age and Highest Driver Blood Alcohol Concentration (BAC) in the Crash .....	119
83. Pedestrians Killed, by Pedestrian's and Driver's Blood Alcohol Concentration (BAC) .....	119

## PEOPLE: Restraints

84. Drivers Involved in Crashes, by Vehicle Type, Restraint Use, and Crash Severity .....	120
85. Passenger Car and Light Truck Occupants Killed or Injured, by Age and Restraint Use .....	121
86. Passenger Car and Light Truck Occupant Survivors of Fatal Crashes, by Age and Restraint Use .....	122
87. Passenger Car Occupants Killed or Injured, by Seating Position and Restraint Use .....	123
88. Light Truck Occupants Killed or Injured, by Seating Position and Restraint Use .....	124
89. Passenger Car and Light Truck Occupants Killed or Injured, by Restraint Use and Type of Restraint .....	125

## PEOPLE: Rollover

90. Passenger Car and Light Truck Occupants Killed, by Crash Type, Vehicle Type, and Rollover Occurrence.....	126
--	-----

## PEOPLE: Motorcyclists

91. Motorcyclists Killed or Injured, by Time of Day and Day of Week .....	127
92. Motorcyclists Killed, by Person Type and Helmet Use.....	129
93. Motorcycle Riders Involved in Fatal Crashes, by Age and License Compliance .....	129

## PEOPLE: School Bus Related

94. Pedestrians Killed in School Bus Related Crashes, by Age and Striking Vehicle .....	130
95. Persons Killed or Injured in School Bus Related Crashes, by Person Type .....	130

## PEOPLE: Pedestrians

96. Pedestrians Killed or Injured, by Age and Location .....	131
97. Pedestrians Killed or Injured and Fatality and Injury Rates per 100,000 Population, by Age and Sex .....	132
98. Pedestrians Killed or Injured, by Time of Day and Day of Week .....	133
99. Pedestrians Killed or Injured in Single-Vehicle Crashes, by Vehicle Type and Initial Point of Impact .....	135
100. Pedestrians Killed, by Related Factors .....	135

# Table of Contents

## PEOPLE: Pedalcyclists

- 101. Pedalcyclists Killed or Injured, by Age and Location .....136
- 102. Pedalcyclists Killed or Injured and Fatality and Injury Rates per 100,000 Population, by Age and Sex .....137
- 103. Pedalcyclists Killed or Injured, by Time of Day and Day of Week .....138
- 104. Pedalcyclists Killed or Injured in Single-Vehicle Crashes, by Vehicle Type and Initial Point of Impact .....139
- 105. Pedalcyclists Killed, by Related Factors .....140

## STATES: Crashes and All Victims

- 106. 2009 Traffic Fatalities by State and Percent Change from 2008 .....144
- 107. Fatal Crashes, by State and First Harmful Event .....146
- 108. Fatal Crashes, by State and Roadway Function Class .....148
- 109. Fatalities, by State and Roadway Function Class .....150
- 110. Persons Killed, Licensed Drivers, Registered Vehicles, Population, and Fatality Rates by State .....152
- 111. Persons Killed, by State and Person Type .....154
- 112. Persons Killed, by State and Age Group .....156

## STATES: Occupants

- 113. Occupants Killed, by State and Vehicle Type.....158
- 114. Passenger Car and Light Truck Occupants Killed, by State and Restraint Use .....160

## STATES: Rollover

- 115. Passenger Car and Light Truck Occupants Killed, by State, Vehicle Type, and Rollover Occurrence.....162

## STATES: Pedestrians

- 116. 2009 Ranking of State Pedestrian Fatality Rates .....164

## STATES: Alcohol

- 117. Persons Killed, by State and Highest Driver Blood Alcohol Concentration (BAC) in the Crash .....166
- 118. Drivers Involved in Fatal Crashes, by State and Blood Alcohol Concentration (BAC) of the Driver ..168
- 119. Drivers Killed in Fatal Crashes, by State and Blood Alcohol Concentration (BAC) of the Driver ....170
- 120. Surviving Drivers Involved in Fatal Crashes, by State and Blood Alcohol Concentration (BAC) of the Driver .....172

## STATES: Speeding

- 121. Speeding-Related Traffic Fatalities, by State, Road Type, and Speed Limit .....174

## STATES: Emergency Medical Services

- 122. Rural Fatal Crashes, by State and Average Emergency Medical Services (EMS) Response Times ....176
- 123. Urban Fatal Crashes, by State and Average Emergency Medical Services (EMS) Response Times ...178

# Table of Contents

## **STATES: City Rates**

124. Persons Killed, Population, and Fatality Rates by City .....	180
---	-----

## **STATES: Fatalities and Fatality Rates**

125. Fatalities and Fatality Rates by State, 1975-2009 .....	184
--	-----

## **STATES: Laws**

126. Key Provisions of Occupant Restraint Laws and 2009 Seat Belt Use Rates .....	186
127. History of State Motorcycle Helmet Laws .....	194
128. States With .08 Blood Alcohol Concentration Illegal Per Se Laws .....	196

# FIGURES

## TRENDS

1. Fatal Crashes, 1975-2009 .....	14
2. Motor Vehicle Fatality and Injury Rates per 100 Million Vehicle Miles Traveled, 1966-2009 .....	16
3. Driver Involvement Rate per 100,000 Licensed Drivers 16 Years and Older by Sex and Crash Severity, 1975-2008 .....	20
4. Passenger Car Occupant Fatality and Injury Rates per 100 Million Vehicle Miles Traveled, 1975-2008 .....	23
5. Light Truck Occupant Fatality and Injury Rates per 100 Million Vehicle Miles Traveled, 1975-2008 .....	25
6. Large Truck Occupant Fatality and Injury Rates per 100 Million Vehicle Miles Traveled, 1975-2008 .....	27
7. Motorcyclist Fatality and Injury Rates per 100 Million Vehicle Miles Traveled, 1975-2008 .....	29
8. Proportion of Persons Killed, by Highest Driver Blood Alcohol Concentration (BAC) in the Crash, 1982-2009 .....	32
9. Proportion of Drivers Involved in Fatal Crashes with BAC = .08+ by Vehicle Type, 1982-2009 ....	35
10. Proportion of Drivers in Fatal Crashes with BAC = .08+ by Age, 1982-2009 .....	37

## CRASHES

11. Average Fatal Crashes per Hour, by Time of Day, Weekdays and Weekends .....	48
12. Percent of Fatal Crashes by Speed Limit and Land Use .....	54
13. Percent of Fatal Crashes Involving Alcohol-Impaired Driving, by Time of Day and Crash Type .....	59

## VEHICLES

14. Proportion of Vehicles Involved in Traffic Crashes .....	64
15. Percent Rollover Occurrence, by Vehicle Type and Crash Severity .....	67
16. Percent of Vehicles in Crashes, by Most Harmful Event and Vehicle Type .....	71
17. Percent of Vehicles in Crashes, by Initial Point of Impact, Crash Type, and Vehicle Type .....	72

## Figures (Continued)

### PEOPLE

18. Percent of Persons Killed or Injured, by Age.....	89
19. Fatality and Injury Rates per 100,000 Population, by Age and Sex.....	91
20. Percent of Fatalities, by Speed Limit and Land Use.....	93
21. Percent of Persons Killed in Alcohol-Impaired Driving Crashes, by Time of Day.....	95
22. Fatality and Injury Rates per 1,000 Crashes, by First Harmful Event and Manner of Collision.....	97
23. Fatality and Injury Rates per 1,000 Crashes, by Time of Day.....	98
24. Fatality and Injury Rates per 1,000 Crashes, by Speed Limit.....	99
25. Driver Involvement Rates per 100,000 Licensed Drivers, by Age, Sex, and Crash Severity, 2008.....	101
26. Percent Alcohol Impairment (BAC .08 or Higher) for Drivers and Motorcycle Riders Involved in Fatal Crashes, by Age.....	115
27. Percent of Drivers and Motorcycle Riders Killed Who Were Alcohol-Impaired (BAC .08 or Higher), by Driver Age, Crash Type, Time of Day, and Day of Week.....	117
28. Average Number of Motorcyclists Killed per Hour, by Time of Day and Day of Week.....	128
29. Average Number of Pedestrians Killed per Hour, by Time of Day and Day of Week.....	134

### STATES

30. 2009 Traffic Fatalities by State and Percent Change from 2008.....	145
--	-----



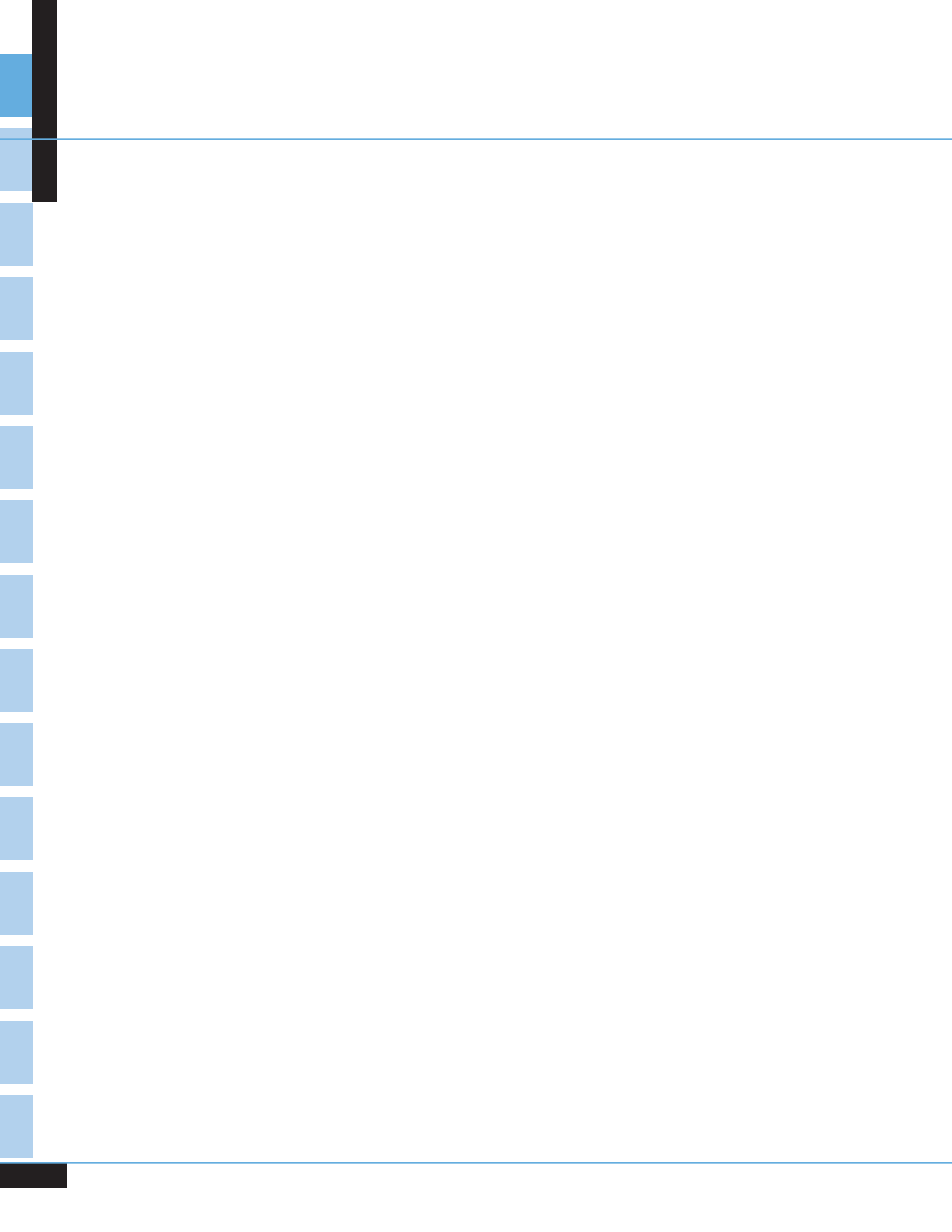


# INTRODUCTION

In this annual report, *Traffic Safety Facts 2009: A Compilation of Motor Vehicle Crash Data from the Fatality Analysis Reporting System and the General Estimates System*, the National Highway Traffic Safety Administration (NHTSA) presents descriptive statistics about traffic crashes of all severities, from those that result in property damage to those that result in the loss of human life.

Information from two of NHTSA's primary data systems has been combined to create a single source for motor vehicle crash statistics. The first data system, the Fatality Analysis Reporting System (FARS), is probably the better known of the two sources. Established in 1975, FARS contains data on the most severe traffic crashes, those in which someone was killed. The second source is the National Automotive Sampling System General Estimates System (GES), which began operation in 1988. GES contains data from a nationally representative sample of police-reported crashes of all severities, including those that result in death, injury, or property damage. The next two sections provide a brief description of FARS and GES.

Both systems were designed and developed by NHTSA's National Center for Statistics and Analysis (NCSA) to provide an overall measure of highway safety, to help identify traffic safety problems, to suggest solutions, and to help provide an objective basis on which to evaluate the effectiveness of motor vehicle safety standards and highway safety initiatives. Data from these systems are used to answer requests for information from the international and national highway traffic safety communities, including State and local governments, the Congress, Federal agencies, research organizations, industry, the media, and private citizens.



The Fatality Analysis Reporting System (FARS), which became operational in 1975, contains data on a census of fatal traffic crashes within the 50 States, the District of Columbia, and Puerto Rico. To be included in FARS, a crash must involve a motor vehicle traveling on a trafficway customarily open to the public, and must result in the death of an occupant of a vehicle or a nonoccupant within 30 days of the crash.

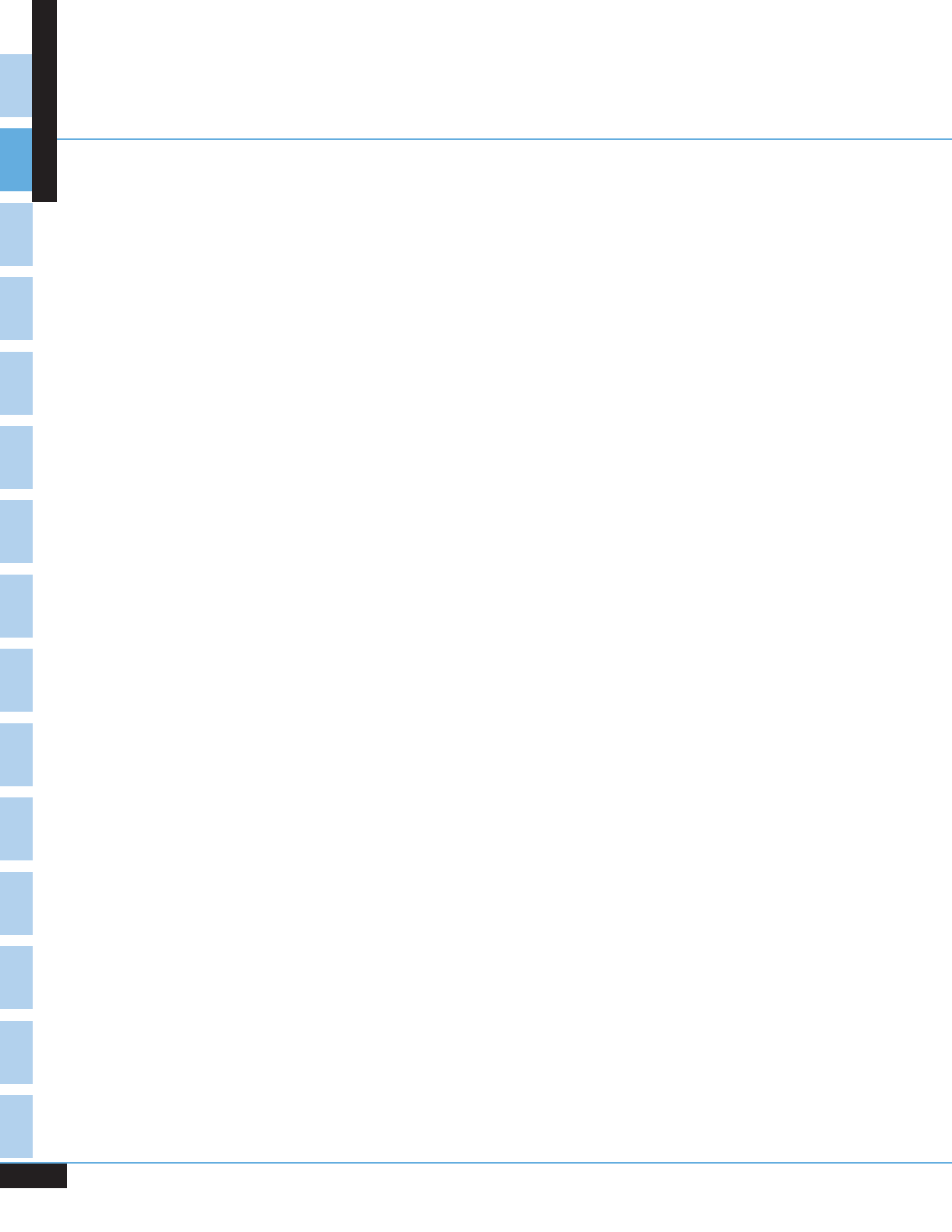
NHTSA has a cooperative agreement with an agency in each State's government to provide information on all qualifying fatal crashes in the State. These agreements are managed by Regional Contracting Officer's Technical Representatives located in the 10 NHTSA Regional Offices. Trained State employees, called "FARS Analysts," are responsible for gathering, translating, and transmitting their State's data to NCSA in a standard format. The number of analysts varies by State, depending on the number of fatal crashes and the ease of obtaining data.

FARS data are obtained solely from the State's existing documents:

Police Accident Reports	Death Certificates
State Vehicle Registration Files	Coroner/Medical Examiner Reports
State Driver Licensing Files	Hospital Medical Reports
State Highway Department Data	Emergency Medical Service Reports
Vital Statistics	Other State Records

From these documents, the analysts code more than 100 FARS data elements. (See Appendix A for a list of the FARS data elements.) The specific data elements may be modified slightly each year to conform to changing user needs, vehicle characteristics, and highway safety emphasis areas. The data collected within FARS do not include any personal identifying information, such as names, addresses, or social security numbers. Thus, any data kept in FARS files and made available to the public fully conform to the Privacy Act.

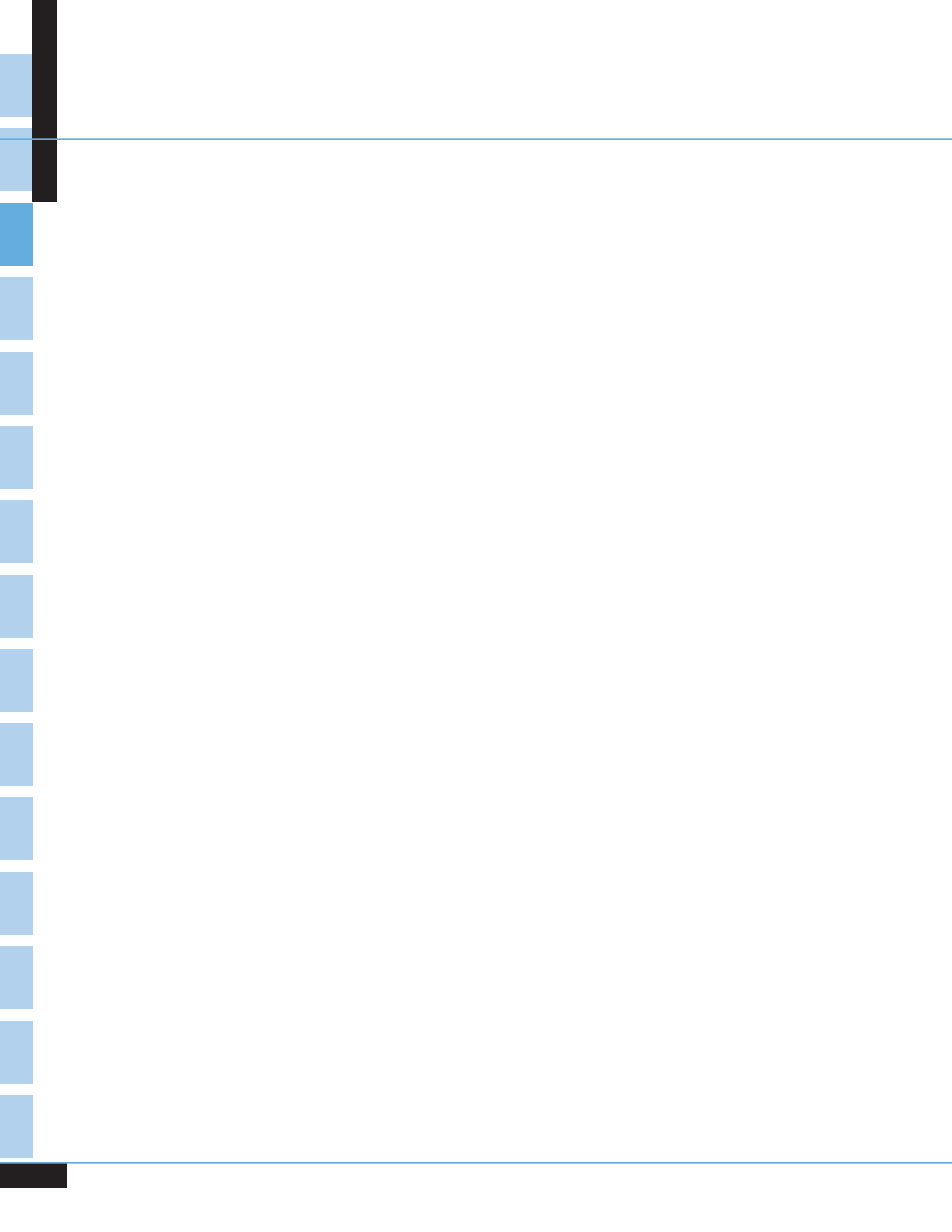
Each analyst enters data into a local microcomputer data file, and daily updates are sent to NHTSA's central computer database. Data are automatically checked when entered for acceptable range values and for consistency, enabling the analyst to make corrections immediately. Several programs continually monitor and improve the completeness and accuracy of the data. The 2009 FARS data file used for the statistics in this report was created in May 2010; however, the 2009 FARS file will *officially* close in December 2010. This additional time provides the opportunity for submission of important variable data requiring outside sources, which may lead to changes in the final counts. The updated final counts for 2008 are reflected in this report. The updated final counts for 2009 will be reflected in the 2010 annual report.



The National Automotive Sampling System (NASS) - General Estimates System (GES) data are obtained from a nationally representative probability sample selected from all police-reported crashes. The system began operation in 1988. To be eligible for the GES sample, a police accident report (PAR) must be completed for the crash, and the crash must involve at least one motor vehicle traveling on a trafficway and must result in property damage, injury, or death. Although various sources suggest that about half the motor vehicle crashes in the country are not reported to police, the majority of these unreported crashes involve only minor property damage and no significant personal injury. By restricting attention to police-reported crashes, the GES concentrates on those crashes of greatest concern to the highway safety community and the general public.

GES data collectors make weekly visits to 410 police jurisdictions in 60 sites across the United States, where they randomly sample about 57,000 PARs per year. The collectors obtain copies of the PARs and send them to the NASS quality control centers for coding. No other data are collected beyond the selected PARs—no driver license, vehicle registration, or medical information is obtained.

Trained data entry personnel interpret and code data directly from the PARs into an electronic data file. Approximately 90 data elements are coded into a common format. (See Appendix B for a list of the GES data elements.) Some elements are modified every other year to meet the changing needs of the highway safety community. To protect individual privacy, no personal information (names, addresses, specific crash locations) is coded. During data coding, the data are checked electronically for validity and consistency. After the data file is created, further quality checks are performed on the data through computer processing and by the data coding supervisors. The 2009 file used for the statistics in this report was completed in May 2010.



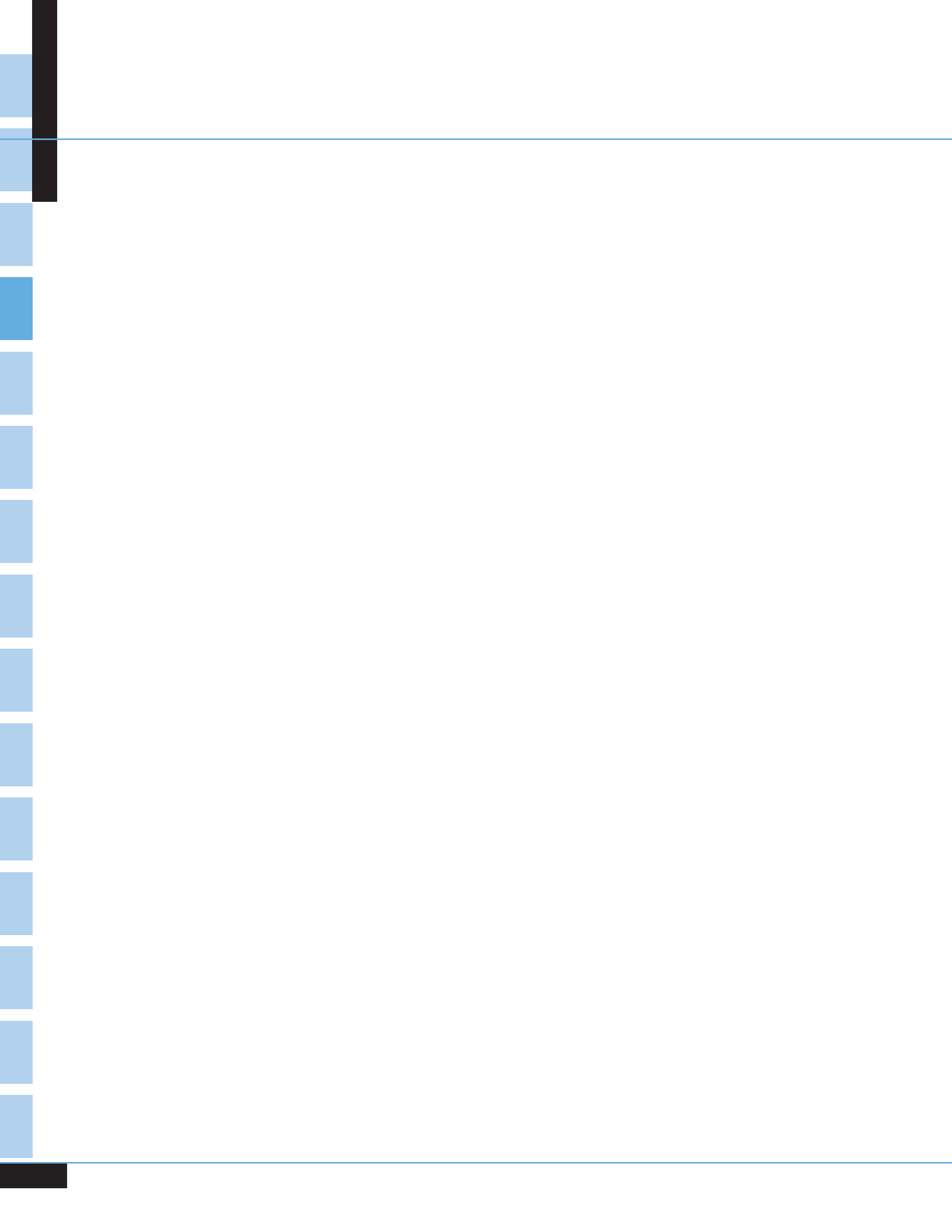


# ABOUT THIS REPORT

**F**atal crash data from FARS and nonfatal crash data from GES are presented in this report in five chapters. Chapter 1, “Trends,” presents data from all years of FARS (1975 through 2009) and GES (1988 through 2009). The remaining chapters present data only from 2009. Chapter 2, “Crashes,” describes general characteristics of crashes, such as when and how often they occurred, where they occurred, and what happened during the crash. Chapter 3, “Vehicles,” concentrates on the types of vehicles involved in crashes and the damage to the vehicles. Chapter 4, “People,” is the largest chapter of this report, with statistics about drivers, passengers, pedestrians, and pedalcyclists. The last chapter of the report, “States,” contains information about crashes for each State, the District of Columbia, and Puerto Rico. Terms used throughout the report are defined in the Glossary.

About three-quarters of the tables in this report present data from both FARS and GES. The remaining tables contain FARS data only. Statistics describing fatal crashes or fatalities have been derived from FARS. Statistics describing injury crashes, property-damage-only crashes, or nonfatal injuries have been derived from GES. The reader should be aware that FARS numbers are actual counts of fatalities or fatal crashes, whereas GES numbers are estimates of counts of crashes and injuries and are subject to sampling and nonsampling errors. (See Appendix C for more information on these errors.) To emphasize this difference, FARS numbers are not rounded, while GES estimates have been rounded to the nearest thousand. As a result of the rounding, for some tables, the sum of the row or column entries may not equal the row or column total. In addition, percentages have been calculated prior to rounding.

The reader may also notice that many tables have rows or footnotes for “unknowns” for FARS data, but not for GES data. The reason for this difference is that almost all the GES unknown data have been assigned values through complex statistical procedures. FARS unknown data, on the other hand, are not assigned values, with the exception of blood alcohol concentration (BAC) test results. When the alcohol test results are unknown, BAC values have been assigned to drivers and nonoccupants involved in fatal crashes, using a method of *multiple imputation* that was revised in 2001. More information on the new multiple imputation method, including detailed tabulations of alcohol involvement in various categories (age, sex, time of day, etc.), is available in NHTSA Technical Report DOT HS 809 403, *Transitioning to Multiple Imputation: A New Method to Estimate Missing Blood Alcohol Concentration (BAC) Values in FARS*.



# DATA AVAILABILITY

While this report presents a wide spectrum of information in more than 100 tables and figures, it contains only a fraction of the data available from FARS and GES. Additional data from FARS (1975 through 2009) or from GES (1988 through 2009) are available in four ways:

- Modest requests for specific data will be answered by NCSA at no charge. Response usually requires about two weeks, depending on the nature and complexity of the data requested.
- Compact disks can be purchased in one of several formats amenable to analysis. This will enable you to process the data using your own computer system. Information on acquiring the compact disks is available by contacting the Volpe Center at the following address:

Attn: Rita Da Silva  
USDOT Volpe National Transportation Systems Center (RTV-5E)  
55 Broadway  
Cambridge, MA 02142  
617-494-3088  
dasilva@volpe.dot.gov

- FARS and GES data can be obtained by downloading any of the published files from the Internet, at <ftp://ftp.nhtsa.dot.gov/FARS> or <ftp://ftp.nhtsa.dot.gov/GES>. The files are available in SAS, sequential ASCII, and (for FARS only, not GES) DBF file formats. This will enable you to process the data using your own computer system.
- FARS data can also be accessed on the Web at [www-fars.nhtsa.dot.gov](http://www-fars.nhtsa.dot.gov). This Web site provides instant access to the 1994 through 2009 FARS data via the Create-a-Query, Create-a-Map, and Reports features. The Create-a-Query feature will enable you to process the data using our interactive user interface. The Create-a-Map feature will enable you to create State-by-State and county-by-county map displays from an inventory of report selections. The Reports feature is an inventory of the fatality statistical reports found in this publication. These are national reports for current and past years that may be customized by selection of State; and for State reports, county tabulation may be selected.

## VEHICLE SAFETY HOTLINE

To report a safety-related problem or to inquire about motor vehicle safety information, contact the Vehicle Safety Hotline at 888-327-4236.

# Data Availability

Requests for more information from FARS or GES should be directed to:

National Highway Traffic Safety Administration  
National Center for Statistics and Analysis  
NVS-424  
1200 New Jersey Avenue, SE  
Washington, DC 20590  
202-366-4198 or 800-934-8517

Requests for more information may also be submitted online via NCSA's Customer Automated Tracking System (CATS):

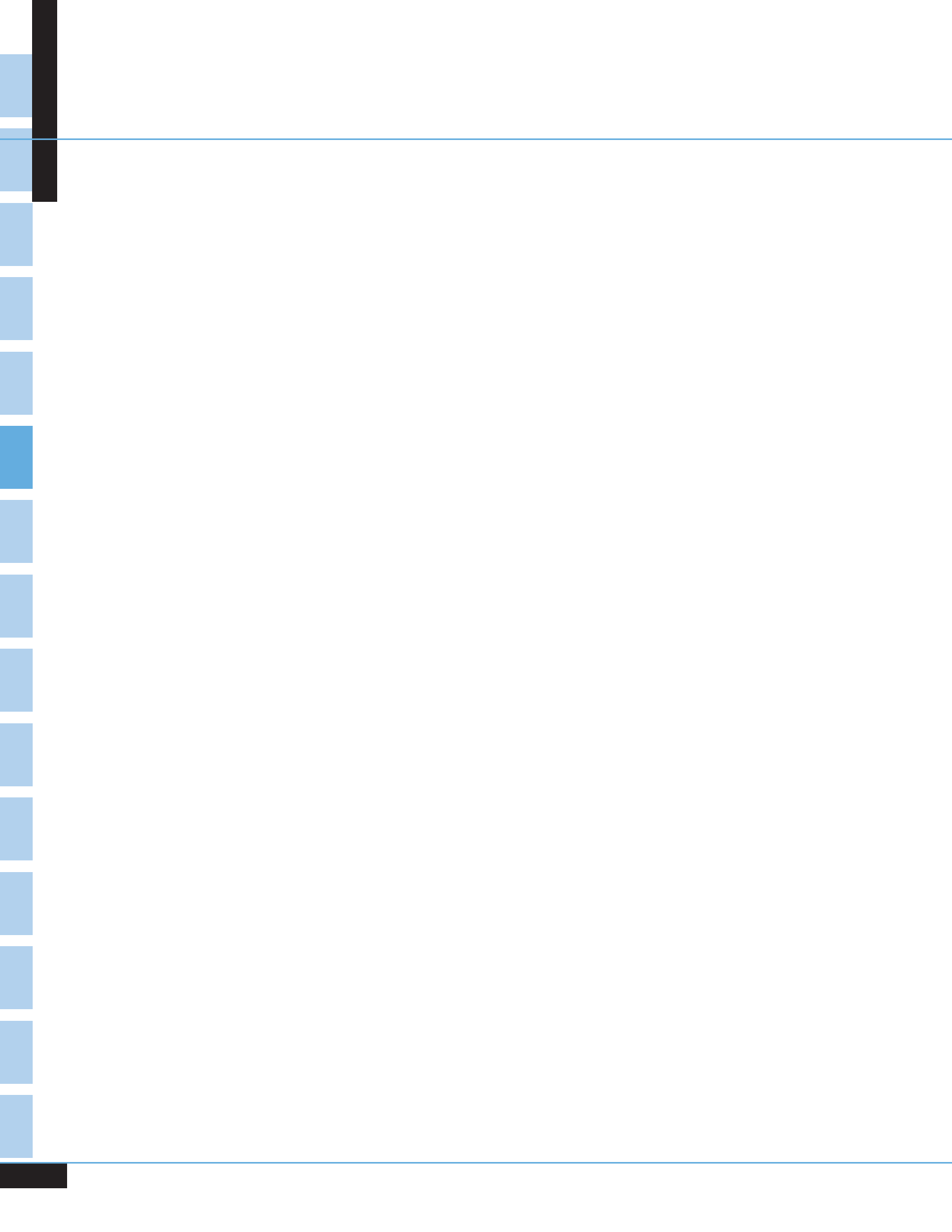


<http://www-nrd.nhtsa.dot.gov/CATS/index.aspx>

Additional information on all NHTSA's data files, including FARS and GES, can be found on the NCSA Web site: <http://www.nhtsa.gov/NCSA>. Fact sheets, recent NCSA research notes, and abstracts of technical reports can be downloaded in portable document format (PDF). Comments and suggestions about the NCSA Web site can be e-mailed to the following address: [ncsaweb@dot.gov](mailto:ncsaweb@dot.gov).

Chapter 1

# TRENDS



# CHAPTER 1 ■ TRENDS

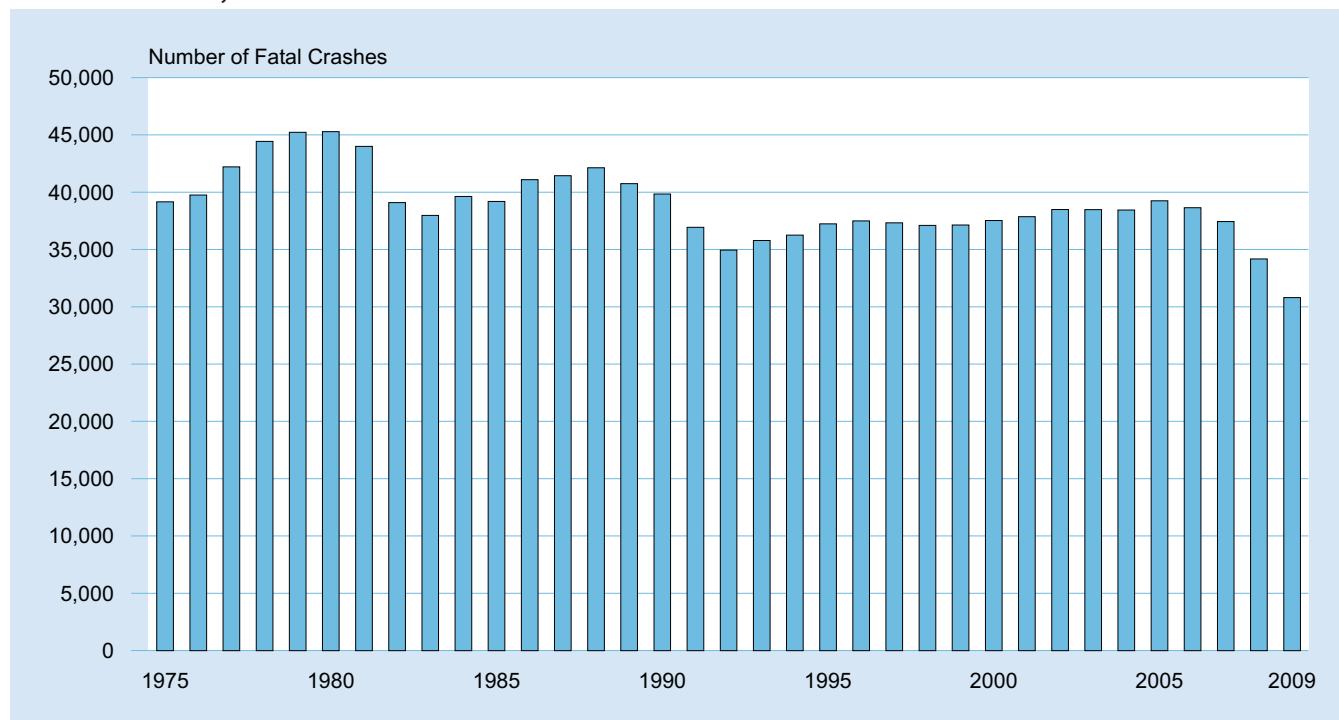
The tables in this chapter present statistics about police-reported motor vehicle crashes over time. Trends for fatal crashes and fatalities generally are presented from 1975 (when FARS began operation) to 2009; however, tables with alcohol data from FARS show data only for the years these data are available—1982 to 2009. Trends for nonfatal crashes and injured are presented from 1988 (when GES began operation) to 2009. Care should be taken when comparing nonfatal crash and injury statistics from one year to the next. Since the statistics derived from GES data are estimates, year-to-year differences may be the result of the sampling process, not the result of an actual trend. The variability or sampling errors associated with the estimates must be considered when making any year-to-year comparisons using GES data. (For more information on sampling error, see Appendix C.) Below are some of the statistics you will find in this chapter:

- Fatal crashes decreased by 9.9 percent from 2008 to 2009, and the fatality rate dropped to 1.13 fatalities per 100 million vehicle miles of travel in 2009.
- The injury rate per 100 million vehicle miles of travel decreased by 6.3 percent from 2008 to 2009.
- The occupant fatality rate (including motorcyclists) per 100,000 population, which declined by 22.7 percent from 1975 to 1992, decreased by 26.8 percent from 1992 to 2009.
- The occupant injury rate (including motorcyclists) per 100,000 population, which declined by 13.6 percent from 1988 to 1992, decreased by 40.0 percent from 1992 to 2009.
- The nonoccupant fatality rate per 100,000 population has declined by 60.2 percent from 1975 to 2009.
- The nonoccupant injury rate per 100,000 population has declined by 51.9 percent from 1988 to 2009.
- The percent of alcohol-impaired driving fatalities has declined from 48 percent in 1982 to 32 percent in 2009.



# Chapter 1 ■ Trends

**Figure 1**  
**Fatal Crashes, 1975-2009**



**Table 1**  
**Crashes by Crash Severity, 1988-2009**

Year	Crash Severity						Total Crashes	
	Fatal		Injury		Property Damage Only			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1988	42,130	0.6	2,233,000	32.4	4,611,000	67.0	6,887,000	100.0
1991	36,937	0.6	2,008,000	32.8	4,073,000	66.6	6,117,000	100.0
1992	34,942	0.6	1,991,000	33.2	3,974,000	66.2	6,000,000	100.0
1993	35,780	0.6	2,022,000	33.1	4,048,000	66.3	6,106,000	100.0
1994	36,254	0.6	2,123,000	32.7	4,336,000	66.8	6,496,000	100.0
1995	37,241	0.6	2,217,000	33.1	4,446,000	66.4	6,699,000	100.0
1996	37,494	0.6	2,238,000	33.1	4,494,000	66.4	6,770,000	100.0
1997	37,324	0.6	2,149,000	32.4	4,438,000	67.0	6,624,000	100.0
1998	37,107	0.6	2,029,000	32.0	4,269,000	67.4	6,335,000	100.0
1999	37,140	0.6	2,054,000	32.7	4,188,000	66.7	6,279,000	100.0
2000	37,526	0.6	2,070,000	32.4	4,286,000	67.0	6,394,000	100.0
2001	37,862	0.6	2,003,000	31.7	4,282,000	67.7	6,323,000	100.0
2002	38,491	0.6	1,929,000	30.5	4,348,000	68.8	6,316,000	100.0
2003	38,477	0.6	1,925,000	30.4	4,365,000	69.0	6,328,000	100.0
2004	38,444	0.6	1,862,000	30.1	4,281,000	69.3	6,181,000	100.0
2005	39,252	0.6	1,816,000	29.5	4,304,000	69.9	6,159,000	100.0
2006	38,648	0.6	1,746,000	29.2	4,189,000	70.1	5,973,000	100.0
2007	37,435	0.6	1,711,000	28.4	4,275,000	71.0	6,024,000	100.0
2008	34,172	0.6	1,630,000	28.1	4,146,000	71.4	5,811,000	100.0
2009	30,797	0.6	1,517,000	27.6	3,957,000	71.9	5,505,000	100.0

# Chapter 1 ■ Trends

**Table 2**

**Persons Killed or Injured and Fatality and Injury Rates per Population, Licensed Drivers, Registered Vehicles, and Vehicle Miles Traveled, 1966-2009**

Killed									
Year	Fatalities	Resident Population (Thousands)	Fatality Rate per 100,000 Population	Licensed Drivers (Thousands)	Fatality Rate per 100,000 Licensed Drivers	Registered Motor Vehicles (Thousands)	Fatality Rate per 100,000 Registered Vehicles	Vehicle Miles Traveled (Billions)	Fatality Rate per 100 Million Vehicle Miles Traveled
1966	50,894	196,560	25.89	100,998	50.39	95,703	53.18	926	5.50
1975	44,525	215,973	20.62	129,791	34.31	126,153	35.29	1,328	3.35
1980	51,091	227,225	22.48	145,295	35.16	146,845	34.79	1,527	3.35
1985	43,825	237,924	18.42	156,868	27.94	166,047	26.39	1,775	2.47
1988	47,087	244,499	19.26	162,854	28.91	177,455	26.53	2,026	2.32
1989	45,582	246,819	18.47	165,554	27.53	181,165	25.16	2,096	2.17
1990	44,599	249,464	17.88	167,015	26.70	184,275	24.20	2,144	2.08
1991	41,508	252,153	16.46	168,995	24.56	186,370	22.27	2,172	1.91
1992	39,250	255,030	15.39	173,125	22.67	184,938	21.22	2,247	1.75
1993	40,150	257,783	15.58	173,149	23.19	188,350	21.32	2,296	1.75
1994	40,716	260,327	15.64	175,403	23.21	192,497	21.15	2,358	1.73
1995	41,817	262,803	15.91	176,628	23.68	197,065	21.22	2,423	1.73
1996	42,065	265,229	15.86	179,539	23.43	201,631	20.86	2,486	1.69
1997	42,013	267,784	15.69	182,709	22.99	203,568	20.64	2,562	1.64
1998	41,501	270,248	15.36	184,861	22.45	208,076	19.95	2,632	1.58
1999	41,717	272,691	15.30	187,170	22.29	212,685	19.61	2,691	1.55
2000	41,945	282,172	14.87	190,625	22.00	217,028	19.33	2,747	1.53
2001	42,196	285,082	14.80	191,276	22.06	221,230	19.07	2,797	1.51
2002	43,005	287,804	14.94	194,602	22.10	225,685	19.06	2,856	1.51
2003	42,884	290,326	14.77	196,166	21.86	230,633	18.59	2,890	1.48
2004	42,836	293,046	14.62	198,889	21.54	237,949	18.00	2,965	1.44
2005	43,510	295,753	14.71	200,549	21.70	245,628	17.71	2,989	1.46
2006	42,708	298,593	14.30	202,810	21.06	251,415	16.99	3,014	1.42
2007	41,259	301,580	13.68	205,742	20.05	255,748	16.13	3,032	1.36
2008	37,423	304,375	12.30	208,321	17.96	257,494	14.53	2,974	1.26
2009	33,808	307,007	11.01	—	—	—	—	2,979	1.13

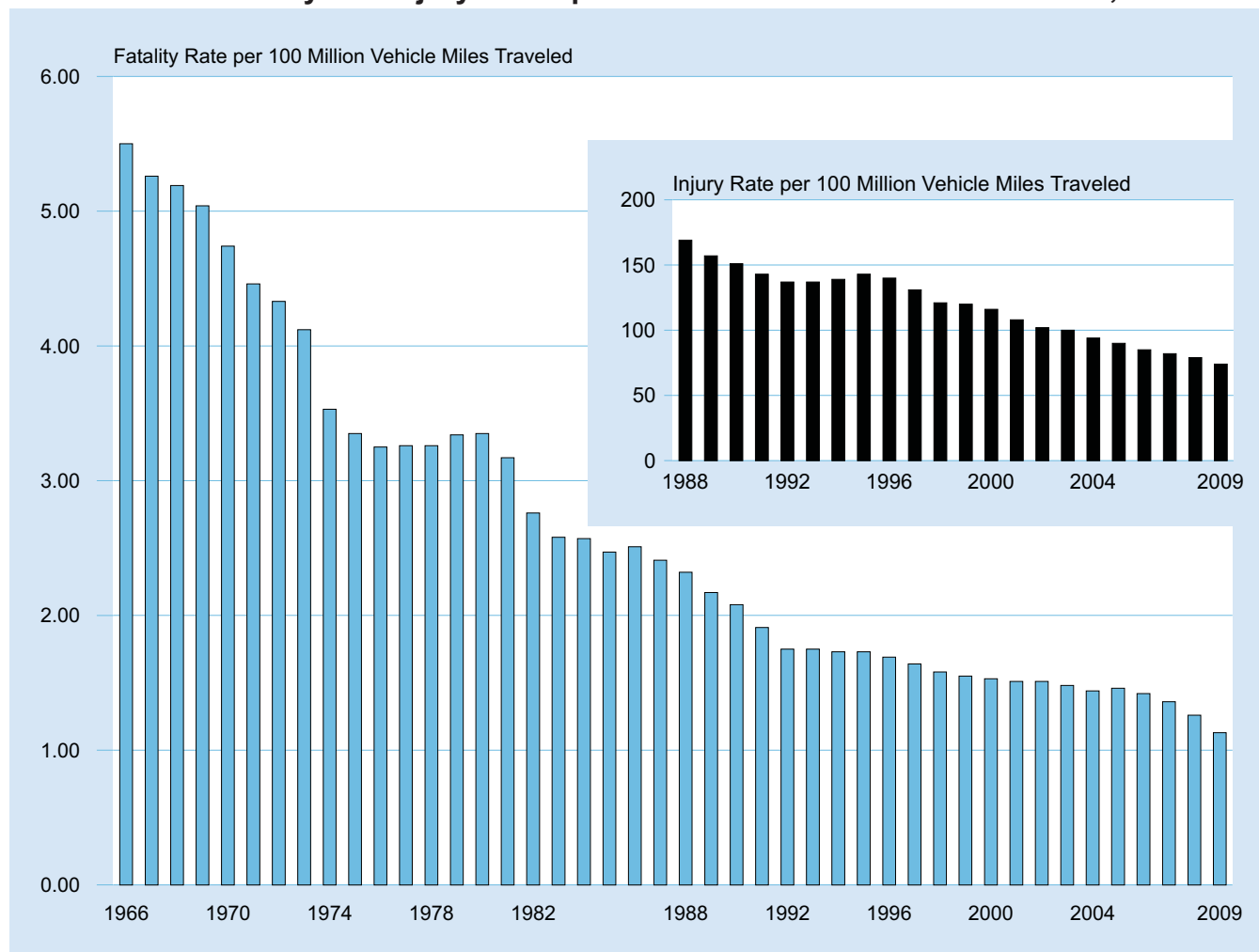
Injured									
Year	Injured	Resident Population (Thousands)	Injury Rate per 100,000 Population	Licensed Drivers (Thousands)	Injury Rate per 100,000 Licensed Drivers	Registered Motor Vehicles (Thousands)	Injury Rate per 100,000 Registered Vehicles	Vehicle Miles Traveled (Billions)	Injury Rate per 100 Million Vehicle Miles Traveled
1988	3,416,000	244,499	1,397	162,854	2,098	177,455	1,925	2,026	169
1989	3,284,000	246,819	1,330	165,554	1,984	181,165	1,813	2,096	157
1990	3,231,000	249,464	1,295	167,015	1,934	184,275	1,753	2,144	151
1991	3,097,000	252,153	1,228	168,995	1,833	186,370	1,662	2,172	143
1992	3,070,000	255,030	1,204	173,125	1,773	184,938	1,660	2,247	137
1993	3,149,000	257,783	1,222	173,149	1,819	188,350	1,672	2,296	137
1994	3,266,000	260,327	1,255	175,403	1,862	192,497	1,697	2,358	139
1995	3,465,000	262,803	1,319	176,628	1,962	197,065	1,758	2,423	143
1996	3,483,000	265,229	1,313	179,539	1,940	201,631	1,728	2,486	140
1997	3,348,000	267,784	1,250	182,709	1,832	203,568	1,644	2,562	131
1998	3,192,000	270,248	1,181	184,861	1,727	208,076	1,534	2,632	121
1999	3,236,000	272,691	1,187	187,170	1,729	212,685	1,522	2,691	120
2000	3,189,000	282,172	1,130	190,625	1,673	217,028	1,469	2,747	116
2001	3,033,000	285,082	1,064	191,276	1,585	221,230	1,371	2,797	108
2002	2,926,000	287,804	1,017	194,602	1,503	225,685	1,296	2,856	102
2003	2,889,000	290,326	995	196,166	1,473	230,633	1,252	2,890	100
2004	2,788,000	293,046	952	198,889	1,402	237,949	1,172	2,965	94
2005	2,699,000	295,753	913	200,549	1,346	245,628	1,099	2,989	90
2006	2,575,000	298,593	862	202,810	1,269	251,415	1,024	3,014	85
2007	2,491,000	301,580	826	205,742	1,211	255,748	974	3,032	82
2008	2,346,000	304,375	771	208,321	1,126	257,494	911	2,974	79
2009	2,217,000	307,007	722	—	—	—	—	2,979	74

Note: Some States include restricted driver licenses and graduated driver licenses in their licensed driver counts.

Sources: Vehicle Miles of Travel and Licensed Drivers—Federal Highway Administration; Registered Vehicles, 1966—Federal Highway Administration; Registered Vehicles, 1975-2009—R.L. Polk & Co. and Federal Highway Administration; Population—U.S. Bureau of the Census; Traffic Deaths, 1966—National Center for Health Statistics, D.H.H.S., State Accident Summaries (adjusted to 30-day traffic deaths by NHTSA); Traffic Deaths, 1975-2009—Fatality Analysis Reporting System (FARS), NHTSA, 30-day traffic deaths; Injured, 1988-2009—General Estimates System (GES), NHTSA. Injury data not available for years before 1988.

# Chapter 1 ■ Trends

**Figure 2**  
**Motor Vehicle Fatality and Injury Rates per 100 Million Vehicle Miles Traveled, 1966-2009**



**Table 3**

## Vehicles Involved in Crashes and Involvement Rates per Vehicle Miles of Travel and per Registered Vehicle by Vehicle Type and Crash Severity, 1975-2009

Year	Vehicle Type											
	Passenger Cars			Light Trucks			Large Trucks			Motorcycles		
	Number	Involvement Rate per 100 Million VMT	Involvement Rate per 100,000 Registered Vehicles	Number	Involvement Rate per 100 Million VMT	Involvement Rate per 100,000 Registered Vehicles	Number	Involvement Rate per 100 Million VMT	Involvement Rate per 100,000 Registered Vehicles	Number	Involvement Rate per 100 Million VMT	Involvement Rate per 100,000 Registered Vehicles
<b>Fatal Crashes</b>												
1975	37,897	3.68	40.11	8,636	4.23	41.35	3,977	4.89	74.16	3,265	58.00	65.77
1980	39,059	3.53	37.28	12,680	4.29	42.18	5,379	4.96	92.89	5,194	50.85	91.22
1990	34,085	2.39	27.65	15,620	2.81	31.29	4,776	3.27	77.08	3,276	34.28	76.91
1993	30,233	2.09	24.97	15,332	2.27	27.10	4,328	2.71	71.09	2,477	25.01	62.27
1994	30,273	2.07	24.81	16,353	2.30	27.49	4,644	2.73	70.49	2,339	22.84	62.26
1995	30,940	2.09	25.11	17,587	2.35	28.13	4,472	2.51	66.55	2,268	23.15	58.20
1996	30,727	2.05	24.66	18,246	2.32	27.88	4,755	2.60	67.81	2,176	21.94	56.20
1997	30,059	1.97	24.11	18,628	2.26	27.68	4,917	2.57	69.42	2,160	21.43	56.45
1998	29,040	1.87	23.05	19,363	2.25	27.75	4,955	2.52	64.08	2,334	22.70	60.16
1999	28,027	1.79	22.09	19,959	2.21	27.29	4,920	2.43	63.15	2,532	23.92	60.98
2000	27,802	1.76	21.76	20,498	2.17	26.91	4,995	2.43	62.26	2,975	28.42	68.45
2001	27,586	1.73	21.41	20,831	2.13	26.42	4,823	2.31	61.38	3,265	33.87	66.59
2002	27,374	1.70	21.03	21,668	2.14	26.49	4,587	2.14	57.86	3,365	35.23	67.24
2003	26,562	1.65	20.19	22,299	2.14	26.18	4,721	2.17	60.86	3,802	39.70	70.80
2004	25,682	1.58	19.27	22,486	2.05	25.00	4,902	2.22	59.99	4,121	40.71	71.45
2005	25,169	1.56	18.62	22,964	2.02	24.19	4,951	2.22	58.37	4,682	44.79	75.19
2006	24,260	1.50	17.72	22,411	1.93	22.82	4,766	2.14	54.04	4,963	41.19	74.31
2007	22,856	1.42	16.57	21,810	1.85	21.63	4,633	2.04	51.32	5,306	38.95	74.33
2008	20,474	1.30	14.73	19,179	1.67	19.01	4,089	1.80	45.40	5,409	37.34	69.77
2009	18,350	—	—	17,902	—	—	3,215	—	—	4,595	—	—
<b>Injury Crashes</b>												
1988	3,073,000	222	2,529	683,000	140	1,530	96,000	69	1,562	98,000	974	2,129
1990	2,838,000	199	2,302	729,000	131	1,460	107,000	73	1,730	82,000	854	1,916
1993	2,631,000	182	2,174	843,000	125	1,490	97,000	60	1,585	56,000	565	1,407
1994	2,785,000	191	2,283	912,000	128	1,533	96,000	56	1,452	54,000	526	1,433
1995	2,914,000	197	2,365	1,024,000	137	1,638	84,000	47	1,244	52,000	530	1,331
1996	2,884,000	192	2,314	1,071,000	136	1,636	94,000	51	1,339	51,000	512	1,312
1997	2,736,000	179	2,195	1,064,000	129	1,582	96,000	50	1,349	51,000	501	1,321
1998	2,545,000	164	2,020	1,059,000	123	1,517	89,000	45	1,146	45,000	433	1,148
1999	2,438,000	156	1,921	1,165,000	129	1,593	101,000	50	1,292	46,000	436	1,111
2000	2,396,000	152	1,876	1,209,000	128	1,587	101,000	49	1,253	53,000	509	1,226
2001	2,279,000	143	1,768	1,218,000	125	1,545	90,000	43	1,143	57,000	587	1,155
2002	2,136,000	133	1,641	1,210,000	119	1,479	94,000	44	1,189	58,000	612	1,167
2003	2,129,000	132	1,619	1,233,000	118	1,447	89,000	41	1,145	64,000	665	1,185
2004	1,990,000	122	1,493	1,246,000	113	1,385	87,000	39	1,062	70,000	694	1,217
2005	1,893,000	117	1,401	1,209,000	107	1,273	82,000	37	971	80,000	769	1,291
2006	1,794,000	111	1,310	1,202,000	104	1,223	80,000	36	911	84,000	694	1,251
2007	1,708,000	106	1,239	1,163,000	99	1,153	76,000	33	839	98,000	720	1,374
2008	1,624,000	103	1,168	1,095,000	96	1,086	66,000	29	734	90,000	622	1,162
2009	1,507,000	—	—	1,066,000	—	—	53,000	—	—	84,000	—	—
<b>Property-Damage-Only Crashes</b>												
1988	6,050,000	437	4,979	1,542,000	316	3,458	297,000	215	4,839	21,000	207	453
1990	5,485,000	384	4,450	1,654,000	298	3,314	273,000	187	4,411	20,000	208	467
1993	4,789,000	331	3,956	1,884,000	279	3,331	296,000	185	4,861	17,000	169	420
1994	5,126,000	351	4,202	2,023,000	284	3,401	360,000	212	5,467	13,000	128	349
1995	5,335,000	361	4,329	2,149,000	287	3,437	289,000	162	4,307	13,000	131	329
1996	5,281,000	352	4,238	2,274,000	289	3,475	295,000	161	4,209	14,000	138	355
1997	5,116,000	335	4,104	2,314,000	281	3,439	337,000	176	4,761	10,000	102	268
1998	4,896,000	315	3,887	2,315,000	269	3,317	318,000	162	4,114	9,000	84	222
1999	4,469,000	285	3,523	2,491,000	276	3,406	369,000	182	4,739	10,000	96	246
2000	4,467,000	283	3,497	2,621,000	278	3,441	351,000	171	4,377	14,000	133	321
2001	4,399,000	276	3,413	2,679,000	275	3,398	335,000	160	4,261	14,000	150	295
2002	4,443,000	276	3,412	2,757,000	272	3,370	336,000	156	4,232	17,000	173	330
2003	4,356,000	270	3,311	2,804,000	269	3,292	363,000	167	4,681	14,000	142	253
2004	4,216,000	259	3,164	2,886,000	263	3,208	324,000	147	3,970	13,000	132	231
2005	4,169,000	258	3,084	2,919,000	257	3,075	354,000	159	4,176	18,000	174	291
2006	4,046,000	251	2,956	2,932,000	253	2,986	300,000	135	3,398	15,000	128	230
2007	4,014,000	250	2,910	3,007,000	256	2,983	333,000	147	3,690	20,000	146	278
2008	3,931,000	249	2,827	2,848,000	249	2,824	309,000	136	3,435	18,000	126	235
2009	3,686,000	—	—	2,866,000	—	—	239,000	—	—	17,000	—	—

Sources: Vehicle Miles Traveled—Federal Highway Administration, revised by NHTSA; Registered Passenger Cars and Light Trucks—R.L. Polk & Co; Registered Large Trucks and Motorcycles—Federal Highway Administration.

# Chapter 1 ■ Trends

**Table 4**  
**Persons Killed or Injured by Person Type and Vehicle Type, 1975-2009**

Year	Person Type											Total
	Occupants by Vehicle Type						Motorcyclists	Nonoccupants				
	Passenger Cars	Light Trucks	Large Trucks	Buses	Other/Unknown	Total		Pedestrian	Pedalcyclist	Other/Unknown	Total	
Killed												
1975	25,929	4,856	961	53	937	32,736	3,189	7,516	1,003	81	8,600	44,525
1980	27,449	7,486	1,262	46	540	36,783	5,144	8,070	/965	129	9,164	51,091
1985	23,212	6,689	977	57	544	31,479	4,564	6,808	890	84	7,782	43,825
1988	25,808	8,306	911	54	429	35,508	3,662	6,870	911	136	7,917	47,087
1989	25,063	8,551	858	50	424	34,946	3,141	6,556	832	107	7,495	45,582
1990	24,092	8,601	705	32	460	33,890	3,244	6,482	859	124	7,465	44,599
1991	22,385	8,391	661	31	466	31,934	2,806	5,801	843	124	6,768	41,508
1992	21,387	8,098	585	28	387	30,485	2,395	5,549	723	98	6,370	39,250
1993	21,566	8,511	605	18	425	31,125	2,449	5,649	816	111	6,576	40,150
1994	21,997	8,904	670	18	409	31,998	2,320	5,489	802	107	6,398	40,716
1995	22,423	9,568	648	33	392	33,064	2,227	5,584	833	109	6,526	41,817
1996*	22,505	9,932	621	21	455	33,534	2,161	5,449	765	154	6,368	42,065
1997	22,199	10,249	723	18	420	33,609	2,116	5,321	814	153	6,288	42,013
1998	21,194	10,705	742	38	409	33,088	2,294	5,228	760	131	6,119	41,501
1999	20,862	11,265	759	59	447	33,392	2,483	4,939	754	149	5,842	41,717
2000	20,699	11,526	754	22	450	33,451	2,897	4,763	693	141	5,597	41,945
2001	20,320	11,723	708	34	458	33,243	3,197	4,901	732	123	5,756	42,196
2002	20,569	12,274	689	45	528	34,105	3,270	4,851	665	114	5,630	43,005
2003	19,725	12,546	726	41	589	33,627	3,714	4,774	629	140	5,543	42,884
2004	19,192	12,674	766	42	602	33,276	4,028	4,675	727	130	5,532	42,836
2005	18,512	13,037	804	58	659	33,070	4,576	4,892	786	186	5,864	43,510
2006	17,925	12,761	805	27	601	32,119	4,837	4,795	772	185	5,752	42,708
2007	16,614	12,458	805	36	614	30,527	5,174	4,699	701	158	5,558	41,259
2008	14,646	10,816	682	67	580	26,791	5,312	4,414	718	188	5,320	37,423
2009	13,095	10,287	503	26	563	24,474	4,462	4,092	630	150	4,872	33,808
Injured												
1988	2,585,000	478,000	37,000	15,000	4,000	3,119,000	105,000	110,000	75,000	8,000	192,000	3,416,000
1989	2,431,000	511,000	43,000	15,000	5,000	3,005,000	83,000	112,000	73,000	11,000	196,000	3,284,000
1990	2,376,000	505,000	42,000	33,000	4,000	2,960,000	84,000	105,000	75,000	7,000	187,000	3,231,000
1991	2,235,000	563,000	28,000	21,000	4,000	2,850,000	80,000	88,000	67,000	11,000	166,000	3,097,000
1992	2,232,000	545,000	34,000	20,000	12,000	2,843,000	65,000	89,000	63,000	10,000	162,000	3,070,000
1993	2,265,000	601,000	32,000	17,000	4,000	2,919,000	59,000	94,000	68,000	9,000	171,000	3,149,000
1994	2,364,000	631,000	30,000	16,000	4,000	3,045,000	57,000	92,000	62,000	9,000	164,000	3,266,000
1995	2,469,000	722,000	30,000	19,000	4,000	3,246,000	57,000	86,000	67,000	10,000	162,000	3,465,000
1996	2,458,000	761,000	33,000	20,000	4,000	3,277,000	55,000	82,000	58,000	11,000	151,000	3,483,000
1997	2,341,000	755,000	31,000	17,000	6,000	3,149,000	53,000	77,000	58,000	11,000	146,000	3,348,000
1998	2,201,000	763,000	29,000	16,000	4,000	3,012,000	49,000	69,000	53,000	8,000	131,000	3,192,000
1999	2,138,000	847,000	33,000	22,000	7,000	3,047,000	50,000	85,000	51,000	3,000	140,000	3,236,000
2000	2,052,000	887,000	31,000	18,000	10,000	2,997,000	58,000	78,000	51,000	5,000	134,000	3,189,000
2001	1,927,000	861,000	29,000	15,000	9,000	2,841,000	60,000	78,000	45,000	8,000	131,000	3,033,000
2002	1,805,000	879,000	26,000	19,000	6,000	2,735,000	65,000	71,000	48,000	7,000	126,000	2,926,000
2003	1,756,000	889,000	27,000	18,000	7,000	2,697,000	67,000	70,000	46,000	8,000	124,000	2,889,000
2004	1,643,000	900,000	27,000	16,000	7,000	2,594,000	76,000	68,000	41,000	9,000	118,000	2,788,000
2005	1,573,000	872,000	27,000	11,000	10,000	2,494,000	87,000	64,000	45,000	8,000	118,000	2,699,000
2006	1,475,000	857,000	23,000	10,000	11,000	2,375,000	88,000	61,000	44,000	7,000	112,000	2,575,000
2007	1,379,000	841,000	23,000	12,000	8,000	2,264,000	103,000	70,000	43,000	10,000	124,000	2,491,000
2008	1,304,000	768,000	23,000	15,000	9,000	2,120,000	96,000	69,000	52,000	9,000	130,000	2,346,000
2009	1,216,000	759,000	17,000	12,000	7,000	2,011,000	90,000	59,000	51,000	7,000	116,000	2,217,000

\*Total for 1996 includes 2 fatalities of unknown person type.

**Table 5**  
**Drivers Involved in Crashes and Involvement Rates per Licensed Driver**  
**by Sex and Crash Severity, 1975-2009**

Year	Sex						Total (>15 Years Old)*		
	Male (>15 Years Old)			Female (>15 Years Old)					
	Number Involved in Crashes	Licensed Drivers (Thousands)	Involvement Rate per 100,000 Licensed Drivers	Number Involved in Crashes	Licensed Drivers (Thousands)	Involvement Rate per 100,000 Licensed Drivers	Number Involved in Crashes	Licensed Drivers (Thousands)	Involvement Rate per 100,000 Licensed Drivers
<b>Drivers in Fatal Crashes</b>									
1975	45,087	70,435	64.01	9,356	59,233	15.80	54,445	129,668	41.99
1988	46,840	84,099	55.70	13,814	78,661	17.56	60,658	162,760	37.27
1992	38,186	88,363	43.21	12,492	84,716	14.75	50,682	173,079	29.28
1993	39,118	87,974	44.47	12,960	85,138	15.22	52,080	173,112	30.08
1994	39,784	89,165	44.62	13,449	86,183	15.61	53,238	175,347	30.36
1995	40,799	89,183	45.75	14,043	87,386	16.07	54,847	176,569	31.06
1996	40,899	90,504	45.19	14,723	89,007	16.54	55,624	179,510	30.99
1997	40,594	91,888	44.18	14,816	90,789	16.32	55,412	182,677	30.33
1998	40,433	93,087	43.44	14,967	91,860	16.29	55,404	184,947	29.96
1999	40,639	94,149	43.16	14,717	92,988	15.83	55,359	187,137	29.58
2000	41,443	95,782	43.27	14,682	94,816	15.48	56,126	190,598	29.45
2001	41,548	95,779	43.38	14,829	95,471	15.53	56,380	191,250	29.48
2002	41,995	97,595	43.03	14,876	96,978	15.34	56,874	194,574	29.23
2003	42,177	98,209	42.95	15,106	97,919	15.43	57,285	196,128	29.21
2004	41,876	99,559	42.06	15,272	99,305	15.38	57,152	198,864	28.74
2005	42,947	100,240	42.84	14,967	100,285	14.92	57,921	200,525	28.88
2006	41,912	101,010	41.49	14,661	101,589	14.43	56,577	202,599	27.93
2007	40,764	102,338	39.83	14,101	103,152	13.67	54,872	205,490	26.70
2008	36,825	103,449	35.60	12,536	104,537	11.99	49,369	207,986	23.74
2009	32,612	—	—	11,756	—	—	44,373	—	—
<b>Drivers in Injury Crashes</b>									
1988	2,423,000	84,099	2,881	1,485,000	78,661	1,887	3,907,000	162,760	2,401
1992	2,114,000	88,363	2,392	1,439,000	84,716	1,699	3,553,000	173,079	2,053
1993	2,144,000	87,974	2,437	1,468,000	85,138	1,724	3,612,000	173,112	2,086
1994	2,264,000	89,165	2,539	1,574,000	86,183	1,826	3,838,000	175,347	2,189
1995	2,378,000	89,183	2,667	1,687,000	87,386	1,931	4,066,000	176,569	2,303
1996	2,378,000	90,504	2,627	1,711,000	89,007	1,922	4,089,000	179,510	2,278
1997	2,296,000	91,888	2,499	1,643,000	90,789	1,809	3,939,000	182,677	2,156
1998	2,158,000	93,087	2,318	1,576,000	91,860	1,716	3,734,000	184,947	2,019
1999	2,134,000	94,149	2,267	1,609,000	92,988	1,730	3,743,000	187,137	2,000
2000	2,192,000	95,782	2,289	1,573,000	94,816	1,659	3,765,000	190,598	1,975
2001	2,090,000	95,779	2,182	1,547,000	95,471	1,620	3,637,000	191,250	1,902
2002	2,000,000	97,595	2,049	1,481,000	96,978	1,528	3,482,000	194,574	1,789
2003	1,990,000	98,209	2,026	1,525,000	97,919	1,557	3,514,000	196,128	1,792
2004	1,912,000	99,559	1,920	1,482,000	99,305	1,493	3,394,000	198,864	1,707
2005	1,837,000	100,240	1,832	1,425,000	100,285	1,421	3,262,000	200,525	1,627
2006	1,763,000	101,010	1,745	1,387,000	101,589	1,366	3,150,000	202,599	1,555
2007	1,708,000	102,338	1,669	1,333,000	103,152	1,292	3,041,000	205,490	1,480
2008	1,596,000	103,449	1,543	1,276,000	104,537	1,221	2,872,000	207,986	1,381
2009	1,487,000	—	—	1,217,000	—	—	2,704,000	—	—
<b>Drivers in Property-Damage-Only Crashes</b>									
1988	5,013,000	84,099	5,961	2,816,000	78,661	3,580	7,829,000	162,760	4,810
1992	4,316,000	88,363	4,885	2,530,000	84,716	2,987	6,847,000	173,079	3,956
1993	4,402,000	87,974	5,003	2,561,000	85,138	3,008	6,963,000	173,112	4,022
1994	4,695,000	89,165	5,265	2,828,000	86,183	3,282	7,523,000	175,347	4,290
1995	4,847,000	89,183	5,434	2,905,000	87,386	3,325	7,752,000	176,569	4,390
1996	4,888,000	90,504	5,400	2,968,000	89,007	3,335	7,856,000	179,510	4,376
1997	4,808,000	91,888	5,232	2,967,000	90,789	3,268	7,775,000	182,677	4,256
1998	4,634,000	93,087	4,978	2,902,000	91,860	3,160	7,536,000	184,947	4,075
1999	4,509,000	94,149	4,789	2,800,000	92,988	3,011	7,309,000	187,137	3,906
2000	4,559,000	95,782	4,760	2,904,000	94,816	3,062	7,463,000	190,598	3,915
2001	4,518,000	95,779	4,717	2,903,000	95,471	3,041	7,421,000	191,250	3,880
2002	4,436,000	97,595	4,545	2,999,000	96,978	3,093	7,435,000	194,574	3,821
2003	4,528,000	98,209	4,610	3,020,000	97,919	3,084	7,547,000	196,128	3,848
2004	4,405,000	99,559	4,424	3,037,000	99,305	3,058	7,442,000	198,864	3,742
2005	4,357,000	100,240	4,347	3,007,000	100,285	2,998	7,364,000	200,525	3,672
2006	4,232,000	101,010	4,190	2,968,000	101,589	2,922	7,200,000	202,599	3,554
2007	4,329,000	102,338	4,230	3,058,000	103,152	2,964	7,386,000	205,490	3,594
2008	4,115,000	103,449	3,978	2,940,000	104,537	2,812	7,055,000	207,986	3,392
2009	3,839,000	—	—	2,879,000	—	—	6,718,000	—	—

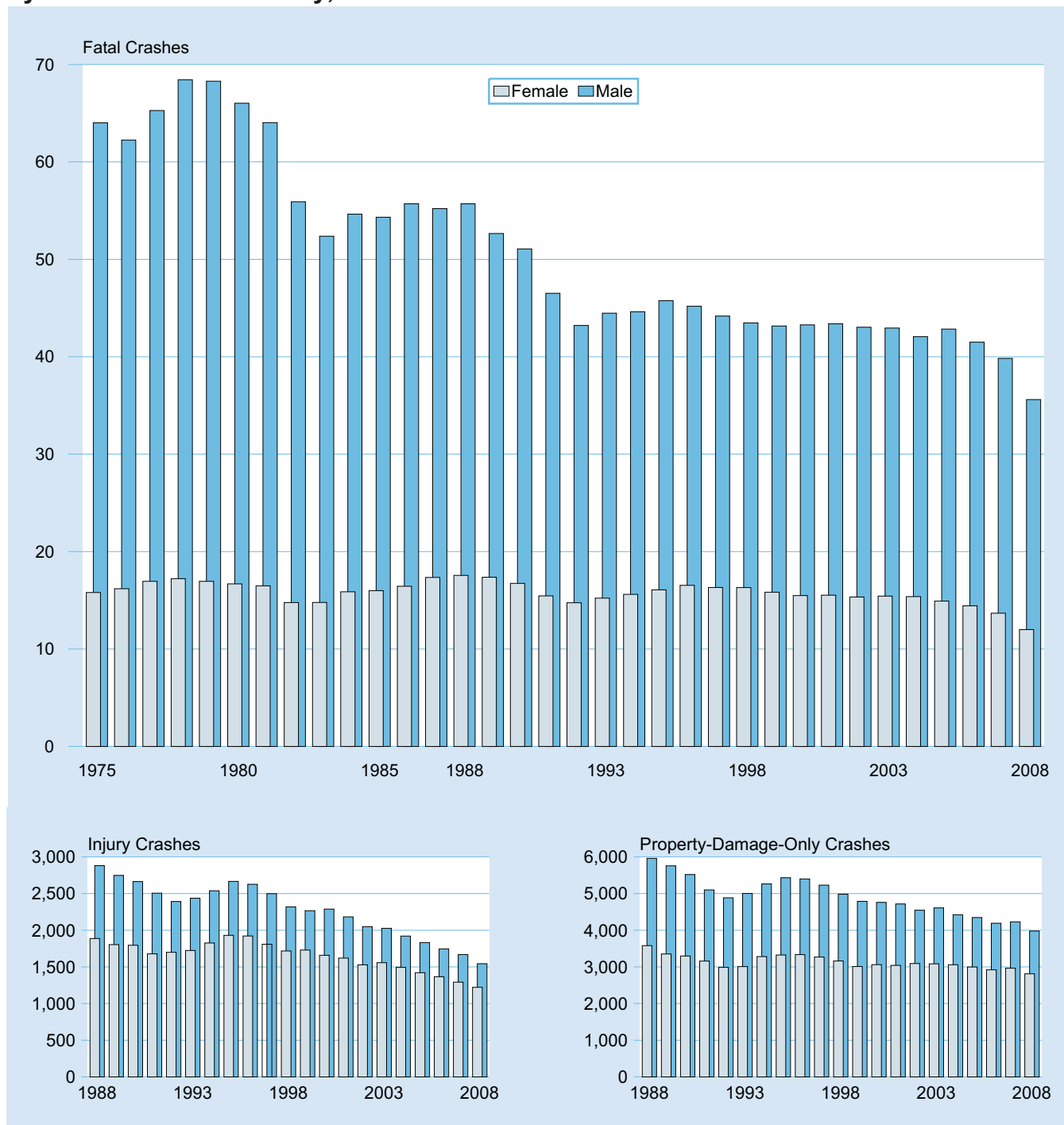
\*Total includes drivers (>15 years old) of unknown sex.

Notes: Drivers in this table include motorcycle riders. Some States include restricted driver licenses and graduated driver licenses in their licensed driver counts.  
Source: Licensed Drivers—Federal Highway Administration.

# Chapter 1 ■ Trends

**Figure 3**

**Driver Involvement Rate per 100,000 Licensed Drivers 16 Years and Older by Sex and Crash Severity, 1975-2008**





**Table 6**  
**Motor Vehicle Occupant and Motorcyclist Fatality and Injury Rates**  
**per Population by Age Group, 1975-2009**

	Age Group (Years)											Total
Year	<5	5-9	10-15	16-20	21-24	25-34	35-44	45-54	55-64	65-74	>74	
Fatality Rate per 100,000 Population												
1975	4.50	2.71	5.71	38.77	34.90	21.57	15.67	13.42	13.29	14.72	16.98	16.67
1980	4.24	2.67	6.00	42.94	39.86	24.82	16.85	14.51	12.83	12.96	15.27	18.45
1985	3.18	2.36	5.52	33.72	32.75	19.50	13.87	11.88	11.33	12.63	16.73	15.15
1988	3.82	2.64	5.74	37.95	33.63	20.50	14.20	12.33	12.15	14.12	19.26	16.02
1989	3.93	2.92	5.48	34.71	30.85	20.10	13.89	12.46	12.18	14.24	19.41	15.43
1990	3.30	2.50	5.25	34.14	30.62	19.81	13.34	12.20	11.91	13.36	18.48	14.89
1991	3.13	2.39	4.86	31.76	28.83	17.79	12.29	11.12	10.75	13.22	19.14	13.78
1992	2.99	2.41	4.75	28.37	25.96	16.54	11.71	10.62	10.53	13.27	18.81	12.89
1993	3.14	2.35	4.67	28.99	26.70	16.47	11.86	10.52	10.86	12.73	20.78	13.02
1994	3.46	2.35	5.07	30.46	26.27	16.07	11.79	11.15	10.71	13.99	20.71	13.18
1995	3.17	2.46	5.15	29.58	27.30	17.03	12.49	11.01	11.42	13.67	20.87	13.43
1996	3.40	2.34	5.07	29.43	27.31	16.78	12.60	11.14	11.58	14.20	20.84	13.46
1997	3.16	2.42	4.96	28.38	25.53	16.49	12.23	11.57	11.96	14.46	22.09	13.34
1998	3.03	2.60	4.60	27.61	25.06	15.81	12.60	11.44	11.53	14.31	21.28	13.09
1999	2.94	2.54	4.49	28.10	25.56	16.13	12.62	11.48	11.52	14.17	20.70	13.16
2000	2.82	2.38	4.27	27.78	25.28	15.55	12.81	11.51	11.39	12.89	19.49	12.88
2001	2.66	2.26	3.79	27.85	24.86	15.63	12.93	11.36	11.04	12.78	19.27	12.78
2002	2.41	2.12	4.09	29.03	25.75	15.67	13.02	11.87	11.15	12.66	18.67	12.99
2003	2.43	2.12	4.17	27.52	24.71	15.43	13.06	12.05	11.32	12.53	19.07	12.86
2004	2.51	2.26	4.31	27.03	24.75	15.68	12.47	12.11	11.15	12.42	17.93	12.73
2005	2.28	2.21	3.55	25.65	25.49	16.15	12.91	12.04	11.73	12.61	17.03	12.73
2006	2.24	1.82	3.38	25.04	25.83	16.15	12.67	11.85	11.09	11.47	15.47	12.38
2007	1.90	1.75	3.25	23.33	24.77	15.15	12.18	11.57	10.73	11.10	15.12	11.84
2008	1.44	1.41	2.49	19.15	21.33	14.01	11.02	10.59	9.98	10.20	13.86	10.55
2009	1.54	1.37	2.23	16.80	17.34	12.19	9.87	9.93	8.95	9.35	13.08	9.43
Injury Rate per 100,000 Population												
1988	417	444	734	3,283	2,666	1,800	1,308	1,030	876	710	656	1,319
1989	370	469	727	3,210	2,467	1,672	1,280	985	801	713	618	1,251
1990	329	430	674	3,110	2,494	1,672	1,227	989	844	750	514	1,220
1991	384	470	709	2,921	2,317	1,574	1,144	977	801	727	521	1,162
1992	323	438	685	2,988	2,253	1,573	1,101	971	783	722	586	1,140
1993	367	471	657	2,885	2,307	1,606	1,195	956	821	707	592	1,155
1994	411	468	706	2,958	2,369	1,667	1,225	987	857	756	598	1,192
1995	418	483	742	3,193	2,456	1,722	1,291	1,132	926	755	624	1,257
1996	418	533	731	3,132	2,432	1,766	1,295	1,085	904	788	654	1,256
1997	400	461	684	2,981	2,401	1,689	1,257	1,012	815	761	641	1,196
1998	403	440	677	2,780	2,123	1,586	1,158	1,029	873	696	587	1,133
1999	383	477	662	2,828	2,169	1,596	1,135	1,028	801	759	610	1,136
2000	349	405	547	2,692	2,095	1,450	1,159	949	830	723	665	1,083
2001	308	371	512	2,460	2,026	1,388	1,094	932	756	668	576	1,018
2002	300	378	517	2,386	1,896	1,311	1,033	874	765	617	545	973
2003	297	372	473	2,277	1,841	1,327	1,021	876	733	608	518	952
2004	279	348	482	2,142	1,697	1,202	1,008	879	730	603	487	911
2005	258	318	480	1,992	1,705	1,211	950	833	687	544	460	873
2006	261	282	411	1,861	1,568	1,139	921	765	671	560	482	825
2007	256	283	363	1,749	1,508	1,116	839	755	634	559	425	785
2008	232	260	363	1,570	1,374	1,020	797	720	608	498	393	728
2009	209	254	333	1,377	1,362	945	734	699	576	514	389	684

Note: Population estimates for historical years are periodically revised by the U.S. Census Bureau.

# Chapter 1 ■ Trends

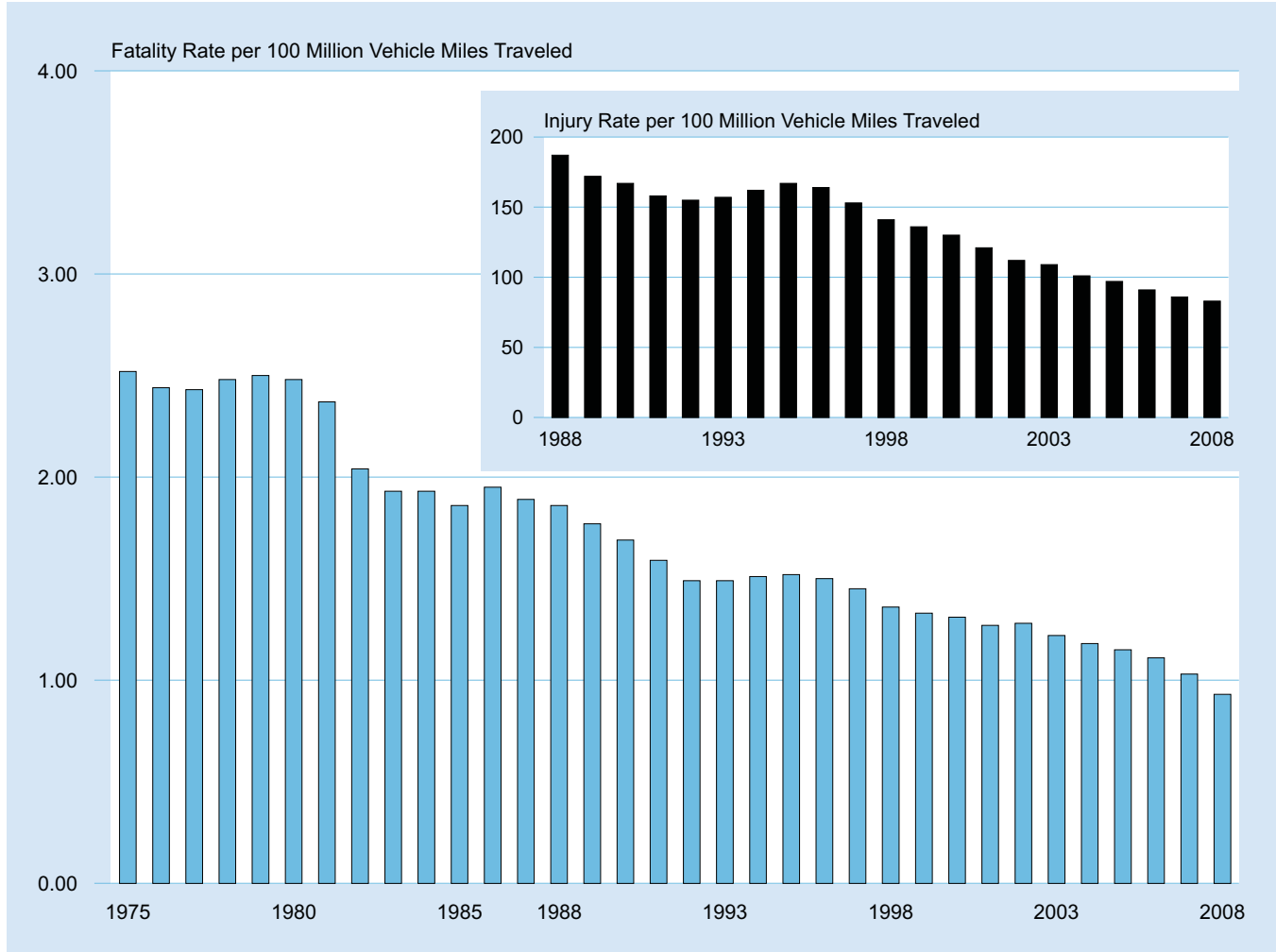
**Table 7**  
**Passenger Car Occupants Killed or Injured and Fatality and Injury Rates**  
**per Registered Vehicle and Vehicle Miles of Travel, 1975-2009**

Year	Registered Passenger Cars	Vehicle Miles Traveled (Millions)	Passenger Car Occupants Killed	Fatality Rate per 100,000 Registered Passenger Cars	Fatality Rate per 100 Million Vehicle Miles Traveled	Passenger Car Occupants Injured	Injury Rate per 100,000 Registered Passenger Cars	Injury Rate per 100 Million Vehicle Miles Traveled
1975	94,478,029	1,030,376	25,929	27.44	2.52	*	*	*
1976	97,011,684	1,070,667	26,166	26.97	2.44	*	*	*
1977	98,967,665	1,102,726	26,782	27.06	2.43	*	*	*
1978	101,855,551	1,136,459	28,153	27.64	2.48	*	*	*
1979	103,543,788	1,111,705	27,808	26.86	2.50	*	*	*
1980	104,770,998	1,107,056	27,449	26.20	2.48	*	*	*
1981	106,002,720	1,122,092	26,645	25.14	2.37	*	*	*
1982	106,936,590	1,145,828	23,330	21.82	2.04	*	*	*
1983	109,085,444	1,187,760	22,979	21.07	1.93	*	*	*
1984	112,177,361	1,226,461	23,620	21.06	1.93	*	*	*
1985	116,348,085	1,248,980	23,212	19.95	1.86	*	*	*
1986	117,268,114	1,277,550	24,944	21.27	1.95	*	*	*
1987	119,848,784	1,328,460	25,132	20.97	1.89	*	*	*
1988	121,519,139	1,384,047	25,808	21.24	1.86	2,585,000	2,127	187
1989	122,758,478	1,415,213	25,063	20.42	1.77	2,431,000	1,980	172
1990	123,276,600	1,427,178	24,092	19.54	1.69	2,376,000	1,928	167
1991	123,327,336	1,411,655	22,385	18.15	1.59	2,235,000	1,812	158
1992	120,346,747	1,436,035	21,387	17.77	1.49	2,232,000	1,854	155
1993	121,055,398	1,445,106	21,566	17.81	1.49	2,265,000	1,871	157
1994	121,996,580	1,459,208	21,997	18.03	1.51	2,364,000	1,937	162
1995	123,241,881	1,478,352	22,423	18.19	1.52	2,469,000	2,004	167
1996	124,612,787	1,499,139	22,505	18.06	1.50	2,458,000	1,973	164
1997	124,672,920	1,528,399	22,199	17.81	1.45	2,341,000	1,877	153
1998	125,965,709	1,555,901	21,194	16.83	1.36	2,201,000	1,748	141
1999	126,868,744	1,566,808	20,862	16.44	1.33	2,138,000	1,685	136
2000	127,740,420	1,580,735	20,699	16.20	1.31	2,052,000	1,606	130
2001	128,874,299	1,595,443	20,320	15.77	1.27	1,927,000	1,495	121
2002	130,196,812	1,611,860	20,569	15.80	1.28	1,805,000	1,386	112
2003	131,549,941	1,612,237	19,725	14.99	1.22	1,756,000	1,335	109
2004	133,275,380	1,628,266	19,192	14.40	1.18	1,643,000	1,232	101
2005	135,183,269	1,615,225	18,512	13.69	1.15	1,573,000	1,164	97
2006	136,881,809	1,614,564	17,925	13.10	1.11	1,475,000	1,077	91
2007	137,929,951	1,608,808	16,614	12.05	1.03	1,379,000	1,000	86
2008	139,028,041	1,578,948	14,646	10.53	0.93	1,304,000	938	83
2009	—	—	13,095	—	—	1,216,000	—	—

\*Injury data not available before 1988.

Sources: Vehicle Miles Traveled—Federal Highway Administration, revised by NHTSA; Registered Vehicles—R.L. Polk & Co.

**Figure 4**  
**Passenger Car Occupant Fatality and Injury Rates per 100 Million Vehicle Miles Traveled, 1975-2008**



# Chapter 1 ■ Trends

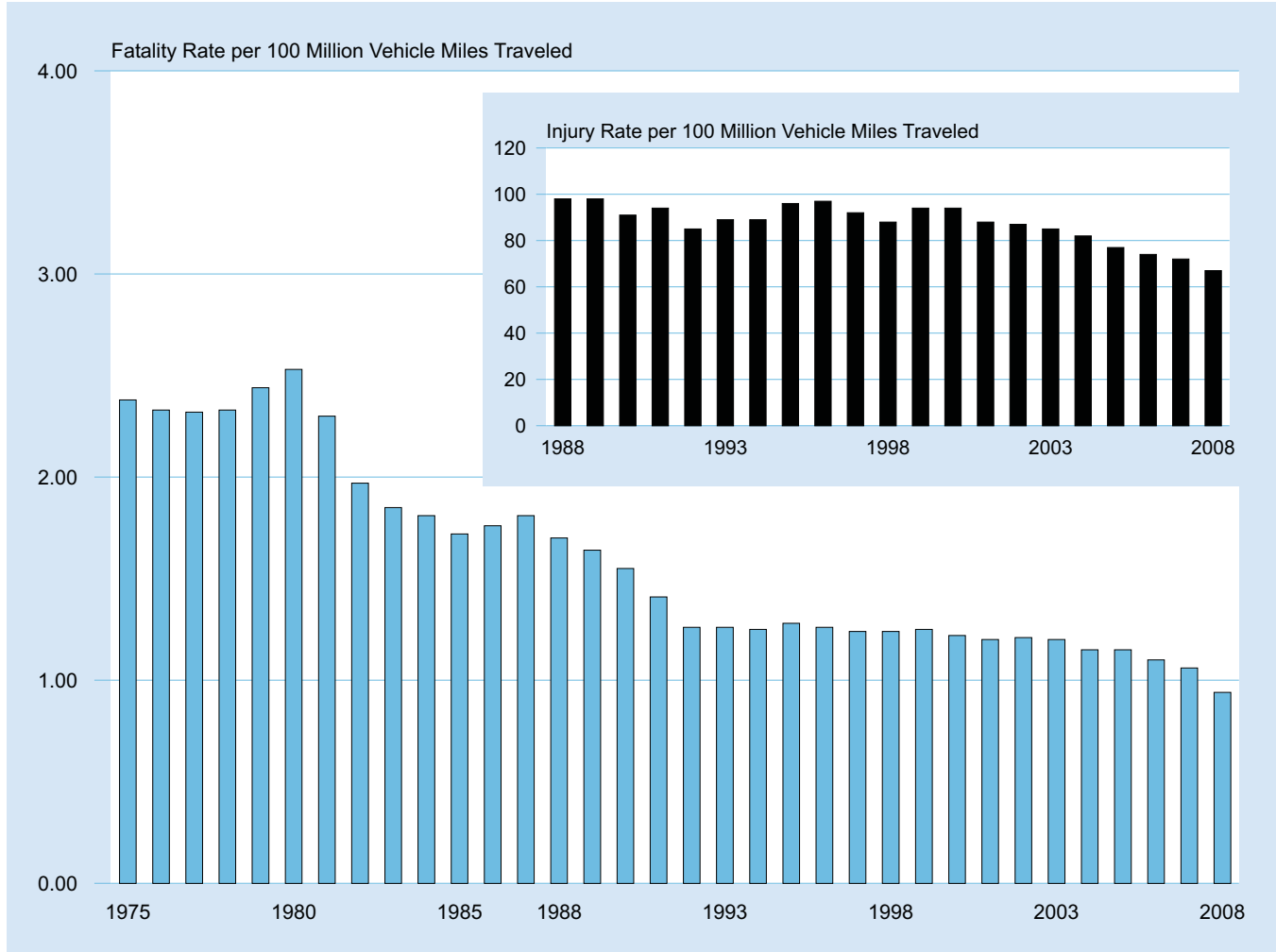
**Table 8**  
**Light Truck Occupants Killed or Injured and Fatality and Injury Rates**  
**per Registered Vehicle and Vehicle Miles of Travel, 1975-2009**

Year	Registered Light Trucks	Vehicle Miles Traveled (Millions)	Light Truck Occupants Killed	Fatality Rate per 100,000 Registered Light Trucks	Fatality Rate per 100 Million Vehicle Miles Traveled	Light Truck Occupants Injured	Injury Rate per 100,000 Registered Light Trucks	Injury Rate per 100 Million Vehicle Miles Traveled
1975	20,886,680	204,274	4,856	23.25	2.38	*	*	*
1976	22,794,702	233,382	5,438	23.86	2.33	*	*	*
1977	24,432,701	257,108	5,976	24.46	2.32	*	*	*
1978	27,285,497	289,463	6,745	24.72	2.33	*	*	*
1979	28,932,820	293,840	7,178	24.81	2.44	*	*	*
1980	30,060,754	295,475	7,486	24.90	2.53	*	*	*
1981	31,236,287	307,583	7,081	22.67	2.30	*	*	*
1982	32,307,692	322,026	6,359	19.68	1.97	*	*	*
1983	33,068,138	334,937	6,202	18.76	1.85	*	*	*
1984	35,257,788	358,588	6,496	18.42	1.81	*	*	*
1985	37,665,180	388,779	6,689	17.76	1.72	*	*	*
1986	39,763,446	416,532	7,317	18.40	1.76	*	*	*
1987	41,695,017	444,392	8,058	19.33	1.81	*	*	*
1988	44,599,500	488,431	8,306	18.62	1.70	478,000	1,071	98
1989	47,134,148	522,483	8,551	18.14	1.64	511,000	1,084	98
1990	49,916,497	555,659	8,601	17.23	1.55	505,000	1,012	91
1991	52,062,064	595,924	8,391	16.12	1.41	563,000	1,081	94
1992	53,836,046	642,397	8,098	15.04	1.26	545,000	1,012	85
1993	56,573,835	675,353	8,511	15.04	1.26	601,000	1,062	89
1994	59,485,995	711,515	8,904	14.97	1.25	631,000	1,061	89
1995	62,520,872	749,971	9,568	15.30	1.28	722,000	1,156	96
1996	65,438,877	787,255	9,932	15.18	1.26	761,000	1,164	97
1997	67,287,470	824,896	10,249	15.23	1.24	755,000	1,122	92
1998	69,783,500	861,951	10,705	15.34	1.24	763,000	1,093	88
1999	73,143,777	903,314	11,265	15.40	1.25	847,000	1,158	94
2000	76,173,062	942,611	11,526	15.13	1.22	887,000	1,164	94
2001	78,845,571	976,096	11,723	14.87	1.20	861,000	1,091	88
2002	81,795,850	1,012,648	12,274	15.01	1.21	879,000	1,075	87
2003	85,179,665	1,043,936	12,546	14.73	1.20	889,000	1,044	85
2004	89,938,578	1,098,807	12,674	14.09	1.15	900,000	1,001	82
2005	94,928,732	1,134,247	13,037	13.73	1.15	872,000	919	77
2006	98,213,587	1,158,460	12,761	12.99	1.10	857,000	872	74
2007	100,817,496	1,175,930	12,458	12.36	1.06	841,000	835	72
2008	100,862,944	1,145,505	10,816	10.72	0.94	768,000	762	67
2009	—	—	10,287	—	—	759,000	—	—

\*Injury data not available before 1988.

Sources: Vehicle Miles Traveled—Federal Highway Administration, revised by NHTSA; Registered Vehicles—R.L. Polk & Co.

**Figure 5**  
**Light Truck Occupant Fatality and Injury Rates per 100 Million Vehicle Miles Traveled, 1975-2008**



# Chapter 1 ■ Trends

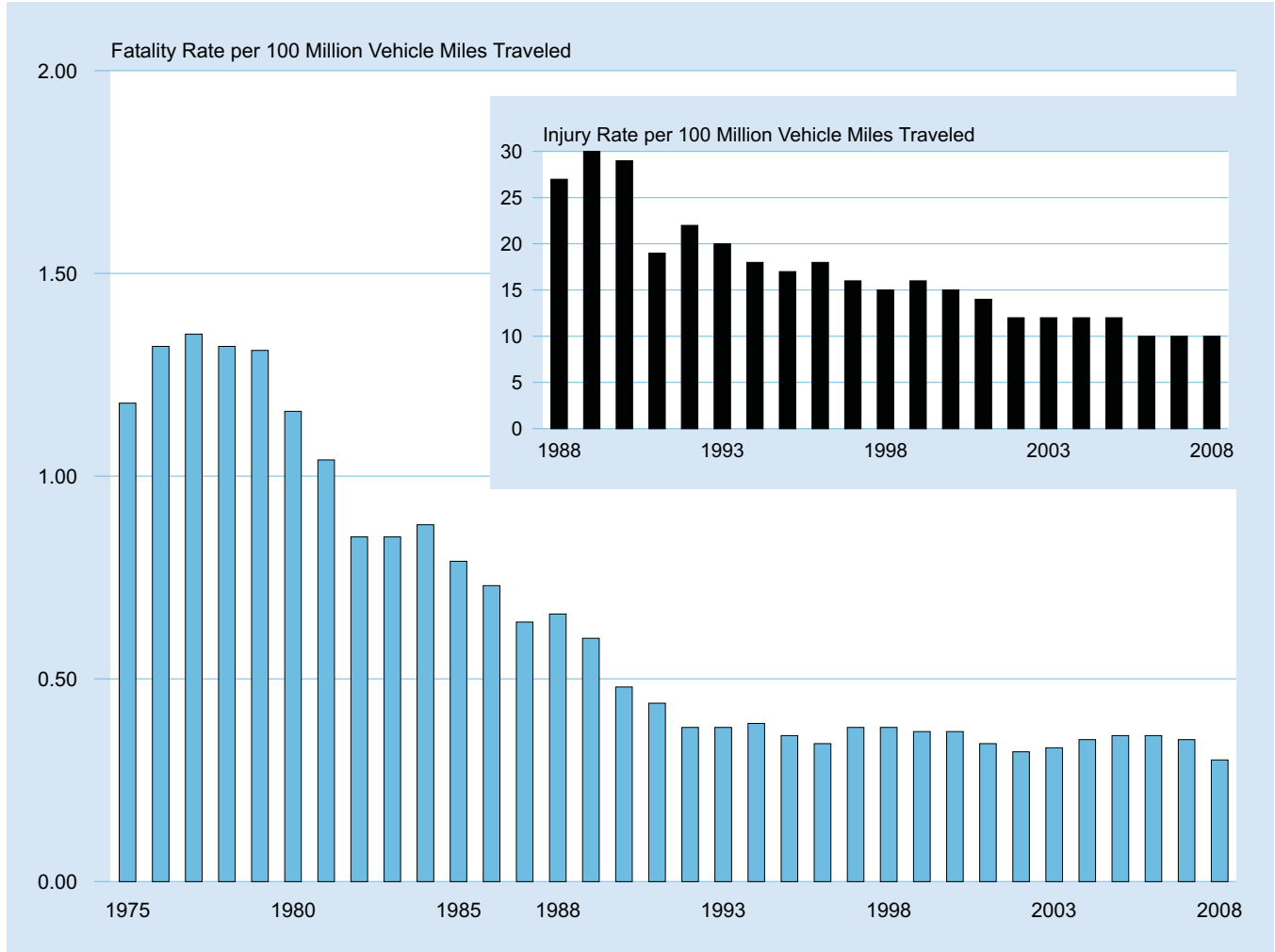
**Table 9**  
**Large Truck Occupants Killed or Injured and Fatality and Injury Rates**  
**per Registered Vehicle and Vehicle Miles of Travel, 1975-2009**

Year	Registered Large Trucks	Vehicle Miles Traveled (Millions)	Large Truck Occupants Killed	Fatality Rate per 100,000 Registered Large Trucks	Fatality Rate per 100 Million Vehicle Miles Traveled	Large Truck Occupants Injured	Injury Rate per 100,000 Registered Large Trucks	Injury Rate per 100 Million Vehicle Miles Traveled
1975	5,362,369	81,330	961	17.92	1.18	*	*	*
1976	5,575,185	86,070	1,132	20.30	1.32	*	*	*
1977	5,689,903	95,021	1,287	22.62	1.35	*	*	*
1978	5,859,807	105,739	1,395	23.81	1.32	*	*	*
1979	5,891,571	109,004	1,432	24.31	1.31	*	*	*
1980	5,790,653	108,491	1,262	21.79	1.16	*	*	*
1981	5,716,278	108,702	1,133	19.82	1.04	*	*	*
1982	5,590,415	111,423	944	16.89	0.85	*	*	*
1983	5,508,392	116,132	982	17.83	0.85	*	*	*
1984	5,401,075	121,796	1,074	19.88	0.88	*	*	*
1985	5,996,337	123,504	977	16.29	0.79	*	*	*
1986	5,720,880	126,675	926	16.19	0.73	*	*	*
1987	5,718,266	133,517	852	14.90	0.64	*	*	*
1988	6,136,884	137,985	911	14.84	0.66	37,000	611	27
1989	6,226,482	142,749	858	13.78	0.60	43,000	687	30
1990	6,195,876	146,242	705	11.38	0.48	42,000	675	29
1991	6,172,146	149,543	661	10.71	0.44	28,000	454	19
1992	6,045,205	153,384	585	9.68	0.38	34,000	559	22
1993	6,088,155	159,888	605	9.94	0.38	32,000	527	20
1994	6,587,885	170,216	670	10.17	0.39	30,000	459	18
1995	6,719,421	178,156	648	9.64	0.36	30,000	452	17
1996	7,012,615	182,971	621	8.86	0.34	33,000	467	18
1997	7,083,326	191,477	723	10.21	0.38	31,000	436	16
1998	7,732,270	196,380	742	9.60	0.38	29,000	372	15
1999	7,791,426	202,688	759	9.74	0.37	33,000	422	16
2000	8,022,649	205,520	754	9.40	0.37	31,000	384	15
2001	7,857,675	209,032	708	9.01	0.34	29,000	374	14
2002	7,927,280	214,603	689	8.69	0.32	26,000	331	12
2003	7,756,888	217,917	726	9.36	0.33	27,000	347	12
2004	8,171,364	220,792	766	9.37	0.35	27,000	334	12
2005	8,481,999	222,523	804	9.48	0.36	27,000	322	12
2006	8,819,007	222,513	805	9.13	0.36	23,000	259	10
2007	9,027,624	227,060	805	8.92	0.35	23,000	258	10
2008	9,006,738	227,458	682	7.57	0.30	23,000	255	10
2009	—	—	503	—	—	17,000	—	—

\*Injury data not available before 1988.

Source: Registered Vehicles and Vehicle Miles Traveled—Federal Highway Administration.

**Figure 6**  
**Large Truck Occupant Fatality and Injury Rates per 100 Million Vehicle Miles Traveled, 1975-2008**



# Chapter 1 ■ Trends

**Table 10**

## **Motorcyclists Killed or Injured and Fatality and Injury Rates per Registered Vehicle and Vehicle Miles of Travel, 1975-2009**

Year	Registered Motorcycles	Vehicle Miles Traveled (Millions)	Motorcyclists Killed	Fatality Rate per 100,000 Registered Motorcycles	Fatality Rate per 100 Million Vehicle Miles Traveled	Motorcyclists Injured	Injury Rate per 100,000 Registered Motorcycles	Injury Rate per 100 Million Vehicle Miles Traveled
1975	4,964,070	5,629	3,189	64.24	56.65	*	*	*
1976	4,933,332	6,003	3,312	67.14	55.17	*	*	*
1977	4,933,256	6,349	4,104	83.19	64.64	*	*	*
1978	4,867,855	7,158	4,577	94.02	63.94	*	*	*
1979	5,422,132	8,637	4,894	90.26	56.66	*	*	*
1980	5,693,940	10,214	5,144	90.34	50.36	*	*	*
1981	5,831,132	10,690	4,906	84.13	45.89	*	*	*
1982	5,753,858	9,910	4,453	77.39	44.93	*	*	*
1983	5,585,112	8,760	4,265	76.36	48.69	*	*	*
1984	5,479,822	8,784	4,608	84.09	52.46	*	*	*
1985	5,444,404	9,086	4,564	83.83	50.23	*	*	*
1986	5,198,993	9,397	4,566	87.82	48.59	*	*	*
1987	4,885,772	9,506	4,036	82.61	42.46	*	*	*
1988	4,584,284	10,024	3,662	79.88	36.53	105,000	2,294	1,049
1989	4,420,420	10,371	3,141	71.06	30.29	83,000	1,888	805
1990	4,259,462	9,557	3,244	76.16	33.94	84,000	1,979	882
1991	4,177,365	9,178	2,806	67.17	30.57	80,000	1,925	876
1992	4,065,118	9,557	2,395	58.92	25.06	65,000	1,601	681
1993	3,977,856	9,906	2,449	61.57	24.72	59,000	1,494	600
1994	3,756,555	10,240	2,320	61.76	22.66	57,000	1,528	561
1995	3,897,191	9,797	2,227	57.14	22.73	57,000	1,475	587
1996	3,871,599	9,920	2,161	55.82	21.78	55,000	1,428	557
1997	3,826,373	10,081	2,116	55.30	20.99	53,000	1,374	522
1998	3,879,450	10,283	2,294	59.13	22.31	49,000	1,262	476
1999	4,152,433	10,584	2,483	59.80	23.46	50,000	1,204	472
2000	4,346,068	10,469	2,897	66.66	27.67	58,000	1,328	551
2001	4,903,056	9,639	3,197	65.20	33.17	60,000	1,229	625
2002	5,004,156	9,552	3,270	65.35	34.23	65,000	1,293	677
2003	5,370,035	9,577	3,714	69.16	38.78	67,000	1,250	701
2004	5,767,934	10,122	4,028	69.83	39.79	76,000	1,324	755
2005	6,227,146	10,454	4,576	73.48	43.77	87,000	1,402	835
2006	6,678,958	12,049	4,837	72.42	40.14	88,000	1,312	727
2007	7,138,476	13,621	5,174	72.48	37.99	103,000	1,443	756
2008	7,752,926	14,484	5,312	68.52	36.67	96,000	1,238	663
2009	—	—	4,462	—	—	90,000	—	—

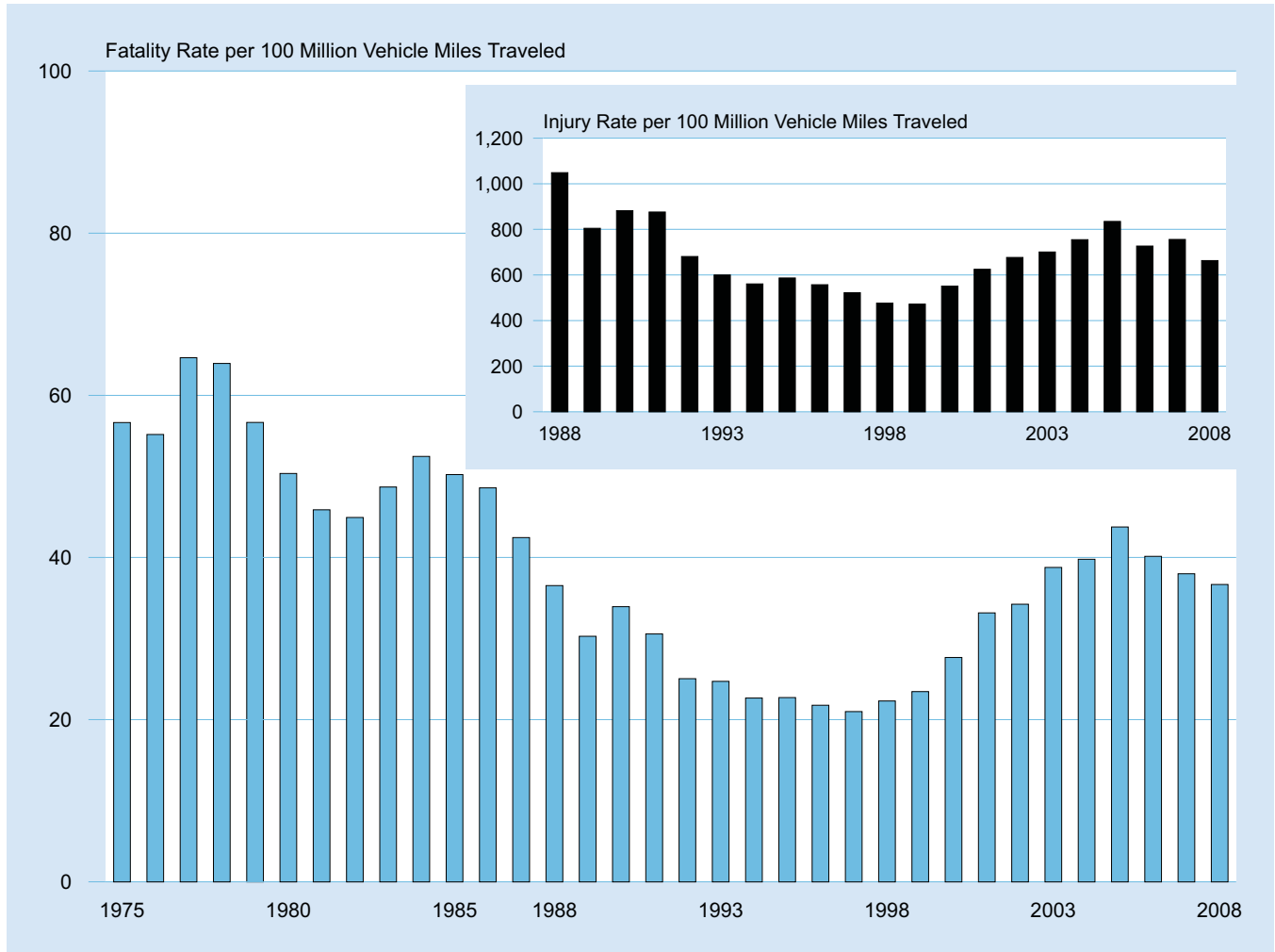
\*Injury data not available before 1988.

Source: Registered Vehicles and Vehicle Miles Traveled—Federal Highway Administration.



**Figure 7**

**Motorcyclist Fatality and Injury Rates per 100 Million Vehicle Miles Traveled, 1975-2008**



# Chapter 1 ■ Trends

**Table 11**

**Persons Killed or Injured in Crashes Involving a Large Truck  
by Person Type and Crash Type, 1975-2009**

Person Type						
Year	Truck Occupants by Crash Type			Other Vehicle Occupants	Nonoccupants	Total
	Single Vehicle	Multiple Vehicle	Total			
Killed						
1975	643	318	961	3,106	416	4,483
1980	861	401	1,262	4,084	625	5,971
1985	634	343	977	4,227	530	5,734
1988	585	326	911	4,250	518	5,679
1989	550	308	858	4,142	490	5,490
1990	485	220	705	4,071	496	5,272
1991	448	213	661	3,705	455	4,821
1992	396	189	585	3,460	417	4,462
1993	389	216	605	3,855	396	4,856
1994	451	219	670	4,013	461	5,144
1995	425	223	648	3,846	424	4,918
1996	412	209	621	4,087	434	5,142
1997	499	224	723	4,223	452	5,398
1998	486	256	742	4,215	438	5,395
1999	480	279	759	4,180	441	5,380
2000	484	270	754	4,114	414	5,282
2001	474	234	708	3,962	441	5,111
2002	449	240	689	3,886	364	4,939
2003	457	269	726	3,919	391	5,036
2004	469	297	766	4,042	427	5,235
2005	478	326	804	3,971	465	5,240
2006	500	305	805	3,797	425	5,027
2007	502	303	805	3,608	409	4,822
2008	430	252	682	3,151	412	4,245
2009	337	166	503	2,551	326	3,380
Injured						
1988	17,000	20,000	37,000	89,000	4,000	130,000
1989	20,000	23,000	43,000	111,000	2,000	156,000
1990	16,000	26,000	42,000	106,000	2,000	150,000
1991	13,000	15,000	28,000	80,000	2,000	110,000
1992	13,000	20,000	34,000	102,000	3,000	139,000
1993	13,000	19,000	32,000	95,000	6,000	133,000
1994	11,000	19,000	30,000	99,000	3,000	133,000
1995	15,000	15,000	30,000	84,000	2,000	117,000
1996	15,000	18,000	33,000	95,000	3,000	130,000
1997	14,000	17,000	31,000	98,000	2,000	131,000
1998	14,000	14,000	29,000	97,000	2,000	127,000
1999	15,000	18,000	33,000	105,000	4,000	142,000
2000	16,000	14,000	31,000	106,000	3,000	140,000
2001	13,000	16,000	29,000	99,000	3,000	131,000
2002	12,000	14,000	26,000	100,000	4,000	130,000
2003	11,000	16,000	27,000	92,000	3,000	122,000
2004	13,000	14,000	27,000	85,000	4,000	116,000
2005	10,000	17,000	27,000	84,000	2,000	114,000
2006	11,000	12,000	23,000	81,000	2,000	106,000
2007	10,000	13,000	23,000	75,000	2,000	101,000
2008	10,000	13,000	23,000	64,000	3,000	90,000
2009	7,000	9,000	17,000	56,000	1,000	74,000

**Table 12**  
**Nonoccupant Fatality and Injury Rates per Population by Age Group, 1975-2009**

Year	Age Group (Years)											Total
	<5	5-9	10-15	16-20	21-24	25-34	35-44	45-54	55-64	65-74	>74	
Fatality Rate per 100,000 Population												
1975	3.64	5.99	3.89	3.79	2.98	2.39	2.75	3.17	3.66	6.05	10.76	3.99
1980	2.67	4.68	3.64	4.45	4.34	3.17	2.80	3.39	3.69	5.00	9.89	4.03
1985	2.05	3.67	3.01	3.31	3.38	2.71	2.65	2.69	3.36	3.90	7.35	3.27
1988	1.69	3.65	2.88	2.92	3.37	2.94	2.70	2.77	3.04	3.94	7.70	3.24
1989	1.54	3.06	2.53	2.58	2.90	3.00	2.73	2.61	3.18	3.49	7.10	3.04
1990	1.60	2.65	2.34	2.53	2.84	2.97	2.77	2.63	3.09	3.67	6.97	2.99
1991	1.43	2.40	2.39	2.45	2.86	2.65	2.36	2.44	2.67	3.08	5.93	2.68
1992	1.29	2.25	2.06	2.20	2.21	2.38	2.39	2.41	2.56	3.10	5.42	2.50
1993	1.35	2.19	2.23	2.06	2.25	2.63	2.51	2.25	2.52	2.95	5.47	2.55
1994	1.31	2.20	2.10	2.01	2.22	2.34	2.46	2.35	2.41	2.82	5.50	2.46
1995	1.12	2.02	2.08	2.02	2.38	2.41	2.60	2.38	2.50	2.97	5.21	2.48
1996	1.22	1.87	1.93	1.98	2.38	2.17	2.49	2.40	2.63	2.94	4.76	2.40
1997	0.97	1.73	1.83	2.11	2.15	2.22	2.47	2.39	2.53	2.99	4.57	2.35
1998	0.96	1.42	1.62	1.88	2.12	2.06	2.46	2.41	2.61	2.74	4.68	2.26
1999	0.94	1.45	1.54	1.76	2.01	1.88	2.41	2.26	2.35	2.78	4.14	2.14
2000	0.88	1.17	1.38	1.58	1.75	1.75	2.28	2.28	2.22	2.40	3.81	1.98
2001	0.70	1.06	1.33	1.78	2.01	1.67	2.36	2.39	2.14	2.44	4.09	2.02
2002	0.70	0.94	1.18	1.65	1.70	1.76	2.24	2.37	2.11	2.77	3.66	1.96
2003	0.61	0.88	1.27	1.77	1.77	1.62	2.25	2.24	2.28	2.36	3.51	1.91
2004	0.61	0.86	1.12	1.58	1.83	1.70	2.15	2.39	2.05	2.43	3.51	1.89
2005	0.62	0.77	1.12	1.65	2.09	1.79	2.25	2.59	2.17	2.53	3.51	1.98
2006	0.57	0.80	0.95	1.59	1.95	1.84	2.11	2.62	2.22	2.35	3.30	1.93
2007	0.54	0.62	1.02	1.63	1.98	1.77	2.09	2.49	1.88	2.36	3.05	1.84
2008	0.51	0.54	0.92	1.63	1.92	1.64	1.86	2.48	2.06	2.07	2.70	1.75
2009	0.48	0.48	0.79	1.28	1.77	1.50	1.76	2.18	1.92	2.07	2.43	1.59
Injury Rate per 100,000 Population												
1988	35	178	195	116	117	74	45	38	35	25	45	79
1989	32	179	198	127	96	69	53	43	42	33	39	79
1990	34	139	181	128	109	76	52	37	26	29	38	75
1991	26	138	157	96	91	70	41	37	31	31	29	66
1992	33	120	165	93	98	57	45	35	29	30	27	63
1993	27	116	170	93	95	66	49	45	26	27	38	66
1994	24	112	151	119	88	60	47	36	33	24	29	63
1995	33	104	160	93	87	62	52	27	22	30	26	62
1996	31	91	156	87	80	57	38	36	26	26	22	57
1997	27	93	132	75	67	51	50	34	29	29	22	55
1998	19	77	121	70	68	49	40	33	25	21	17	48
1999	20	85	129	70	58	56	38	38	26	27	22	51
2000	18	99	91	65	71	50	41	30	29	21	20	48
2001	17	64	106	75	52	46	38	36	30	29	18	46
2002	16	60	93	62	37	54	40	29	35	26	20	44
2003	15	59	93	63	50	46	42	32	26	24	21	43
2004	18	55	83	60	52	41	39	35	22	22	18	40
2005	16	61	79	68	59	33	28	35	37	22	16	40
2006	11	36	73	67	41	36	35	33	35	24	19	38
2007	11	43	78	68	62	47	37	38	24	24	22	41
2008	11	35	84	84	64	39	38	40	35	25	23	43
2009	13	38	67	63	71	46	23	39	29	21	18	38

Note: Population estimates for historical years are periodically revised by the U.S. Census Bureau.

# Chapter 1 ■ Trends

**Table 13**

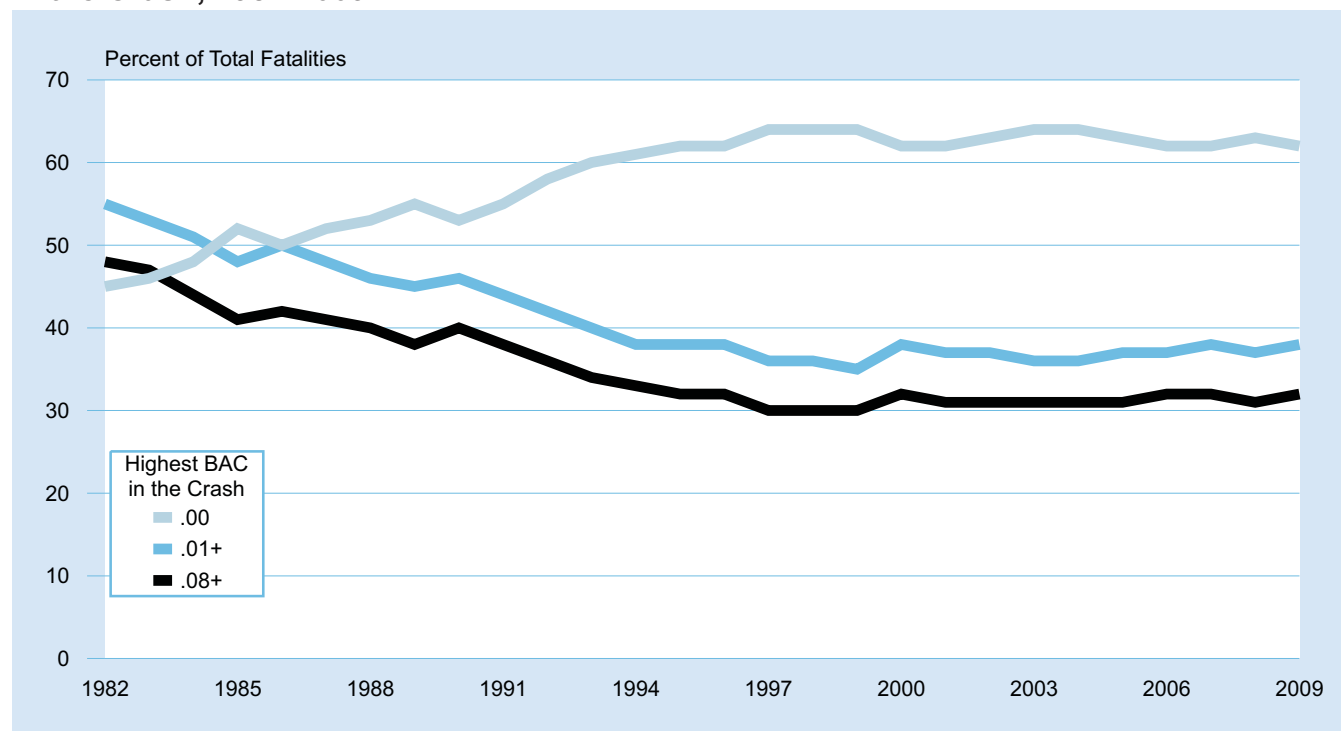
**Persons Killed, by Highest Driver Blood Alcohol Concentration (BAC) in the Crash, 1982-2009**

Year	BAC = .00		BAC = .01-.07		Alcohol-Impaired Driving Fatalities (BAC = .08+)		BAC = .01+		Total Fatalities	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1982	19,771	45	2,912	7	21,113	48	24,025	55	43,945	100
1985	22,589	52	2,974	7	18,125	41	21,098	48	43,825	100
1988	25,164	53	3,156	7	18,611	40	21,767	46	47,087	100
1989	25,152	55	2,793	6	17,521	38	20,314	45	45,582	100
1990	23,823	53	2,901	7	17,705	40	20,607	46	44,599	100
1991	23,025	55	2,480	6	15,827	38	18,307	44	41,508	100
1992	22,726	58	2,352	6	14,049	36	16,401	42	39,250	100
1993	23,979	60	2,300	6	13,739	34	16,039	40	40,150	100
1994	24,948	61	2,236	5	13,390	33	15,626	38	40,716	100
1995	25,768	62	2,416	6	13,478	32	15,893	38	41,817	100
1996	26,052	62	2,415	6	13,451	32	15,866	38	42,065	100
1997	26,902	64	2,216	5	12,757	30	14,973	36	42,013	100
1998	26,477	64	2,353	6	12,546	30	14,899	36	41,501	100
1999	26,798	64	2,235	5	12,555	30	14,790	35	41,717	100
2000	26,082	62	2,422	6	13,324	32	15,746	38	41,945	100
2001	26,334	62	2,441	6	13,290	31	15,731	37	42,196	100
2002	27,080	63	2,321	5	13,472	31	15,793	37	43,005	100
2003	27,328	64	2,327	5	13,096	31	15,423	36	42,884	100
2004	27,413	64	2,212	5	13,099	31	15,311	36	42,836	100
2005	27,423	63	2,404	6	13,582	31	15,985	37	43,510	100
2006	26,633	62	2,479	6	13,491	32	15,970	37	42,708	100
2007	25,611	62	2,494	6	13,041	32	15,534	38	41,259	100
2008	23,499	63	2,115	6	11,711	31	13,826	37	37,423	100
2009	20,961	62	1,905	6	10,839	32	12,744	38	33,808	100

Notes: Total fatalities include those in which there was no driver or motorcycle rider present. NHTSA estimates alcohol involvement when alcohol test results are unknown. For more information, see page 7 of this report.

**Figure 8**

**Proportion of Persons Killed, by Highest Driver Blood Alcohol Concentration (BAC) in the Crash, 1982-2009**



**Table 14**

**Persons Killed and Percent Alcohol-Impaired Driving During Holiday Periods, 1982-2009**

Year	Killed	Percent Alcohol-Impaired Driving*	Killed	Percent Alcohol-Impaired Driving*	Killed	Percent Alcohol-Impaired Driving*
	Holiday Period**					
	New Year's Day		Memorial Day		Fourth of July	
1982	***	***	498 (3)	58	600 (3)	59
1985	496 (4)	50	557 (3)	51	689 (4)	49
1988	407 (3)	49	529 (3)	51	631 (3)	51
1989	443 (3)	41	594 (3)	47	748 (4)	47
1990	421 (3)	44	589 (3)	50	268 (1)	55
1991	441 (4)	47	533 (3)	50	718 (4)	45
1992	164 (1)	55	438 (3)	46	535 (3)	45
1993	370 (3)	46	454 (3)	40	525 (3)	42
1994	372 (3)	47	482 (3)	41	519 (3)	44
1995	392 (3)	38	483 (3)	40	661 (4)	37
1996	420 (3)	40	514 (3)	43	629 (4)	36
1997	192 (1)	53	511 (3)	40	508 (3)	40
1998	545 (4)	39	393 (3)	40	479 (3)	43
1999	354 (3)	43	500 (3)	42	509 (3)	35
2000	469 (3)	47	466 (3)	46	717 (4)	39
2001	357 (3)	40	515 (3)	44	207 (1)	44
2002	575 (4)	41	494 (3)	37	685 (4)	36
2003	220 (1)	49	481 (3)	37	519 (3)	43
2004	563 (4)	40	514 (3)	38	524 (3)	40
2005	472 (3)	38	532 (3)	39	591 (3)	44
2006	456 (3)	42	511 (3)	40	659 (4)	37
2007	391 (3)	40	492 (3)	37	202 (1)	45
2008	424 (4)	41	425 (3)	41	494 (3)	44
2009	468 (4)	40	473 (3)	42	410 (3)	40
	Labor Day		Thanksgiving		Christmas	
1982	628 (3)	55	601 (4)	51	458 (3)	50
1985	605 (3)	51	566 (4)	47	152 (1)	47
1988	592 (3)	52	601 (4)	47	511 (3)	48
1989	588 (3)	48	561 (4)	47	553 (3)	49
1990	599 (3)	52	563 (4)	44	567 (4)	42
1991	577 (3)	46	546 (4)	42	135 (1)	36
1992	460 (3)	42	403 (4)	47	410 (3)	39
1993	522 (3)	47	569 (4)	38	402 (3)	43
1994	494 (3)	46	575 (4)	40	455 (3)	40
1995	511 (3)	40	527 (4)	41	358 (3)	40
1996	525 (3)	43	588 (4)	38	167 (1)	37
1997	507 (3)	42	571 (4)	31	480 (4)	33
1998	464 (3)	40	602 (4)	38	364 (3)	41
1999	485 (3)	38	581 (4)	36	485 (3)	41
2000	529 (3)	43	509 (4)	41	442 (3)	40
2001	481 (3)	40	590 (4)	39	604 (4)	39
2002	543 (3)	45	551 (4)	36	131 (1)	40
2003	507 (3)	38	562 (4)	36	520 (4)	37
2004	502 (3)	38	574 (4)	30	389 (3)	38
2005	507 (3)	40	629 (4)	37	402 (3)	40
2006	508 (3)	37	635 (4)	34	395 (3)	42
2007	520 (3)	42	553 (4)	35	478 (4)	38
2008	493 (3)	40	507 (4)	35	426 (4)	32
2009	360 (3)	38	411 (4)	34	262 (3)	37

\*Highest blood alcohol concentration (BAC) among drivers or motorcycle riders involved in the crash was .08 grams per deciliter (g/dL) or greater. NHTSA estimates alcohol involvement when alcohol test results are unknown. For more information, see page 7 of this report.

\*\*The number of whole days in the holiday period is shown in parentheses. The length of the holiday period depends on the day on which the legal holiday falls, as follows:

- If the holiday falls on *Monday*, the holiday period is from 6:00 pm Friday to 5:59 am Tuesday.
- If the holiday falls on *Tuesday*, the holiday period is from 6:00 pm Friday to 5:59 am Wednesday.
- If the holiday falls on *Wednesday*, the holiday period is from 6:00 pm Tuesday to 5:59 am Thursday.
- If the holiday falls on *Thursday*, the holiday period is from 6:00 pm Wednesday to 5:59 am Monday.
- If the holiday falls on *Friday*, the holiday period is from 6:00 pm Thursday to 5:59 am Monday.
- Number of days and number of hours incorporated: 1 day (36 hours), 2 days (60 hours), 3 days (84 hours), 4 days (108 hours).

\*\*\*No data available.

# Chapter 1 ■ Trends

**Table 15**

## Drivers in Fatal Crashes by Blood Alcohol Concentration (BAC) and Time of Day, 1982-2009

Year	Total	Day*		Total	Night*		Total	Total Drivers	
		Percent			Percent			Percent	
		BAC = .01+	BAC = .08+		BAC = .01+	BAC = .08+		BAC = .01+	BAC = .08+
1982	23,725	19	15	32,085	57	49	56,029	41	35
1985	27,578	16	12	30,008	52	44	57,883	35	29
1988	30,196	14	11	31,715	50	43	62,253	33	28
1991	26,829	13	10	27,249	49	43	54,391	31	27
1992	26,236	12	10	25,380	47	40	51,901	30	25
1993	27,770	11	9	25,355	46	39	53,401	28	24
1994	29,134	11	9	25,112	44	38	54,549	27	23
1995	30,066	11	9	25,755	43	37	56,164	26	22
1996	30,802	11	8	25,864	43	37	57,001	26	22
1997	30,979	10	8	25,368	41	35	56,688	24	20
1998	31,389	10	8	24,879	42	36	56,604	24	20
1999	31,212	10	8	24,968	41	35	56,502	24	20
2000	31,236	11	8	25,710	43	37	57,280	26	21
2001	31,620	11	8	25,661	43	37	57,586	25	21
2002	31,135	11	8	26,653	42	36	58,113	25	21
2003	31,863	10	8	26,258	41	36	58,517	24	21
2004	31,686	11	8	26,360	41	35	58,395	24	21
2005	31,820	11	9	27,085	41	36	59,220	25	21
2006	30,566	12	9	26,949	42	36	57,846	26	22
2007	29,307	11	9	26,367	42	36	56,019	26	22
2008	26,377	11	9	23,760	42	36	50,416	26	22
2009	23,625	12	9	21,313	43	37	45,230	27	22

\*Day = 6:00 AM - 5:59 PM. Night = 6:00 PM - 5:59 AM. Total includes drivers with time of day unknown.

Note: NHTSA estimates alcohol involvement when alcohol test results are unknown. For more information, see page 7 of this report.

**Table 16**

## Drivers in Fatal Crashes by Blood Alcohol Concentration (BAC) and Sex, 1982-2009

Year	Male			Female		
	Percent			Percent		
	Total	BAC = .01+	BAC = .08+	Total	BAC = .01+	BAC = .08+
1982	44,370	44	38	10,675	27	22
1985	44,846	38	32	12,142	22	18
1988	47,402	37	31	13,951	20	16
1991	40,731	35	30	12,825	19	16
1992	38,598	33	28	12,596	18	15
1993	39,556	32	27	13,082	17	14
1994	40,233	30	26	13,567	17	14
1995	41,235	30	25	14,184	16	13
1996	41,376	29	25	14,850	16	13
1997	40,954	28	24	14,954	15	12
1998	40,816	28	23	15,089	15	12
1999	41,012	28	23	14,835	14	12
2000	41,795	29	24	14,790	16	13
2001	41,901	29	24	14,919	15	13
2002	42,377	29	25	14,999	15	12
2003	42,586	28	24	15,211	14	12
2004	42,250	28	24	15,384	15	12
2005	43,282	28	24	15,059	16	13
2006	42,223	29	24	14,753	18	15
2007	41,053	29	24	14,184	16	13
2008	37,061	29	25	12,627	16	13
2009	32,807	30	25	11,825	16	14

Note: NHTSA estimates alcohol involvement when alcohol test results are unknown. For more information, see page 7 of this report.

**Table 17**

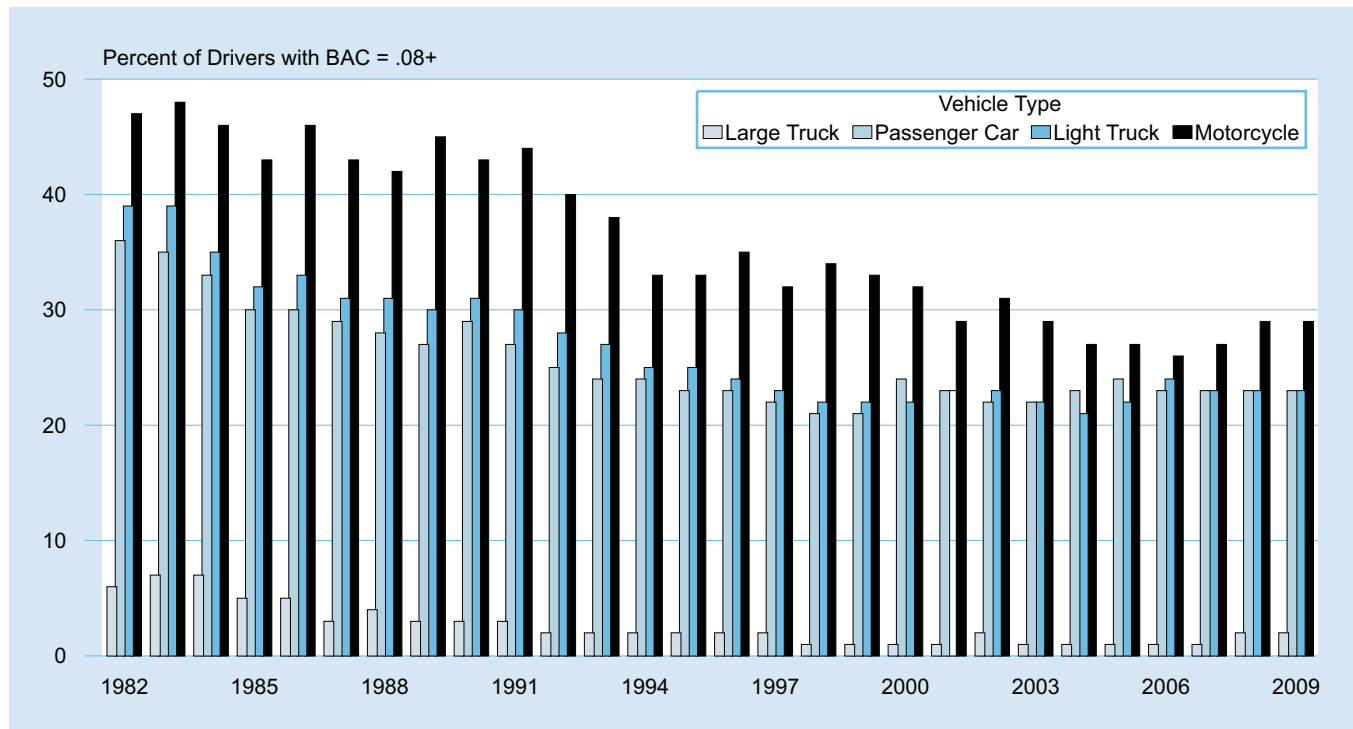
**Drivers in Fatal Crashes by Blood Alcohol Concentration (BAC) and Vehicle Type, 1982-2009**

Year	Passenger Car			Light Truck			Large Truck			Motorcycle		
	Total	Percent		Total	Percent		Total	Percent		Total	Percent	
		BAC = .01+	BAC = .08+		BAC = .01+	BAC = .08+		BAC = .01+	BAC = .08+		BAC = .01+	BAC = .08+
1982	34,121	42	36	11,199	44	39	4,582	10	6	4,490	55	47
1985	34,071	36	30	12,372	37	32	5,091	7	5	4,598	53	43
1988	36,769	34	28	15,167	37	31	5,141	6	4	3,704	51	42
1991	31,102	31	27	14,702	35	30	4,291	4	3	2,816	52	44
1992	29,670	30	25	14,540	33	28	3,980	3	2	2,435	49	40
1993	30,060	28	24	15,207	31	27	4,271	4	2	2,471	45	38
1994	30,103	28	24	16,235	29	25	4,592	3	2	2,330	41	33
1995	30,773	27	23	17,483	29	25	4,410	4	2	2,262	42	33
1996	30,595	27	23	18,118	28	24	4,703	3	2	2,175	43	35
1997	29,896	26	22	18,502	26	23	4,859	3	2	2,159	41	32
1998	28,907	26	21	19,247	26	22	4,905	2	1	2,333	41	34
1999	27,878	25	21	19,865	26	22	4,868	3	1	2,528	40	33
2000	27,661	28	24	20,393	26	22	4,948	3	1	2,971	40	32
2001	27,444	27	23	20,704	27	23	4,779	2	1	3,261	37	29
2002	27,236	27	22	21,562	27	23	4,550	3	2	3,363	39	31
2003	26,422	26	22	22,172	25	22	4,658	2	1	3,800	36	29
2004	25,568	27	23	22,367	25	21	4,837	2	1	4,116	34	27
2005	25,046	28	24	22,879	25	22	4,900	3	1	4,679	34	27
2006	24,162	27	23	22,307	28	24	4,729	2	1	4,961	34	26
2007	22,765	27	23	21,719	27	23	4,601	2	1	5,306	35	27
2008	20,379	27	23	19,095	26	23	4,040	3	2	5,405	36	29
2009	18,279	27	23	17,822	27	23	3,187	3	2	4,593	36	29

Note: NHTSA estimates alcohol involvement when alcohol test results are unknown. For more information, see page 7 of this report.

**Figure 9**

**Proportion of Drivers Involved in Fatal Crashes with BAC = .08+ by Vehicle Type, 1982-2009**



# Chapter 1 ■ Trends

**Table 18**

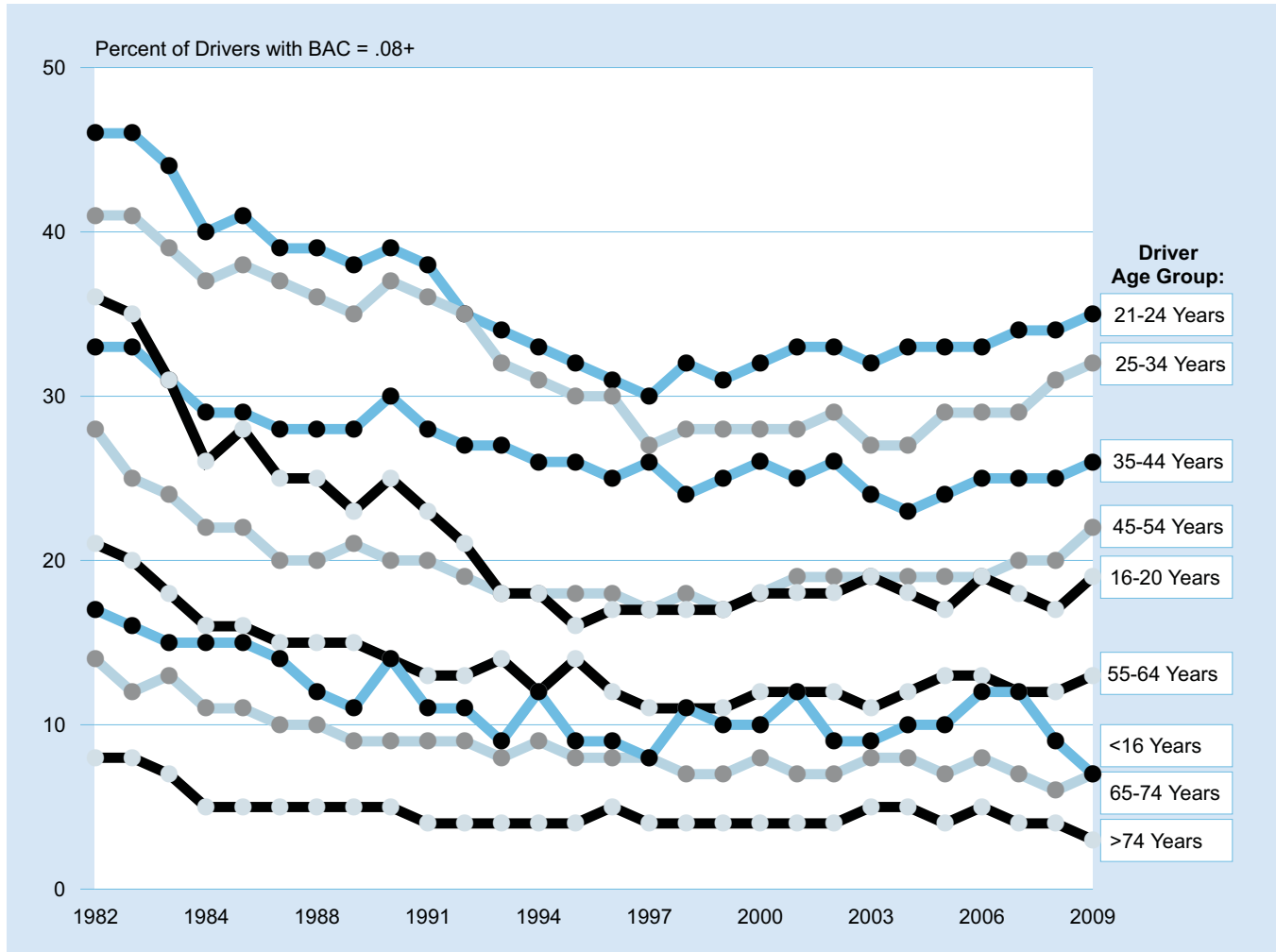
## Drivers in Fatal Crashes by Blood Alcohol Concentration (BAC) and Age, 1982-2009

Year	Total	Percent		Total	Percent		Total	Percent		
		BAC = .01+	BAC = .08+		BAC = .01+	BAC = .08+		BAC = .01+	BAC = .08+	
	Age									
	<16 Years			16-20 Years			21-24 Years			
1982	412	20	17	9,858	45	36	9,018	53	46	
1985	479	21	15	9,386	35	26	9,046	47	40	
1988	448	17	12	10,171	33	25	8,555	47	39	
1991	364	18	11	8,002	30	23	6,748	45	38	
1994	397	16	12	7,723	24	18	6,291	39	33	
1995	410	14	9	7,725	21	16	6,263	38	32	
1996	413	13	9	7,824	23	17	6,205	38	31	
1997	345	11	8	7,719	22	17	5,705	36	30	
1998	361	15	11	7,767	22	17	5,613	37	32	
1999	333	13	10	7,985	22	17	5,639	38	31	
2000	320	15	10	8,024	24	18	5,950	38	32	
2001	293	16	12	7,992	23	18	6,037	39	33	
2002	335	13	9	8,128	23	18	6,316	39	33	
2003	345	13	9	7,744	24	19	6,276	38	32	
2004	345	14	10	7,755	23	18	6,413	39	33	
2005	304	16	10	7,334	22	17	6,585	39	33	
2006	277	16	12	7,315	24	19	6,480	39	33	
2007	239	17	12	6,894	23	18	6,287	41	34	
2008	215	12	9	5,750	22	17	5,342	40	34	
2009	181	12	7	5,051	24	19	4,597	41	35	
		25-34 Years			35-44 Years			45-54 Years		
1982	14,787	46	41	7,984	38	33	4,980	32	28	
1985	15,257	42	37	8,892	32	29	5,150	26	22	
1988	16,398	42	36	10,077	32	28	5,761	23	20	
1991	14,151	41	36	9,482	32	28	5,458	23	20	
1994	12,891	36	31	9,951	29	26	6,493	21	18	
1995	13,048	35	30	10,677	30	26	6,815	21	18	
1996	12,889	34	30	10,955	29	25	7,127	21	18	
1997	12,453	32	27	10,904	29	26	7,522	20	17	
1998	11,925	32	28	11,241	28	24	7,690	21	18	
1999	11,763	32	28	11,059	28	25	7,708	20	17	
2000	11,739	33	28	11,132	30	26	8,234	22	18	
2001	11,584	32	28	11,261	29	25	8,346	22	19	
2002	11,483	33	29	10,973	29	26	8,558	22	19	
2003	11,288	31	27	11,053	28	24	9,024	22	19	
2004	11,242	32	27	10,743	27	23	9,148	22	19	
2005	11,467	33	29	10,793	28	24	9,434	23	19	
2006	11,279	34	29	10,379	29	25	9,234	23	19	
2007	10,773	34	29	9,936	28	25	9,028	24	20	
2008	9,800	36	31	8,806	29	25	8,355	24	20	
2009	8,610	36	32	7,757	30	26	7,664	26	22	
		55-64 Years			65-74 Years			>74 Years		
1982	3,941	25	21	2,343	17	14	1,551	11	8	
1985	4,112	19	16	2,650	14	11	1,829	8	5	
1988	4,320	18	15	3,079	14	10	2,297	8	5	
1991	3,695	16	13	3,017	12	9	2,454	7	4	
1994	3,828	15	12	3,194	11	9	2,867	6	4	
1995	4,079	16	14	3,251	10	8	2,989	6	4	
1996	4,237	15	12	3,319	11	8	3,068	6	5	
1997	4,394	14	11	3,401	10	8	3,314	6	4	
1998	4,478	14	11	3,399	9	7	3,291	6	4	
1999	4,608	14	11	3,251	10	7	3,346	6	4	
2000	4,766	15	12	3,134	11	8	3,147	6	4	
2001	4,714	14	12	3,156	9	7	3,290	6	4	
2002	5,093	14	12	3,100	9	7	3,223	6	4	
2003	5,455	14	11	3,116	10	8	3,329	6	5	
2004	5,612	15	12	3,070	10	8	3,169	7	5	
2005	6,075	16	13	3,217	10	7	3,016	6	4	
2006	5,894	17	13	3,029	11	8	2,967	7	5	
2007	6,037	15	12	3,038	10	7	2,879	6	4	
2008	5,717	16	12	2,927	9	6	2,672	6	4	
2009	5,276	15	13	2,868	9	7	2,550	5	3	

Note: NHTSA estimates alcohol involvement when alcohol test results are unknown. For more information, see page 7 of this report.



**Figure 10**  
**Proportion of Drivers in Fatal Crashes with BAC = .08+ by Age, 1982-2009**



# Chapter 1 ■ Trends

**Table 19**

## Drivers in Fatal Crashes by Blood Alcohol Concentration (BAC) and Survival Status, 1982-2009

Year	Driver Survival Status								All Drivers in Fatal Crashes			
	Surviving Drivers				Killed Drivers							
	BAC = .00	BAC = .01-.07	BAC = .08+	Total	BAC = .00	BAC = .01-.07	BAC = .08+	Total	BAC = .00	BAC = .01-.07	BAC = .08+	Total
1982	22,187	1,615	7,537	31,339	11,015	1,537	12,139	24,690	33,202	3,152	19,676	56,029
1985	24,921	1,451	6,174	32,546	12,960	1,692	10,685	25,337	37,880	3,143	16,860	57,883
1990	25,582	1,469	6,092	33,143	13,858	1,497	10,395	25,750	39,440	2,966	16,487	58,893
1991	24,157	1,245	5,059	30,461	13,138	1,307	9,485	23,930	37,295	2,552	14,544	54,391
1992	23,678	1,172	4,467	29,317	12,906	1,226	8,452	22,584	36,584	2,398	12,919	51,901
1993	24,858	1,147	4,254	30,259	13,652	1,168	8,322	23,142	38,510	2,315	12,576	53,401
1994	25,331	1,078	4,449	30,858	14,612	1,166	7,913	23,691	39,943	2,244	12,362	54,549
1995	26,633	1,082	4,059	31,774	14,841	1,242	8,307	24,390	41,474	2,324	12,366	56,164
1996	27,158	1,136	4,173	32,467	15,134	1,225	8,175	24,534	42,292	2,361	12,348	57,001
1997	27,258	1,027	3,736	32,021	15,670	1,154	7,843	24,667	42,929	2,180	11,579	56,688
1998	27,026	1,108	3,727	31,861	15,738	1,171	7,834	24,743	42,764	2,279	11,561	56,604
1999	26,733	983	3,529	31,245	16,126	1,213	7,918	25,257	42,858	2,196	11,447	56,502
2000	26,527	1,092	4,094	31,713	16,116	1,285	8,167	25,567	42,643	2,376	12,261	57,280
2001	26,601	1,135	3,981	31,717	16,332	1,285	8,253	25,869	42,932	2,420	12,233	57,586
2002	26,524	1,040	3,889	31,454	16,863	1,281	8,515	26,659	43,388	2,321	12,405	58,113
2003	27,081	976	3,681	31,738	17,107	1,319	8,354	26,779	44,187	2,295	12,035	58,517
2004	26,661	960	3,903	31,524	17,450	1,266	8,155	26,871	44,111	2,226	12,057	58,395
2005	26,650	998	4,082	31,729	17,628	1,374	8,489	27,491	44,278	2,371	12,571	59,220
2006	25,509	1,016	3,973	30,498	17,315	1,455	8,578	27,348	42,823	2,472	12,551	57,846
2007	24,831	1,136	3,483	29,449	16,591	1,361	8,617	26,570	41,422	2,497	12,100	56,019
2008	22,312	913	2,937	26,162	15,067	1,226	7,961	24,254	37,379	2,139	10,898	50,416
2009	19,760	850	2,821	23,432	13,458	1,060	7,281	21,798	33,218	1,910	10,102	45,230

Note: NHTSA estimates alcohol involvement when alcohol test results are unknown. For more information, see page 7 of this report.

**Table 20**

## Pedestrians Killed, 14 Years and Older, by Blood Alcohol Concentration (BAC), 1982-2009

Year	BAC = .00		BAC = .01-.07		BAC = .08+		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1982	3,132	51	321	5	2,701	44	6,154	100
1985	3,072	54	342	6	2,288	40	5,702	100
1990	3,185	57	260	5	2,150	38	5,595	100
1991	2,862	57	236	5	1,907	38	5,005	100
1992	2,712	56	231	5	1,868	39	4,812	100
1993	2,792	57	199	4	1,869	38	4,860	100
1994	2,782	59	230	5	1,725	36	4,737	100
1995	2,871	59	225	5	1,801	37	4,896	100
1996	2,749	58	212	4	1,816	38	4,777	100
1997	2,889	61	177	4	1,649	35	4,715	100
1998	2,743	59	248	5	1,689	36	4,680	100
1999	2,568	58	194	4	1,657	37	4,419	100
2000	2,535	59	213	5	1,541	36	4,288	100
2001	2,666	60	220	5	1,567	35	4,453	100
2002	2,670	60	193	4	1,589	36	4,451	100
2003	2,621	60	192	4	1,570	36	4,383	100
2004	2,563	60	208	5	1,535	36	4,306	100
2005	2,778	61	197	4	1,566	34	4,541	100
2006	2,580	58	222	5	1,661	37	4,463	100
2007	2,585	59	207	5	1,594	36	4,386	100
2008	2,409	58	183	4	1,553	37	4,145	100
2009	2,283	59	163	4	1,405	36	3,851	100

Note: NHTSA estimates alcohol involvement when alcohol test results are unknown. For more information, see page 7 of this report.

**Table 21**

## Drivers of Passenger Cars and Light Trucks in Crashes by Crash Severity and Restraint Use, 1975-2009

Year	Restraint Used		Restraint Not Used		Restraint Use Unknown		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>Drivers in Fatal Crashes</b>								
1975	2,583	5.6	29,710	64.3	13,931	30.1	46,224	100.0
1980	1,482	2.9	37,889	73.8	11,935	23.3	51,306	100.0
1985	6,172	13.3	29,705	64.0	10,566	22.8	46,443	100.0
1988	16,948	32.6	28,146	54.2	6,842	13.2	51,936	100.0
1990	18,340	37.1	24,706	50.0	6,348	12.9	49,394	100.0
1992	19,106	43.2	19,836	44.9	5,268	11.9	44,210	100.0
1994	22,763	49.1	18,946	40.9	4,629	10.0	46,338	100.0
1995	24,166	50.1	19,427	40.3	4,663	9.7	48,256	100.0
1996	25,207	51.7	18,759	38.5	4,747	9.7	48,713	100.0
1997	25,313	52.3	18,286	37.8	4,799	9.9	48,398	100.0
1998	25,854	53.7	17,601	36.6	4,699	9.8	48,154	100.0
1999	25,498	53.4	17,693	37.1	4,552	9.5	47,743	100.0
2000	26,690	55.5	16,995	35.4	4,369	9.1	48,054	100.0
2001	27,222	56.5	16,528	34.3	4,398	9.1	48,148	100.0
2002	27,813	57.0	16,710	34.2	4,275	8.8	48,798	100.0
2003	28,822	59.3	15,491	31.9	4,281	8.8	48,594	100.0
2004	29,072	60.6	15,120	31.5	3,743	7.8	47,935	100.0
2005	29,264	61.1	14,984	31.3	3,677	7.7	47,925	100.0
2006	28,285	60.9	14,434	31.1	3,750	8.1	46,469	100.0
2007	27,622	62.1	13,215	29.7	3,647	8.2	44,484	100.0
2008	24,649	62.4	11,770	29.8	3,055	7.7	39,474	100.0
2009	22,867	63.3	10,457	29.0	2,777	7.7	36,101	100.0
<b>Drivers in Injury Crashes</b>								
1988	2,313,000	62.1	802,000	21.5	609,000	16.4	3,724,000	100.0
1990	2,290,000	64.4	703,000	19.8	563,000	15.8	3,556,000	100.0
1992	2,420,000	71.5	476,000	14.0	490,000	14.5	3,386,000	100.0
1994	2,856,000	77.4	418,000	11.3	416,000	11.3	3,690,000	100.0
1995	3,118,000	79.3	388,000	9.9	425,000	10.8	3,931,000	100.0
1996	3,136,000	79.4	366,000	9.3	445,000	11.3	3,947,000	100.0
1997	3,003,000	79.1	339,000	8.9	452,000	11.9	3,794,000	100.0
1998	2,863,000	79.5	309,000	8.6	428,000	11.9	3,600,000	100.0
1999	2,897,000	80.5	293,000	8.1	409,000	11.4	3,598,000	100.0
2000	2,959,000	82.2	252,000	7.0	390,000	10.8	3,600,000	100.0
2001	2,882,000	82.5	234,000	6.7	376,000	10.8	3,491,000	100.0
2002	2,787,000	83.5	208,000	6.2	343,000	10.3	3,338,000	100.0
2003	2,844,000	84.7	180,000	5.4	332,000	9.9	3,356,000	100.0
2004	2,785,000	86.2	138,000	4.3	307,000	9.5	3,230,000	100.0
2005	2,666,000	86.1	141,000	4.5	290,000	9.4	3,097,000	100.0
2006	2,577,000	86.2	124,000	4.1	290,000	9.7	2,990,000	100.0
2007	2,475,000	86.4	116,000	4.0	274,000	9.6	2,865,000	100.0
2008	2,369,000	87.2	105,000	3.9	241,000	8.9	2,715,000	100.0
2009	2,257,000	87.8	87,000	3.4	226,000	8.8	2,570,000	100.0
<b>Drivers in Property-Damage-Only Crashes</b>								
1988	4,517,000	60.4	1,200,000	16.0	1,763,000	23.6	7,481,000	100.0
1990	4,499,000	63.4	978,000	13.8	1,616,000	22.8	7,094,000	100.0
1992	4,671,000	71.6	508,000	7.8	1,344,000	20.6	6,523,000	100.0
1994	5,534,000	77.7	392,000	5.5	1,198,000	16.8	7,124,000	100.0
1995	5,914,000	79.3	356,000	4.8	1,184,000	15.9	7,454,000	100.0
1996	5,960,000	79.2	328,000	4.4	1,241,000	16.5	7,529,000	100.0
1997	5,841,000	78.9	311,000	4.2	1,255,000	16.9	7,406,000	100.0
1998	5,720,000	79.6	268,000	3.7	1,199,000	16.7	7,187,000	100.0
1999	5,637,000	81.3	236,000	3.4	1,058,000	15.3	6,932,000	100.0
2000	5,846,000	82.7	173,000	2.4	1,050,000	14.9	7,069,000	100.0
2001	5,897,000	83.6	161,000	2.3	1,000,000	14.2	7,058,000	100.0
2002	6,093,000	84.9	157,000	2.2	923,000	12.9	7,173,000	100.0
2003	6,042,000	84.7	135,000	1.9	960,000	13.4	7,137,000	100.0
2004	6,106,000	86.2	106,000	1.5	870,000	12.3	7,083,000	100.0
2005	6,087,000	86.1	104,000	1.5	880,000	12.4	7,071,000	100.0
2006	5,940,000	85.3	95,000	1.4	925,000	13.3	6,960,000	100.0
2007	6,011,000	85.8	91,000	1.3	900,000	12.9	7,003,000	100.0
2008	5,862,000	86.7	95,000	1.4	802,000	11.9	6,758,000	100.0
2009	5,708,000	87.4	71,000	1.1	751,000	11.5	6,531,000	100.0

Note: Restraint use is determined by police and may be overreported for survivors.

# Chapter 1 ■ Trends

**Table 22**

## **Occupants of Passenger Cars and Light Trucks Killed or Injured, by Restraint Use, 1975-2009**

Year	Restraint Used		Restraint Not Used		Restraint Use Unknown		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>Occupants Killed</b>								
1975	986	3.2	21,076	68.5	8,723	28.3	30,785	100.0
1980	671	1.9	27,483	78.7	6,781	19.4	34,935	100.0
1985	2,391	8.0	22,131	74.0	5,379	18.0	29,901	100.0
1988	6,210	18.2	24,359	71.4	3,545	10.4	34,114	100.0
1989	6,546	19.5	23,613	70.2	3,455	10.3	33,614	100.0
1990	6,775	20.7	22,547	69.0	3,371	10.3	32,693	100.0
1991	7,332	23.8	20,488	66.6	2,956	9.6	30,776	100.0
1992	7,699	26.1	19,053	64.6	2,733	9.3	29,485	100.0
1993	8,679	28.9	18,553	61.7	2,845	9.5	30,077	100.0
1994	9,642	31.2	18,636	60.3	2,623	8.5	30,901	100.0
1995	10,159	31.8	19,123	59.8	2,709	8.5	31,991	100.0
1996	10,716	33.0	18,848	58.1	2,873	8.9	32,437	100.0
1997	10,995	33.9	18,642	57.5	2,811	8.7	32,448	100.0
1998	11,213	35.2	18,022	56.5	2,664	8.4	31,899	100.0
1999	11,174	34.8	18,316	57.0	2,637	8.2	32,127	100.0
2000	11,787	36.6	17,810	55.3	2,628	8.2	32,225	100.0
2001	11,946	37.3	17,517	54.7	2,580	8.1	32,043	100.0
2002	12,533	38.2	17,797	54.2	2,513	7.7	32,843	100.0
2003	12,967	40.2	16,764	51.9	2,540	7.9	32,271	100.0
2004	13,250	41.6	16,432	51.6	2,184	6.9	31,866	100.0
2005	13,064	41.4	16,247	51.5	2,238	7.1	31,549	100.0
2006	12,710	41.4	15,635	51.0	2,341	7.6	30,686	100.0
2007	12,322	42.4	14,446	49.7	2,304	7.9	29,072	100.0
2008	10,691	42.0	12,925	50.8	1,846	7.3	25,462	100.0
2009	10,140	43.4	11,512	49.2	1,730	7.4	23,382	100.0
<b>Occupants Injured</b>								
1988	1,752,000	57.2	912,000	29.8	399,000	13.0	3,063,000	100.0
1989	1,720,000	58.5	863,000	29.4	359,000	12.2	2,942,000	100.0
1990	1,737,000	60.3	820,000	28.4	325,000	11.3	2,882,000	100.0
1991	1,785,000	63.8	725,000	25.9	287,000	10.3	2,797,000	100.0
1992	1,854,000	66.8	622,000	22.4	300,000	10.8	2,776,000	100.0
1993	1,983,000	69.2	589,000	20.6	294,000	10.2	2,866,000	100.0
1994	2,208,000	73.7	564,000	18.8	223,000	7.4	2,995,000	100.0
1995	2,415,000	75.7	549,000	17.2	227,000	7.1	3,192,000	100.0
1996	2,468,000	76.7	520,000	16.1	231,000	7.2	3,220,000	100.0
1997	2,369,000	76.5	475,000	15.3	251,000	8.1	3,095,000	100.0
1998	2,297,000	77.5	437,000	14.7	230,000	7.8	2,964,000	100.0
1999	2,328,000	78.0	420,000	14.1	237,000	7.9	2,984,000	100.0
2000	2,369,000	80.6	369,000	12.6	200,000	6.8	2,938,000	100.0
2001	2,249,000	80.7	324,000	11.6	214,000	7.7	2,787,000	100.0
2002	2,195,000	81.8	284,000	10.6	205,000	7.7	2,684,000	100.0
2003	2,204,000	83.3	248,000	9.4	193,000	7.3	2,646,000	100.0
2004	2,156,000	84.8	206,000	8.1	181,000	7.1	2,543,000	100.0
2005	2,077,000	84.9	207,000	8.5	161,000	6.6	2,446,000	100.0
2006	1,992,000	85.5	183,000	7.8	156,000	6.7	2,331,000	100.0
2007	1,894,000	85.3	170,000	7.6	157,000	7.1	2,221,000	100.0
2008	1,784,000	86.1	141,000	6.8	147,000	7.1	2,072,000	100.0
2009	1,716,000	86.8	125,000	6.3	135,000	6.8	1,976,000	100.0

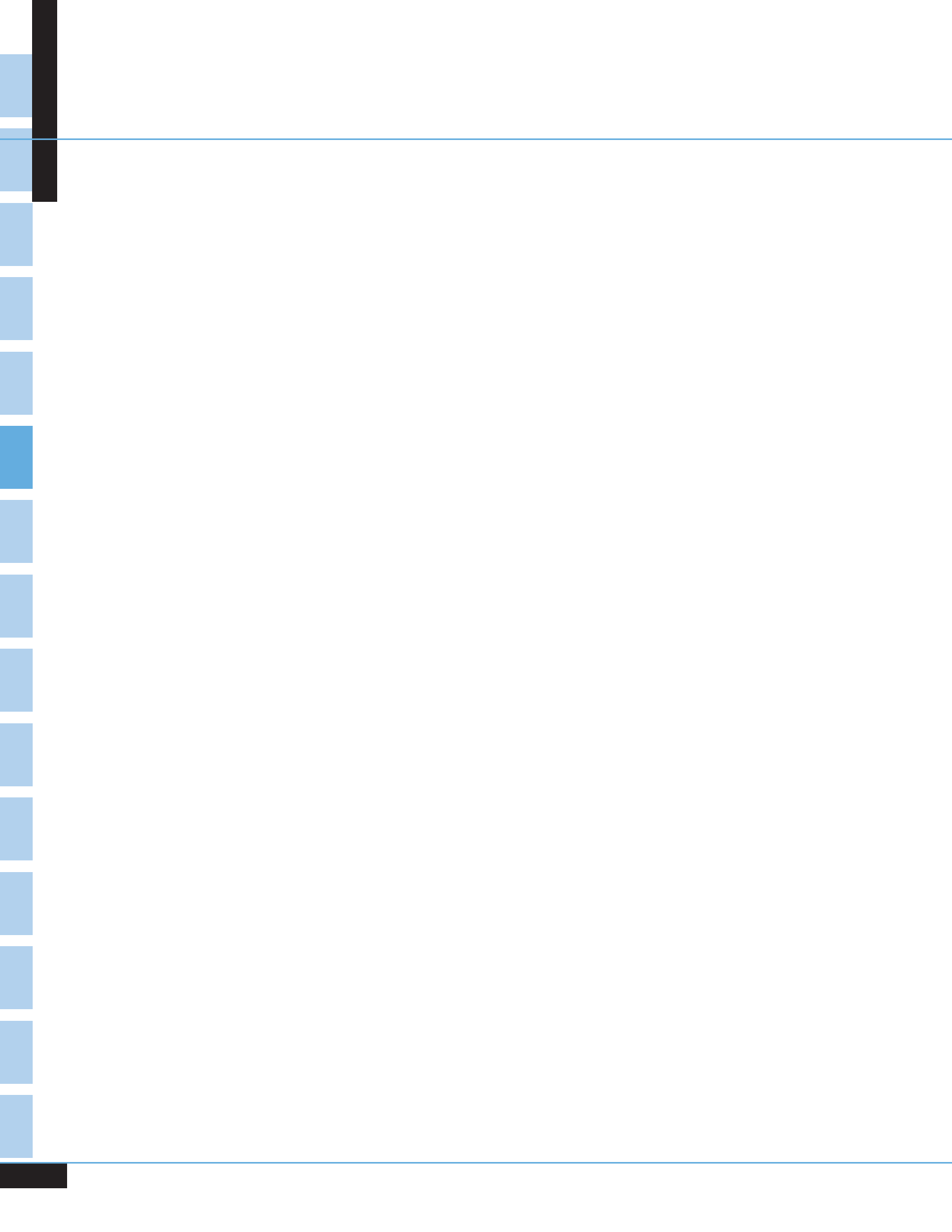
Note: Restraint use is determined by police and may be overreported for survivors.

**Table 23**

**Passenger Car and Light Truck Occupants Killed, by Vehicle Type and Rollover Occurrence, 1982-2009**

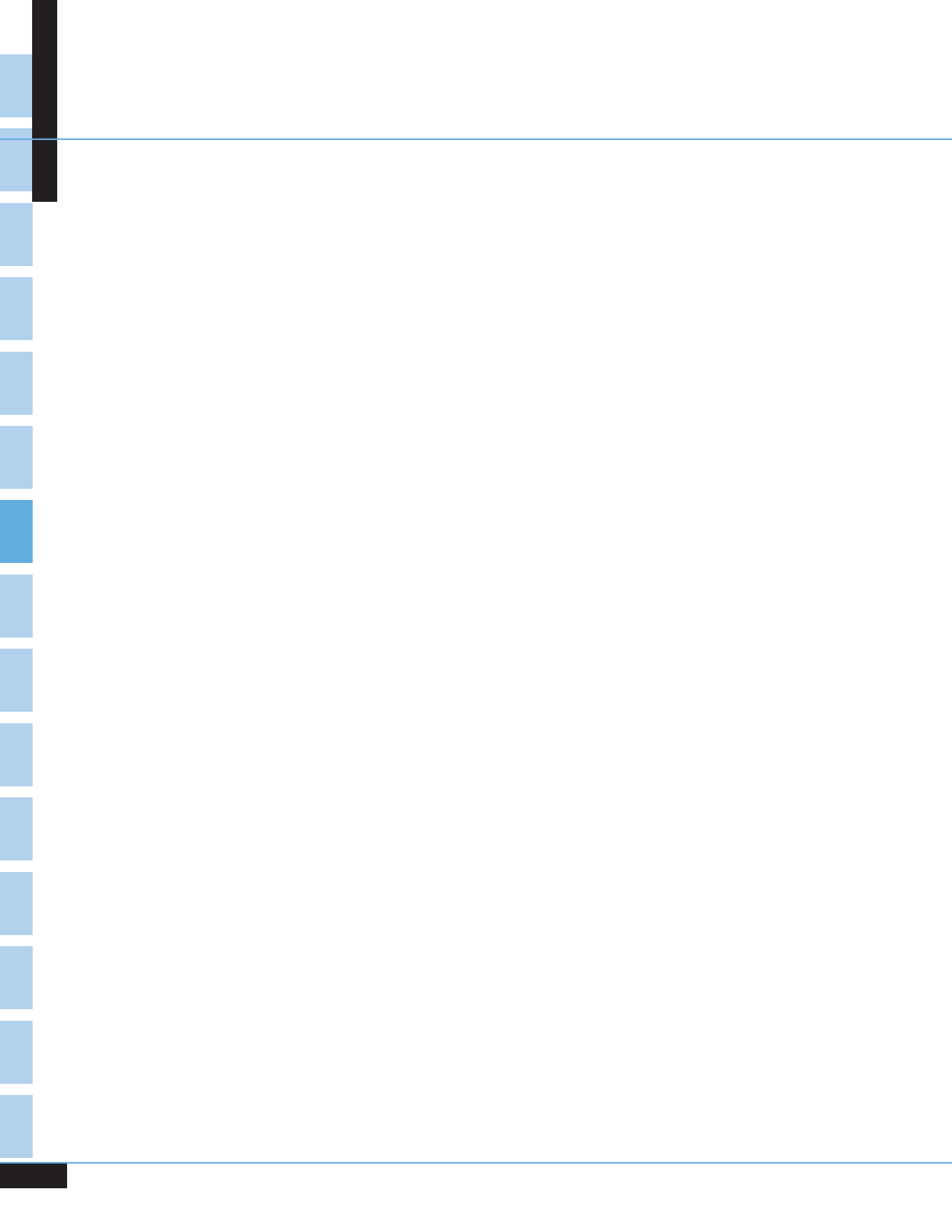
Year	Passenger Cars			Light Trucks									Total*		
	Total Killed	Rollover		Total Killed	Rollover		Total Killed	Rollover		Total Killed	Rollover		Total Killed	Rollover	
		Number	Percent		Number	Percent		Number	Percent		Number	Percent		Number	Percent
1982	23,330	5,529	23.7	4,605	1,895	41.2	735	504	68.6	814	285	35.0	29,689	8,298	27.9
1983	22,979	5,434	23.6	4,496	1,903	42.3	769	527	68.5	712	267	37.5	29,181	8,219	28.2
1984	23,620	5,569	23.6	4,686	1,994	42.6	723	496	68.6	764	299	39.1	30,116	8,497	28.2
1985	23,212	5,290	22.8	4,640	1,972	42.5	855	567	66.3	791	314	39.7	29,901	8,284	27.7
1986	24,944	6,015	24.1	5,090	2,301	45.2	927	608	65.6	879	349	39.7	32,261	9,474	29.4
1987	25,132	6,028	24.0	5,502	2,497	45.4	1,050	688	65.5	1,025	384	37.5	33,190	9,801	29.5
1988	25,808	6,248	24.2	5,880	2,713	46.1	1,040	651	62.6	1,001	374	37.4	34,114	10,138	29.7
1989	25,063	5,707	22.8	5,870	2,660	45.3	1,135	722	63.6	1,214	463	38.1	33,614	9,689	28.8
1990	24,092	5,593	23.2	5,979	2,698	45.1	1,214	762	62.8	1,154	451	39.1	32,693	9,619	29.4
1991	22,385	5,328	23.8	5,671	2,543	44.8	1,476	882	59.8	1,143	472	41.3	30,776	9,258	30.1
1992	21,387	4,738	22.2	5,385	2,460	45.7	1,335	834	62.5	1,292	564	43.7	29,485	8,636	29.3
1993	21,566	4,648	21.6	5,538	2,403	43.4	1,521	934	61.4	1,365	541	39.6	30,077	8,561	28.5
1994	21,997	4,870	22.1	5,574	2,409	43.2	1,757	1,063	60.5	1,508	610	40.5	30,901	8,981	29.1
1995	22,423	5,076	22.6	5,938	2,571	43.3	1,935	1,210	62.5	1,639	650	39.7	31,991	9,537	29.8
1996	22,505	4,997	22.2	5,904	2,545	43.1	2,147	1,384	64.5	1,832	681	37.2	32,437	9,624	29.7
1997	22,199	4,765	21.5	5,887	2,479	42.1	2,380	1,489	62.6	1,914	768	40.1	32,448	9,527	29.4
1998	21,194	4,672	22.0	5,921	2,560	43.2	2,713	1,705	62.8	2,042	823	40.3	31,899	9,773	30.6
1999	20,862	4,718	22.6	6,127	2,724	44.5	3,026	1,902	62.9	2,088	784	37.5	32,127	10,140	31.6
2000	20,699	4,548	22.0	6,003	2,558	42.6	3,358	2,064	61.5	2,129	771	36.2	32,225	9,959	30.9
2001	20,320	4,559	22.4	6,139	2,651	43.2	3,530	2,149	60.9	2,019	786	38.9	32,043	10,157	31.7
2002	20,569	4,794	23.3	6,100	2,755	45.2	4,031	2,471	61.3	2,109	699	33.1	32,843	10,729	32.7
2003	19,725	4,464	22.6	5,957	2,580	43.3	4,483	2,661	59.4	2,080	728	35.0	32,271	10,442	32.4
2004	19,192	4,353	22.7	5,838	2,597	44.5	4,760	2,929	61.5	2,046	695	34.0	31,866	10,590	33.2
2005	18,512	4,371	23.6	6,067	2,796	46.1	4,831	2,895	59.9	2,112	794	37.6	31,549	10,870	34.5
2006	17,925	4,376	24.4	5,993	2,844	47.5	4,928	2,899	58.8	1,815	609	33.6	30,686	10,742	35.0
2007	16,614	4,055	24.4	5,847	2,748	47.0	4,834	2,861	59.2	1,764	572	32.4	29,072	10,240	35.2
2008	14,646	3,653	24.9	5,097	2,435	47.8	4,214	2,435	57.8	1,492	514	34.5	25,462	9,043	35.5
2009	13,095	3,219	24.6	4,792	2,292	47.8	4,091	2,294	56.1	1,394	457	32.8	23,382	8,267	35.4

\*Total includes occupants of other and unknown light trucks.



Chapter 2

# CRASHES





## CHAPTER 2 ■ CRASHES

This chapter presents statistics about police-reported motor vehicle crashes according to the most severe injury in the crash: **Fatal**, **Nonfatal Injury** (Injury), and **Property Damage**. The tables and figures are presented in four groups: Time, Location, Circumstances, and Alcohol. Below are some of the crash statistics you will find in this section:

- More than 5.5 million police-reported motor vehicle crashes occurred in the United States in 2009. Twenty-eight percent of those crashes (1.52 million) resulted in an injury, and fewer than 1 percent (30,797) resulted in a death.
- Midnight to 3 a.m. on Saturdays and Sundays proved to be the deadliest 3-hour periods throughout 2009, with 1,024 and 1,072 fatal crashes, respectively.
- Sixty-one percent of fatal crashes involved only one vehicle, as compared with 32 percent of injury crashes and 32 percent of property-damage-only crashes.
- Nearly one-half of all fatal crashes in 2009 occurred on roads with posted speed limits of 55 mph or more, as compared with 23 percent of injury crashes and 23 percent of property-damage-only crashes.
- Collision with another motor vehicle in transport was the most common first harmful event for fatal, injury, and property-damage-only crashes. Collisions with fixed objects and noncollisions accounted for only 19 percent of all crashes, but they accounted for 46 percent of fatal crashes.
- Thirty-two percent of all fatal crashes involved alcohol-impaired driving, where the highest blood alcohol concentration (BAC) among drivers involved in the crash was .08 grams per deciliter (g/dL) or higher. For fatal crashes occurring from midnight to 3 a.m., 66 percent involved alcohol-impaired driving.

## Chapter 2 ■ Crashes

**Table 24**  
**Crashes and Crash Rates by Month and Crash Severity**

Month	Crash Severity						Total Crashes	
	Fatal		Injury		Property Damage Only			
Month	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*
January	2,374	1.05	133,000	59	404,000	179	539,000	238
February	2,164	0.99	109,000	50	317,000	145	429,000	196
March	2,344	0.94	129,000	52	308,000	124	440,000	177
April	2,590	1.02	123,000	49	293,000	116	418,000	165
May	2,772	1.06	139,000	54	328,000	126	470,000	180
June	2,755	1.06	125,000	48	310,000	119	437,000	168
July	2,783	1.04	132,000	49	289,000	108	423,000	158
August	2,864	1.09	127,000	48	308,000	117	438,000	167
September	2,646	1.08	122,000	50	306,000	125	431,000	177
October	2,617	1.03	131,000	51	354,000	139	488,000	192
November	2,501	1.05	116,000	49	347,000	145	466,000	195
December	2,387	0.99	130,000	54	392,000	162	525,000	217
Total	30,797	1.03	1,517,000	51	3,957,000	133	5,505,000	185

\*Crashes per 100 million vehicle miles traveled.

Source: Vehicle miles traveled (VMT), Federal Highway Administration, *Traffic Volume Trends*, April 2010.

## Chapter 2 ■ Crashes

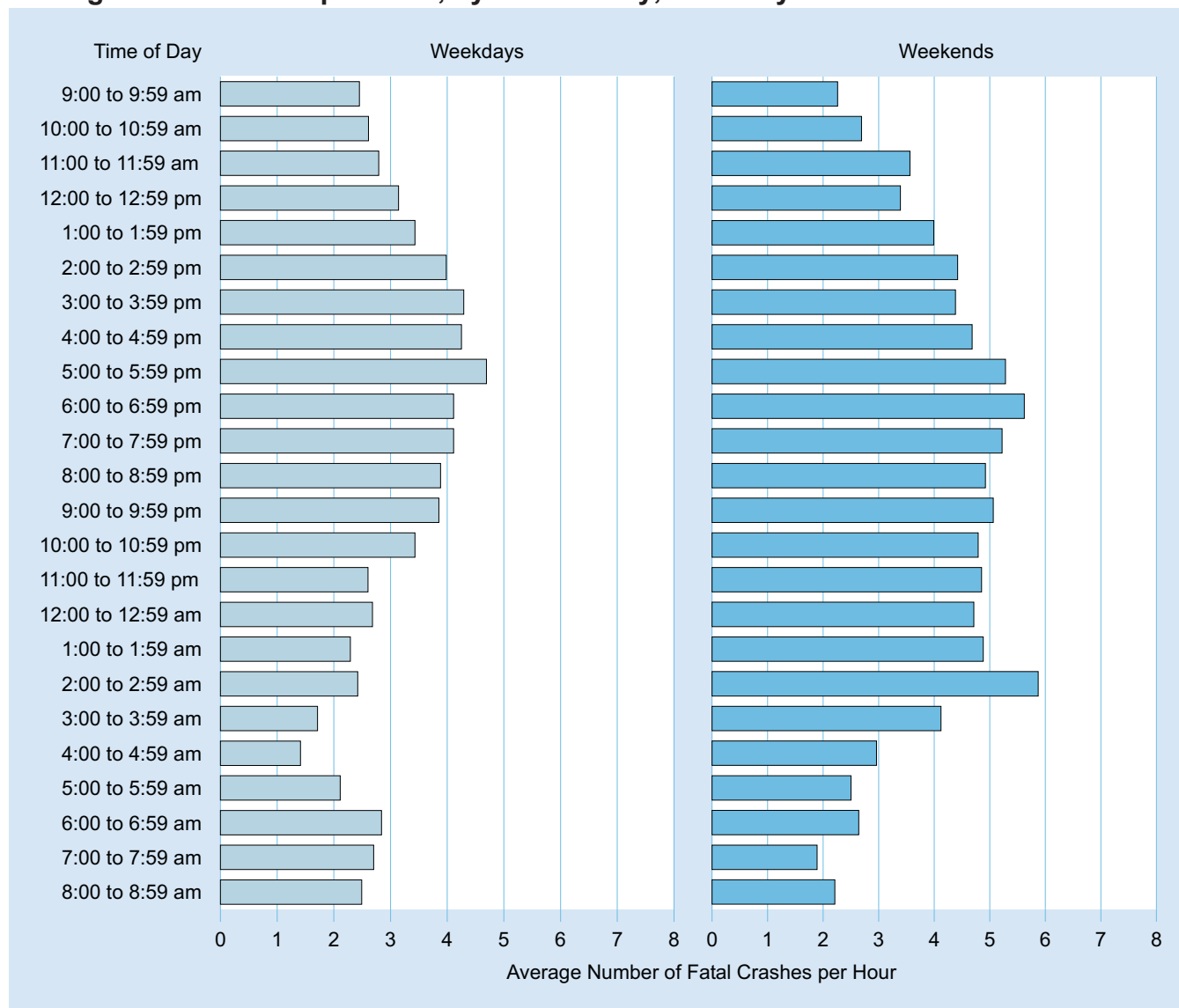
**Table 25**  
**Crashes by Time of Day, Day of Week, and Crash Severity**

Time of Day	Day of Week							Total
	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
Fatal Crashes								
Midnight to 3 am	1,072	316	270	328	422	525	1,024	3,957
3 am to 6 am	635	245	221	259	276	337	614	2,587
6 am to 9 am	324	451	388	400	428	429	378	2,798
9 am to Noon	392	420	409	373	395	452	493	2,934
Noon to 3 pm	559	572	542	493	524	622	669	3,981
3 pm to 6 pm	700	687	677	663	659	767	791	4,944
6 pm to 9 pm	768	627	594	628	680	807	884	4,988
9 pm to Midnight	523	448	484	540	592	892	880	4,359
Unknown	31	31	30	40	28	36	53	249
Total	5,004	3,797	3,615	3,724	4,004	4,867	5,786	30,797
Injury Crashes								
Midnight to 3 am	18,000	8,000	4,000	7,000	9,000	7,000	20,000	73,000
3 am to 6 am	12,000	5,000	5,000	5,000	6,000	5,000	11,000	48,000
6 am to 9 am	10,000	31,000	32,000	31,000	31,000	26,000	12,000	174,000
9 am to Noon	22,000	28,000	29,000	34,000	31,000	30,000	29,000	202,000
Noon to 3 pm	32,000	40,000	44,000	44,000	43,000	46,000	41,000	290,000
3 pm to 6 pm	35,000	52,000	54,000	61,000	57,000	65,000	47,000	371,000
6 pm to 9 pm	22,000	30,000	31,000	34,000	37,000	35,000	32,000	223,000
9 pm to Midnight	14,000	16,000	17,000	20,000	17,000	26,000	25,000	135,000
Total	165,000	210,000	216,000	235,000	231,000	242,000	218,000	1,517,000
Property-Damage-Only Crashes								
Midnight to 3 am	45,000	16,000	14,000	14,000	21,000	19,000	47,000	176,000
3 am to 6 am	24,000	17,000	11,000	17,000	15,000	17,000	27,000	127,000
6 am to 9 am	25,000	86,000	92,000	97,000	88,000	82,000	41,000	511,000
9 am to Noon	41,000	85,000	82,000	87,000	90,000	79,000	69,000	534,000
Noon to 3 pm	76,000	119,000	106,000	118,000	106,000	137,000	103,000	766,000
3 pm to 6 pm	76,000	155,000	159,000	153,000	161,000	174,000	88,000	966,000
6 pm to 9 pm	61,000	71,000	85,000	79,000	80,000	102,000	82,000	559,000
9 pm to Midnight	40,000	36,000	43,000	40,000	43,000	55,000	60,000	318,000
Total	387,000	586,000	593,000	605,000	604,000	665,000	517,000	3,957,000
All Crashes								
Midnight to 3 am	64,000	24,000	18,000	22,000	30,000	27,000	67,000	253,000
3 am to 6 am	36,000	22,000	15,000	21,000	22,000	22,000	38,000	178,000
6 am to 9 am	35,000	118,000	125,000	128,000	119,000	109,000	53,000	688,000
9 am to Noon	63,000	113,000	111,000	121,000	122,000	110,000	99,000	739,000
Noon to 3 pm	109,000	160,000	150,000	163,000	150,000	184,000	145,000	1,060,000
3 pm to 6 pm	111,000	208,000	214,000	215,000	219,000	240,000	136,000	1,342,000
6 pm to 9 pm	84,000	102,000	117,000	114,000	117,000	138,000	115,000	787,000
9 pm to Midnight	54,000	53,000	61,000	60,000	61,000	82,000	87,000	457,000
Total	557,000	800,000	812,000	844,000	839,000	912,000	741,000	5,505,000

## Chapter 2 ■ Crashes

**Figure 11**

**Average Fatal Crashes per Hour, by Time of Day, Weekdays and Weekends**



## Chapter 2 ■ Crashes

**Table 26**  
**Crashes by Weather Condition, Light Condition, and Crash Severity**

Weather Condition	Light Condition					Total
	Daylight	Dark, But Lighted	Dark	Dawn or Dusk	Other/Unknown	
Fatal Crashes						
Normal	13,408	4,811	7,813	1,037	55	27,124
Rain	1,055	486	747	115	7	2,410
Snow/Sleet	307	43	207	34	2	593
Other	113	51	200	33	0	397
Unknown	65	14	116	3	75	273
Total	14,948	5,405	9,083	1,222	139	30,797
Injury Crashes						
Normal	913,000	209,000	125,000	47,000	*	1,295,000
Rain	106,000	36,000	21,000	7,000	*	170,000
Snow/Sleet	20,000	7,000	5,000	1,000	*	33,000
Other/Unknown	10,000	4,000	3,000	2,000	*	19,000
Total	1,049,000	256,000	154,000	57,000	*	1,517,000
Property-Damage-Only Crashes						
Normal	2,352,000	470,000	359,000	108,000	1,000	3,291,000
Rain	279,000	95,000	54,000	20,000	*	447,000
Snow/Sleet	86,000	31,000	28,000	7,000	*	151,000
Other/Unknown	35,000	15,000	14,000	5,000	*	68,000
Total	2,751,000	610,000	455,000	139,000	2,000	3,957,000
All Crashes						
Normal	3,278,000	684,000	492,000	157,000	1,000	4,612,000
Rain	386,000	131,000	76,000	27,000	*	620,000
Snow/Sleet	106,000	38,000	33,000	8,000	*	184,000
Other/Unknown	45,000	19,000	17,000	7,000	*	88,000
Total	3,815,000	872,000	618,000	198,000	2,000	5,505,000

## Chapter 2 ■ Crashes

**Table 27**  
**Fatal Crashes by Emergency Medical Services (EMS) Response Times**  
**Within Designated Minutes and by Land Use**

Response Time (Minutes)	Time of Crash to EMS Notification		EMS Notification to EMS Arrival		EMS Arrival at Scene to Hospital Arrival		Time of Crash to Hospital Arrival	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>Rural Fatal Crashes</b>								
0 to 10	7,986	85.4	6,442	58.8	1,270	21.6	23	0.5
11 to 20	831	8.9	3,254	29.7	630	10.7	135	2.9
21 to 30	260	2.8	853	7.8	1,131	19.2	450	9.8
31 to 40	115	1.2	262	2.4	1,017	17.3	744	16.2
41 to 50	47	0.5	75	0.7	706	12.0	814	17.8
51 to 60	32	0.3	21	0.2	475	8.1	734	16.0
61 to 120	80	0.9	45	0.4	654	11.1	1,685	36.8
<b>Total*</b>	<b>9,351</b>	<b>100.0</b>	<b>10,952</b>	<b>100.0</b>	<b>5,883</b>	<b>100.0</b>	<b>4,585</b>	<b>100.0</b>
<b>Urban Fatal Crashes</b>								
0 to 10	6,726	93.5	6,574	85.8	866	20.0	33	0.9
11 to 20	306	4.3	884	11.5	1,106	25.5	466	12.7
21 to 30	73	1.0	155	2.0	1,165	26.9	1,006	27.3
31 to 40	27	0.4	33	0.4	613	14.1	883	24.0
41 to 50	15	0.2	5	0.1	284	6.6	578	15.7
51 to 60	13	0.2	5	0.1	155	3.6	330	9.0
61 to 120	33	0.5	8	0.1	145	3.3	387	10.5
<b>Total*</b>	<b>7,193</b>	<b>100.0</b>	<b>7,664</b>	<b>100.0</b>	<b>4,334</b>	<b>100.0</b>	<b>3,683</b>	<b>100.0</b>

\*Includes crashes for which both times were known.

**Table 28**  
**Crashes by Crash Type, Relation to Roadway, and Crash Severity**

Crash Type	Relation to Roadway					Total
	On Roadway	Off Roadway	Shoulder	Median	Other/Unknown	
Fatal Crashes						
Single Vehicle	5,430	9,891	2,299	823	302	18,745
Multiple Vehicle	11,476	223	198	125	30	12,052
Total	16,906	10,114	2,497	948	332	30,797
Injury Crashes						
Single Vehicle	151,000	262,000	12,000	40,000	25,000	489,000
Multiple Vehicle	1,018,000	5,000	1,000	3,000	1,000	1,028,000
Total	1,169,000	267,000	13,000	43,000	26,000	1,517,000
Property-Damage-Only Crashes						
Single Vehicle	325,000	584,000	17,000	77,000	245,000	1,247,000
Multiple Vehicle	2,686,000	4,000	2,000	6,000	10,000	2,710,000
Total	3,011,000	588,000	19,000	83,000	255,000	3,957,000
All Crashes						
Single Vehicle	481,000	856,000	31,000	118,000	270,000	1,756,000
Multiple Vehicle	3,716,000	10,000	3,000	9,000	12,000	3,749,000
Total	4,197,000	865,000	34,000	127,000	282,000	5,505,000

## Chapter 2 ■ Crashes

**Table 29**  
**Crashes by Relation to Junction, Traffic Control Device, and Crash Severity**

Relation to Junction	Traffic Control Device				Total
	None	Traffic Signal	Stop Sign	Other/Unknown	
Fatal Crashes					
Nonjunction	20,502	62	155	1,567	22,286
Junction:					
Intersection	1,393	1,845	2,003	285	5,526
Intersection Related	475	454	227	88	1,244
Other/Unknown	1,380	50	65	246	1,741
Total	23,750	2,411	2,450	2,186	30,797
Injury Crashes					
Nonjunction	563,000	12,000	1,000	52,000	627,000
Junction:					
Intersection	63,000	199,000	133,000	14,000	409,000
Intersection Related	70,000	171,000	34,000	14,000	290,000
Other/Unknown	142,000	16,000	11,000	21,000	190,000
Total	837,000	399,000	179,000	102,000	1,517,000
Property-Damage-Only Crashes					
Nonjunction	1,687,000	42,000	*	129,000	1,858,000
Junction:					
Intersection	124,000	277,000	227,000	31,000	659,000
Intersection Related	175,000	508,000	112,000	50,000	845,000
Other/Unknown	426,000	55,000	36,000	79,000	595,000
Total	2,411,000	882,000	375,000	289,000	3,957,000
All Crashes					
Nonjunction	2,270,000	55,000	1,000	182,000	2,508,000
Junction:					
Intersection	188,000	478,000	362,000	46,000	1,074,000
Intersection Related	245,000	680,000	146,000	64,000	1,136,000
Other/Unknown	569,000	71,000	47,000	100,000	787,000
Total	3,272,000	1,284,000	557,000	392,000	5,505,000

\*Less than 500.



## Chapter 2 ■ Crashes

**Table 30**  
**Crashes by Speed Limit, Crash Type, and Crash Severity**

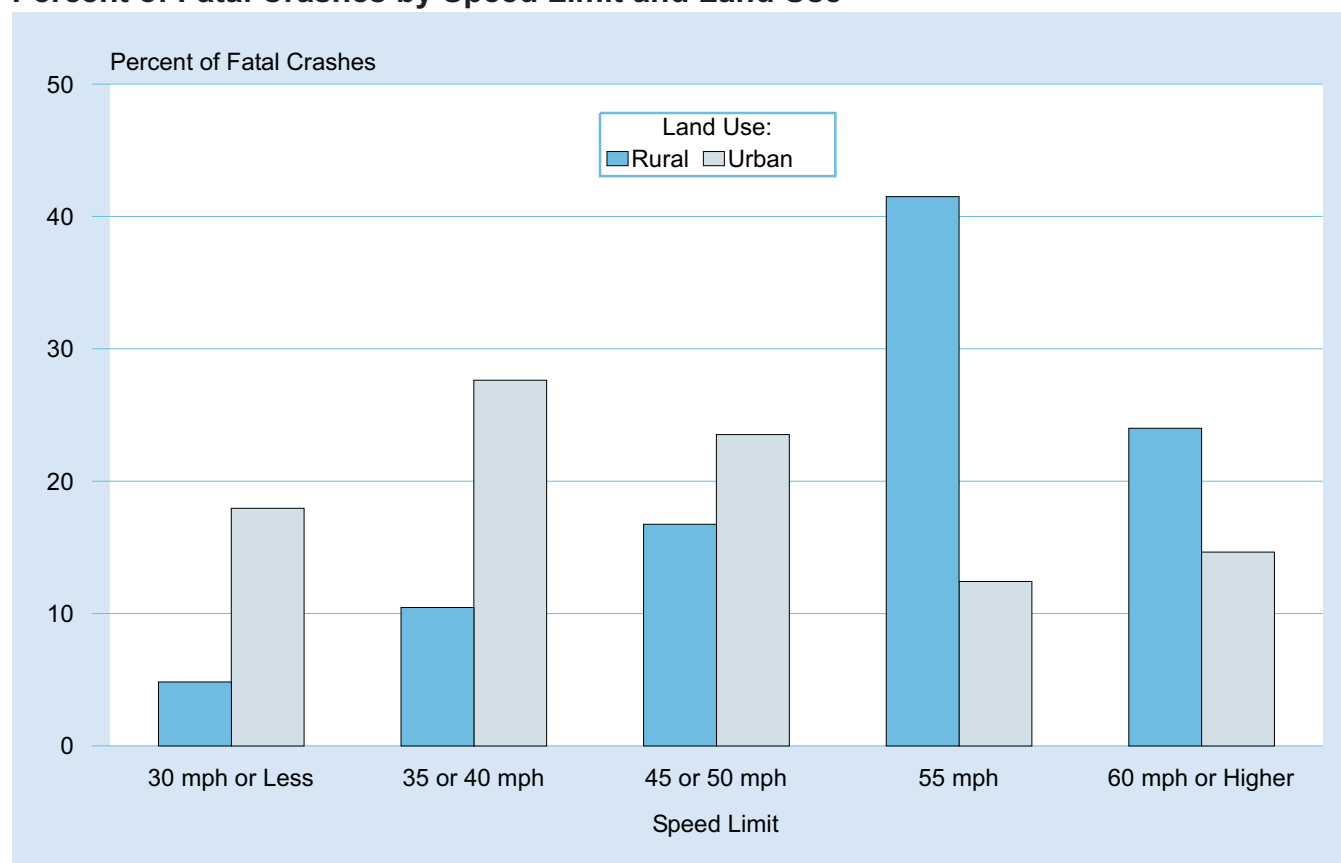
Speed Limit	Crash Type				Total	
	Single Vehicle		Multiple Vehicle			
	Number	Percent	Number	Percent	Number	Percent
Fatal Crashes						
30 mph or less	2,471	13.2	806	6.7	3,277	10.6
35 or 40 mph	3,543	18.9	1,973	16.4	5,516	17.9
45 or 50 mph	3,451	18.4	2,623	21.8	6,074	19.7
55 mph	5,018	26.8	3,829	31.8	8,847	28.7
60 mph or higher	3,519	18.8	2,605	21.6	6,124	19.9
No Statutory Limit	100	0.5	17	0.1	117	0.4
Unknown	643	3.4	199	1.7	842	2.7
Total	18,745	100.0	12,052	100.0	30,797	100.0
Injury Crashes						
30 mph or less	131,000	26.8	192,000	18.7	323,000	21.3
35 or 40 mph	116,000	23.8	395,000	38.4	511,000	33.7
45 or 50 mph	73,000	14.8	253,000	24.6	325,000	21.5
55 mph	94,000	19.1	95,000	9.2	189,000	12.4
60 mph or higher	67,000	13.8	87,000	8.5	154,000	10.2
No Statutory Limit	8,000	1.7	6,000	0.6	14,000	0.9
Total	489,000	100.0	1,028,000	100.0	1,517,000	100.0
Property-Damage-Only Crashes						
30 mph or less	376,000	30.2	621,000	22.9	998,000	25.2
35 or 40 mph	216,000	17.3	961,000	35.5	1,177,000	29.7
45 or 50 mph	165,000	13.3	621,000	22.9	786,000	19.9
55 mph	291,000	23.3	242,000	8.9	532,000	13.5
60 mph or higher	160,000	12.8	230,000	8.5	390,000	9.8
No Statutory Limit	40,000	3.2	35,000	1.3	75,000	1.9
Total	1,247,000	100.0	2,710,000	100.0	3,957,000	100.0
All Crashes						
30 mph or less	510,000	29.0	814,000	21.7	1,324,000	24.1
35 or 40 mph	335,000	19.1	1,358,000	36.2	1,694,000	30.8
45 or 50 mph	241,000	13.7	876,000	23.4	1,117,000	20.3
55 mph	389,000	22.2	341,000	9.1	730,000	13.3
60 mph or higher	230,000	13.1	320,000	8.5	550,000	10.0
No Statutory Limit	49,000	2.8	41,000	1.1	89,000	1.6
Total	1,756,000	100.0	3,749,000	100.0	5,505,000	100.0

## Chapter 2 ■ Crashes

**Table 31**  
**Fatal Crashes by Speed Limit and Land Use**

Speed Limit	Land Use						Total	
	Rural		Urban		Unknown			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
30 mph or less	832	25.4	2,397	73.1	48	1.5	3,277	100.0
35 or 40 mph	1,803	32.7	3,689	66.9	24	0.4	5,516	100.0
45 or 50 mph	2,888	47.5	3,140	51.7	46	0.8	6,074	100.0
55 mph	7,157	80.9	1,659	18.8	31	0.4	8,847	100.0
60 mph or higher	4,138	67.6	1,955	31.9	31	0.5	6,124	100.0
No Statutory Limit	88	75.2	27	23.1	2	1.7	117	100.0
Unknown	339	40.3	483	57.4	20	2.4	842	100.0
Total	17,245	56.0	13,350	43.3	202	0.7	30,797	100.0

**Figure 12**  
**Percent of Fatal Crashes by Speed Limit and Land Use**



## Chapter 2 ■ Crashes

**Table 32**  
**Crashes by Number of Lanes, Trafficway Flow, and Crash Severity**

Number of Lanes	Trafficway Flow				Total
	Not Divided	Divided	One-Way	Unknown	
Fatal Crashes					
One Lane	20	45	52	321	438
Two Lanes	17,848	4,882	113	121	22,964
Three Lanes	278	1,771	71	16	2,136
Four Lanes	2,083	1,710	22	5	3,820
More Than Four	407	606	3	4	1,020
Unknown	91	65	13	250	419
Total	20,727	9,079	274	717	30,797
Injury Crashes					
One Lane	2,000	7,000	23,000	3,000	35,000
Two Lanes	433,000	152,000	16,000	35,000	636,000
Three Lanes	57,000	126,000	9,000	7,000	199,000
Four Lanes	89,000	70,000	7,000	8,000	173,000
More Than Four	129,000	34,000	2,000	5,000	169,000
Unknown	83,000	30,000	5,000	186,000	305,000
Total	793,000	419,000	62,000	243,000	1,517,000
Property-Damage-Only Crashes					
One Lane	6,000	19,000	86,000	2,000	113,000
Two Lanes	1,097,000	358,000	47,000	65,000	1,567,000
Three Lanes	135,000	264,000	34,000	18,000	452,000
Four Lanes	232,000	150,000	12,000	10,000	404,000
More Than Four	299,000	85,000	3,000	8,000	396,000
Unknown	266,000	104,000	22,000	636,000	1,027,000
Total	2,034,000	979,000	204,000	739,000	3,957,000
All Crashes					
One Lane	7,000	27,000	109,000	5,000	148,000
Two Lanes	1,548,000	515,000	63,000	100,000	2,226,000
Three Lanes	193,000	392,000	43,000	25,000	653,000
Four Lanes	323,000	221,000	18,000	18,000	580,000
More Than Four	428,000	119,000	5,000	13,000	565,000
Unknown	349,000	134,000	28,000	822,000	1,332,000
Total	2,848,000	1,408,000	266,000	983,000	5,505,000

## Chapter 2 ■ Crashes

**Table 33**  
**Crashes by First Harmful Event, Manner of Collision, and Crash Severity**

First Harmful Event	Crash Severity						Total	
	Fatal		Injury		Property Damage Only			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Collision with Motor Vehicle in Transport:								
Angle	5,637	18.3	448,000	29.5	965,000	24.4	1,418,000	25.8
Rear End	1,674	5.4	448,000	29.5	1,283,000	32.4	1,733,000	31.5
Sideswipe	757	2.5	58,000	3.8	367,000	9.3	426,000	7.7
Head On	3,007	9.8	60,000	4.0	63,000	1.6	126,000	2.3
Other/Unknown	115	0.4	2,000	0.1	15,000	0.4	17,000	0.3
Subtotal	11,190	36.3	1,016,000	66.9	2,693,000	68.1	3,720,000	67.6
Collision with Fixed Object:								
Pole/Post	1,557	5.1	55,000	3.6	141,000	3.6	198,000	3.6
Culvert/Curb/Ditch	2,488	8.1	56,000	3.7	116,000	2.9	175,000	3.2
Shrubbery/Tree	2,697	8.8	45,000	3.0	61,000	1.5	109,000	2.0
Guard Rail	900	2.9	27,000	1.8	72,000	1.8	100,000	1.8
Embankment	1,018	3.3	21,000	1.4	30,000	0.8	52,000	0.9
Bridge	224	0.7	5,000	0.4	8,000	0.2	14,000	0.2
Other/Unknown	1,671	5.4	60,000	3.9	166,000	4.2	227,000	4.1
Subtotal	10,555	34.3	270,000	17.8	594,000	15.0	875,000	15.9
Collision with Object Not Fixed:								
Parked Motor Vehicle	335	1.1	28,000	1.8	311,000	7.9	339,000	6.2
Animal	173	0.6	12,000	0.8	260,000	6.6	272,000	4.9
Pedestrian	3,803	12.3	53,000	3.5	1,000	*	57,000	1.0
Pedalcyclist	626	2.0	49,000	3.3	3,000	0.1	53,000	1.0
Train	122	0.4	*	*	*	*	1,000	*
Other/Unknown	298	1.0	7,000	0.4	30,000	0.8	37,000	0.7
Subtotal	5,357	17.4	148,000	9.8	605,000	15.3	759,000	13.8
Noncollision:								
Rollover	3,282	10.7	77,000	5.1	38,000	1.0	119,000	2.2
Other/Unknown	384	1.2	6,000	0.4	26,000	0.7	33,000	0.6
Subtotal	3,666	11.9	83,000	5.5	64,000	1.6	151,000	2.8
Total	**30,797	100.0	1,517,000	100.0	3,957,000	100.0	5,505,000	100.0

\*Less than 500 or less than 0.05 percent.

\*\*Includes 29 fatal crashes with an unknown first harmful event.

## Chapter 2 ■ Crashes

**Table 34**  
**Two-Vehicle Crashes by Vehicle Type and Crash Severity**

Vehicle Type	Vehicle Type					
	Passenger Car	Light Truck	Large Truck	Motorcycle	Bus	Other/Unknown
<b>Fatal Crashes</b> <b>(Total = 10,248)</b>						
Passenger Car . . . .	1,484	3,239	917	891	65	110
Light Truck . . . . .		1,272	792	929	46	113
Large Truck . . . . .			75	131	4	20
Motorcycle . . . . .				73	10	45
Bus . . . . .				0	0	1
Other/Unknown. . . . .						31
<b>Injury Crashes</b> <b>(Total = 878,000)</b>						
Passenger Car . . . .	279,000	386,000	22,000	19,000	4,000	1,000
Light Truck . . . . .		133,000	12,000	16,000	3,000	1,000
Large Truck . . . . .			1,000	*	*	*
Motorcycle . . . . .				1,000	*	*
<b>Property-Damage-Only Crashes</b> <b>(Total = 2,534,000)</b>						
Passenger Car . . . .	757,000	1,137,000	77,000	6,000	22,000	6,000
Light Truck . . . . .		444,000	56,000	4,000	13,000	3,000
Large Truck . . . . .			6,000	*	2,000	*

\*Less than 500.

## Chapter 2 ■ Crashes

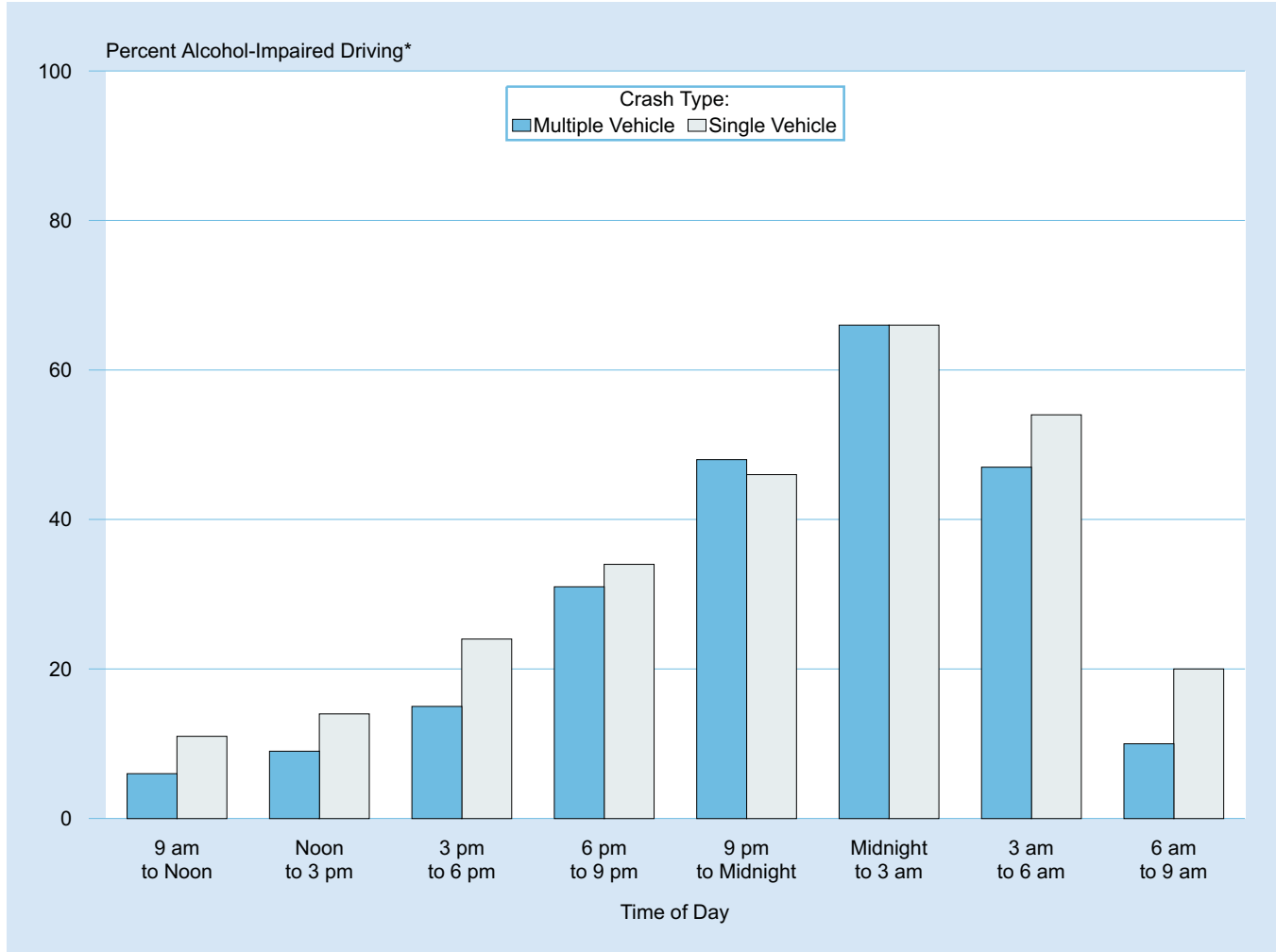
**Table 35**  
**Fatal Crashes and Percent Alcohol-Impaired Driving, by Time of Day and Crash Type**

Time of Day	Crash Type						Total		
	Single Vehicle			Multiple Vehicle					
	Number	Alcohol-Impaired Driving*	Percent Alcohol-Impaired Driving*	Number	Alcohol-Impaired Driving*	Percent Alcohol-Impaired Driving*	Number	Alcohol-Impaired Driving*	Percent Alcohol-Impaired Driving*
Midnight to 3 am	3,099	2,030	66	858	568	66	3,957	2,599	66
3 am to 6 am	1,935	1,042	54	652	304	47	2,587	1,345	52
6 am to 9 am	1,536	301	20	1,262	128	10	2,798	429	15
9 am to Noon	1,412	159	11	1,522	94	6	2,934	253	9
Noon to 3 pm	1,898	267	14	2,083	185	9	3,981	452	11
3 pm to 6 pm	2,474	594	24	2,470	363	15	4,944	957	19
6 pm to 9 pm	3,104	1,044	34	1,884	585	31	4,988	1,629	33
9 pm to Midnight	3,056	1,401	46	1,303	623	48	4,359	2,024	46
Unknown	231	120	52	18	6	32	249	126	50
Total	18,745	6,958	37	12,052	2,856	24	30,797	9,813	32

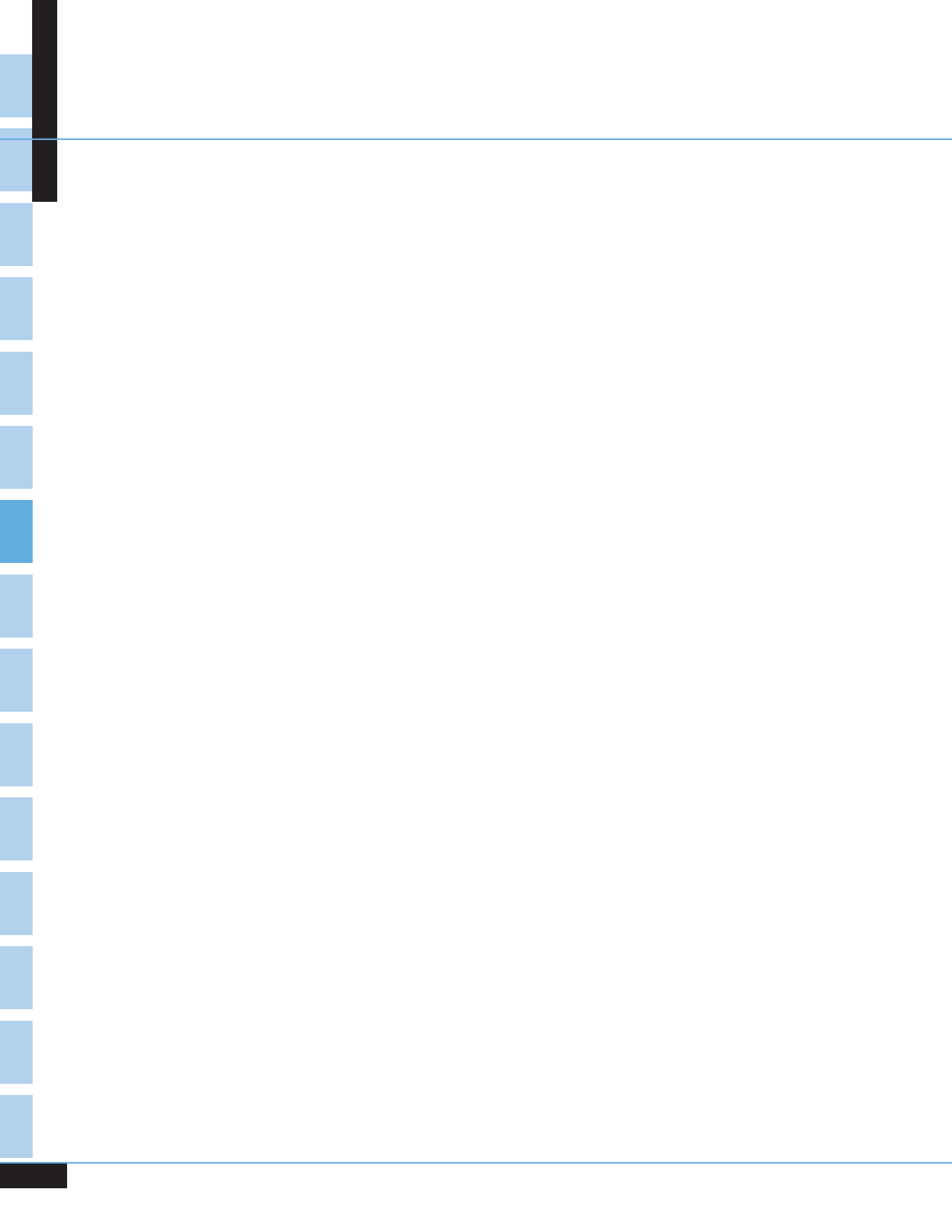
\*Highest blood alcohol concentration (BAC) among drivers or motorcycle riders involved in the crash was .08 grams per deciliter (g/dL) or greater.

**Figure 13**

**Percent of Fatal Crashes Involving Alcohol-Impaired Driving, by Time of Day and Crash Type**



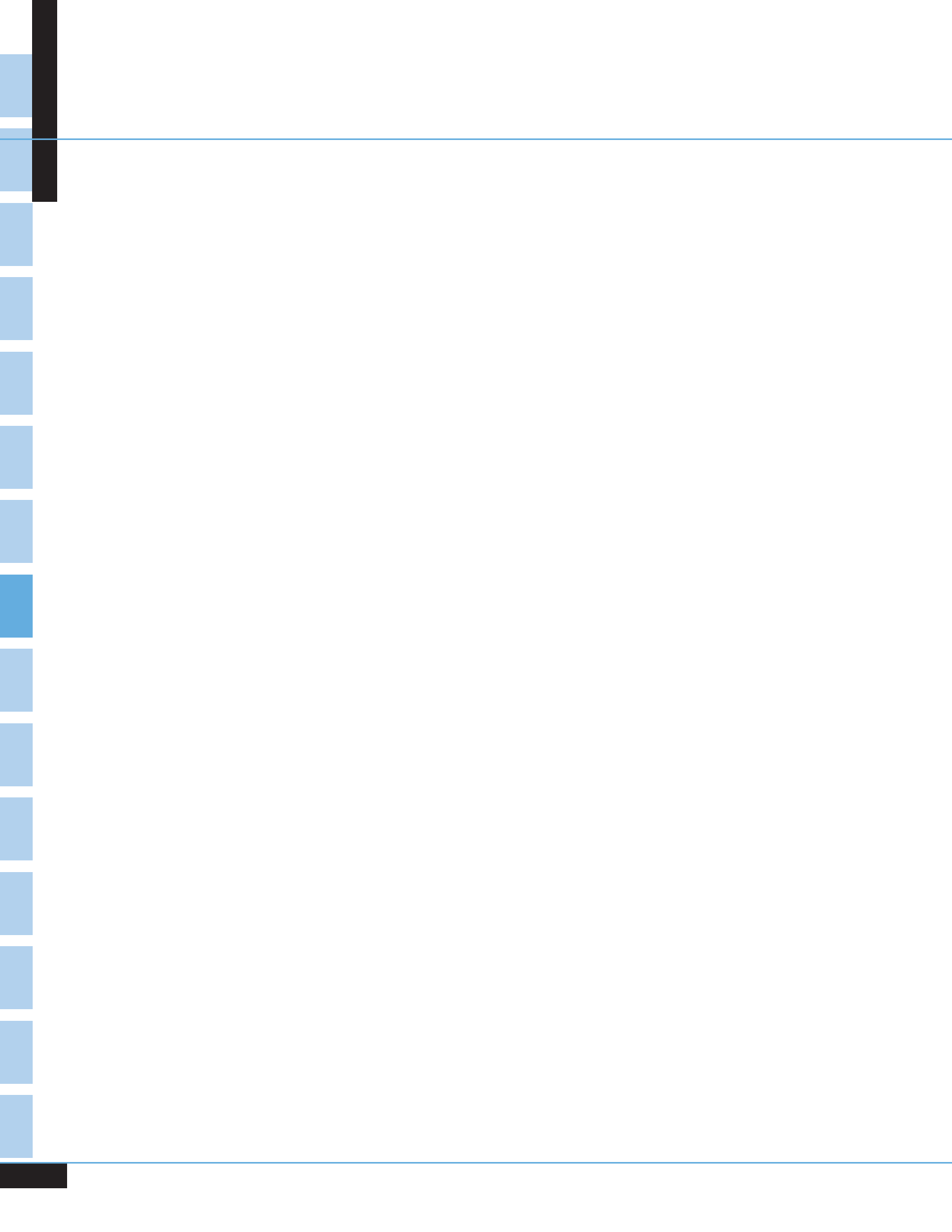
\*Highest blood alcohol concentration (BAC) among drivers or motorcycle riders involved in the crash was .08 grams per deciliter (g/dL) or greater.





Chapter 3

# VEHICLES



## CHAPTER 3 ■ VEHICLES

Statistics about the vehicles involved in police-reported motor vehicle crashes are presented in this chapter, according to six major vehicle types: Passenger Cars, Light Trucks (including pickups, vans, and utility vehicles with a gross vehicle weight rating of 10,000 pounds or less), Large Trucks (including single-unit trucks and truck tractors with a gross vehicle weight rating of more than 10,000 pounds), Motorcycles (including motorcycles, mopeds, and motorscooters), Buses (including school buses and transit buses), and Other Vehicles (including all-terrain vehicles, farm and construction equipment, and motorhomes). The tables and figures are presented for all vehicle types first, then by individual vehicle type. Below are some of the vehicle statistics you will find in this section:

- More than 95 percent of the 9.6 million vehicles involved in motor vehicle crashes in 2009 were passenger cars or light trucks.
- Large trucks accounted for 7 percent of the vehicles in fatal crashes, but only 2 percent of the vehicles involved in injury crashes and 3 percent of the vehicles involved in property-damage-only crashes. Of the 3,215 large trucks involved in fatal crashes, 73 percent were combination trucks.
- The proportion of vehicles that rolled over in fatal crashes (21.4 percent) was more than 4 times as high as the proportion in injury crashes (5.2 percent) and nearly 18 times as high as the proportion in property-damage-only crashes (1.2 percent).
- Compared with other vehicle types, utility vehicles experienced the highest rollover rates in fatal crashes (32.3 percent) and in injury crashes (9.3 percent). Pickup trucks experienced the highest rollover rate in property-damage-only crashes (2.3 percent).
- Fires occurred in 0.1 percent of the vehicles involved in all traffic crashes in 2009. For fatal crashes, however, fires occurred in 2.9 percent of the vehicles involved.
- Regardless of crash severity, the majority of vehicles in single- and two-vehicle crashes were going straight prior to the crash. The next most common vehicle maneuver differed by crash severity: negotiating a curve for fatal crashes, turning left for injury crashes, and stopped in traffic lane for property-damage-only crashes.
- Motorcycles in fatal crashes had the highest proportion of collisions with fixed objects (25.0 percent), and large trucks in fatal crashes had the lowest proportion (3.7 percent).

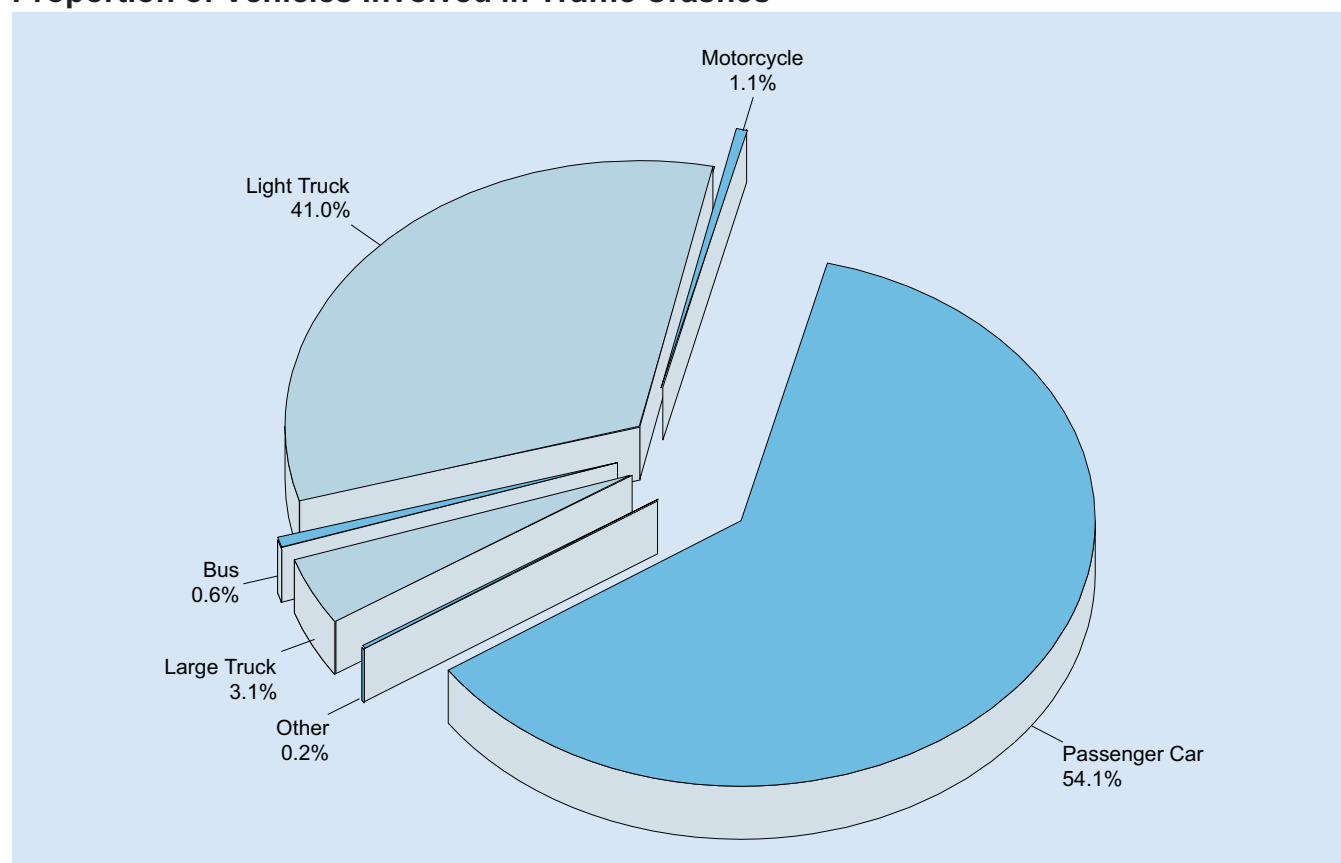
## Chapter 3 ■ Vehicles

**Table 36**  
**Vehicles Involved in Crashes by Vehicle Type and Crash Severity**

Vehicle Type	Crash Severity						Total	
	Fatal		Injury		Property Damage Only			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Passenger Car	18,350	40.4	1,507,000	55.2	3,686,000	53.7	5,211,000	54.1
Light Truck	17,902	39.4	1,066,000	39.1	2,866,000	41.7	3,950,000	41.0
Large Truck	3,215	7.1	53,000	2.0	239,000	3.5	296,000	3.1
Motorcycle	4,595	10.1	84,000	3.1	17,000	0.2	106,000	1.1
Bus	221	0.5	10,000	0.4	47,000	0.7	58,000	0.6
Other	592	1.3	6,000	0.2	12,000	0.2	19,000	0.2
Total	*45,435	100.0	2,727,000	100.0	6,868,000	100.0	9,640,000	100.0

\*Includes 560 vehicles of unknown type involved in fatal crashes.

**Figure 14**  
**Proportion of Vehicles Involved in Traffic Crashes**



## Chapter 3 ■ Vehicles

**Table 37**  
**Vehicles Involved in Fatal Crashes by Body Type**

Body Type	Number	Percent	Body Type	Number	Percent
<b>Passenger Cars</b>	<b>18,350</b>	<b>40.4</b>	<b>Large Trucks</b>	<b>3,215</b>	<b>7.1</b>
Convertible	334	0.7	Step Van	15	*
2 Door Sedan, Hardtop, Coupe	2,871	6.3	Single Unit Truck (10,000 lb < GVWR ≤ 19,500 lb)	198	0.4
3 Door/2 Door Hatchback	666	1.5	Single Unit Truck (19,500 lb < GVWR ≤ 26,000 lb)	189	0.4
4 Door Sedan Hardtop	13,100	28.8	Single Unit Heavy Truck (GVWR > 26,000 lb)	541	1.2
5 Door/4 Door Hatchback	268	0.6	Single Unit Truck, Unknown GVWR	8	*
Station Wagon	893	2.0	Truck Tractor	2,161	4.8
Hatchback, Doors Unknown	11	*	Medium/Heavy Pickup (Ford Super Duty 450/550)	92	0.2
Other Auto	29	0.1	Unknown Heavy Truck (GVWR > 26,000 lb)	2	*
Unknown Auto	163	0.4	Unknown Large Truck Type	9	*
Auto-Based Pickup	15	*	<b>Motorcycles</b>	<b>4,595</b>	<b>10.1</b>
<b>Light Trucks</b>	<b>17,902</b>	<b>39.4</b>	Motorcycle	4,348	9.6
Compact Utility	5,101	11.2	Moped	99	0.2
Large Utility	1,504	3.3	Three Wheel Motorcycle or Moped	10	*
Utility Station Wagon	312	0.7	Off-Road Motorcycle (Two Wheel)	64	0.1
Utility, Unknown Body Type	7	*	Other Motorcycle/Minibike	65	0.1
Minivan	1,811	4.0	Unknown Motorcycle	9	*
Large Van	661	1.5	<b>Buses</b>	<b>221</b>	<b>0.5</b>
Step Van	11	*	School Bus	89	0.2
Other Van Type	1	*	Cross Country/Intercity Bus	38	0.1
Unknown Van Type	10	*	Transit Bus	77	0.2
Compact Pickup	2,306	5.1	Other Bus	9	*
Standard Pickup	6,104	13.4	Unknown Bus	8	*
Pickup with Camper	17	*	<b>Other Vehicles</b>	<b>592</b>	<b>1.3</b>
Unknown Pickup Style Truck	25	0.1	Large Limousine	1	*
Cab Chassis-Based Light Truck	25	0.1	Light Truck-Based Motorhome	2	*
Truck-Based Panel Truck	1	*	Medium/Heavy Truck-Based Motorhome	26	0.1
Other Conventional Light Truck	1	*	Unknown Truck Camper/Motorhome	22	*
Unknown Light Truck Type (Not Pickup)	1	*	All Terrain Vehicle	353	0.8
Unknown Light Vehicle Type	4	*	Snowmobile	38	0.1
			Farm Equipment Except Trucks	82	0.2
			Construction Equipment Except Trucks	16	*
			Other Vehicle	52	0.1
			<b>Unknown Body Type</b>	<b>560</b>	<b>1.2</b>
			<b>Total</b>	<b>45,435</b>	<b>100.0</b>

\*Less than 0.05 percent.

## Chapter 3 ■ Vehicles

**Table 38**

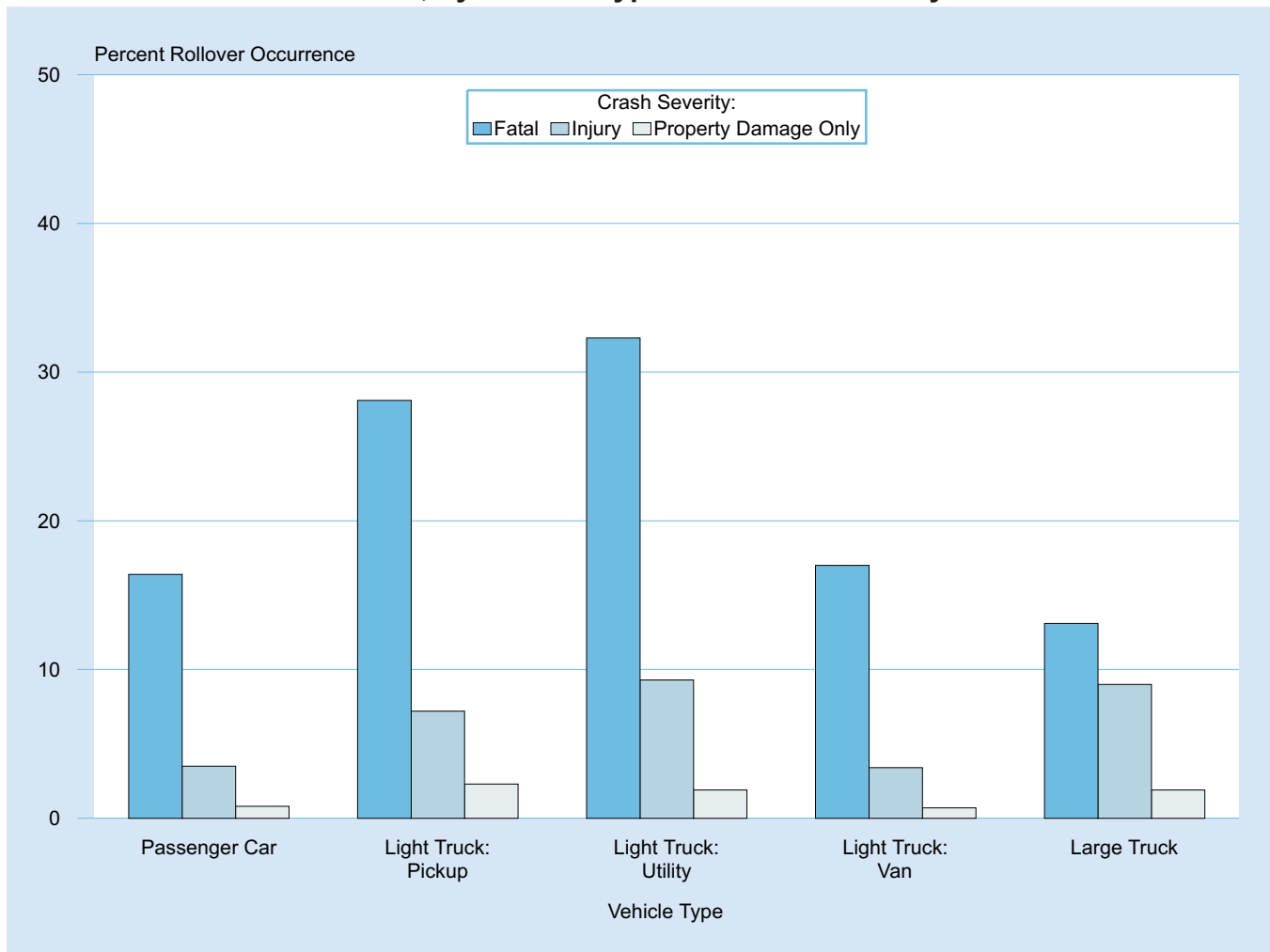
### Vehicles Involved in Crashes by Vehicle Type, Rollover Occurrence, and Crash Severity

Vehicle Type	Rollover Occurrence				Total	
	Yes		No		Number	Percent
	Number	Percent	Number	Percent		
<b>Fatal Crashes</b>						
Passenger Car	3,017	16.4	15,333	83.6	<b>18,350</b>	<b>100.0</b>
Light Truck						
Pickup	2,379	28.1	6,073	71.9	<b>8,452</b>	<b>100.0</b>
Utility	2,234	32.3	4,690	67.7	<b>6,924</b>	<b>100.0</b>
Van	424	17.0	2,070	83.0	<b>2,494</b>	<b>100.0</b>
Other	6	18.8	26	81.3	<b>32</b>	<b>100.0</b>
Large Truck	422	13.1	2,793	86.9	<b>3,215</b>	<b>100.0</b>
Bus	7	3.2	214	96.8	<b>221</b>	<b>100.0</b>
Other/Unknown	243	21.1	909	78.9	<b>1,152</b>	<b>100.0</b>
<b>Total*</b>	<b>8,732</b>	<b>21.4</b>	<b>32,108</b>	<b>78.6</b>	<b>40,840</b>	<b>100.0</b>
<b>Injury Crashes</b>						
Passenger Car	52,000	3.5	1,455,000	96.5	<b>1,507,000</b>	<b>100.0</b>
Light Truck						
Pickup	27,000	7.2	349,000	92.8	<b>376,000</b>	<b>100.0</b>
Utility	42,000	9.3	406,000	90.7	<b>448,000</b>	<b>100.0</b>
Van	6,000	3.4	168,000	96.6	<b>174,000</b>	<b>100.0</b>
Other	2,000	3.4	66,000	96.6	<b>68,000</b>	<b>100.0</b>
Large Truck	5,000	9.0	49,000	91.0	<b>53,000</b>	<b>100.0</b>
Bus	**	**	10,000	100.0	<b>10,000</b>	<b>100.0</b>
Other/Unknown	3,000	54.5	3,000	45.5	<b>6,000</b>	<b>100.0</b>
<b>Total*</b>	<b>137,000</b>	<b>5.2</b>	<b>2,506,000</b>	<b>94.8</b>	<b>2,642,000</b>	<b>100.0</b>
<b>Property-Damage-Only Crashes</b>						
Passenger Car	29,000	0.8	3,657,000	99.2	<b>3,686,000</b>	<b>100.0</b>
Light Truck						
Pickup	23,000	2.3	979,000	97.7	<b>1,002,000</b>	<b>100.0</b>
Utility	23,000	1.9	1,165,000	98.1	<b>1,188,000</b>	<b>100.0</b>
Van	3,000	0.7	450,000	99.3	<b>453,000</b>	<b>100.0</b>
Other	2,000	1.0	221,000	99.0	<b>223,000</b>	<b>100.0</b>
Large Truck	5,000	1.9	235,000	98.1	<b>239,000</b>	<b>100.0</b>
Bus	**	**	47,000	100.0	<b>47,000</b>	<b>100.0</b>
Other/Unknown	**	2.6	12,000	97.4	<b>12,000</b>	<b>100.0</b>
<b>Total*</b>	<b>84,000</b>	<b>1.2</b>	<b>6,767,000</b>	<b>98.8</b>	<b>6,851,000</b>	<b>100.0</b>
<b>All Crashes</b>						
Passenger Car	84,000	1.6	5,127,000	98.4	<b>5,211,000</b>	<b>100.0</b>
Light Truck						
Pickup	52,000	3.8	1,334,000	96.2	<b>1,387,000</b>	<b>100.0</b>
Utility	66,000	4.0	1,576,000	96.0	<b>1,643,000</b>	<b>100.0</b>
Van	10,000	1.5	620,000	98.5	<b>630,000</b>	<b>100.0</b>
Other	5,000	1.6	286,000	98.4	<b>291,000</b>	<b>100.0</b>
Large Truck	10,000	3.3	286,000	96.7	<b>296,000</b>	<b>100.0</b>
Bus	**	**	58,000	100.0	<b>58,000</b>	<b>100.0</b>
Other/Unknown	4,000	20.1	16,000	79.9	<b>20,000</b>	<b>100.0</b>
<b>Total*</b>	<b>230,000</b>	<b>2.4</b>	<b>9,304,000</b>	<b>97.6</b>	<b>9,534,000</b>	<b>100.0</b>

\*Excludes motorcycles.

\*\*Less than 500 or less than 0.05 percent.

**Figure 15**  
**Percent Rollover Occurrence, by Vehicle Type and Crash Severity**



## Chapter 3 ■ Vehicles

**Table 39**  
**Vehicles Involved in Crashes by Vehicle Type, Fire Occurrence, and Crash Severity**

Vehicle Type	Fire Occurrence				Total	
	Yes		No			
	Number	Percent	Number	Percent	Number	Percent
Fatal Crashes						
Passenger Car	527	2.9	17,823	97.1	18,350	100.0
Light Truck	535	3.0	17,367	97.0	17,902	100.0
Large Truck	187	5.8	3,028	94.2	3,215	100.0
Motorcycle	66	1.4	4,529	98.6	4,595	100.0
Bus	1	0.5	220	99.5	221	100.0
Other/Unknown	5	0.4	1,147	99.6	1,152	100.0
Total	1,321	2.9	44,114	97.1	45,435	100.0
Injury Crashes						
Passenger Car	2,000	0.1	1,505,000	99.9	1,507,000	100.0
Light Truck	2,000	0.2	1,064,000	99.8	1,066,000	100.0
Large Truck	*	0.1	53,000	99.9	53,000	100.0
Motorcycle	*	0.1	84,000	99.9	84,000	100.0
Bus	*	*	10,000	100.0	10,000	100.0
Other/Unknown	*	*	6,000	100.0	6,000	100.0
Total	4,000	0.1	2,723,000	99.9	2,727,000	100.0
Property-Damage-Only Crashes						
Passenger Car	3,000	0.1	3,683,000	99.9	3,686,000	100.0
Light Truck	4,000	0.1	2,862,000	99.9	2,866,000	100.0
Large Truck	1,000	0.6	238,000	99.4	239,000	100.0
Motorcycle	*	*	17,000	100.0	17,000	100.0
Bus	*	*	47,000	100.0	47,000	100.0
Other/Unknown	1,000	5.2	12,000	94.8	12,000	100.0
Total	9,000	0.1	6,859,000	99.9	6,868,000	100.0
All Crashes						
Passenger Car	6,000	0.1	5,205,000	99.9	5,211,000	100.0
Light Truck	6,000	0.2	3,944,000	99.8	3,950,000	100.0
Large Truck	2,000	0.5	294,000	99.5	296,000	100.0
Motorcycle	*	0.2	106,000	99.8	106,000	100.0
Bus	*	*	58,000	100.0	58,000	100.0
Other/Unknown	1,000	3.3	19,000	96.7	20,000	100.0
Total	14,000	0.1	9,626,000	99.9	9,640,000	100.0

\*Less than 500 or less than 0.05 percent.



**Table 40**  
**Vehicles Involved in Single- and Two-Vehicle Crashes by Vehicle Maneuver and Crash Severity**

Vehicle Maneuver	Crash Severity							
	Fatal		Injury		Property Damage Only		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Going Straight	27,124	69.1	1,251,000	55.8	3,045,000	48.4	<b>4,323,000</b>	<b>50.4</b>
Turning Left	2,398	6.1	272,000	12.1	562,000	8.9	<b>836,000</b>	<b>9.8</b>
Stopped in Traffic Lane	549	1.4	216,000	9.6	784,000	12.4	<b>1,000,000</b>	<b>11.7</b>
Turning Right	319	0.8	70,000	3.1	267,000	4.2	<b>337,000</b>	<b>3.9</b>
Slowed in Traffic Lane	286	0.7	112,000	5.0	413,000	6.6	<b>525,000</b>	<b>6.1</b>
Merging/Changing Lanes	769	2.0	48,000	2.1	263,000	4.2	<b>312,000</b>	<b>3.6</b>
Negotiating Curve	5,588	14.2	133,000	5.9	270,000	4.3	<b>408,000</b>	<b>4.8</b>
Backing Up	127	0.3	11,000	0.5	157,000	2.5	<b>168,000</b>	<b>2.0</b>
Passing Other Vehicle	802	2.0	16,000	0.7	64,000	1.0	<b>81,000</b>	<b>0.9</b>
Starting in Traffic Lane	313	0.8	59,000	2.6	167,000	2.6	<b>226,000</b>	<b>2.6</b>
Leaving Parking Space	43	0.1	4,000	0.2	42,000	0.7	<b>46,000</b>	<b>0.5</b>
Making U-Turn	113	0.3	13,000	0.6	39,000	0.6	<b>52,000</b>	<b>0.6</b>
Entering Parking Space	17	*	1,000	0.1	22,000	0.3	<b>23,000</b>	<b>0.3</b>
Disabled in Traffic Lane	19	*	1,000	0.1	8,000	0.1	<b>9,000</b>	<b>0.1</b>
Other Maneuver	469	1.2	37,000	1.7	193,000	3.1	<b>230,000</b>	<b>2.7</b>
<b>Total</b>	<b>**39,241</b>	<b>100.0</b>	<b>2,243,000</b>	<b>100.0</b>	<b>6,294,000</b>	<b>100.0</b>	<b>8,576,000</b>	<b>100.0</b>

\*Less than 0.05 percent.

\*\*Includes 305 vehicles involved in fatal crashes with unknown vehicle maneuver.

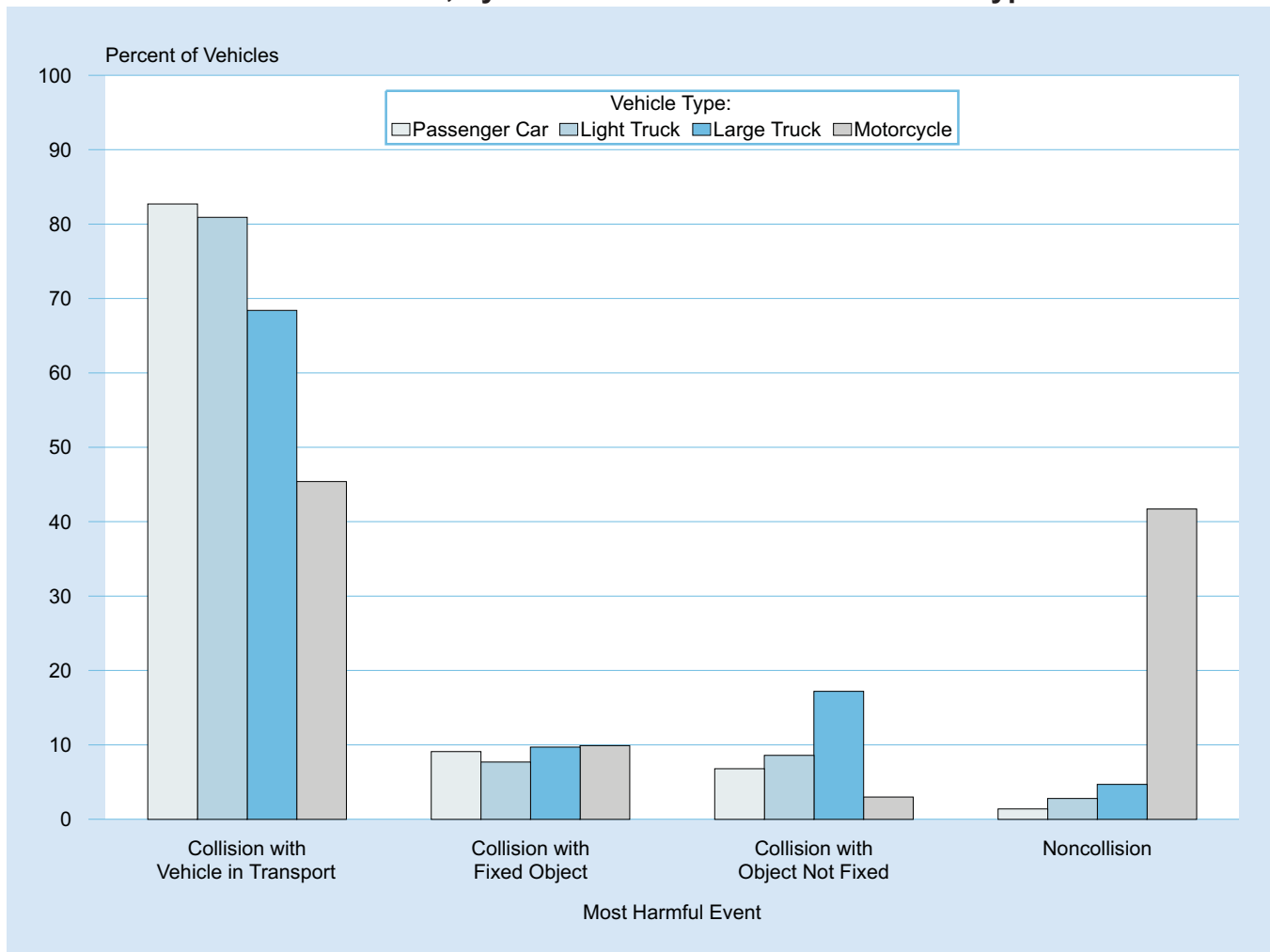
## Chapter 3 ■ Vehicles

**Table 41**

**Vehicles Involved in Fatal Crashes by Roadway Function Class, Crash Type, and Hazardous Cargo**

Roadway Function Class	Crash Type					
	Single Vehicle		Multiple Vehicle		Total	
	Hazardous Cargo	Total	Hazardous Cargo	Total	Hazardous Cargo	Total
<b>Rural Fatal Crashes</b>						
Principal Arterial						
Interstate	4	1,134	12	1,572	16	2,706
Other	8	1,869	19	4,719	27	6,588
Minor Arterial	3	1,281	14	2,851	17	4,132
Major Collector	3	2,710	6	2,967	9	5,677
Minor Collector	2	923	3	643	5	1,566
Local Road or Street	2	2,668	2	1,444	4	4,112
Unknown Rural	0	109	0	35	0	144
<b>Total</b>	<b>22</b>	<b>10,694</b>	<b>56</b>	<b>14,231</b>	<b>78</b>	<b>24,925</b>
<b>Urban Fatal Crashes</b>						
Principal Arterial						
Interstate	9	1,057	3	1,922	12	2,979
Freeway/Expressway	2	699	3	1,178	5	1,877
Other	0	1,911	6	4,023	6	5,934
Minor Arterial	1	1,451	4	2,568	5	4,019
Collector	0	668	2	865	2	1,533
Local Road or Street	1	2,100	0	1,728	1	3,828
Unknown Urban	0	25	0	37	0	62
<b>Total</b>	<b>13</b>	<b>7,911</b>	<b>18</b>	<b>12,321</b>	<b>31</b>	<b>20,232</b>
<b>All Fatal Crashes</b>						
Principal Arterial						
Interstate	13	2,191	15	3,494	28	5,685
Freeway/Expressway	2	699	3	1,178	5	1,877
Other	8	3,780	25	8,742	33	12,522
Minor Arterial	4	2,732	18	5,419	22	8,151
Collector	5	4,301	11	4,475	16	8,776
Local Road or Street	3	4,768	2	3,172	5	7,940
Unknown Rural	0	109	0	35	0	144
Unknown Urban	0	25	0	37	0	62
Unknown Rural or Urban	0	140	0	138	0	278
<b>Total</b>	<b>35</b>	<b>18,745</b>	<b>74</b>	<b>26,690</b>	<b>109</b>	<b>45,435</b>

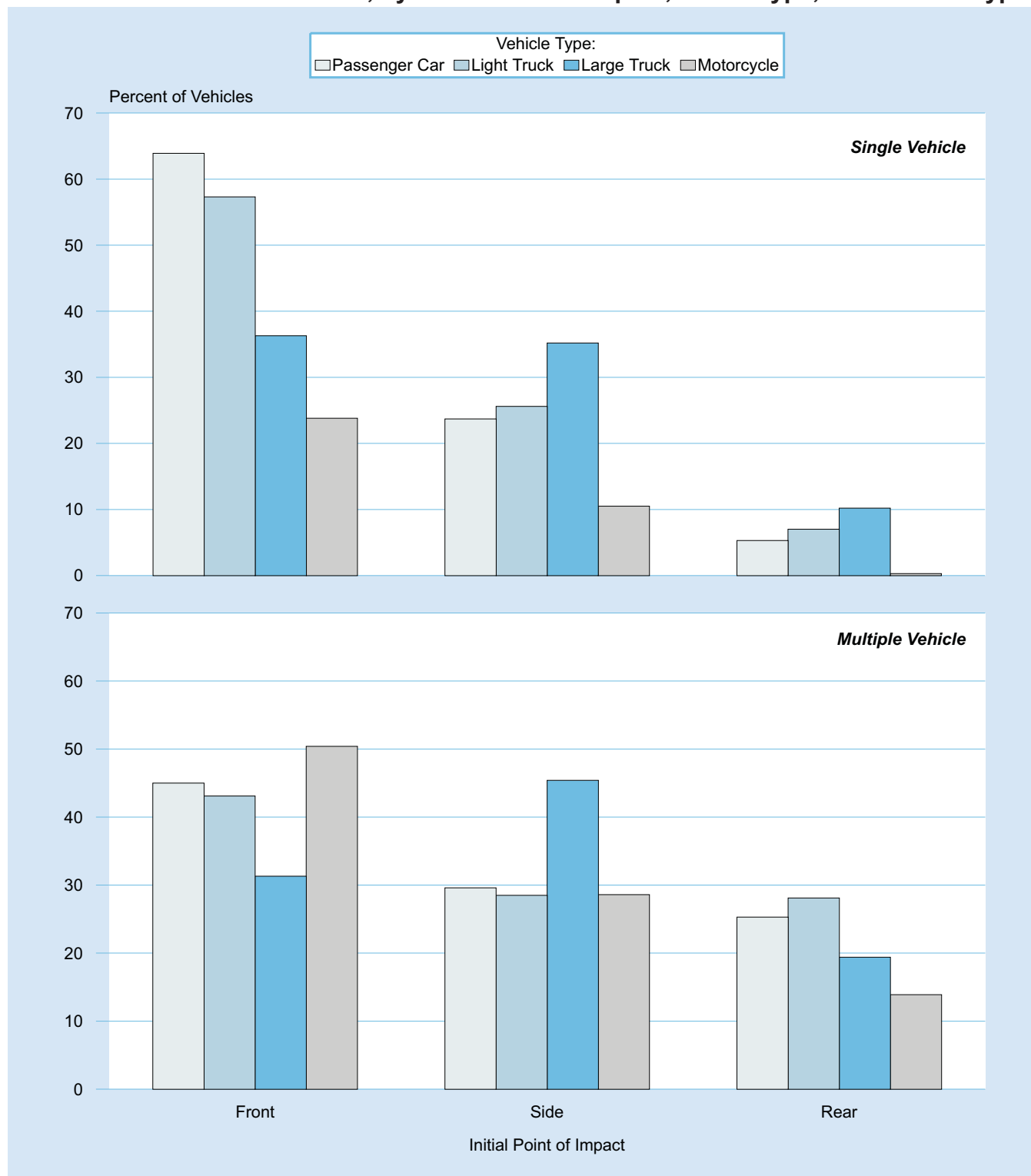
**Figure 16**  
**Percent of Vehicles in Crashes, by Most Harmful Event and Vehicle Type**



## Chapter 3 ■ Vehicles

Figure 17

Percent of Vehicles in Crashes, by Initial Point of Impact, Crash Type, and Vehicle Type



Note: Excludes other or unknown point of impact and noncollisions.

**Table 42**  
**Passenger Cars Involved in Crashes by Most Harmful Event and Crash Severity**

Most Harmful Event	Crash Severity						Total	
	Fatal		Injury		Property Damage Only			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Collision with Motor Vehicle in Transport by Initial Point of Impact:								
Front	5,865	32.0	598,000	39.7	1,337,000	36.3	1,941,000	37.3
Left Side	1,587	8.6	169,000	11.2	497,000	13.5	667,000	12.8
Right Side	1,383	7.5	158,000	10.5	443,000	12.0	602,000	11.6
Rear	954	5.2	320,000	21.2	776,000	21.1	1,097,000	21.0
Other/Unknown	78	0.4	*	*	4,000	0.1	4,000	0.1
Subtotal	9,867	53.8	1,245,000	82.6	3,057,000	82.9	4,312,000	82.7
Collision with Fixed Object	3,646	19.9	138,000	9.2	331,000	9.0	473,000	9.1
Collision with Object Not Fixed:								
Nonoccupant	2,082	11.3	58,000	3.9	2,000	0.1	62,000	1.2
Other	427	2.3	25,000	1.7	264,000	7.2	290,000	5.6
Subtotal	2,509	13.7	84,000	5.6	266,000	7.2	353,000	6.8
Noncollision	2,321	12.6	40,000	2.7	31,000	0.9	74,000	1.4
Total	**18,350	100.0	1,507,000	100.0	3,686,000	100.0	5,211,000	100.0

\*Less than 0.05 percent.

\*\*Includes 7 passenger cars involved in fatal crashes with unknown most harmful event.

## Chapter 3 ■ Vehicles

**Table 43**  
**Passenger Cars Involved in Crashes by Initial Point of Impact, Crash Severity, and Crash Type**

Initial Point of Impact	Crash Severity							
	Fatal		Injury		Property Damage Only		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>Single-Vehicle Crashes</b>								
Front	5,021	66.6	167,000	67.2	384,000	62.6	<b>556,000</b>	<b>63.9</b>
Left Side	669	8.9	23,000	9.3	60,000	9.9	<b>84,000</b>	<b>9.7</b>
Right Side	665	8.8	31,000	12.6	90,000	14.6	<b>121,000</b>	<b>14.0</b>
Rear	158	2.1	6,000	2.3	40,000	6.6	<b>46,000</b>	<b>5.3</b>
Noncollision	428	5.7	17,000	7.0	18,000	2.9	<b>36,000</b>	<b>4.1</b>
Other/Unknown	603	8.0	4,000	1.5	21,000	3.5	<b>26,000</b>	<b>3.0</b>
<b>Total</b>	<b>7,544</b>	<b>100.0</b>	<b>248,000</b>	<b>100.0</b>	<b>614,000</b>	<b>100.0</b>	<b>869,000</b>	<b>100.0</b>
<b>Multiple-Vehicle Crashes</b>								
Front	6,391	59.1	603,000	47.9	1,343,000	43.7	<b>1,952,000</b>	<b>45.0</b>
Left Side	1,683	15.6	174,000	13.8	502,000	16.3	<b>677,000</b>	<b>15.6</b>
Right Side	1,461	13.5	161,000	12.8	446,000	14.5	<b>609,000</b>	<b>14.0</b>
Rear	1,057	9.8	321,000	25.5	776,000	25.3	<b>1,098,000</b>	<b>25.3</b>
Noncollision	8	0.1	*	*	1,000	*	<b>1,000</b>	<b>*</b>
Other/Unknown	206	1.9	*	*	4,000	0.1	<b>5,000</b>	<b>0.1</b>
<b>Total</b>	<b>10,806</b>	<b>100.0</b>	<b>1,259,000</b>	<b>100.0</b>	<b>3,073,000</b>	<b>100.0</b>	<b>4,342,000</b>	<b>100.0</b>
<b>All Crashes</b>								
Front	11,412	62.2	770,000	51.1	1,727,000	46.9	<b>2,508,000</b>	<b>48.1</b>
Left Side	2,352	12.8	197,000	13.1	562,000	15.3	<b>761,000</b>	<b>14.6</b>
Right Side	2,126	11.6	192,000	12.8	536,000	14.5	<b>730,000</b>	<b>14.0</b>
Rear	1,215	6.6	326,000	21.7	817,000	22.2	<b>1,144,000</b>	<b>22.0</b>
Noncollision	436	2.4	18,000	1.2	19,000	0.5	<b>37,000</b>	<b>0.7</b>
Other/Unknown	809	4.4	4,000	0.3	25,000	0.7	<b>30,000</b>	<b>0.6</b>
<b>Total</b>	<b>18,350</b>	<b>100.0</b>	<b>1,507,000</b>	<b>100.0</b>	<b>3,686,000</b>	<b>100.0</b>	<b>5,211,000</b>	<b>100.0</b>

\*Less than 500 or less than 0.05 percent.

**Table 44**  
**Light Trucks Involved in Crashes by Most Harmful Event and Crash Severity**

Most Harmful Event	Crash Severity						Total	
	Fatal		Injury		Property Damage Only			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Collision with Motor Vehicle in Transport by Initial Point of Impact:								
Front	6,518	36.4	421,000	39.5	951,000	33.2	1,378,000	34.9
Left Side	868	4.8	116,000	10.9	355,000	12.4	471,000	11.9
Right Side	684	3.8	98,000	9.2	333,000	11.6	431,000	10.9
Rear	809	4.5	230,000	21.6	672,000	23.5	903,000	22.9
Other/Unknown	80	0.4	1,000	0.1	8,000	0.3	9,000	0.2
Subtotal	8,959	50.0	866,000	81.2	2,319,000	80.9	3,194,000	80.9
Collision with Fixed Object								
	2,471	13.8	86,000	8.0	216,000	7.5	304,000	7.7
Collision with Object Not Fixed:								
Nonoccupant	2,101	11.7	44,000	4.1	2,000	0.1	48,000	1.2
Other	311	1.7	14,000	1.4	278,000	9.7	292,000	7.4
Subtotal	2,412	13.5	59,000	5.5	279,000	9.8	341,000	8.6
Noncollision	4,050	22.6	56,000	5.3	52,000	1.8	112,000	2.8
Total	*17,902	100.0	1,066,000	100.0	2,866,000	100.0	3,950,000	100.0

\*Includes 10 light trucks involved in fatal crashes with unknown most harmful event.

## Chapter 3 ■ Vehicles

**Table 45**

**Light Trucks Involved in Crashes by Initial Point of Impact, Crash Severity, and Crash Type**

Initial Point of Impact	Crash Severity						Total	
	Fatal		Injury		Property Damage Only			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Single-Vehicle Crashes								
Front	4,766	61.3	111,000	60.6	301,000	56.2	417,000	57.3
Left Side	482	6.2	17,000	9.0	50,000	9.3	67,000	9.2
Right Side	520	6.7	24,000	13.0	95,000	17.8	120,000	16.5
Rear	154	2.0	3,000	1.5	48,000	8.9	51,000	7.0
Noncollision	1,138	14.6	27,000	14.7	31,000	5.7	59,000	8.1
Other/Unknown	718	9.2	2,000	1.1	12,000	2.1	14,000	2.0
Total	7,778	100.0	184,000	100.0	536,000	100.0	728,000	100.0
Multiple-Vehicle Crashes								
Front	7,134	70.5	426,000	48.3	954,000	41.0	1,388,000	43.1
Left Side	1,004	9.9	120,000	13.6	357,000	15.3	478,000	14.8
Right Side	795	7.9	103,000	11.7	335,000	14.4	439,000	13.6
Rear	978	9.7	232,000	26.2	673,000	28.9	905,000	28.1
Noncollision	12	0.1	*	*	2,000	0.1	2,000	0.1
Other/Unknown	201	2.0	1,000	0.1	9,000	0.4	10,000	0.3
Total	10,124	100.0	882,000	100.0	2,330,000	100.0	3,222,000	100.0
All Crashes								
Front	11,900	66.5	538,000	50.4	1,255,000	43.8	1,805,000	45.7
Left Side	1,486	8.3	136,000	12.8	407,000	14.2	545,000	13.8
Right Side	1,315	7.3	127,000	11.9	430,000	15.0	559,000	14.2
Rear	1,132	6.3	234,000	22.0	720,000	25.1	956,000	24.2
Noncollision	1,150	6.4	27,000	2.6	32,000	1.1	61,000	1.5
Other/Unknown	919	5.1	3,000	0.3	20,000	0.7	24,000	0.6
Total	17,902	100.0	1,066,000	100.0	2,866,000	100.0	3,950,000	100.0

\*Less than 500 or less than 0.05 percent.



**Table 46**  
**Large Trucks Involved in Crashes by Most Harmful Event and Crash Severity**

Most Harmful Event	Crash Severity						Total	
	Fatal		Injury		Property Damage Only			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Collision with Motor Vehicle in Transport by Initial Point of Impact:								
Front	1,425	44.3	20,000	36.9	43,000	17.9	64,000	21.6
Left Side	269	8.4	8,000	15.7	35,000	14.6	44,000	14.8
Right Side	141	4.4	7,000	12.5	43,000	17.9	50,000	16.8
Rear	514	16.0	9,000	16.9	30,000	12.7	40,000	13.5
Other/Unknown	45	1.4	1,000	1.7	4,000	1.9	5,000	1.8
Subtotal	2,394	74.5	45,000	83.6	155,000	65.0	203,000	68.4
Collision with Fixed Object								
	118	3.7	3,000	5.1	26,000	10.8	29,000	9.7
Collision with Object Not Fixed:								
Nonoccupant	308	9.6	1,000	1.6	*	*	1,000	0.4
Other	56	1.7	1,000	1.3	49,000	20.4	50,000	16.8
Subtotal	364	11.3	2,000	2.9	49,000	20.4	51,000	17.2
Noncollision	338	10.5	4,000	8.4	9,000	3.8	14,000	4.7
Total	**3,215	100.0	53,000	100.0	239,000	100.0	296,000	100.0

\*Less than 500 or less than 0.05 percent.

\*\*Includes 1 large truck involved in a fatal crash with unknown most harmful event.

## Chapter 3 ■ Vehicles

**Table 47**

**Large Trucks Involved in Crashes by Initial Point of Impact, Crash Severity, and Crash Type**

Initial Point of Impact	Crash Severity							
	Fatal		Injury		Property Damage Only		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Single-Vehicle Crashes								
Front	343	56.9	3,000	32.7	30,000	36.5	33,000	36.3
Left Side	23	3.8	*	3.8	9,000	11.6	10,000	10.9
Right Side	66	10.9	1,000	18.7	20,000	25.0	22,000	24.4
Rear	32	5.3	*	0.3	9,000	11.2	9,000	10.2
Noncollision	71	11.8	3,000	40.8	7,000	8.5	10,000	11.3
Other/Unknown	68	11.3	*	3.9	6,000	7.2	6,000	6.9
Total	603	100.0	8,000	100.0	81,000	100.0	90,000	100.0
Multiple-Vehicle Crashes								
Front	1,550	59.3	20,000	43.9	43,000	27.2	65,000	31.3
Left Side	292	11.2	9,000	18.7	35,000	22.2	44,000	21.3
Right Side	157	6.0	7,000	15.0	43,000	27.1	50,000	24.2
Rear	537	20.6	9,000	19.7	30,000	19.3	40,000	19.4
Noncollision	4	0.2	*	0.6	1,000	0.7	1,000	0.7
Other/Unknown	72	2.8	1,000	2.1	6,000	3.5	7,000	3.2
Total	2,612	100.0	46,000	100.0	158,000	100.0	206,000	100.0
All Crashes								
Front	1,893	58.9	23,000	42.3	73,000	30.4	97,000	32.8
Left Side	315	9.8	9,000	16.6	44,000	18.6	54,000	18.1
Right Side	223	6.9	8,000	15.5	63,000	26.4	72,000	24.2
Rear	569	17.7	9,000	16.9	40,000	16.5	49,000	16.6
Noncollision	75	2.3	3,000	6.4	8,000	3.4	12,000	3.9
Other/Unknown	140	4.4	1,000	2.3	11,000	4.8	13,000	4.3
Total	3,215	100.0	53,000	100.0	239,000	100.0	296,000	100.0

\*Less than 500.

## Chapter 3 ■ Vehicles

**Table 48**  
**Large Trucks Involved in Crashes by Truck Type, Rollover Occurrence,**  
**and Crash Severity**

Truck Type	Rollover Occurrence				Total	
	Yes		No			
	Number	Percent	Number	Percent	Number	Percent
Fatal Crashes						
Single-Unit Truck	154	17.5	727	82.5	881	100.0
Combination Truck	268	11.5	2,066	88.5	2,334	100.0
Total	422	13.1	2,793	86.9	3,215	100.0
Injury Crashes						
Single-Unit Truck	2,000	6.9	22,000	93.1	24,000	100.0
Combination Truck	3,000	10.7	26,000	89.3	29,000	100.0
Total	5,000	9.0	49,000	91.0	53,000	100.0
Property-Damage-Only Crashes						
Single-Unit Truck	1,000	1.2	119,000	98.8	121,000	100.0
Combination Truck	3,000	2.7	115,000	97.3	118,000	100.0
Total	5,000	1.9	235,000	98.1	239,000	100.0
All Crashes						
Single-Unit Truck	3,000	2.2	143,000	97.8	146,000	100.0
Combination Truck	7,000	4.4	144,000	95.6	150,000	100.0
Total	10,000	3.3	286,000	96.7	296,000	100.0

## Chapter 3 ■ Vehicles

**Table 49**

**Truck Tractors with Trailers Involved in Crashes by Number of Trailers, Jackknife Occurrence, and Crash Severity**

Number of Trailers	Jackknife Occurrence				Total	
	Yes		No			
	Number	Percent	Number	Percent	Number	Percent
Fatal Crashes						
One	126	6.3	1,881	93.7	2,007	100.0
Two or More	11	12.2	79	87.8	90	100.0
Unknown Number	0	0.0	0	0.0	0	0.0
Total	137	6.5	1,960	93.5	2,097	100.0
Injury Crashes						
One	1,000	2.8	25,000	97.2	25,000	100.0
Two or More	*	1.3	1,000	98.7	1,000	100.0
Unknown Number	*	*	*	100.0	*	100.0
Total	1,000	2.8	25,000	97.2	26,000	100.0
Property-Damage-Only Crashes						
One	3,000	3.2	92,000	96.8	96,000	100.0
Two or More	*	0.7	2,000	99.3	2,000	100.0
Unknown Number	*	*	2,000	100.0	2,000	100.0
Total	3,000	3.1	97,000	96.9	100,000	100.0
All Crashes						
One	4,000	3.2	119,000	96.8	123,000	100.0
Two or More	*	1.2	3,000	98.8	3,000	100.0
Unknown Number	*	*	2,000	100.0	2,000	100.0
Total	4,000	3.1	124,000	96.9	128,000	100.0

\*Less than 500 or less than 0.05 percent.

**Table 50**  
**Motorcycles Involved in Crashes by Most Harmful Event and Crash Severity**

Most Harmful Event	Crash Severity						Total	
	Fatal		Injury		Property Damage Only			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Collision with Motor Vehicle in Transport by Initial Point of Impact:								
Front	1,682	36.6	19,000	22.8	5,000	31.1	26,000	24.7
Left Side	163	3.5	5,000	6.3	2,000	11.4	7,000	6.9
Right Side	113	2.5	6,000	6.5	1,000	5.5	7,000	6.2
Rear	165	3.6	4,000	4.7	3,000	19.4	7,000	7.0
Other/Unknown	93	2.0	*	0.1	*	1.9	1,000	0.5
Subtotal	2,216	48.2	34,000	40.5	12,000	69.2	48,000	45.4
Collision with Fixed Object	1,147	25.0	9,000	10.7	*	1.8	10,000	9.9
Collision with Object Not Fixed:								
Nonoccupant	30	0.7	1,000	1.2	*	*	1,000	1.0
Other	204	4.4	2,000	2.3	*	*	2,000	2.0
Subtotal	234	5.1	3,000	3.5	*	*	3,000	3.0
Noncollision	989	21.5	38,000	45.3	5,000	28.9	44,000	41.7
Total	**4,595	100.0	84,000	100.0	17,000	100.0	106,000	100.0

\*Less than 500 or less than 0.05 percent.

\*\*Includes 9 motorcycles involved in fatal crashes with unknown most harmful event.

## Chapter 3 ■ Vehicles

**Table 51**  
**Motorcycles Involved in Crashes by Initial Point of Impact, Crash Severity, and Crash Type**

Initial Point of Impact	Crash Severity						Total	
	Fatal		Injury		Property Damage Only			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Single-Vehicle Crashes								
Front	1,106	54.7	11,000	24.4	*	6.2	12,000	23.8
Left Side	106	5.2	2,000	3.9	*	6.5	2,000	4.2
Right Side	150	7.4	3,000	7.0	*	*	3,000	6.3
Rear	28	1.4	*	0.3	*	*	*	0.3
Noncollision	358	17.7	29,000	64.3	4,000	87.4	34,000	64.7
Other/Unknown	275	13.6	*	0.1	*	*	*	0.6
Total	2,023	100.0	45,000	100.0	5,000	100.0	52,000	100.0
Multiple-Vehicle Crashes								
Front	1,876	72.9	20,000	50.6	5,000	44.4	27,000	50.4
Left Side	195	7.6	6,000	14.9	2,000	16.2	8,000	14.8
Right Side	133	5.2	6,000	16.1	1,000	7.9	7,000	13.8
Rear	190	7.4	4,000	10.2	3,000	27.6	7,000	13.9
Noncollision	35	1.4	3,000	8.1	*	3.9	4,000	6.9
Other/Unknown	143	5.6	*	0.1	*	*	*	0.3
Total	2,572	100.0	40,000	100.0	12,000	100.0	54,000	100.0
All Crashes								
Front	2,982	64.9	31,000	36.7	6,000	33.0	39,000	37.4
Left Side	301	6.6	8,000	9.0	2,000	13.3	10,000	9.6
Right Side	283	6.2	9,000	11.2	1,000	5.5	11,000	10.1
Rear	218	4.7	4,000	5.0	3,000	19.4	8,000	7.2
Noncollision	393	8.6	32,000	38.0	5,000	28.9	37,000	35.2
Other/Unknown	418	9.1	*	0.1	*	*	*	0.5
Total	4,595	100.0	84,000	100.0	17,000	100.0	106,000	100.0

\*Less than 500 or less than 0.05 percent.

**Table 52**  
**Buses Involved in Crashes by Most Harmful Event and Crash Severity**

Most Harmful Event	Crash Severity						Total	
	Fatal		Injury		Property Damage Only			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Collision with Motor Vehicle in Transport by Initial Point of Impact:								
Front	90	40.7	3,000	29.0	8,000	16.2	11,000	18.5
Left Side	9	4.1	2,000	24.9	12,000	25.4	15,000	25.2
Right Side	5	2.3	1,000	10.1	9,000	19.9	10,000	18.2
Rear	34	15.4	3,000	29.3	10,000	20.7	13,000	22.1
Other/Unknown	1	0.5	*	*	*	0.6	*	0.5
Subtotal	139	62.9	9,000	93.3	39,000	82.7	49,000	84.5
Collision with Fixed Object								
	2	0.9	*	*	1,000	2.0	1,000	1.7
Collision with Object Not Fixed:								
Nonoccupant	66	29.9	1,000	6.5	*	*	1,000	1.2
Other	2	0.9	*	0.2	7,000	15.3	7,000	12.6
Subtotal	68	30.8	1,000	6.7	7,000	15.3	8,000	13.9
Noncollision	12	5.4	*	*	*	*	*	*
Total	221	100.0	10,000	100.0	47,000	100.0	58,000	100.0

\*Less than 500 or less than 0.05 percent.

## Chapter 3 ■ Vehicles

**Table 53**  
**Buses Involved in Crashes by Initial Point of Impact, Crash Severity, and Crash Type**

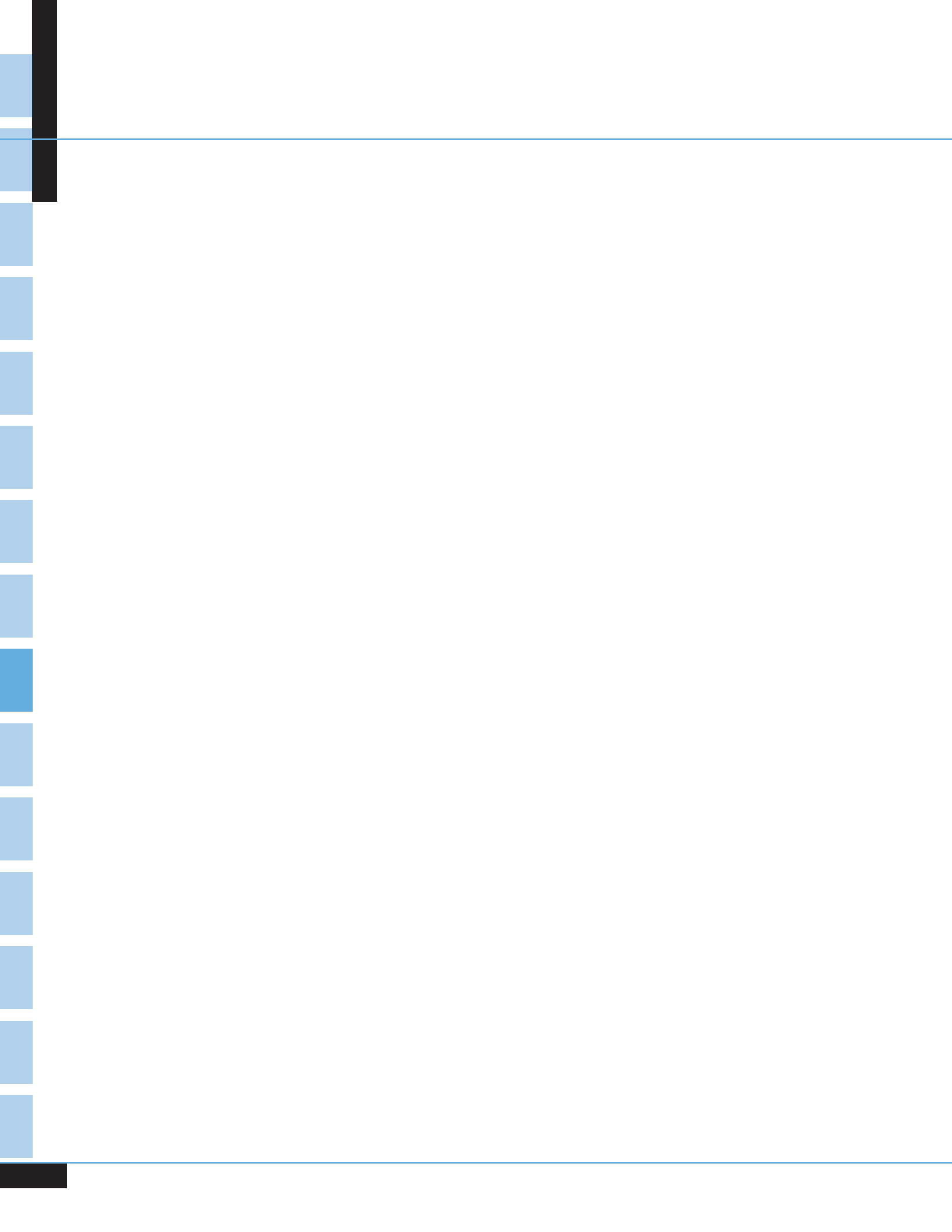
Initial Point of Impact	Crash Severity						Total	
	Fatal		Injury		Property Damage Only			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Single-Vehicle Crashes								
Front	48	67.6	*	55.4	2,000	26.3	3,000	28.8
Left Side	2	2.8	*	6.0	1,000	7.7	1,000	7.5
Right Side	6	8.5	*	35.6	5,000	66.0	6,000	63.3
Rear	2	2.8	*	3.0	*	*	*	0.2
Noncollision	3	4.2	*	*	*	*	*	*
Other/Unknown	10	14.1	*	*	*	*	*	0.1
Total	71	100.0	1,000	100.0	8,000	100.0	9,000	100.0
Multiple-Vehicle Crashes								
Front	94	62.7	3,000	31.1	8,000	19.5	11,000	21.9
Left Side	11	7.3	2,000	26.7	12,000	30.7	15,000	29.8
Right Side	5	3.3	1,000	10.8	9,000	24.1	10,000	21.5
Rear	36	24.0	3,000	31.4	10,000	25.0	13,000	26.2
Noncollision	2	1.3	*	*	*	*	*	*
Other/Unknown	2	1.3	*	*	*	0.7	*	0.6
Total	150	100.0	9,000	100.0	39,000	100.0	49,000	100.0
All Crashes								
Front	142	64.3	3,000	32.7	10,000	20.7	13,000	23.0
Left Side	13	5.9	3,000	25.3	13,000	26.7	15,000	26.4
Right Side	11	5.0	1,000	12.5	15,000	31.4	16,000	28.0
Rear	38	17.2	3,000	29.5	10,000	20.7	13,000	22.2
Noncollision	5	2.3	*	*	*	*	*	*
Other/Unknown	12	5.4	*	*	*	0.6	*	0.5
Total	221	100.0	10,000	100.0	47,000	100.0	58,000	100.0

\*Less than 500 or less than 0.05 percent.



Chapter 4

# PEOPLE



## CHAPTER 4 ■ PEOPLE

This chapter presents statistics about the Drivers, Passengers, Pedestrians, and Pedalcyclists involved in police-reported motor vehicle crashes in 2009. The tables and figures are presented in nine groups: all killed or injured persons, crash-involved drivers, occupants (drivers and passengers), alcohol, restraints, motorcycle related, school bus related, pedestrians, and pedalcyclists. Below are some of the statistics you will find in this section:

- A total of 33,808 people lost their lives in motor vehicle crashes in 2009. Another 2.22 million people were injured.
- The majority of persons killed or injured in traffic crashes were drivers (63 percent), followed by passengers (28 percent), motorcycle riders (4 percent), pedestrians (3 percent), and pedalcyclists (2 percent).
- Per 100,000 population, persons 21 to 24 years old had the highest fatality rate, and persons 16 to 20 years old had the highest injury rate. Children 5 to 9 years old had the lowest fatality rate, and children under 5 years old had the lowest injury rate per 100,000 population.
- For every age group, the fatality rate per 100,000 population was lower for females than for males. The injury rate based on population was higher for females than for males in every age group, except for people over 74 years old.
- Of the persons who were killed in traffic crashes in 2009, 32 percent died in alcohol-impaired driving crashes.

## Chapter 4 ■ People

**Table 54**

**Persons Killed or Injured, by Person Type and Injury Severity**

Person Type	Persons Killed	Persons Injured by Injury Severity			Total Injured	Total Killed or Injured
		Incapacitating	Nonincapacitating	Other		
Vehicle Occupants						
Driver	17,640	121,000	381,000	893,000	1,395,000	1,413,000
Passenger	6,770	49,000	158,000	410,000	616,000	623,000
Unknown Occupant	64	*	*	*	*	*
Subtotal	24,474	170,000	539,000	1,303,000	2,011,000	2,036,000
Motorcyclists	4,462	27,000	44,000	19,000	90,000	94,000
Nonoccupants						
Pedestrian	4,092	14,000	25,000	20,000	59,000	63,000
Pedalcyclist	630	6,000	23,000	22,000	51,000	51,000
Other/Unknown	150	*	2,000	5,000	7,000	7,000
Subtotal	4,872	20,000	49,000	47,000	116,000	121,000
Total	33,808	217,000	632,000	1,369,000	2,217,000	2,251,000

\*Less than 500.

**Table 55**

**Persons Killed or Injured, by Age and Injury Severity**

Age (Years)	Persons Killed	Persons Injured by Injury Severity			Total Injured	Total Killed or Injured
		Incapacitating	Nonincapacitating	Other		
<5	430	3,000	11,000	33,000	47,000	48,000
5-9	380	3,000	16,000	41,000	60,000	61,000
10-15	728	10,000	32,000	54,000	96,000	97,000
16-20	3,932	30,000	105,000	178,000	313,000	317,000
21-24	3,287	26,000	71,000	150,000	246,000	250,000
25-34	5,689	40,000	114,000	258,000	412,000	418,000
35-44	4,826	32,000	87,000	196,000	314,000	319,000
45-54	5,397	33,000	88,000	208,000	329,000	334,000
55-64	3,781	22,000	55,000	133,000	211,000	214,000
65-74	2,374	11,000	29,000	72,000	111,000	113,000
>74	2,914	8,000	24,000	45,000	76,000	79,000
<b>Total</b>	<b>*33,808</b>	<b>217,000</b>	<b>632,000</b>	<b>1,369,000</b>	<b>2,217,000</b>	<b>2,251,000</b>

\*Includes 70 fatalities of unknown age.

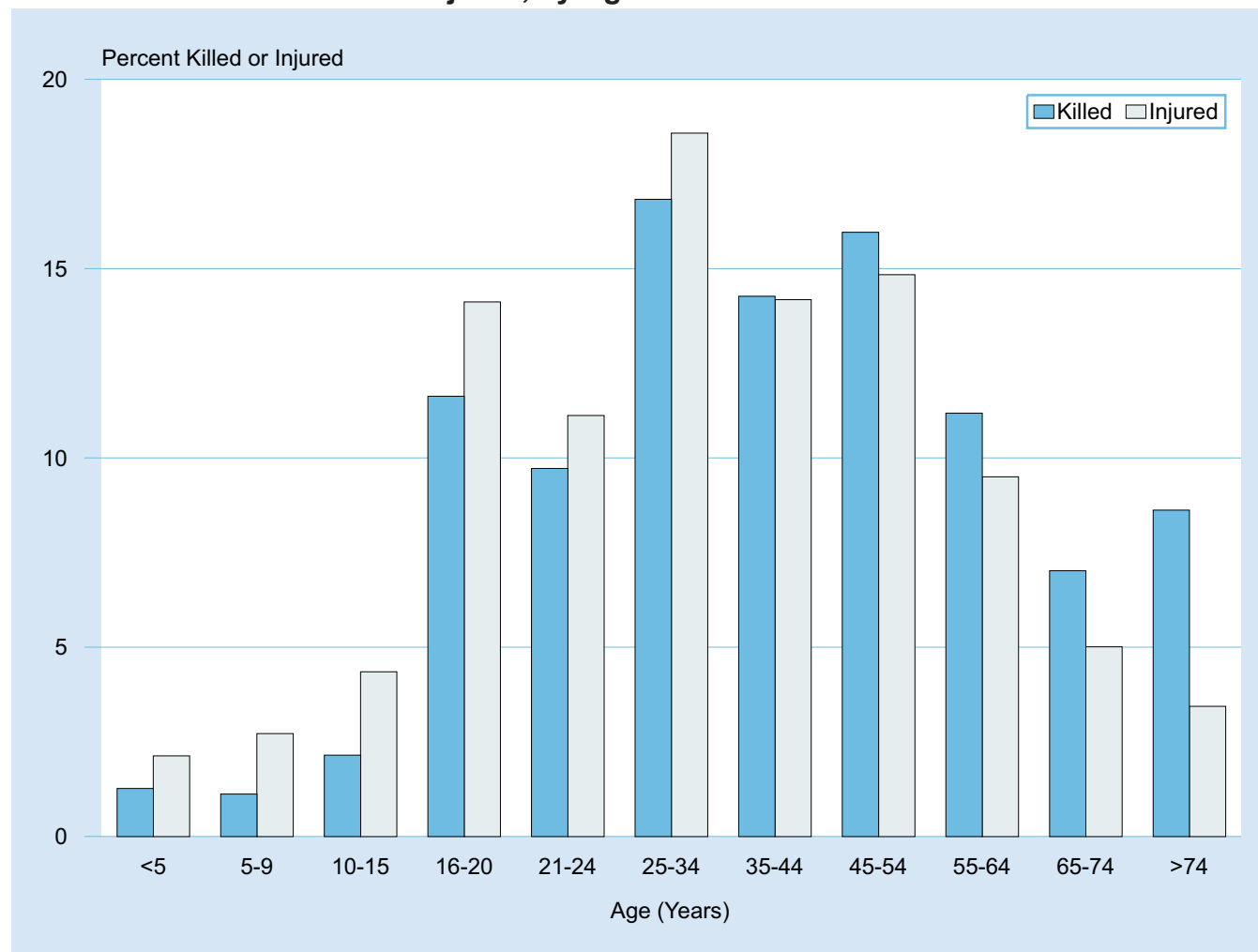
**Table 56**

**Persons Killed or Injured, by Sex and Injury Severity**

Sex	Persons Killed	Persons Injured by Injury Severity			Total Injured	Total Killed or Injured
		Incapacitating	Nonincapacitating	Other		
Male	23,726	121,000	337,000	593,000	1,051,000	1,075,000
Female	10,070	95,000	295,000	776,000	1,166,000	1,176,000
<b>Total</b>	<b>*33,808</b>	<b>217,000</b>	<b>632,000</b>	<b>1,369,000</b>	<b>2,217,000</b>	<b>2,251,000</b>

\*Includes 12 fatalities of unknown sex.

**Figure 18**  
**Percent of Persons Killed or Injured, by Age**



## Chapter 4 ■ People

**Table 57**

**Persons Killed or Injured and Fatality and Injury Rates per 100,000 Population, by Age and Sex**

Age (Years)	Male			Female			Total		
	Killed	Population (Thousands)	Rate	Killed	Population (Thousands)	Rate	Killed	Population (Thousands)	Rate
<5	235	10,887	2.16	194	10,413	1.86	430	21,300	2.02
5-9	199	10,536	1.89	181	10,074	1.80	380	20,610	1.84
10-15	414	12,340	3.35	314	11,767	2.67	728	24,107	3.02
16-20	2,656	11,166	23.79	1,275	10,578	12.05	3,932	21,744	18.08
21-24	2,488	8,861	28.08	798	8,339	9.57	3,287	17,200	19.11
25-34	4,268	21,224	20.11	1,421	20,343	6.99	5,689	41,566	13.69
35-44	3,587	20,857	17.20	1,239	20,673	5.99	4,826	41,530	11.62
45-54	3,964	21,973	18.04	1,433	22,619	6.34	5,397	44,592	12.10
55-64	2,707	16,782	16.13	1,074	18,005	5.96	3,781	34,787	10.87
65-74	1,523	9,593	15.88	851	11,199	7.60	2,374	20,792	11.42
>74	1,647	7,230	22.78	1,267	11,548	10.97	2,914	18,779	15.52
Unknown	38	*	*	23	*	*	70	*	*
<b>Total</b>	<b>23,726</b>	<b>151,449</b>	<b>15.67</b>	<b>10,070</b>	<b>155,557</b>	<b>6.47</b>	<b>**33,808</b>	<b>307,007</b>	<b>11.01</b>

Age (Years)	Male			Female			Total		
	Injured	Population (Thousands)	Rate	Injured	Population (Thousands)	Rate	Injured	Population (Thousands)	Rate
<5	22,000	10,887	207	25,000	10,413	239	47,000	21,300	222
5-9	31,000	10,536	291	30,000	10,074	295	60,000	20,610	293
10-15	48,000	12,340	388	49,000	11,767	413	96,000	24,107	400
16-20	144,000	11,166	1,294	169,000	10,578	1,594	313,000	21,744	1,440
21-24	124,000	8,861	1,402	122,000	8,339	1,466	246,000	17,200	1,433
25-34	197,000	21,224	927	215,000	20,343	1,057	412,000	41,566	991
35-44	150,000	20,857	718	165,000	20,673	797	314,000	41,530	757
45-54	155,000	21,973	706	174,000	22,619	769	329,000	44,592	738
55-64	98,000	16,782	586	112,000	18,005	624	211,000	34,787	606
65-74	49,000	9,593	514	62,000	11,199	552	111,000	20,792	534
>74	32,000	7,230	445	44,000	11,548	383	76,000	18,779	407
<b>Total</b>	<b>1,051,000</b>	<b>151,449</b>	<b>694</b>	<b>1,166,000</b>	<b>155,557</b>	<b>750</b>	<b>2,217,000</b>	<b>307,007</b>	<b>722</b>

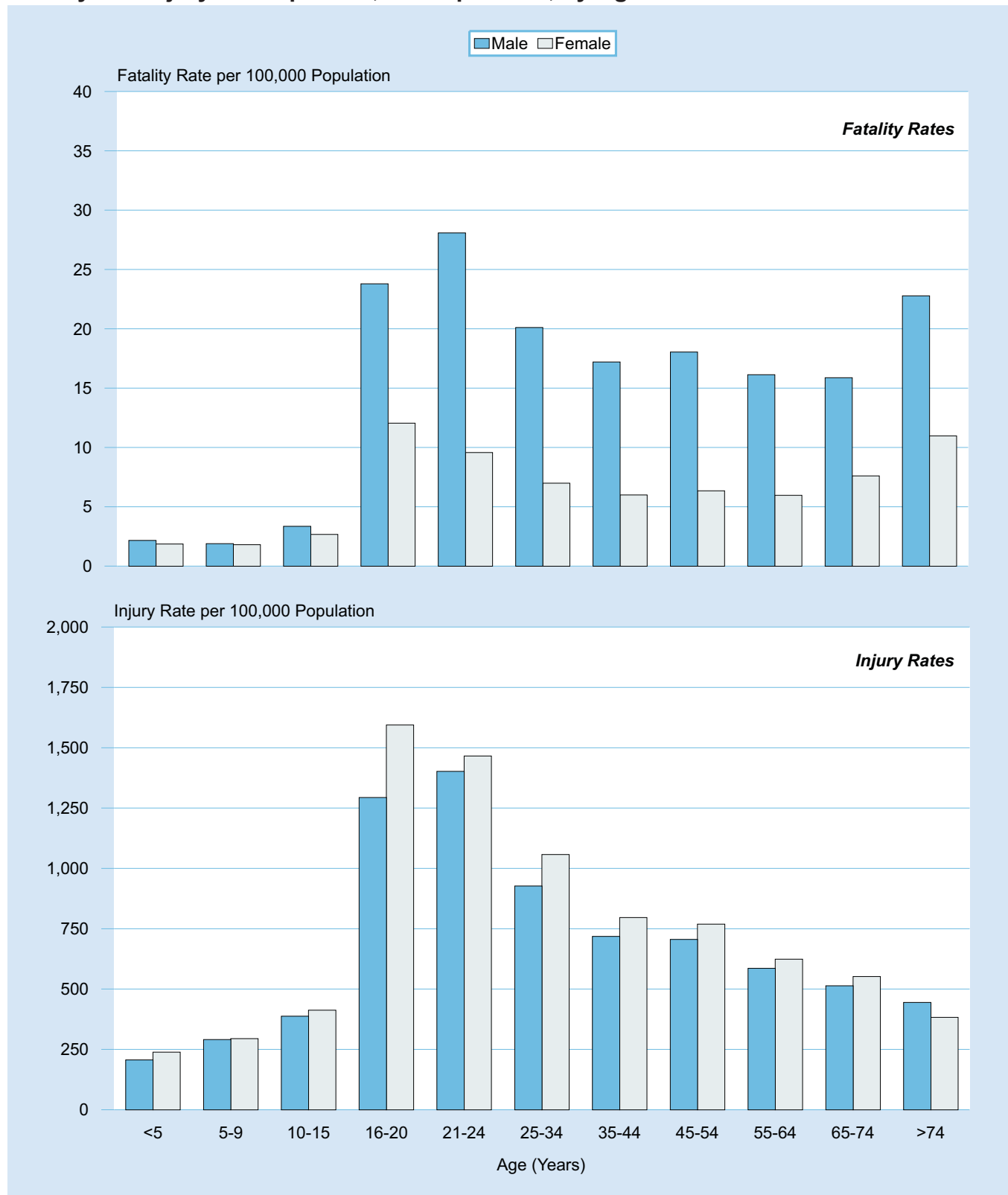
\*Not applicable.

\*\*Includes 12 fatalities of unknown sex.

Note: Totals may not equal sum of components due to independent rounding.

Source: Population—Bureau of the Census.

**Figure 19**  
**Fatality and Injury Rates per 100,000 Population, by Age and Sex**



## Chapter 4 ■ People

**Table 58**

**Persons Killed or Injured in Crashes, by Weather Condition and Light Condition**

Weather Condition	Light Condition					Total
	Daylight	Dark, But Lighted	Dark	Dawn or Dusk	Other/Unknown	
Persons Killed						
Normal	14,743	5,185	8,590	1,140	60	29,718
Rain	1,205	515	821	127	7	2,675
Snow/Sleet	341	46	236	35	2	660
Other	132	59	235	35	0	461
Unknown	69	14	129	4	78	294
Total	16,490	5,819	10,011	1,341	147	33,808
Persons Injured						
Normal	1,334,000	318,000	179,000	69,000	*	1,901,000
Rain	156,000	51,000	29,000	9,000	*	246,000
Snow/Sleet	27,000	9,000	7,000	2,000	*	44,000
Other	15,000	5,000	4,000	3,000	*	27,000
Total	1,531,000	383,000	220,000	83,000	*	2,217,000

**Table 59**

**Persons Killed or Injured in Crashes, by Speed Limit and Crash Type**

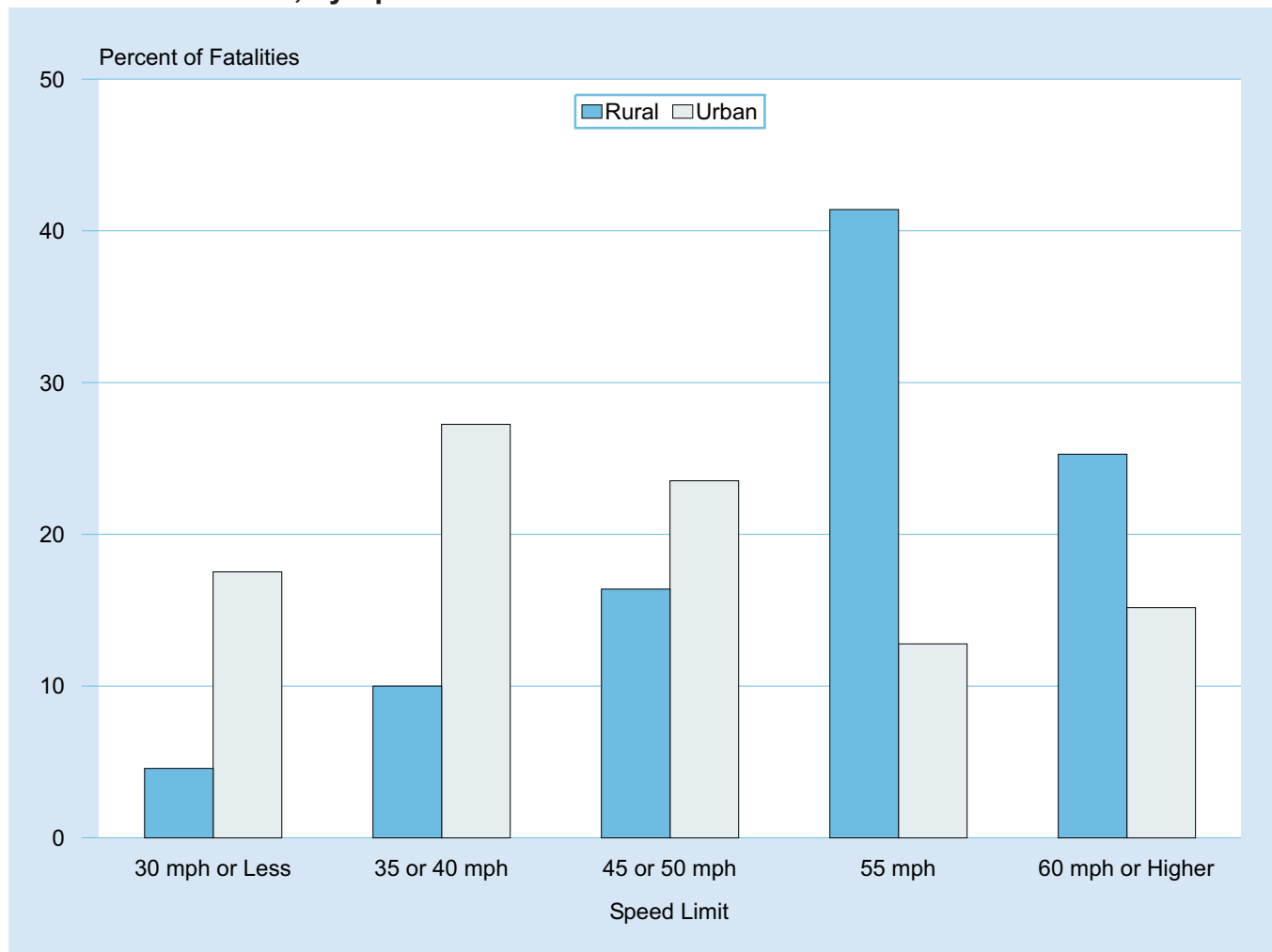
Speed Limit	Crash Type				Total	
	Single Vehicle		Multiple Vehicle			
	Number	Percent	Number	Percent	Number	Percent
Persons Killed						
30 mph or less	2,584	13.0	861	6.2	3,445	10.2
35 or 40 mph	3,718	18.7	2,140	15.4	5,858	17.3
45 or 50 mph	3,632	18.3	2,947	21.1	6,579	19.5
55 mph	5,317	26.8	4,521	32.4	9,838	29.1
60 mph or higher	3,843	19.3	3,233	23.2	7,076	20.9
No Statutory Limit	103	0.5	18	0.1	121	0.4
Unknown	672	3.4	219	1.6	891	2.6
Total	19,869	100.0	13,939	100.0	33,808	100.0
Persons Injured						
30 mph or less	151,000	25.9	292,000	17.9	443,000	20.0
35 or 40 mph	134,000	23.0	619,000	37.9	753,000	34.0
45 or 50 mph	87,000	14.9	410,000	25.1	497,000	22.4
55 mph	113,000	19.4	165,000	10.1	279,000	12.6
60 mph or higher	89,000	15.3	138,000	8.5	227,000	10.3
No Statutory Limit	10,000	1.7	9,000	0.5	18,000	0.8
Total	585,000	100.0	1,632,000	100.0	2,217,000	100.0



**Table 60**  
**Persons Killed in Crashes, by Speed Limit and Land Use**

Speed Limit	Land Use						Total	
	Rural		Urban		Unknown			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
30 mph or less	881	25.6	2,514	73.0	50	1.5	3,445	100.0
35 or 40 mph	1,925	32.9	3,908	66.7	25	0.4	5,858	100.0
45 or 50 mph	3,157	48.0	3,375	51.3	47	0.7	6,579	100.0
55 mph	7,973	81.0	1,833	18.6	32	0.3	9,838	100.0
60 mph or higher	4,869	68.8	2,176	30.8	31	0.4	7,076	100.0
No Statutory Limit	91	75.2	28	23.1	2	1.7	121	100.0
Unknown	363	40.7	507	56.9	21	2.4	891	100.0
Total	19,259	57.0	14,341	42.4	208	0.6	33,808	100.0

**Figure 20**  
**Percent of Fatalities, by Speed Limit and Land Use**



## Chapter 4 ■ People

**Table 61**

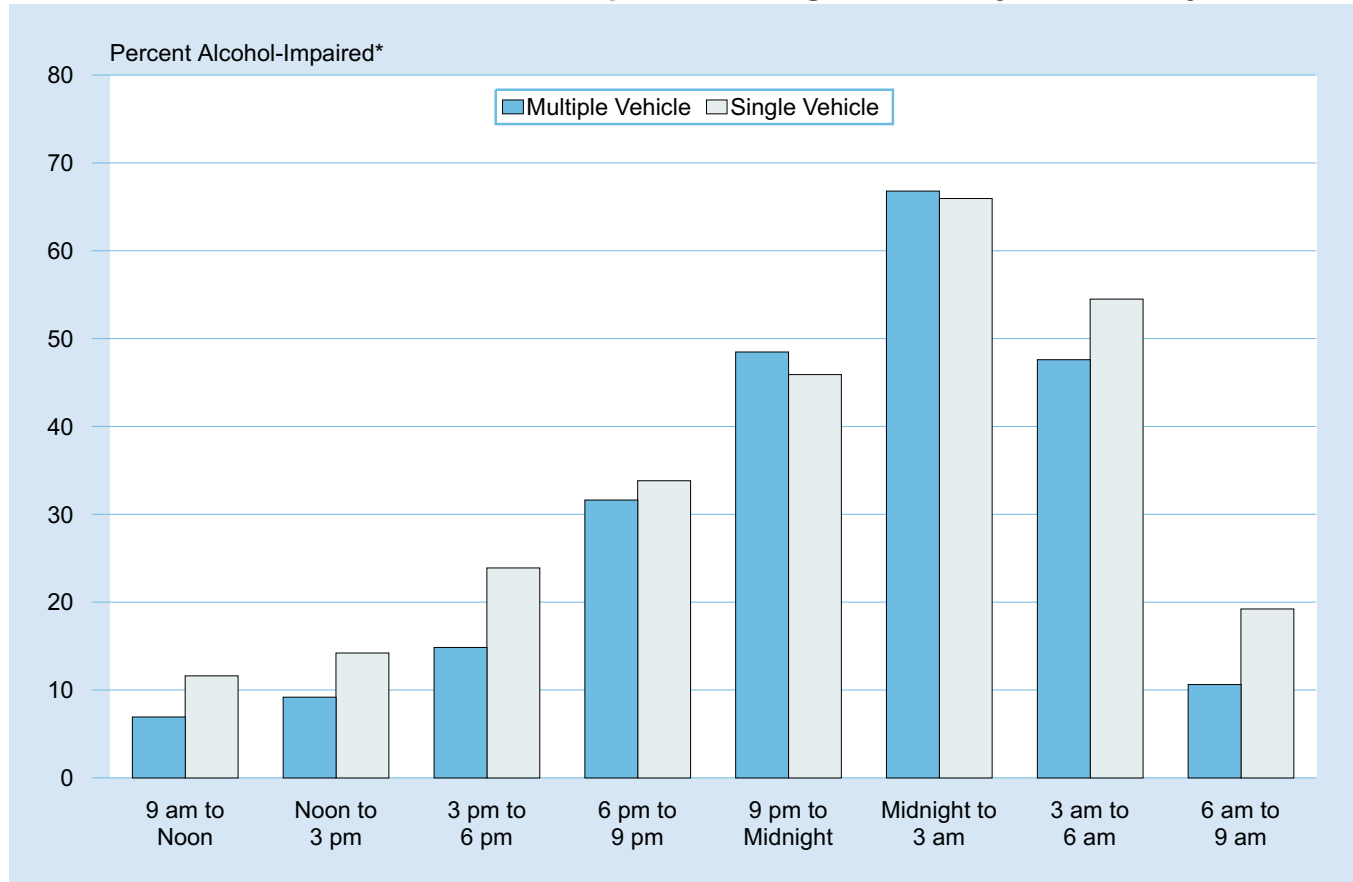
**Persons Killed in Crashes and Percent Alcohol-Impaired Driving Fatalities, by Time of Day and Crash Type**

Time of Day	Crash Type						Total		
	Single Vehicle			Multiple Vehicle			Total		
	Alcohol-Impaired Driving*			Alcohol-Impaired Driving*			Alcohol-Impaired Driving*		
	Number	Number	Percent	Number	Number	Percent	Number	Number	Percent
Midnight to 3 am	3,334	2,199	66	1,044	697	67	4,378	2,896	66
3 am to 6 am	2,074	1,130	54	750	357	48	2,824	1,487	53
6 am to 9 am	1,618	311	19	1,423	151	11	3,041	463	15
9 am to Noon	1,488	173	12	1,748	121	7	3,236	294	9
Noon to 3 pm	2,017	287	14	2,387	219	9	4,404	506	11
3 pm to 6 pm	2,604	622	24	2,864	425	15	5,468	1,047	19
6 pm to 9 pm	3,248	1,098	34	2,172	687	32	5,420	1,786	33
9 pm to Midnight	3,241	1,488	46	1,526	740	48	4,767	2,227	47
Unknown	245	126	51	25	8	31	270	133	49
<b>Total</b>	<b>19,869</b>	<b>7,433</b>	<b>37</b>	<b>13,939</b>	<b>3,406</b>	<b>24</b>	<b>33,808</b>	<b>10,839</b>	<b>32</b>

\*Highest blood alcohol concentration (BAC) among drivers or motorcycle riders involved in the crash was .08 grams per deciliter (g/dL) or greater. NHTSA estimates alcohol involvement when alcohol test results are unknown. For more information, see page 7 of this report.

**Figure 21**

**Percent of Persons Killed in Alcohol-Impaired Driving Crashes, by Time of Day**



\*Highest blood alcohol concentration (BAC) among drivers or motorcycle riders involved in the crash was .08 grams per deciliter (g/dL) or greater. NHTSA estimates alcohol involvement when alcohol test results are unknown. For more information, see page 7 of this report.

## Chapter 4 ■ People

**Table 62**

**Persons Killed in Construction/Maintenance Zones, by Roadway Function Class and Person Type**

Roadway Function Class	Person Type					Total
	Driver*	Passenger**	Pedestrian	Pedalcyclist	Other Nonoccupant	
Principal Arterial						
Interstate	148	57	30	2	0	237
Freeway/Expressway	35	7	10	2	0	54
Other	112	53	22	1	0	188
Minor Arterial	41	18	19	2	1	81
Collector	31	3	5	0	0	39
Local Road or Street	31	19	10	1	2	63
Unknown	3	0	2	0	0	5
<b>Total</b>	<b>401</b>	<b>157</b>	<b>98</b>	<b>8</b>	<b>3</b>	<b>667</b>

\*Includes motorcycle riders.

\*\*Includes motorcycle passengers.

**Table 63**

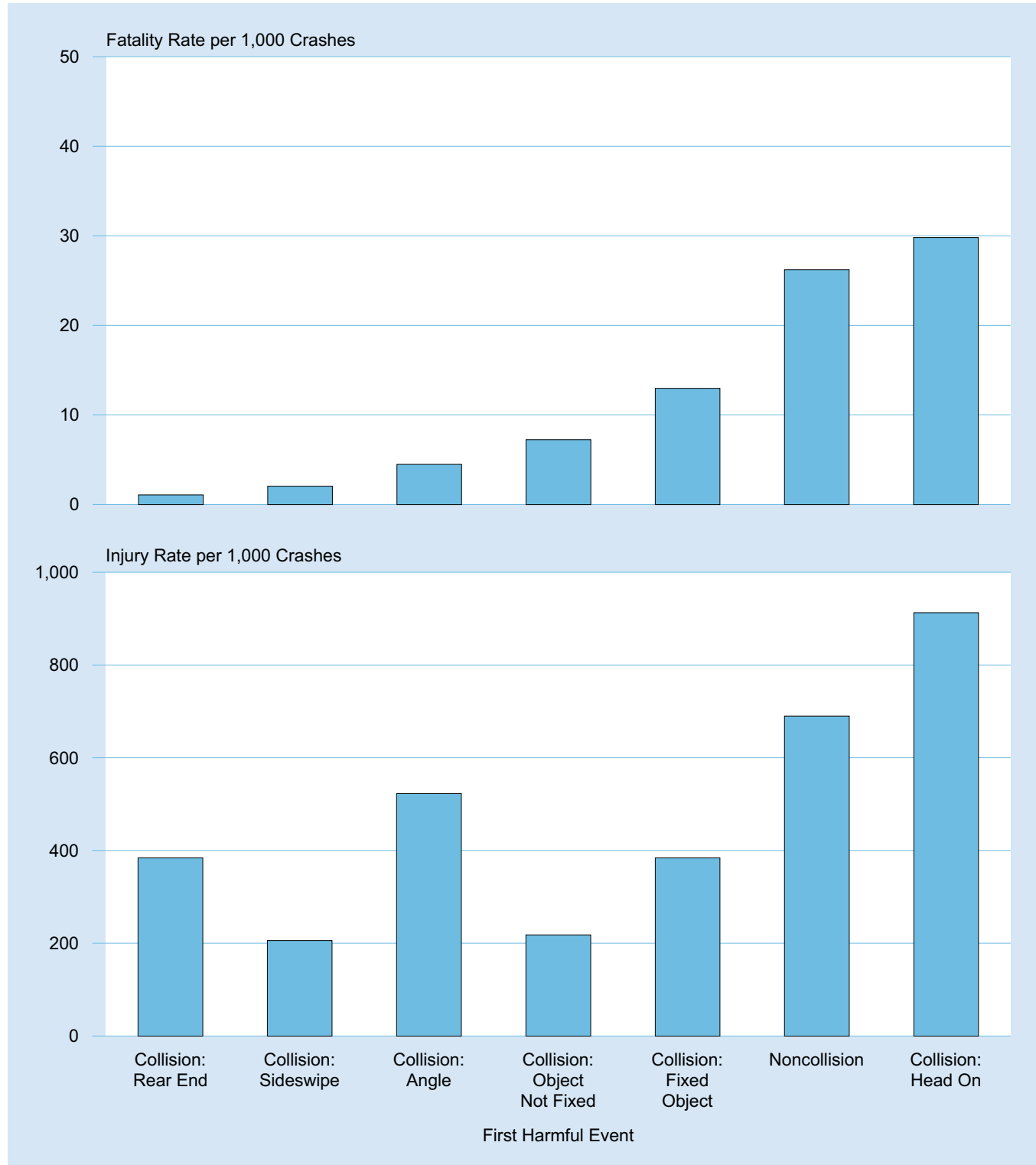
**Persons Killed in Crashes Involving Emergency Vehicles, by Person Type, Crash Type, and Vehicle Type**

Person Type	Crash Type				Total	
	Single Vehicle		Multiple Vehicle			
	Total	In Emergency Use*	Total	In Emergency Use*	Total	In Emergency Use*
Ambulance						
Ambulance Driver	0	0	3	1	3	1
Ambulance Passenger	4	2	6	3	10	5
Occupant of Other Vehicle	0	0	16	9	16	9
Pedestrian	4	3	1	0	5	3
Pedalcyclist	1	0	0	0	1	0
Total	9	5	26	13	35	18
Fire Truck						
Fire Truck Driver	1	0	0	0	1	0
Fire Truck Passenger	2	1	0	0	2	1
Occupant of Other Vehicle	0	0	10	4	10	4
Pedestrian	2	2	1	1	3	3
Pedalcyclist	0	0	1	1	1	1
Total	5	3	12	6	17	9
Police Vehicle						
Police Vehicle Driver	10	5	15	7	25	12
Police Vehicle Passenger	1	1	2	0	3	1
Occupant of Other Vehicle	0	0	40	13	40	13
Pedestrian	15	4	3	2	18	6
Pedalcyclist	3	1	0	0	3	1
Other Nonoccupant	1	0	0	0	1	0
Total	30	11	60	22	90	33

\*Refers to a vehicle traveling with physical emergency signals in use (red lights blinking, sirens sounding, etc.).

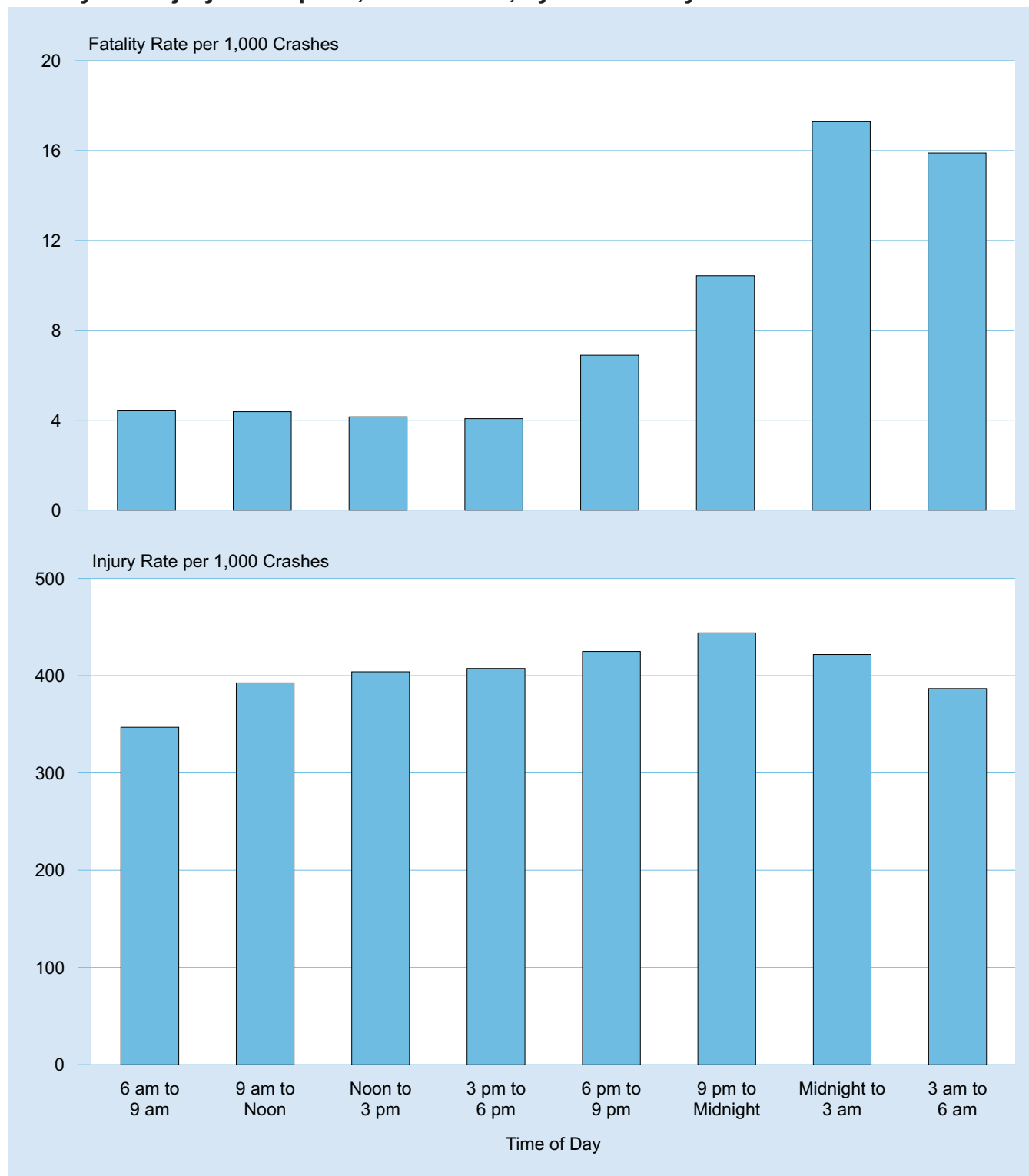
**Figure 22**

**Fatality and Injury Rates per 1,000 Crashes, by First Harmful Event and Manner of Collision**

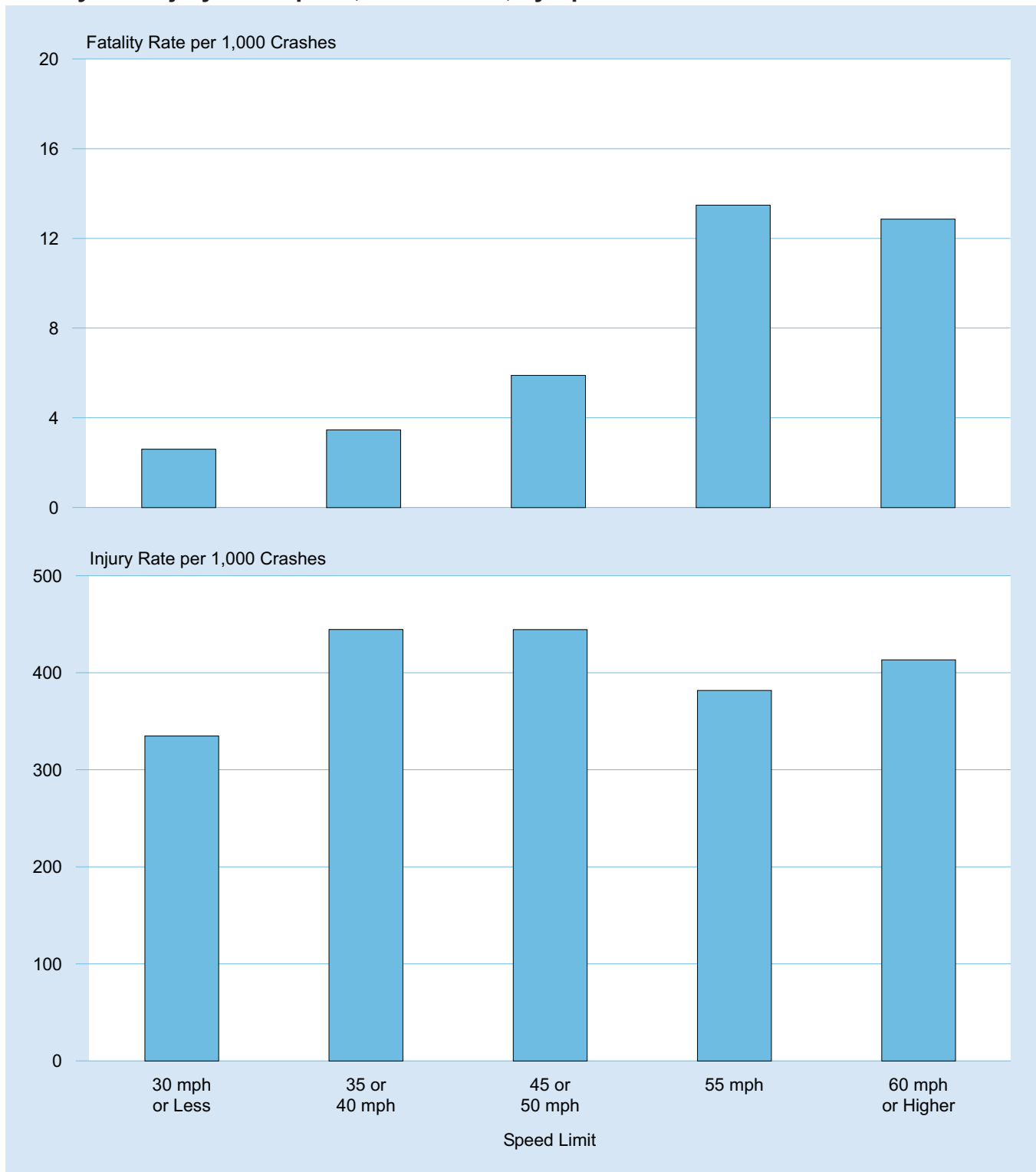


## Chapter 4 ■ People

**Figure 23**  
**Fatality and Injury Rates per 1,000 Crashes, by Time of Day**



**Figure 24**  
**Fatality and Injury Rates per 1,000 Crashes, by Speed Limit**



## Chapter 4 ■ People

**Table 64**

### Driver Involvement Rates per 100,000 Licensed Drivers, by Age, Sex, and Crash Severity

Age (Years)	Sex				Total	
	Male		Female			
	Drivers	Involvement Rate	Drivers	Involvement Rate	Drivers	Involvement Rate
Drivers in Fatal Crashes						
<16	125	*	56	*	181	*
16-20	3,527	—	1,523	—	5,051	—
21-24	3,463	—	1,133	—	4,597	—
25-34	6,349	—	2,261	—	8,610	—
35-44	5,792	—	1,964	—	7,757	—
45-54	5,798	—	1,866	—	7,664	—
55-64	3,946	—	1,330	—	5,276	—
65-74	2,042	—	826	—	2,868	—
>74	1,695	—	853	—	2,550	—
Unknown	70	*	13	*	676	*
Total	32,807	*	11,825	*	**45,230	*
Drivers in Injury Crashes						
<16	13,000	*	7,000	*	20,000	*
16-20	198,000	—	170,000	—	368,000	—
21-24	176,000	—	143,000	—	319,000	—
25-34	296,000	—	260,000	—	556,000	—
35-44	263,000	—	213,000	—	476,000	—
45-54	258,000	—	202,000	—	460,000	—
55-64	158,000	—	129,000	—	288,000	—
65-74	81,000	—	58,000	—	139,000	—
>74	56,000	—	42,000	—	98,000	—
Total	1,500,000	*	1,225,000	*	2,724,000	*
Drivers in Property-Damage-Only Crashes						
<16	75,000	*	53,000	*	127,000	*
16-20	514,000	—	437,000	—	952,000	—
21-24	485,000	—	337,000	—	822,000	—
25-34	746,000	—	597,000	—	1,343,000	—
35-44	686,000	—	525,000	—	1,211,000	—
45-54	670,000	—	465,000	—	1,135,000	—
55-64	420,000	—	281,000	—	701,000	—
65-74	201,000	—	138,000	—	339,000	—
>74	116,000	—	99,000	—	215,000	—
Total	3,913,000	*	2,931,000	*	6,845,000	*
Drivers in All Crashes						
<16	87,000	*	60,000	*	148,000	*
16-20	716,000	—	609,000	—	1,325,000	—
21-24	665,000	—	481,000	—	1,146,000	—
25-34	1,048,000	—	860,000	—	1,908,000	—
35-44	955,000	—	740,000	—	1,694,000	—
45-54	934,000	—	669,000	—	1,603,000	—
55-64	583,000	—	412,000	—	994,000	—
65-74	284,000	—	197,000	—	480,000	—
>74	174,000	—	141,000	—	315,000	—
Unknown	***	*	***	*	1,000	*
Total	5,446,000	*	4,168,000	*	9,614,000	*

\*Not applicable.

\*\*Includes 598 drivers of unknown sex.

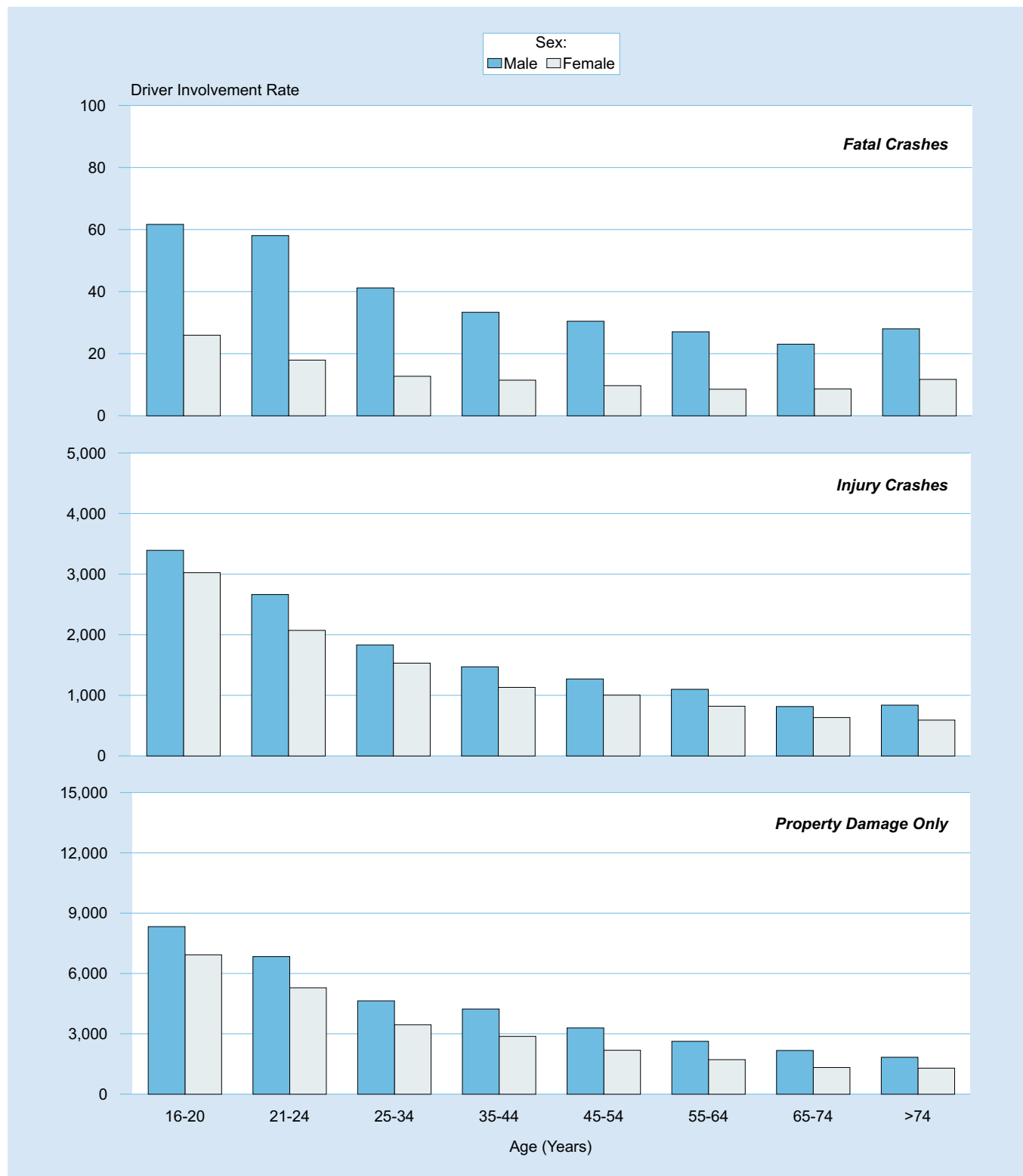
\*\*\*Less than 500.

Notes: Drivers include motorcycle riders. Some States include restricted driver licenses and graduated driver licenses in their licensed driver counts. 2009 data not yet available for licensed drivers.

Source: Licensed Drivers—Federal Highway Administration.



**Figure 25**  
**Driver Involvement Rates per 100,000 Licensed Drivers, by Age, Sex, and Crash Severity, 2008**



Note: Drivers include motorcycle riders.

## Chapter 4 ■ People

**Table 65**

**Drivers and Motorcycle Riders Involved in Fatal Crashes,  
by Previous Driving Record and License Type Compliance**

Previous Convictions	Valid License (38,443)		Invalid License (5,657)		Total (44,100)	
	Number	Percent	Number	Percent	Number	Percent
Previous Recorded Crashes	4,555	11.8	651	11.5	<b>5,206</b>	<b>11.8</b>
Previous Recorded Suspensions or Revocations	3,360	8.7	2,535	44.8	<b>5,895</b>	<b>13.4</b>
Previous DWI Convictions	643	1.7	609	10.8	<b>1,252</b>	<b>2.8</b>
Previous Speeding Convictions	7,262	18.9	1,037	18.3	<b>8,299</b>	<b>18.8</b>
Previous Other Harmful Moving Convictions	6,400	16.6	1,422	25.1	<b>7,822</b>	<b>17.7</b>
Drivers with No Previous Convictions	23,771	61.8	2,553	45.1	<b>26,324</b>	<b>59.7</b>

Notes: Table does not include 1,130 drivers with unknown license status. FARS records prior driving records (convictions only, not violations) for events occurring within 3 years of the date of the crash. The same driver can have one or more of these convictions. License type compliance refers to the type of drivers license possessed or not possessed by the driver for the class of vehicle being driven at the time of the crash.

**Table 66**

**Related Factors for Drivers and Motorcycle Riders Involved in Fatal Crashes**

Factors	Number	Percent
Driving too fast for conditions or in excess of posted speed limit . . . . .	9,654	21.3
Failure to keep in proper lane or running off road . . . . .	7,696	17.0
Under the influence of alcohol, drugs or medication . . . . .	6,957	15.4
Inattentive (talking, eating, etc.) . . . . .	4,196	9.3
Failure to yield right of way . . . . .	3,067	6.8
Overcorrecting/oversteering . . . . .	2,062	4.6
Failure to obey traffic signs, signals, or officer . . . . .	1,922	4.2
Swerving or avoiding due to wind, slippery surface, vehicle, object, nonmotorist in roadway, etc.. .	1,801	4.0
Driving wrong way on one-way trafficway or on wrong side of road . . . . .	1,382	3.1
Operating vehicle in erratic, reckless, careless, or negligent manner . . . . .	1,347	3.0
Vision obscured (rain, snow, glare, lights, building, trees, etc.) . . . . .	1,205	2.7
Drowsy, asleep, fatigued, ill, or blackout . . . . .	1,202	2.7
Making improper turn . . . . .	1,168	2.6
Other factors . . . . .	7,602	16.8
None reported . . . . .	15,795	34.9
Unknown . . . . .	1,009	2.2
<b>Total Drivers . . . . .</b>	<b>45,230</b>	<b>100.0</b>

Note: The sum of the numbers and percentages is greater than total drivers as more than one factor may be present for the same driver.

**Table 67**

**Vehicle Occupants Killed or Injured, by Vehicle Type, Person Type, and Injury Severity**

Vehicle and Person Type	Occupants Killed	Occupants Injured by Injury Severity			Total Injured	Total Killed or Injured
		Incapacitating	Nonincapacitating	Other		
Passenger Car						
Drivers	9,435	71,000	228,000	565,000	863,000	873,000
Passengers	3,643	28,000	86,000	239,000	353,000	357,000
Unknown	17	*	*	*	*	*
Subtotal	13,095	99,000	313,000	804,000	1,216,000	1,230,000
Light Truck						
Drivers	7,318	47,000	146,000	318,000	511,000	519,000
Passengers	2,942	19,000	68,000	161,000	248,000	251,000
Unknown	27	*	*	*	*	*
Subtotal	10,287	66,000	214,000	479,000	759,000	770,000
Large Truck						
Drivers	438	2,000	5,000	7,000	14,000	14,000
Passengers	65	*	2,000	1,000	3,000	3,000
Unknown	0	*	*	*	*	*
Subtotal	503	2,000	7,000	8,000	17,000	17,000
Bus	26	*	2,000	10,000	12,000	12,000
Other/Unknown	563	3,000	3,000	1,000	7,000	8,000
Subtotal**	24,474	170,000	539,000	1,303,000	2,011,000	2,036,000
Motorcycle						
Riders	4,158	24,000	41,000	17,000	82,000	86,000
Passengers	304	3,000	3,000	2,000	8,000	8,000
Subtotal	4,462	27,000	44,000	19,000	90,000	94,000
Total	28,936	197,000	582,000	1,322,000	2,101,000	2,130,000

\*Less than 500.

\*\*Excluding motorcycles.

## Chapter 4 ■ People

**Table 68**

**Vehicle Occupants Killed or Injured, by Sex and Vehicle Type**

Sex	Vehicle Type							Total
	Passenger Cars	Light Trucks	Large Trucks	Buses	Other/ Unknown	Subtotal	Motorcycles	
Occupants Killed								
Male	7,903	7,382	470	15	453	16,223	4,027	20,250
Female	5,192	2,899	33	11	105	8,240	435	8,675
Unknown	0	6	0	0	5	11	0	11
Total	13,095	10,287	503	26	563	24,474	4,462	28,936
Occupants Injured								
Male	488,000	384,000	15,000	6,000	6,000	900,000	76,000	975,000
Female	728,000	376,000	1,000	6,000	1,000	1,112,000	14,000	1,126,000
Total	1,216,000	759,000	17,000	12,000	7,000	2,011,000	90,000	2,101,000

**Table 69**  
**Vehicle Occupants Killed or Injured, by Age and Vehicle Type**

Age (Years)	Vehicle Type							Total
	Passenger Cars	Light Trucks	Large Trucks	Buses	Other/ Unknown	Subtotal	Motorcycles	
Occupants Killed								
<5	175	147	0	0	6	328	0	328
5-9	111	156	2	0	7	276	6	282
10-15	221	241	2	3	51	518	20	538
16-20	2,194	1,155	6	2	72	3,429	224	3,653
21-24	1,507	971	19	2	40	2,539	444	2,983
25-34	2,329	1,698	64	4	98	4,193	872	5,065
35-44	1,393	1,551	115	2	86	3,147	950	4,097
45-54	1,511	1,627	145	3	85	3,371	1,056	4,427
55-64	1,113	1,184	103	6	45	2,451	663	3,114
65-74	901	776	40	4	34	1,755	189	1,944
>74	1,628	756	7	0	32	2,423	34	2,457
Unknown	12	25	0	0	7	44	4	48
Total	13,095	10,287	503	26	563	24,474	4,462	28,936
Occupants Injured								
<5	25,000	19,000	*	*	*	44,000	*	45,000
5-9	26,000	25,000	*	*	1,000	52,000	*	52,000
10-15	37,000	35,000	*	5,000	2,000	79,000	2,000	80,000
16-20	202,000	90,000	*	1,000	1,000	293,000	6,000	299,000
21-24	155,000	66,000	1,000	*	1,000	223,000	11,000	234,000
25-34	226,000	143,000	3,000	1,000	1,000	373,000	20,000	393,000
35-44	153,000	130,000	4,000	2,000	1,000	290,000	15,000	305,000
45-54	161,000	121,000	5,000	2,000	1,000	289,000	23,000	312,000
55-64	114,000	74,000	2,000	1,000	*	191,000	10,000	201,000
65-74	63,000	39,000	1,000	1,000	*	104,000	3,000	107,000
>74	54,000	18,000	*	*	*	73,000	*	73,000
Total	1,216,000	759,000	17,000	12,000	7,000	2,011,000	90,000	2,101,000

\*Less than 500.

## Chapter 4 ■ People

**Table 70**

**Vehicle Occupants Killed or Injured, by Age, Person Type, and Sex**

Age (Years)	Person Type											
	Drivers						Passengers					
	Sex			Sex			Sex			Sex		
	Male		Female		Total		Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>Occupants Killed</b>												
<5	1	100.0	0	0.0	1	100.0	172	52.6	154	47.1	327	100.0
5-9	5	100.0	0	0.0	5	100.0	128	46.2	149	53.8	277	100.0
10-15	66	71.0	27	29.0	93	100.0	218	49.0	227	51.0	445	100.0
16-20	1,656	72.2	639	27.8	2,295	100.0	795	58.5	562	41.4	1,358	100.0
21-24	1,797	79.7	458	20.3	2,256	100.0	470	64.6	257	35.4	727	100.0
25-34	3,162	78.9	846	21.1	4,008	100.0	644	60.9	413	39.1	1,057	100.0
35-44	2,731	79.9	689	20.1	3,420	100.0	326	48.2	351	51.8	677	100.0
45-54	2,956	78.7	799	21.3	3,755	100.0	288	42.9	384	57.1	672	100.0
55-64	2,031	76.5	625	23.5	2,656	100.0	181	39.5	277	60.5	458	100.0
65-74	1,121	71.7	443	28.3	1,564	100.0	114	30.0	266	70.0	380	100.0
>74	1,145	66.1	588	33.9	1,733	100.0	220	30.4	504	69.6	724	100.0
Unknown	7	58.3	1	8.3	12	100.0	16	44.4	16	44.4	36	100.0
<b>Total</b>	<b>16,678</b>	<b>76.5</b>	<b>5,115</b>	<b>23.5</b>	<b>*21,798</b>	<b>100.0</b>	<b>3,572</b>	<b>50.0</b>	<b>3,560</b>	<b>49.9</b>	<b>**7,138</b>	<b>100.0</b>
<b>Occupants Injured</b>												
<5	***	***	***	***	***	***	21,000	46.6	24,000	53.4	45,000	100.0
5-9	1,000	55.7	***	44.3	1,000	100.0	25,000	47.8	27,000	52.2	51,000	100.0
10-15	4,000	76.1	1,000	23.9	6,000	100.0	33,000	44.2	42,000	55.8	75,000	100.0
16-20	93,000	48.4	100,000	51.6	193,000	100.0	42,000	39.3	65,000	60.7	106,000	100.0
21-24	90,000	51.8	83,000	48.2	173,000	100.0	26,000	43.1	35,000	56.9	61,000	100.0
25-34	148,000	47.6	163,000	52.4	311,000	100.0	36,000	44.1	46,000	55.9	82,000	100.0
35-44	121,000	48.9	126,000	51.1	247,000	100.0	22,000	37.7	36,000	62.3	58,000	100.0
45-54	129,000	50.0	129,000	50.0	258,000	100.0	16,000	29.5	38,000	70.5	54,000	100.0
55-64	82,000	51.0	79,000	49.0	160,000	100.0	10,000	25.7	30,000	74.3	40,000	100.0
65-74	41,000	52.2	38,000	47.8	79,000	100.0	5,000	18.3	22,000	81.7	27,000	100.0
>74	25,000	50.9	24,000	49.1	50,000	100.0	5,000	23.4	18,000	76.6	23,000	100.0
<b>Total</b>	<b>734,000</b>	<b>49.7</b>	<b>744,000</b>	<b>50.3</b>	<b>1,477,000</b>	<b>100.0</b>	<b>242,000</b>	<b>38.7</b>	<b>382,000</b>	<b>61.3</b>	<b>624,000</b>	<b>100.0</b>

\*Includes 5 drivers of unknown sex. \*\*Includes 6 passengers of unknown sex.

\*\*\*Less than 500 or less than 0.05 percent.

Note: Drivers include motorcycle riders; passengers include motorcycle passengers.

**Table 71**  
**Vehicle Occupants Killed or Injured, by Vehicle Type and Most Harmful Event**

Vehicle Type	Most Harmful Event								Total	
	Collision with									
	Motor Vehicle in Transport		Object Not Fixed		Fixed Object		Noncollision			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Occupants Killed										
Passenger Car	6,385	48.8	292	2.2	3,917	29.9	2,495	19.1	13,095	100.0
Light Truck	3,208	31.2	191	1.9	2,573	25.0	4,309	41.9	10,287	100.0
Large Truck	108	21.5	27	5.4	103	20.5	265	52.7	503	100.0
Bus	2	7.7	0	0.0	1	3.8	23	88.5	26	100.0
Other/Unknown	142	25.2	17	3.0	167	29.7	218	38.7	563	100.0
Subtotal	9,845	40.2	527	2.2	6,761	27.6	7,310	29.9	24,474	100.0
Motorcycle	2,131	47.8	198	4.4	1,162	26.0	962	21.6	4,462	100.0
Total	11,976	41.4	725	2.5	7,923	27.4	8,272	28.6	*28,936	100.0
Occupants Injured										
Passenger Car	970,000	79.7	32,000	2.6	163,000	13.4	51,000	4.2	1,216,000	100.0
Light Truck	561,000	73.9	15,000	2.0	104,000	13.6	80,000	10.5	759,000	100.0
Large Truck	8,000	50.6	**	1.8	3,000	16.2	5,000	31.4	17,000	100.0
Bus	12,000	99.7	**	0.2	**	0.2	**	**	12,000	100.0
Other/Unknown	1,000	20.9	**	0.7	1,000	11.7	5,000	66.7	7,000	100.0
Subtotal	1,553,000	77.2	47,000	2.3	271,000	13.5	141,000	7.0	2,011,000	100.0
Motorcycle	36,000	39.8	3,000	3.2	10,000	10.9	41,000	46.0	90,000	100.0
Total	1,588,000	75.6	50,000	2.4	280,000	13.3	182,000	8.7	2,101,000	100.0

\*Includes 40 fatalities with unknown most harmful event.

\*\*Less than 500 or less than 0.05 percent.

## Chapter 4 ■ People

**Table 72**

**Vehicle Occupants Killed or Injured, by Initial Point of Impact and Vehicle Type**

Initial Point of Impact	Vehicle Type							Total
	Passenger Cars	Light Trucks	Large Trucks	Buses	Other/ Unknown	Subtotal	Motorcycles	
Occupants Killed								
Front	7,238	5,728	301	8	252	13,527	2,921	16,448
Left Side	2,108	1,070	22	1	33	3,234	299	3,533
Right Side	1,938	983	52	1	35	3,009	280	3,289
Rear	672	435	14	0	52	1,173	180	1,353
Other	484	436	22	5	16	963	131	1,094
Noncollision	463	1,261	73	11	125	1,933	374	2,307
Unknown	192	374	19	0	50	635	277	912
Total	13,095	10,287	503	26	563	24,474	4,462	28,936
Occupants Injured								
Front	557,000	323,000	7,000	6,000	2,000	895,000	33,000	928,000
Left Side	178,000	109,000	2,000	1,000	*	291,000	8,000	299,000
Right Side	163,000	98,000	2,000	2,000	*	264,000	10,000	274,000
Rear	291,000	187,000	2,000	3,000	1,000	484,000	4,000	489,000
Other	5,000	3,000	*	*	*	9,000	*	9,000
Noncollision	22,000	39,000	4,000	*	4,000	68,000	35,000	103,000
Total	1,216,000	759,000	17,000	12,000	7,000	2,011,000	90,000	2,101,000

\*Less than 500.



**Table 73**

**Vehicle Occupants Killed or Injured, by Vehicle Type and Ejection**

Vehicle Type	Ejected*		Not Ejected		Unknown		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>Occupants Killed</b>								
Passenger Car	2,503	19.1	10,551	80.6	41	0.3	<b>13,095</b>	<b>100.0</b>
Light Truck	3,793	36.9	6,456	62.8	38	0.4	<b>10,287</b>	<b>100.0</b>
Large Truck	135	26.8	362	72.0	6	1.2	<b>503</b>	<b>100.0</b>
Bus	18	69.2	8	30.8	0	0.0	<b>26</b>	<b>100.0</b>
Other/Unknown	243	43.2	315	56.0	5	0.9	<b>563</b>	<b>100.0</b>
<b>Total**</b>	<b>6,692</b>	<b>27.3</b>	<b>17,692</b>	<b>72.3</b>	<b>90</b>	<b>0.4</b>	<b>24,474</b>	<b>100.0</b>
<b>Occupants Injured</b>								
Passenger Car	3,000	0.3	1,213,000	99.7	****	****	<b>1,216,000</b>	<b>100.0</b>
Light Truck	6,000	0.8	753,000	99.2	****	****	<b>759,000</b>	<b>100.0</b>
Large Truck	***	0.4	16,000	99.6	****	****	<b>17,000</b>	<b>100.0</b>
Bus	***	***	12,000	100.0	****	****	<b>12,000</b>	<b>100.0</b>
Other/Unknown	3,000	43.4	4,000	56.6	****	****	<b>7,000</b>	<b>100.0</b>
<b>Total**</b>	<b>12,000</b>	<b>0.6</b>	<b>1,999,000</b>	<b>99.4</b>	<b>****</b>	<b>****</b>	<b>2,011,000</b>	<b>100.0</b>

\*Includes total and partial ejection.

\*\*Excludes motorcyclists.

\*\*\*Less than 500.

\*\*\*\*Not applicable.

## Chapter 4 ■ People

**Table 74**

**Occupants Killed or Injured in Two-Vehicle Crashes, by Vehicle Types Involved**

Vehicle Type	Occupants Killed	Vehicle Type	Occupants Killed	Total Occupants Killed
Passenger Car	—	Passenger Car	—	1,675
Passenger Car	2,929	Light Truck	788	3,717
Passenger Car	1,022	Large Truck	18	1,040
Passenger Car	10	Motorcycle	910	920
Passenger Car	74	Bus	0	74
Passenger Car	57	Other/Unknown	46	103
Light Truck	—	Light Truck	—	1,494
Light Truck	866	Large Truck	33	899
Light Truck	5	Motorcycle	966	971
Light Truck	48	Bus	0	48
Light Truck	55	Other/Unknown	60	115
Large Truck	—	Large Truck	—	72
Large Truck	0	Motorcycle	132	132
Large Truck	0	Bus	2	2
Large Truck	0	Other/Unknown	22	22
Motorcycle	—	Motorcycle	—	80
Motorcycle	9	Bus	7	16
Motorcycle	45	Other/Unknown	3	48
Bus	0	Other/Unknown	0	0
Other/Unknown	—	Other/Unknown	—	30
<b>Total Occupants Killed</b> .....				<b>11,458</b>
Vehicle Type	Occupants Injured	Vehicle Type	Occupants Injured	Total Occupants Injured
Passenger Car	—	Passenger Car	—	429,000
Passenger Car	351,000	Light Truck	247,000	598,000
Passenger Car	26,000	Large Truck	4,000	30,000
Passenger Car	4,000	Motorcycle	20,000	24,000
Passenger Car	3,000	Bus	4,000	7,000
Passenger Car	1,000	Other/Unknown	1,000	2,000
Light Truck	—	Light Truck	—	209,000
Light Truck	15,000	Large Truck	2,000	17,000
Light Truck	2,000	Motorcycle	17,000	19,000
Light Truck	2,000	Bus	3,000	5,000
Light Truck	1,000	Other/Unknown	1,000	1,000
Large Truck	—	Large Truck	—	1,000
<b>Total Occupants Injured</b> .....				<b>1,343,000</b>

**Table 75**

**Occupants Involved in Fatal Crashes and Occupant Fatalities, by Vehicle Body Type**

Body Type	Occupants Involved		Occupants Killed		Body Type	Occupants Involved		Occupants Killed	
	No.	%	No.	%		No.	%	No.	%
<b>Passenger Cars</b>	<b>29,044</b>	<b>41.0</b>	<b>13,095</b>	<b>45.3</b>	<b>Large Trucks</b>	<b>3,759</b>	<b>5.3</b>	<b>503</b>	<b>1.7</b>
Convertible	482	0.7	260	0.9	Step Van	17	*	5	*
2 Door Sedan, Hardtop, Coupe	4,462	6.3	2,206	7.6	Single Unit Truck (10,000 lb < GVWR ≤ 19,500 lb)	263	0.4	33	0.1
3 Door/2 Door Hatchback	993	1.4	527	1.8	Single Unit Truck (19,500 lb < GVWR ≤ 26,000 lb)	235	0.3	41	0.1
4 Door Sedan Hardtop	20,908	29.5	9,268	32.0	Single Unit Heavy Truck (GVWR > 26,000 lb)	632	0.9	82	0.3
5 Door/4 Door Hatchback	388	0.5	167	0.6	Single Unit Truck, Unknown GVWR	9	*	2	*
Station Wagon	1,467	2.1	534	1.8	Truck Tractor	2,432	3.4	313	1.1
Hatchback, Doors Unknown	19	*	11	*	Medium/Heavy Pickup (Ford Super Duty 450/550)	153	0.2	27	0.1
Other Auto	44	0.1	21	0.1	Unknown Heavy Truck (GVWR > 26,000 lb)	2	*	0	0.0
Unknown Auto	261	0.4	87	0.3	Unknown Large Truck Type	16	*	0	0.0
Auto-Based Pickup	20	*	14	*	<b>Motorcycles</b>	<b>5,148</b>	<b>7.3</b>	<b>4,462</b>	<b>15.4</b>
<b>Light Trucks</b>	<b>30,762</b>	<b>43.4</b>	<b>10,287</b>	<b>35.6</b>	Motorcycle	4,878	6.9	4,222	14.6
Compact Utility	8,851	12.5	3,156	10.9	Moped	107	0.2	96	0.3
Large Utility	3,089	4.4	748	2.6	Three Wheel Motorcycle or Moped	13	*	10	*
Utility Station Wagon	684	1.0	186	0.6	Off-Road Motorcycle (Two Wheel)	73	0.1	60	0.2
Utility, Unknown Body Type	8	*	1	*	Other Motorcycle/Minibike	67	0.1	65	0.2
Minivan	3,840	5.4	1,113	3.8	Unknown Motorcycle	10	*	9	*
Large Van	1,390	2.0	275	1.0	<b>Buses**</b>	<b>681</b>	<b>1.0</b>	<b>26</b>	<b>0.1</b>
Step Van	12	*	2	*	School Bus	259	0.4	3	*
Other Van Type	1	*	0	0.0	Cross Country/Intercity Bus	179	0.3	9	*
Unknown Van Type	21	*	4	*	Transit Bus	148	0.2	0	0.0
Compact Pickup	3,191	4.5	1,512	5.2	Other Bus	83	0.1	11	*
Standard Pickup	9,565	13.5	3,256	11.3	Unknown Bus	12	*	3	*
Pickup with Camper	33	*	10	*	<b>Other Vehicles</b>	<b>813</b>	<b>1.1</b>	<b>481</b>	<b>1.7</b>
Unknown Pickup Style Truck	34	*	14	*	Large Limousine	1	*	1	*
Cab Chassis-Based Light Truck	36	0.1	6	*	Light Truck-Based Motorhome	2	*	0	0.0
Truck-Based Panel Truck	1	*	0	0.0	Medium/Heavy Truck-Based Motorhome	61	0.1	5	*
Other Conventional Light Truck	1	*	1	*	Unknown Truck Camper/Motorhome	42	0.1	9	*
Unknown Light Truck Type (Not Pickup)	1	*	1	*	All Terrain Vehicle	467	0.7	336	1.2
Unknown Light Vehicle Type	4	*	2	*	Snowmobile	45	0.1	34	0.1
					Farm Equipment Except Trucks	96	0.1	37	0.1
					Construction Equipment Except Trucks	16	*	7	*
					Other Vehicle	83	0.1	52	0.2
					<b>Unknown Body Type</b>	<b>638</b>	<b>0.9</b>	<b>82</b>	<b>0.3</b>
					<b>Total</b>	<b>70,845</b>	<b>100.0</b>	<b>28,936</b>	<b>100.0</b>

\*Less than 0.05 percent.

\*\*Noninjured passengers are not included in this bus occupant count. All bus drivers are included, regardless of injury severity.

## Chapter 4 ■ People

**Table 76**

**Passenger Car Occupants Involved in Fatal Crashes and Occupants Killed, by Car Wheelbase Size**

Passenger Car Wheelbase Size	Occupants Involved in Fatal Crashes		Occupants Killed		Percent of Occupants Killed by Car Wheelbase Size
	Number	Percent of Total	Number	Percent of Total	
Minicompact (under 95 inches)	326	1.1	212	1.6	65.0
Subcompact (95 to 99 inches)	2,567	8.8	1,333	10.2	51.9
Compact (100 to 104 inches)	8,684	29.9	4,128	31.5	47.5
Intermediate (105 to 109 inches)	9,992	34.4	4,393	33.5	44.0
Full Size (110 to 114 inches)	5,098	17.6	2,175	16.6	42.7
Largest Size (115 inches and over)	1,895	6.5	674	5.1	35.6
Unknown	482	1.7	180	1.4	37.3
<b>Total</b>	<b>29,044</b>	<b>100.0</b>	<b>13,095</b>	<b>100.0</b>	<b>45.1</b>

**Table 77**

**Persons Killed and Alcohol-Impaired Driving Fatalities, by Person Type**

Person Type	Total Killed	Alcohol-Impaired Driving Fatalities*	
		Number	Percent
Vehicle Occupants			
Driver	17,640	6,669	38
Passenger	6,770	2,022	30
Unknown Occupant	64	3	4
Subtotal	24,474	8,693	36
Motorcyclists	4,462	1,480	33
Nonoccupants			
Pedestrian	4,092	562	14
Pedalcyclist	630	85	14
Other/Unknown	150	19	13
Subtotal	4,872	667	14
Total	33,808	10,839	32

\*Fatalities in crashes involving a driver or motorcycle rider with a blood alcohol concentration (BAC) of .08 grams per deciliter (g/dL) or greater. NHTSA estimates alcohol involvement when alcohol test results are unknown. For more information, see page 7 of this report.

## Chapter 4 ■ People

**Table 78**

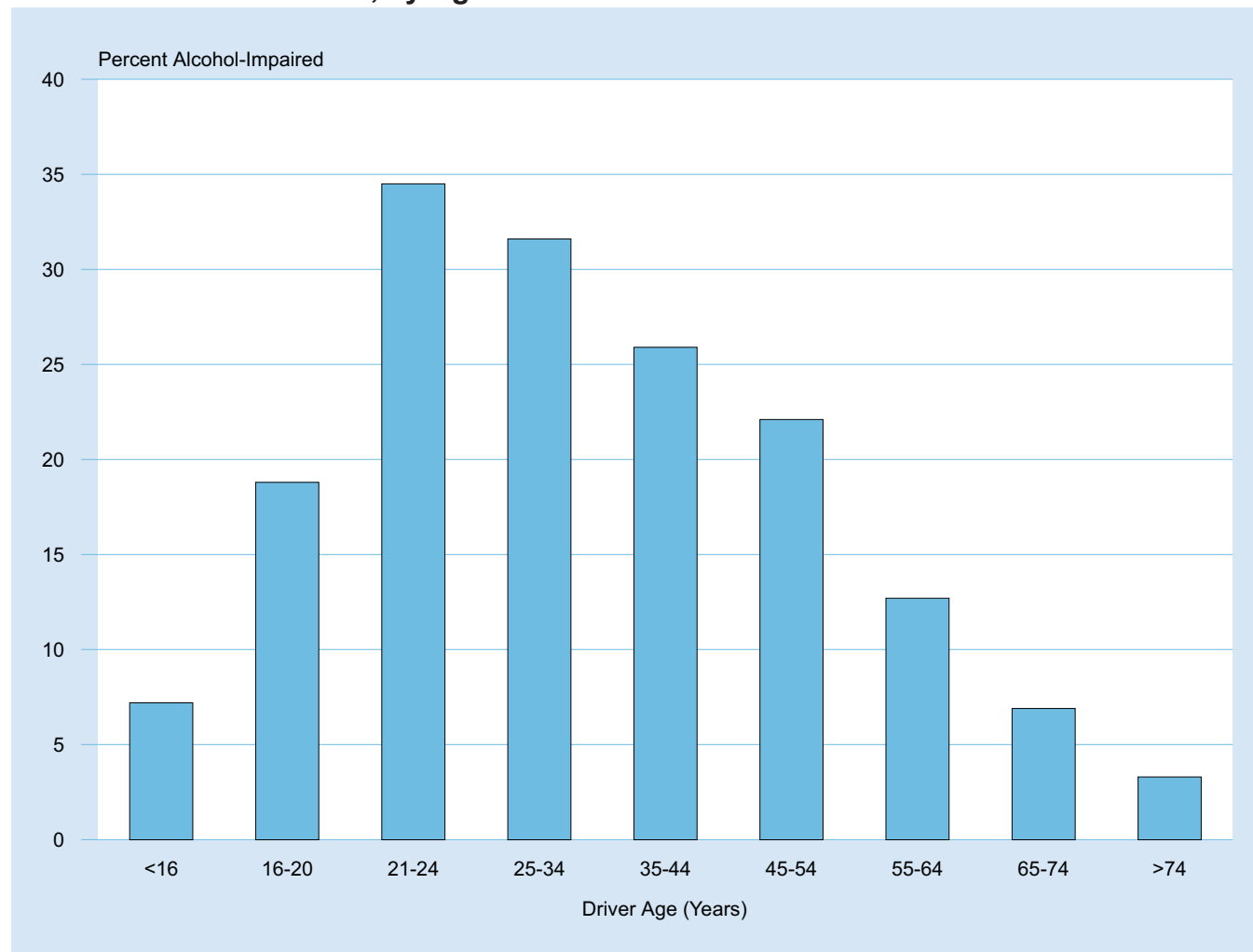
**Drivers and Motorcycle Riders Involved in Fatal Crashes, by Age and Driver's Blood Alcohol Concentration (BAC)**

Age (Years)	Driver's BAC									
	.00		.01-.07		.08 or Higher*		.01 and Higher		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<16	159	88	9	5	13	7	22	12	181	100
16-20	3,851	76	249	5	951	19	1,200	24	5,051	100
21-24	2,717	59	292	6	1,588	35	1,880	41	4,597	100
25-34	5,471	64	417	5	2,722	32	3,139	36	8,610	100
35-44	5,435	70	316	4	2,006	26	2,322	30	7,757	100
45-54	5,672	74	298	4	1,694	22	1,992	26	7,664	100
55-64	4,475	85	132	2	669	13	801	15	5,276	100
65-74	2,611	91	59	2	199	7	258	9	2,868	100
>74	2,411	95	53	2	85	3	139	5	2,550	100
Unknown	415	61	85	13	176	26	261	39	676	100
Total	33,218	73	1,910	4	10,102	22	12,012	27	45,230	100

\*BAC of .08 g/dL or higher indicates alcohol-impaired driving.

Note: NHTSA estimates alcohol involvement when alcohol test results are unknown. For more information, see page 7 of this report.

**Figure 26**  
**Percent Alcohol Impairment (BAC .08 or Higher) for Drivers and Motorcycle Riders Involved in Fatal Crashes, by Age**



## Chapter 4 ■ People

**Table 79**

**Drivers and Motorcycle Riders Killed in Crashes, by Time of Day, Day of Week, Age, Alcohol Impairment, and Crash Type**

Time of Day and Day of Week	Under 21		21 and Older	
	Number Killed	Percent Alcohol-Impaired*	Number Killed	Percent Alcohol-Impaired*
<b>Single-Vehicle Crashes</b>				
<b>Daytime</b>	<b>517</b>	<b>15</b>	<b>4,264</b>	<b>24</b>
Weekday	312	11	2,832	21
Weekend	205	21	1,432	31
<b>Nighttime</b>	<b>963</b>	<b>47</b>	<b>5,793</b>	<b>67</b>
Weekday	390	39	2,608	60
Weekend	573	52	3,185	72
<b>Multiple-Vehicle Crashes</b>				
<b>Daytime</b>	<b>470</b>	<b>3</b>	<b>5,763</b>	<b>8</b>
Weekday	356	3	4,293	6
Weekend	114	4	1,470	11
<b>Nighttime</b>	<b>423</b>	<b>24</b>	<b>3,400</b>	<b>35</b>
Weekday	200	19	1,635	30
Weekend	223	29	1,765	39

\*Highest blood alcohol concentration (BAC) among drivers or motorcycle riders involved in the crash was .08 grams per deciliter (g/dL) or greater. NHTSA estimates alcohol involvement when alcohol test results are unknown. For more information, see page 7 of this report.

**Table 80**

**Drivers and Motorcycle Riders Killed in Crashes, by Age and Driver's Blood Alcohol Concentration (BAC)**

Age (Years)	Driver's BAC								Total	
	.00		.01-.07		.08 or Higher*		.01 and Higher			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<16	86	87	5	5	8	8	13	13	99	100
16-20	1,529	67	120	5	646	28	767	33	2,295	100
21-24	1,051	47	152	7	1,053	47	1,205	53	2,256	100
25-34	1,862	46	225	6	1,921	48	2,146	54	4,008	100
35-44	1,760	51	184	5	1,475	43	1,660	49	3,420	100
45-54	2,192	58	194	5	1,369	36	1,563	42	3,755	100
55-64	2,000	75	94	4	562	21	657	25	2,656	100
65-74	1,355	87	41	3	167	11	209	13	1,564	100
>74	1,617	93	43	2	73	4	116	7	1,733	100
Unknown	5	45	0	3	6	53	7	55	12	100
Total	13,458	62	1,060	5	7,281	33	8,341	38	21,798	100

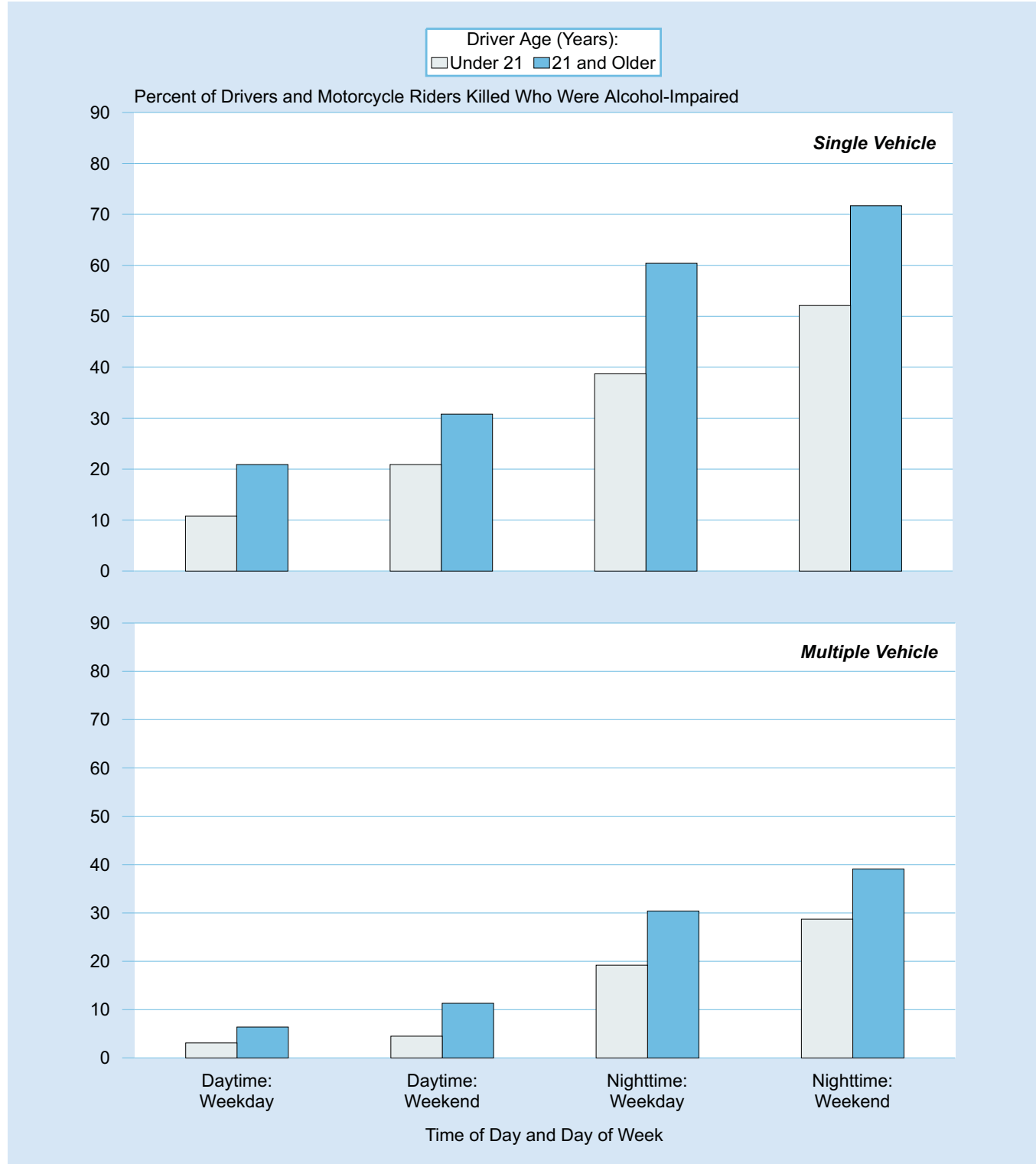
\*BAC of .08 g/dL or higher indicates alcohol-impaired driving.

Note: NHTSA estimates alcohol involvement when alcohol test results are unknown. For more information, see page 7 of this report.



**Figure 27**

**Percent of Drivers and Motorcycle Riders Killed Who Were Alcohol-Impaired (BAC .08 or Higher), by Driver Age, Crash Type, Time of Day, and Day of Week**



## Chapter 4 ■ People

**Table 81**

**Drivers and Motorcycle Riders Involved in Fatal Crashes, by Vehicle Type and Driver's Blood Alcohol Concentration (BAC)**

Vehicle Type	Driver's BAC								Total	
	.00		.01-.07		.08 or Higher*		.01 and Higher			
Vehicle Type	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Passenger Car	13,317	73	720	4	4,242	23	4,962	27	18,279	100
Light Truck	13,022	73	665	4	4,134	23	4,800	27	17,822	100
Large Truck	3,094	97	39	1	54	2	94	3	3,187	100
Bus	221	100	0	0	0	0	0	0	221	100
Other/Unknown	637	57	134	12	357	32	491	43	1,128	100
Subtotal	30,291	75	1,558	4	8,788	22	10,346	25	40,637	100
Motorcycle	2,927	64	352	8	1,314	29	1,667	36	4,593	100
Total	33,218	73	1,910	4	10,102	22	12,012	27	45,230	100

\*BAC of .08 g/dL or higher indicates alcohol-impaired driving.

Note: NHTSA estimates alcohol involvement when alcohol test results are unknown. For more information, see page 7 of this report.

**Table 82**

**Persons Killed, by Age and Highest Driver Blood Alcohol Concentration (BAC) in the Crash**

Age (Years)	Highest Driver BAC in Crash								Total	
	.00		.01-.07		.08 or Higher*		.01 and Higher			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<5	339	79	23	5	66	15	89	21	430	100
5-9	312	82	19	5	47	12	67	18	380	100
10-15	588	81	33	5	105	14	138	19	728	100
16-20	2,457	62	281	7	1,180	30	1,461	37	3,932	100
21-24	1,475	45	239	7	1,563	48	1,802	55	3,287	100
25-34	2,650	47	379	7	2,643	46	3,023	53	5,689	100
35-44	2,540	53	299	6	1,975	41	2,274	47	4,826	100
45-54	3,193	59	300	6	1,890	35	2,190	41	5,397	100
55-64	2,755	73	161	4	852	23	1,013	27	3,781	100
65-74	1,986	84	80	3	301	13	381	16	2,374	100
>74	2,628	90	86	3	193	7	279	10	2,914	100
Unknown	39	56	3	4	25	36	28	40	70	100
Total	20,961	62	1,905	6	10,839	32	12,744	38	33,808	100

\*BAC of .08 g/dL or higher indicates alcohol-impaired driving.

Note: NHTSA estimates alcohol involvement when alcohol test results are unknown. For more information, see page 7 of this report.

**Table 83**

**Pedestrians Killed, by Pedestrian's and Driver's Blood Alcohol Concentration (BAC)**

Pedestrian's BAC	Driver's BAC						Total	
	.00		.01-.07		.08 or Higher*			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
.00	2,095	52	93	2	273	7	2,461	61
.01-.07	125	3	7	0	29	1	162	4
.08 or Higher	1,090	27	83	2	227	6	1,400	35
Total**	3,311	82	182	5	529	13	4,022	100

\*BAC of .08 g/dL or higher indicates alcohol-impaired driving.

\*\*Includes pedestrians struck by motorcycles. Does not include pedestrians killed in hit and run crashes.

Note: NHTSA estimates alcohol involvement when alcohol test results are unknown. For more information, see page 7 of this report.

## Chapter 4 ■ People

**Table 84**  
**Drivers Involved in Crashes, by Vehicle Type, Restraint Use, and Crash Severity**

Vehicle Type	Restraint Use						Total	
	Used		Not Used		Unknown			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Drivers in Fatal Crashes								
Passenger Car	11,857	64.9	4,925	26.9	1,497	8.2	18,279	100.0
Light Truck	11,010	61.8	5,532	31.0	1,280	7.2	17,822	100.0
Large Truck	2,619	82.2	350	11.0	218	6.8	3,187	100.0
Bus	190	86.0	15	6.8	16	7.2	221	100.0
Other/Unknown	142	12.6	484	42.9	502	44.5	1,128	100.0
Total*	25,818	63.5	11,306	27.8	3,513	8.6	40,637	100.0
Drivers in Injury Crashes								
Passenger Car	1,330,000	88.3	50,000	3.3	126,000	8.4	1,506,000	100.0
Light Truck	927,000	87.1	37,000	3.5	100,000	9.4	1,065,000	100.0
Large Truck	45,000	85.1	1,000	2.2	7,000	12.6	53,000	100.0
Bus	9,000	91.5	**	4.8	**	3.8	10,000	100.0
Other/Unknown	1,000	13.5	5,000	83.1	**	3.4	6,000	100.0
Total*	2,312,000	87.6	94,000	3.6	234,000	8.9	2,640,000	100.0
Drivers in Property-Damage-Only Crashes								
Passenger Car	3,256,000	88.7	40,000	1.1	376,000	10.2	3,672,000	100.0
Light Truck	2,452,000	85.8	31,000	1.1	375,000	13.1	2,858,000	100.0
Large Truck	171,000	72.1	4,000	1.6	63,000	26.3	238,000	100.0
Bus	41,000	86.5	1,000	2.7	5,000	10.8	47,000	100.0
Other/Unknown	6,000	50.8	3,000	24.9	3,000	24.3	12,000	100.0
Total*	5,927,000	86.8	79,000	1.2	822,000	12.0	6,828,000	100.0
Drivers in All Crashes								
Passenger Car	4,598,000	88.5	94,000	1.8	504,000	9.7	5,196,000	100.0
Light Truck	3,390,000	86.0	74,000	1.9	477,000	12.1	3,941,000	100.0
Large Truck	219,000	74.5	5,000	1.8	70,000	23.7	294,000	100.0
Bus	50,000	87.4	2,000	3.1	5,000	9.6	57,000	100.0
Other/Unknown	7,000	36.8	9,000	44.4	4,000	18.9	20,000	100.0
Total*	8,265,000	86.9	184,000	1.9	1,059,000	11.1	9,508,000	100.0

\*Excludes motorcycle riders.

\*\*Less than 500.

Note: Restraint use is determined by police and may be overreported for survivors.

**Table 85**

**Passenger Car and Light Truck Occupants Killed or Injured, by Age and Restraint Use**

Age (Years)	Restraint Use						Total	
	Used		Not Used		Unknown			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Occupants Killed								
<5	206	64.0	92	28.6	24	7.5	322	100.0
5-9	127	47.6	123	46.1	17	6.4	267	100.0
10-15	162	35.1	260	56.3	40	8.7	462	100.0
16-20	1,201	35.9	1,880	56.1	268	8.0	3,349	100.0
21-24	821	33.1	1,447	58.4	210	8.5	2,478	100.0
25-34	1,320	32.8	2,382	59.2	325	8.1	4,027	100.0
35-44	1,132	38.5	1,595	54.2	217	7.4	2,944	100.0
45-54	1,365	43.5	1,559	49.7	214	6.8	3,138	100.0
55-64	1,159	50.5	968	42.1	170	7.4	2,297	100.0
65-74	1,019	60.8	568	33.9	90	5.4	1,677	100.0
>74	1,615	67.7	620	26.0	149	6.3	2,384	100.0
Unknown	13	35.1	18	48.6	6	16.2	37	100.0
Total	10,140	43.4	11,512	49.2	1,730	7.4	23,382	100.0
Occupants Injured								
<5	39,000	89.9	2,000	5.2	2,000	4.9	44,000	100.0
5-9	44,000	85.9	4,000	8.4	3,000	5.7	51,000	100.0
10-15	59,000	80.9	9,000	12.5	5,000	6.5	72,000	100.0
16-20	244,000	83.5	29,000	9.9	19,000	6.7	292,000	100.0
21-24	179,000	80.7	18,000	8.2	24,000	11.1	221,000	100.0
25-34	317,000	85.9	24,000	6.5	28,000	7.5	369,000	100.0
35-44	247,000	87.4	14,000	5.1	21,000	7.5	283,000	100.0
45-54	255,000	90.4	11,000	4.0	16,000	5.6	282,000	100.0
55-64	172,000	91.6	7,000	3.5	9,000	4.9	188,000	100.0
65-74	94,000	92.1	3,000	3.1	5,000	4.8	102,000	100.0
>74	67,000	92.8	3,000	3.7	3,000	3.5	72,000	100.0
Total	1,716,000	86.8	125,000	6.3	135,000	6.8	1,976,000	100.0

Note: Restraint use is determined by police and may be overreported for survivors.

## Chapter 4 ■ People

**Table 86**  
**Passenger Car and Light Truck Occupant Survivors of Fatal Crashes,**  
**by Age and Restraint Use**

Age (Years)	Restraint Use						Total	
	Used		Not Used		Unknown			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<5	1,278	85.8	159	10.7	52	3.5	1,489	100.0
5-9	1,075	75.0	258	18.0	100	7.0	1,433	100.0
10-15	1,390	66.8	545	26.2	146	7.0	2,081	100.0
16-20	3,761	62.4	1,758	29.1	512	8.5	6,031	100.0
21-24	2,562	64.4	1,005	25.2	414	10.4	3,981	100.0
25-34	4,437	70.4	1,279	20.3	588	9.3	6,304	100.0
35-44	3,679	77.6	724	15.3	338	7.1	4,741	100.0
45-54	3,315	82.7	457	11.4	235	5.9	4,007	100.0
55-64	2,364	87.3	215	7.9	128	4.7	2,707	100.0
65-74	1,473	88.1	131	7.8	68	4.1	1,672	100.0
>74	1,031	89.3	68	5.9	56	4.8	1,155	100.0
Unknown	260	31.6	126	15.3	437	53.1	823	100.0
Total	26,625	73.1	6,725	18.5	3,074	8.4	36,424	100.0

Note: Restraint use is determined by police and may be overreported for survivors.

**Table 87**  
**Passenger Car Occupants Killed or Injured, by Seating Position and Restraint Use**

Seating Position	Restraint Use						Total	
	Used		Not Used		Unknown			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Passenger Car Occupants Killed								
Front Seat	6,068	51.1	4,910	41.3	899	7.6	11,877	100.0
Left	4,750	50.3	3,967	42.0	720	7.6	9,437	100.0
Middle	1	12.5	6	75.0	1	12.5	8	100.0
Right	1,317	54.2	936	38.5	178	7.3	2,431	100.0
Other/Unknown	0	0.0	1	100.0	0	0.0	1	100.0
Second Seat	430	39.3	571	52.1	94	8.6	1,095	100.0
Left	170	42.1	199	49.3	35	8.7	404	100.0
Middle	46	29.1	99	62.7	13	8.2	158	100.0
Right	211	40.8	263	50.9	43	8.3	517	100.0
Other/Unknown	3	18.8	10	62.5	3	18.8	16	100.0
Other	1	4.5	19	86.4	2	9.1	22	100.0
Unknown	6	5.9	69	68.3	26	25.7	101	100.0
Total	6,505	49.7	5,569	42.5	1,021	7.8	13,095	100.0
Passenger Car Occupants Injured								
Front Seat	969,000	88.2	55,000	5.0	75,000	6.8	1,099,000	100.0
Left	762,000	88.3	40,000	4.6	61,000	7.1	863,000	100.0
Middle	2,000	66.5	1,000	26.3	*	7.3	3,000	100.0
Right	205,000	88.2	14,000	6.0	13,000	5.7	233,000	100.0
Second Seat	89,000	80.9	15,000	13.2	6,000	5.9	110,000	100.0
Left	33,000	81.0	5,000	13.3	2,000	5.8	41,000	100.0
Middle	11,000	77.8	3,000	18.4	1,000	3.8	14,000	100.0
Right	45,000	81.7	7,000	11.9	4,000	6.4	55,000	100.0
Other	3,000	44.9	1,000	12.2	3,000	42.8	8,000	100.0
Total	1,062,000	87.3	70,000	5.8	85,000	7.0	1,216,000	100.0

\*Less than 500.

Note: Restraint use is determined by police and may be overreported for survivors.

## Chapter 4 ■ People

**Table 88**  
**Light Truck Occupants Killed or Injured, by Seating Position and Restraint Use**

Seating Position	Restraint Use						Total	
	Used		Not Used		Unknown			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Light Truck Occupants Killed								
Front Seat	3,329	36.8	5,122	56.6	595	6.6	9,046	100.0
Left	2,630	35.9	4,197	57.4	490	6.7	7,317	100.0
Middle	10	15.2	51	77.3	5	7.6	66	100.0
Right	689	41.7	866	52.4	99	6.0	1,654	100.0
Other/Unknown	0	0.0	8	88.9	1	11.1	9	100.0
Second Seat	257	30.5	524	62.1	63	7.5	844	100.0
Left	100	32.8	176	57.7	29	9.5	305	100.0
Middle	29	20.7	103	73.6	8	5.7	140	100.0
Right	124	32.3	236	61.5	24	6.3	384	100.0
Other/Unknown	4	26.7	9	60.0	2	13.3	15	100.0
Other	44	16.9	205	78.5	12	4.6	261	100.0
Unknown	5	3.7	92	67.6	39	28.7	136	100.0
Total	3,635	35.3	5,943	57.8	709	6.9	10,287	100.0
Light Truck Occupants Injured								
Front Seat	569,000	87.3	40,000	6.1	43,000	6.7	652,000	100.0
Left	446,000	87.3	28,000	5.5	37,000	7.2	511,000	100.0
Middle	3,000	68.3	1,000	21.0	1,000	10.6	5,000	100.0
Right	119,000	88.0	10,000	7.5	6,000	4.5	136,000	100.0
Second Seat	75,000	84.2	10,000	11.8	4,000	4.0	89,000	100.0
Left	29,000	84.3	4,000	12.5	1,000	3.2	34,000	100.0
Middle	10,000	77.2	2,000	15.0	1,000	7.7	13,000	100.0
Right	36,000	86.3	4,000	10.1	1,000	3.5	42,000	100.0
Other	10,000	54.4	5,000	26.0	3,000	19.5	18,000	100.0
Total	654,000	86.1	55,000	7.2	51,000	6.7	759,000	100.0

Note: Restraint use is determined by police and may be overreported for survivors.



**Table 89**  
**Passenger Car and Light Truck Occupants Killed or Injured,**  
**by Restraint Use and Type of Restraint**

Restraint Use and Type of Restraint	Vehicle Type			
	Passenger Car		Light Truck	
	Number	Percent	Number	Percent
<b>Occupants Killed</b>				
Restraint Used				
Lap/Shoulder Belt	2,455	18.7	1,763	17.1
Lap Belt	68	0.5	64	0.6
Shoulder Belt	86	0.7	9	0.1
Child Safety Seat	109	0.8	62	0.6
Type Unknown	4	*	10	0.1
Restraint Used, Airbag Deployed	3,735	28.5	1,694	16.5
Seat Belt Used Improperly	29	0.2	12	0.1
Child Safety Seat Used Improperly	19	0.1	21	0.2
<i>Subtotal</i>	<i>6,505</i>	<i>49.7</i>	<i>3,635</i>	<i>35.3</i>
No Restraint Used	2,865	21.9	4,249	41.3
No Restraint Used, Airbag Deployed	2,704	20.6	1,694	16.5
Restraint Use Unknown	1,021	7.8	709	6.9
<b>Total</b>	<b>13,095</b>	<b>100.0</b>	<b>10,287</b>	<b>100.0</b>
<b>Occupants Injured</b>				
Restraint Used				
Lap/Shoulder Belt	690,000	56.7	471,000	62.0
Lap Belt	13,000	1.0	10,000	1.3
Shoulder Belt	6,000	0.5	3,000	0.4
Child Safety Seat	20,000	1.6	18,000	2.4
Type Unknown	19,000	1.5	9,000	1.2
Restraint Used, Airbag Deployed	315,000	25.9	142,000	18.7
<i>Subtotal</i>	<i>1,062,000</i>	<i>87.3</i>	<i>654,000</i>	<i>86.1</i>
No Restraint Used	49,000	4.0	44,000	5.7
No Restraint Used, Airbag Deployed	22,000	1.8	11,000	1.5
Restraint Use Unknown	85,000	7.0	51,000	6.7
<b>Total</b>	<b>1,216,000</b>	<b>100.0</b>	<b>759,000</b>	<b>100.0</b>

\*Less than 0.05 percent.

Note: Restraint use is determined by police and may be overreported for survivors.

## Chapter 4 ■ People

**Table 90**

**Passenger Car and Light Truck Occupants Killed, by Crash Type, Vehicle Type, and Rollover Occurrence**

Vehicle Type	Rollover Occurrence				Total	
	Yes		No			
	Number	Percent	Number	Percent	Number	Percent
<b>Single-Vehicle Crashes</b>						
Passenger Car	2,748	44.1	3,488	55.9	<b>6,236</b>	<b>100.0</b>
Light Truck						<b>100.0</b>
Pickup	1,940	61.9	1,195	38.1	<b>3,135</b>	<b>100.0</b>
Utility	1,865	70.1	795	29.9	<b>2,660</b>	<b>100.0</b>
Van	307	53.4	268	46.6	<b>575</b>	<b>100.0</b>
Other	3	60.0	2	40.0	<b>5</b>	<b>100.0</b>
<b>Total</b>	<b>6,863</b>	<b>54.4</b>	<b>5,748</b>	<b>45.6</b>	<b>12,611</b>	<b>100.0</b>
<b>Multiple-Vehicle Crashes</b>						
Passenger Car	471	6.9	6,388	93.1	<b>6,859</b>	<b>100.0</b>
Light Truck						<b>100.0</b>
Pickup	352	21.2	1,305	78.8	<b>1,657</b>	<b>100.0</b>
Utility	429	30.0	1,002	70.0	<b>1,431</b>	<b>100.0</b>
Van	150	18.3	669	81.7	<b>819</b>	<b>100.0</b>
Other	2	40.0	3	60.0	<b>5</b>	<b>100.0</b>
<b>Total</b>	<b>1,404</b>	<b>13.0</b>	<b>9,367</b>	<b>87.0</b>	<b>10,771</b>	<b>100.0</b>
<b>All Crashes</b>						
Passenger Car	3,219	24.6	9,876	75.4	<b>13,095</b>	<b>100.0</b>
Light Truck						<b>100.0</b>
Pickup	2,292	47.8	2,500	52.2	<b>4,792</b>	<b>100.0</b>
Utility	2,294	56.1	1,797	43.9	<b>4,091</b>	<b>100.0</b>
Van	457	32.8	937	67.2	<b>1,394</b>	<b>100.0</b>
Other	5	50.0	5	50.0	<b>10</b>	<b>100.0</b>
<b>Total</b>	<b>8,267</b>	<b>35.4</b>	<b>15,115</b>	<b>64.6</b>	<b>23,382</b>	<b>100.0</b>

**Table 91**  
**Motorcyclists Killed or Injured, by Time of Day and Day of Week**

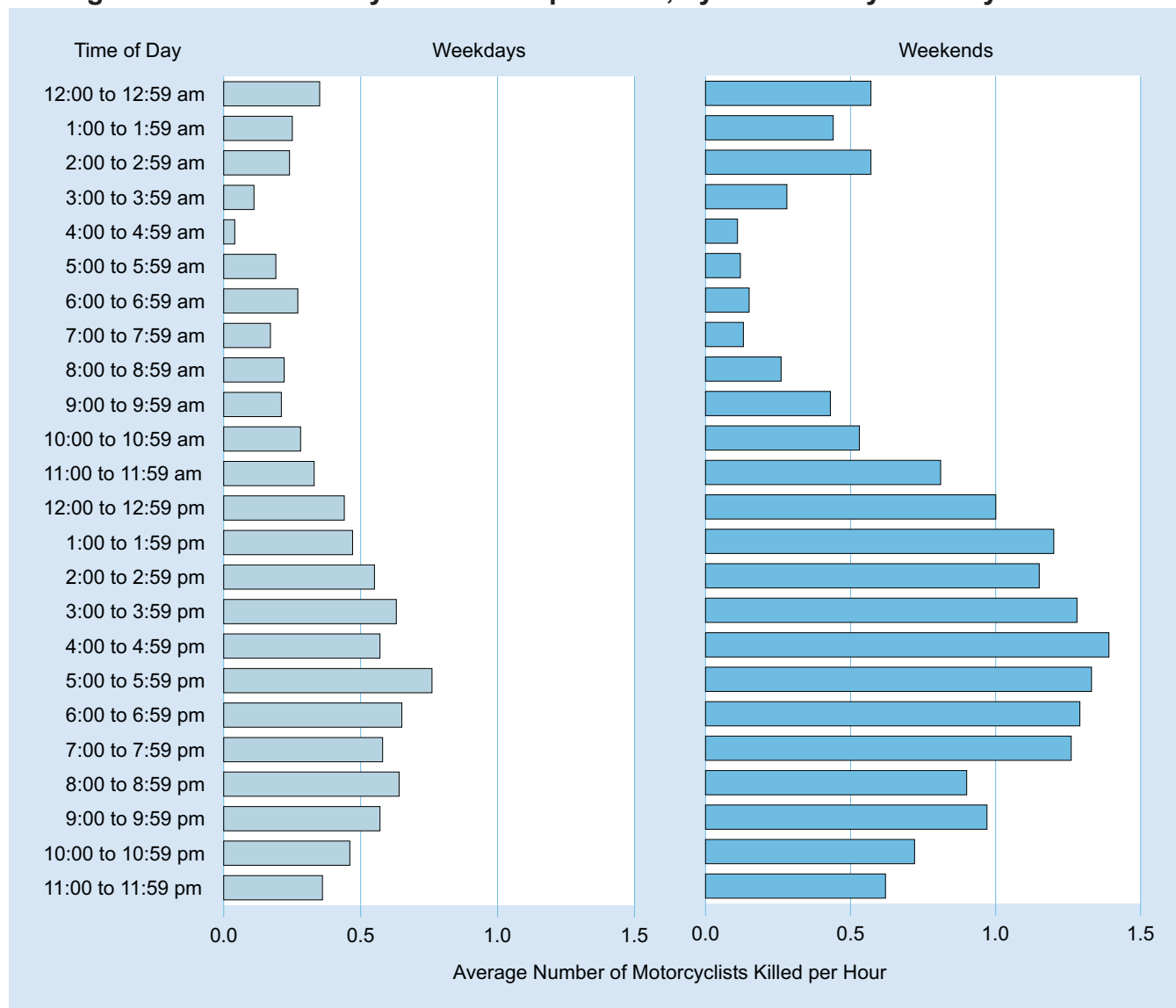
Time of Day	Day of Week				Total	
	Weekday		Weekend			
	Number	Percent	Number	Percent	Number	Percent
Motorcyclists Killed						
Midnight to 3 am	176	7.9	247	11.1	423	9.5
3 am to 6 am	73	3.3	78	3.5	151	3.4
6 am to 9 am	173	7.8	57	2.6	230	5.2
9 am to Noon	212	9.5	184	8.2	396	8.9
Noon to 3 pm	380	17.1	349	15.6	729	16.3
3 pm to 6 pm	513	23.1	416	18.6	929	20.8
6 pm to 9 pm	391	17.6	538	24.1	929	20.8
9 pm to Midnight	291	13.1	359	16.1	650	14.6
Unknown	11	0.5	7	0.3	25	0.6
Total	2,220	100.0	2,235	100.0	*4,462	100.0
Motorcyclists Injured						
Midnight to 3 am	1,000	1.8	2,000	5.1	3,000	3.2
3 am to 6 am	1,000	1.0	1,000	2.1	1,000	1.4
6 am to 9 am	5,000	9.2	1,000	3.2	6,000	6.7
9 am to Noon	6,000	11.5	3,000	8.4	9,000	10.2
Noon to 3 pm	10,000	19.9	9,000	25.0	20,000	22.0
3 pm to 6 pm	14,000	27.2	9,000	25.6	24,000	26.5
6 pm to 9 pm	10,000	18.6	8,000	21.1	18,000	19.6
9 pm to Midnight	6,000	10.9	3,000	9.4	9,000	10.3
Total	53,000	100.0	37,000	100.0	90,000	100.0

\*Includes 7 motorcyclists killed on unknown day of week.

## Chapter 4 ■ People

**Figure 28**

**Average Number of Motorcyclists Killed per Hour, by Time of Day and Day of Week**



Note: Motorcyclists include motorcycle riders (operators) and passengers.

**Table 92**  
**Motorcyclists Killed, by Person Type and Helmet Use**

Person Type	Helmet Use						Total	
	Used		Not Used		Unknown			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Riders	2,311	55.6	1,742	41.9	105	2.5	4,158	100.0
Passengers	128	42.1	169	55.6	7	2.3	304	100.0
Total	2,439	54.7	1,911	42.8	112	2.5	4,462	100.0

**Table 93**  
**Motorcycle Riders Involved in Fatal Crashes, by Age and License Compliance**

Age (Years)	License Compliance					Total
	Not Licensed	No Motorcycle License Required	No Valid Motorcycle License	Valid Motorcycle License	Unknown	
<16	13	3	1	1	0	18
16-20	23	3	57	130	6	219
21-24	17	5	110	313	6	451
25-34	23	6	264	602	9	904
35-44	21	5	229	714	9	978
45-54	11	9	157	915	5	1,097
55-64	5	3	60	617	2	687
65-74	2	0	4	188	3	197
>74	1	0	1	33	0	35
Unknown	2	0	0	0	5	7
<b>Total</b>	<b>118</b>	<b>34</b>	<b>883</b>	<b>3,513</b>	<b>45</b>	<b>4,593</b>

## Chapter 4 ■ People

**Table 94**

**Pedestrians Killed in School Bus Related Crashes, by Age and Striking Vehicle**

Age (Years)	Vehicle Type		Total
	Bus	Other Vehicle	
<5	0	0	0
5-9	3	5	8
10-15	4	1	5
>15	6	2	8
<b>Total</b>	<b>13</b>	<b>8</b>	<b>21</b>

**Table 95**

**Persons Killed or Injured in School Bus Related Crashes, by Person Type**

Person Type	Killed		Injured	
	Number	Percent	Number	Percent
School Bus Driver	2	1.7	1,000	7.6
School Bus Passenger	3	2.5	6,000	47.2
Pedestrian	21	17.8	1,000	4.4
Pedalcyclist	1	0.8	*	0.3
Occupant of Other Vehicle	91	77.1	5,000	40.4
Other Nonoccupants	0	0.0	*	0.1
<b>Total</b>	<b>118</b>	<b>100.0</b>	<b>13,000</b>	<b>100.0</b>

\*Less than 500.

**Table 96**  
**Pedestrians Killed or Injured, by Age and Location**

Age (Years)	Location				Total	
	Intersection		Nonintersection			
	Number	Percent	Number	Percent	Number	Percent
Pedestrians Killed						
<5	16	17.2	76	81.7	93	100.0
5-9	26	36.1	45	62.5	72	100.0
10-15	30	27.0	78	70.3	111	100.0
16-20	49	21.1	180	77.6	232	100.0
21-24	41	15.1	230	84.6	272	100.0
25-34	84	15.6	447	82.9	539	100.0
35-44	114	18.8	487	80.5	605	100.0
45-54	179	22.0	624	76.8	813	100.0
55-64	169	30.3	388	69.5	558	100.0
65-74	127	34.9	233	64.0	364	100.0
>74	144	35.0	259	63.0	411	100.0
Unknown	7	31.8	14	63.6	22	100.0
Total	986	24.1	3,061	74.8	*4,092	100.0
Pedestrians Injured						
<5	1,000	50.0	1,000	49.3	2,000	100.0
5-9	2,000	42.5	3,000	55.4	5,000	100.0
10-15	4,000	48.4	4,000	51.0	8,000	100.0
16-20	3,000	46.2	3,000	45.1	6,000	100.0
21-24	2,000	52.1	2,000	46.3	5,000	100.0
25-34	4,000	53.0	3,000	40.1	8,000	100.0
35-44	2,000	38.2	3,000	54.3	6,000	100.0
45-54	4,000	52.1	3,000	41.5	8,000	100.0
55-64	2,000	43.5	3,000	47.5	5,000	100.0
65-74	2,000	63.4	1,000	32.2	3,000	100.0
>74	2,000	60.5	1,000	38.8	3,000	100.0
Total	29,000	49.1	27,000	45.9	**59,000	100.0

\*Includes 45 pedestrians killed at other or unknown locations.

\*\*Includes 3,000 pedestrians injured at other or unknown locations.

## Chapter 4 ■ People

**Table 97**

**Pedestrians Killed or Injured and Fatality and Injury Rates per 100,000 Population, by Age and Sex**

Age (Years)	Male			Female			Total		
	Killed	Population (Thousands)	Rate	Killed	Population (Thousands)	Rate	Killed	Population (Thousands)	Rate
<5	57	10,887	0.52	36	10,413	0.35	93	21,300	0.44
5-9	47	10,536	0.45	25	10,074	0.25	72	20,610	0.35
10-15	71	12,340	0.58	40	11,767	0.34	111	24,107	0.46
16-20	165	11,166	1.48	67	10,578	0.63	232	21,744	1.07
21-24	196	8,861	2.21	76	8,339	0.91	272	17,200	1.58
25-34	390	21,224	1.84	149	20,343	0.73	539	41,566	1.30
35-44	424	20,857	2.03	181	20,673	0.88	605	41,530	1.46
45-54	582	21,973	2.65	231	22,619	1.02	813	44,592	1.82
55-64	395	16,782	2.35	163	18,005	0.91	558	34,787	1.60
65-74	227	9,593	2.37	137	11,199	1.22	364	20,792	1.75
>74	245	7,230	3.39	166	11,548	1.44	411	18,779	2.19
Unknown	15	*	*	6	*	*	22	*	*
<b>Total</b>	<b>2,814</b>	<b>151,449</b>	<b>1.86</b>	<b>1,277</b>	<b>155,557</b>	<b>0.82</b>	<b>**4,092</b>	<b>307,007</b>	<b>1.33</b>

Age (Years)	Male			Female			Total		
	Injured	Population (Thousands)	Rate	Injured	Population (Thousands)	Rate	Injured	Population (Thousands)	Rate
<5	1,000	10,887	12	1,000	10,413	7	2,000	21,300	9
5-9	3,000	10,536	27	2,000	10,074	19	5,000	20,610	23
10-15	4,000	12,340	33	4,000	11,767	32	8,000	24,107	33
16-20	3,000	11,166	28	3,000	10,578	26	6,000	21,744	27
21-24	3,000	8,861	33	2,000	8,339	22	5,000	17,200	28
25-34	4,000	21,224	18	5,000	20,343	22	8,000	41,566	20
35-44	4,000	20,857	18	2,000	20,673	9	6,000	41,530	14
45-54	4,000	21,973	18	4,000	22,619	19	8,000	44,592	18
55-64	3,000	16,782	16	3,000	18,005	15	5,000	34,787	16
65-74	2,000	9,593	19	1,000	11,199	12	3,000	20,792	15
>74	1,000	7,230	14	2,000	11,548	15	3,000	18,779	15
<b>Total</b>	<b>31,000</b>	<b>151,449</b>	<b>21</b>	<b>27,000</b>	<b>155,557</b>	<b>18</b>	<b>59,000</b>	<b>307,007</b>	<b>19</b>

\*Not applicable.

\*\*Includes 1 pedestrian fatality of unknown sex.

Note: Totals may not equal sum of components due to independent rounding.

Source: Population—Bureau of the Census.



**Table 98**  
**Pedestrians Killed or Injured, by Time of Day and Day of Week**

Time of Day	Day of Week				Total	
	Weekday		Weekend			
	Number	Percent	Number	Percent	Number	Percent
Pedestrians Killed						
Midnight to 3 am	183	7.8	313	18.2	496	12.1
3 am to 6 am	175	7.4	204	11.8	379	9.3
6 am to 9 am	289	12.2	54	3.1	343	8.4
9 am to Noon	184	7.8	49	2.8	233	5.7
Noon to 3 pm	184	7.8	54	3.1	238	5.8
3 pm to 6 pm	329	13.9	111	6.4	440	10.8
6 pm to 9 pm	556	23.6	460	26.7	1,016	24.8
9 pm to Midnight	444	18.8	474	27.5	918	22.4
Unknown	16	0.7	5	0.3	29	0.7
Total	2,360	100.0	1,724	100.0	*4,092	100.0
Pedestrians Injured						
Midnight to 3 am	1,000	1.8	1,000	7.0	2,000	3.5
3 am to 6 am	**	0.9	1,000	6.1	2,000	2.6
6 am to 9 am	5,000	11.4	1,000	2.7	5,000	8.6
9 am to Noon	4,000	9.8	1,000	7.2	5,000	8.9
Noon to 3 pm	8,000	19.2	1,000	7.6	9,000	15.4
3 pm to 6 pm	10,000	24.3	4,000	21.0	14,000	23.3
6 pm to 9 pm	9,000	21.8	6,000	30.3	14,000	24.6
9 pm to Midnight	4,000	10.7	3,000	18.2	8,000	13.2
Total	40,000	100.0	19,000	100.0	59,000	100.0

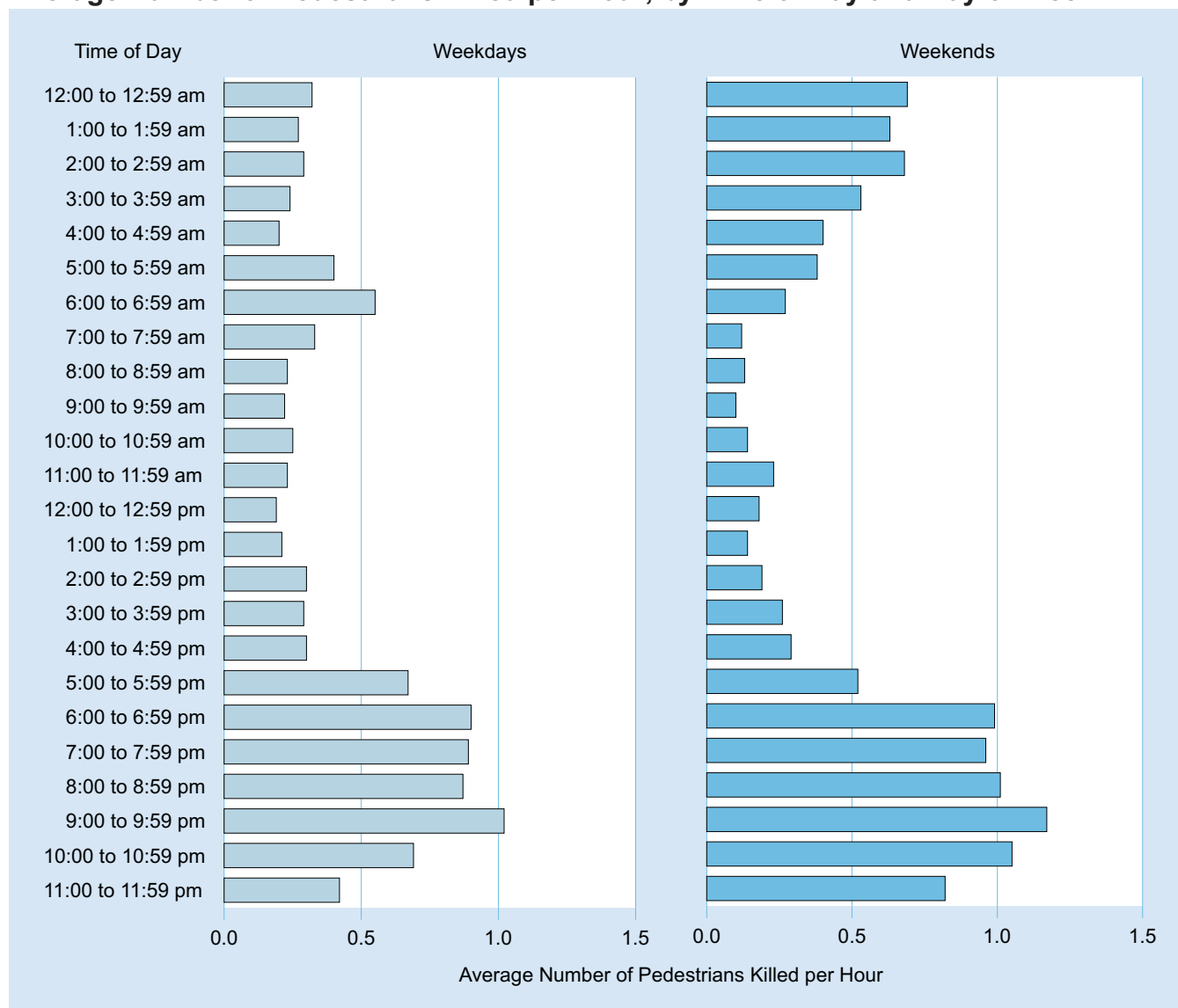
\*Includes 8 pedestrians killed at unknown time of day and day of week.

\*\*Less than 500.

## Chapter 4 ■ People

**Figure 29**

**Average Number of Pedestrians Killed per Hour, by Time of Day and Day of Week**



**Table 99**

**Pedestrians Killed or Injured in Single-Vehicle Crashes, by Vehicle Type and Initial Point of Impact**

Vehicle Type	Initial Point of Impact											
	Front		Right Side		Left Side		Rear		Other/Unknown		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Pedestrians Killed												
Passenger Car	1,420	92.6	23	1.5	29	1.9	15	1.0	47	3.1	1,534	100.0
Light Truck	1,411	89.2	45	2.8	20	1.3	49	3.1	57	3.6	1,582	100.0
Large Truck	141	66.2	11	5.2	10	4.7	22	10.3	29	13.6	213	100.0
Bus	41	73.2	4	7.1	2	3.6	1	1.8	8	14.3	56	100.0
Other/Unknown	217	65.0	2	0.6	2	0.6	2	0.6	111	33.2	334	100.0
Total	3,230	86.9	85	2.3	63	1.7	89	2.4	252	6.8	3,719	100.0
Pedestrians Injured												
Passenger Car	22,000	69.9	5,000	16.9	3,000	9.9	1,000	2.9	*	0.4	31,000	100.0
Light Truck	16,000	66.6	4,000	16.1	3,000	10.7	1,000	6.2	*	0.3	23,000	100.0
Other	1,000	57.4	1,000	28.7	*	7.6	*	1.4	*	4.9	2,000	100.0
Total	39,000	68.2	10,000	17.0	6,000	10.1	2,000	4.2	*	0.5	57,000	100.0

\*Less than 500.

**Table 100**

**Pedestrians Killed, by Related Factors**

Factors	Number	Percent
Improper crossing of roadway or intersection . . . . .	842	20.6
Walking, playing, working, etc., in roadway . . . . .	703	17.2
Failure to yield right of way . . . . .	662	16.2
Under the influence of alcohol, drugs or medication . . . . .	558	13.6
Darting or running into road . . . . .	469	11.5
Not visible. . . . .	446	10.9
Inattentive (talking, eating, etc.) . . . . .	71	1.7
Failure to obey traffic signs, signals, or officer. . . . .	63	1.5
Physical impairment. . . . .	53	1.3
Emotional (e.g., depression, angry, disturbed) . . . . .	17	0.4
Portable electronic devices . . . . .	14	0.3
Getting on/off/in/out of transport vehicle . . . . .	13	0.3
Ill, blackout . . . . .	12	0.3
Nonmotorist pushing vehicle . . . . .	6	0.1
Other factors . . . . .	93	2.3
None reported . . . . .	1,410	34.5
Unknown . . . . .	89	2.2
<b>Total Pedestrians . . . . .</b>	<b>4,092</b>	<b>100.0</b>

Note: The sum of the numbers and percentages is greater than total pedestrians killed as more than one factor may be present for the same pedestrian.

## Chapter 4 ■ People

**Table 101**  
**Pedalcyclists Killed or Injured, by Age and Location**

Age (Years)	Location				Total	
	Intersection		Nonintersection			
	Number	Percent	Number	Percent	Number	Percent
Pedalcyclists Killed						
<5	1	33.3	2	66.7	3	100.0
5-9	7	38.9	11	61.1	18	100.0
10-15	26	40.6	38	59.4	64	100.0
16-20	15	40.5	22	59.5	37	100.0
21-24	11	37.9	18	62.1	29	100.0
25-34	24	33.8	47	66.2	71	100.0
35-44	33	31.4	70	66.7	105	100.0
45-54	34	24.5	103	74.1	139	100.0
55-64	27	30.7	60	68.2	88	100.0
65-74	23	43.4	30	56.6	53	100.0
>74	8	34.8	15	65.2	23	100.0
Unknown	0	0.0	0	0.0	0	0.0
Total	209	33.2	416	66.0	*630	100.0
Pedalcyclists Injured						
<5	**	78.7	**	21.3	**	100.0
5-9	1,000	61.3	1,000	38.7	2,000	100.0
10-15	5,000	60.5	3,000	39.3	8,000	100.0
16-20	5,000	66.4	2,000	33.4	7,000	100.0
21-24	4,000	53.7	3,000	46.0	7,000	100.0
25-34	7,000	69.1	3,000	30.3	10,000	100.0
35-44	2,000	68.4	1,000	30.6	4,000	100.0
45-54	4,000	53.2	4,000	46.4	8,000	100.0
55-64	1,000	34.4	2,000	54.3	4,000	100.0
65-74	**	42.4	1,000	57.6	1,000	100.0
>74	**	49.2	**	50.8	**	100.0
Total	30,000	59.2	20,000	39.6	51,000	100.0

\*Includes 5 pedalcyclists killed at other or unknown location.

\*\*Less than 500.

**Table 102**

**Pedalcyclists Killed or Injured and Fatality and Injury Rates per 100,000 Population, by Age and Sex**

Age (Years)	Male			Female			Total		
	Killed	Population (Thousands)	Rate	Killed	Population (Thousands)	Rate	Killed	Population (Thousands)	Rate
<5	3	10,887	0.03	0	10,413	0.00	3	21,300	0.01
5-9	12	10,536	0.11	6	10,074	0.06	18	20,610	0.09
10-15	50	12,340	0.41	14	11,767	0.12	64	24,107	0.27
16-20	32	11,166	0.29	5	10,578	0.05	37	21,744	0.17
21-24	23	8,861	0.26	6	8,339	0.07	29	17,200	0.17
25-34	60	21,224	0.28	11	20,343	0.05	71	41,566	0.17
35-44	93	20,857	0.45	12	20,673	0.06	105	41,530	0.25
45-54	124	21,973	0.56	15	22,619	0.07	139	44,592	0.31
55-64	82	16,782	0.49	6	18,005	0.03	88	34,787	0.25
65-74	49	9,593	0.51	4	11,199	0.04	53	20,792	0.25
>74	21	7,230	0.29	2	11,548	0.02	23	18,779	0.12
<b>Total</b>	<b>549</b>	<b>151,449</b>	<b>0.36</b>	<b>81</b>	<b>155,557</b>	<b>0.05</b>	<b>630</b>	<b>307,007</b>	<b>0.21</b>

Age (Years)	Male			Female			Total		
	Injured	Population (Thousands)	Rate	Injured	Population (Thousands)	Rate	Injured	Population (Thousands)	Rate
<5	*	10,887	4	*	10,413	**	*	21,300	2
5-9	2,000	10,536	17	*	10,074	4	2,000	20,610	11
10-15	6,000	12,340	50	2,000	11,767	14	8,000	24,107	32
16-20	6,000	11,166	51	1,000	10,578	12	7,000	21,744	32
21-24	4,000	8,861	50	2,000	8,339	25	7,000	17,200	38
25-34	8,000	21,224	40	1,000	20,343	7	10,000	41,566	24
35-44	3,000	20,857	15	*	20,673	2	4,000	41,530	9
45-54	6,000	21,973	28	2,000	22,619	8	8,000	44,592	18
55-64	3,000	16,782	19	1,000	18,005	5	4,000	34,787	12
65-74	1,000	9,593	9	*	11,199	1	1,000	20,792	5
>74	*	7,230	3	*	11,548	1	*	18,779	2
<b>Total</b>	<b>41,000</b>	<b>151,449</b>	<b>27</b>	<b>10,000</b>	<b>155,557</b>	<b>7</b>	<b>51,000</b>	<b>307,007</b>	<b>17</b>

\*Less than 500.

\*\*Less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Source: Population—Bureau of the Census.

## Chapter 4 ■ People

**Table 103**  
**Pedalcyclists Killed or Injured, by Time of Day and Day of Week**

Time of Day	Day of Week				Total	
	Weekday		Weekend			
	Number	Percent	Number	Percent	Number	Percent
Pedalcyclists Killed						
Midnight to 3 am	22	5.4	24	10.7	46	7.3
3 am to 6 am	15	3.7	16	7.1	31	4.9
6 am to 9 am	51	12.6	21	9.4	72	11.4
9 am to Noon	52	12.8	16	7.1	68	10.8
Noon to 3 pm	56	13.8	21	9.4	77	12.2
3 pm to 6 pm	89	21.9	28	12.5	117	18.6
6 pm to 9 pm	85	20.9	53	23.7	138	21.9
9 pm to Midnight	35	8.6	45	20.1	80	12.7
Unknown	1	0.2	0	0.0	1	0.2
Total	406	100.0	224	100.0	630	100.0
Pedalcyclists Injured						
Midnight to 3 am	*	0.5	*	1.2	*	0.7
3 am to 6 am	*	1.1	*	0.7	*	1.0
6 am to 9 am	5,000	14.7	*	2.4	6,000	11.3
9 am to Noon	4,000	12.3	2,000	13.3	6,000	12.6
Noon to 3 pm	6,000	15.6	2,000	14.5	8,000	15.3
3 pm to 6 pm	12,000	32.0	5,000	34.5	17,000	32.7
6 pm to 9 pm	7,000	20.0	3,000	18.4	10,000	19.6
9 pm to Midnight	1,000	3.7	2,000	15.0	3,000	6.9
Total	37,000	100.0	14,000	100.0	51,000	100.0

\*Less than 500.

**Table 104**

**Pedalcyclists Killed or Injured in Single-Vehicle Crashes, by Vehicle Type and Initial Point of Impact**

Initial Point of Impact												
	Front		Right Side		Left Side		Rear		Other/Unknown		Total	
Vehicle Type	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Pedalcyclists Killed												
Passenger Car	220	92.8	8	3.4	5	2.1	1	0.4	3	1.3	237	100.0
Light Truck	239	88.5	17	6.3	3	1.1	9	3.3	2	0.7	270	100.0
Large Truck	25	45.5	15	27.3	5	9.1	6	10.9	4	7.3	55	100.0
Bus	3	60.0	1	20.0	0	0.0	1	20.0	0	0.0	5	100.0
Other/Unknown	22	66.7	2	6.1	0	0.0	0	0.0	9	27.3	33	100.0
Total	509	84.8	43	7.2	13	2.2	17	2.8	18	3.0	600	100.0
Pedalcyclists Injured												
Passenger Car	18,000	63.8	6,000	20.4	4,000	12.7	1,000	3.1	*	*	29,000	100.0
Light Truck	12,000	55.7	7,000	33.0	2,000	8.6	1,000	2.8	*	*	21,000	100.0
Other	*	38.7	*	50.1	*	5.2	*	3.0	*	3.0	1,000	100.0
Total	30,000	60.1	13,000	26.1	5,000	10.9	1,000	2.9	*	*	51,000	100.0

\*Less than 500 or less than 0.05 percent.

## Chapter 4 ■ People

**Table 105**  
**Pedalcyclists Killed, by Related Factors**

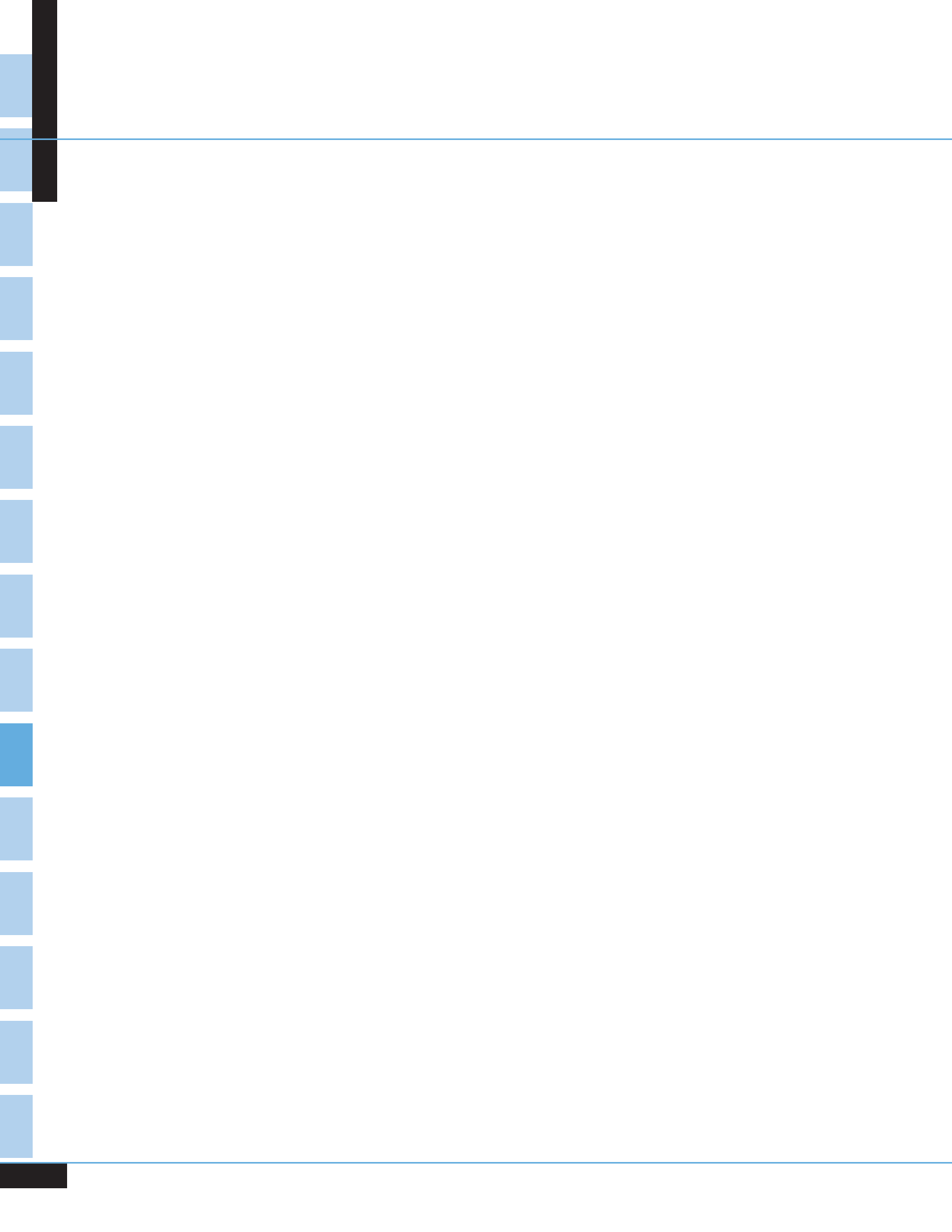
Factors	Number	Percent
Failure to yield right of way . . . . .	117	18.6
Under the influence of alcohol, drugs or medication . . . . .	67	10.6
Failure to obey (e.g., signs, control devices, officers) . . . . .	60	9.5
Walking, playing, working, etc., in roadway . . . . .	51	8.1
Improper crossing of roadway or intersection . . . . .	44	7.0
Operating without required equipment . . . . .	38	6.0
Not visible . . . . .	34	5.4
Darting into road . . . . .	32	5.1
Riding on wrong side of road . . . . .	25	4.0
Making improper turn . . . . .	19	3.0
Improper lane changing . . . . .	18	2.9
Failure to keep in proper lane or running off road . . . . .	17	2.7
Inattentive (talking, eating, etc.) . . . . .	11	1.7
Improper entry to or exit from trafficway . . . . .	4	0.6
Failing to have lights on when required . . . . .	2	0.3
Portable electronic devices . . . . .	2	0.3
Erratic, reckless, careless, or negligent operation . . . . .	0	0.0
Other factors . . . . .	25	4.0
None reported . . . . .	239	37.9
Unknown . . . . .	19	3.0
<b>Total Pedalcyclists . . . . .</b>	<b>630</b>	<b>100.0</b>

Note: The sum of the numbers and percentages is greater than total pedalcyclists killed as more than one factor may be present for the same pedalcyclist.



# Chapter 5

# STATES



## CHAPTER 5 ■ STATES

Fatal crash and fatality statistics for each of the 50 States, the District of Columbia, and Puerto Rico are presented in this chapter. Several tables display State fatality rates based on population, licensed drivers, and registered vehicles. The last three tables describe each State's occupant restraint laws, motorcycle helmet laws, and driver's blood alcohol concentration laws. Below are some of the State statistics you will find in this chapter:

- Traffic fatalities dropped by 10 percent from 2008 to 2009 for the Nation as a whole. Forty-one States, the District of Columbia, and Puerto Rico showed decreases, ranging from 1 percent to as much as 26 percent.
- The pedestrian fatality rate per 100,000 population was 1.33 for the Nation. Florida had the highest rate (2.51), and Wyoming, with two pedestrian fatalities, had the lowest rate (0.37).
- About 1.9 percent of all traffic crash fatalities in 2009 were pedalcyclists. Maine, Rhode Island, South Dakota, Vermont, West Virginia, and the District of Columbia reported no pedalcyclists killed.
- In 2009, all 50 States, the District of Columbia, and Puerto Rico had seat belt use laws. All 50 States, the District of Columbia, and Puerto Rico also had laws requiring children of certain ages to be restrained in child safety seats.
- Motorcycle helmets were required for all riders in 20 States, the District of Columbia, and Puerto Rico in 2009. Twenty-seven States had helmet requirements with exceptions (age, rider type, roadway type), and three States (Illinois, Iowa, and New Hampshire) did not require helmets at all.
- In 2009, it was a criminal offense to operate a motor vehicle at a blood alcohol concentration (BAC) of .08 g/dL or above in all 50 States, the District of Columbia, and Puerto Rico.

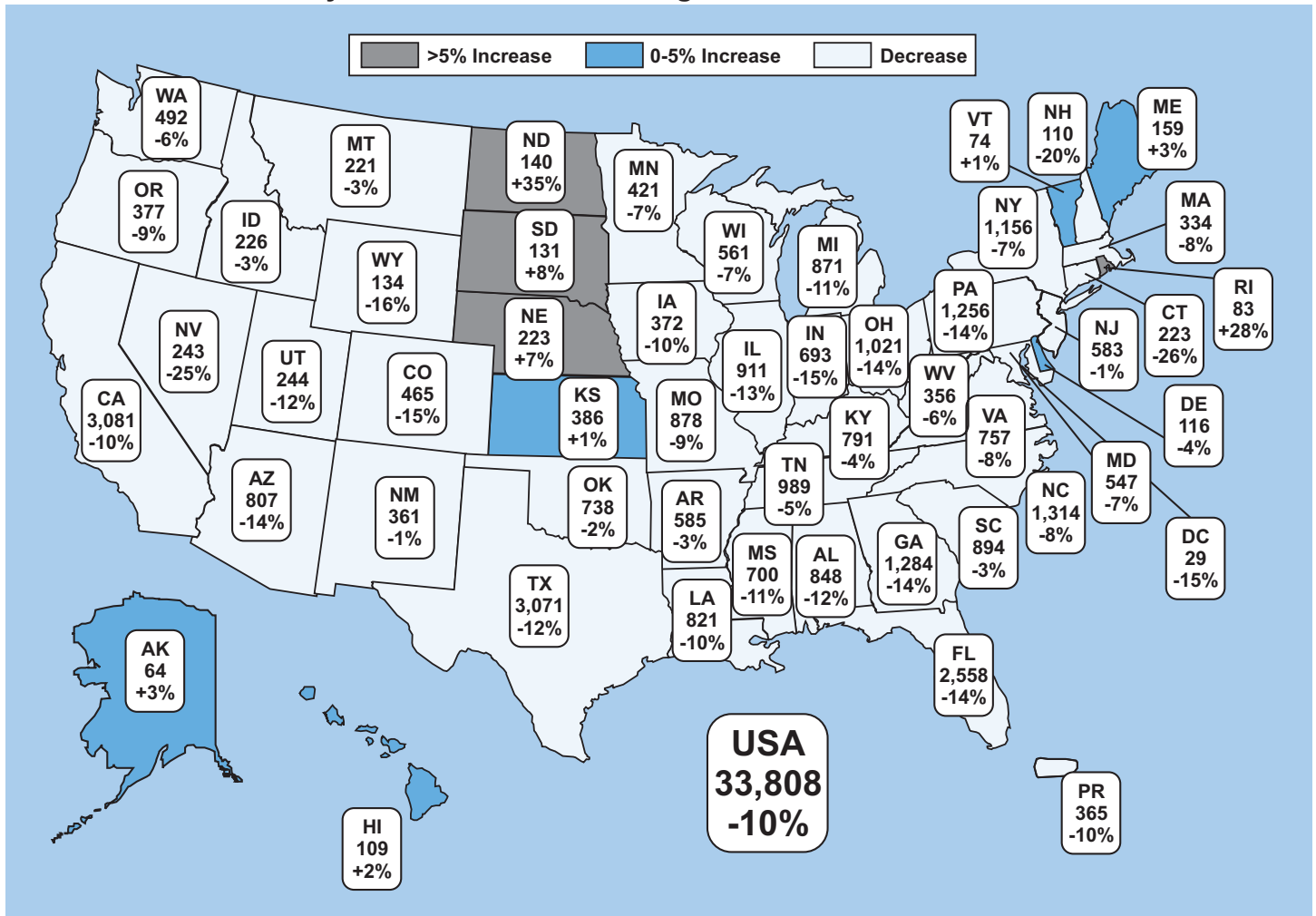
## Chapter 5 ■ States

**Table 106**

**2009 Traffic Fatalities by State and Percent Change from 2008**

State	Fatalities			State	Fatalities		
	2008	2009	Percent Change		2008	2009	Percent Change
AL	969	848	-12	NE	208	223	+7
AK	62	64	+3	NV	324	243	-25
AZ	938	807	-14	NH	138	110	-20
AR	600	585	-3	NJ	590	583	-1
CA	3,434	3,081	-10	NM	366	361	-1
CO	548	465	-15	NY	1,238	1,156	-7
CT	302	223	-26	NC	1,428	1,314	-8
DE	121	116	-4	ND	104	140	+35
DC	34	29	-15	OH	1,191	1,021	-14
FL	2,980	2,558	-14	OK	750	738	-2
GA	1,495	1,284	-14	OR	416	377	-9
HI	107	109	+2	PA	1,468	1,256	-14
ID	232	226	-3	RI	65	83	+28
IL	1,043	911	-13	SC	921	894	-3
IN	820	693	-15	SD	121	131	+8
IA	412	372	-10	TN	1,043	989	-5
KS	384	386	+1	TX	3,476	3,071	-12
KY	825	791	-4	UT	276	244	-12
LA	916	821	-10	VT	73	74	+1
ME	155	159	+3	VA	825	757	-8
MD	591	547	-7	WA	521	492	-6
MA	364	334	-8	WV	378	356	-6
MI	980	871	-11	WI	605	561	-7
MN	455	421	-7	WY	159	134	-16
MS	783	700	-11	<b>USA</b>	<b>37,423</b>	<b>33,808</b>	<b>-10</b>
MO	960	878	-9				
MT	229	221	-3	PR	405	365	-10

## 2009 Traffic Fatalities by State and Percent Change from 2008



## Chapter 5 ■ States

**Table 107**  
**Fatal Crashes, by State and First Harmful Event**

State	First Harmful Event												Total Fatal Crashes	
	Collision with						Non-Collision							
	Motor Vehicle in Transport		Nonoccupant		Fixed Object		Object Not Fixed		Overturn		Other			
Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
AL	290	37.5	65	8.4	337	43.5	14	1.8	65	8.4	3	0.4	774	100.0
AK	21	35.6	12	20.3	11	18.6	3	5.1	8	13.6	4	6.8	59	100.0
AZ	222	31.3	143	20.1	161	22.7	19	2.7	134	18.9	13	1.8	710	100.0
AR	202	38.6	39	7.5	196	37.5	12	2.3	64	12.2	9	1.7	523	100.0
CA	913	32.4	657	23.3	861	30.6	80	2.8	261	9.3	44	1.6	2,816	100.0
CO	142	32.5	60	13.7	121	27.7	15	3.4	96	22.0	3	0.7	437	100.0
CT	68	32.4	24	11.4	101	48.1	2	1.0	14	6.7	1	0.5	210	100.0
DE	37	36.6	21	20.8	38	37.6	1	1.0	3	3.0	1	1.0	101	100.0
DC	8	28.6	12	42.9	6	21.4	1	3.6	0	0.0	1	3.6	28	100.0
FL	842	35.5	565	23.8	684	28.9	46	1.9	204	8.6	28	1.2	2,369	100.0
GA	446	38.1	165	14.1	440	37.5	23	2.0	89	7.6	7	0.6	1,172	100.0
HI	25	25.3	18	18.2	42	42.4	5	5.1	9	9.1	0	0.0	99	100.0
ID	66	33.2	16	8.0	61	30.7	5	2.5	48	24.1	3	1.5	199	100.0
IL	349	41.9	123	14.8	233	28.0	28	3.4	87	10.5	12	1.4	832	100.0
IN	268	42.4	56	8.9	224	35.4	26	4.1	43	6.8	15	2.4	632	100.0
IA	149	44.0	22	6.5	77	22.7	12	3.5	75	22.1	4	1.2	339	100.0
KS	131	37.6	27	7.8	103	29.6	14	4.0	71	20.4	2	0.6	348	100.0
KY	313	42.9	46	6.3	296	40.5	14	1.9	55	7.5	6	0.8	730	100.0
LA	255	35.1	110	15.2	291	40.1	12	1.7	54	7.4	4	0.6	726	100.0
ME	71	46.4	11	7.2	64	41.8	2	1.3	4	2.6	1	0.7	153	100.0
MD	183	35.7	116	22.6	172	33.5	12	2.3	24	4.7	5	1.0	513	100.0
MA	99	32.1	52	16.9	113	36.7	17	5.5	22	7.1	3	1.0	308	100.0
MI	353	43.8	129	16.0	227	28.2	30	3.7	56	6.9	11	1.4	806	100.0
MN	151	40.7	50	13.5	99	26.7	13	3.5	53	14.3	5	1.3	371	100.0
MS	208	33.0	68	10.8	249	39.5	22	3.5	84	13.3	0	0.0	631	100.0
MO	294	37.4	67	8.5	312	39.7	23	2.9	82	10.4	8	1.0	786	100.0
MT	56	28.3	15	7.6	53	26.8	7	3.5	62	31.3	5	2.5	198	100.0
NE	100	48.8	12	5.9	55	26.8	5	2.4	33	16.1	0	0.0	205	100.0
NV	81	36.3	41	18.4	55	24.7	5	2.2	39	17.5	2	0.9	223	100.0
NH	39	40.2	9	9.3	34	35.1	3	3.1	10	10.3	2	2.1	97	100.0

**Table 107**  
**Fatal Crashes, by State and First Harmful Event (Continued)**

State	First Harmful Event												Total Fatal Crashes	
	Collision with								Non-Collision					
	Motor Vehicle in Transport		Nonoccupant		Fixed Object		Object Not Fixed		Overturn		Other			
Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
NJ	183	33.3	157	28.6	170	31.0	18	3.3	16	2.9	5	0.9	549	100.0
NM	112	35.1	41	12.9	39	12.2	6	1.9	118	37.0	3	0.9	319	100.0
NY	365	34.2	310	29.1	329	30.8	37	3.5	16	1.5	9	0.8	1,067	100.0
NC	450	37.3	159	13.2	469	38.8	22	1.8	94	7.8	14	1.2	1,208	100.0
ND	48	41.4	4	3.4	17	14.7	4	3.4	41	35.3	2	1.7	116	100.0
OH	392	41.5	102	10.8	372	39.4	22	2.3	44	4.7	12	1.3	944	100.0
OK	231	35.7	39	6.0	249	38.5	16	2.5	97	15.0	15	2.3	647	100.0
OR	108	32.6	44	13.3	93	28.1	9	2.7	69	20.8	8	2.4	331	100.0
PA	455	39.8	133	11.6	470	41.1	28	2.4	51	4.5	5	0.4	1,143	100.0
RI	19	25.0	16	21.1	33	43.4	2	2.6	4	5.3	2	2.6	76	100.0
SC	274	33.5	97	11.9	352	43.1	21	2.6	70	8.6	3	0.4	817	100.0
SD	28	25.0	4	3.6	17	15.2	9	8.0	52	46.4	2	1.8	112	100.0
TN	310	33.8	77	8.4	438	47.7	17	1.9	63	6.9	13	1.4	918	100.0
TX	1,034	37.2	357	12.9	875	31.5	74	2.7	389	14.0	44	1.6	2,776	100.0
UT	79	36.4	21	9.7	45	20.7	8	3.7	52	24.0	12	5.5	217	100.0
VT	26	37.7	4	5.8	28	40.6	5	7.2	5	7.2	1	1.4	69	100.0
VA	217	31.2	78	11.2	349	50.2	18	2.6	28	4.0	5	0.7	695	100.0
WA	152	33.6	69	15.2	140	30.9	9	2.0	76	16.8	7	1.5	453	100.0
WV	99	30.6	21	6.5	156	48.1	6	1.9	38	11.7	4	1.2	324	100.0
WI	199	39.4	42	8.3	169	33.5	20	4.0	65	12.9	10	2.0	505	100.0
WY	27	23.3	4	3.4	29	25.0	5	4.3	45	38.8	6	5.2	116	100.0
USA	11,190	36.3	4,530	14.7	10,555	34.3	827	2.7	3,282	10.7	384	1.2	*30,797	100.0
PR	95	27.7	125	36.4	100	29.2	9	2.6	1	0.3	13	3.8	343	100.0

\*Total includes 29 crashes with unknown first harmful event.

## Chapter 5 ■ States

**Table 108**  
**Fatal Crashes, by State and Roadway Function Class**

State	Roadway Function Class								Total Fatal Crashes
	Principal Arterial								
	Interstate		Freeway and Expressway	Other	Minor Arterial	Collector	Local	Unknown	
Rural	Urban								
AL	31	36	70	93	128	195	141	80	774
AK	12	8	0	11	11	11	4	2	59
AZ	88	30	25	169	131	143	121	3	710
AR	35	21	8	133	90	120	116	0	523
CA	137	255	286	906	436	357	439	0	2,816
CO	53	19	20	144	97	55	49	0	437
CT	5	30	22	45	45	32	31	0	210
DE	0	4	0	39	6	33	16	3	101
DC	0	3	0	0	0	0	25	0	28
FL	85	186	74	785	273	48	841	77	2,369
GA	78	82	8	234	308	226	191	45	1,172
HI	0	5	5	29	31	17	12	0	99
ID	20	6	2	68	25	44	25	9	199
IL	51	71	7	220	184	172	127	0	832
IN	40	17	0	0	110	158	307	0	632
IA	26	16	0	78	45	83	91	0	339
KS	28	0	4	93	69	67	87	0	348
KY	56	21	4	152	110	247	139	1	730
LA	43	67	4	121	149	215	92	35	726
ME	10	0	0	32	44	33	34	0	153
MD	3	52	38	134	122	108	51	5	513
MA	2	57	84	5	28	4	128	0	308
MI	27	36	31	215	193	183	120	1	806
MN	13	10	9	88	101	92	57	1	371
MS	35	29	12	97	16	316	123	3	631
MO	23	66	75	151	145	201	125	0	786
MT	36	1	0	58	40	34	28	1	198
NE	16	2	2	60	38	36	51	0	205
NV	28	13	4	56	65	29	26	2	223
NH	13	0	0	0	4	33	47	0	97



**Table 108**  
**Fatal Crashes, by State and Roadway Function Class (Continued)**

State	Roadway Function Class								Total Fatal Crashes
	Principal Arterial								
	Interstate		Freeway and Expressway	Other	Minor Arterial	Collector	Local	Unknown	
Rural	Urban								
NJ	2	41	50	194	124	60	78	0	549
NM	65	4	3	232	4	6	2	3	319
NY	55	14	18	439	123	115	300	3	1,067
NC	46	30	22	296	37	447	330	0	1,208
ND	12	1	0	44	14	18	27	0	116
OH	47	51	28	154	138	309	210	7	944
OK	35	46	22	132	142	168	96	6	647
OR	30	3	0	106	61	94	36	1	331
PA	34	51	26	294	278	232	228	0	1,143
RI	2	6	7	14	3	1	16	27	76
SC	79	9	0	196	164	367	0	2	817
SD	16	2	0	24	19	35	16	0	112
TN	50	58	9	205	217	234	145	0	918
TX	130	237	174	529	383	533	774	16	2,776
UT	43	18	2	56	54	4	40	0	217
VT	7	1	2	15	9	17	16	2	69
VA	43	50	10	162	161	148	117	4	695
WA	20	26	6	177	63	101	29	31	453
WV	26	14	3	76	74	82	49	0	324
WI	15	12	21	137	103	118	99	0	505
WY	22	8	0	29	9	35	13	0	116
USA	1,773	1,825	1,197	7,727	5,224	6,416	6,265	370	30,797
PR	29	27	12	66	78	70	61	0	343

## Chapter 5 ■ States

**Table 109**  
**Fatalities, by State and Roadway Function Class**

State	Roadway Function Class								Total Fatalities
	Principal Arterial								
	Interstate		Freeway and Expressway	Other	Minor Arterial	Collector	Local	Unknown	
Rural	Urban								
AL	35	45	75	106	145	208	151	83	848
AK	14	9	0	11	13	11	4	2	64
AZ	104	38	25	199	143	165	130	3	807
AR	46	23	8	151	102	131	124	0	585
CA	155	283	308	1,009	466	397	463	0	3,081
CO	56	20	21	157	103	57	51	0	465
CT	6	31	25	50	48	32	31	0	223
DE	0	6	0	46	6	38	17	3	116
DC	0	3	0	0	0	0	26	0	29
FL	99	202	79	843	298	49	909	79	2,558
GA	99	98	8	258	331	241	201	48	1,284
HI	0	5	7	33	32	20	12	0	109
ID	21	8	2	81	29	49	27	9	226
IL	56	75	10	240	210	181	139	0	911
IN	53	24	0	0	112	173	331	0	693
IA	29	18	0	90	50	90	95	0	372
KS	33	0	4	108	79	69	93	0	386
KY	60	25	4	166	119	275	141	1	791
LA	51	85	4	127	164	247	105	38	821
ME	10	0	0	33	45	35	36	0	159
MD	3	58	44	144	125	117	51	5	547
MA	4	65	91	5	30	4	135	0	334
MI	28	38	33	232	210	200	129	1	871
MN	17	12	13	99	111	107	61	1	421
MS	40	30	14	108	16	348	141	3	700
MO	29	66	80	175	174	224	130	0	878
MT	39	1	0	69	47	35	29	1	221
NE	19	2	2	66	41	39	54	0	223
NV	31	16	4	64	67	32	27	2	243
NH	13	0	0	0	5	40	52	0	110

**Table 109**  
**Fatalities, by State and Roadway Function Class (Continued)**

State	Roadway Function Class								Total Fatalities
	Principal Arterial								
	Interstate		Freeway and Expressway	Other	Minor Arterial	Collector	Local	Unknown	
Rural	Urban								
NJ	2	46	57	202	132	64	80	0	583
NM	73	4	3	266	4	6	2	3	361
NY	59	14	19	482	135	127	317	3	1,156
NC	57	30	25	328	41	488	345	0	1,314
ND	13	1	0	54	17	22	33	0	140
OH	50	53	29	166	151	336	227	9	1,021
OK	51	48	23	156	165	189	100	6	738
OR	38	3	0	128	71	98	38	1	377
PA	38	56	28	328	301	264	241	0	1,256
RI	3	9	7	15	3	1	17	28	83
SC	85	9	0	220	183	395	0	2	894
SD	20	2	0	29	22	41	17	0	131
TN	58	67	9	223	234	246	152	0	989
TX	151	252	187	585	447	604	829	16	3,071
UT	50	18	2	65	61	4	44	0	244
VT	7	1	3	17	10	17	17	2	74
VA	48	58	10	175	179	158	125	4	757
WA	23	28	6	199	66	109	29	32	492
WV	30	17	3	83	88	85	50	0	356
WI	18	14	25	160	110	128	106	0	561
WY	26	9	0	36	11	38	14	0	134
USA	2,050	2,025	1,297	8,587	5,752	7,034	6,678	385	33,808
PR	31	28	13	72	84	72	65	0	365

## Chapter 5 ■ States

**Table 110**

**Persons Killed, Licensed Drivers, Registered Vehicles, Population, and Fatality Rates by State**

State	Licensed Drivers (Thousands)	Fatalities per 100,000 Drivers	Registered Vehicles (Thousands)	Fatalities per 100,000 Registered Vehicles	Population (Thousands)	Fatalities per 100,000 Population	Total Killed
AL	—	—	—	—	4,709	18.01	848
AK	—	—	—	—	698	9.16	64
AZ	—	—	—	—	6,596	12.24	807
AR	—	—	—	—	2,889	20.25	585
CA	—	—	—	—	36,962	8.34	3,081
CO	—	—	—	—	5,025	9.25	465
CT	—	—	—	—	3,518	6.34	223
DE	—	—	—	—	885	13.11	116
DC	—	—	—	—	600	4.84	29
FL	—	—	—	—	18,538	13.80	2,558
GA	—	—	—	—	9,829	13.06	1,284
HI	—	—	—	—	1,295	8.42	109
ID	—	—	—	—	1,546	14.62	226
IL	—	—	—	—	12,910	7.06	911
IN	—	—	—	—	6,423	10.79	693
IA	—	—	—	—	3,008	12.37	372
KS	—	—	—	—	2,819	13.69	386
KY	—	—	—	—	4,314	18.34	791
LA	—	—	—	—	4,492	18.28	821
ME	—	—	—	—	1,318	12.06	159
MD	—	—	—	—	5,699	9.60	547
MA	—	—	—	—	6,594	5.07	334
MI	—	—	—	—	9,970	8.74	871
MN	—	—	—	—	5,266	7.99	421
MS	—	—	—	—	2,952	23.71	700
MO	—	—	—	—	5,988	14.66	878
MT	—	—	—	—	975	22.67	221
NE	—	—	—	—	1,797	12.41	223
NV	—	—	—	—	2,643	9.19	243
NH	—	—	—	—	1,325	8.30	110

Table 110

**Persons Killed, Licensed Drivers, Registered Vehicles, Population, and Fatality Rates by State (Continued)**

State	Licensed Drivers (Thousands)	Fatalities per 100,000 Drivers	Registered Vehicles (Thousands)	Fatalities per 100,000 Registered Vehicles	Population (Thousands)	Fatalities per 100,000 Population	Total Killed
NJ	—	—	—	—	8,708	6.70	583
NM	—	—	—	—	2,010	17.96	361
NY	—	—	—	—	19,541	5.92	1,156
NC	—	—	—	—	9,381	14.01	1,314
ND	—	—	—	—	647	21.64	140
OH	—	—	—	—	11,543	8.85	1,021
OK	—	—	—	—	3,687	20.02	738
OR	—	—	—	—	3,826	9.85	377
PA	—	—	—	—	12,605	9.96	1,256
RI	—	—	—	—	1,053	7.88	83
SC	—	—	—	—	4,561	19.60	894
SD	—	—	—	—	812	16.13	131
TN	—	—	—	—	6,296	15.71	989
TX	—	—	—	—	24,782	12.39	3,071
UT	—	—	—	—	2,785	8.76	244
VT	—	—	—	—	622	11.90	74
VA	—	—	—	—	7,883	9.60	757
WA	—	—	—	—	6,664	7.38	492
WV	—	—	—	—	1,820	19.56	356
WI	—	—	—	—	5,655	9.92	561
WY	—	—	—	—	544	24.62	134
<b>USA</b>	—	—	—	—	<b>307,007</b>	<b>11.01</b>	<b>33,808</b>
PR	—	—	—	—	3,967	9.20	365

Note: Some States include restricted driver licenses and graduated driver licenses in their licensed driver counts.

Sources: Fatalities—Fatality Analysis Reporting System (FARS); Licensed Drivers (estimated)—Federal Highway Administration; Registered Vehicles for USA—R.L. Polk & Co. and Federal Highway Administration; Population—Bureau of the Census.

## Chapter 5 ■ States

**Table 111**  
**Persons Killed, by State and Person Type**

State	Person Type												Total Killed	
	Driver		Passenger		Motorcyclist		Pedestrian		Pedalcyclist		Other/Unknown			
State	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
AL	538	63.4	162	19.1	76	9.0	64	7.5	6	0.7	2	0.2	848	100.0
AK	27	42.2	18	28.1	7	10.9	9	14.1	2	3.1	1	1.6	64	100.0
AZ	314	38.9	195	24.2	121	15.0	120	14.9	25	3.1	32	4.0	807	100.0
AR	358	61.2	111	19.0	70	12.0	36	6.2	5	0.9	5	0.9	585	100.0
CA	1,293	42.0	689	22.4	394	12.8	563	18.3	99	3.2	43	1.4	3,081	100.0
CO	234	50.3	82	17.6	88	18.9	47	10.1	10	2.2	4	0.9	465	100.0
CT	115	51.6	36	16.1	45	20.2	26	11.7	1	0.4	0	0.0	223	100.0
DE	55	47.4	26	22.4	14	12.1	15	12.9	6	5.2	0	0.0	116	100.0
DC	6	20.7	4	13.8	4	13.8	14	48.3	0	0.0	1	3.4	29	100.0
FL	1,099	43.0	453	17.7	413	16.1	466	18.2	107	4.2	20	0.8	2,558	100.0
GA	728	56.7	236	18.4	140	10.9	150	11.7	21	1.6	9	0.7	1,284	100.0
HI	40	36.7	15	13.8	35	32.1	16	14.7	3	2.8	0	0.0	109	100.0
ID	118	52.2	57	25.2	34	15.0	10	4.4	7	3.1	0	0.0	226	100.0
IL	459	50.4	190	20.9	130	14.3	111	12.2	20	2.2	1	0.1	911	100.0
IN	386	55.7	136	19.6	111	16.0	50	7.2	7	1.0	3	0.4	693	100.0
IA	229	61.6	71	19.1	49	13.2	21	5.6	2	0.5	0	0.0	372	100.0
KS	226	58.5	86	22.3	47	12.2	22	5.7	5	1.3	0	0.0	386	100.0
KY	511	64.6	148	18.7	86	10.9	41	5.2	5	0.6	0	0.0	791	100.0
LA	439	53.5	157	19.1	103	12.5	107	13.0	13	1.6	2	0.2	821	100.0
ME	99	62.3	25	15.7	24	15.1	11	6.9	0	0.0	0	0.0	159	100.0
MD	269	49.2	83	15.2	69	12.6	113	20.7	11	2.0	2	0.4	547	100.0
MA	163	48.8	62	18.6	54	16.2	48	14.4	6	1.8	1	0.3	334	100.0
MI	443	50.9	175	20.1	109	12.5	118	13.5	19	2.2	7	0.8	871	100.0
MN	220	52.3	96	22.8	52	12.4	42	10.0	10	2.4	1	0.2	421	100.0
MS	440	62.9	145	20.7	47	6.7	58	8.3	10	1.4	0	0.0	700	100.0
MO	519	59.1	199	22.7	87	9.9	68	7.7	2	0.2	3	0.3	878	100.0
MT	140	63.3	39	17.6	26	11.8	15	6.8	1	0.5	0	0.0	221	100.0
NE	155	69.5	41	18.4	15	6.7	9	4.0	3	1.3	0	0.0	223	100.0
NV	101	41.6	58	23.9	42	17.3	35	14.4	6	2.5	1	0.4	243	100.0
NH	54	49.1	26	23.6	21	19.1	8	7.3	1	0.9	0	0.0	110	100.0

**Table 111**  
**Persons Killed, by State and Person Type (Continued)**

State	Person Type												Total Killed	
	Driver		Passenger		Motorcyclist		Pedestrian		Pedalcyclist		Other/Unknown			
State	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
NJ	253	43.4	93	16.0	65	11.1	157	26.9	13	2.2	2	0.3	583	100.0
NM	184	51.0	93	25.8	40	11.1	39	10.8	3	0.8	2	0.6	361	100.0
NY	461	39.9	203	17.6	155	13.4	306	26.5	29	2.5	2	0.2	1,156	100.0
NC	734	55.9	256	19.5	155	11.8	146	11.1	16	1.2	7	0.5	1,314	100.0
ND	88	62.9	40	28.6	7	5.0	4	2.9	1	0.7	0	0.0	140	100.0
OH	553	54.2	189	18.5	166	16.3	85	8.3	19	1.9	9	0.9	1,021	100.0
OK	425	57.6	161	21.8	108	14.6	31	4.2	11	1.5	2	0.3	738	100.0
OR	199	52.8	80	21.2	53	14.1	35	9.3	8	2.1	2	0.5	377	100.0
PA	675	53.7	216	17.2	204	16.2	134	10.7	15	1.2	12	1.0	1,256	100.0
RI	31	37.3	17	20.5	19	22.9	16	19.3	0	0.0	0	0.0	83	100.0
SC	512	57.3	170	19.0	108	12.1	89	10.0	11	1.2	4	0.4	894	100.0
SD	75	57.3	33	25.2	16	12.2	4	3.1	0	0.0	3	2.3	131	100.0
TN	574	58.0	211	21.3	121	12.2	70	7.1	9	0.9	4	0.4	989	100.0
TX	1,628	53.0	614	20.0	426	13.9	344	11.2	48	1.6	11	0.4	3,071	100.0
UT	119	48.8	70	28.7	30	12.3	19	7.8	5	2.0	1	0.4	244	100.0
VT	49	66.2	11	14.9	8	10.8	5	6.8	0	0.0	1	1.4	74	100.0
VA	437	57.7	154	20.3	77	10.2	73	9.6	11	1.5	5	0.7	757	100.0
WA	242	49.2	109	22.2	69	14.0	61	12.4	9	1.8	2	0.4	492	100.0
WV	230	64.6	79	22.2	25	7.0	21	5.9	0	0.0	1	0.3	356	100.0
WI	319	56.9	108	19.3	84	15.0	38	6.8	7	1.2	5	0.9	561	100.0
WY	74	55.2	42	31.3	13	9.7	2	1.5	2	1.5	1	0.7	134	100.0
USA	17,640	52.2	6,770	20.0	4,462	13.2	4,092	12.1	630	1.9	214	0.6	33,808	100.0
PR	116	31.8	64	17.5	54	14.8	109	29.9	17	4.7	5	1.4	365	100.0

## Chapter 5 ■ States

**Table 112**  
**Persons Killed, by State and Age Group**

State	Age Group (Years)											Unknown	Total Killed
	<5	5-9	10-15	16-20	21-24	25-34	35-44	45-54	55-64	65-74	>74		
AL	11	8	24	112	69	135	128	123	98	66	67	7	848
AK	3	1	1	8	4	14	8	14	4	5	2	0	64
AZ	19	11	20	71	68	141	120	118	103	58	68	10	807
AR	7	9	12	59	44	107	90	106	71	49	30	1	585
CA	52	49	58	351	336	529	392	500	343	204	263	4	3,081
CO	4	4	9	45	49	77	64	85	59	33	36	0	465
CT	2	1	2	30	26	48	34	28	27	8	16	1	223
DE	1	5	7	13	11	15	14	24	5	12	9	0	116
DC	0	0	1	2	3	8	5	5	2	1	1	1	29
FL	21	23	42	251	266	412	365	438	289	209	238	4	2,558
GA	12	19	24	113	120	233	190	196	174	118	83	2	1,284
HI	1	2	1	16	16	22	17	13	11	4	6	0	109
ID	3	4	9	28	15	32	38	31	29	19	18	0	226
IL	12	12	12	98	94	161	137	141	91	51	102	0	911
IN	7	8	19	78	68	122	108	106	58	54	64	1	693
IA	6	2	11	37	29	60	57	62	42	37	28	1	372
KS	6	2	7	55	35	74	39	57	40	32	39	0	386
KY	14	3	14	84	76	145	112	127	89	58	69	0	791
LA	13	10	24	114	74	158	136	136	72	41	42	1	821
ME	1	2	1	17	17	26	19	25	22	11	18	0	159
MD	1	5	12	66	54	86	59	108	60	44	48	4	547
MA	3	3	7	34	43	55	45	53	37	29	25	0	334
MI	7	11	17	110	59	140	114	152	93	54	113	1	871
MN	10	4	8	42	31	54	65	63	60	27	57	0	421
MS	10	6	25	97	61	128	109	107	78	33	46	0	700
MO	9	10	16	107	85	140	135	141	96	55	83	1	878
MT	2	4	6	32	23	36	32	32	22	21	11	0	221
NE	2	2	8	30	21	38	36	32	18	14	22	0	223
NV	3	3	6	28	31	29	33	43	33	20	14	0	243
NH	1	2	1	14	9	7	8	29	18	11	10	0	110



**Table 112**  
**Persons Killed, by State and Age Group (Continued)**

State	Age Group (Years)											Unknown	Total Killed
	<5	5-9	10-15	16-20	21-24	25-34	35-44	45-54	55-64	65-74	>74		
NJ	2	5	10	54	47	91	79	86	72	51	86	0	583
NM	11	5	9	45	33	57	59	52	34	23	29	4	361
NY	14	19	25	130	116	191	132	158	125	96	138	12	1,156
NC	17	18	23	165	146	217	171	213	150	81	111	2	1,314
ND	2	2	2	20	10	24	17	20	19	4	19	1	140
OH	13	9	23	124	72	158	160	177	113	74	98	0	1,021
OK	11	9	24	88	66	114	125	112	70	63	56	0	738
OR	2	3	9	45	32	62	56	61	45	27	35	0	377
PA	9	10	21	152	127	189	164	216	121	88	158	1	1,256
RI	0	0	1	14	7	11	8	20	4	10	8	0	83
SC	8	8	15	102	85	174	137	144	107	57	56	1	894
SD	2	5	2	22	13	17	27	13	19	4	7	0	131
TN	11	4	18	110	88	175	137	172	111	67	95	1	989
TX	57	36	78	386	312	576	486	449	340	170	169	12	3,071
UT	4	5	13	36	23	27	26	44	34	11	21	0	244
VT	1	0	2	7	5	3	12	13	12	8	11	0	74
VA	9	4	12	94	96	124	106	112	75	58	67	0	757
WA	6	5	14	61	62	85	62	76	63	28	29	1	492
WV	3	1	3	42	45	55	56	49	51	21	30	0	356
WI	4	4	18	69	54	87	79	88	60	44	54	0	561
WY	1	3	2	24	11	20	18	27	12	11	5	0	134
<b>USA</b>	<b>430</b>	<b>380</b>	<b>728</b>	<b>3,932</b>	<b>3,287</b>	<b>5,689</b>	<b>4,826</b>	<b>5,397</b>	<b>3,781</b>	<b>2,374</b>	<b>2,910</b>	<b>74</b>	<b>33,808</b>
PR	1	9	14	30	45	74	51	47	28	30	26	10	365

## Chapter 5 ■ States

**Table 113**  
**Occupants Killed, by State and Vehicle Type**

State	Vehicle Type														Motorcycles		Total Occupants Killed	
	Passenger Cars		Light Trucks		Large Trucks		Buses		Other Vehicles		Unknown		Subtotal					
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
AL	365	47.0	296	38.1	16	2.1	0	0.0	23	3.0	0	0.0	700	90.2	76	9.8	776	100.0
AK	20	38.5	20	38.5	0	0.0	0	0.0	5	9.6	0	0.0	45	86.5	7	13.5	52	100.0
AZ	209	31.8	251	38.2	9	1.4	7	1.1	11	1.7	49	7.5	536	81.6	121	18.4	657	100.0
AR	210	38.8	237	43.8	13	2.4	0	0.0	10	1.8	1	0.2	471	87.1	70	12.9	541	100.0
CA	1,199	50.4	718	30.2	36	1.5	7	0.3	25	1.1	0	0.0	1,985	83.4	394	16.6	2,379	100.0
CO	138	34.2	166	41.1	10	2.5	0	0.0	2	0.5	0	0.0	316	78.2	88	21.8	404	100.0
CT	103	52.6	46	23.5	2	1.0	0	0.0	0	0.0	0	0.0	151	77.0	45	23.0	196	100.0
DE	46	48.4	35	36.8	0	0.0	0	0.0	0	0.0	0	0.0	81	85.3	14	14.7	95	100.0
DC	9	64.3	1	7.1	0	0.0	0	0.0	0	0.0	0	0.0	10	71.4	4	28.6	14	100.0
FL	866	44.0	649	33.0	22	1.1	1	0.1	13	0.7	4	0.2	1,555	79.0	413	21.0	1,968	100.0
GA	455	41.1	464	41.9	29	2.6	0	0.0	19	1.7	1	0.1	968	87.4	140	12.6	1,108	100.0
HI	34	37.8	18	20.0	2	2.2	0	0.0	1	1.1	0	0.0	55	61.1	35	38.9	90	100.0
ID	74	35.4	89	42.6	2	1.0	1	0.5	9	4.3	0	0.0	175	83.7	34	16.3	209	100.0
IL	416	53.4	212	27.2	4	0.5	2	0.3	10	1.3	5	0.6	649	83.3	130	16.7	779	100.0
IN	292	46.1	208	32.9	17	2.7	0	0.0	5	0.8	0	0.0	522	82.5	111	17.5	633	100.0
IA	146	41.8	127	36.4	12	3.4	0	0.0	15	4.3	0	0.0	300	86.0	49	14.0	349	100.0
KS	141	39.3	157	43.7	5	1.4	0	0.0	7	1.9	2	0.6	312	86.9	47	13.1	359	100.0
KY	330	44.3	289	38.8	20	2.7	0	0.0	19	2.6	1	0.1	659	88.5	86	11.5	745	100.0
LA	289	41.3	290	41.5	8	1.1	0	0.0	9	1.3	0	0.0	596	85.3	103	14.7	699	100.0
ME	66	44.6	51	34.5	1	0.7	0	0.0	5	3.4	1	0.7	124	83.8	24	16.2	148	100.0
MD	232	55.1	114	27.1	4	1.0	0	0.0	1	0.2	1	0.2	352	83.6	69	16.4	421	100.0
MA	151	53.9	64	22.9	3	1.1	0	0.0	4	1.4	4	1.4	226	80.7	54	19.3	280	100.0
MI	370	50.9	219	30.1	2	0.3	0	0.0	27	3.7	0	0.0	618	85.0	109	15.0	727	100.0
MN	167	45.4	127	34.5	7	1.9	2	0.5	13	3.5	0	0.0	316	85.9	52	14.1	368	100.0
MS	311	49.2	250	39.6	9	1.4	2	0.3	13	2.1	0	0.0	585	92.6	47	7.4	632	100.0
MO	387	48.0	298	37.0	11	1.4	0	0.0	23	2.9	0	0.0	719	89.2	87	10.8	806	100.0
MT	69	33.7	94	45.9	7	3.4	0	0.0	8	3.9	1	0.5	179	87.3	26	12.7	205	100.0
NE	93	44.1	94	44.5	4	1.9	0	0.0	5	2.4	0	0.0	196	92.9	15	7.1	211	100.0
NV	81	40.3	69	34.3	5	2.5	0	0.0	4	2.0	0	0.0	159	79.1	42	20.9	201	100.0
NH	40	39.6	39	38.6	0	0.0	0	0.0	1	1.0	0	0.0	80	79.2	21	20.8	101	100.0

**Table 113**  
**Occupants Killed, by State and Vehicle Type (Continued)**

State	Vehicle Type														Motorcycles		Total Occupants Killed	
	Passenger Cars		Light Trucks		Large Trucks		Buses		Other Vehicles		Unknown		Subtotal					
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
NJ	257	62.5	80	19.5	4	1.0	0	0.0	3	0.7	2	0.5	346	84.2	65	15.8	411	100.0
NM	109	34.4	152	47.9	9	2.8	0	0.0	6	1.9	1	0.3	277	87.4	40	12.6	317	100.0
NY	435	53.1	204	24.9	11	1.3	1	0.1	9	1.1	4	0.5	664	81.1	155	18.9	819	100.0
NC	596	51.8	366	31.8	16	1.4	0	0.0	17	1.5	0	0.0	995	86.5	155	13.5	1,150	100.0
ND	50	37.0	69	51.1	6	4.4	0	0.0	3	2.2	0	0.0	128	94.8	7	5.2	135	100.0
OH	453	49.9	263	29.0	10	1.1	0	0.0	16	1.8	0	0.0	742	81.7	166	18.3	908	100.0
OK	240	34.6	312	45.0	26	3.7	0	0.0	8	1.2	0	0.0	586	84.4	108	15.6	694	100.0
OR	135	40.7	133	40.1	5	1.5	0	0.0	6	1.8	0	0.0	279	84.0	53	16.0	332	100.0
PA	557	50.7	301	27.4	15	1.4	0	0.0	22	2.0	0	0.0	895	81.4	204	18.6	1,099	100.0
RI	31	46.3	14	20.9	1	1.5	0	0.0	0	0.0	2	3.0	48	71.6	19	28.4	67	100.0
SC	373	47.0	300	37.8	10	1.3	0	0.0	2	0.3	0	0.0	685	86.4	108	13.6	793	100.0
SD	52	40.9	56	44.1	3	2.4	0	0.0	0	0.0	0	0.0	111	87.4	16	12.6	127	100.0
TN	408	45.0	341	37.6	21	2.3	0	0.0	16	1.8	0	0.0	786	86.7	121	13.3	907	100.0
TX	1,021	38.2	1,134	42.5	58	2.2	1	0.0	27	1.0	3	0.1	2,244	84.0	426	16.0	2,670	100.0
UT	85	38.8	93	42.5	8	3.7	1	0.5	2	0.9	0	0.0	189	86.3	30	13.7	219	100.0
VT	41	60.3	13	19.1	3	4.4	0	0.0	3	4.4	0	0.0	60	88.2	8	11.8	68	100.0
VA	349	52.0	219	32.6	16	2.4	0	0.0	10	1.5	0	0.0	594	88.5	77	11.5	671	100.0
WA	195	46.4	142	33.8	9	2.1	0	0.0	5	1.2	0	0.0	351	83.6	69	16.4	420	100.0
WV	142	42.5	142	42.5	7	2.1	0	0.0	18	5.4	0	0.0	309	92.5	25	7.5	334	100.0
WI	225	43.9	183	35.7	2	0.4	0	0.0	19	3.7	0	0.0	429	83.6	84	16.4	513	100.0
WY	32	24.8	78	60.5	3	2.3	1	0.8	2	1.6	0	0.0	116	89.9	13	10.1	129	100.0
USA	13,095	45.3	10,287	35.6	503	1.7	26	0.1	481	1.7	82	0.3	24,474	84.6	4,462	15.4	28,936	100.0
PR	126	53.8	43	18.4	4	1.7	1	0.4	6	2.6	0	0.0	180	76.9	54	23.1	234	100.0

## Chapter 5 ■ States

**Table 114**

### **Passenger Car and Light Truck Occupants Killed, by State and Restraint Use**

State	Restraint Used		No Restraint Used		Restraint Use Unknown		Total Occupants Killed	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
AL	263	39.8	378	57.2	20	3.0	661	100.0
AK	19	47.5	12	30.0	9	22.5	40	100.0
AZ	160	34.8	240	52.2	60	13.0	460	100.0
AR	157	35.1	247	55.3	43	9.6	447	100.0
CA	1,149	59.9	639	33.3	129	6.7	1,917	100.0
CO	125	41.1	168	55.3	11	3.6	304	100.0
CT	58	38.9	69	46.3	22	14.8	149	100.0
DE	35	43.2	40	49.4	6	7.4	81	100.0
DC	2	20.0	4	40.0	4	40.0	10	100.0
FL	625	41.3	846	55.8	44	2.9	1,515	100.0
GA	354	38.5	454	49.4	111	12.1	919	100.0
HI	16	30.8	27	51.9	9	17.3	52	100.0
ID	67	41.1	89	54.6	7	4.3	163	100.0
IL	299	47.6	264	42.0	65	10.4	628	100.0
IN	239	47.8	206	41.2	55	11.0	500	100.0
IA	125	45.8	124	45.4	24	8.8	273	100.0
KS	109	36.6	169	56.7	20	6.7	298	100.0
KY	265	42.8	352	56.9	2	0.3	619	100.0
LA	193	33.3	351	60.6	35	6.0	579	100.0
ME	50	42.7	50	42.7	17	14.5	117	100.0
MD	192	55.5	129	37.3	25	7.2	346	100.0
MA	60	27.9	112	52.1	43	20.0	215	100.0
MI	303	51.4	199	33.8	87	14.8	589	100.0
MN	128	43.5	117	39.8	49	16.7	294	100.0
MS	180	32.1	380	67.7	1	0.2	561	100.0
MO	220	32.1	417	60.9	48	7.0	685	100.0
MT	57	35.0	101	62.0	5	3.1	163	100.0
NE	59	31.6	108	57.8	20	10.7	187	100.0
NV	68	45.3	74	49.3	8	5.3	150	100.0
NH	30	38.0	49	62.0	0	0.0	79	100.0

Table 114

**Passenger Car and Light Truck Occupants Killed, by State and Restraint Use (Continued)**

State	Restraint Used		No Restraint Used		Restraint Use Unknown		Total Occupants Killed	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
NJ	182	54.0	144	42.7	11	3.3	337	100.0
NM	137	52.5	124	47.5	0	0.0	261	100.0
NY	343	53.7	208	32.6	88	13.8	639	100.0
NC	494	51.4	417	43.3	51	5.3	962	100.0
ND	39	32.8	74	62.2	6	5.0	119	100.0
OH	267	37.3	399	55.7	50	7.0	716	100.0
OK	211	38.2	306	55.4	35	6.3	552	100.0
OR	151	56.3	96	35.8	21	7.8	268	100.0
PA	310	36.1	446	52.0	102	11.9	858	100.0
RI	9	20.0	30	66.7	6	13.3	45	100.0
SC	249	37.0	381	56.6	43	6.4	673	100.0
SD	28	25.9	76	70.4	4	3.7	108	100.0
TN	286	38.2	424	56.6	39	5.2	749	100.0
TX	1,043	48.4	947	43.9	165	7.7	2,155	100.0
UT	81	45.5	85	47.8	12	6.7	178	100.0
VT	22	40.7	28	51.9	4	7.4	54	100.0
VA	233	41.0	322	56.7	13	2.3	568	100.0
WA	175	51.9	129	38.3	33	9.8	337	100.0
WV	93	32.7	152	53.5	39	13.7	284	100.0
WI	149	36.5	231	56.6	28	6.9	408	100.0
WY	31	28.2	78	70.9	1	0.9	110	100.0
<b>USA</b>	<b>10,140</b>	<b>43.4</b>	<b>11,512</b>	<b>49.2</b>	<b>1,730</b>	<b>7.4</b>	<b>23,382</b>	<b>100.0</b>
PR	65	38.5	104	61.5	0	0.0	169	100.0

## Chapter 5 ■ States

**Table 115**

**Passenger Car and Light Truck Occupants Killed, by State, Vehicle Type, and Rollover Occurrence**

State	Passenger Cars			Light Trucks									Total*		
				Pickup			Utility			Van					
	Total Killed	Number	Percent	Total Killed	Number	Percent	Total Killed	Number	Percent	Total Killed	Number	Percent	Total Killed	Number	Percent
AL	365	94	25.8	145	69	47.6	125	74	59.2	26	10	38.5	661	247	37.4
AK	20	4	20.0	9	7	77.8	10	4	40.0	1	0	0.0	40	15	37.5
AZ	209	47	22.5	88	55	62.5	120	85	70.8	43	28	65.1	460	215	46.7
AR	210	49	23.3	124	55	44.4	89	51	57.3	24	10	41.7	447	165	36.9
CA	1,199	356	29.7	323	150	46.4	284	163	57.4	109	43	39.4	1,917	714	37.2
CO	138	49	35.5	58	40	69.0	89	61	68.5	19	8	42.1	304	158	52.0
CT	103	20	19.4	13	2	15.4	26	11	42.3	7	2	28.6	149	35	23.5
DE	46	5	10.9	9	5	55.6	19	10	52.6	7	4	57.1	81	24	29.6
DC	9	0	0.0	0	0	0.0	1	1	100.0	0	0	0.0	10	1	10.0
FL	866	182	21.0	270	134	49.6	288	188	65.3	91	29	31.9	1,515	533	35.2
GA	455	111	24.4	230	97	42.2	174	110	63.2	60	14	23.3	919	332	36.1
HI	34	10	29.4	10	4	40.0	8	4	50.0	0	0	0.0	52	18	34.6
ID	74	28	37.8	40	27	67.5	39	29	74.4	10	4	40.0	163	88	54.0
IL	416	86	20.7	90	40	44.4	81	38	46.9	41	8	19.5	628	172	27.4
IN	292	69	23.6	91	37	40.7	79	39	49.4	38	12	31.6	500	157	31.4
IA	146	47	32.2	63	34	54.0	37	20	54.1	26	8	30.8	273	110	40.3
KS	141	35	24.8	83	48	57.8	49	34	69.4	25	9	36.0	298	126	42.3
KY	330	63	19.1	165	56	33.9	98	48	49.0	25	9	36.0	619	176	28.4
LA	289	84	29.1	186	81	43.5	76	47	61.8	28	14	50.0	579	226	39.0
ME	66	20	30.3	17	6	35.3	20	6	30.0	14	3	21.4	117	35	29.9
MD	232	41	17.7	47	19	40.4	44	17	38.6	23	5	21.7	346	82	23.7
MA	151	31	20.5	20	9	45.0	35	22	62.9	8	1	12.5	215	63	29.3
MI	370	60	16.2	88	35	39.8	87	46	52.9	44	12	27.3	589	153	26.0
MN	167	44	26.3	59	25	42.4	37	11	29.7	31	8	25.8	294	88	29.9
MS	311	72	23.2	143	51	35.7	84	35	41.7	23	6	26.1	561	164	29.2
MO	387	96	24.8	155	92	59.4	100	53	53.0	43	18	41.9	685	259	37.8
MT	69	30	43.5	57	43	75.4	33	25	75.8	4	0	0.0	163	98	60.1
NE	93	25	26.9	50	24	48.0	33	22	66.7	11	4	36.4	187	75	40.1
NV	81	33	40.7	31	21	67.7	31	24	77.4	7	4	57.1	150	82	54.7
NH	40	2	5.0	15	6	40.0	21	6	28.6	3	0	0.0	79	14	17.7

Table 115

**Passenger Car and Light Truck Occupants Killed, by State, Vehicle Type, and Rollover Occurrence (Continued)**

State	Passenger Cars			Light Trucks									Total*		
				Pickup			Utility			Van					
	Total Killed	Rollover Number	Rollover Percent	Total Killed	Rollover Number	Rollover Percent	Total Killed	Rollover Number	Rollover Percent	Total Killed	Rollover Number	Rollover Percent	Total Killed	Rollover Number	Rollover Percent
NJ	257	29	11.3	27	11	40.7	34	7	20.6	19	3	15.8	337	50	14.8
NM	109	37	33.9	71	46	64.8	66	40	60.6	15	11	73.3	261	134	51.3
NY	435	73	16.8	46	14	30.4	107	40	37.4	51	11	21.6	639	138	21.6
NC	596	155	26.0	153	67	43.8	161	98	60.9	51	15	29.4	962	336	34.9
ND	50	15	30.0	31	24	77.4	17	12	70.6	21	11	52.4	119	62	52.1
OH	453	108	23.8	90	41	45.6	107	43	40.2	66	14	21.2	716	206	28.8
OK	240	62	25.8	172	100	58.1	100	65	65.0	38	11	28.9	552	238	43.1
OR	135	46	34.1	71	42	59.2	46	25	54.3	16	7	43.8	268	120	44.8
PA	557	116	20.8	105	30	28.6	147	66	44.9	48	11	22.9	858	224	26.1
RI	31	9	29.0	1	0	0.0	10	9	90.0	3	0	0.0	45	18	40.0
SC	373	79	21.2	152	48	31.6	119	66	55.5	29	9	31.0	673	202	30.0
SD	52	27	51.9	22	16	72.7	24	17	70.8	10	8	80.0	108	68	63.0
TN	408	97	23.8	183	77	42.1	122	64	52.5	35	14	40.0	749	252	33.6
TX	1,021	249	24.4	609	300	49.3	433	241	55.7	92	22	23.9	2,155	812	37.7
UT	85	28	32.9	31	21	67.7	46	35	76.1	16	6	37.5	178	90	50.6
VT	41	16	39.0	7	5	71.4	4	1	25.0	2	0	0.0	54	22	40.7
VA	349	94	26.9	101	46	45.5	86	56	65.1	32	10	31.3	568	206	36.3
WA	195	59	30.3	54	26	48.1	77	37	48.1	11	4	36.4	337	126	37.4
WV	142	41	28.9	65	31	47.7	64	28	43.8	13	7	53.8	284	107	37.7
WI	225	69	30.7	83	44	53.0	69	33	47.8	31	7	22.6	408	153	37.5
WY	32	17	53.1	39	31	79.5	35	27	77.1	4	3	75.0	110	78	70.9
USA	13,095	3,219	24.6	4,792	2,292	47.8	4,091	2,294	56.1	1,394	457	32.8	23,382	8,267	35.4
PR	126	8	6.3	13	2	15.4	26	5	19.2	4	0	0.0	169	15	8.9

\*Total includes occupants of other and unknown light trucks.

## Chapter 5 ■ States

**Table 116**  
**2009 Ranking of State Pedestrian Fatality Rates**

Rank	State	Pedestrians Killed	Population (Thousands)	Pedestrian Fatality Rate per 100,000 Population
1	Florida	466	18,538	2.51
2	Louisiana	107	4,492	2.38
3	District of Columbia	14	600	2.33
4	Maryland	113	5,699	1.98
5	Mississippi	58	2,952	1.96
6	South Carolina	89	4,561	1.95
7	New Mexico	39	2,010	1.94
8	Arizona	120	6,596	1.82
9	New Jersey	157	8,708	1.80
10	Delaware	15	885	1.69
11	New York	306	19,541	1.57
12	North Carolina	146	9,381	1.56
13	Montana	15	975	1.54
14	Georgia	150	9,829	1.53
15	California	563	36,962	1.52
16	Rhode Island	16	1,053	1.52
17	Texas	344	24,782	1.39
18	Alabama	64	4,709	1.36
19	Nevada	35	2,643	1.32
20	Alaska	9	698	1.29
21	Arkansas	36	2,889	1.25
22	Hawaii	16	1,295	1.24
23	Michigan	118	9,970	1.18
24	West Virginia	21	1,820	1.15
25	Missouri	68	5,988	1.14
26	Tennessee	70	6,296	1.11
27	Pennsylvania	134	12,605	1.06



**Table 116**  
**2009 Ranking of State Pedestrian Fatality Rates (Continued)**

Rank	State	Pedestrians Killed	Population (Thousands)	Pedestrian Fatality Rate per 100,000 Population
28	Kentucky	41	4,314	0.95
29	Colorado	47	5,025	0.94
30	Virginia	73	7,883	0.93
31	Washington	61	6,664	0.92
32	Oregon	35	3,826	0.91
33	Illinois	111	12,910	0.86
34	Oklahoma	31	3,687	0.84
35	Maine	11	1,318	0.83
36	Vermont	5	622	0.80
37	Minnesota	42	5,266	0.80
38	Kansas	22	2,819	0.78
39	Indiana	50	6,423	0.78
40	Connecticut	26	3,518	0.74
41	Ohio	85	11,543	0.74
42	Massachusetts	48	6,594	0.73
43	Iowa	21	3,008	0.70
44	Utah	19	2,785	0.68
45	Wisconsin	38	5,655	0.67
46	Idaho	10	1,546	0.65
47	North Dakota	4	647	0.62
48	New Hampshire	8	1,325	0.60
49	Nebraska	9	1,797	0.50
50	South Dakota	4	812	0.49
51	Wyoming	2	544	0.37
	<b>USA</b>	<b>4,092</b>	<b>307,007</b>	<b>1.33</b>
	Puerto Rico	109	3,967	2.75

## Chapter 5 ■ States

**Table 117**

**Persons Killed, by State and Highest Driver Blood Alcohol Concentration (BAC) in the Crash**

State	Highest Driver* Blood Alcohol Concentration in Crash								Total Killed**	
	BAC = .00		BAC = .01-.07		Alcohol-Impaired Driving Fatalities (BAC = .08+)		BAC = .01+			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
AL	522	62	46	5	280	33	325	38	848	100
AK	42	65	3	4	20	31	22	35	64	100
AZ	514	64	42	5	219	27	260	32	807	100
AR	372	64	43	7	168	29	211	36	585	100
CA	1,956	63	168	5	950	31	1,118	36	3,081	100
CO	285	61	20	4	158	34	178	38	465	100
CT	109	49	15	7	99	44	114	51	223	100
DE	68	58	4	3	45	38	48	42	116	100
DC	17	59	2	7	10	35	12	41	29	100
FL	1,649	64	134	5	770	30	904	35	2,558	100
GA	885	69	63	5	331	26	394	31	1,284	100
HI	51	46	6	6	52	48	59	54	109	100
ID	160	71	7	3	58	26	65	29	226	100
IL	530	58	62	7	319	35	381	42	911	100
IN	443	64	39	6	210	30	249	36	693	100
IA	254	68	22	6	96	26	118	32	372	100
KS	208	54	23	6	154	40	177	46	386	100
KY	550	70	45	6	194	25	239	30	791	100
LA	455	55	72	9	295	36	366	45	821	100
ME	106	67	6	4	47	29	53	33	159	100
MD	354	65	32	6	162	30	194	35	547	100
MA	201	60	23	7	108	32	130	39	334	100
MI	579	67	45	5	246	28	291	33	871	100
MN	289	69	23	5	108	26	131	31	421	100
MS	436	62	30	4	234	33	264	38	700	100
MO	518	59	58	7	300	34	358	41	878	100
MT	129	58	11	5	81	36	92	42	221	100
NE	135	61	22	10	66	30	88	39	223	100
NV	152	63	22	9	68	28	90	37	243	100
NH	73	66	7	6	30	27	36	33	110	100

Table 117

**Persons Killed, by State and Highest Driver Blood Alcohol Concentration (BAC) in the Crash (Continued)**

State	Highest Driver* Blood Alcohol Concentration in Crash								Total Killed**	
	BAC = .00		BAC = .01-.07		Alcohol-Impaired Driving Fatalities (BAC = .08+)		BAC = .01+			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
NJ	397	68	36	6	149	25	185	32	583	100
NM	232	64	15	4	114	32	129	36	361	100
NY	766	66	68	6	321	28	388	34	1,156	100
NC	879	67	67	5	363	28	430	33	1,314	100
ND	81	58	6	4	54	38	59	42	140	100
OH	643	63	54	5	324	32	378	37	1,021	100
OK	473	64	30	4	235	32	265	36	738	100
OR	235	62	26	7	115	30	141	37	377	100
PA	783	62	64	5	406	32	470	37	1,256	100
RI	43	52	7	8	34	40	40	48	83	100
SC	468	52	47	5	377	42	423	47	894	100
SD	69	53	6	5	53	40	59	45	131	100
TN	642	65	42	4	303	31	345	35	989	100
TX	1,628	53	202	7	1,235	40	1,437	47	3,071	100
UT	190	78	14	6	40	16	54	22	244	100
VT	46	63	4	6	23	32	28	37	74	100
VA	476	63	34	5	243	32	278	37	757	100
WA	259	53	26	5	206	42	232	47	492	100
WV	221	62	19	5	115	32	134	38	356	100
WI	308	55	38	7	213	38	251	45	561	100
WY	81	60	7	5	47	35	54	40	134	100
USA	20,961	62	1,905	6	10,839	32	12,744	38	33,808	100
PR	224	61	32	9	109	30	141	39	365	100

\*Includes motorcycle riders.

\*\*Total includes fatalities in crashes in which there was no driver or motorcycle rider present.

Note: NHTSA estimates alcohol involvement when alcohol test results are unknown. For more information, see page 7 of this report.

## Chapter 5 ■ States

**Table 118**

### **Drivers Involved in Fatal Crashes, by State and Blood Alcohol Concentration (BAC) of the Driver**

State	Blood Alcohol Concentration of Driver*								Total Drivers* Involved in Fatal Crashes	
	BAC = .00		BAC = .01-.07		BAC = .08+		BAC = .01+		Number	Percent
	Number	Percent	Number	Percent	Number	Percent	Number	Percent		
AL	835	73	43	4	259	23	302	27	1,137	100
AK	69	78	3	3	17	19	19	22	88	100
AZ	736	75	44	4	202	21	245	25	981	100
AR	584	76	36	5	151	20	187	24	770	100
CA	3,145	75	168	4	868	21	1,035	25	4,180	100
CO	481	74	20	3	153	23	172	26	653	100
CT	190	63	16	5	95	32	110	37	300	100
DE	108	70	5	3	41	27	46	30	154	100
DC	26	69	2	6	9	25	11	31	37	100
FL	2,632	75	140	4	715	20	855	25	3,487	100
GA	1,362	78	62	4	318	18	379	22	1,741	100
HI	83	60	7	5	49	35	56	40	139	100
ID	226	79	6	2	55	19	61	21	287	100
IL	933	72	71	5	292	23	363	28	1,296	100
IN	752	76	39	4	201	20	240	24	991	100
IA	390	78	21	4	92	18	113	22	503	100
KS	323	65	25	5	151	30	175	35	498	100
KY	887	80	40	4	184	17	223	20	1,110	100
LA	697	68	69	7	267	26	335	32	1,032	100
ME	183	78	6	3	47	20	53	22	236	100
MD	591	76	34	4	151	19	185	24	776	100
MA	312	71	25	6	100	23	125	29	437	100
MI	961	78	49	4	229	18	278	22	1,239	100
MN	431	78	22	4	98	18	120	22	551	100
MS	610	71	30	3	217	25	247	29	857	100
MO	813	71	54	5	274	24	328	29	1,141	100
MT	188	69	9	3	74	27	83	31	271	100
NE	244	75	21	6	62	19	83	25	327	100
NV	250	75	21	6	64	19	85	25	335	100
NH	110	76	7	5	27	19	34	24	144	100

Table 118

**Drivers Involved in Fatal Crashes, by State and Blood Alcohol Concentration (BAC) of the Driver (Continued)**

State	Blood Alcohol Concentration of Driver*								Total Drivers* Involved in Fatal Crashes	
	BAC = .00		BAC = .01-.07		BAC = .08+		BAC = .01+		Number	Percent
NJ	649	79	37	4	139	17	176	21	824	100
NM	338	74	13	3	104	23	116	26	454	100
NY	1,144	76	69	5	302	20	370	24	1,514	100
NC	1,366	77	63	4	343	19	406	23	1,772	100
ND	117	69	5	3	46	28	51	31	168	100
OH	1,071	75	56	4	296	21	352	25	1,423	100
OK	698	74	29	3	216	23	245	26	942	100
OR	355	73	23	5	109	22	132	27	487	100
PA	1,292	75	62	4	368	21	430	25	1,722	100
RI	61	62	6	6	32	32	38	38	99	100
SC	744	65	50	4	357	31	407	35	1,151	100
SD	93	65	7	5	43	30	50	35	143	100
TN	973	75	42	3	290	22	332	25	1,305	100
TX	2,771	67	213	5	1,179	28	1,392	33	4,163	100
UT	297	86	11	3	37	11	48	14	345	100
VT	70	72	3	3	23	24	27	28	97	100
VA	700	73	35	4	230	24	265	27	965	100
WA	419	66	27	4	189	30	215	34	634	100
WV	324	72	19	4	106	24	125	28	449	100
WI	488	67	43	6	197	27	239	33	727	100
WY	100	68	6	4	42	28	48	33	148	100
<b>USA</b>	<b>33,218</b>	<b>73</b>	<b>1,910</b>	<b>4</b>	<b>10,102</b>	<b>22</b>	<b>12,012</b>	<b>27</b>	<b>45,230</b>	<b>100</b>
PR	332	70	34	7	106	23	140	30	472	100

\*Includes motorcycle riders.

Note: NHTSA estimates alcohol involvement when alcohol test results are unknown. For more information, see page 7 of this report.

## Chapter 5 ■ States

**Table 119**

### **Drivers Killed in Fatal Crashes, by State and Blood Alcohol Concentration (BAC) of the Driver**

State	Blood Alcohol Concentration of Driver*								Total Drivers* Killed	
	BAC = .00		BAC = .01-.07		BAC = .08+		BAC = .01+		Number	Percent
	Number	Percent	Number	Percent	Number	Percent	Number	Percent		
AL	371	61	29	5	210	34	239	39	610	100
AK	22	67	1	4	10	30	11	33	33	100
AZ	266	62	24	6	137	32	161	38	427	100
AR	276	65	21	5	128	30	150	35	425	100
CA	1,050	63	66	4	562	33	628	37	1,678	100
CO	194	62	12	4	106	34	118	38	312	100
CT	80	51	11	7	66	42	77	49	157	100
DE	38	54	2	2	30	43	31	46	69	100
DC	3	33	0	1	7	66	7	67	10	100
FL	909	61	73	5	503	34	576	39	1,485	100
GA	596	69	37	4	231	27	267	31	863	100
HI	32	43	3	4	39	53	42	57	74	100
ID	100	68	4	3	42	29	47	32	147	100
IL	352	61	42	7	182	32	223	39	575	100
IN	303	62	27	6	162	33	190	38	493	100
IA	192	70	10	4	72	26	83	30	274	100
KS	153	57	12	5	105	39	118	43	271	100
KY	420	71	29	5	142	24	171	29	591	100
LA	298	55	32	6	209	39	241	45	539	100
ME	81	67	6	5	34	28	40	33	121	100
MD	217	64	21	6	100	30	121	36	338	100
MA	134	63	16	7	62	29	78	37	212	100
MI	360	66	21	4	166	30	186	34	546	100
MN	183	69	14	5	66	25	81	31	264	100
MS	300	62	18	4	169	35	187	38	487	100
MO	353	59	38	6	209	35	247	41	600	100
MT	93	58	7	4	62	38	68	42	161	100
NE	99	59	17	10	53	31	70	41	169	100
NV	88	62	14	10	41	29	54	38	142	100
NH	52	73	2	2	17	25	19	27	71	100

Table 119

**Drivers Killed in Fatal Crashes, by State and Blood Alcohol Concentration (BAC) of the Driver (Continued)**

State	Blood Alcohol Concentration of Driver*								Total Drivers* Killed	
	BAC = .00		BAC = .01-.07		BAC = .08+		BAC = .01+			
State	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
NJ	210	67	22	7	82	26	104	33	314	100
NM	134	61	8	4	79	36	87	39	221	100
NY	412	67	32	5	167	27	199	33	611	100
NC	584	66	39	4	258	29	296	34	880	100
ND	50	55	2	3	39	42	41	45	91	100
OH	437	62	36	5	230	33	267	38	703	100
OK	335	64	15	3	172	33	186	36	521	100
OR	154	62	13	5	81	33	94	38	248	100
PA	542	63	32	4	285	33	317	37	859	100
RI	21	46	3	7	21	47	25	54	46	100
SC	311	51	31	5	272	44	303	49	614	100
SD	53	59	4	4	33	37	36	41	89	100
TN	435	64	21	3	226	33	247	36	682	100
TX	1,111	55	108	5	802	40	911	45	2,021	100
UT	115	77	7	5	26	18	34	23	148	100
VT	33	59	3	6	20	36	23	41	56	100
VA	312	61	22	4	176	35	199	39	511	100
WA	160	53	13	4	132	43	144	47	304	100
WV	165	65	12	5	77	30	89	35	254	100
WI	220	56	24	6	151	38	175	44	395	100
WY	51	59	2	3	33	38	35	41	86	100
USA	13,458	62	1,060	5	7,281	33	8,341	38	21,798	100
PR	109	64	10	6	51	30	61	36	169	100

\*Includes motorcycle riders.

Note: NHTSA estimates alcohol involvement when alcohol test results are unknown. For more information, see page 7 of this report.

## Chapter 5 ■ States

**Table 120**

### **Surviving Drivers Involved in Fatal Crashes, by State and Blood Alcohol Concentration (BAC) of the Driver**

State	Blood Alcohol Concentration of Driver*								Total Surviving Drivers* in Fatal Crashes	
	BAC = .00		BAC = .01-.07		BAC = .08+		BAC = .01+		Number	Percent
	Number	Percent	Number	Percent	Number	Percent	Number	Percent		
AL	464	88	14	3	49	9	63	12	527	100
AK	47	85	1	3	7	12	8	15	55	100
AZ	470	85	19	3	65	12	84	15	554	100
AR	308	89	15	4	23	7	37	11	345	100
CA	2,095	84	101	4	306	12	407	16	2,502	100
CO	286	84	8	2	47	14	55	16	341	100
CT	110	77	5	3	28	20	33	23	143	100
DE	70	83	3	4	11	13	15	17	85	100
DC	22	83	2	8	3	10	5	17	27	100
FL	1,723	86	67	3	212	11	279	14	2,002	100
GA	766	87	25	3	87	10	112	13	878	100
HI	51	79	4	7	10	15	14	21	65	100
ID	126	90	2	1	13	9	14	10	140	100
IL	581	81	29	4	110	15	140	19	721	100
IN	448	90	12	2	38	8	50	10	498	100
IA	199	87	10	5	20	9	31	13	229	100
KS	170	75	12	5	45	20	58	25	227	100
KY	467	90	11	2	41	8	52	10	519	100
LA	399	81	36	7	58	12	94	19	493	100
ME	102	89	0	0	13	11	13	11	115	100
MD	374	85	14	3	50	12	64	15	438	100
MA	178	79	9	4	38	17	47	21	225	100
MI	601	87	28	4	64	9	92	13	693	100
MN	248	86	8	3	31	11	39	14	287	100
MS	310	84	12	3	49	13	61	16	370	100
MO	460	85	16	3	66	12	81	15	541	100
MT	95	86	3	3	12	11	15	14	110	100
NE	145	92	4	2	9	6	13	8	158	100
NV	162	84	7	4	23	12	31	16	193	100
NH	58	79	5	7	10	14	15	21	73	100



Table 120

### Surviving Drivers Involved in Fatal Crashes, by State and Blood Alcohol Concentration (BAC) of the Driver (Continued)

State	Blood Alcohol Concentration of Driver*								Total Surviving Drivers* in Fatal Crashes	
	BAC = .00		BAC = .01-.07		BAC = .08+		BAC = .01+		Number	Percent
NJ	439	86	15	3	57	11	71	14	510	100
NM	204	87	4	2	25	11	29	13	233	100
NY	732	81	37	4	135	15	171	19	903	100
NC	782	88	25	3	86	10	110	12	892	100
ND	67	86	3	4	8	10	11	14	77	100
OH	635	88	20	3	66	9	85	12	720	100
OK	363	86	14	3	44	10	58	14	421	100
OR	201	84	10	4	29	12	38	16	239	100
PA	750	87	30	3	83	10	113	13	863	100
RI	40	75	3	6	10	19	13	25	53	100
SC	433	81	19	4	85	16	104	19	537	100
SD	41	75	3	6	10	19	13	25	54	100
TN	538	86	21	3	64	10	85	14	623	100
TX	1,660	78	105	5	377	18	482	22	2,142	100
UT	182	93	4	2	11	5	15	7	197	100
VT	38	91	0	0	3	8	4	9	41	100
VA	388	85	13	3	53	12	66	15	454	100
WA	259	78	14	4	57	17	71	22	330	100
WV	159	82	7	4	29	15	36	18	195	100
WI	268	81	19	6	45	14	64	19	332	100
WY	49	79	4	6	9	15	13	21	62	100
<b>USA</b>	<b>19,760</b>	<b>84</b>	<b>850</b>	<b>4</b>	<b>2,821</b>	<b>12</b>	<b>3,672</b>	<b>16</b>	<b>23,432</b>	<b>100</b>
PR	223	74	24	8	56	18	80	26	303	100

\*Includes motorcycle riders.

Note: NHTSA estimates alcohol involvement when alcohol test results are unknown. For more information, see page 7 of this report.

## Chapter 5 ■ States

**Table 121**  
**Speeding-Related Traffic Fatalities, by State, Road Type, and Speed Limit**

State	Total Traffic Fatalities	Speeding-Related Fatalities by Road Type and Speed Limit								
		Interstate				Non-Interstate				
		Total	>55 mph	≤55 mph	55 mph	50 mph	45 mph	40 mph	35 mph	<35 mph
AL	848	327	21	2	75	10	100	24	27	27
AK	64	26	5	5	8	1	6	0	1	0
AZ	807	283	54	6	23	20	61	13	25	33
AR	585	105	19	2	39	3	11	4	12	11
CA	3,081	1,087	145	18	266	39	100	100	161	119
CO	465	171	17	8	21	14	11	21	21	23
CT	223	103	10	6	6	4	13	15	7	40
DE	116	44	5	1	8	14	6	3	2	3
DC	29	10	0	1	0	0	1	0	0	8
FL	2,558	535	56	17	78	19	127	36	73	85
GA	1,284	238	17	13	54	10	42	12	47	30
HI	109	59	0	5	2	1	10	1	20	20
ID	226	81	8	0	15	8	8	0	4	7
IL	911	325	41	10	113	5	23	15	27	64
IN	693	174	20	3	53	8	27	16	19	25
IA	372	62	5	3	28	4	3	1	8	8
KS	386	103	9	0	43	3	6	5	5	15
KY	791	154	7	3	85	4	18	0	24	11
LA	821	288	30	1	115	8	49	5	35	19
ME	159	61	2	2	10	7	18	4	7	5
MD	547	184	10	21	15	39	11	37	18	28
MA	334	76	13	4	4	3	4	4	9	30
MI	871	205	16	2	95	7	16	7	17	34
MN	421	95	5	5	48	4	2	2	1	20
MS	700	106	9	1	24	4	25	4	18	10
MO	878	379	26	12	124	23	29	19	54	38
MT	221	86	15	1	5	1	5	0	6	8
NE	223	30	7	0	1	7	1	2	1	2
NV	243	91	12	2	11	0	23	0	20	8
NH	110	39	3	1	2	6	1	1	14	11

Table 121

## Speeding-Related Traffic Fatalities, by State, Road Type, and Speed Limit (Continued)

State	Total Traffic Fatalities	Speeding-Related Fatalities by Road Type and Speed Limit								
		Interstate				Non-Interstate				
		Total	>55 mph	≤55 mph	55 mph	50 mph	45 mph	40 mph	35 mph	<35 mph
NJ	583	95	2	3	5	24	8	4	13	29
NM	361	69	5	5	9	1	4	5	6	11
NY	1,156	368	6	8	142	11	32	22	20	57
NC	1,314	517	32	2	270	9	125	8	49	13
ND	140	32	4	1	10	0	3	0	1	2
OH	1,021	287	22	4	129	11	21	12	55	25
OK	738	234	26	2	25	7	83	18	8	14
OR	377	125	7	1	55	3	16	6	8	8
PA	1,256	634	19	37	152	12	131	94	116	54
RI	83	28	0	5	0	2	0	0	4	9
SC	894	337	37	1	99	9	84	29	43	22
SD	131	41	12	0	19	2	2	0	2	0
TN	989	209	10	10	35	10	48	30	29	30
TX	3,071	1,228	106	37	149	40	116	104	132	140
UT	244	104	23	5	9	9	5	12	10	10
VT	74	22	1	0	2	8	0	2	5	3
VA	757	147	8	8	45	3	20	8	27	18
WA	492	208	16	0	15	22	15	10	41	44
WV	356	120	20	1	44	2	13	5	11	8
WI	561	203	8	2	105	0	21	3	14	36
WY	134	56	13	0	11	4	4	1	2	2
USA	33,808	*10,591	964	287	2,701	465	1,508	724	1,279	1,277
PR	365	156	22	0	4	2	11	9	77	27

\*Of the total number of speeding-related fatalities in 2009, 4,275 occurred on roads with posted speed limits between 55 and 65 mph, and 610 occurred on roads with speed limits above 65 mph.

Note: The total column for speeding-related fatalities includes fatalities that occurred on roads for which the speed limit was unknown.

## Chapter 5 ■ States

**Table 122**  
**Rural Fatal Crashes, by State and Average Emergency Medical Services (EMS) Response Times**

State	Average Response Time (Minutes)*								Total Fatal Crashes
	Time of Crash to EMS Notification		EMS Notification to EMS Arrival at Crash Scene		EMS Arrival at Crash Scene to Hospital Arrival		Time of Crash to Hospital Arrival		
	Average	Percent Unknown	Average	Percent Unknown	Average	Percent Unknown	Average	Percent Unknown	
AL	NA	NA	0.00	96.7	0.00	96.7	NA	NA	453
AK	1.00	55.6	6.13	36.1	18.50	50.0	47.89	75.0	36
AZ	3.93	35.2	13.82	29.9	54.26	79.7	65.60	82.3	355
AR	5.39	27.3	10.96	5.6	0.00	79.8	NA	NA	411
CA	6.00	99.9	0.00	99.7	0.00	99.7	NA	NA	1,164
CO	6.94	47.8	13.50	50.0	41.52	79.1	55.64	80.4	230
CT	1.59	35.3	7.00	20.6	50.60	55.9	56.47	55.9	34
DE	5.46	6.9	8.45	8.6	32.45	50.0	48.63	48.3	58
DC	NA	NA	NA	NA	NA	NA	NA	NA	0
FL	4.69	22.0	8.87	19.3	NA	NA	NA	NA	905
GA	2.39	9.7	9.50	3.2	38.58	34.7	53.79	41.8	596
HI	5.60	14.3	10.09	0.0	32.77	37.1	50.10	42.9	35
ID	5.03	11.7	14.03	3.9	2.56	94.2	42.00	99.4	154
IL	2.21	5.5	1.50	95.3	0.00	95.9	NA	NA	344
IN	3.42	2.6	7.78	0.5	NA	NA	NA	NA	385
IA	4.49	17.9	9.45	2.9	24.36	35.0	46.19	50.0	274
KS	6.92	15.7	11.11	5.0	37.05	32.5	55.59	42.1	280
KY	4.80	11.1	10.77	10.6	37.57	43.3	51.59	44.4	593
LA	6.36	5.8	13.78	2.1	41.96	42.4	61.45	44.5	380
ME	3.95	5.7	9.84	3.5	33.91	39.0	47.84	39.0	141
MD	NA	NA	NA	NA	NA	NA	NA	NA	193
MA	7.00	35.5	8.56	19.4	30.80	51.6	44.20	51.6	31
MI	3.68	27.2	10.25	26.3	0.00	99.2	NA	NA	372
MN	2.38	15.2	11.31	23.8	33.80	59.4	46.67	61.1	244
MS	17.38	51.7	13.20	14.0	13.66	19.9	67.73	60.5	458
MO	10.20	52.0	14.20	42.7	37.08	64.6	60.21	67.4	494
MT	7.59	11.1	12.80	4.4	33.33	36.1	53.64	42.2	180
NE	6.33	72.8	6.57	48.5	9.48	62.7	37.20	85.2	169
NV	10.69	21.3	20.82	5.3	43.00	43.6	61.70	54.3	94
NH	0.46	1.0	10.06	0.0	26.31	16.7	36.97	17.7	96

Table 122

### Rural Fatal Crashes, by State and Average Emergency Medical Services (EMS) Response Times (Continued)

	Average Response Time (Minutes)*								Total Fatal Crashes
	Time of Crash to EMS Notification		EMS Notification to EMS Arrival at Crash Scene		EMS Arrival at Crash Scene to Hospital Arrival		Time of Crash to Hospital Arrival		
State	Average	Percent Unknown	Average	Percent Unknown	Average	Percent Unknown	Average	Percent Unknown	
NJ	3.41	36.9	13.78	21.5	31.59	55.4	50.61	56.9	65
NM	NA	NA	NA	NA	NA	NA	NA	NA	222
NY	3.94	19.8	10.05	21.9	41.81	59.6	51.30	60.0	525
NC	8.28	71.1	11.24	29.6	43.14	56.4	51.69	58.7	878
ND	10.99	9.9	16.34	4.5	45.79	30.6	64.89	34.2	111
OH	6.14	18.9	9.00	6.0	30.86	29.9	53.26	43.5	598
OK	8.30	59.8	12.96	39.7	45.26	68.8	59.73	70.7	423
OR	3.58	11.2	14.20	2.0	44.54	47.4	60.59	53.8	251
PA	5.83	54.3	10.24	42.0	38.59	73.5	52.68	75.0	584
RI	2.17	60.0	7.29	53.3	48.50	73.3	56.00	73.3	15
SC	NA	NA	NA	NA	NA	NA	NA	NA	801
SD	6.38	40.8	12.32	34.0	29.94	52.4	54.54	66.0	103
TN	11.08	97.5	12.00	96.8	33.55	97.9	56.09	97.9	530
TX	8.74	41.2	8.91	1.2	21.60	15.7	60.22	55.2	1,448
UT	7.00	12.7	15.29	11.2	0.00	97.0	NA	NA	134
VT	3.33	36.5	11.44	17.5	41.55	39.7	53.89	39.7	63
VA	NA	NA	NA	NA	NA	NA	NA	NA	386
WA	5.79	42.5	10.47	21.1	45.83	77.5	57.20	78.2	280
WV	6.85	44.5	12.68	43.2	39.45	66.5	59.54	69.6	227
WI	3.57	18.3	10.62	14.5	31.92	61.9	47.77	65.1	344
WY	5.79	26.5	14.62	9.2	28.10	46.9	53.83	58.2	98
USA	5.69	45.8	10.82	36.5	31.61	65.9	55.16	73.4	17,245
PR	6.94	83.3	10.17	83.9	NA	NA	NA	NA	186

\*Includes crashes for which both times were known.

NA = not available or not applicable.

## Chapter 5 ■ States

**Table 123**  
**Urban Fatal Crashes, by State and Average Emergency Medical Services (EMS) Response Times**

State	Average Response Time (Minutes)*								Total Fatal Crashes
	Time of Crash to EMS Notification		EMS Notification to EMS Arrival at Crash Scene		EMS Arrival at Crash Scene to Hospital Arrival		Time of Crash to Hospital Arrival		
	Average	Percent Unknown	Average	Percent Unknown	Average	Percent Unknown	Average	Percent Unknown	
AL	4.00	99.6	0.50	96.0	0.00	96.4	NA	NA	252
AK	4.89	17.4	5.95	17.4	20.93	39.1	30.20	34.8	23
AZ	2.08	26.1	6.08	24.1	26.65	58.4	33.75	58.6	353
AR	3.70	18.8	6.23	0.9	0.00	86.6	NA	NA	112
CA	12.00	99.8	2.29	99.6	25.75	99.8	106.00	99.9	1,652
CO	1.95	35.7	6.15	36.2	20.58	63.3	27.29	62.8	207
CT	1.65	16.5	6.24	23.3	28.28	55.1	35.76	55.1	176
DE	2.59	9.3	5.55	7.0	24.56	41.9	32.20	41.9	43
DC	5.88	42.9	5.18	39.3	26.18	39.3	39.19	42.9	28
FL	3.43	28.2	5.76	26.2	NA	NA	NA	NA	1,387
GA	2.32	11.5	6.83	2.1	28.05	21.7	41.38	31.4	576
HI	3.52	9.4	7.81	3.1	32.02	29.7	41.69	29.7	64
ID	2.50	2.2	5.50	2.2	NA	NA	NA	NA	45
IL	2.26	3.3	3.26	96.1	0.00	96.9	22.50	99.6	488
IN	4.69	3.6	8.91	0.4	NA	NA	NA	NA	247
IA	2.27	9.2	5.20	1.5	18.98	21.5	28.74	29.2	65
KS	2.41	5.9	5.30	2.9	22.27	35.3	31.26	38.2	68
KY	1.93	10.9	6.06	9.5	24.58	39.4	33.53	40.9	137
LA	3.47	13.9	7.93	8.1	28.44	43.6	40.34	45.4	346
ME	3.17	0.0	5.25	0.0	41.75	33.3	49.75	33.3	12
MD	NA	NA	NA	NA	NA	NA	NA	NA	316
MA	3.85	35.4	5.05	17.7	25.56	44.8	33.09	45.5	277
MI	3.23	42.2	5.34	42.6	8.40	98.8	22.33	99.3	434
MN	2.40	11.0	7.04	23.6	23.93	53.5	33.07	55.9	127
MS	10.13	45.1	12.54	15.0	13.13	26.0	55.19	59.5	173
MO	4.19	62.3	7.08	56.5	24.97	69.5	36.99	70.2	292
MT	5.73	16.7	5.63	11.1	20.45	38.9	27.10	44.4	18
NE	1.46	27.8	3.76	19.4	16.40	30.6	24.41	38.9	36
NV	2.07	9.3	6.99	13.2	22.22	37.2	31.09	37.2	129
NH	0.00	0.0	4.00	0.0	17.00	0.0	21.00	0.0	1

Table 123

**Urban Fatal Crashes, by State and Average Emergency Medical Services (EMS) Response Times (Continued)**

	Average Response Time (Minutes)*								Total Fatal Crashes
	Time of Crash to EMS Notification		EMS Notification to EMS Arrival at Crash Scene		EMS Arrival at Crash Scene to Hospital Arrival		Time of Crash to Hospital Arrival		
State	Average	Percent Unknown	Average	Percent Unknown	Average	Percent Unknown	Average	Percent Unknown	
NJ	4.58	45.5	9.73	41.3	26.99	56.4	41.39	57.0	484
NM	NA	NA	NA	NA	NA	NA	NA	NA	97
NY	2.35	56.3	6.21	57.7	27.93	73.1	35.56	72.5	542
NC	3.25	59.4	7.28	33.3	27.29	54.2	34.67	54.8	330
ND	1.80	0.0	4.20	0.0	28.25	20.0	34.00	20.0	5
OH	4.79	15.9	5.02	4.3	20.77	23.5	34.64	35.7	345
OK	4.06	51.8	7.53	41.1	29.54	57.1	39.44	57.1	224
OR	1.05	2.5	5.46	1.3	29.25	40.0	36.40	40.0	80
PA	3.04	44.7	6.59	32.6	27.43	57.6	35.96	58.9	559
RI	1.86	63.2	3.57	63.2	23.92	68.4	26.92	68.4	38
SC	NA	NA	NA	NA	NA	NA	NA	NA	16
SD	1.00	33.3	4.40	44.4	25.75	55.6	32.00	66.7	9
TN	NA	NA	NA	NA	NA	NA	NA	NA	388
TX	5.03	34.4	5.32	2.1	18.53	13.8	40.36	44.9	1,313
UT	2.44	12.0	6.63	14.5	13.00	98.8	16.00	98.8	83
VT	0.75	20.0	5.00	0.0	33.00	20.0	38.75	20.0	5
VA	NA	NA	NA	NA	NA	NA	NA	NA	305
WA	2.60	25.1	5.60	14.4	32.83	61.7	39.45	61.1	167
WV	3.39	41.2	6.77	36.1	27.75	50.5	41.63	55.7	97
WI	2.60	24.8	5.95	26.1	28.74	57.1	40.31	59.6	161
WY	2.19	11.1	5.19	11.1	24.92	27.8	31.77	27.8	18
USA	3.40	46.1	6.37	42.6	23.61	67.5	37.66	72.4	13,350
PR	5.08	84.1	12.14	86.0	NA	NA	NA	NA	157

\*Includes crashes for which both times were known.

NA = not available or not applicable.

## Chapter 5 ■ States

**Table 124**  
**Persons Killed, Population, and Fatality Rates by City**

City	State	Fatalities			Population	Total Fatality Rate per 100,000 Population
		Total Killed	Number	Percent of Total Killed		
New York	NY	266	158	59.4	8,391,881	3.17
Los Angeles	CA	244	77	31.6	3,831,868	6.37
Chicago	IL	152	34	22.4	2,851,268	5.33
Houston	TX	207	36	17.4	2,257,926	9.17
Phoenix	AZ	159	38	23.9	1,593,659	9.98
Philadelphia	PA	95	31	32.6	1,547,297	6.14
San Antonio	TX	128	32	25.0	1,373,668	9.32
San Diego	CA	76	20	26.3	1,306,300	5.82
Dallas	TX	104	28	26.9	1,299,542	8.00
San Jose	CA	46	13	28.3	964,695	4.77
Detroit	MI	113	31	27.4	910,921	12.41
San Francisco	CA	39	20	51.3	815,358	4.78
Jacksonville	FL	110	23	20.9	813,518	13.52
Indianapolis	IN	55	9	16.4	807,584	6.81
Austin	TX	65	15	23.1	786,386	8.27
Columbus	OH	54	10	18.5	769,332	7.02
Fort Worth	TX	52	7	13.5	727,577	7.15
Charlotte	NC	58	13	22.4	704,422	8.23
Memphis	TN	94	15	16.0	676,640	13.89
Boston	MA	16	2	12.5	645,169	2.48
Baltimore	MD	38	16	42.1	637,418	5.96
El Paso	TX	55	13	23.6	620,456	8.86
Seattle	WA	30	13	43.3	616,627	4.87
Denver	CO	36	10	27.8	610,345	5.90
Nashville-Davidson	TN	63	8	12.7	605,473	10.41
Milwaukee	WI	33	5	15.2	605,013	5.45
Washington	DC	29	14	48.3	599,657	4.84
Las Vegas	NV	31	9	29.0	567,641	5.46
Louisville-Jefferson Co.	KY	56	7	12.5	566,503	9.89
Portland	OR	32	7	21.9	566,143	5.65
Oklahoma City	OK	71	5	7.0	560,333	12.67
Tucson	AZ	35	11	31.4	543,910	6.43
Atlanta	GA	47	12	25.5	540,922	8.69
Albuquerque	NM	45	10	22.2	529,219	8.50
Kansas City	MO	63	9	14.3	482,299	13.06
Fresno	CA	26	3	11.5	479,918	5.42
Mesa	AZ	22	3	13.6	467,157	4.71
Sacramento	CA	28	7	25.0	466,676	6.00
Long Beach	CA	29	8	27.6	462,604	6.27
Omaha	NE	22	2	9.1	454,731	4.84

Source: Population—Bureau of the Census.



**Table 124**  
**Persons Killed, Population, and Fatality Rates by City (Continued)**

City	State	Fatalities			Population	Total Fatality Rate per 100,000 Population
		Total Killed	Number	Percent of Total Killed		
Virginia Beach	VA	29	5	17.2	433,575	6.69
Miami	FL	37	13	35.1	433,136	8.54
Cleveland	OH	31	1	3.2	431,369	7.19
Oakland	CA	24	3	12.5	409,189	5.87
Raleigh	NC	27	6	22.2	405,612	6.66
Colorado Springs	CO	19	2	10.5	399,827	4.75
Tulsa	OK	52	6	11.5	389,625	13.35
Minneapolis	MN	17	6	35.3	385,378	4.41
Arlington	TX	31	6	19.4	380,085	8.16
Honolulu CDP	HI	16	5	31.3	374,658	4.27
Wichita	KS	26	5	19.2	372,186	6.99
St. Louis	MO	39	13	33.3	356,587	10.94
New Orleans	LA	42	14	33.3	354,850	11.84
Tampa	FL	42	14	33.3	343,890	12.21
Santa Ana	CA	11	6	54.5	340,338	3.23
Anaheim	CA	25	9	36.0	337,896	7.40
Cincinnati	OH	18	3	16.7	333,012	5.41
Bakersfield	CA	26	5	19.2	324,463	8.01
Aurora	CO	17	4	23.5	323,348	5.26
Toledo	OH	20	2	10.0	316,179	6.33
Pittsburgh	PA	17	4	23.5	311,647	5.45
Riverside	CA	29	4	13.8	297,841	9.74
Lexington-Fayette	KY	23	2	8.7	296,545	7.76
Stockton	CA	20	2	10.0	287,578	6.95
Corpus Christi	TX	23	9	39.1	287,439	8.00
Anchorage	AK	20	4	20.0	286,174	6.99
St. Paul	MN	12	6	50.0	281,253	4.27
Newark	NJ	15	5	33.3	278,154	5.39
Plano	TX	11	3	27.3	273,613	4.02
Buffalo	NY	13	4	30.8	270,240	4.81
Henderson	NV	10	1	10.0	256,445	3.90
Fort Wayne	IN	20	1	5.0	255,890	7.82
Greensboro	NC	20	4	20.0	255,124	7.84
Lincoln	NE	6	1	16.7	254,001	2.36
Glendale	AZ	13	1	7.7	253,209	5.13
Chandler	AZ	2	2	100.0	249,535	0.80
St. Petersburg	FL	24	7	29.2	244,324	9.82
Jersey City	NJ	7	3	42.9	242,503	2.89
Scottsdale	AZ	7	2	28.6	237,844	2.94

Source: Population—Bureau of the Census.

## Chapter 5 ■ States

**Table 124**  
**Persons Killed, Population, and Fatality Rates by City (Continued)**

City	State	Fatalities			Population	Total Fatality Rate per 100,000 Population
		Total Killed	Pedestrians Killed Number	Percent of Total Killed		
Orlando	FL	24	5	20.8	235,860	10.18
Madison	WI	14	4	28.6	235,419	5.95
Norfolk	VA	24	1	4.2	233,333	10.29
Birmingham	AL	36	5	13.9	230,131	15.64
Winston-Salem	NC	21	4	19.0	229,828	9.14
Durham	NC	14	3	21.4	229,171	6.11
Laredo	TX	15	5	33.3	226,124	6.63
Lubbock	TX	20	5	25.0	225,859	8.86
Baton Rouge	LA	21	5	23.8	225,388	9.32
North Las Vegas	NV	6	1	16.7	224,387	2.67
Chula Vista	CA	10	6	60.0	223,739	4.47
Chesapeake	VA	18	0	0.0	222,455	8.09
Gilbert	AZ	5	1	20.0	222,075	2.25
Garland	TX	13	1	7.7	222,013	5.86
Reno	NV	7	2	28.6	219,636	3.19
Hialeah	FL	25	4	16.0	218,896	11.42
Arlington CDP	VA	0	0	0.0	217,483	0.00
Irvine	CA	15	3	20.0	209,716	7.15
Rochester	NY	7	4	57.1	207,294	3.38
Akron	OH	15	1	6.7	207,209	7.24
Boise City	ID	10	3	30.0	205,707	4.86
Irving	TX	14	1	7.1	205,541	6.81
Fremont	CA	7	1	14.3	205,517	3.41
Richmond	VA	15	4	26.7	204,451	7.34
Spokane	WA	15	7	46.7	203,268	7.38
Modesto	CA	12	3	25.0	202,743	5.92
Montgomery	AL	13	2	15.4	202,124	6.43
Yonkers	NY	8	1	12.5	201,066	3.98
Des Moines	IA	10	1	10.0	200,538	4.99
Tacoma	WA	10	3	30.0	199,638	5.01
Shreveport	LA	17	3	17.6	199,244	8.53
San Bernardino	CA	20	4	20.0	198,411	10.08
Fayetteville	NC	27	4	14.8	198,071	13.63
Glendale	CA	4	0	0.0	196,882	2.03
Augusta-Richmond Co.	GA	27	7	25.9	194,343	13.89
Grand Rapids	MI	8	1	12.5	193,710	4.13
Huntington Beach	CA	12	3	25.0	193,366	6.21
Mobile	AL	17	3	17.6	193,205	8.80
Newport News	VA	13	1	7.7	193,172	6.73

Source: Population—Bureau of the Census.

**Table 124**  
**Persons Killed, Population, and Fatality Rates by City (Continued)**

City	State	Fatalities			Population	Total Fatality Rate per 100,000 Population
		Pedestrians Killed				
		Total Killed	Number	Percent of Total Killed		
Little Rock	AR	32	4	12.5	191,933	16.67
Moreno Valley	CA	3	0	0.0	191,754	1.56
Columbus	GA	19	3	15.8	190,414	9.98
Amarillo	TX	16	3	18.8	189,392	8.45
Fontana	CA	11	0	0.0	188,013	5.85
Oxnard	CA	15	2	13.3	187,535	8.00
Knoxville	TN	25	3	12.0	185,100	13.51
Fort Lauderdale	FL	33	10	30.3	184,892	17.85
Salt Lake City	UT	10	3	30.0	183,102	5.46
Worcester	MA	3	0	0.0	182,882	1.64
Huntsville	AL	19	5	26.3	179,652	10.58
Tempe	AZ	11	4	36.4	178,519	6.16
Brownsville	TX	14	2	14.3	176,859	7.92
Jackson	MS	39	6	15.4	175,021	22.28
Overland Park	KS	4	1	25.0	174,907	2.29
Aurora	IL	5	2	40.0	172,950	2.89
Oceanside	CA	8	2	25.0	172,901	4.63
Tallahassee	FL	15	6	40.0	172,574	8.69
Providence	RI	10	1	10.0	171,909	5.82
Rancho Cucamonga	CA	6	1	16.7	171,809	3.49
Ontario	CA	18	4	22.2	171,603	10.49
Chattanooga	TN	24	7	29.2	171,350	14.01
Santa Clarita	CA	6	1	16.7	169,174	3.55
Garden Grove	CA	12	2	16.7	166,332	7.21
Vancouver	WA	4	0	0.0	165,742	2.41
Grand Prairie	TX	12	0	0.0	163,351	7.35
Peoria	AZ	3	0	0.0	163,226	1.84
Sioux Falls	SD	7	0	0.0	158,008	4.43
Springfield	MO	11	0	0.0	157,630	6.98
Santa Rosa	CA	7	3	42.9	157,468	4.45
Rockford	IL	13	1	7.7	157,280	8.27
Springfield	MA	5	2	40.0	155,580	3.21
Salem	OR	3	1	33.3	155,469	1.93
Port St. Lucie	FL	11	2	18.2	154,410	7.12
Cape Coral	FL	8	0	0.0	154,202	5.19
Dayton	OH	20	0	0.0	153,843	13.00
Eugene	OR	10	2	20.0	153,272	6.52
Pomona	CA	15	3	20.0	152,367	9.84
Corona	CA	11	3	27.3	151,027	7.28
Alexandria	VA	0	0	0.0	150,006	0.00

Source: Population—Bureau of the Census.

## Chapter 5 ■ States

**Table 125**  
**Fatalities and Fatality Rates by State, 1975-2009**

State	Fatalities								Fatality Rate per 100 Million Vehicle Miles Traveled							
	1975	1985	1990	1995	2000	2005	2009	Difference, 1975-2009	1975	1985	1990	1995	2000	2005	2009	Difference, 1975-2009
AL	902	882	1,121	1,114	996	1,148	848	-6%	3.63	2.51	2.65	2.20	1.76	1.92	—	—
AK	112	127	98	87	106	73	64	-43%	4.38	3.17	2.51	2.11	2.30	1.45	—	—
AZ	670	893	869	1,035	1,036	1,179	807	+20%	4.19	4.14	2.45	2.61	2.11	1.97	—	—
AR	559	534	604	631	652	654	585	+5%	4.01	3.12	2.87	2.37	2.24	2.05	—	—
CA	4,092	4,960	5,192	4,192	3,753	4,333	3,081	-25%	3.09	2.39	2.01	1.52	1.22	1.32	—	—
CO	581	579	544	645	681	606	465	-20%	3.50	2.21	2.00	1.84	1.63	1.26	—	—
CT	389	448	385	317	341	278	223	-43%	2.13	2.00	1.46	1.13	1.11	0.88	—	—
DE	122	104	138	121	123	133	116	-5%	3.37	1.94	2.11	1.61	1.49	1.40	—	—
DC	70	60	48	58	48	48	29	-59%	2.27	1.86	1.41	1.67	1.37	1.29	—	—
FL	1,998	2,832	2,891	2,805	2,999	3,518	2,558	+28%	3.24	3.22	2.63	2.19	1.99	1.75	—	—
GA	1,360	1,361	1,562	1,488	1,541	1,729	1,284	-6%	3.46	2.53	2.22	1.74	1.47	1.52	—	—
HI	144	126	177	130	132	140	109	-24%	3.47	1.86	2.19	1.64	1.55	1.39	—	—
ID	281	255	244	262	276	275	226	-20%	4.78	3.31	2.48	2.13	2.04	1.85	—	—
IL	2,041	1,534	1,589	1,586	1,418	1,363	911	-55%	3.56	2.17	1.91	1.68	1.38	1.27	—	—
IN	1,128	974	1,049	960	886	938	693	-39%	3.02	2.39	1.95	1.49	1.25	1.31	—	—
IA	670	474	465	527	445	450	372	-44%	3.75	2.35	2.02	2.03	1.51	1.45	—	—
KS	509	486	444	442	461	428	386	-24%	3.29	2.52	1.94	1.76	1.64	1.44	—	—
KY	863	712	849	849	820	985	791	-8%	3.50	2.50	2.52	2.07	1.75	2.08	—	—
LA	934	931	959	894	938	963	821	-12%	4.60	2.79	2.53	2.31	2.30	2.14	—	—
ME	223	206	213	187	169	169	159	-29%	3.14	2.22	1.79	1.49	1.19	1.13	—	—
MD	670	729	707	671	588	614	547	-18%	2.66	2.19	1.74	1.50	1.17	1.09	—	—
MA	864	742	605	444	433	441	334	-61%	2.75	1.87	1.31	0.92	0.82	0.80	—	—
MI	1,779	1,545	1,571	1,530	1,382	1,129	871	-51%	3.06	2.29	1.94	1.79	1.41	1.09	—	—
MN	754	608	566	597	625	559	421	-44%	2.94	1.86	1.45	1.35	1.19	0.98	—	—
MS	546	662	750	868	949	931	700	+28%	3.80	3.45	3.07	2.94	2.67	2.32	—	—
MO	1,045	931	1,097	1,109	1,157	1,257	878	-16%	3.41	2.37	2.16	1.87	1.72	1.83	—	—
MT	291	223	212	215	237	251	221	-24%	5.08	3.03	2.54	2.28	2.40	2.26	—	—
NE	369	237	262	254	276	276	223	-40%	3.29	1.97	1.88	1.61	1.53	1.43	—	—
NV	218	259	343	313	323	427	243	+11%	4.74	3.42	3.36	2.24	1.83	2.06	—	—
NH	151	191	158	118	126	166	110	-27%	2.85	2.53	1.61	1.11	1.05	1.24	—	—

**Table 125**  
**Fatalities and Fatality Rates by State, 1975-2009 (Continued)**

State	Fatalities								Fatality Rate per 100 Million Vehicle Miles Traveled							
	1975	1985	1990	1995	2000	2005	2009	Difference, 1975-2009	1975	1985	1990	1995	2000	2005	2009	Difference, 1975-2009
NJ	1,043	964	886	774	731	747	583	-44%	2.15	1.83	1.50	1.27	1.08	1.01	—	—
NM	555	535	499	485	432	488	361	-35%	5.59	4.03	3.09	2.29	1.90	2.04	—	—
NY	2,366	2,006	2,217	1,679	1,460	1,434	1,156	-51%	3.63	2.22	2.07	1.46	1.13	1.03	—	—
NC	1,506	1,482	1,385	1,448	1,557	1,547	1,314	-13%	4.14	2.97	2.21	1.90	1.74	1.53	—	—
ND	167	90	112	74	86	123	140	-16%	3.71	1.61	1.90	1.13	1.19	1.62	—	—
OH	1,766	1,646	1,638	1,360	1,366	1,321	1,021	-42%	2.75	2.18	1.79	1.35	1.29	1.20	—	—
OK	757	744	641	669	650	803	738	-3%	3.33	2.39	1.93	1.74	1.50	1.71	—	—
OR	562	559	579	574	451	487	377	-33%	3.53	2.61	2.17	1.91	1.33	1.38	—	—
PA	2,078	1,771	1,646	1,480	1,520	1,616	1,256	-40%	3.26	2.35	1.92	1.57	1.49	1.50	—	—
RI	110	109	84	69	80	87	83	-25%	1.94	1.87	1.14	1.00	0.96	1.05	—	—
SC	820	951	979	881	1,065	1,094	894	+9%	3.98	3.56	2.85	2.28	2.34	2.21	—	—
SD	195	130	153	158	173	186	131	-33%	3.76	2.07	2.19	2.06	2.05	2.22	—	—
TN	1,126	1,101	1,177	1,259	1,307	1,270	989	-12%	3.42	3.03	2.52	2.24	1.99	1.79	—	—
TX	3,372	3,678	3,250	3,183	3,779	3,536	3,071	-9%	3.99	2.57	2.08	1.76	1.72	1.50	—	—
UT	272	303	272	325	373	282	244	-10%	3.42	2.52	1.86	1.73	1.65	1.12	—	—
VT	143	115	90	106	76	73	74	-48%	4.32	2.45	1.54	1.71	1.12	0.95	—	—
VA	993	976	1,079	900	929	947	757	-24%	2.87	2.04	1.79	1.29	1.24	1.18	—	—
WA	758	744	825	653	631	649	492	-35%	3.16	2.16	1.85	1.33	1.18	1.17	—	—
WV	461	420	481	376	411	374	356	-23%	4.36	3.32	3.12	2.16	2.14	1.82	—	—
WI	930	744	769	745	799	815	561	-40%	3.25	2.03	1.74	1.45	1.40	1.36	—	—
WY	210	152	125	170	152	170	134	-36%	5.36	2.81	2.14	2.41	1.88	1.88	—	—
<b>USA</b>	<b>44,525</b>	<b>43,825</b>	<b>44,599</b>	<b>41,817</b>	<b>41,945</b>	<b>43,510</b>	<b>33,808</b>	<b>-24%</b>	<b>3.35</b>	<b>2.47</b>	<b>2.08</b>	<b>1.73</b>	<b>1.53</b>	<b>1.46</b>	—	—
PR	496	600	473	595	568	457	365	-26%	7.27	5.74	3.68	3.83	3.23	2.35	—	—

Sources: Fatalities—Fatality Analysis Reporting System (FARS). Vehicle Miles Traveled—Federal Highway Administration.

## Chapter 5 ■ States

**Table 126**

### Key Provisions of Occupant Restraint Laws and 2009 Seat Belt Use Rates

State	Enforcement Type	Base Fine	Seat Belt Required		Exemptions <sup>(3)</sup>	2009 Observed Seat Belt Use Rate	Child Restraint Required	First Base Fine	Additional Information
			Seats <sup>(1)</sup>	Ages <sup>(2)</sup>					
AL	Primary	\$25	Front	15 years and older	Designed for >10 passengers, model year <1965, rural mail carriers/newspaper delivery vehicles, vehicles operating in reverse.	86.1%	<1 year (or <20 lb) in rear-facing infant seat; 1-4 (or 20-40 lb) in forward-facing child safety seat; 5 (but not yet 6) in booster seat <sup>(4)</sup>	\$25	
AK	Primary	\$15	All	16 years and older	School buses, emergency vehicles, mail or newspaper delivery vehicles, non-highway vehicles (generally, off-road or snowmobiles).	84.9%	3 years and under in child safety seat; 4-8 (and 20-65 lb and <57 inches tall) in booster seat	\$15 <sup>(5)</sup>	
AZ	Secondary	\$10	All Front	5-15 years 5 years and older	Designed for >10 passengers, model year <1972, rural mail carriers.	79.9%	<5 years	\$50	
AR	Primary	\$25	Front	15 years and older	Not required when an emergency exists that threatens the life of a child or person operating a motor vehicle. Any child who is physically unable because of a medical condition (as certified by a physician) is exempted.	70.4%	5 years and under (and <60 lb)	\$100 <sup>(6)</sup>	Children 60 lb or more may be in a seat belt.
CA	Primary	\$20 <sup>(7)</sup>	All	16 years and older	Emergency vehicles, rural postal service vehicles, newspaper delivery vehicles, recycling vehicles, taxis.	95.7%	5 years and under (or <60 lb) in a rear seat	\$100 <sup>(8)</sup>	<1 year or <20 lb or in rear-facing restraint may not ride in front if front passenger air bag is activated; 60 lb or more in rear seat if available.
CO	Secondary <sup>(9)</sup>	\$18	All Front	Under 16 16 years and older	Passenger buses, school buses, ambulances, postal service vehicles, delivery and pickup service vehicles.	81.7%	<1 year (and <20 lb) in rear-facing infant seat; 1-3 (and 20-40 lb) in forward-facing child safety seat; 4-5 (and <55 inches) in booster seat <sup>(10)</sup>	\$82	<1 year and <20 lb in rear-facing infant seat; 1-3 and 20-40 lb in forward-facing child seat; 4-5 and <55 inches in booster seat.

<sup>(1)</sup>The word "All" used in this category means everyone must be restrained. For children, that may be in a child restraint.

<sup>(2)</sup>May include rear-facing child restraint seats, forward-facing child restraint seats, and booster seats.

<sup>(3)</sup>Emergency vehicle and bus exemptions generally do not apply to the operator.

<sup>(4)</sup>First violation, 1 point; second or subsequent violation, 2 points.

<sup>(5)</sup>Two points for child restraint violation.

<sup>(6)</sup>Arkansas reduces the fine for the primary violation by \$10.

<sup>(7)</sup>Court may substitute traffic safety school for fine with regard to first offense. Fine for second and subsequent offenses is \$50.

<sup>(8)</sup>One point for child restraint violation; operators are liable for children <16 years old not wearing seat belt or in proper child safety restraint.

<sup>(9)</sup>Primary enforcement for child safety restraints.

<sup>(10)</sup>Less than 1 year old and <20 lb in rear-facing restraint system; 1-3 years and 20-39 lb in forward-facing child safety seat; 4-5 years and <55 inches in booster seat.

Sources: **Occupant restraint laws:** NHTSA, Regional Office. Updated as of January 2010. **2009 observed seat belt use rates:** NHTSA, National Center for Statistics and Analysis, "Seat Belt Use in 2009—Use Rates in the States and Territories," DOT HS 811 106 (April 2009).

**Table 126**

**Key Provisions of Occupant Restraint Laws and 2009 Seat Belt Use Rates (Continued)**

State	Enforcement Type	Base Fine	Seat Belt Required			2009 Observed Seat Belt Use Rate	Child Restraint Required	First Base Fine	Additional Information
			Seats <sup>(1)</sup>	Ages <sup>(2)</sup>	Exemptions <sup>(3)</sup>				
CT	Primary	\$15 <sup>(11)</sup>	Front	7 years and older	Truck or bus >15,000 lb, public vehicles, emergency vehicles, delivery vehicles, postal service vehicles, newspaper delivery vehicles.	88.0%	<1 year (or <20 lb) in rear-facing restraint system; 1-6 (and <60 lb) in child restraint system; booster seat only in seating position with lap and shoulder belt	\$60 <sup>(12)</sup>	4 years and older, or <4 and <40 lb in student transportation vehicle (not a school bus), must be in child seat or belt.
DE	Primary	\$25	All	16 years and older	Postal service vehicles, tractors, off-highway vehicles, electric personal assistive mobility devices.	91.3%	<7 years and <65 lb in age/weight appropriate restraint; 8-15 years or >65 lb in seat belt	\$25	
DC	Primary	\$50 <sup>(13)</sup>	All	16 years and older	Seating for >8 people, taxis (6pm-6am), vehicles with 3 or fewer wheels, farm vehicles.	90.0%	7 years and under	\$75 <sup>(13)</sup>	
FL	Primary	\$30	All Front	6-17 years >6 years	Newspaper delivery vehicles; solid waste/recyclable collection service vehicles working designated routes; persons traveling in the living quarters of a recreational vehicle or a space within a truck body primarily intended for merchandise or property; school buses; buses that transport for compensation; farm tractors or implements of husbandry; trucks >26,000 lb.	81.7%	3 years and under <sup>(14)</sup>	\$60	Persons who have a doctor-certified medical condition for which the use of a seat belt may be inappropriate or dangerous are exempt.
GA	Primary	\$15 <sup>(15)</sup>	All Front	6-17 years 18 years and older	Pickups, vehicles designed for >10 passengers, off-road vehicles, vehicles used for frequent stops (all seats), rural postal vehicles, newspaper delivery vehicles, emergency vehicles, driver in reverse, taxis, public transit vehicles.	89.6%	5 years and older (and <57 inches) in rear seat if available <sup>(16)</sup>	\$50 <sup>(17)</sup>	5 years and younger must be in rear seat if available; exemption for pickups applies to passengers over 18 years old.

<sup>(11)</sup>If a driver under 18 commits a violation, he/she is subject to a \$75 fine.

<sup>(12)</sup>The fine is \$15 if the child is 4-16 years old and 40 pounds or more; a mandatory child restraint education program is also required for the first or second violation.

<sup>(13)</sup>For child restraint violation, the driver may opt to take a child restraint safety class for \$25 in lieu of the \$75 base fine. In either case, and for seat belt violation, 2 points are assessed on the driver's record.

<sup>(14)</sup>Children 3 years and younger must be secured in a federally approved child restraint seat; children 4 and 5 years must be secured by either a federally approved child restraint seat or seat belt; points are assessed.

<sup>(15)</sup>If a minor violates the seat belt law, the driver may be fined \$25.

<sup>(16)</sup>For children at least 40 lb, the child restraint requirement is satisfied if they are restrained in the rear seat by a seat belt; the seat belt may be a lap belt if 3-point belts are unavailable or already being used by other children >40 lb.

<sup>(17)</sup>One point assessed against the driver's record; 2 points for subsequent offense.

## Chapter 5 ■ States

**Table 126**

**Key Provisions of Occupant Restraint Laws and 2009 Seat Belt Use Rates (Continued)**

State	Enforcement Type	Base Fine	Seat Belt Required		Exemptions <sup>(3)</sup>	2009 Observed Seat Belt Use Rate	Child Restraint Required	First Base Fine	Additional Information
			Seats <sup>(1)</sup>	Ages <sup>(2)</sup>					
HI	Primary	\$45 <sup>(18)</sup>	All  Front	8-17 years  18 years and older	Bus or school bus >10,000 lb, emergency vehicles, taxicabs. DOT may establish additional exemptions.	97.0%	3 years and under in child safety seat; 4-7 in booster seat or child restraint <sup>(19)</sup>	\$100 <sup>(20)</sup>	Persons are exempted if they are unable to use a seat belt because all available seat belt assemblies are in use. In this case, unsecured children must sit in the back seat.
ID	Secondary	\$10	All	7 years and older	Vehicles >8,000 lb, mail carriers, implements of husbandry, motorcycles.	76.9%	7 years and under	Less than \$100 <sup>(21)</sup>	
IL	Primary	\$25	All  Front	18 years and under if driver is 18 or under  16 years and older	Emergency vehicles, motorcycles, vehicles that stop frequently, rural letter carriers, model year <1964.	90.5%	7 years and under	Less than \$50	Children >40 lb may use lap belt in rear seat if no three-point belt is available.
IN	Primary	\$25	All	16 years and older	Tractors, RVs, postal vehicles, school buses, delivery vehicles, taxis, buses, emergency vehicles, antique cars, motorcycles, farm vehicles engaged in farming, law enforcement vehicles, non-drivers in parades, public utility vehicles, towing recovery vehicles.	91.2%	7 years and under <sup>(22)</sup>	Less than \$25 <sup>(23)</sup>	Child restraint law applies only to drivers with Indiana licenses.
IA	Primary	\$25	Front	11 years and older	Delivery vehicles that do not exceed 25 mph between stops, buses, model year <1965, emergency vehicles, motorcycles, postal vehicles making frequent stops.	92.9%	5 years and under <sup>(24)</sup>	\$25 <sup>(25)</sup>	

<sup>(18)</sup>In addition to the \$45 fine, the driver must pay a surcharge of \$10 for the neurotrauma special fund.

<sup>(19)</sup>Children 4-7 are exempted if >57 inches or >40 lb and traveling in a motor vehicle equipped only with lap belts, without shoulder straps, in the back seat.

<sup>(20)</sup>First-time violators are required to attend a child passenger restraint system seat class not to exceed 4 hours in length, pay a driver education safety assessment fee of \$50, and pay a \$10 surcharge into the neurotrauma fund.

<sup>(21)</sup>This is an infraction punishable by a fine not exceeding \$100. The typical total fine is \$60, including all add-on costs.

<sup>(22)</sup>A child >40 lb may be restrained by a lap seat belt if: (1) the motor vehicle is not equipped with lap and shoulder seat belts; or (2) not including the operator's seat and the front passenger seat, all the lap and shoulder seat belts are being used properly to restrain other children under 16. A child under 8 may be exempt if the child cannot reasonably fit in a child safety restraint.

<sup>(23)</sup>Four points assessed on driving record.

<sup>(24)</sup>Younger than 1 year and <20 lb in rear-facing child seat; children over 3 but under 6 years old may be secured in a child restraint, seat belt, or seat harness.

<sup>(25)</sup>First offenders who prove purchase or acquisition of a child restraint system shall not be convicted.



**Table 126**

**Key Provisions of Occupant Restraint Laws and 2009 Seat Belt Use Rates (Continued)**

State	Enforcement Type	Base Fine	Seat Belt Required		Exemptions <sup>(3)</sup>	2009 Observed Seat Belt Use Rate	Child Restraint Required	First Base Fine	Additional Information
			Seats <sup>(1)</sup>	Ages <sup>(2)</sup>					
KS	Secondary (primary for ages 14-17)	\$30	All	14-17 years	Designed for >10 people, truck >12,000 lb, off-road vehicles, postal vehicles, vehicles delivering newspapers.	77.4%	3 years and under in child restraint; 4-7 (and <80 lb or <57 inches tall) in child restraint or booster seat <sup>(26)</sup>	\$60 <sup>(27)</sup>	
KY	Primary	\$25	All	All	Designed for >10 people, farm trucks >2,000 lb, motorcycles.	73.3%	40 inches tall or less in child restraint; 6 years and under (and between 40 and 50 inches tall) in booster seat	Child restraint \$50; booster seat \$30	
LA	Primary	\$25	All	14 years and older	Vehicles with gross weight >10,000 lb, utility vehicles traveling <20 mph, model year <1981, postal vehicles, farm vehicles, persons delivering newspapers.	75.5%	5 years and under <sup>(28)</sup>	\$50	
ME	Primary	\$50	All	18 years and older	Postal vehicles, passengers riding in taxi or limousine for hire.	83.0%	<40 lb in child safety seat; 40-80 lb and <8 years old in safety system that elevates child so adult seat belt fits properly; <11 (and <100 lb) in rear seat if available	\$50	Everyone riding in school bus equipped with seat belts must use them.
MD	Primary	\$25	Front	16 years and older	"Historical" vehicles, for-hire vehicles, motorcycles, trucks, buses, vehicles delivering mail, vehicles built before June 1, 1964.	93.3%	<8 years (and either <57 inches tall or 65 lb or less)	\$25	
MA	Secondary	\$25 <sup>(29)</sup>	All	13 years and older	Buses, trucks 18,000 lb or more, taxis, utility vehicles, model year <1966, postal vehicles, farm vehicles, authorized emergency vehicles, side-facing seat in car owned for antique collecting.	66.8%	7 years and under (and <57 inches tall)	\$25	
MI	Primary	\$25	Front	16 years and older	Taxis, buses, school buses, postal service vehicles, model year <1965, commercial vehicles making frequent stops.	97.2%	7 years and under (and <57 inches tall); <4 years must be in car seat in the back seat	\$10 <sup>(30)</sup>	

<sup>(26)</sup>If the number of children subject to these requirements exceeds the number of passenger-securing locations available for use by children and all of the securing locations are in use by children, the requirement is waived for the additional children.

<sup>(27)</sup>\$10 plus court costs are waived if offender purchases or obtains an appropriate child restraint.

<sup>(28)</sup>Age <1 year or <20 lb in rear-facing child seat; 1-3 years or 20-39 lb in forward-facing child seat; 4-5 years or 40-60 lb in booster seat.

<sup>(29)</sup>Operator may be fined an additional \$25 if allowing anyone >12 and <16 years old to ride unrestrained.

<sup>(30)</sup>\$10 for child <4 years; \$50 for child 4-8 years and <57 inches tall.

## Chapter 5 ■ States

**Table 126**

### Key Provisions of Occupant Restraint Laws and 2009 Seat Belt Use Rates (Continued)

State	Enforcement Type	Base Fine	Seat Belt Required		Exemptions <sup>(3)</sup>	2009 Observed Seat Belt Use Rate	Child Restraint Required	First Base Fine	Additional Information
			Seats <sup>(1)</sup>	Ages <sup>(2)</sup>					
MN	Primary	\$25	All	8 years and older	Farm pickup trucks, postal vehicles, commercial vehicles making frequent stops and going <25 mph between stops, vehicles driving in reverse, persons riding in a vehicle in which all the seating positions equipped with seat belts are occupied by other persons in seat belts, model year <1965, persons in possession of written certificate from a licensed physician verifying that he/she is unable to wear a seat belt.	86.7%	7 years and under (and <57 inches tall)	\$50	
MS	Primary	\$25	Front	7 years and older	Farm vehicles, buses, postal vehicles, utility meter readers' vehicles, all-terrain vehicles, vehicles designed to carry >15 persons, trailers.	71.3%	3 years and under in child restraint; 4-6 years (and <57 inches tall or <65 lb) in booster seat	\$25	
MO	Secondary (primary for <16 years old)	\$10	Front	16 years and older	Vehicles designed for >10 people, trucks >12,000 lb, postal service vehicles, vehicles requiring frequent entry or exit, agricultural vehicles.	75.8%	Primary enforcement: <4 years old (or <40 lb) in child safety seat; 4-7 (and 40-80 lb and <57 inches tall) in booster seat. If all safety restraints are in use, <16 years old must be in rear seat.	\$50; \$10 for >80 lb or >57 inches tall	Persons <18 years operating or riding in a truck are required to wear seat belts.
MT	Secondary	\$20	All	6 years and older	Motorcycles, taxis, vehicles making frequent stops, construction vehicles.	79.3%	<6 years (and <60 lb)	\$100	Persons who cannot use a seat belt because all belts are in use are exempt.
NE	Secondary	\$25	Front	18 years and older	Emergency vehicles, model year <1973, farm tractors and other agricultural equipment, buses, postal vehicles.	82.6%	5 years and under	\$25	
NV	Secondary	\$25	All	6 years and older	Taxis, buses, school buses, postal service vehicles, emergency vehicles, delivery vehicles not exceeding 15 mph. Any vehicle or seating position if the State determines compliance is impractical.	90.9%	<6 years (and <60 lb)	\$500	
NH	No law	—	—	—	—	69.2%	5 years and under (and <55 inches tall)	\$25	

Table 126

## Key Provisions of Occupant Restraint Laws and 2009 Seat Belt Use Rates (Continued)

State	Enforcement Type	Base Fine	Seat Belt Required		Exemptions <sup>(3)</sup>	2009 Observed Seat Belt Use Rate	Child Restraint Required	First Base Fine	Additional Information
			Seats <sup>(1)</sup>	Ages <sup>(2)</sup>					
NJ	Primary	\$20	All	8-17 years	Vehicles manufactured before 1966, rural letter carriers, fewer belts than seats.	91.8%	<8 years (and <55 inches tall)	\$25	
			All	>7 years and >80 lb					
			Front	18 years and older					
NM	Primary	\$25 <sup>(31)</sup>	All	18 years and older	Vehicles >10,000 lb, rural letter carriers.	91.1%	<1 year in rear-facing infant seat, in rear seat if available; 1-4 (or <40 lb) in child safety seat; 5-6 (or <60 lb) in booster seat	\$25	
NY	Primary	\$50 <sup>(32)</sup>	Front	16 years and older	Buses, school buses, taxis, emergency or delivery vehicles, rural letter carriers.	89.1%	<3 years unless >40 lb and no lap/shoulder belt available; 4-6 years unless no lap/shoulder belt available	\$100	
NC	Primary (secondary for rear seat occupants)	\$25	All	16 years and older	Farm vehicles, postal vehicles, designated commercial vehicles, delivery vehicles traveling <20 mph, trash/recycling trucks.	89.8%	7 years and under (and <80 lb)	\$25	
ND	Secondary	\$20	Front	18 years and older	Designed for >10 people, farm vehicles, rural mail carriers, all front seat belts in use by other occupants.	81.6%	6 years and under (and <57 inches tall or <80 lb)	\$25 <sup>(33)</sup>	
OH	Secondary	\$30 <sup>(34)</sup>	All	4-14 years	Postal service vehicles, vehicles delivering newspapers.	82.7%	<4 years (or <40 lb) in child safety seat; 4-8 years (and <57 inches) in booster seat	\$150	
			Front	15 years and older					
OK	Primary	\$20	Front	13 years and older	Exempt from seat belt law: farm vehicles (trucks, truck tractors), RVs, postal service vehicles. Exempt from child restraint law: school buses, taxicabs, emergency vehicles.	84.3%	5 years and under <sup>(35)</sup>	\$50 <sup>(36)</sup>	

<sup>(31)</sup>New Mexico also assesses points for violations.

<sup>(32)</sup>New York assesses points only when the violation involves a child under 16 years old.

<sup>(33)</sup>North Dakota assesses 1 point for child restraint violations.

<sup>(34)</sup>Fine is \$30 for a driver violating the law, \$20 for a passenger.

<sup>(35)</sup>Children >40 lb may be belted in the rear seat by a lap belt if the vehicle is not equipped with lap and shoulder belts, or when the lap and shoulder belts are being used by other children.

<sup>(36)</sup>Child restraint fine is \$15 with proof of possession of a child safety seat.

## Chapter 5 ■ States

**Table 126**

### Key Provisions of Occupant Restraint Laws and 2009 Seat Belt Use Rates (Continued)

State	Enforcement Type	Base Fine	Seat Belt Required		Exemptions <sup>(3)</sup>	2009 Observed Seat Belt Use Rate	Child Restraint Required	First Base Fine	Additional Information
			Seats <sup>(1)</sup>	Ages <sup>(2)</sup>					
OR	Primary	\$97	All	16 years and older	Designed for >15 passengers, newspaper and mail vehicles, meter and transit vehicles, for-hire vehicles, trash trucks, emergency vehicles, taxicab operators.	96.3%	<1 year (or <20 lb) in rear-facing child safety seat; <40 lb in child safety seat; >40 lb (and 57 inches or less or <8 years old) in safety system that elevates the child so that an adult seat belts fits properly	\$97	
PA	Secondary	\$10	All	8-17 years	Trucks >7,000 lb, rural letter carriers, delivery vehicles, vehicles traveling <15 mph.	85.1%	7 years and under	\$100	
			Front	18 years and older					
RI	Secondary (primary for drivers and occupants <18 years)	\$75	All	All	Postal service vehicles.	72.0%	6 years and under (and <80 lb and <54 inches tall) in rear seat if available	\$75	
SC	Primary <sup>(37, 38)</sup>	\$25	Front	6 years and older	Emergency vehicles, buses, postal service vehicles, delivery vehicles, parade vehicles, vehicles in which all seating positions with seat belts are already occupied, persons occupying vehicles not originally equipped with seat belts.	79.0%	<1 year (or <20 lb) in rear-facing infant seat; 1-5 (and 20-39 lb) in forward-facing child safety seat; 1-5 (and 40-80 lb) in booster seat secured by lap/shoulder belt (lap belt alone is not permissible); <6 in rear seat if available	\$150 <sup>(39)</sup>	
			Rear with shoulder belt	6 years and older					
SD	Secondary	\$20	Front	18 years and older	Passenger buses, school buses, farm tractors, rural mail carriers, newspaper or periodical delivery vehicles.	71.8%	<5 years (and <40 lb)	\$25	
TN	Primary	\$10 <sup>(40)</sup>	Front	16 years and older	Vehicles >8,500 lb, rural letter carriers, utility workers, newspaper delivery vehicles, parade vehicles, hayrides crossing a highway from one field to another if operated at <15 mph.	81.5%	<1 year (or 20 lb or less) in rear-facing infant seat; 1-3 (and >20 lb) in forward-facing infant seat; 4-8 (and <57 inches tall) in booster seat; <9 (and <57 inches) in rear seat if available; rear seat recommended for 9-12 years old	\$50	
TX	Primary	\$200	All	5-16 years	Farm vehicles <48,000 lb, postal service vehicles, newspaper delivery vehicles, meter readers.	91.2%	4 years and younger (and <36 inches tall) in child safety seat; 4-8 years (and <57 inches) in booster seat.	\$200	
			Front	17 years and older					

<sup>(37)</sup>Seat belt law may not be enforced by checkpoints designed for that purpose.

<sup>(38)</sup>Seat belt law does not apply to an occupant if all belts in the vehicle are used by other occupants.

<sup>(39)</sup>Up to \$150 fine, but it may be waived with acquisition of child restraint.

<sup>(40)</sup>Drivers 18 years or older who choose not to contest the citation pay a \$10 fine by mail (\$20 for drivers 16-17 years old).

**Table 126**

**Key Provisions of Occupant Restraint Laws and 2009 Seat Belt Use Rates (Continued)**

State	Enforcement Type	Base Fine	Seat Belt Required		Exemptions <sup>(3)</sup>	2009 Observed Seat Belt Use Rate	Child Restraint Required	First Base Fine	Additional Information
			Seats <sup>(1)</sup>	Ages <sup>(2)</sup>					
UT	Secondary (primary for drivers and occupants 18 years and younger)	\$45 <sup>(41)</sup>	All	16 years and older	Passengers exempted if all seats are occupied or person is riding in a seating position not equipped with seat belts.	86.0%	7 years or under (and <57 inches tall)	\$45	
VT	Secondary	\$25	All	16 years and older	Buses, taxis, rural mail carriers, delivery vehicles traveling <15 mph, emergency vehicles, farm tractors, vehicles ordered by emergency personnel to evacuate persons from stricken area.	87.3%	<1 year (or <20 lb) in rear-facing infant seat; 2-7 (and >20 lb) in rear seat unless front passenger airbag is deactivated	\$25	
VA	Secondary	\$25	Front	16 years and older	Trucks >10,000 lb, school buses, motor homes, taxis, police vehicles enforcing parking or transporting prisoners, rural mail carriers, newspaper delivery vehicles, utility meter readers, commercial vehicles making frequent stops.	80.6%	7 years and under; rear-facing devices in rear seat if available; if not, in front seat only if front passenger airbag is deactivated	\$50	
WA	Primary	\$124	All	16 years and older	Vehicles designed for >10 people; when all designated seating positions are occupied; vehicles exempted by State regulation, including farm construction or commercial vehicles making frequent stops.	96.5%	<8 years (and <57 inches); <13 in rear seat if practical	\$124 <sup>(42)</sup>	
WV	Secondary	\$25	All  Front	8-17 years  8 years and older	Designed for >10 people, rural mail carriers, trailers. All seat belts in use and vehicle contains more passengers than total number of seat belts or other safety devices installed in compliance with Federal motor vehicle safety standards.	89.5%	7 years and younger (and <57 inches tall)	\$20	
WI	Primary	\$10	All	8 years and older	Taxis, farm trucks engaged in farming, emergency vehicles, rural mail carriers, land surveyors.	74.2%	<1 year (or <20 lb) in rear-facing infant seat, 1-3 (and 20-40 lb) in forward-facing infant seat, in rear seat if available; 4-7 (and 40-80 lb) in booster seat.	\$75	
WY	Secondary	\$25 <sup>(43)</sup>	All	9 years and older	Postal vehicles; excess passengers exempted if all seats occupied.	68.6%	8 years and younger in rear seat if available.	\$50	

<sup>(41)</sup>Reduced to \$15 upon completion of class.

<sup>(42)</sup>\$124 to driver if passenger under 16 years old; \$124 to passenger if over 16 years old.

<sup>(43)</sup>If motorist is wearing a seat belt when stopped for another violation, the fine for that violation is reduced by \$10. Passengers violating the seat belt requirements are subject to a fine of \$10.

## Chapter 5 ■ States

**Table 127**  
**History of State Motorcycle Helmet Laws**

State	Effective Date of Original Law*	Effective Date of Repeal/Amendment	
AL	11/06/67		
AK	01/01/71	06/23/76	Repealed for operators age 18 and over.
AZ	01/01/69	05/27/76	Repealed for age 18 and over.
AR	06/29/67	07/31/97	Repealed for age 21 and over.
CA	01/01/85**	01/01/92	Reinstated for all.
CO	07/01/69	05/20/77	Repealed.
		07/01/07	Reinstated for under age 18.
CT	10/01/67	06/01/76	Repealed.
		01/01/90	Reinstated for under age 18.
DE	06/21/68	06/10/78	Repealed for age 19 and over. All riders must have helmet in their possession.
		07/17/84	Helmet required for instruction permit holders.
DC	02/11/70		
FL	09/13/67	07/01/00	Repealed for age 21 and over if covered by insurance of at least \$10,000 in medical benefits.
GA	07/01/69		
HI	06/04/67	06/07/77	Repealed for age 18 and over.
ID	01/01/68	03/29/78	Repealed for age 18 and over.
IL	07/01/69	07/01/70	No helmet law for any motorcyclists since 1970 repeal.
IN	07/26/67	09/01/77	Repealed.
		01/01/84	Reinstated for under age 18.
IA	09/01/75	07/01/76	No helmet law for any motorcyclists since 1976 repeal.
KS	07/01/67	07/01/70	Repealed for age 21 and over.
		07/01/72	Reinstated for all.
		07/01/76	Repealed for age 16 and over.
		07/01/79	Reinstated for ages 16 and 17.
KY	06/13/68	07/15/98	Repealed for age 21 and over provided operator has held motorcycle license for 1 year and has provided proof of health insurance when registering motorcycle.
		07/04/00	Health insurance requirement repealed.
LA	07/31/68	10/01/76	Repealed for age 18 and over.
		01/01/82	Reinstated for all.
		08/15/99	Repealed for age 18 and over if covered by insurance of at least \$10,000 in medical benefits.
		08/15/04	Reinstated for all.
ME	10/07/67	10/24/77	Repealed.
		07/03/80	Reinstated for under age 15.
		09/23/83	Required for holders of instruction permits, for licensees holding license for 1 year or less, and for passengers if required for operator.
		09/01/09	Reinstated for ages 16 and 17, instruction permit holders, operators licensed for less than 1 year, and passengers (regardless of age) if required for operator.
MD	07/01/68	07/01/79	Repealed for age 18 and over.
		10/01/92	Reinstated for all.
MA	05/22/67		
MI	03/10/67	06/12/68	All riders required to have helmet in their possession.
		07/29/69	Reinstated for all.
MN	05/01/68	04/06/77	Repealed for age 18 and over. Helmet required for holders of instruction permits.
MS	03/28/74		
MO	09/28/67		
MT	07/01/73	07/01/77	Repealed for age 18 and over.
NE	05/29/67	09/02/77	Repealed (law was never enforced).
		01/01/89	Reinstated for all.
NV	01/01/72		
NH	09/05/67	08/07/77	Repealed for age 18 and over until Federal law ceases to require a motorcycle helmet law as a condition for receipt of Federal funds.
		09/30/95	Repealed for all when Federal law requiring helmet laws for Federal funds was voided.

**Table 127**  
**History of State Motorcycle Helmet Laws (Continued)**

State	Effective Date of Original Law*	Effective Date of Repeal/Amendment	
NJ	01/01/68		
NM	06/16/67	03/31/77	Repealed for age 18 and over.
NY	01/01/67		
NC	01/01/68		
ND	07/01/67	07/01/77	Repealed except for operators under age 18 and passengers, regardless of age, if required for operator.
OH	01/01/68	07/10/78	Repealed except for riders under age 18; operators having motorcycle license less than 1 year; and passengers if required for operator.
OK	04/27/67	04/01/69 11/01/75 05/21/76	Repealed for age 21 and over. Reinstated for all. Repealed for age 18 and over.
OR	01/01/68	10/04/77 06/16/88	Repealed for age 18 and over. Reinstated for all (by voter referendum).
PA	07/15/68	09/04/03	Repealed for operator age 21 and over if operator has held motorcycle license for at least 2 years or has completed rider education. Repealed for passenger age 21 and over if operator is exempt.
RI	04/04/67	05/21/76 07/01/92	Repealed for all operators. Required for all passengers. Required for operators under 21, operators licensed for 1 year or less, and all passengers.
SC	07/01/67	06/16/80	Repealed for age 21 and over.
SD	07/01/67	07/01/77	Repealed for age 18 and over.
TN	06/04/67		
TX	01/01/68	08/29/77 09/01/89 09/01/97	Repealed for age 18 and over. Reinstated for all. Repealed for age 21 and over who have completed rider education or are covered by insurance of at least \$10,000 in medical benefits.
UT	05/13/69	05/10/77	Repealed for age 18 and over. Required for age 17 and under on roads posted for speeds higher than 35 mph.
VT	03/06/68		
VA	06/26/70		
WA	06/08/67	09/21/77 07/26/87 06/07/90	Repealed. Reinstated for under age 18. Reinstated for all.
WV	05/25/71		
WI	07/01/68	03/19/78	Repealed except for under age 18 and instruction permit holders.
WY	05/24/73	05/27/83 07/01/93	Repealed for age 19 and over. Repealed for age 18 and over.
PR	07/20/60		

Sources: Motorcycle Industry Council, Insurance Institute for Highway Safety, Highway Data Loss Institute.



## Chapter 5 ■ States

**Table 128**

**States With .08 Blood Alcohol Concentration Illegal Per Se Laws**

State	Enactment Date	Effective Date	State	Enactment Date	Effective Date
AL	July 31, 1995	October 1, 1995	MT	April 15, 2003	April 15, 2003
AK	July 3, 2001	September 1, 2001	NE	March 1, 2001	September 1, 2001
AZ	April 11, 2001	August 31, 2001	NV	June 10, 2003	September 23, 2003
AR	March 6, 2001	August 13, 2001	NH	April 15, 1993	January 1, 1994
CA	1989	January 1, 1990	NJ	January 12, 2004	January 20, 2004
CO	May 21, 2004	July 1, 2004	NM	March 19, 1993	January 1, 1994
CT	July 1, 2002	July 1, 2002	NY	December 30, 2002	July 1, 2003
DE	July 12, 2004	July 12, 2004	NC	July 5, 1993	October 1, 1993
DC	December 1, 1998	April 13, 1999	ND	April 7, 2003	August 27, 2003
FL	April 27, 1993	January 1, 1994	OH	March 31, 2003	July 1, 2003
GA	April 16, 2001	July 1, 2001	OK	June 8, 2001	July 1, 2001
HI	June 30, 1995	June 30, 1995	OR	August 4, 1983	October 15, 1983
ID	March 17, 1997	July 1, 1997	PA	September 30, 2003	September 30, 2003
IL	July 2, 1997	July 2, 1997	RI	July 2, 2003	July 2, 2003
IN	May 9, 2001	July 1, 2001	SC	June 19, 2003	August 19, 2003
IA	April 24, 2003	July 1, 2003	SD	February 27, 2002	July 1, 2002
KS	April 22, 1993	July 1, 1993	TN	June 27, 2002	July 1, 2003
KY	April 21, 2000	October 1, 2000	TX	May 28, 1999	September 1, 1999
LA	June 26, 2001	September 30, 2003	UT	March 19, 1983	August 1, 1983
ME	April 28, 1988	August 4, 1988	VT	June 6, 1991	July 1, 1991
MD	April 10, 2001	September 30, 2001	VA	April 6, 1994	July 1, 1994
MA	June 30, 2003	June 30, 2003	WA	March 30, 1998	January 1, 1999
MI	July 15, 2003	September 30, 2003	WV	February 16, 2004	May 4, 2004
MN	May 27, 2004	August 1, 2005	WI	July 3, 2003	September 30, 2003
MS	March 11, 2002	July 1, 2002	WY	March 11, 2002	July 1, 2002
MO	June 12, 2001	September 29, 2001	PR	January 10, 2000	January 10, 2001

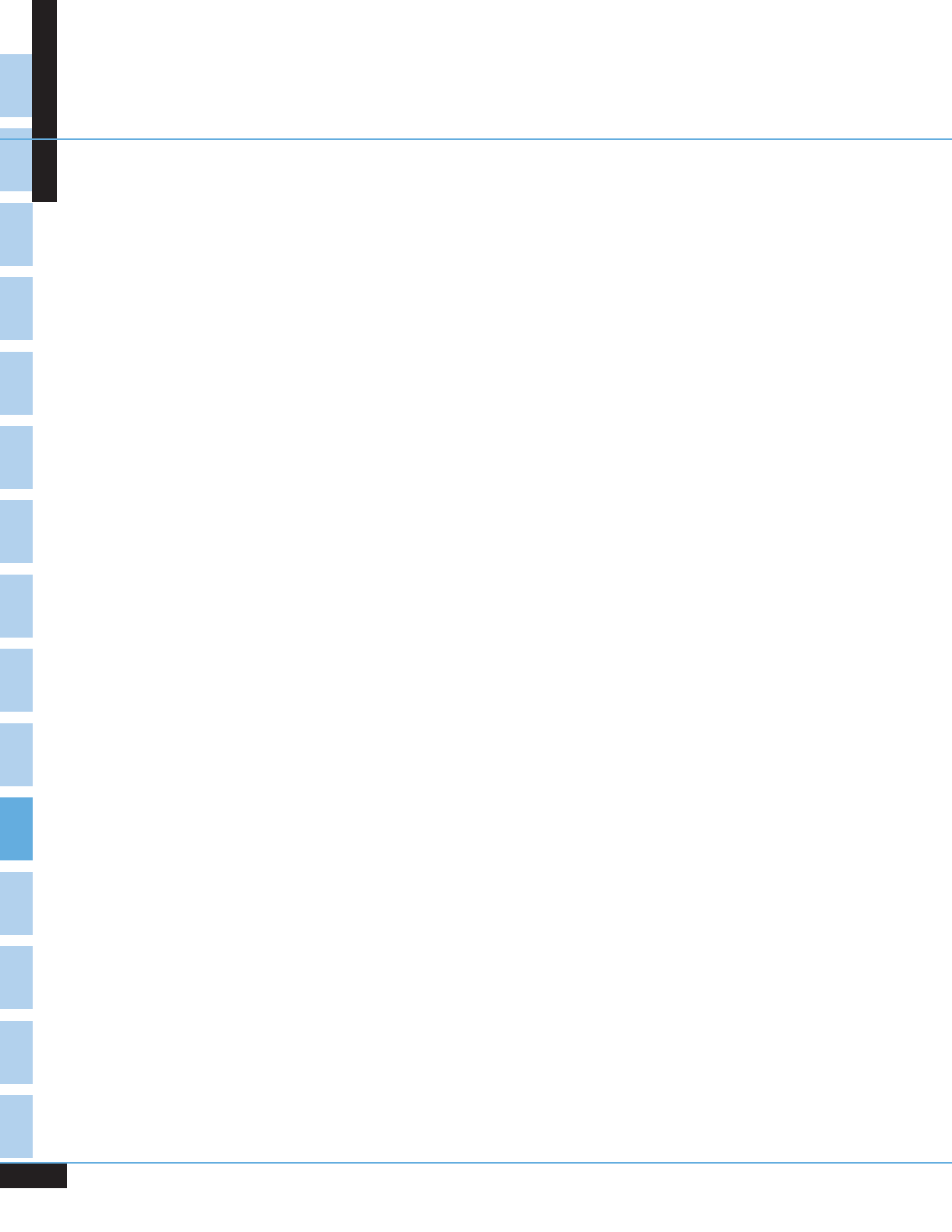
In 2009, all 50 States, the District of Columbia, and Puerto Rico had .08 blood alcohol concentration illegal per se laws.

Note: The term “illegal per se” refers to State laws that make it a criminal offense to operate a motor vehicle at or above a specified alcohol (or drug) concentration in the blood, breath, or urine.

Source: NHTSA, Injury Control Operations and Resources.



# APPENDIXES



# APPENDIX A ■ FARS DATA ELEMENTS

## 2009 Fatality Analysis Reporting System Data Elements

### Crash Level

Crash Date	Number of Travel Lanes
Atmospheric Condition	Number of Vehicle Forms Submitted
City	Rail Grade Crossing Identifier
County	Related Factors—Crash Level
Crash Time	Relation to Junction
Day of Week	Relation to Roadway
Emergency Medical Services (EMS) Notification Time	Roadway Alignment
EMS Arrival Time at Hospital	Roadway Function Class
EMS Arrival Time at Scene	Roadway Profile
First Harmful Event	Roadway Surface Condition
Global Position	Roadway Surface Type
Light Condition	Route Signing
Location of Rollover	School Bus Related
Manner of Collision	Special Jurisdiction
Milepoint	Speed Limit
National Highway System	State
Number of Drinking Drivers in Crash	Traffic Control Device
Number of Fatalities in Crash	Traffic Control Device Functioning
Number of Forms Submitted	Trafficway Flow
for Persons Not in Motor Vehicles	Trafficway Identifier
Number of Person Forms Submitted	Vehicle Removal
	Work Zone

### Vehicle Level

Body Type	Registration State
Bus Use	Related Factors—Vehicle Level
Cargo Body Type	Rollover
Crash Avoidance Maneuver	Sequence of Events
Emergency Use	Special Use
Extent of Damage	Travel Speed
Fire Occurrence	Truck Fuel Type
Gross Vehicle Weight Rating	Truck Gross Vehicle Weight Rating
Hazardous Material Involvement/Placard	Truck Series
Hit and Run	Underride/Override
Impact Point—Initial	Unit Type
Impact Point—Principal	Vehicle Configuration
Jackknife	Vehicle Identification Number
Location of Rollover	Vehicle Make
Manner of Leaving Scene	Vehicle Maneuver
Most Harmful Event	Vehicle Model
Motor Carrier Identification Number	Vehicle Model Year
Motorcycle Displacement	Vehicle Number
Number of Axles	Vehicle Removal
Number of Deaths in Vehicle	Vehicle Role
Number of Occupants in Vehicle	Vehicle Trailing
Passenger Car Weight	VIN Body Type
Passenger Car Wheelbase (Short and Long)	VIN Length
Registered Vehicle Owner	VIN Model

# Appendix A ■ FARS Data Elements

## 2009 Fatality Analysis Reporting System Data Elements (Continued)

### Driver Level

---

Commercial Motor Vehicle License Status	Driver Weight
Compliance with License Endorsements	Driver Zip Code
Compliance with License Restrictions	Driver's Vision Obscured by
Date of First and Last Crash, Suspension, Conviction	License State
Driver Drinking	Non-CDL License Status
Driver Height	Related Factors—Driver Level
Driver Level Counters	Speed Related
Driver License Type Compliance	Violations Charged
Driver Presence	

### Person Level

---

Age	Nonoccupant Location
Air Bag Deployed	Nonoccupant Striking Vehicle Number
Alcohol Test	Person Number
Death Date	Person Type
Death Time	Police-Reported Alcohol Involvement
Died at Scene/En Route	Police-Reported Drug Involvement
Drug Test	Race
Ejection	Related Factors—Person Level
Ejection Path	Protection System Use
Extrication	Seating Position
Fatal Injury at Work	Sex
Hispanic Origin	Time of Crash to Time of Death
Injury Severity	Transported for Treatment by
Method of Alcohol Determination	Vehicle Number
Method of Drug Determination by Police	

# APPENDIX B ■ GES DATA ELEMENTS

## 2009 General Estimates System Data Elements

### Crash Level

---

Alcohol Involved in Crash	Number of Travel Lanes
Atmospheric Condition	Number of Vehicles
Day of Week	Pedestrian/Pedalcyclist Crash Type
EMS on Scene	Region of Country
First Harmful Event	Relation to Junction
Hour of Crash	Relation to Roadway
Interstate Highway	Roadway Alignment
Land Use	Roadway Profile
Light Condition	Roadway Surface Condition
Manner of Collision	School Bus Related
Maximum Injury Severity	Speed Limit
Minute of Crash	Traffic Control Device
Month of Crash	Trafficway Flow
Number Injured in Crash	Work Zone
Number of Nonoccupants	Year of Crash

### Vehicle/Driver Level

---

Crash Type	Manner of Leaving Scene
Body Type	Maximum Injury Severity in Vehicle
Cargo Body Type	Model Year
Carrier's Identification Number	Most Harmful Event
Corrective Action Attempted	Movement Prior to Critical Event
Critical Event	Number Injured in Vehicle
Damage Areas	Number of Axles, Including Trailer
Damage Severity	Number of Occupants
Driver Distracted By	Precrash Location
Driver Drinking in Vehicle	Precrash Vehicle Control
Driver Maneuvered To Avoid	Rollover Type
Driver Presence	Special Use
Driver's Vision Obscured By	Speed Related
Driver's Zip Code	Travel Speed
Emergency Use	Vehicle Contributing Factors
Fire Occurrence	Vehicle Identification Number
Hazardous Materials Placard Number	Vehicle Make
Hazardous Materials Placarded	Vehicle Model
Hazardous Materials Release	Vehicle Number
Hit and Run	Vehicle Role
Initial Point of Impact	Vehicle Trailing
Jackknife	Violations Charged

## Appendix B ■ GES Data Elements

### 2009 General Estimates System Data Elements (Continued)

#### Person Level

---

Age	Person Type
Air Bag Availability/Function	Person Number
Alcohol Test Given	Person's Physical Impairment
Drug Test Given	Police-Reported Alcohol Involvement
Ejection	Police-Reported Drug Involvement
Injury Severity	Restraint System Use
Nonoccupant Action	Seating Position
Nonoccupant Location	Sex
Nonoccupant Safety Equipment Use	Taken to Hospital or Treatment Facility
Nonoccupant Striking Vehicle Number	Vehicle Number

# APPENDIX C ■ GES TECHNICAL NOTES

## Standard Errors

The national estimates produced from GES data may differ from the true values, because they are based on a probability sample of crashes and not a census of all crashes. The size of these differences may vary depending on which sample of crashes was selected. [For a complete description of the GES sampling design, see *National Accident Sampling System General Estimates System Technical Note* (DOT HS 807 796) available from NCSA.] The standard error of an estimate is a measure of the precision or reliability with which an estimate from this particular GES sample approximates the results of a census.

In a report of this size, it is impractical to provide standard errors for each estimate. Instead, generalized standard errors for estimates of totals are provided in the following table. Generalized errors were calculated separately for the crash, vehicle, and people characteristics. The values for the GES estimates and an estimate of one standard error are given in Table C1 on the following page. By adding and subtracting two standard errors, a 95 percent confidence interval can be created for the GES estimates in this report. For example, the estimated number of injury crashes that occurred in the month of May is given in Table 24 as 139,000. To calculate one standard error for this crash estimate, use Table C1. Since 139,000 does not appear in the Crash Estimate column of Table C1, use linear interpolation from the standard error values for 100,000 (8,400) and 200,000 (15,200). One standard error would be approximately 11,100. The 95 percent confidence interval for this estimate would be  $139,000 \pm 2 \times 11,100$  or 116,800 to 161,200.

## Appendix C ■ GES Technical Notes

**Table C1**  
**2009 GES Estimates and Standard Errors**

Crash Estimate (x)	Crash Standard Error (SE) *	Vehicle Estimate (x)	Vehicle Standard Error (SE) **	Person Estimate (x)	Person Standard Error (SE) ***
1,000	400	1,000	400	1,000	400
5,000	1,000	5,000	1,000	5,000	900
6,000	1,100	10,000	1,500	10,000	1,400
7,000	1,200	20,000	2,400	20,000	2,200
8,000	1,300	30,000	3,200	30,000	3,000
9,000	1,400	40,000	4,000	40,000	3,700
10,000	1,500	50,000	4,800	50,000	4,300
20,000	2,500	60,000	5,500	60,000	5,000
30,000	3,300	70,000	6,200	70,000	5,600
40,000	4,100	80,000	6,900	80,000	6,200
50,000	4,900	90,000	7,600	90,000	6,800
60,000	5,600	100,000	8,300	100,000	7,400
70,000	6,300	200,000	15,000	200,000	13,200
80,000	7,000	300,000	21,500	300,000	18,700
90,000	7,700	400,000	28,000	400,000	24,200
100,000	8,400	500,000	34,500	500,000	29,600
200,000	15,200	600,000	41,000	600,000	35,000
300,000	21,800	700,000	47,500	700,000	40,400
400,000	28,300	800,000	54,100	800,000	45,800
500,000	34,800	900,000	60,700	900,000	51,200
600,000	41,300	1,000,000	67,300	1,000,000	56,600
700,000	47,800	2,000,000	136,200	2,000,000	112,100
800,000	54,400	3,000,000	208,900	3,000,000	169,900
900,000	61,000	4,000,000	285,100	4,000,000	229,700
1,000,000	67,700	5,000,000	364,400	5,000,000	291,400
2,000,000	136,400	6,000,000	446,400	6,000,000	354,800
3,000,000	208,900	7,000,000	530,900	7,000,000	419,800
4,000,000	284,500	8,000,000	617,900	8,000,000	486,400
5,000,000	363,100	9,000,000	707,100	9,000,000	554,400
6,000,000	444,400	10,000,000	798,400	10,000,000	623,700
6,500,000	486,000	11,000,000	891,700	11,000,000	694,300
7,000,000	528,100	12,000,000	987,000	12,000,000	766,200
* $SE = e^{a + b (\ln x)^2}$ , where a = 4.310860 b = 0.035690		** $SE = e^{a + b (\ln x)^2}$ , where a = 4.268980 b = 0.035880		*** $SE = e^{a + b (\ln x)^2}$ , where a = 4.300010 b = 0.034810	



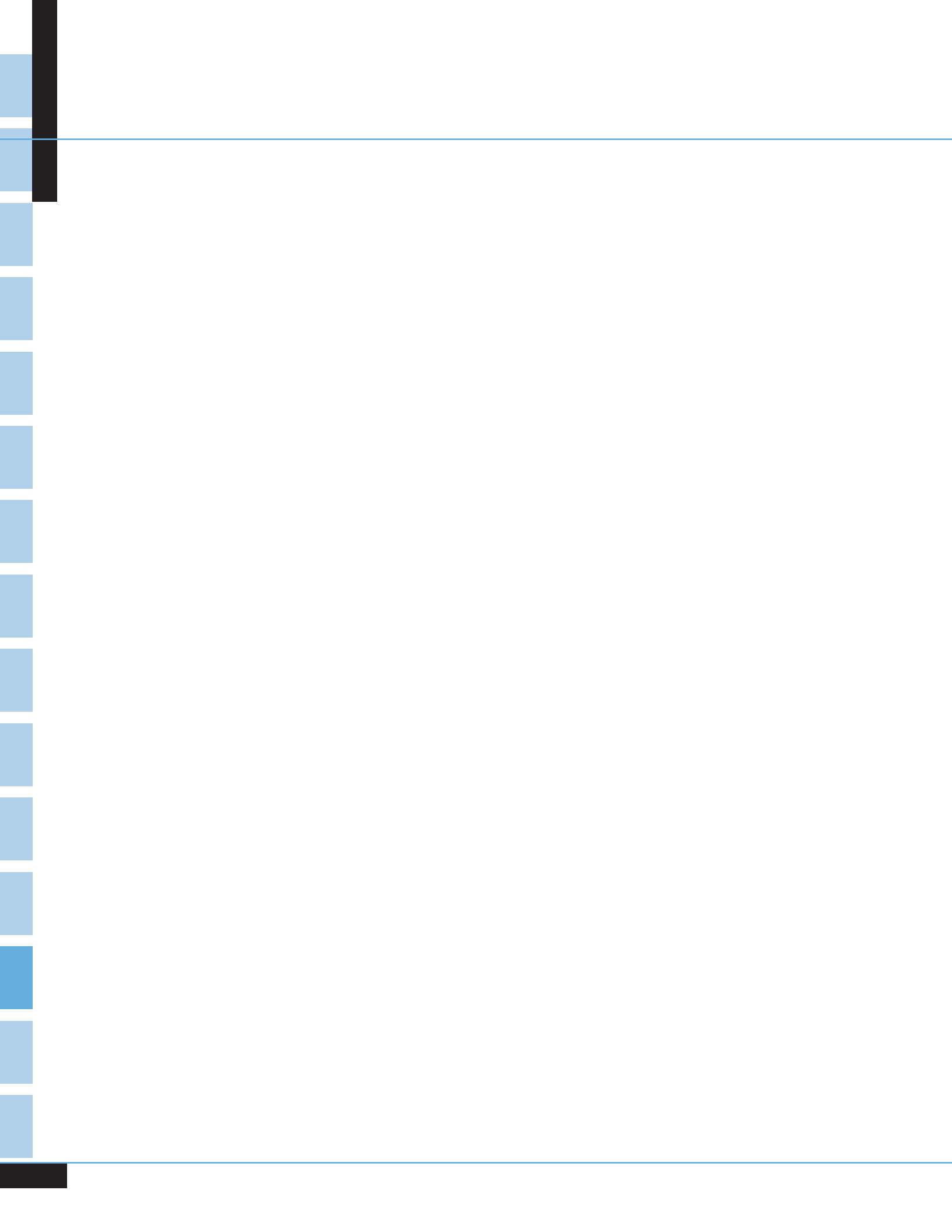
# Appendix C ■ GES Technical Notes

## Unknowns

GES data are obtained either directly from an item on the PAR or by interpreting the information provided in the report through reviewing the crash diagram, the Officer's written summary of the crash, or combinations of variables on the PAR. Because of this interpretation, and because the police officer may not have entered some item of information or provide complete information, data can be missing. Two different statistical procedures are used on GES data to complete values for unknown data. These procedures, univariate and hotdeck imputation, are described in a technical report available from NCSA, *Imputation in the General Estimates System* (DOT HS 807 985). Table C2 below gives the reader the proportion of unknown values prior to imputation for variables with imputed values that were used in this report.

**Table C2**  
**Percent of Unknowns for 2009 GES Data Elements**

Crash Level			
Alcohol Involved in Crash . . . . .	18.4%	Manner of Collision . . . . .	0.3%
Atmospheric Condition . . . . .	1.4%	Minute of Crash . . . . .	0.7%
Crash Severity . . . . .	3.6%	Relation to Junction . . . . .	0.7%
Day of Week . . . . .	0.0%	Relation to Roadway . . . . .	0.8%
First Harmful Event . . . . .	0.1%	Roadway Surface Condition . . . . .	1.4%
Hour of Crash . . . . .	0.7%	Speed Limit . . . . .	15.1%
Light Condition . . . . .	1.0%	Traffic Control Device . . . . .	4.2%
Vehicle/Driver Level			
Driver Drinking in Vehicle . . . . .	12.8%	Rollover Type . . . . .	0.7%
Initial Point of Impact . . . . .	2.0%	Vehicle Type . . . . .	1.6%
Most Harmful Event . . . . .	<0.1%		
Person Level			
Age . . . . .	8.1%	Seating Position . . . . .	0.5%
Injury Severity . . . . .	4.3%	Sex . . . . .	4.9%
Police-Reported Alcohol Involvement . . . . .	5.0%		



## Alcohol Involvement

NHTSA defines a fatal crash as alcohol-related or alcohol-involved if at least one driver or nonoccupant (such as a pedestrian or pedalcyclist) involved in the crash is determined to have had a Blood Alcohol Concentration (BAC) of .01 gram per deciliter (g/dL) or higher. Thus, any fatality that occurs in an alcohol-related crash is considered an alcohol-related fatality.

NHTSA defines a nonfatal crash as alcohol-related or alcohol-involved if police indicate on the police accident report that there is evidence of alcohol present. The code does not necessarily mean that a driver or nonoccupant was tested for alcohol.

The term “alcohol-related” or “alcohol-involved” does not indicate that a crash or fatality was caused by the presence of alcohol.

## Alcohol-Impaired Driving Crashes

Crashes that involve at least one driver or motorcycle rider (operator) with a BAC of .08 g/dL or higher. Thus, any crash involving a driver or motorcycle rider with a BAC of .08 g/dL or higher is considered to be an alcohol-impaired driving crash.

## Alcohol-Impaired Driving Fatalities

Fatalities in crashes that involve at least one driver or motorcycle rider (operator) with a BAC of .08 g/dL or higher. Thus, any fatality occurring in a crash involving a driver or motorcycle rider with a BAC of .08 g/dL or higher is considered to be an alcohol-impaired driving fatality.

## Blood Alcohol Concentration

The BAC is measured as a percentage by weight of alcohol in the blood (g/dL). A positive BAC level (.01 g/dL and higher) indicates that alcohol was consumed by the person tested; a BAC level of .08 g/dL or more indicates that the person was alcohol-impaired.

## Body Type

Detailed type of motor vehicle within a vehicle type.

## Bus

Large motor vehicles used to carry more than ten passengers, including school buses, inter-city buses, and transit buses.

## Combination Truck

A truck tractor not pulling a trailer; a tractor pulling at least one full or semi-trailer; or a single-unit truck pulling at least one trailer.

## Construction/Maintenance Zone

An area, usually marked by signs, barricades, or other devices indicating that highway construction or highway maintenance activities are ongoing.

## Crash

An event that produces injury and/or property damage, involves a motor vehicle in transport, and occurs on a trafficway or while the vehicle is still in motion after running off the trafficway.

## Crash Severity

1. **Fatal Crash.** A police-reported crash involving a motor vehicle in transport on a trafficway in which at least one person dies within 30 days of the crash.
2. **Injury Crash.** A police-reported crash that involves a motor vehicle in transport on a trafficway in which no one died but at least one person was reported to have: (1) an incapacitating injury; (2) a visible but not incapacitating injury; (3) a possible, not visible injury; or (4) an injury of unknown severity.
3. **Property-Damage-Only Crash.** A police-reported crash involving a motor vehicle in transport on a trafficway in which no one involved in the crash suffered any injuries.

## Crash Type

Single-vehicle or multiple-vehicle crash.

## Day

From 6 a.m. to 5:59 p.m.

## Driver

An occupant of a vehicle who is in physical control of a motor vehicle in transport, or for an out-of-control vehicle, an occupant who was in control until control was lost.

## Ejection

Refers to occupants being totally or partially thrown from the vehicle as a result of an impact or rollover.

# Glossary

## First Harmful Event

The first event during a crash that caused injury or property damage.

## Fixed Object

Stationary structures or substantial vegetation attached to the terrain.

## Gross Vehicle Weight Rating (GVWR)

The maximum rated capacity of a vehicle, including the weight of the base vehicle, all added equipment, driver and passengers, and all cargo loaded into or on the vehicle. Actual weight may be less than or greater than GVWR.

## Initial Impact Point

The first impact point that produced personal injury or property damage, regardless of First or Most Harmful Event.

## Injury Severity

The police-reported injury severity of the person (i.e., occupant, pedestrian, or pedalcyclist).

1. Killed (Fatal)
2. Injured (Incapacitating injury, evident injury but not incapacitating, complaint of injury, or injured, severity unknown).
3. No injury.

## Jackknife

Jackknife can occur at any time during the crash sequence. In this report, jackknifing is restricted to truck tractors pulling a trailing unit in which the trailing unit and the pulling vehicle rotate with respect to each other.

## Junction

Area formed by the connection of two roadways, including intersections, interchange areas, and entrance/exit ramps.

## Land Use

The crash location (urban or rural).

## Large Trucks

Trucks over 10,000 pounds gross vehicle weight rating, including single unit trucks and truck tractors.

## Light Trucks

Trucks of 10,000 pounds gross vehicle weight rating or less, including pickups, vans, truck-based station wagons, and utility vehicles.

## Manner of Collision

A classification for crashes in which the first harmful event was a collision between two motor vehicles in transport and is described as one of the following:

**Angle.** Collisions which are not head-on, rear-end, rear-to-rear, or sideswipe.

**Head-on.** Refers to a collision where the front end of one vehicle collides with the front-end of another vehicle while the two vehicles are traveling in opposite directions.

**Rear-end.** A collision in which one vehicle collides with the rear of another vehicle.

**Sideswipe.** A collision in which the sides of both vehicles sustain minimal engagements.

## Most Harmful Event

The event during a crash for a particular vehicle that is judged to have produced the greatest personal injury or property damage.

## Motor Vehicle in Transport

A motor vehicle in motion on the trafficway or any other motor vehicle on the roadway, including stalled, disabled, or abandoned vehicles.

## Motorcycle

A two- or three-wheeled motor vehicle designed to transport one or two people, including motor-scooters, minibikes, and mopeds.

## Motorcycle Rider

The operator (driver) of a motorcycle.

## Motorcyclist

Any person riding on a motorcycle, including the motorcycle rider (operator) and any passenger (a person riding on, but not in control of, the motorcycle).

## Night

From 6 p.m. to 5:59 a.m.

## Noncollision

A class of crash in which the first harmful event does not involve a collision with a fixed object, nonfixed object, or a motor vehicle. This includes overturn, fire/explosion, falls from a vehicle, and injuries in a vehicle.

## Nonoccupant

Any person who is not an occupant of a motor vehicle in transport and includes the following:

1. Pedestrians
2. Pedalcyclists
3. Occupants of parked motor vehicles
4. Others such as joggers, skateboard riders, people riding on animals, and persons riding in animal-drawn conveyances.

## Nonoccupant Location

The location of nonoccupants at time of impact. Intersection locations are coded only if nonoccupants were struck in the area formed by a junction of two or more trafficways. Non-intersection location may include nonoccupants struck on a junction of a driveway/alley access and a named trafficway. Nonoccupants who are occupants of motor vehicles not in transport are coded with respect to the location of the vehicle.

## Objects Not Fixed

Objects that are movable or moving but are not motor vehicles. Includes pedestrians, pedalcyclists, animals, or trains (e.g., spilled cargo in roadway).

## Occupant

Any person who is in or upon a motor vehicle in transport. Includes the driver, passengers, and persons riding on the exterior of a motor vehicle.

## Other Vehicle

Consists of the following types of vehicles:

1. Large limousine (more than four side doors or stretched chassis)
2. Three-wheel automobile or automobile derivative
3. Van-based motorhome
4. Light-truck-based motorhome (chassis mounted)
5. Large-truck-based motorhome

6. ATV (all terrain vehicle, including dune/swamp buggy) and ATC (all terrain cycle)
7. Snowmobile
8. Farm equipment other than trucks
9. Construction equipment other than trucks (includes graders)
10. Other type vehicle (includes go-cart, fork lift, city streetsweeper).

## Passenger

Any occupant of a motor vehicle who is not a driver.

## Passenger Car

Motor vehicles used primarily for carrying passengers, including convertibles, sedans, and station wagons.

## Pedalcyclist

A person on a vehicle that is powered solely by pedals.

## Pedestrian

Any person not in or upon a motor vehicle or other vehicle.

## Restraint Use

The occupant's use of available vehicle restraints, including lap belt, shoulder belt, or automatic belt.

## Roadway

That part of a trafficway designed, improved, and ordinarily used for motor vehicle travel.

## Roadway Function Class

The classification describing the character of service the street or highway is intended to provide. Includes the following:

**Interstates.** Limited access divided facilities of at least four lanes designated by the Federal Highway Administration as part of the Interstate System.

**Other Freeways and Expressways.** All urban principal arterial with limited control of access not on the Interstate system.

**Other Principal Arterials.** Major streets or highways, many with multi-lane or freeway design, serving high-volume traffic corridor movements that connect major generators of travel.

# Glossary

**Minor Arterials.** Streets and highways linking cities and larger towns in rural areas in distributing trips to small geographic areas in urban areas (not penetrating identifiable neighborhoods).

**Collectors.** In rural areas, routes serving intra-county, rather than State-wide travel. In urban areas, streets providing direct access to neighborhoods as well as direct access to arterials.

**Local Streets and Roads.** Streets whose primary purpose is feeding higher order systems, providing direct access with little or no through traffic.

## Rollover

Rollover is defined as any vehicle rotation of 90 degrees or more about any true longitudinal or lateral axis. Includes rollovers occurring as a first harmful event or subsequent event.

## Seating Position

The location of the occupants in the vehicle. More than one can be assigned the same seat position; however, this is allowed only when a person is sitting on someone's lap.

## School Bus Related Crash

Any crash in which a vehicle, regardless of body design, used as a school bus is directly or indirectly involved, such as a crash involving school children alighting from a vehicle.

## Single-Unit Truck

A medium or heavy truck in which the engine, cab, drive train, and cargo area are all on one chassis.

## Trafficway

Any road, street, or highway open to the public as a matter of right or custom for moving persons or property from one place to another.

## Vehicle

See *Motor Vehicle in Transport*.

## Vehicle Type

A series of motor vehicle body types that have been grouped together because of their design similarities. The principal vehicle types used in this report are passenger car, light truck, large truck, motorcycle, bus, and other vehicle. See the definition of each of the vehicle types elsewhere in this glossary.

## Weekday

From 6 a.m. Monday to 5:59 p.m. Friday.

## Weekend

From 6 p.m. Friday to 5:59 a.m. Monday.

## A

### Age

Alcohol 36, 37, 114, 115, 116, 117, 119  
 Crash Type 116, 117  
 Day of Week 116  
 Injury Severity 88  
 Occupant 105, 129  
 Person Type 106, 131, 132, 136, 137  
 Rates 21, 31, 90, 91, 100, 101, 132, 137  
 Restraint Use 121, 122  
 School Bus Related 130  
 Sex 90, 91, 100, 101, 106, 132, 137  
 State 156-157  
 Time of Day 116, 117

### Airbag 125

### Alcohol

Age 36, 37, 114, 115, 116, 117, 119  
 Crash Type 58, 94, 116, 117  
 Day of Week 116, 117  
 Driver Survival Status 38, 168-173  
 Holiday 33  
 Illegal Per Se Laws 192  
 Injury Severity 113  
 Pedestrian 38, 119  
 Person Type 113  
 Sex 34  
 State 166-173  
 Time of Day 34, 58, 59, 94, 116, 117  
 Vehicle Type 35, 118  
 Year 32

### Ambulance 96

## B

### Body Type 65, 111

### Bus 65, 66, 83, 84, 103, 104, 105, 108-111, 118, 120

## C

### City 180-183

### Construction/Maintenance Zone 96

### Crash Type

Alcohol 58, 94, 116  
 Day of Week 116  
 Driver Age 116  
 Emergency Vehicle 96  
 Hazardous Cargo 70  
 Impact Point 72, 74, 76, 78, 82, 84  
 Relation to Roadway 51  
 Roadway Function Class 70  
 Speed Limit 92  
 Time of Day 58, 94, 116, 117  
 Vehicle Type 30, 72, 74, 76, 78, 82, 84, 96

## D

### Day of Week 47, 116, 117, 127, 128, 133, 134, 138

### Driver

Age 36, 100, 101, 106, 116, 117  
 Alcohol 34, 35, 36, 37, 114, 115, 116-119, 168-173  
 Injury Severity 88, 103, 114  
 License Compliance 129  
 License Status 102  
 Previous Driving Record 102  
 Rates 19, 20, 100  
 Related Factors 102  
 Restraint Use 39, 120  
 Sex 34, 100, 106  
 State 152-153, 168-175

## E

### Ejection 109

### Emergency Medical Services 50, 176-177, 178-179

### Emergency Vehicle 96

## F

### Fire 68

### Fire Truck 96

### First Harmful Event 56, 146-147



# Index

## H

**Hazardous Cargo** 70

**Helmet Use** 129, 191

**Holiday** 33

## I

**Impact Point** 72, 73, 74, 75, 76, 77, 78, 81, 82, 83, 84, 108, 135, 140

**Intersection** 52, 131, 136

## J

**Jackknife** 80

## L

**Land Use** 50, 54, 70, 93, 176-177, 178-179

**Large Truck**

Alcohol 35, 118

Crash Type 30, 72, 78

Ejection 109

Fire 68

Impact Point 72, 77, 78, 108

Jackknife 80

Most Harmful Event 71, 77, 107

Number of Trailers 80

Occupant 26, 27, 30, 103, 104, 105

Rates 17, 26, 27

Restraint Use 120

Rollover 66, 79

State 158-159

Year 17, 26, 30

**License Compliance** 129

**License Status** 102

**Licensed Drivers** 15, 19, 152-153

**Light Condition** 49, 92

**Light Truck**

Alcohol 35, 118

Crash Type 72, 76

Ejection 109

Fire 68

Impact Point 72, 75, 76, 108

Most Harmful Event 71, 75, 107

Occupant 24, 25, 103, 104, 105

Rates 17, 24, 25

Restraint Use 120, 124, 125

Rollover 66

Seating Position 124

State 158-159

Year 17, 24

**Location (Nonoccupant)** 128, 133

## M

**Manner of Collision** 56

**Month** 46

**Most Harmful Event** 71, 73, 75, 77, 81, 83, 107

**Motorcycle**

Age 129

Alcohol 35, 118

Crash Type 72, 82

Day of Week 126, 127

Fire 68

Helmet Use 129

Helmet Use Requirements 191

Impact Point 72, 81, 82, 108

License Compliance 129

Most Harmful Event 71, 81, 107

Occupant 28, 29, 103, 104, 105

Rates 17, 28, 29

State 158-159

Time of Day 127, 128

Year 17, 28

## N

**Number of Lanes** 55

## O

**Occupant**

Age 21, 105, 106

Body Type 111

Ejection 109

Injury Severity 88, 103, 113

Restraint Laws 186-191

Restraint Use 40

Sex 104, 106

Vehicle Type 18, 96, 103, 104, 105, 108, 110, 111, 158-159

Year 18



## P

**Passenger** 88, 103, 106, 113, 127, 130, 154-155

**Passenger Car**

Alcohol 35, 118  
 Crash Type 72, 74  
 Ejection 109  
 Fire 68  
 Impact Point 72, 73, 74, 108  
 Most Harmful Event 71, 73, 107  
 Occupant 22, 23, 103, 104, 105, 106, 108, 109, 110, 111, 112  
 Rates 17, 22, 23  
 Restraint Use 123, 125  
 Rollover 66  
 Seating Position 123  
 State 158-159, 160-161  
 Wheelbase Size 112  
 Year 17, 22, 23

**Pedalcyclist**

Age 136, 137  
 Alcohol 113  
 Day of Week 138  
 Impact Point on Striking Vehicle 139  
 Injury Severity 88, 113  
 Location 136  
 Rates 137  
 Related Factors 140  
 Sex 137  
 State 154-155  
 Striking Vehicle Type 138  
 Time of Day 137  
 Year 18

**Pedestrian**

Age 130, 131, 132  
 Alcohol 38, 113, 120  
 City 178-183  
 Day of Week 133, 134  
 Impact Point on Striking Vehicle 135  
 Injury Severity 88, 113  
 Location 131  
 Rates 132, 164-165  
 Related Factors 135

School Bus Related 130

Sex 132

State 154-155, 180-183

Striking Vehicle Type 135

Time of Day 133, 134

Year 18

**Police Vehicle** 96

**Population**

Age 21, 31, 90, 91, 132, 137

City 180-183

Rates 15, 21, 90, 91, 132, 137, 152-153, 180-185

Sex 90, 91, 132, 137

State 152-153

Year 15, 21, 31

**Previous Driving Record** 102

## R

**Rates: Licensed Drivers**

Age 15, 19, 20, 100, 101

Sex 19, 20, 100, 101

State 152-153

Year 15, 19, 20

**Rates: Population**

Age 21, 31, 90, 91, 132, 137

City 180-183

Pedestrian 132, 164-165

Sex 90, 91, 132, 137

State 152-153, 164-165

Year 15

**Rates: Registered Vehicles**

State 152-153

Vehicle Type 17, 22, 24, 26, 28

Year 15, 17

**Rates: Vehicle Miles of Travel**

Month 46

State 184-185

Vehicle Type 17, 22, 23, 24, 25, 26, 27, 28, 29

Year 15, 16, 17

**Registered Vehicles** 15, 17, 22, 24, 26, 28, 152-153

**Relation to Junction** 52

**Relation to Roadway** 51

# Index

## **Restraint Use**

- Age 121, 122
- Child Passenger Protection Laws 186-191
- Driver 39, 120
- Restraint Type 125
- Seat Belt Use Laws 186-191
- Seating Position 123, 124
- State 160-161
- Vehicle Type 120
- Year 39, 40

**Roadway Function Class** 70, 96, 148-149, 150-151

**Rollover** 41, 66, 67, 79, 126, 162

## **S**

**School Bus Related** 130

**Seating Position** 124, 125

## **Sex**

- Age 90, 91, 100, 101, 131, 137
- Alcohol 34
- Injury Severity 88
- Person Type 106, 132, 137
- Rates 19, 20, 90, 91, 100, 101, 132, 137
- Vehicle Type 104

**Speed Limit** 53, 54, 92, 93, 99, 174-175

## **T**

**Time of Day** 34, 47, 48, 58, 59, 94, 100, 116, 117, 127, 128

**Traffic Control Device** 52

**Trafficway Flow** 55

## **V**

**Vehicle Maneuver** 69

**Vehicle Miles of Travel** 15, 16, 17, 22, 23, 24, 25, 26, 27, 28, 29

## **Vehicle Type**

- Alcohol 35, 118
- Body Type 65, 111
- Ejection 109
- Fire 68
- Impact Point 72, 74, 76, 78, 82, 84, 108, 135, 139
- Injury Severity 103
- Most Harmful Event 71, 73, 75, 77, 81, 83, 107
- Occupant Age 105
- Occupant Sex 104
- Restraint Use 120
- Rollover 66
- State 158-159
- Two-Vehicle Crash 57, 110
- Year 17, 18

## **W**

**Weather Condition** 49, 92

**Lives Saved by Restraint Use and 21-Year-Old Minimum Legal Drinking Age Laws,  
and Additional Lives That Would Have Been Saved  
at 100 Percent Seat Belt and Motorcycle Helmet Use, 1975-2009**

Year	Lives Saved					Additional Lives That Would Have Been Saved at 100% Use	
	Passenger Vehicle Restraints			Motorcycle Helmets	21-Year-Old Drinking Age*	Seat Belts	Motorcycle Helmets
	Child Restraints	Seat Belts	Frontal Air Bags				
1975	36	978	0	823	412	13,301	1,164
1976	20	796	0	788	436	13,851	1,189
1977	35	682	0	970	474	14,460	1,472
1978	25	679	0	900	509	15,541	1,588
1979	49	594	0	885	575	15,726	1,676
1980	49	575	0	871	595	15,730	1,744
1981	69	548	0	843	633	15,222	1,667
1982	75	678	0	816	578	13,250	1,528
1983	105	809	0	735	609	12,913	1,450
1984	126	1,197	0	813	709	13,227	759
1985	153	2,435	0	788	701	12,508	764
1986	166	4,094	0	807	840	12,728	751
1987	213	5,141	2	667	1,071	12,678	697
1988	248	5,959	5	622	1,148	12,674	644
1989	238	6,333	8	561	1,093	12,256	553
1990	222	6,592	37	655	1,033	11,761	541
1991	253	6,838	71	595	941	10,812	467
1992	292	7,020	108	641	795	10,195	323
1993	313	7,773	190	671	816	10,212	336
1994	420	9,219	309	625	848	9,507	339
1995	408	9,882	536	624	851	9,781	326
1996	480	10,710	783	617	846	9,459	324
1997	444	11,259	973	627	846	9,096	315
1998	438	11,680	1,208	660	861	8,690	369
1999	447	11,941	1,491	745	901	8,809	396
2000	479	12,882	1,716	872	922	8,245	478
2001	388	13,295	1,978	947	927	8,016	558
2002	383	14,264	2,324	992	922	6,837	576
2003	447	15,095	2,519	1,173	918	6,151	651
2004	455	15,548	2,660	1,324	927	5,874	673
2005	424	15,688	2,752	1,554	882	5,667	731
2006	427	15,458	2,824	1,667	888	5,468	756
2007	388	15,223	2,800	1,788	831	5,048	805
2008	286	13,312	2,557	1,836	716	4,171	827
2009	309	12,713	2,381	1,483	623	3,688	732
Total	9,310	267,890	30,232	31,985	27,677	363,552	28,169

\*Estimated reductions in deaths that resulted from the presence of laws establishing a minimum legal age of 21 years for the consumption of alcoholic beverages.

The table above presents estimates of the lives saved in 2009 and previous years by various protective devices or laws. The estimates were obtained by combining information from fatal traffic crashes with estimates of the effectiveness of each device or law in saving lives. For seat belts and motorcycle helmets, the table also estimates the numbers of additional lives that could have been saved if the devices had been used by more people.

Introduction

FARS Operations

GES Operations

About This Report

Data Availability

Chapter 1 ■ Trends

Chapter 2 ■ Crashes

Chapter 3 ■ Vehicles

Chapter 4 ■ People

Chapter 5 ■ States

FARS Data Elements

GES Data Elements

GES Technical Notes

Glossary

Index



U.S. Department  
of Transportation

**National Highway  
Traffic Safety  
Administration**

DOT HS 811 402

EARLY EDITION