U.S. Department
of Transportation
**National Highway
Traffic Safety
Administration**

# Traffic Safety Facts 1999

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

# 1999 National Statistics

| | | |
|---|---|---|
| **Motor Vehicle Traffic Crashes** | | |
| Fatal | 37,043 | |
| Injury | 2,054,000 | |
| Property Damage Only | 4,188,000 | |
| **Total** | **6,279,000** | |
| **Traffic Crash Victims** | **Killed** | **Injured** |
| **Occupants** | | |
| Drivers | 25,210 | 2,061,000 |
| Passengers | 10,499 | 1,024,000 |
| Unknown | 97 | 12,000 |
| **Nonmotorists** | | |
| Pedestrians | 4,906 | 85,000 |
| Pedalcyclists | 750 | 51,000 |
| Other/Unknown | 149 | 3,000 |
| **Total** | **41,611** | **3,236,000** |
| **Other National Statistics** | | |
| Vehicle Miles Traveled | 2,691,335,000,000 | |
| Resident Population | 272,690,813 | |
| Registered Vehicles | 212,685,157 | |
| Licensed Drivers | 187,170,000 | |
| Economic Cost of Traffic Crashes (1994) (estimate for reported and unreported crashes) | $150.5 billion | |
| **National Rates: Fatalities** | | |
| Fatalities per 100 Million Vehicle Miles Traveled | 1.5 | |
| Fatalities per 100,000 Population | 15.26 | |
| Fatalities per 100,000 Registered Vehicles | 19.56 | |
| Fatalities per 100,000 Licensed Drivers | 22.23 | |
| **National Rates: Injured Persons** | | |
| Injured Persons per 100 Million Vehicle Miles Traveled | 120 | |
| Injured Persons per 100,000 Population | 1,187 | |
| Injured Persons per 100,000 Registered Vehicles | 1,522 | |
| Injured Persons per 100,000 Licensed Drivers | 1,729 | |

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.

*Cover Photo—This single-vehicle crash occurred in Fairfax County, Virginia, on a roadway with a posted speed limit of 35 mph. The driver, who was the only occupant of the vehicle, was seriously injured when the vehicle hit a utility pole at high speed. Photographer: Detective James D. Bean, Fairfax County Police Department, Accident Reconstruction Section.*

DOT HS 809 100

# Traffic Safety Facts 1999:
# 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

**December 2000**

# EXECUTIVE DIRECTOR'S MESSAGE

**Dear Reader,**

The National Highway Traffic Safety Administration is pleased to present its *Traffic Safety Facts 1999: A Compilation of Motor Vehicle Crash Data from the Fatality Analysis Reporting System and the General Estimates System*. This report combines data from two of our key crash databases, providing statistics on traffic crashes of all severities.

The mission of the National Highway Traffic Safety Administration is to reduce deaths, injuries, and economic losses from motor vehicle crashes. Fortunately, much progress has been made in reducing the number of deaths and serious injuries on our nation's highways. In 1999, the fatality rate per 100 million vehicle miles of travel fell to a new historic low of 1.5. However, nearly 6.3 million police-reported motor vehicle crashes still occurred on our highways in 1999—one every 5 seconds. On average, a person was injured in these crashes every 10 seconds, and someone was killed every 13 minutes.

Information about these crashes, such as the tables in this report, helps us better understand the highway safety problem and develop effective solutions. Reducing these numbers requires the continued and combined efforts of state, local, and federal organizations working toward this common goal.

The National Highway Traffic Safety Administration is committed to keeping highway safety high on the list of our national priorities.

I hope you find this publication useful.

**Sincerely,**

**L. Robert Shelton**
***Executive Director***
**National Highway Traffic Safety Administration**

# CONTENTS

# Tables

## Tables (Continued)

## Tables (Continued)

## Tables (Continued)

### People: *Occupants*



### People: *Alcohol*



### People: *Restraints*

## Tables (Continued)

## Tables (Continued)

# Figures

## Trends



## Crashes



## Vehicles

## Figures (Continued)

### People



### States

# INTRODUCTION

In this annual report, *Traffic Safety Facts 1999: 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.

# FARS OPERATIONS

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 nonmotorist 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 1999 FARS data file used for the statistics in this report was created in June 2000; however, the 1999 FARS file will *officially* close on February 21, 2001. 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 1998 are reflected in this report. The updated final counts for 1999 will be reflected in the 2000 annual report.

# GES OPERATIONS

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 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 approximately 400 police jurisdictions in 60 sites across the United States, where they randomly sample about 50,000 PARs per year. The collectors obtain copies of the PARs and send them to a central contractor 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 1999 file used for the statistics in this report was completed in July 2000.

# ABOUT THIS REPORT

Fatal 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 1999) and GES (1988 through 1999). The remaining chapters present data only from 1999. 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. BAC values have been assigned to drivers and nonoccupants involved in fatal crashes when the alcohol test results are unknown. A complete description of the statistical procedures used for unknown data in GES and for unknown alcohol test results in FARS can be found in two technical reports: Imputation in the General Estimates System (DOT HS 807 985) and A Method for Estimating Posterior BAC Distributions for Persons Involved in Fatal Traffic Accidents (DOT HS 807 094). These reports are available from the National Center for Statistics and Analysis (NCSA) at the address given in the following section.

# 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 1999) or from GES (1988 through 1999) are available in four ways:

- Modest requests for specific data will be answered by NCSA at no charge. Response usually requires about 2 weeks, depending on the nature and complexity of the data requested.

- Computer tapes or 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 tapes is available by contacting the NCSA at the address below.

- FARS and GES data can be obtained by downloading any of the published files from the Internet, at ftp://www.nhtsa.dot.gov. The files are available in SAS and sequential ASCII file formats. This will enable you to process the data using your own computer system.

- FARS data can also be accessed on the world wide web at www-fars.nhtsa.dot.gov. This web site provides instant access to the 1994 through 1999 FARS data via the Query Engine, Wizard, and Reports Library. The Query Engine will enable you to process the data using our interactive user interface. The Query Wizard is an inventory of popularly requested statistical reports not included in NHTSA official publications. These are national reports that may be customized by selection to state, county, or city jurisdictions. The Reports Library, which contains NHTSA's published reports (including this publication) provides searchable and browseable access to NCSA's reports on crashes.

Requests for more information from FARS or GES or for a copy of the data files, should be directed to:

National Highway Traffic Safety Administration
National Center for Statistics and Analysis
NRD-31
400 Seventh Street, S.W.
Washington, D.C. 20590
(202) 366-4198 or 1-800-934-8517
(202) 366-7078 (FAX)

**Auto Safety Hotline**

To report a safety-related problem or to inquire about motor vehicle safety information, contact the Auto Safety Hotline at 1-800-424-9393.

Additional information on all NHTSA's data files, including FARS and GES, can be found on the NCSA world wide web site: www.nhtsa.dot.gov/people/ncsa. Current fact sheets, as well as recent NCSA research notes and abstracts of technical reports, can be downloaded in portable document format (.pdf). A traffic safety overview is also provided, with information from several fact sheets and data on lives saved by different types of passenger restraints. Comments and suggestions about the NCSA web site can be e-mailed to the following address: ncsaweb@nhtsa.dot.gov.

# Chapter 1 ♦ Trends

# 1. TRENDS

The tables in this chapter present statistics about motor vehicle crashes over time. Trends for fatal crashes and fatalities generally are presented from 1975 (when FARS began operation) to 1999; however, tables with alcohol data from FARS show data only for the years these data are available—1982 to 1999. Trends for nonfatal crashes and injured are presented from 1988 (when GES began operation) to 1999. 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 dropped slightly (0.2 percent) from 1998 to 1999, and the fatality rate dropped to a new historic low of 1.5 fatalities per 100 million vehicle miles of travel in 1999.
- The injury rate per 100 million vehicle miles of travel decreased slightly (by 0.8 percent) from 1998 to 1999.
- The occupant fatality rate per 100,000 population, which declined by 23 percent from 1975 to 1992, increased by 1.9 percent from 1992 to 1999.
- The occupant injury rate per 100,000 population, which declined by 14 percent from 1988 to 1992, decreased by 0.4 percent from 1992 to 1999.
- The nonmotorist fatality rate per 100,000 population has declined by 47 percent from 1975 to 1999.
- The nonmotorist injury rate per 100,000 population has declined by 35 percent from 1988 to 1999.
- The percent of alcohol-related fatalities has declined from 57 percent in 1982 to 38 percent in 1999.

**Figure 1**
**Fatal Crashes, 1975-1999**

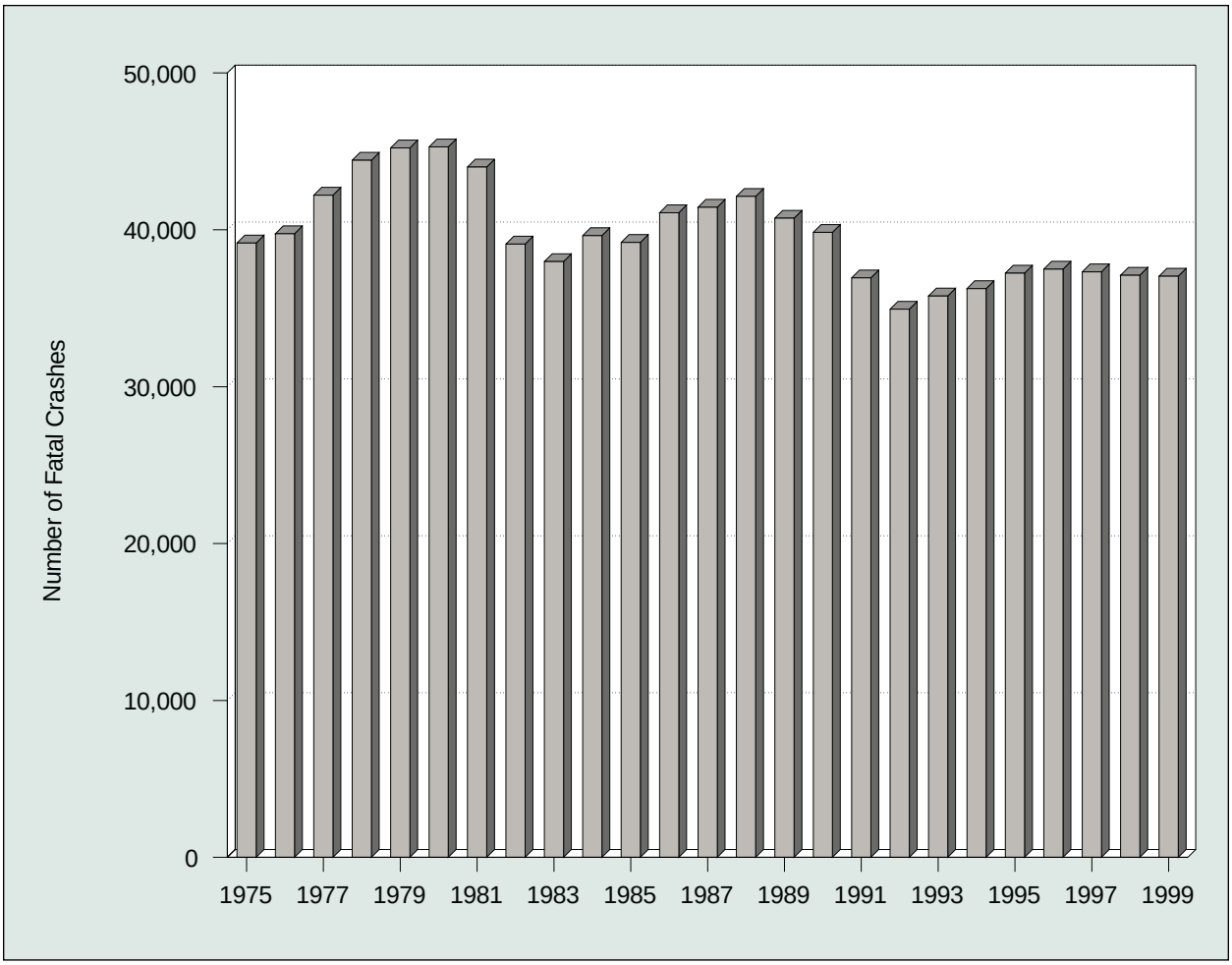



**Table 1**
**Crashes by Crash Severity, 1988-1999**

| 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** |
| 1989 | 40,741 | 0.6 | 2,153,000 | 32.4 | 4,459,000 | 67.0 | **6,653,000** | **100.0** |
| 1990 | 39,836 | 0.6 | 2,122,000 | 32.8 | 4,309,000 | 66.6 | **6,471,000** | **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 | 37,043 | 0.6 | 2,054,000 | 32.7 | 4,188,000 | 66.7 | **6,279,000** | **100.0** |

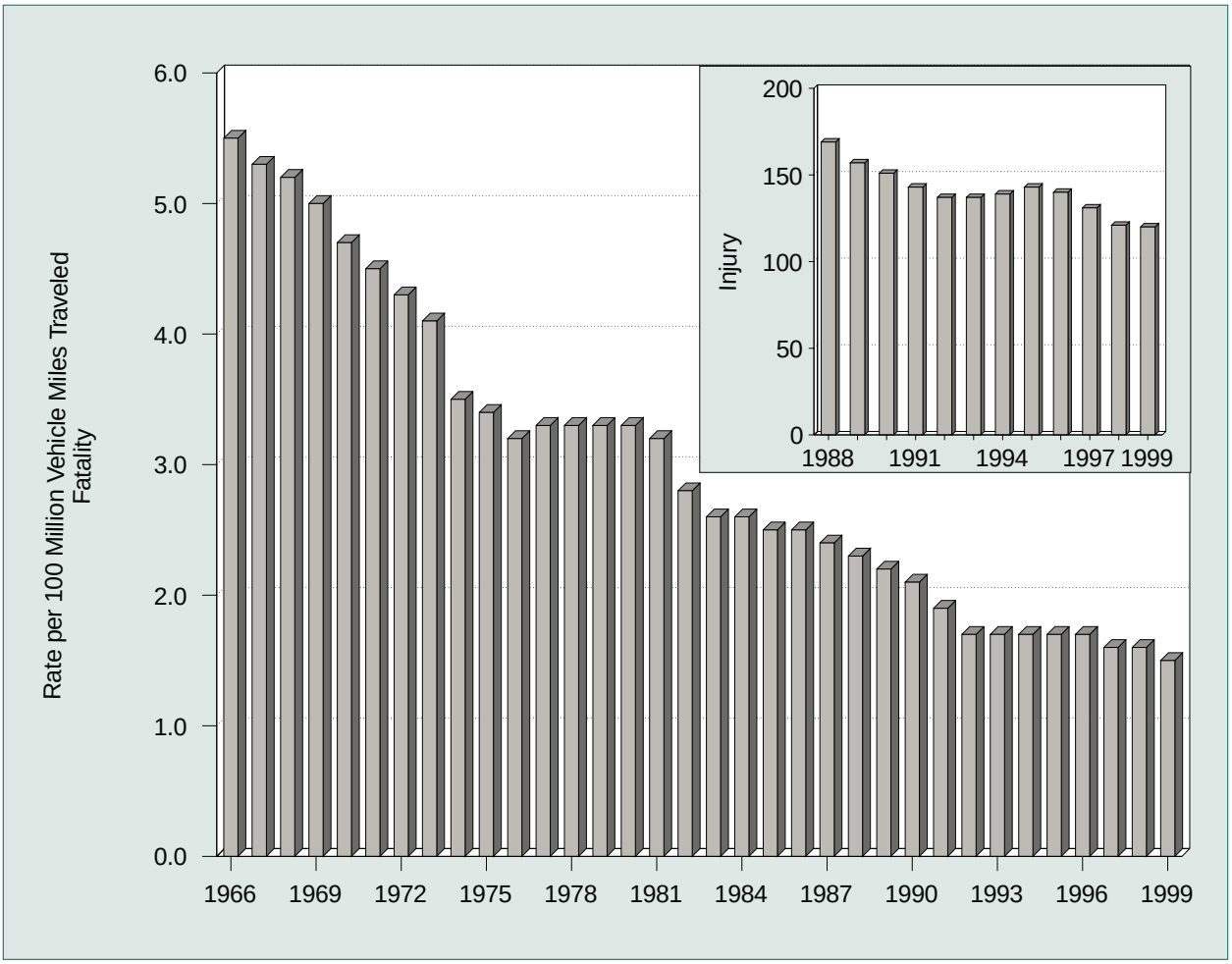
## Table 2
## Persons Killed or Injured and Fatality and Injury Rates per Population, Licensed Drivers, Registered Vehicles, and Vehicle Miles Traveled, 1966-1999

| 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 VMT |
| 1966 | 50,894 | 196,560 | 25.89 | 100,998 | 50.39 | 95,703 | 53.18 | 926 | 5.5 |
| 1967 | 50,724 | 198,712 | 25.53 | 103,172 | 49.16 | 98,859 | 51.31 | 964 | 5.3 |
| 1968 | 52,725 | 200,706 | 26.27 | 105,410 | 50.02 | 102,987 | 51.20 | 1,016 | 5.2 |
| 1969 | 53,543 | 202,677 | 26.42 | 108,306 | 49.44 | 107,412 | 49.85 | 1,062 | 5.0 |
| 1970 | 52,627 | 205,052 | 25.67 | 111,543 | 47.18 | 111,242 | 47.31 | 1,110 | 4.7 |
| 1971 | 52,542 | 207,661 | 25.30 | 114,426 | 45.92 | 116,330 | 45.17 | 1,179 | 4.5 |
| 1972 | 54,589 | 209,896 | 26.01 | 118,414 | 46.10 | 122,557 | 44.54 | 1,260 | 4.3 |
| 1973 | 54,052 | 211,909 | 25.51 | 121,546 | 44.47 | 130,025 | 41.57 | 1,313 | 4.1 |
| 1974 | 45,196 | 213,854 | 21.13 | 125,427 | 36.03 | 134,900 | 33.50 | 1,281 | 3.5 |
| 1975 | 44,525 | 215,973 | 20.62 | 129,791 | 34.31 | 126,153 | 35.29 | 1,328 | 3.4 |
| 1976 | 45,523 | 218,035 | 20.88 | 134,036 | 33.96 | 130,793 | 34.81 | 1,402 | 3.2 |
| 1977 | 47,878 | 220,239 | 21.74 | 138,121 | 34.66 | 134,514 | 35.59 | 1,467 | 3.3 |
| 1978 | 50,331 | 222,585 | 22.61 | 140,844 | 35.74 | 140,374 | 35.85 | 1,545 | 3.3 |
| 1979 | 51,093 | 225,055 | 22.70 | 143,284 | 35.66 | 144,317 | 35.40 | 1,529 | 3.3 |
| 1980 | 51,091 | 227,225 | 22.48 | 145,295 | 35.16 | 146,845 | 34.79 | 1,527 | 3.3 |
| 1981 | 49,301 | 229,466 | 21.49 | 147,075 | 33.52 | 149,330 | 33.01 | 1,555 | 3.2 |
| 1982 | 43,945 | 231,664 | 18.97 | 150,234 | 29.25 | 151,148 | 29.07 | 1,595 | 2.8 |
| 1983 | 42,589 | 233,792 | 18.22 | 154,389 | 27.59 | 153,830 | 27.69 | 1,653 | 2.6 |
| 1984 | 44,257 | 235,825 | 18.77 | 155,424 | 28.48 | 158,900 | 27.85 | 1,720 | 2.6 |
| 1985 | 43,825 | 237,924 | 18.42 | 156,868 | 27.94 | 166,047 | 26.39 | 1,775 | 2.5 |
| 1986 | 46,087 | 240,133 | 19.19 | 159,486 | 28.90 | 168,545 | 27.34 | 1,835 | 2.5 |
| 1987 | 46,390 | 242,289 | 19.15 | 161,816 | 28.67 | 172,750 | 26.85 | 1,921 | 2.4 |
| 1988 | 47,087 | 244,499 | 19.26 | 162,854 | 28.91 | 177,455 | 26.53 | 2,026 | 2.3 |
| 1989 | 45,582 | 246,819 | 18.47 | 165,554 | 27.53 | 181,165 | 25.16 | 2,096 | 2.2 |
| 1990 | 44,599 | 249,464 | 17.88 | 167,015 | 26.70 | 184,275 | 24.20 | 2,144 | 2.1 |
| 1991 | 41,508 | 252,153 | 16.46 | 168,995 | 24.56 | 186,370 | 22.27 | 2,172 | 1.9 |
| 1992 | 39,250 | 255,030 | 15.39 | 173,125 | 22.67 | 184,938 | 21.22 | 2,247 | 1.7 |
| 1993 | 40,150 | 257,783 | 15.58 | 173,149 | 23.19 | 188,350 | 21.32 | 2,296 | 1.7 |
| 1994 | 40,716 | 260,327 | 15.64 | 175,403 | 23.21 | 192,497 | 21.15 | 2,358 | 1.7 |
| 1995 | 41,817 | 262,803 | 15.91 | 176,628 | 23.68 | 197,065 | 21.22 | 2,423 | 1.7 |
| 1996 | 42,065 | 265,229 | 15.86 | 179,539 | 23.43 | 201,631 | 20.86 | 2,486 | 1.7 |
| 1997 | 42,013 | 267,784 | 15.69 | 182,709 | 22.99 | 203,568 | 20.64 | 2,562 | 1.6 |
| 1998 | 41,501 | 270,248 | 15.36 | 184,980 | 22.44 | 208,076 | 19.95 | 2,632 | 1.6 |
| 1999 | 41,611 | 272,691 | 15.26 | 187,170 | 22.23 | 212,685 | 19.56 | 2,691 | 1.5 |

| 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 VMT |
| 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 | 184,980 | 1,726 | 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 |

Source: Vehicle Miles of Travel and Licensed Drivers—Federal Highway Administration; Registered Vehicles, 1966-1974—Federal Highway Administration; Registered Vehicles, 1975-1999—R.L. Polk & Co. and Federal Highway Administration; Population—U.S. Bureau of the Census; Traffic Deaths, 1966-1974—National Center for Health Statistics, D.H.H.S., State Accident Summaries (adjusted to 30-day traffic deaths by NHTSA); Traffic Deaths, 1975-1999—Fatality Analysis Reporting System (FARS), NHTSA, 30-day traffic deaths; Injured, 1988-1999—General Estimates System (GES), NHTSA. Injury data not available for years before 1988.

**Figure 2**
**Motor Vehicle Fatality and Injury Rates per 100 Million Vehicle Miles Traveled, 1966-1999**



## Table 3
## Vehicles Involved in Crashes and Involvement Rates per Vehicle Miles of Travel and per Registered Vehicle by Vehicle Type and Crash Severity, 1975-1999

| 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 |
| **Fatal Crashes** | | | | | | | | | | | | |
| 1975 | 37,897 | 3.7 | 40.11 | 8,636 | 4.2 | 41.35 | 3,977 | 4.9 | 74.16 | 3,265 | 58.0 | 65.77 |
| 1976 | 37,206 | 3.5 | 38.35 | 9,300 | 4.0 | 40.80 | 4,435 | 5.2 | 79.55 | 3,343 | 55.7 | 67.76 |
| 1977 | 39,038 | 3.5 | 39.45 | 10,400 | 4.0 | 42.57 | 5,164 | 5.4 | 90.76 | 4,164 | 65.6 | 84.41 |
| 1978 | 40,544 | 3.6 | 39.81 | 11,898 | 4.1 | 43.61 | 5,759 | 5.4 | 98.28 | 4,643 | 64.9 | 95.38 |
| 1979 | 39,999 | 3.6 | 38.63 | 12,544 | 4.3 | 43.36 | 6,084 | 5.6 | 103.27 | 4,916 | 56.9 | 90.67 |
| 1980 | 39,059 | 3.5 | 37.28 | 12,680 | 4.3 | 42.18 | 5,379 | 5.0 | 92.89 | 5,194 | 50.9 | 91.22 |
| 1981 | 38,864 | 3.5 | 36.66 | 12,331 | 4.0 | 39.48 | 5,230 | 4.8 | 91.49 | 4,963 | 46.4 | 85.11 |
| 1982 | 34,334 | 3.0 | 32.11 | 11,317 | 3.5 | 35.03 | 4,646 | 4.2 | 83.11 | 4,495 | 45.4 | 78.12 |
| 1983 | 33,298 | 2.8 | 30.52 | 11,118 | 3.3 | 33.62 | 4,877 | 4.2 | 88.54 | 4,302 | 49.1 | 77.03 |
| 1984 | 34,648 | 2.8 | 30.89 | 11,973 | 3.3 | 33.96 | 5,124 | 4.2 | 94.87 | 4,659 | 53.0 | 85.02 |
| 1985 | 34,277 | 2.7 | 29.46 | 12,464 | 3.2 | 33.09 | 5,153 | 4.2 | 85.94 | 4,608 | 50.7 | 84.64 |
| 1986 | 36,195 | 2.8 | 30.87 | 13,327 | 3.2 | 33.52 | 5,097 | 4.0 | 89.09 | 4,570 | 48.6 | 87.90 |
| 1987 | 36,580 | 2.8 | 30.52 | 14,514 | 3.3 | 34.81 | 5,108 | 3.8 | 89.33 | 4,067 | 42.8 | 83.24 |
| 1988 | 36,977 | 2.7 | 30.43 | 15,286 | 3.1 | 34.27 | 5,241 | 3.8 | 85.40 | 3,715 | 37.1 | 81.04 |
| 1989 | 35,410 | 2.5 | 28.85 | 15,700 | 3.0 | 33.31 | 4,984 | 3.5 | 80.05 | 3,192 | 30.8 | 72.21 |
| 1990 | 34,085 | 2.4 | 27.65 | 15,620 | 2.8 | 31.29 | 4,776 | 3.3 | 77.08 | 3,276 | 34.3 | 76.91 |
| 1991 | 31,291 | 2.2 | 25.37 | 14,832 | 2.5 | 28.49 | 4,347 | 2.9 | 70.43 | 2,829 | 30.8 | 67.72 |
| 1992 | 29,817 | 2.1 | 24.78 | 14,648 | 2.3 | 27.21 | 4,035 | 2.6 | 66.75 | 2,439 | 25.5 | 60.00 |
| 1993 | 30,233 | 2.1 | 24.97 | 15,332 | 2.3 | 27.10 | 4,328 | 2.7 | 71.09 | 2,477 | 25.0 | 62.27 |
| 1994 | 30,273 | 2.1 | 24.81 | 16,353 | 2.3 | 27.49 | 4,644 | 2.7 | 70.49 | 2,339 | 22.8 | 62.26 |
| 1995 | 30,940 | 2.1 | 25.11 | 17,587 | 2.3 | 28.13 | 4,472 | 2.5 | 66.55 | 2,268 | 23.1 | 58.20 |
| 1996 | 30,727 | 2.0 | 24.66 | 18,246 | 2.3 | 27.88 | 4,755 | 2.6 | 67.81 | 2,176 | 21.9 | 56.20 |
| 1997 | 30,059 | 2.0 | 24.11 | 18,628 | 2.3 | 27.68 | 4,917 | 2.6 | 69.42 | 2,160 | 21.4 | 56.45 |
| 1998 | 29,040 | 1.9 | 23.05 | 19,363 | 2.2 | 27.75 | 4,955 | 2.5 | 64.08 | 2,334 | 22.7 | 60.16 |
| 1999 | 27,953 | 1.8 | 22.03 | 19,895 | 2.2 | 27.20 | 4,898 | 2.4 | 62.86 | 2,519 | 23.8 | 60.66 |
| **Injury Crashes** | | | | | | | | | | | | |
| 1988 | 3,073,000 | 222 | 2,529 | 683,000 | 140 | 1,530 | 96,000 | 69 | 1,562 | 98,000 | 974 | 2,129 |
| 1989 | 2,892,000 | 204 | 2,355 | 727,000 | 139 | 1,543 | 110,000 | 77 | 1,770 | 76,000 | 732 | 1,717 |
| 1990 | 2,838,000 | 199 | 2,302 | 729,000 | 131 | 1,460 | 107,000 | 73 | 1,730 | 82,000 | 854 | 1,916 |
| 1991 | 2,615,000 | 185 | 2,120 | 789,000 | 132 | 1,515 | 78,000 | 52 | 1,264 | 79,000 | 856 | 1,882 |
| 1992 | 2,640,000 | 184 | 2,194 | 758,000 | 118 | 1,409 | 95,000 | 62 | 1,567 | 61,000 | 642 | 1,509 |
| 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 |
| **Fatal Crashes** | | | | | | | | | | | | |
| 1988 | 6,050,000 | 437 | 4,979 | 1,542,000 | 316 | 3,458 | 297,000 | 215 | 4,839 | 21,000 | 207 | 453 |
| 1989 | 5,678,000 | 401 | 4,625 | 1,613,000 | 309 | 3,421 | 300,000 | 210 | 4,825 | 20,000 | 188 | 441 |
| 1990 | 5,485,000 | 384 | 4,450 | 1,654,000 | 298 | 3,314 | 273,000 | 187 | 4,411 | 20,000 | 208 | 467 |
| 1991 | 5,084,000 | 360 | 4,122 | 1,675,000 | 281 | 3,217 | 248,000 | 166 | 4,022 | 25,000 | 268 | 589 |
| 1992 | 4,852,000 | 338 | 4,031 | 1,704,000 | 265 | 3,165 | 277,000 | 181 | 4,586 | 10,000 | 100 | 236 |
| 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 |

Note: Vehicle miles traveled (VMT) data in this table have been revised and are not based exclusively on Federal Highway Administration (FHWA) data as they have been in earlier reports. The change was made to reflect the different vehicle classification schemes used by FHWA and the National Highway Traffic Safety Administration (NHTSA).

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.

## Table 4
## Persons Killed or Injured by Person Type and Vehicle Type, 1975-1999

| Year | Person Type | | | | | | | | | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Occupants by Vehicle Type | | | | | | | Nonmotorists | | | | |
| | Passenger Cars | Light Trucks | Large Trucks | Motorcycles | Buses | Other/ Unknown | Total | Pedestrian | Pedalcyclist | Other/ Unknown | Total | |
| **Killed** | | | | | | | | | | | | |
| 1975 | 25,929 | 4,856 | 961 | 3,189 | 53 | 937 | *35,925* | 7,516 | 1,003 | 81 | *8,600* | **44,525** |
| 1976 | 26,166 | 5,438 | 1,132 | 3,312 | 73 | 981 | *37,102* | 7,427 | 914 | 80 | *8,421* | **45,523** |
| 1977 | 26,782 | 5,976 | 1,287 | 4,104 | 42 | 959 | *39,150* | 7,732 | 922 | 74 | *8,728* | **47,878** |
| 1978 | 28,153 | 6,745 | 1,395 | 4,577 | 41 | 622 | *41,533* | 7,795 | 892 | 111 | *8,798* | **50,331** |
| 1979 | 27,808 | 7,178 | 1,432 | 4,894 | 39 | 579 | *41,930* | 8,096 | 932 | 135 | *9,163* | **51,093** |
| 1980 | 27,449 | 7,486 | 1,262 | 5,144 | 46 | 540 | *41,927* | 8,070 | 965 | 129 | *9,164* | **51,091** |
| 1981 | 26,645 | 7,081 | 1,133 | 4,906 | 56 | 603 | *40,424* | 7,837 | 936 | 104 | *8,877* | **49,301** |
| 1982 | 23,330 | 6,359 | 944 | 4,453 | 35 | 525 | *35,646* | 7,331 | 883 | 85 | *8,299* | **43,945** |
| 1983 | 22,979 | 6,202 | 982 | 4,265 | 53 | 362 | *34,843* | 6,826 | 839 | 81 | *7,746* | **42,589** |
| 1984 | 23,620 | 6,496 | 1,074 | 4,608 | 46 | 440 | *36,284* | 7,025 | 849 | 99 | *7,973* | **44,257** |
| 1985 | 23,212 | 6,689 | 977 | 4,564 | 57 | 544 | *36,043* | 6,808 | 890 | 84 | *7,782* | **43,825** |
| 1986 | 24,944 | 7,317 | 926 | 4,566 | 39 | 442 | *38,234* | 6,779 | 941 | 133 | *7,853* | **46,087** |
| 1987 | 25,132 | 8,058 | 852 | 4,036 | 51 | 436 | *38,565* | 6,745 | 948 | 132 | *7,825* | **46,390** |
| 1988 | 25,808 | 8,306 | 911 | 3,662 | 54 | 429 | *39,170* | 6,870 | 911 | 136 | *7,917* | **47,087** |
| 1989 | 25,063 | 8,551 | 858 | 3,141 | 50 | 424 | *38,087* | 6,556 | 832 | 107 | *7,495* | **45,582** |
| 1990 | 24,092 | 8,601 | 705 | 3,244 | 32 | 460 | *37,134* | 6,482 | 859 | 124 | *7,465* | **44,599** |
| 1991 | 22,385 | 8,391 | 661 | 2,806 | 31 | 466 | *34,740* | 5,801 | 843 | 124 | *6,768* | **41,508** |
| 1992 | 21,387 | 8,098 | 585 | 2,395 | 28 | 387 | *32,880* | 5,549 | 723 | 98 | *6,370* | **39,250** |
| 1993 | 21,566 | 8,511 | 605 | 2,449 | 18 | 425 | *33,574* | 5,649 | 816 | 111 | *6,576* | **40,150** |
| 1994 | 21,997 | 8,904 | 670 | 2,320 | 18 | 409 | *34,318* | 5,489 | 802 | 107 | *6,398* | **40,716** |
| 1995 | 22,423 | 9,568 | 648 | 2,227 | 33 | 392 | *35,291* | 5,584 | 833 | 109 | *6,526* | **41,817** |
| 1996* | 22,505 | 9,932 | 621 | 2,161 | 21 | 455 | *35,695* | 5,449 | 765 | 154 | *6,368* | **42,065** |
| 1997 | 22,199 | 10,249 | 723 | 2,116 | 18 | 420 | *35,725* | 5,321 | 814 | 153 | *6,288* | **42,013** |
| 1998 | 21,194 | 10,705 | 742 | 2,294 | 38 | 409 | *35,382* | 5,228 | 760 | 131 | *6,119* | **41,501** |
| 1999 | 20,818 | 11,243 | 758 | 2,472 | 58 | 457 | *35,806* | 4,906 | 750 | 149 | *5,805* | **41,611** |
| **Injured** | | | | | | | | | | | | |
| 1988 | 2,585,000 | 478,000 | 37,000 | 105,000 | 15,000 | 4,000 | *3,224,000* | 110,000 | 75,000 | 8,000 | *192,000* | **3,416,000** |
| 1989 | 2,431,000 | 511,000 | 43,000 | 83,000 | 15,000 | 5,000 | *3,088,000* | 112,000 | 73,000 | 11,000 | *196,000* | **3,284,000** |
| 1990 | 2,376,000 | 505,000 | 42,000 | 84,000 | 33,000 | 4,000 | *3,044,000* | 105,000 | 75,000 | 7,000 | *187,000* | **3,231,000** |
| 1991 | 2,235,000 | 563,000 | 28,000 | 80,000 | 21,000 | 4,000 | *2,931,000* | 88,000 | 67,000 | 11,000 | *166,000* | **3,097,000** |
| 1992 | 2,232,000 | 545,000 | 34,000 | 65,000 | 20,000 | 12,000 | *2,908,000* | 89,000 | 63,000 | 10,000 | *162,000* | **3,070,000** |
| 1993 | 2,265,000 | 601,000 | 32,000 | 59,000 | 17,000 | 4,000 | *2,978,000* | 94,000 | 68,000 | 9,000 | *171,000* | **3,149,000** |
| 1994 | 2,364,000 | 631,000 | 30,000 | 57,000 | 16,000 | 4,000 | *3,102,000* | 92,000 | 62,000 | 9,000 | *164,000* | **3,266,000** |
| 1995 | 2,469,000 | 722,000 | 30,000 | 57,000 | 19,000 | 4,000 | *3,303,000* | 86,000 | 67,000 | 10,000 | *162,000* | **3,465,000** |
| 1996 | 2,458,000 | 761,000 | 33,000 | 55,000 | 20,000 | 4,000 | *3,332,000* | 82,000 | 58,000 | 11,000 | *151,000* | **3,483,000** |
| 1997 | 2,341,000 | 755,000 | 31,000 | 53,000 | 17,000 | 6,000 | *3,201,000* | 77,000 | 58,000 | 11,000 | *146,000* | **3,348,000** |
| 1998 | 2,201,000 | 763,000 | 29,000 | 49,000 | 16,000 | 4,000 | *3,061,000* | 69,000 | 53,000 | 8,000 | *131,000* | **3,192,000** |
| 1999 | 2,138,000 | 847,000 | 33,000 | 50,000 | 22,000 | 7,000 | *3,097,000* | 85,000 | 51,000 | 3,000 | *140,000* | **3,236,000** |

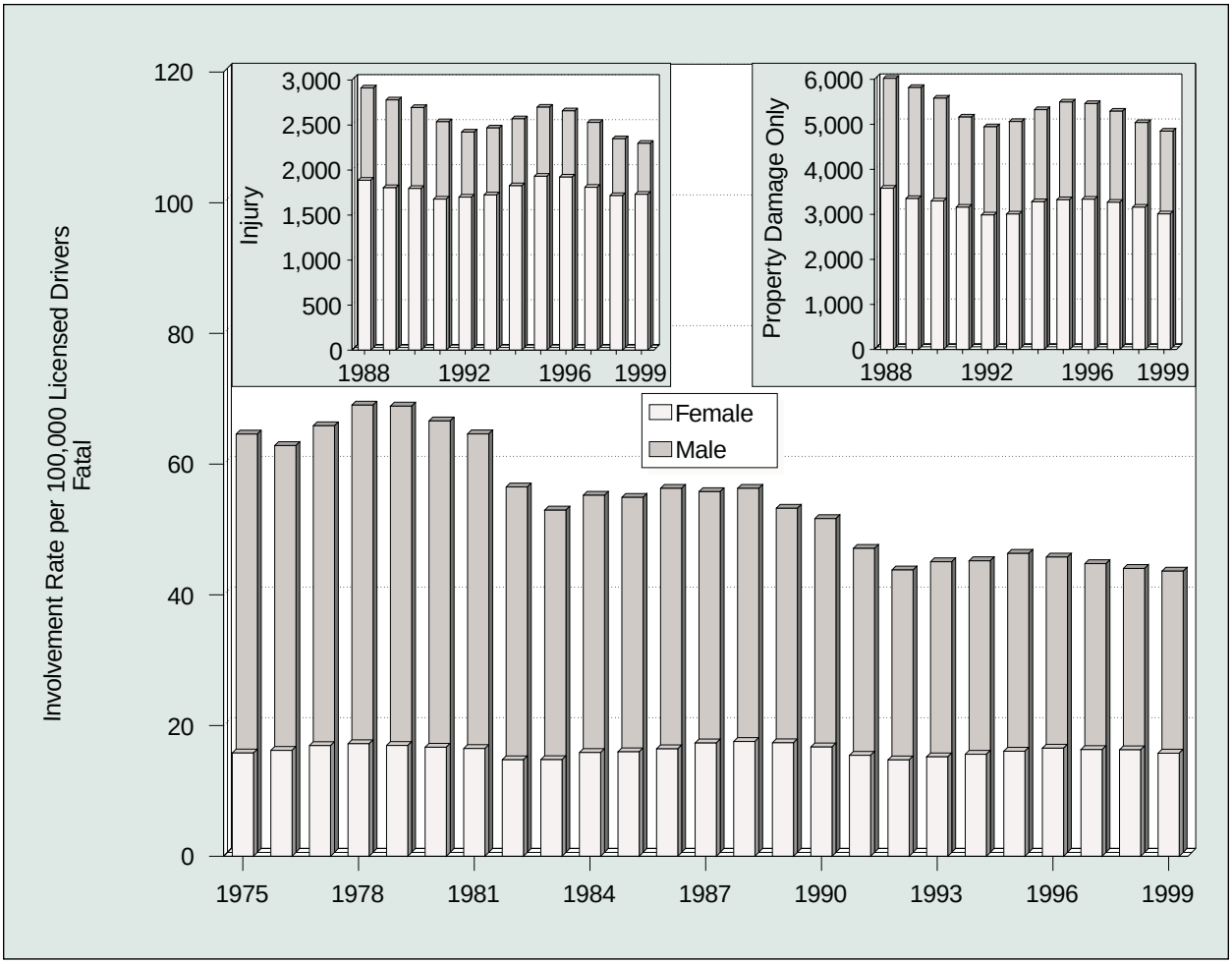
*Total for 1996 includes 2 fatalities of unknown person type.

## Table 5
## Drivers Involved in Crashes and Involvement Rates per Licensed Driver by Sex and Crash Severity, 1975-1999

| 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 |
| **Drivers in Fatal Crashes** | | | | | | | | | |
| 1975 | 45,087 | 70,435 | 64.01 | 9,356 | 59,233 | 15.80 | 54,445 | 129,668 | 41.99 |
| 1976 | 45,091 | 72,452 | 62.24 | 9,953 | 61,458 | 16.19 | 55,045 | 133,910 | 41.11 |
| 1977 | 48,548 | 74,385 | 65.27 | 10,775 | 63,591 | 16.94 | 59,324 | 137,976 | 43.00 |
| 1978 | 51,665 | 75,504 | 68.43 | 11,221 | 65,177 | 17.22 | 62,887 | 140,681 | 44.70 |
| 1979 | 52,208 | 76,458 | 68.28 | 11,308 | 66,695 | 16.95 | 63,518 | 143,152 | 44.37 |
| 1980 | 50,921 | 77,135 | 66.02 | 11,353 | 68,067 | 16.68 | 62,277 | 145,202 | 42.89 |
| 1981 | 49,838 | 77,831 | 64.03 | 11,396 | 69,142 | 16.48 | 61,238 | 146,972 | 41.67 |
| 1982 | 43,877 | 78,484 | 55.91 | 10,579 | 71,627 | 14.77 | 54,462 | 150,111 | 36.28 |
| 1983 | 42,329 | 80,823 | 52.37 | 10,854 | 73,440 | 14.78 | 53,184 | 154,263 | 34.48 |
| 1984 | 44,213 | 80,916 | 54.64 | 11,806 | 74,398 | 15.87 | 56,022 | 155,315 | 36.07 |
| 1985 | 44,290 | 81,537 | 54.32 | 12,031 | 75,231 | 15.99 | 56,322 | 156,769 | 35.93 |
| 1986 | 46,083 | 82,740 | 55.70 | 12,603 | 76,651 | 16.44 | 58,688 | 159,390 | 36.82 |
| 1987 | 46,337 | 83,939 | 55.20 | 13,492 | 77,789 | 17.34 | 59,829 | 161,728 | 36.99 |
| 1988 | 46,840 | 84,099 | 55.70 | 13,814 | 78,661 | 17.56 | 60,658 | 162,760 | 37.27 |
| 1989 | 44,941 | 85,356 | 52.65 | 13,927 | 80,160 | 17.37 | 58,870 | 165,516 | 35.57 |
| 1990 | 43,802 | 85,769 | 51.07 | 13,586 | 81,203 | 16.73 | 57,393 | 166,972 | 34.37 |
| 1991 | 40,288 | 86,630 | 46.51 | 12,716 | 82,300 | 15.45 | 53,007 | 168,930 | 31.38 |
| 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 | 40,523 | 94,149 | 43.04 | 14,675 | 92,988 | 15.78 | 55,201 | 187,137 | 29.50 |
| **Drivers in Injury Crashes** | | | | | | | | | |
| 1988 | 2,423,000 | 84,099 | 2,881 | 1,485,000 | 78,661 | 1,887 | 3,907,000 | 162,760 | 2,401 |
| 1989 | 2,347,000 | 85,356 | 2,749 | 1,446,000 | 80,160 | 1,804 | 3,793,000 | 165,516 | 2,291 |
| 1990 | 2,285,000 | 85,769 | 2,664 | 1,458,000 | 81,203 | 1,795 | 3,743,000 | 166,972 | 2,242 |
| 1991 | 2,171,000 | 86,630 | 2,506 | 1,380,000 | 82,300 | 1,677 | 3,551,000 | 168,930 | 2,102 |
| 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 |
| **Drivers in Property-Damage-Only Crashes** | | | | | | | | | |
| 1988 | 5,013,000 | 84,099 | 5,961 | 2,816,000 | 78,661 | 3,580 | 7,829,000 | 162,760 | 4,810 |
| 1989 | 4,915,000 | 85,356 | 5,758 | 2,687,000 | 80,160 | 3,352 | 7,602,000 | 165,516 | 4,593 |
| 1990 | 4,733,000 | 85,769 | 5,519 | 2,677,000 | 81,203 | 3,296 | 7,410,000 | 166,972 | 4,438 |
| 1991 | 4,419,000 | 86,630 | 5,101 | 2,600,000 | 82,300 | 3,159 | 7,019,000 | 168,930 | 4,155 |
| 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 |

*Total includes drivers (>15 years old) of unknown sex.
Source: Licensed Drivers—Federal Highway Administration.

**Figure 3**
**Driver Involvement Rate per 100,000 Licensed Drivers 16 Years and Older by Sex and Crash Severity, 1975-1999**



## Table 6
## Occupant Fatality and Injury Rates per Population by Age Group, 1975-1999

| 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 | 4.50 | 2.71 | 5.71 | 38.77 | 34.90 | 21.57 | 15.67 | 13.42 | 13.29 | 14.72 | 16.98 | **16.67** |
| 1976 | 4.50 | 2.56 | 6.14 | 40.95 | 35.01 | 21.27 | 15.27 | 13.71 | 13.58 | 14.92 | 17.27 | **17.05** |
| 1977 | 4.68 | 2.83 | 6.44 | 42.86 | 38.73 | 22.27 | 15.61 | 13.90 | 13.55 | 14.03 | 16.13 | **17.81** |
| 1978 | 4.61 | 2.66 | 6.60 | 44.45 | 40.75 | 24.26 | 16.72 | 14.07 | 13.44 | 14.79 | 16.36 | **18.70** |
| 1979 | 4.35 | 2.84 | 6.13 | 44.36 | 40.06 | 24.96 | 17.11 | 14.03 | 13.24 | 13.59 | 15.51 | **18.67** |
| 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** |
| 1981 | 3.75 | 2.43 | 5.24 | 38.56 | 37.41 | 24.22 | 16.63 | 13.81 | 12.68 | 13.16 | 14.94 | **17.62** |
| 1982 | 3.67 | 2.22 | 4.85 | 34.51 | 32.75 | 20.45 | 14.30 | 11.84 | 11.24 | 11.85 | 14.89 | **15.39** |
| 1983 | 3.55 | 2.33 | 4.60 | 33.18 | 30.97 | 19.86 | 13.87 | 11.79 | 10.92 | 11.92 | 15.48 | **14.90** |
| 1984 | 3.13 | 2.33 | 5.21 | 34.94 | 32.89 | 20.26 | 13.91 | 11.86 | 11.16 | 12.98 | 16.18 | **15.39** |
| 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** |
| 1986 | 3.42 | 2.30 | 6.07 | 38.16 | 33.72 | 21.04 | 13.82 | 11.50 | 11.38 | 13.46 | 17.71 | **15.92** |
| 1987 | 3.78 | 2.60 | 6.00 | 36.65 | 32.83 | 21.05 | 14.15 | 12.10 | 11.93 | 13.58 | 18.22 | **15.92** |
| 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 | 29.57 | 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 | 12.61 | 11.44 | 11.53 | 14.31 | 21.28 | **13.09** |
| 1999 | 2.93 | 2.54 | 4.48 | 28.08 | 25.52 | 16.10 | 12.60 | 11.47 | 11.50 | 14.06 | 20.57 | **13.13** |
| **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 | 2,431 | 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 | 588 | **1,133** |
| 1999 | 383 | 477 | 662 | 2,828 | 2,169 | 1,596 | 1,135 | 1,028 | 801 | 759 | 610 | **1,136** |

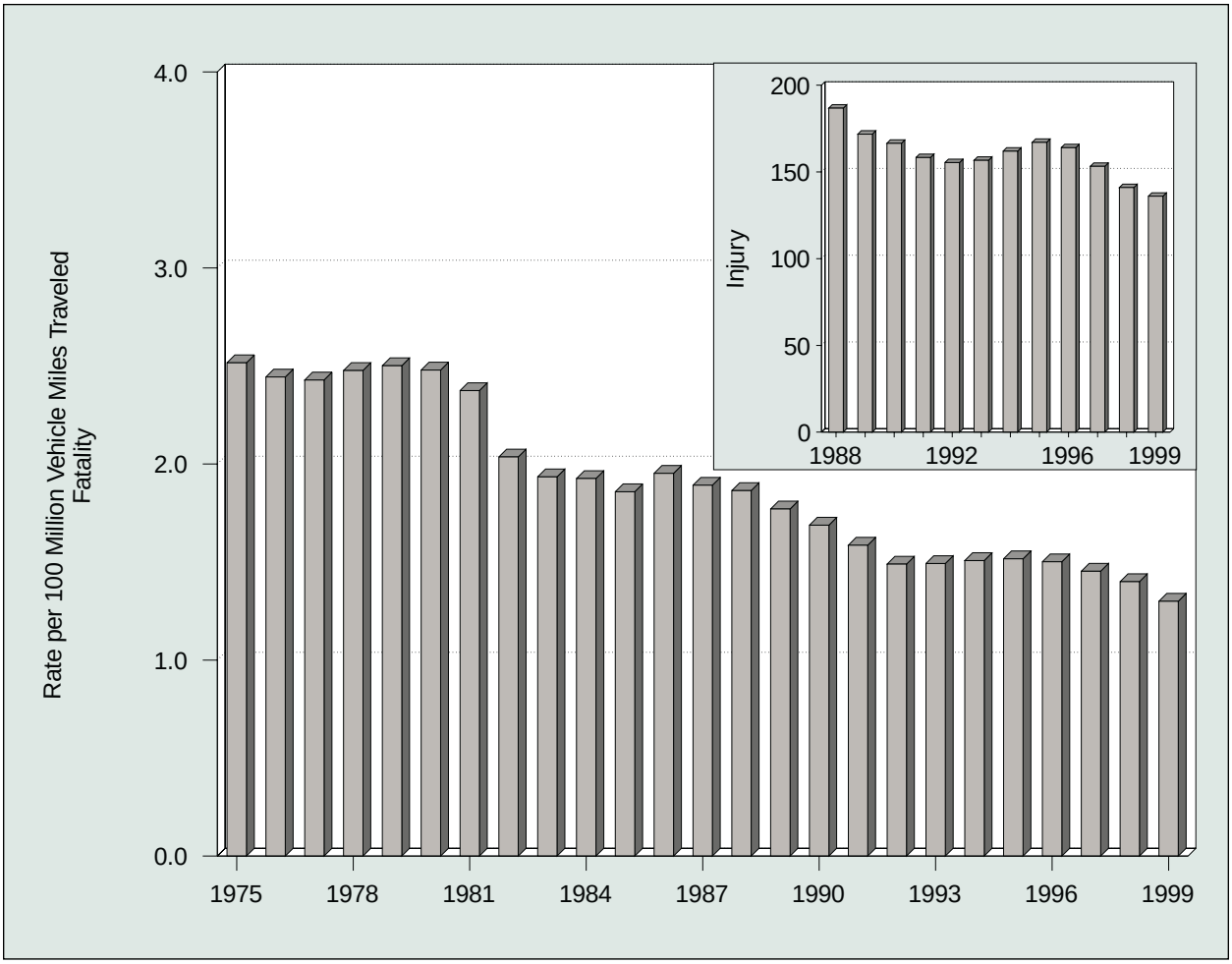
Note: Population estimates for historical years are periodically revised by the U.S. Census Bureau.

## Table 7
## Passenger Car Occupants Killed or Injured and Fatality and Injury Rates per Registered Vehicle and Vehicle Miles of Travel, 1975-1999

| 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 VMT | Passenger Car Occupants Injured | Injury Rate per 100,000 Registered Passenger Cars | Injury Rate per 100 Million VMT |
|---|---|---|---|---|---|---|---|---|
| 1975 | 94,478,029 | 1,030,376 | 25,929 | 27.44 | 2.5 | * | * | * |
| 1976 | 97,011,684 | 1,070,667 | 26,166 | 26.97 | 2.4 | * | * | * |
| 1977 | 98,967,665 | 1,102,726 | 26,782 | 27.06 | 2.4 | * | * | * |
| 1978 | 101,855,551 | 1,136,459 | 28,153 | 27.64 | 2.5 | * | * | * |
| 1979 | 103,543,788 | 1,111,705 | 27,808 | 26.86 | 2.5 | * | * | * |
| 1980 | 104,770,998 | 1,107,056 | 27,449 | 26.20 | 2.5 | * | * | * |
| 1981 | 106,002,720 | 1,122,092 | 26,645 | 25.14 | 2.4 | * | * | * |
| 1982 | 106,936,590 | 1,145,828 | 23,330 | 21.82 | 2.0 | * | * | * |
| 1983 | 109,085,444 | 1,187,760 | 22,979 | 21.07 | 1.9 | * | * | * |
| 1984 | 112,177,361 | 1,226,461 | 23,620 | 21.06 | 1.9 | * | * | * |
| 1985 | 116,348,085 | 1,248,981 | 23,212 | 19.95 | 1.9 | * | * | * |
| 1986 | 117,268,114 | 1,277,550 | 24,944 | 21.27 | 2.0 | * | * | * |
| 1987 | 119,848,784 | 1,328,460 | 25,132 | 20.97 | 1.9 | * | * | * |
| 1988 | 121,519,139 | 1,384,047 | 25,808 | 21.24 | 1.9 | 2,585,000 | 2,127 | 187 |
| 1989 | 122,758,478 | 1,415,213 | 25,063 | 20.42 | 1.8 | 2,431,000 | 1,980 | 172 |
| 1990 | 123,276,600 | 1,427,178 | 24,092 | 19.54 | 1.7 | 2,376,000 | 1,928 | 167 |
| 1991 | 123,327,336 | 1,411,655 | 22,385 | 18.15 | 1.6 | 2,235,000 | 1,812 | 158 |
| 1992 | 120,346,747 | 1,436,035 | 21,387 | 17.77 | 1.5 | 2,232,000 | 1,854 | 155 |
| 1993 | 121,055,398 | 1,445,106 | 21,566 | 17.81 | 1.5 | 2,265,000 | 1,871 | 157 |
| 1994 | 121,996,580 | 1,459,208 | 21,997 | 18.03 | 1.5 | 2,364,000 | 1,937 | 162 |
| 1995 | 123,241,881 | 1,478,352 | 22,423 | 18.19 | 1.5 | 2,469,000 | 2,004 | 167 |
| 1996 | 124,612,787 | 1,499,139 | 22,505 | 18.06 | 1.5 | 2,458,000 | 1,973 | 164 |
| 1997 | 124,672,920 | 1,528,399 | 22,199 | 17.81 | 1.5 | 2,341,000 | 1,877 | 153 |
| 1998 | 125,965,709 | 1,555,901 | 21,194 | 16.83 | 1.4 | 2,201,000 | 1,748 | 141 |
| 1999 | 126,868,744 | 1,566,979 | 20,818 | 16.41 | 1.3 | 2,138,000 | 1,685 | 136 |

*Injury data not available before 1988.
Note: Vehicle miles traveled (VMT) data in this table have been revised and are not based exclusively on Federal Highway Administration (FHWA) data as they have been in earlier reports. The change was made to reflect the different vehicle classification schemes used by FHWA and the National Highway Traffic Safety Administration (NHTSA).
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, 1975-1999**

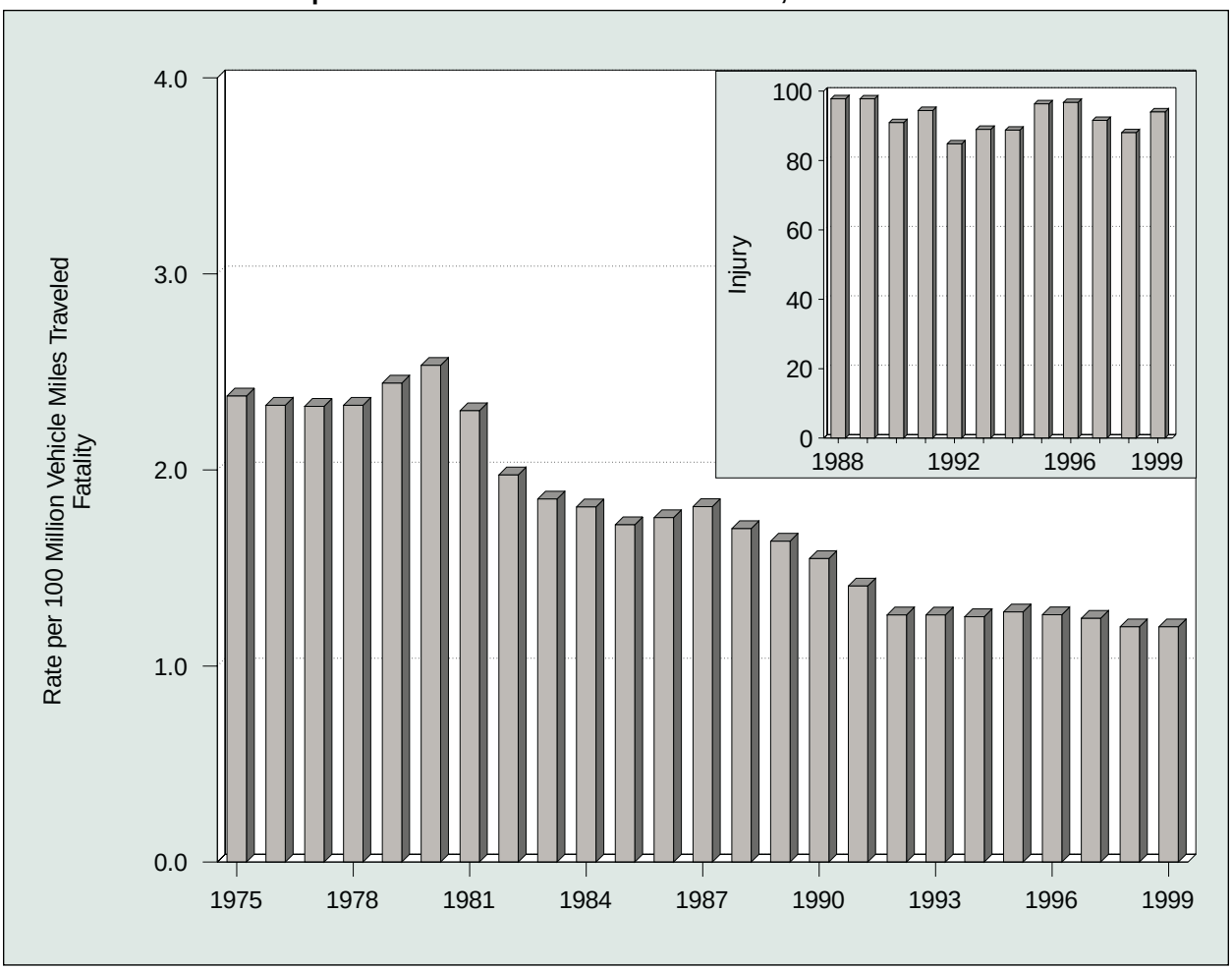


## Table 8
## Light Truck Occupants Killed or Injured and Fatality and Injury Rates per Registered Vehicle and Vehicle Miles of Travel, 1975-1999

| 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 VMT | Light Truck Occupants Injured | Injury Rate per 100,000 Registered Light Trucks | Injury Rate per 100 Million VMT |
|---|---|---|---|---|---|---|---|---|
| 1975 | 20,886,680 | 204,274 | 4,856 | 23.25 | 2.4 | * | * | * |
| 1976 | 22,794,702 | 233,382 | 5,438 | 23.86 | 2.3 | * | * | * |
| 1977 | 24,432,701 | 257,108 | 5,976 | 24.46 | 2.3 | * | * | * |
| 1978 | 27,285,497 | 289,463 | 6,745 | 24.72 | 2.3 | * | * | * |
| 1979 | 28,932,820 | 293,840 | 7,178 | 24.81 | 2.4 | * | * | * |
| 1980 | 30,060,754 | 295,475 | 7,486 | 24.90 | 2.5 | * | * | * |
| 1981 | 31,236,287 | 307,583 | 7,081 | 22.67 | 2.3 | * | * | * |
| 1982 | 32,307,692 | 322,026 | 6,359 | 19.68 | 2.0 | * | * | * |
| 1983 | 33,068,138 | 334,937 | 6,202 | 18.76 | 1.9 | * | * | * |
| 1984 | 35,257,788 | 358,588 | 6,496 | 18.42 | 1.8 | * | * | * |
| 1985 | 37,665,180 | 388,778 | 6,689 | 17.76 | 1.7 | * | * | * |
| 1986 | 39,763,446 | 416,532 | 7,317 | 18.40 | 1.8 | * | * | * |
| 1987 | 41,695,017 | 444,392 | 8,058 | 19.33 | 1.8 | * | * | * |
| 1988 | 44,599,500 | 488,431 | 8,306 | 18.62 | 1.7 | 478,000 | 1,071 | 98 |
| 1989 | 47,134,148 | 522,483 | 8,551 | 18.14 | 1.6 | 511,000 | 1,084 | 98 |
| 1990 | 49,916,497 | 555,659 | 8,601 | 17.23 | 1.5 | 505,000 | 1,012 | 91 |
| 1991 | 52,062,064 | 595,924 | 8,391 | 16.12 | 1.4 | 563,000 | 1,081 | 94 |
| 1992 | 53,836,046 | 642,397 | 8,098 | 15.04 | 1.3 | 545,000 | 1,012 | 85 |
| 1993 | 56,573,835 | 675,353 | 8,511 | 15.04 | 1.3 | 601,000 | 1,062 | 89 |
| 1994 | 59,485,995 | 711,515 | 8,904 | 14.97 | 1.3 | 631,000 | 1,061 | 89 |
| 1995 | 62,520,872 | 749,971 | 9,568 | 15.30 | 1.3 | 722,000 | 1,156 | 96 |
| 1996 | 65,438,877 | 787,255 | 9,932 | 15.18 | 1.3 | 761,000 | 1,164 | 97 |
| 1997 | 67,287,470 | 824,896 | 10,249 | 15.23 | 1.2 | 755,000 | 1,122 | 92 |
| 1998 | 69,783,500 | 861,951 | 10,705 | 15.34 | 1.2 | 763,000 | 1,093 | 88 |
| 1999 | 73,143,777 | 903,412 | 11,243 | 15.37 | 1.2 | 847,000 | 1,158 | 94 |

*Injury data not available before 1988.
Note: Vehicle miles traveled (VMT) data in this table have been revised and are not based exclusively on Federal Highway Administration (FHWA) data as they have been in earlier reports. The change was made to reflect the different vehicle classification schemes used by FHWA and the National Highway Traffic Safety Administration (NHTSA).
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, 1975-1999**

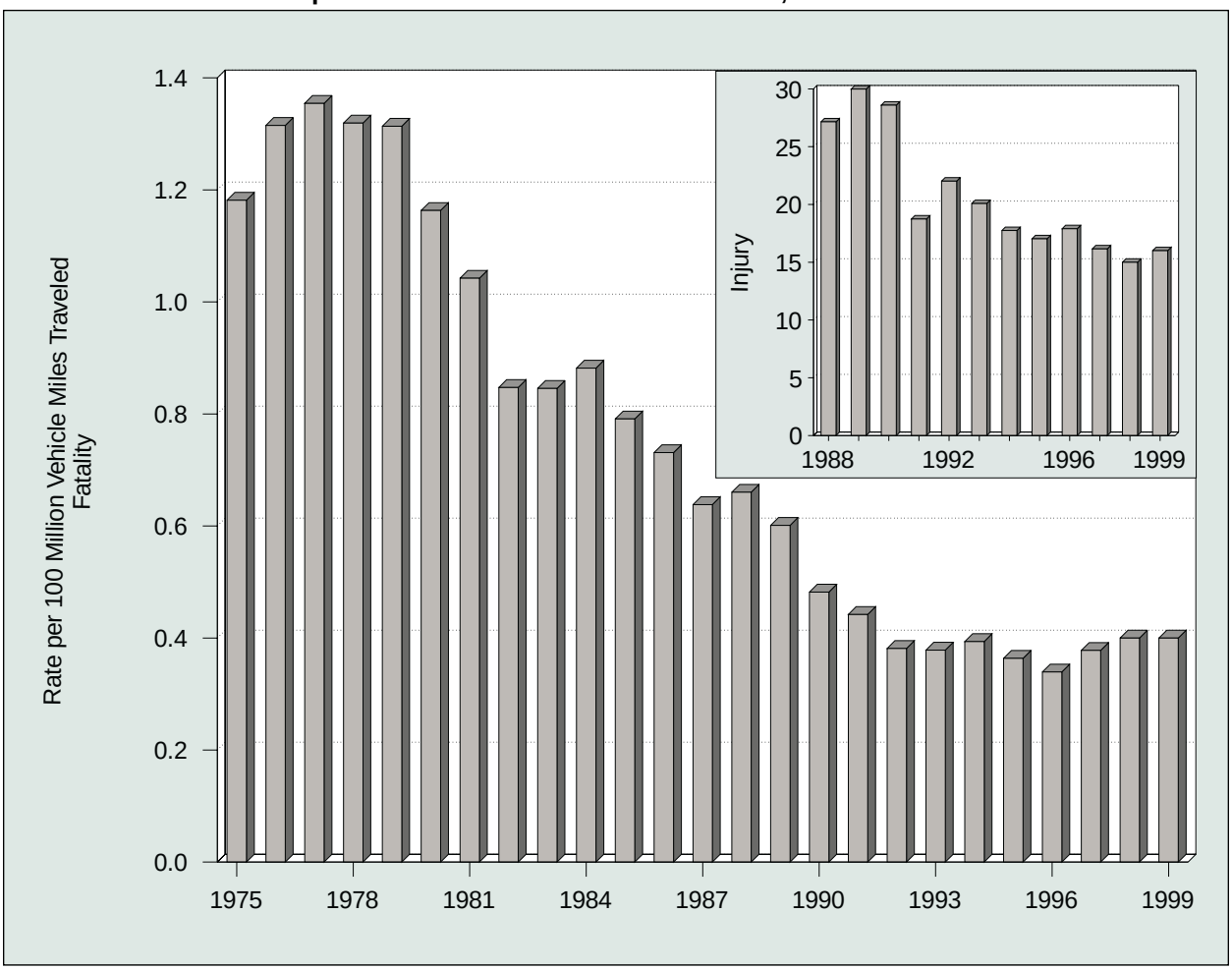


## Table 9
## Large Truck Occupants Killed or Injured and Fatality and Injury Rates per Registered Vehicle and Vehicle Miles of Travel, 1975-1999

| 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 VMT | Large Truck Occupants Injured | Injury Rate per 100,000 Registered Large Trucks | Injury Rate per 100 Million VMT |
|---|---|---|---|---|---|---|---|---|
| 1975 | 5,362,369 | 81,330 | 961 | 17.92 | 1.2 | * | * | * |
| 1976 | 5,575,185 | 86,070 | 1,132 | 20.30 | 1.3 | * | * | * |
| 1977 | 5,689,903 | 95,021 | 1,287 | 22.62 | 1.4 | * | * | * |
| 1978 | 5,859,807 | 105,739 | 1,395 | 23.81 | 1.3 | * | * | * |
| 1979 | 5,891,571 | 109,004 | 1,432 | 24.31 | 1.3 | * | * | * |
| 1980 | 5,790,653 | 108,491 | 1,262 | 21.79 | 1.2 | * | * | * |
| 1981 | 5,716,278 | 108,702 | 1,133 | 19.82 | 1.0 | * | * | * |
| 1982 | 5,590,415 | 111,423 | 944 | 16.89 | 0.8 | * | * | * |
| 1983 | 5,508,392 | 116,132 | 982 | 17.83 | 0.8 | * | * | * |
| 1984 | 5,401,075 | 121,796 | 1,074 | 19.88 | 0.9 | * | * | * |
| 1985 | 5,996,337 | 123,504 | 977 | 16.29 | 0.8 | * | * | * |
| 1986 | 5,720,880 | 126,675 | 926 | 16.19 | 0.7 | * | * | * |
| 1987 | 5,718,266 | 133,517 | 852 | 14.90 | 0.6 | * | * | * |
| 1988 | 6,136,884 | 137,985 | 911 | 14.84 | 0.7 | 37,000 | 611 | 27 |
| 1989 | 6,226,482 | 142,749 | 858 | 13.78 | 0.6 | 43,000 | 687 | 30 |
| 1990 | 6,195,876 | 146,242 | 705 | 11.38 | 0.5 | 42,000 | 675 | 29 |
| 1991 | 6,172,146 | 149,543 | 661 | 10.71 | 0.4 | 28,000 | 454 | 19 |
| 1992 | 6,045,205 | 153,384 | 585 | 9.68 | 0.4 | 34,000 | 559 | 22 |
| 1993 | 6,088,155 | 159,888 | 605 | 9.94 | 0.4 | 32,000 | 527 | 20 |
| 1994 | 6,587,885 | 170,216 | 670 | 10.17 | 0.4 | 30,000 | 459 | 18 |
| 1995 | 6,719,421 | 178,156 | 648 | 9.64 | 0.4 | 30,000 | 452 | 17 |
| 1996 | 7,012,615 | 182,971 | 621 | 8.86 | 0.3 | 33,000 | 467 | 18 |
| 1997 | 7,083,326 | 191,477 | 723 | 10.21 | 0.4 | 31,000 | 436 | 16 |
| 1998 | 7,732,270 | 196,380 | 742 | 9.60 | 0.4 | 29,000 | 372 | 15 |
| 1999 | 7,791,426 | 202,697 | 758 | 9.73 | 0.4 | 33,000 | 422 | 16 |

*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, 1975-1999**



## Table 10
## Motorcycle Occupants Killed or Injured and Fatality and Injury Rates per Registered Vehicle and Vehicle Miles of Travel, 1975-1999

| Year | Registered Motorcycles | Vehicle Miles Traveled (Millions) | Motorcycle Occupants Killed | Fatality Rate per 100,000 Registered Motorcycles | Fatality Rate per 100 Million VMT | Motorcycle Occupants Injured | Injury Rate per 100,000 Registered Motorcycles | Injury Rate per 100 Million VMT |
|---|---|---|---|---|---|---|---|---|
| 1975 | 4,964,070 | 5,629 | 3,189 | 64.24 | 56.7 | * | * | * |
| 1976 | 4,933,332 | 6,003 | 3,312 | 67.14 | 55.2 | * | * | * |
| 1977 | 4,933,256 | 6,349 | 4,104 | 83.19 | 64.6 | * | * | * |
| 1978 | 4,867,855 | 7,158 | 4,577 | 94.02 | 63.9 | * | * | * |
| 1979 | 5,422,132 | 8,637 | 4,894 | 90.26 | 56.7 | * | * | * |
| 1980 | 5,693,940 | 10,214 | 5,144 | 90.34 | 50.4 | * | * | * |
| 1981 | 5,831,132 | 10,690 | 4,906 | 84.13 | 45.9 | * | * | * |
| 1982 | 5,753,858 | 9,910 | 4,453 | 77.39 | 44.9 | * | * | * |
| 1983 | 5,585,112 | 8,760 | 4,265 | 76.36 | 48.7 | * | * | * |
| 1984 | 5,479,822 | 8,784 | 4,608 | 84.09 | 52.5 | * | * | * |
| 1985 | 5,444,404 | 9,086 | 4,564 | 83.83 | 50.2 | * | * | * |
| 1986 | 5,198,993 | 9,397 | 4,566 | 87.82 | 48.6 | * | * | * |
| 1987 | 4,885,772 | 9,506 | 4,036 | 82.61 | 42.5 | * | * | * |
| 1988 | 4,584,284 | 10,024 | 3,662 | 79.88 | 36.5 | 105,000 | 2,294 | 1,049 |
| 1989 | 4,420,420 | 10,371 | 3,141 | 71.06 | 30.3 | 83,000 | 1,887 | 805 |
| 1990 | 4,259,462 | 9,557 | 3,244 | 76.16 | 33.9 | 84,000 | 1,979 | 882 |
| 1991 | 4,177,365 | 9,178 | 2,806 | 67.17 | 30.6 | 80,000 | 1,925 | 876 |
| 1992 | 4,065,118 | 9,557 | 2,395 | 58.92 | 25.1 | 65,000 | 1,601 | 681 |
| 1993 | 3,977,856 | 9,906 | 2,449 | 61.57 | 24.7 | 59,000 | 1,494 | 600 |
| 1994 | 3,756,555 | 10,240 | 2,320 | 61.76 | 22.7 | 57,000 | 1,528 | 561 |
| 1995 | 3,897,191 | 9,797 | 2,227 | 57.14 | 22.7 | 57,000 | 1,475 | 587 |
| 1996 | 3,871,599 | 9,920 | 2,161 | 55.82 | 21.8 | 55,000 | 1,428 | 557 |
| 1997 | 3,826,373 | 10,081 | 2,116 | 55.30 | 21.0 | 53,000 | 1,374 | 522 |
| 1998 | 3,879,450 | 10,283 | 2,294 | 59.13 | 22.3 | 49,000 | 1,262 | 476 |
| 1999 | 4,152,433 | 10,584 | 2,472 | 59.53 | 23.4 | 50,000 | 1,204 | 472 |

*Injury data not available before 1988.
Source: Registered Vehicles and Vehicle Miles Traveled—Federal Highway Administration.

**Figure 7**
**Motorcycle Occupant Fatality and Injury Rates per 100 Million Vehicle Miles Traveled, 1975-1999**

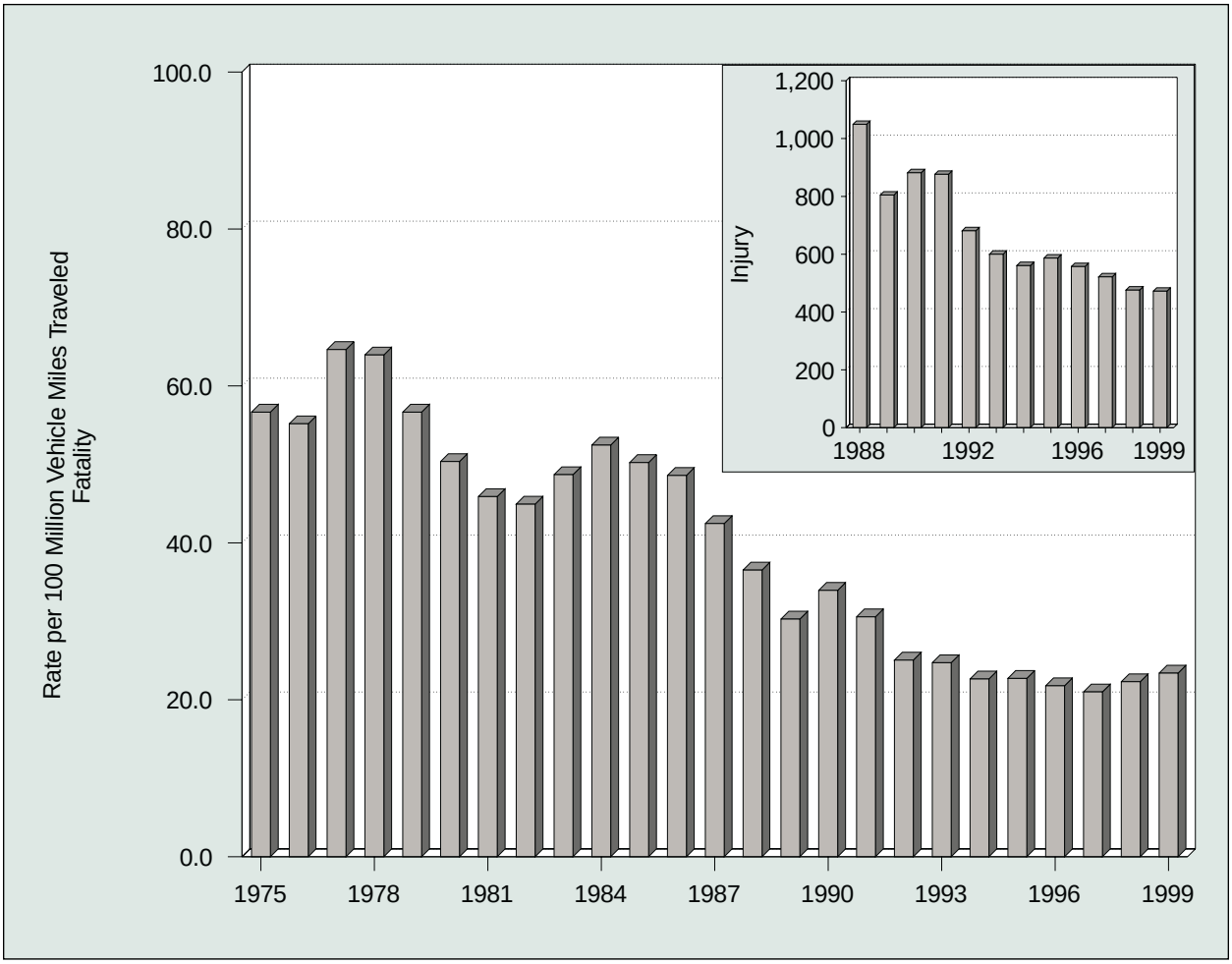


**Table 11**
**Persons Killed or Injured in Crashes Involving a Large Truck**
**by Person Type and Crash Type, 1975-1999**

| Year | Person Type | | | | | |
|---|---|---|---|---|---|---|
| | Truck Occupants by Crash Type | | | Other Vehicle Occupants | Nonmotorists | Total |
| | Single Vehicle | Multiple Vehicle | Total | | | |
| | | | **Killed** | | | |
| 1975 | 643 | 318 | *961* | 3,106 | 416 | **4,483** |
| 1976 | 774 | 358 | *1,132* | 3,384 | 492 | **5,008** |
| 1977 | 884 | 403 | *1,287* | 3,925 | 511 | **5,723** |
| 1978 | 929 | 466 | *1,395* | 4,354 | 607 | **6,356** |
| 1979 | 967 | 465 | *1,432* | 4,615 | 655 | **6,702** |
| 1980 | 861 | 401 | *1,262* | 4,084 | 625 | **5,971** |
| 1981 | 785 | 348 | *1,133* | 4,126 | 547 | **5,806** |
| 1982 | 639 | 305 | *944* | 3,790 | 495 | **5,229** |
| 1983 | 676 | 306 | *982* | 3,941 | 568 | **5,491** |
| 1984 | 755 | 319 | *1,074* | 4,036 | 530 | **5,640** |
| 1985 | 634 | 343 | *977* | 4,227 | 530 | **5,734** |
| 1986 | 603 | 323 | *926* | 4,088 | 565 | **5,579** |
| 1987 | 571 | 281 | *852* | 4,194 | 552 | **5,598** |
| 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 | 479 | 279 | *758* | 4,170 | 434 | **5,362** |
| | | | **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** |

## Table 12
## Nonmotorist Fatality and Injury Rates per Population by Age Group, 1975-1999

| 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** |
| 1976 | 3.52 | 5.63 | 3.71 | 3.72 | 3.04 | 2.43 | 2.62 | 3.30 | 3.60 | 5.58 | 10.12 | **3.87** |
| 1977 | 2.99 | 5.35 | 3.68 | 3.98 | 3.18 | 2.68 | 2.66 | 3.20 | 4.05 | 5.80 | 10.57 | **3.97** |
| 1978 | 3.14 | 5.45 | 3.76 | 4.04 | 3.51 | 2.90 | 2.78 | 3.33 | 3.77 | 5.36 | 8.93 | **3.96** |
| 1979 | 2.87 | 5.16 | 3.68 | 4.51 | 4.01 | 3.14 | 2.99 | 3.34 | 3.68 | 5.50 | 9.17 | **4.08** |
| 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** |
| 1981 | 2.14 | 4.44 | 3.27 | 4.20 | 4.18 | 3.36 | 2.82 | 3.22 | 3.42 | 4.88 | 8.74 | **3.87** |
| 1982 | 2.15 | 3.89 | 3.07 | 4.11 | 4.27 | 3.06 | 3.00 | 3.05 | 3.05 | 4.45 | 7.41 | **3.58** |
| 1983 | 2.03 | 3.69 | 3.05 | 3.67 | 3.83 | 2.91 | 2.46 | 2.80 | 3.12 | 3.77 | 7.37 | **3.31** |
| 1984 | 1.92 | 3.61 | 3.13 | 3.55 | 3.63 | 2.95 | 2.58 | 2.93 | 3.34 | 4.01 | 7.64 | **3.38** |
| 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** |
| 1986 | 1.89 | 3.58 | 3.22 | 3.45 | 3.54 | 2.93 | 2.51 | 2.98 | 2.86 | 3.64 | 7.34 | **3.27** |
| 1987 | 1.66 | 3.63 | 3.24 | 3.12 | 3.39 | 2.83 | 2.69 | 2.88 | 3.14 | 3.79 | 7.20 | **3.23** |
| 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 | 1.44 | 1.53 | 1.77 | 1.97 | 1.88 | 2.39 | 2.24 | 2.33 | 2.75 | 4.09 | **2.13** |
| **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** |

**Table 13**
**Persons Killed, by Highest Blood Alcohol Concentration (BAC) in the Crash, 1982-1999**

| Year | BAC = 0.00 | | BAC = 0.01-0.09 | | BAC = 0.10+ | | Tota | Total Fatalities in Alcohol-Related Crashes | |
|---|---|---|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent | Number | Number | Percent |
| 1982 | 18,780 | 43 | 4,809 | 11 | 20,356 | 46 | 43,945 | 25,165 | 57 |
| 1983 | 18,943 | 44 | 4,472 | 10 | 19,174 | 45 | 42,589 | 23,646 | 56 |
| 1984 | 20,499 | 46 | 4,766 | 11 | 18,992 | 43 | 44,257 | 23,758 | 54 |
| 1985 | 21,109 | 48 | 4,604 | 11 | 18,111 | 41 | 43,825 | 22,716 | 52 |
| 1986 | 22,042 | 48 | 5,109 | 11 | 18,936 | 41 | 46,087 | 24,045 | 52 |
| 1987 | 22,749 | 49 | 5,112 | 11 | 18,529 | 40 | 46,390 | 23,641 | 51 |
| 1988 | 23,461 | 50 | 4,895 | 10 | 18,731 | 40 | 47,087 | 23,626 | 50 |
| 1989 | 23,178 | 51 | 4,541 | 10 | 17,863 | 39 | 45,582 | 22,404 | 49 |
| 1990 | 22,515 | 50 | 4,434 | 10 | 17,650 | 40 | 44,599 | 22,084 | 50 |
| 1991 | 21,621 | 52 | 3,957 | 10 | 15,930 | 38 | 41,508 | 19,887 | 48 |
| 1992 | 21,392 | 55 | 3,625 | 9 | 14,234 | 36 | 39,250 | 17,858 | 45 |
| 1993 | 22,677 | 56 | 3,496 | 9 | 13,977 | 35 | 40,150 | 17,473 | 44 |
| 1994 | 24,136 | 59 | 3,480 | 9 | 13,100 | 32 | 40,716 | 16,580 | 41 |
| 1995 | 24,570 | 59 | 3,746 | 9 | 13,501 | 32 | 41,817 | 17,247 | 41 |
| 1996 | 24,847 | 59 | 3,774 | 9 | 13,444 | 32 | 42,065 | 17,218 | 41 |
| 1997 | 25,824 | 61 | 3,480 | 8 | 12,710 | 30 | 42,013 | 16,189 | 39 |
| 1998 | 25,481 | 61 | 3,526 | 8 | 12,494 | 30 | 41,501 | 16,020 | 39 |
| 1999 | 25,825 | 62 | 3,466 | 8 | 12,321 | 30 | 41,611 | 15,786 | 38 |

Note: 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 Blood Alcohol Concentration (BAC) in the Crash, 1982-1999**

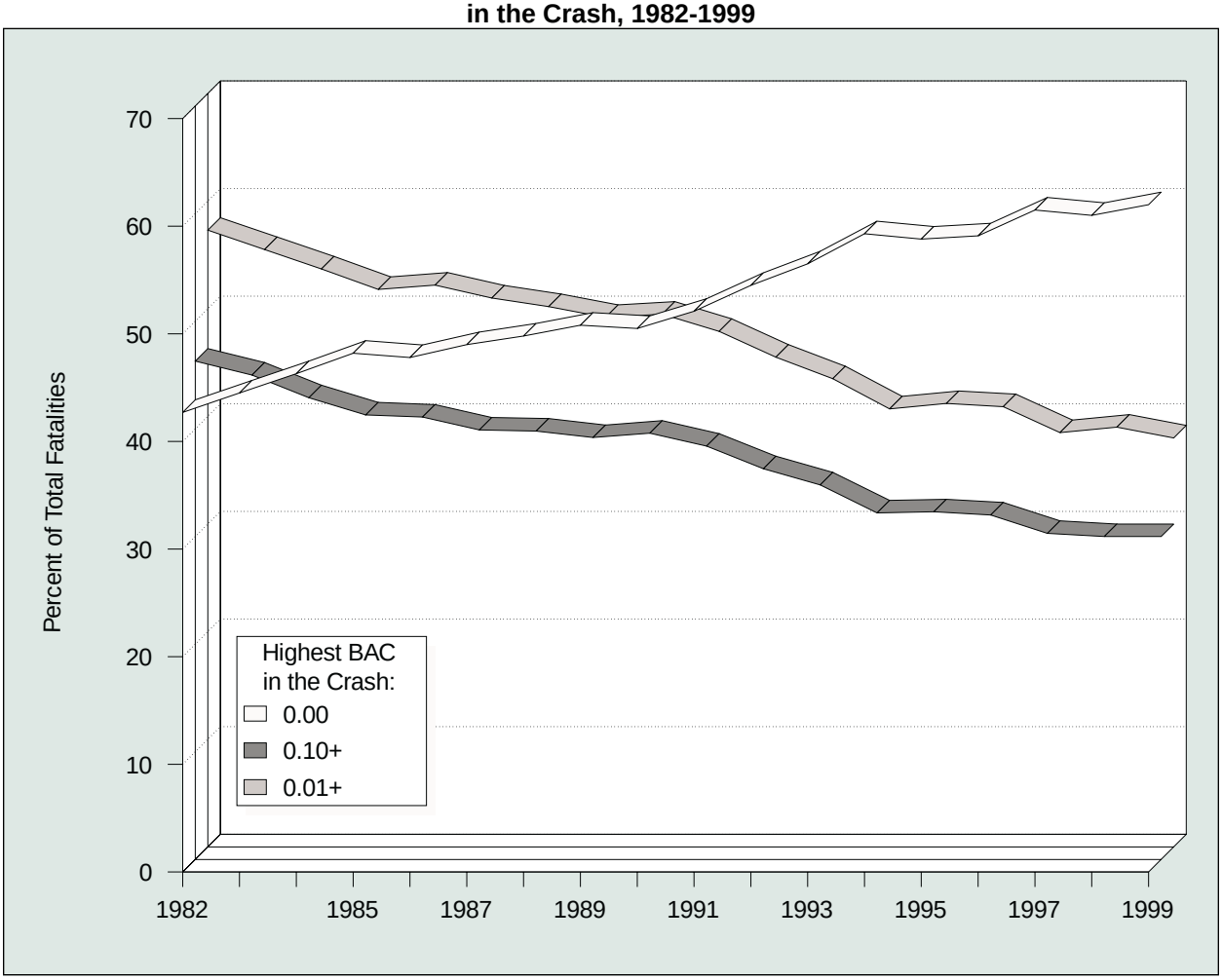


**Table 14**
**Persons Killed During Holiday Periods by Alcohol Involvement, 1982-1999**

| Year | Holiday Period* | | | | | |
|---|---|---|---|---|---|---|
| | New Year's Day | | Memorial Day | | Fourth of July | |
| | Killed | Percent Alcohol-Related** | Killed | Percent Alcohol-Related** | Killed | Percent Alcohol-Related** |
| 1982 | *** | *** | 498 (3) | 68 | 600 (3) | 70 |
| 1983 | 375 (3) | 69 | 539 (3) | 63 | 620 (3) | 68 |
| 1984 | 346 (3) | 69 | 527 (3) | 67 | 223 (1) | 65 |
| 1985 | 496 (4) | 60 | 557 (3) | 62 | 689 (4) | 63 |
| 1986 | 223 (1) | 66 | 616 (3) | 63 | 611 (3) | 68 |
| 1987 | 535 (4) | 61 | 519 (3) | 61 | 556 (3) | 60 |
| 1988 | 407 (3) | 63 | 529 (3) | 62 | 631 (3) | 63 |
| 1989 | 443 (3) | 55 | 594 (3) | 58 | 748 (4) | 60 |
| 1990 | 421 (3) | 57 | 589 (3) | 62 | 268 (1) | 65 |
| 1991 | 441 (4) | 60 | 533 (3) | 61 | 718 (4) | 57 |
| 1992 | 164 (1) | 74 | 438 (3) | 57 | 535 (3) | 56 |
| 1993 | 370 (3) | 58 | 454 (3) | 52 | 525 (3) | 54 |
| 1994 | 372 (3) | 55 | 482 (3) | 48 | 519 (3) | 49 |
| 1995 | 392 (3) | 48 | 483 (3) | 52 | 661 (4) | 49 |
| 1996 | 420 (3) | 52 | 514 (3) | 52 | 629 (4) | 47 |
| 1997 | 192 (1) | 67 | 511 (3) | 47 | 508 (3) | 50 |
| 1998 | 545 (4) | 51 | 393 (3) | 52 | 479 (3) | 50 |
| 1999 | 354 (3) | 54 | 500 (3) | 50 | 510 (3) | 45 |
| | Labor Day | | Thanksgiving | | Christmas | |
| 1982 | 628 (3) | 68 | 601 (4) | 62 | 458 (3) | 65 |
| 1983 | 636 (3) | 70 | 533 (4) | 59 | 352 (3) | 60 |
| 1984 | 609 (3) | 66 | 558 (4) | 60 | 643 (4) | 66 |
| 1985 | 605 (3) | 64 | 566 (4) | 57 | 152 (1) | 66 |
| 1986 | 663 (3) | 64 | 598 (4) | 59 | 508 (4) | 59 |
| 1987 | 630 (3) | 63 | 659 (4) | 56 | 409 (3) | 57 |
| 1988 | 592 (3) | 64 | 601 (4) | 58 | 511 (3) | 60 |
| 1989 | 588 (3) | 60 | 561 (4) | 57 | 553 (3) | 61 |
| 1990 | 599 (3) | 66 | 563 (4) | 54 | 567 (4) | 51 |
| 1991 | 577 (3) | 56 | 546 (4) | 52 | 135 (1) | 50 |
| 1992 | 460 (3) | 55 | 403 (4) | 57 | 410 (3) | 50 |
| 1993 | 522 (3) | 58 | 569 (4) | 47 | 402 (3) | 54 |
| 1994 | 494 (3) | 55 | 575 (4) | 47 | 455 (3) | 49 |
| 1995 | 511 (3) | 49 | 527 (4) | 52 | 358 (3) | 47 |
| 1996 | 525 (3) | 52 | 588 (4) | 46 | 167 (1) | 54 |
| 1997 | 507 (3) | 50 | 571 (4) | 40 | 480 (4) | 44 |
| 1998 | 464 (3) | 51 | 602 (4) | 49 | 364 (3) | 49 |
| 1999 | 484 (3) | 47 | 578 (4) | 44 | 479 (3) | 46 |

*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.

**Blood alcohol concentration (BAC) of 0.01 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.
***No data available.

## Table 15
## Drivers in Fatal Crashes by Blood Alcohol Concentration (BAC) and Time of Day, 1982-1999

| Year | Day* | | | Night* | | | Total Drivers | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total | Percent | | Total | Percent | | Total | Percent | |
| | | BAC = 0.01+ | BAC = 0.10+ | | BAC = 0.01+ | BAC = 0.10+ | | BAC = 0.01+ | BAC = 0.10+ |
| 1982 | 23,725 | 17 | 12 | 32,085 | 55 | 43 | 56,029 | 39 | 30 |
| 1983 | 24,381 | 17 | 12 | 30,037 | 54 | 43 | 54,656 | 38 | 29 |
| 1984 | 26,415 | 16 | 11 | 30,775 | 53 | 41 | 57,512 | 36 | 27 |
| 1985 | 27,578 | 15 | 10 | 30,008 | 51 | 40 | 57,883 | 34 | 26 |
| 1986 | 28,434 | 15 | 10 | 31,543 | 51 | 40 | 60,335 | 34 | 26 |
| 1987 | 29,227 | 14 | 10 | 31,854 | 50 | 38 | 61,442 | 33 | 25 |
| 1988 | 30,196 | 14 | 10 | 31,715 | 50 | 39 | 62,253 | 33 | 25 |
| 1989 | 29,953 | 14 | 9 | 30,170 | 49 | 39 | 60,435 | 32 | 24 |
| 1990 | 28,797 | 14 | 9 | 29,778 | 50 | 39 | 58,893 | 32 | 25 |
| 1991 | 26,829 | 13 | 9 | 27,249 | 49 | 38 | 54,391 | 31 | 24 |
| 1992 | 26,236 | 12 | 8 | 25,380 | 46 | 36 | 51,901 | 29 | 22 |
| 1993 | 27,770 | 11 | 7 | 25,355 | 45 | 36 | 53,401 | 27 | 21 |
| 1994 | 29,134 | 10 | 7 | 25,112 | 42 | 33 | 54,549 | 25 | 19 |
| 1995 | 30,066 | 11 | 7 | 25,755 | 42 | 33 | 56,164 | 25 | 19 |
| 1996 | 30,802 | 10 | 7 | 25,864 | 42 | 33 | 57,001 | 25 | 19 |
| 1997 | 30,979 | 9 | 6 | 25,368 | 40 | 32 | 56,688 | 24 | 18 |
| 1998 | 31,389 | 10 | 6 | 24,879 | 40 | 32 | 56,604 | 23 | 18 |
| 1999 | 31,106 | 10 | 6 | 24,920 | 40 | 31 | 56,352 | 23 | 17 |

*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, 1982-1999

| Year | Male | | | Female | | |
|---|---|---|---|---|---|---|
| | Total | Percent | | Total | Percent | |
| | | BAC = 0.01+ | BAC = 0.10+ | | BAC = 0.01+ | BAC = 0.10+ |
| 1982 | 44,370 | 42 | 32 | 10,675 | 26 | 19 |
| 1983 | 42,812 | 40 | 31 | 10,958 | 25 | 18 |
| 1984 | 44,723 | 39 | 30 | 11,907 | 24 | 17 |
| 1985 | 44,846 | 37 | 28 | 12,142 | 22 | 15 |
| 1986 | 46,653 | 38 | 29 | 12,744 | 21 | 15 |
| 1987 | 46,884 | 36 | 28 | 13,614 | 21 | 15 |
| 1988 | 47,402 | 36 | 28 | 13,951 | 20 | 15 |
| 1989 | 45,448 | 35 | 27 | 14,054 | 20 | 14 |
| 1990 | 44,281 | 36 | 28 | 13,726 | 19 | 14 |
| 1991 | 40,731 | 35 | 27 | 12,825 | 19 | 14 |
| 1992 | 38,598 | 32 | 25 | 12,596 | 18 | 13 |
| 1993 | 39,556 | 31 | 24 | 13,082 | 17 | 12 |
| 1994 | 40,233 | 29 | 22 | 13,567 | 15 | 11 |
| 1995 | 41,235 | 28 | 22 | 14,184 | 16 | 11 |
| 1996 | 41,376 | 28 | 21 | 14,850 | 16 | 11 |
| 1997 | 40,954 | 27 | 20 | 14,954 | 14 | 10 |
| 1998 | 40,816 | 27 | 20 | 15,089 | 14 | 10 |
| 1999 | 40,900 | 26 | 20 | 14,792 | 14 | 10 |

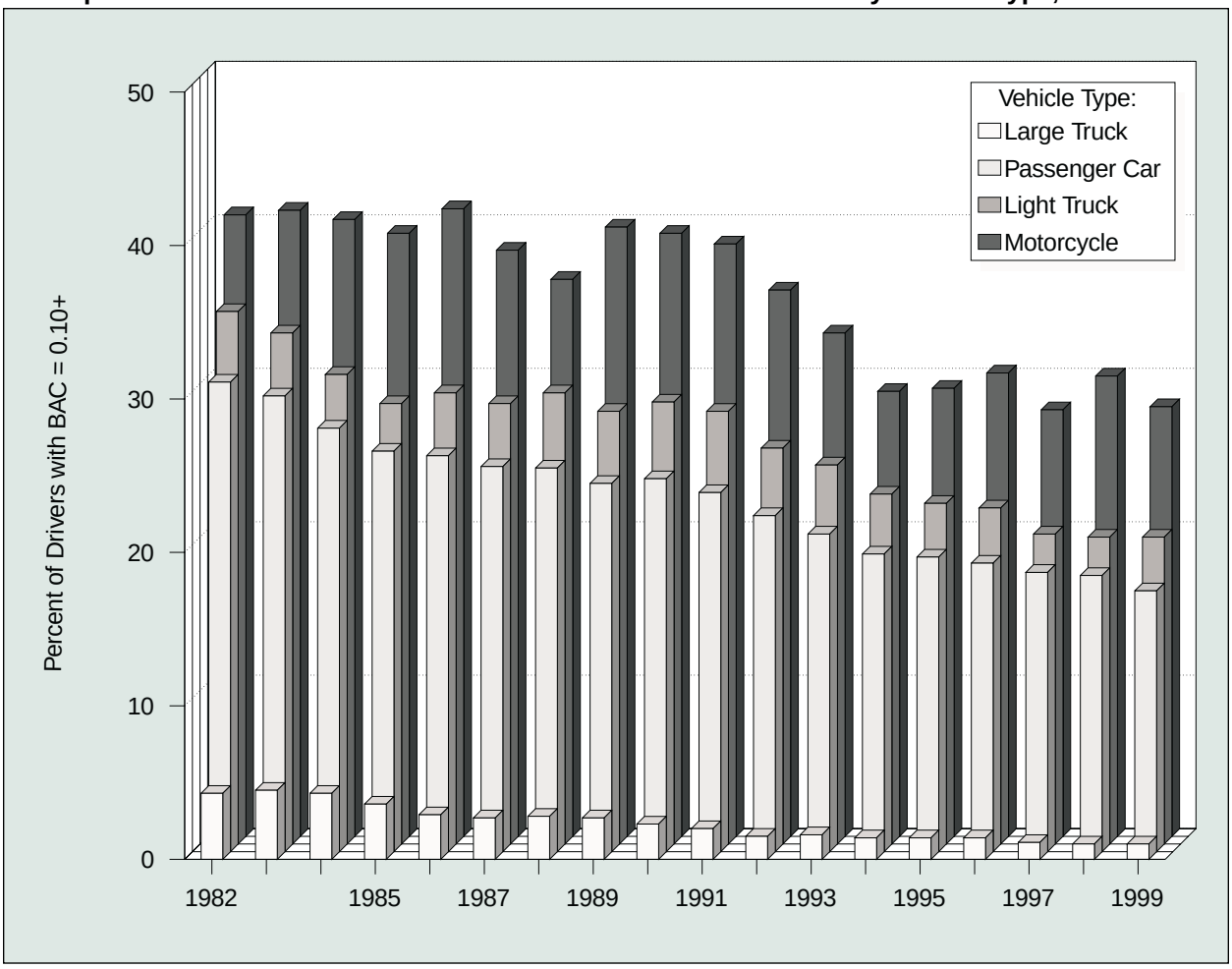
Note: NHTSA estimates alcohol involvement when alcohol test results are unknown. For more information, see page 7 of this report.

**Table 17**
**Drivers in Fatal Crashes by Blood Alcohol Concentration (BAC) and Vehicle Type, 1982-1999**

| | Passenger Car | | | Light Truck | | | Large Truck | | | Motorcycle | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Percent | | | Percent | | | Percent | | | Percent | |
| Year | Total | BAC = 0.01+ | BAC = 0.10+ | Total | BAC = 0.01+ | BAC = 0.10+ | Total | BAC = 0.01+ | BAC = 0.10+ | Total | BAC = 0.01+ | BAC = 0.10+ |
| 1982 | 34,121 | 40 | 31 | 11,199 | 43 | 35 | 4,582 | 8 | 4 | 4,490 | 53 | 41 |
| 1983 | 33,069 | 39 | 30 | 11,017 | 42 | 33 | 4,790 | 8 | 5 | 4,288 | 54 | 41 |
| 1984 | 34,395 | 36 | 28 | 11,866 | 39 | 31 | 5,056 | 8 | 4 | 4,650 | 54 | 40 |
| 1985 | 34,071 | 35 | 26 | 12,372 | 36 | 29 | 5,091 | 6 | 4 | 4,598 | 53 | 39 |
| 1986 | 35,959 | 35 | 26 | 13,208 | 37 | 29 | 5,015 | 5 | 3 | 4,558 | 54 | 41 |
| 1987 | 36,371 | 34 | 25 | 14,407 | 37 | 29 | 5,046 | 4 | 3 | 4,061 | 51 | 38 |
| 1988 | 36,769 | 33 | 25 | 15,167 | 37 | 29 | 5,141 | 5 | 3 | 3,704 | 50 | 36 |
| 1989 | 35,204 | 32 | 24 | 15,579 | 35 | 28 | 4,903 | 5 | 3 | 3,182 | 53 | 40 |
| 1990 | 33,893 | 32 | 24 | 15,501 | 36 | 29 | 4,709 | 5 | 2 | 3,269 | 52 | 39 |
| 1991 | 31,102 | 31 | 23 | 14,702 | 36 | 28 | 4,291 | 4 | 2 | 2,816 | 51 | 39 |
| 1992 | 29,670 | 29 | 22 | 14,540 | 33 | 26 | 3,980 | 3 | 1 | 2,435 | 48 | 36 |
| 1993 | 30,060 | 27 | 21 | 15,207 | 31 | 25 | 4,271 | 3 | 2 | 2,471 | 44 | 33 |
| 1994 | 30,103 | 26 | 19 | 16,235 | 29 | 23 | 4,592 | 3 | 1 | 2,330 | 40 | 29 |
| 1995 | 30,773 | 26 | 19 | 17,483 | 28 | 22 | 4,410 | 3 | 1 | 2,262 | 41 | 29 |
| 1996 | 30,595 | 26 | 19 | 18,118 | 28 | 22 | 4,703 | 3 | 1 | 2,175 | 42 | 30 |
| 1997 | 29,896 | 24 | 18 | 18,502 | 26 | 20 | 4,859 | 2 | 1 | 2,159 | 39 | 28 |
| 1998 | 28,907 | 24 | 18 | 19,247 | 26 | 20 | 4,905 | 2 | 1 | 2,333 | 40 | 30 |
| 1999 | 27,806 | 23 | 17 | 19,801 | 26 | 20 | 4,847 | 2 | 1 | 2,515 | 38 | 28 |

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 = 0.10+ by Vehicle Type, 1982-1999**

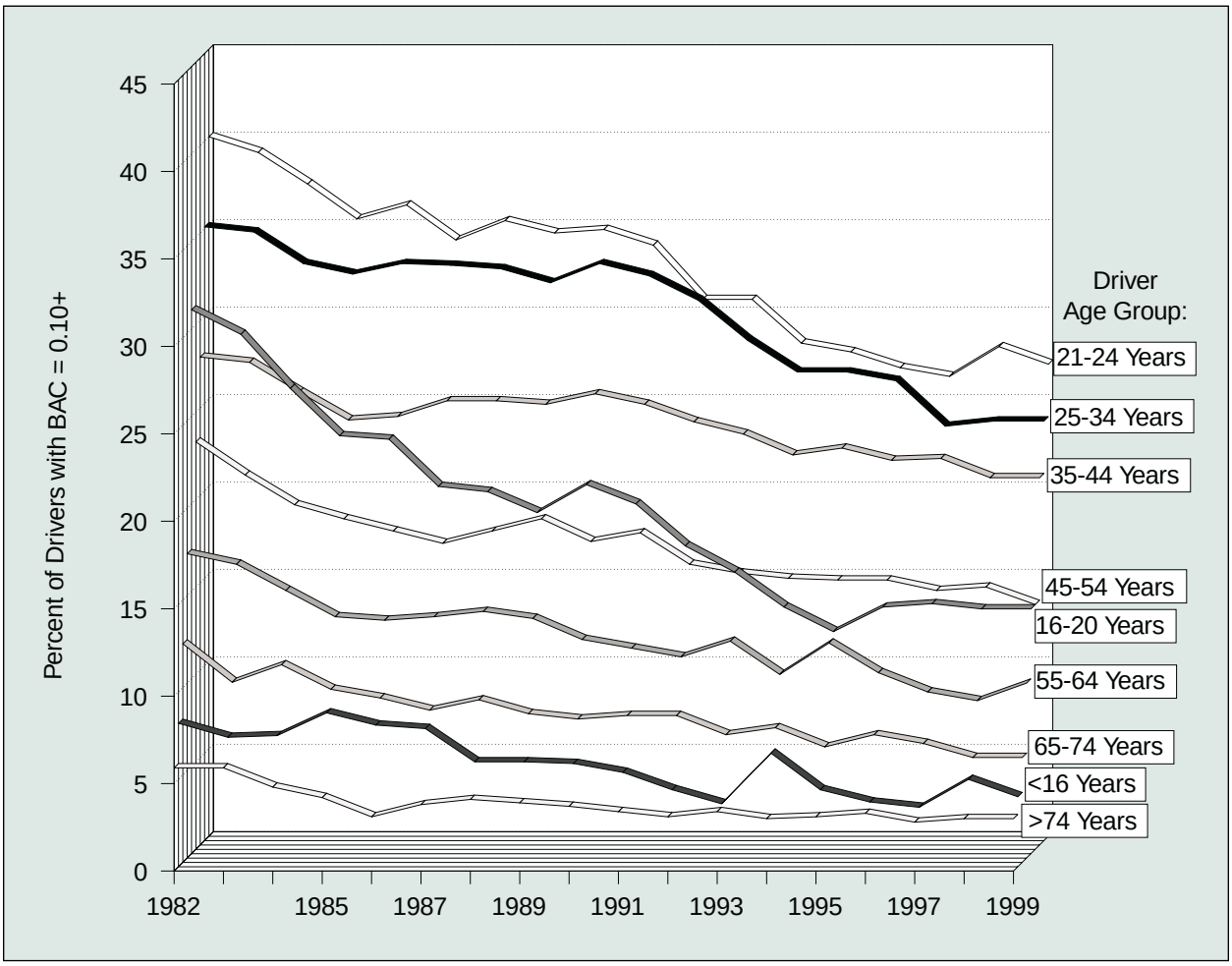


## Table 18
## Drivers in Fatal Crashes by Blood Alcohol Concentration (BAC) and Age, 1982-1999

| Year | Age | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | <16 Years | | | 16-20 Years | | | 21-24 Years | | |
| | Total | Percent | | Total | Percent | | Total | Percent | |
| | | BAC = 0.01+ | BAC = 0.10+ | | BAC = 0.01+ | BAC = 0.10+ | | BAC = 0.01+ | BAC = 0.10+ |
| 1982 | 412 | 13 | 8 | 9,858 | 44 | 31 | 9,018 | 52 | 40 |
| 1983 | 416 | 12 | 7 | 9,334 | 42 | 30 | 8,432 | 51 | 39 |
| 1984 | 446 | 15 | 8 | 9,804 | 40 | 27 | 8,963 | 49 | 37 |
| 1985 | 479 | 15 | 9 | 9,386 | 35 | 24 | 9,046 | 46 | 35 |
| 1986 | 504 | 15 | 8 | 10,163 | 36 | 24 | 9,129 | 47 | 36 |
| 1987 | 469 | 16 | 8 | 9,910 | 33 | 21 | 8,808 | 45 | 34 |
| 1988 | 448 | 14 | 6 | 10,171 | 32 | 21 | 8,555 | 46 | 35 |
| 1989 | 402 | 11 | 6 | 9,442 | 30 | 20 | 7,723 | 45 | 35 |
| 1990 | 409 | 12 | 6 | 8,821 | 32 | 21 | 7,195 | 45 | 35 |
| 1991 | 364 | 14 | 5 | 8,002 | 30 | 20 | 6,748 | 44 | 34 |
| 1992 | 350 | 12 | 4 | 7,192 | 27 | 18 | 6,323 | 41 | 31 |
| 1993 | 383 | 10 | 4 | 7,256 | 25 | 16 | 6,406 | 39 | 31 |
| 1994 | 397 | 10 | 7 | 7,723 | 23 | 14 | 6,291 | 37 | 28 |
| 1995 | 410 | 10 | 4 | 7,725 | 21 | 13 | 6,263 | 37 | 28 |
| 1996 | 413 | 9 | 3 | 7,824 | 21 | 14 | 6,205 | 37 | 27 |
| 1997 | 345 | 6 | 3 | 7,719 | 22 | 14 | 5,705 | 35 | 26 |
| 1998 | 361 | 10 | 5 | 7,767 | 22 | 14 | 5,613 | 36 | 28 |
| 1999 | 332 | 8 | 4 | 7,973 | 21 | 14 | 5,620 | 36 | 27 |
| | 25-34 Years | | | 35-44 Years | | | 45-54 Years | | |
| 1982 | 14,787 | 44 | 35 | 7,984 | 35 | 28 | 4,980 | 29 | 23 |
| 1983 | 14,470 | 44 | 35 | 8,068 | 34 | 28 | 4,992 | 27 | 21 |
| 1984 | 15,233 | 42 | 33 | 8,563 | 32 | 26 | 5,084 | 25 | 20 |
| 1985 | 15,257 | 41 | 32 | 8,892 | 30 | 24 | 5,150 | 24 | 19 |
| 1986 | 16,179 | 41 | 33 | 9,240 | 31 | 25 | 5,077 | 24 | 18 |
| 1987 | 16,562 | 42 | 33 | 9,778 | 31 | 25 | 5,470 | 22 | 17 |
| 1988 | 16,398 | 41 | 33 | 10,077 | 31 | 25 | 5,761 | 23 | 18 |
| 1989 | 15,928 | 40 | 32 | 10,106 | 31 | 25 | 6,038 | 24 | 19 |
| 1990 | 15,764 | 41 | 33 | 10,177 | 32 | 26 | 5,867 | 23 | 18 |
| 1991 | 14,151 | 40 | 32 | 9,482 | 31 | 25 | 5,458 | 23 | 18 |
| 1992 | 13,049 | 38 | 31 | 9,284 | 30 | 24 | 5,672 | 21 | 16 |
| 1993 | 13,038 | 36 | 29 | 9,738 | 29 | 23 | 5,970 | 20 | 16 |
| 1994 | 12,891 | 34 | 27 | 9,951 | 27 | 22 | 6,493 | 20 | 15 |
| 1995 | 13,048 | 34 | 27 | 10,677 | 29 | 23 | 6,815 | 20 | 15 |
| 1996 | 12,889 | 33 | 26 | 10,955 | 28 | 22 | 7,127 | 20 | 15 |
| 1997 | 12,453 | 31 | 24 | 10,904 | 27 | 22 | 7,522 | 19 | 15 |
| 1998 | 11,925 | 31 | 24 | 11,241 | 27 | 21 | 7,690 | 19 | 15 |
| 1999 | 11,734 | 30 | 24 | 11,023 | 26 | 21 | 7,700 | 19 | 14 |
| | 55-64 Years | | | 65-74 Years | | | >74 Years | | |
| 1982 | 3,941 | 23 | 17 | 2,343 | 17 | 13 | 1,551 | 9 | 6 |
| 1983 | 3,862 | 22 | 17 | 2,434 | 14 | 10 | 1,592 | 9 | 6 |
| 1984 | 4,059 | 20 | 15 | 2,620 | 15 | 11 | 1,696 | 8 | 5 |
| 1985 | 4,112 | 19 | 14 | 2,650 | 14 | 10 | 1,829 | 7 | 4 |
| 1986 | 4,019 | 19 | 14 | 2,844 | 14 | 9 | 2,037 | 6 | 3 |
| 1987 | 4,223 | 18 | 14 | 2,987 | 13 | 9 | 2,091 | 6 | 4 |
| 1988 | 4,320 | 18 | 14 | 3,079 | 14 | 9 | 2,297 | 7 | 4 |
| 1989 | 4,202 | 18 | 14 | 3,107 | 12 | 9 | 2,324 | 7 | 4 |
| 1990 | 4,068 | 17 | 13 | 3,161 | 12 | 8 | 2,340 | 7 | 4 |
| 1991 | 3,695 | 16 | 12 | 3,017 | 12 | 8 | 2,454 | 6 | 3 |
| 1992 | 3,688 | 16 | 11 | 3,024 | 12 | 8 | 2,450 | 5 | 3 |
| 1993 | 3,824 | 16 | 12 | 3,031 | 10 | 7 | 2,817 | 6 | 3 |
| 1994 | 3,828 | 14 | 11 | 3,194 | 11 | 8 | 2,867 | 5 | 3 |
| 1995 | 4,079 | 16 | 12 | 3,251 | 10 | 7 | 2,989 | 5 | 3 |
| 1996 | 4,237 | 14 | 11 | 3,319 | 11 | 7 | 3,068 | 5 | 3 |
| 1997 | 4,394 | 13 | 10 | 3,401 | 10 | 7 | 3,314 | 5 | 3 |
| 1998 | 4,478 | 13 | 9 | 3,399 | 9 | 6 | 3,291 | 5 | 3 |
| 1999 | 4,592 | 13 | 10 | 3,228 | 9 | 6 | 3,331 | 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 = 0.10+ by Age, 1982-1999**



## Table 19
## Drivers in Fatal Crashes by Blood Alcohol Concentration (BAC) and Survival Status, 1982-1999

| Year | Driver Survival Status | | | | | | | | All Drivers in Fatal Crashes | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Surviving Drivers | | | | Killed Drivers | | | | | | | |
| | BAC = 0.00 | BAC = 0.01-0.09 | BAC = 0.10+ | Total | BAC = 0.00 | BAC = 0.01-0.09 | BAC = 0.10+ | Total | BAC = 0.00 | BAC = 0.01-0.09 | BAC = 0.10+ | Total |
| 1982 | 22,674 | 2,698 | 5,967 | 31,339 | 11,576 | 2,289 | 10,825 | 24,690 | 34,250 | 4,987 | 16,793 | **56,029** |
| 1983 | 22,426 | 2,512 | 5,581 | 30,518 | 11,720 | 2,165 | 10,253 | 24,138 | 34,145 | 4,677 | 15,834 | **54,656** |
| 1984 | 23,888 | 2,587 | 5,448 | 31,923 | 12,943 | 2,365 | 10,281 | 25,589 | 36,831 | 4,952 | 15,729 | **57,512** |
| 1985 | 25,106 | 2,350 | 5,089 | 32,546 | 13,215 | 2,317 | 9,805 | 25,337 | 38,321 | 4,668 | 14,894 | **57,883** |
| 1986 | 25,835 | 2,626 | 5,244 | 33,705 | 13,798 | 2,514 | 10,317 | 26,630 | 39,633 | 5,140 | 15,560 | **60,335** |
| 1987 | 26,727 | 2,657 | 5,224 | 34,609 | 14,322 | 2,403 | 10,108 | 26,833 | 41,049 | 5,060 | 15,332 | **61,442** |
| 1988 | 27,306 | 2,562 | 5,132 | 35,000 | 14,507 | 2,395 | 10,351 | 27,253 | 41,813 | 4,957 | 15,483 | **62,253** |
| 1989 | 26,903 | 2,317 | 4,826 | 34,046 | 14,367 | 2,194 | 9,828 | 26,389 | 41,271 | 4,511 | 14,654 | **60,435** |
| 1990 | 26,054 | 2,329 | 4,761 | 33,143 | 13,924 | 2,050 | 9,776 | 25,750 | 39,978 | 4,378 | 14,537 | **58,893** |
| 1991 | 24,172 | 2,060 | 4,229 | 30,461 | 13,328 | 1,852 | 8,749 | 23,930 | 37,500 | 3,913 | 12,978 | **54,391** |
| 1992 | 23,762 | 1,827 | 3,728 | 29,317 | 13,158 | 1,697 | 7,729 | 22,584 | 36,919 | 3,524 | 11,457 | **51,901** |
| 1993 | 24,874 | 1,753 | 3,632 | 30,259 | 13,944 | 1,616 | 7,582 | 23,142 | 38,818 | 3,369 | 11,214 | **53,401** |
| 1994 | 25,916 | 1,710 | 3,233 | 30,858 | 14,826 | 1,580 | 7,285 | 23,691 | 40,741 | 3,290 | 10,518 | **54,549** |
| 1995 | 26,753 | 1,745 | 3,277 | 31,774 | 15,143 | 1,722 | 7,525 | 24,390 | 41,895 | 3,467 | 10,802 | **56,164** |
| 1996 | 27,326 | 1,829 | 3,313 | 32,467 | 15,443 | 1,716 | 7,375 | 24,534 | 42,768 | 3,545 | 10,688 | **57,001** |
| 1997 | 27,266 | 1,693 | 3,062 | 32,021 | 16,042 | 1,605 | 7,021 | 24,667 | 43,308 | 3,297 | 10,083 | **56,688** |
| 1998 | 27,236 | 1,684 | 2,941 | 31,861 | 16,128 | 1,578 | 7,037 | 24,743 | 43,364 | 3,262 | 9,978 | **56,604** |
| 1999 | 26,689 | 1,595 | 2,858 | 31,142 | 16,616 | 1,635 | 6,960 | 25,210 | 43,305 | 3,229 | 9,818 | **56,352** |

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), 1982-1999

| Year | BAC = 0.00 | | BAC = 0.01-0.09 | | BAC = 0.10+ | | Total | |
|---|---|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| 1982 | 3,266 | 53 | 482 | 8 | 2,406 | 39 | **6,154** | **100** |
| 1983 | 3,049 | 53 | 455 | 8 | 2,206 | 39 | **5,710** | **100** |
| 1984 | 3,234 | 55 | 430 | 7 | 2,242 | 38 | **5,907** | **100** |
| 1985 | 3,120 | 55 | 478 | 8 | 2,104 | 37 | **5,702** | **100** |
| 1986 | 3,171 | 56 | 465 | 8 | 2,066 | 36 | **5,702** | **100** |
| 1987 | 3,226 | 56 | 462 | 8 | 2,027 | 35 | **5,715** | **100** |
| 1988 | 3,372 | 58 | 426 | 7 | 2,026 | 35 | **5,825** | **100** |
| 1989 | 3,176 | 56 | 449 | 8 | 2,033 | 36 | **5,658** | **100** |
| 1990 | 3,204 | 57 | 385 | 7 | 2,006 | 36 | **5,595** | **100** |
| 1991 | 2,872 | 57 | 333 | 7 | 1,800 | 36 | **5,005** | **100** |
| 1992 | 2,734 | 57 | 335 | 7 | 1,743 | 36 | **4,812** | **100** |
| 1993 | 2,819 | 58 | 309 | 6 | 1,732 | 36 | **4,860** | **100** |
| 1994 | 2,791 | 59 | 350 | 7 | 1,595 | 34 | **4,737** | **100** |
| 1995 | 2,895 | 59 | 331 | 7 | 1,670 | 34 | **4,896** | **100** |
| 1996 | 2,762 | 58 | 324 | 7 | 1,691 | 35 | **4,777** | **100** |
| 1997 | 2,935 | 62 | 269 | 6 | 1,511 | 32 | **4,715** | **100** |
| 1998 | 2,787 | 60 | 340 | 7 | 1,552 | 33 | **4,680** | **100** |
| 1999 | 2,584 | 59 | 307 | 7 | 1,489 | 34 | **4,381** | **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, 1975-1999

| Year | Restraint Used | | Restraint Not Used | | Restraint Use Unknown | | Total | |
|---|---|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Drivers in Fatal Crashes** | | | | | | | | |
| 1975 | 2,583 | 5.6 | 29,710 | 64.3 | 13,931 | 30.1 | **46,224** | **100.0** |
| 1976 | 2,062 | 4.5 | 29,905 | 64.7 | 14,239 | 30.8 | **46,206** | **100.0** |
| 1977 | 1,897 | 3.9 | 33,011 | 67.3 | 14,154 | 28.8 | **49,062** | **100.0** |
| 1978 | 1,882 | 3.6 | 37,606 | 72.3 | 12,510 | 24.1 | **51,998** | **100.0** |
| 1979 | 1,680 | 3.2 | 38,326 | 73.5 | 12,123 | 23.3 | **52,129** | **100.0** |
| 1980 | 1,482 | 2.9 | 37,889 | 73.8 | 11,935 | 23.3 | **51,306** | **100.0** |
| 1981 | 1,488 | 2.9 | 38,353 | 75.6 | 10,905 | 21.5 | **50,746** | **100.0** |
| 1982 | 1,515 | 3.3 | 33,793 | 74.6 | 10,012 | 22.1 | **45,320** | **100.0** |
| 1983 | 1,835 | 4.2 | 32,332 | 73.3 | 9,919 | 22.5 | **44,086** | **100.0** |
| 1984 | 2,756 | 6.0 | 32,979 | 71.3 | 10,526 | 22.8 | **46,261** | **100.0** |
| 1985 | 6,172 | 13.3 | 29,705 | 64.0 | 10,566 | 22.8 | **46,443** | **100.0** |
| 1986 | 10,891 | 22.2 | 28,778 | 58.5 | 9,498 | 19.3 | **49,167** | **100.0** |
| 1987 | 14,474 | 28.5 | 28,154 | 55.4 | 8,150 | 16.1 | **50,778** | **100.0** |
| 1988 | 16,948 | 32.6 | 28,146 | 54.2 | 6,842 | 13.2 | **51,936** | **100.0** |
| 1989 | 17,545 | 34.5 | 26,764 | 52.7 | 6,474 | 12.7 | **50,783** | **100.0** |
| 1990 | 18,340 | 37.1 | 24,706 | 50.0 | 6,348 | 12.9 | **49,394** | **100.0** |
| 1991 | 18,457 | 40.3 | 21,843 | 47.7 | 5,504 | 12.0 | **45,804** | **100.0** |
| 1992 | 19,106 | 43.2 | 19,836 | 44.9 | 5,268 | 11.9 | **44,210** | **100.0** |
| 1993 | 20,932 | 46.2 | 19,139 | 42.3 | 5,196 | 11.5 | **45,267** | **100.0** |
| 1994 | 22,763 | 49.1 | 18,946 | 40.9 | 4,629 | 10.0 | **46,338** | **100.0** |
| 1995 | 24,165 | 50.1 | 19,428 | 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 | 25,423 | 53.4 | 17,643 | 37.1 | 4,541 | 9.5 | **47,607** | **100.0** |
| **Drivers in Injury Crashes** | | | | | | | | |
| 1988 | 2,313,000 | 62.1 | 802,000 | 21.5 | 609,000 | 16.4 | **3,724,000** | **100.0** |
| 1989 | 2,267,000 | 62.8 | 749,000 | 20.8 | 592,000 | 16.4 | **3,607,000** | **100.0** |
| 1990 | 2,290,000 | 64.4 | 703,000 | 19.8 | 563,000 | 15.8 | **3,556,000** | **100.0** |
| 1991 | 2,308,000 | 68.0 | 581,000 | 17.1 | 505,000 | 14.9 | **3,394,000** | **100.0** |
| 1992 | 2,420,000 | 71.5 | 476,000 | 14.0 | 490,000 | 14.5 | **3,386,000** | **100.0** |
| 1993 | 2,557,000 | 73.8 | 435,000 | 12.6 | 475,000 | 13.7 | **3,467,000** | **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** |
| **Drivers in Property-Damage-Only Crashes** | | | | | | | | |
| 1988 | 4,517,000 | 60.4 | 1,200,000 | 16.0 | 1,763,000 | 23.6 | **7,481,000** | **100.0** |
| 1989 | 4,531,000 | 62.6 | 1,015,000 | 14.0 | 1,691,000 | 23.4 | **7,237,000** | **100.0** |
| 1990 | 4,499,000 | 63.4 | 978,000 | 13.8 | 1,616,000 | 22.8 | **7,094,000** | **100.0** |
| 1991 | 4,516,000 | 67.2 | 712,000 | 10.6 | 1,490,000 | 22.2 | **6,718,000** | **100.0** |
| 1992 | 4,671,000 | 71.6 | 508,000 | 7.8 | 1,344,000 | 20.6 | **6,523,000** | **100.0** |
| 1993 | 4,986,000 | 75.0 | 451,000 | 6.8 | 1,209,000 | 18.2 | **6,646,000** | **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** |

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

## Table 22
## Occupants of Passenger Cars and Light Trucks Killed and Injured, by Restraint Use, 1975-1999

| Year | Restraint Used | | Restraint Not Used | | Restraint Use Unknown | | Total | |
|---|---|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Occupants Killed** | | | | | | | | |
| 1975 | 986 | 3.2 | 21,076 | 68.5 | 8,723 | 28.3 | **30,785** | **100.0** |
| 1976 | 796 | 2.5 | 21,979 | 69.5 | 8,829 | 27.9 | **31,604** | **100.0** |
| 1977 | 778 | 2.4 | 23,593 | 72.0 | 8,387 | 25.6 | **32,758** | **100.0** |
| 1978 | 784 | 2.2 | 26,671 | 76.4 | 7,443 | 21.3 | **34,898** | **100.0** |
| 1979 | 683 | 2.0 | 27,130 | 77.5 | 7,173 | 20.5 | **34,986** | **100.0** |
| 1980 | 671 | 1.9 | 27,483 | 78.7 | 6,781 | 19.4 | **34,935** | **100.0** |
| 1981 | 649 | 1.9 | 26,974 | 80.0 | 6,103 | 18.1 | **33,726** | **100.0** |
| 1982 | 679 | 2.3 | 23,558 | 79.3 | 5,452 | 18.4 | **29,689** | **100.0** |
| 1983 | 827 | 2.8 | 23,080 | 79.1 | 5,274 | 18.1 | **29,181** | **100.0** |
| 1984 | 1,208 | 4.0 | 23,299 | 77.4 | 5,609 | 18.6 | **30,116** | **100.0** |
| 1985 | 2,391 | 8.0 | 22,131 | 74.0 | 5,379 | 18.0 | **29,901** | **100.0** |
| 1986 | 4,074 | 12.6 | 23,420 | 72.6 | 4,767 | 14.8 | **32,261** | **100.0** |
| 1987 | 5,249 | 15.8 | 23,799 | 71.7 | 4,142 | 12.5 | **33,190** | **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 | 9,620 | 31.1 | 18,658 | 60.4 | 2,623 | 8.5 | **30,901** | **100.0** |
| 1995 | 10,115 | 31.6 | 19,167 | 59.9 | 2,709 | 8.5 | **31,991** | **100.0** |
| 1996 | 10,683 | 32.9 | 18,881 | 58.2 | 2,873 | 8.9 | **32,437** | **100.0** |
| 1997 | 10,961 | 33.8 | 18,676 | 57.6 | 2,811 | 8.7 | **32,448** | **100.0** |
| 1998 | 11,173 | 35.0 | 18,062 | 56.6 | 2,664 | 8.4 | **31,899** | **100.0** |
| 1999 | 11,101 | 34.6 | 18,317 | 57.1 | 2,643 | 8.2 | **32,061** | **100.0** |
| **Occupants Injured** | | | | | | | | |
| 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** |

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

# Chapter 2 ♦ Crashes

# 2. CRASHES

This chapter presents statistics about 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:

- Nearly 6.3 million police-reported motor vehicle crashes occurred in the United States in 1999. Almost one-third of these crashes resulted in an injury, with less than 1 percent of total crashes (37,043) resulting in a death.

- Midnight to 3 a.m. on Saturdays and Sundays proved to be the deadliest 3-hour periods throughout 1999, with 1,215 and 1,182 fatal crashes, respectively.

- Fifty-six percent of fatal crashes involved only one vehicle, compared to 28 percent of both injury crashes and property-damage-only crashes.

- More than half of fatal crashes occurred on roads with posted speed limits of 55 mph or more, while only 22 percent of property-damage-only crashes occurred on these roads.

- 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 17 percent of all crashes, but they accounted for 41 percent of fatal crashes.

- Thirty-eight percent of fatal crashes involved alcohol. For fatal crashes occurring from midnight to 3 a.m., 75 percent involved alcohol.

**Table 23**
**Crashes and Crash Rates by Month and Crash Severity**

| Month | Crash Severity | | | | | | Total Crashes | |
|---|---|---|---|---|---|---|---|---|
| | Fatal | | Injury | | Property Damage Only | | | |
| | Number | Rate* | Number | Rate* | Number | Rate* | Number | Rate* |
| January | 2,585 | 1.3 | 152,000 | 79 | 395,000 | 204 | **550,000** | **284** |
| February | 2,411 | 1.3 | 144,000 | 75 | 296,000 | 155 | **442,000** | **231** |
| March | 2,811 | 1.3 | 166,000 | 75 | 355,000 | 161 | **524,000** | **238** |
| April | 2,766 | 1.3 | 171,000 | 77 | 331,000 | 150 | **504,000** | **228** |
| May | 3,244 | 1.4 | 178,000 | 77 | 338,000 | 146 | **519,000** | **225** |
| June | 3,141 | 1.3 | 182,000 | 77 | 334,000 | 142 | **520,000** | **220** |
| July | 3,410 | 1.4 | 169,000 | 69 | 325,000 | 133 | **497,000** | **204** |
| August | 3,528 | 1.5 | 184,000 | 76 | 334,000 | 138 | **522,000** | **216** |
| September | 3,295 | 1.5 | 171,000 | 76 | 346,000 | 154 | **520,000** | **232** |
| October | 3,442 | 1.5 | 189,000 | 81 | 374,000 | 160 | **566,000** | **242** |
| November | 3,190 | 1.4 | 166,000 | 75 | 369,000 | 166 | **539,000** | **243** |
| December | 3,220 | 1.5 | 182,000 | 82 | 390,000 | 176 | **576,000** | **260** |
| **Total** | **37,043** | **1.4** | **2,054,000** | **77** | **4,188,000** | **156** | **6,279,000** | **234** |

*Crashes per 100 million vehicle miles traveled.
Source: Vehicle miles traveled, Federal Highway Administration, *Traffic Volume Trends* (June 2000).

**Table 24**
**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 | 1,182 | 411 | 323 | 394 | 433 | 575 | 1,215 | **4,534** |
| 3 am to 6 am | 683 | 295 | 262 | 255 | 282 | 386 | 659 | **2,822** |
| 6 am to 9 am | 430 | 562 | 531 | 616 | 540 | 562 | 502 | **3,743** |
| 9 am to Noon | 461 | 551 | 521 | 493 | 525 | 578 | 585 | **3,715** |
| Noon to 3 pm | 719 | 713 | 593 | 663 | 659 | 753 | 786 | **4,886** |
| 3 pm to 6 pm | 842 | 840 | 845 | 851 | 864 | 1,042 | 948 | **6,232** |
| 6 pm to 9 pm | 827 | 708 | 704 | 740 | 736 | 971 | 1,004 | **5,691** |
| 9 pm to Midnight | 628 | 562 | 580 | 574 | 689 | 991 | 1,079 | **5,103** |
| Unknown | 68 | 26 | 31 | 33 | 37 | 46 | 73 | **317** |
| **Total** | **5,840** | **4,668** | **4,390** | **4,619** | **4,765** | **5,904** | **6,851** | ***37,043** |
| **Injury Crashes** | | | | | | | | |
| Midnight to 3 am | 27,000 | 9,000 | 8,000 | 8,000 | 9,000 | 12,000 | 26,000 | **99,000** |
| 3 am to 6 am | 13,000 | 8,000 | 6,000 | 5,000 | 6,000 | 7,000 | 14,000 | **59,000** |
| 6 am to 9 am | 10,000 | 41,000 | 46,000 | 41,000 | 40,000 | 37,000 | 19,000 | **234,000** |
| 9 am to Noon | 28,000 | 39,000 | 39,000 | 35,000 | 40,000 | 45,000 | 39,000 | **265,000** |
| Noon to 3 pm | 45,000 | 55,000 | 60,000 | 55,000 | 56,000 | 66,000 | 60,000 | **397,000** |
| 3 pm to 6 pm | 51,000 | 82,000 | 84,000 | 76,000 | 80,000 | 92,000 | 56,000 | **520,000** |
| 6 pm to 9 pm | 32,000 | 40,000 | 41,000 | 45,000 | 49,000 | 54,000 | 44,000 | **305,000** |
| 9 pm to Midnight | 26,000 | 22,000 | 21,000 | 21,000 | 22,000 | 32,000 | 32,000 | **175,000** |
| **Total** | **232,000** | **295,000** | **305,000** | **286,000** | **302,000** | **346,000** | **289,000** | **2,054,000** |
| **Property-Damage-Only Crashes** | | | | | | | | |
| Midnight to 3 am | 40,000 | 19,000 | 15,000 | 16,000 | 15,000 | 29,000 | 51,000 | **185,000** |
| 3 am to 6 am | 21,000 | 15,000 | 13,000 | 14,000 | 14,000 | 16,000 | 22,000 | **116,000** |
| 6 am to 9 am | 21,000 | 97,000 | 108,000 | 105,000 | 93,000 | 90,000 | 34,000 | **549,000** |
| 9 am to Noon | 49,000 | 87,000 | 85,000 | 83,000 | 83,000 | 99,000 | 85,000 | **571,000** |
| Noon to 3 pm | 83,000 | 128,000 | 120,000 | 111,000 | 111,000 | 143,000 | 112,000 | **807,000** |
| 3 pm to 6 pm | 89,000 | 164,000 | 164,000 | 160,000 | 160,000 | 202,000 | 113,000 | **1,053,000** |
| 6 pm to 9 pm | 65,000 | 79,000 | 86,000 | 86,000 | 86,000 | 103,000 | 71,000 | **576,000** |
| 9 pm to Midnight | 43,000 | 36,000 | 41,000 | 45,000 | 41,000 | 67,000 | 58,000 | **330,000** |
| **Total** | **411,000** | **625,000** | **633,000** | **620,000** | **603,000** | **749,000** | **547,000** | **4,188,000** |
| **All Crashes** | | | | | | | | |
| Midnight to 3 am | 69,000 | 29,000 | 23,000 | 24,000 | 25,000 | 41,000 | 78,000 | **288,000** |
| 3 am to 6 am | 34,000 | 23,000 | 19,000 | 20,000 | 21,000 | 24,000 | 37,000 | **178,000** |
| 6 am to 9 am | 32,000 | 138,000 | 155,000 | 147,000 | 134,000 | 127,000 | 53,000 | **787,000** |
| 9 am to Noon | 77,000 | 127,000 | 124,000 | 119,000 | 123,000 | 145,000 | 124,000 | **840,000** |
| Noon to 3 pm | 129,000 | 184,000 | 181,000 | 166,000 | 167,000 | 210,000 | 172,000 | **1,209,000** |
| 3 pm to 6 pm | 141,000 | 246,000 | 249,000 | 237,000 | 241,000 | 295,000 | 170,000 | **1,579,000** |
| 6 pm to 9 pm | 98,000 | 119,000 | 128,000 | 131,000 | 135,000 | 158,000 | 116,000 | **887,000** |
| 9 pm to Midnight | 69,000 | 58,000 | 62,000 | 66,000 | 64,000 | 100,000 | 92,000 | **511,000** |
| **Total** | **649,000** | **925,000** | **942,000** | **911,000** | **910,000** | **1,100,000** | **843,000** | **6,279,000** |

*Includes 6 fatal crashes that occurred on unknown days.

**Figure 11**
**Average Fatal Crashes per Hour by Time of Day, Weekdays and Weekends**

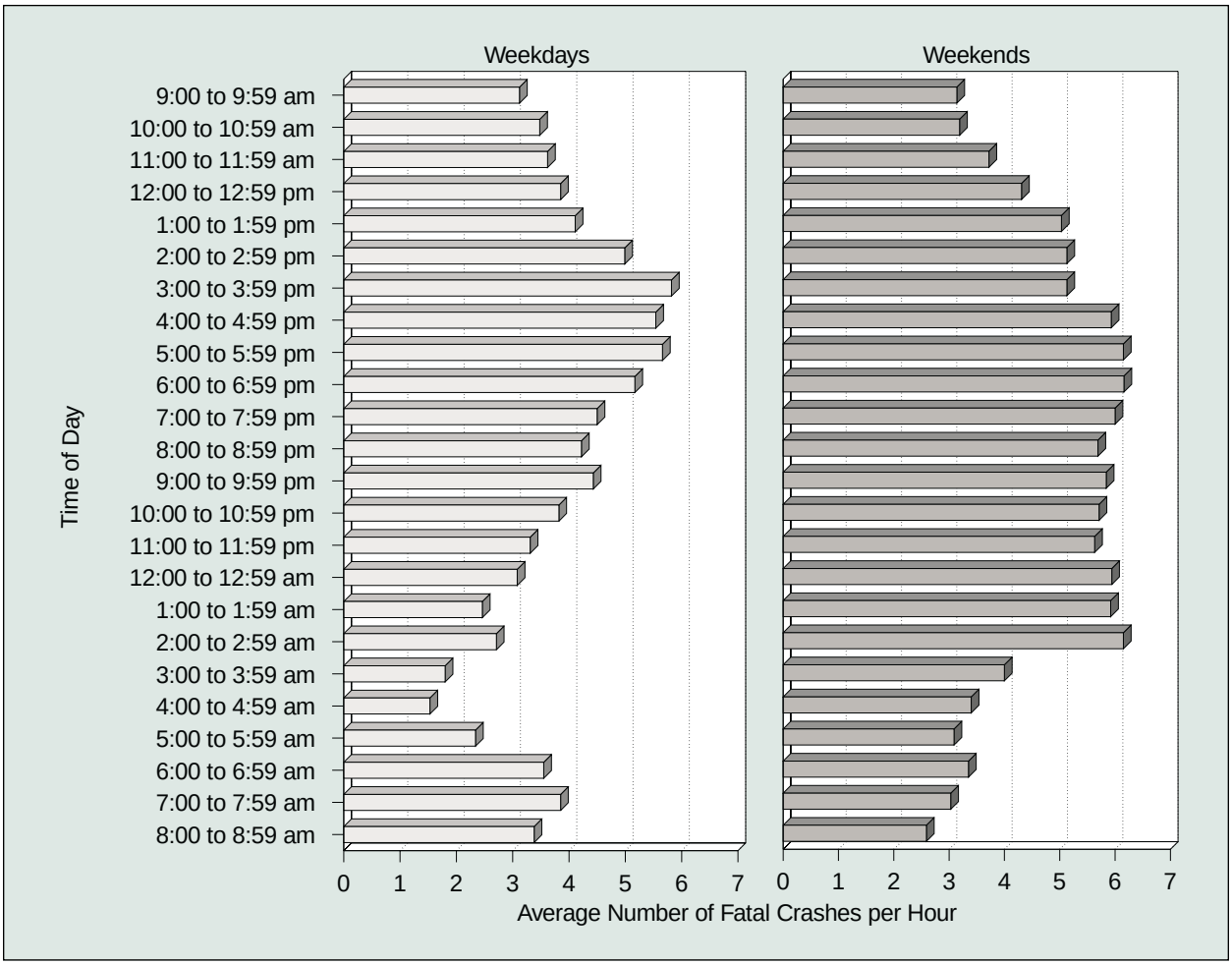


**Table 25**
**Crashes by Weather Condition, Light Condition, and Crash Severity**

| Weather Condition | Light Condition | | | | Total |
|---|---|---|---|---|---|
| | Daylight | Dark, but Lighted | Dark | Dawn or Dusk | |
| **Fatal Crashes** | | | | | |
| Normal | 16,873 | 4,944 | 9,732 | 1,371 | **32,961** |
| Rain | 1,376 | 444 | 769 | 123 | **2,714** |
| Snow/Sleet | 313 | 61 | 199 | 33 | **606** |
| Other | 175 | 82 | 276 | 49 | **582** |
| Unknown | 53 | 5 | 36 | 3 | **180** |
| **Total** | **18,790** | **5,536** | **11,012** | **1,579** | ***37,043** |
| **Injury Crashes** | | | | | |
| Normal | 1,262,000 | 252,000 | 175,000 | 57,000 | **1,747,000** |
| Rain | 148,000 | 45,000 | 24,000 | 12,000 | **229,000** |
| Snow/Sleet | 24,000 | 8,000 | 7,000 | 2,000 | **42,000** |
| Other | 21,000 | 5,000 | 7,000 | 3,000 | **36,000** |
| **Total** | **1,456,000** | **311,000** | **213,000** | **75,000** | **2,054,000** |
| **Property-Damage-Only Crashes** | | | | | |
| Normal | 2,552,000 | 452,000 | 375,000 | 121,000 | **3,501,000** |
| Rain | 294,000 | 80,000 | 51,000 | 22,000 | **447,000** |
| Snow/Sleet | 89,000 | 34,000 | 24,000 | 10,000 | **157,000** |
| Other | 51,000 | 13,000 | 14,000 | 5,000 | **83,000** |
| **Total** | **2,985,000** | **579,000** | **465,000** | **158,000** | **4,188,000** |
| **All Crashes** | | | | | |
| Normal | 3,831,000 | 709,000 | 560,000 | 180,000 | **5,281,000** |
| Rain | 443,000 | 126,000 | 76,000 | 35,000 | **679,000** |
| Snow/Sleet | 114,000 | 42,000 | 31,000 | 12,000 | **199,000** |
| Other | 72,000 | 19,000 | 22,000 | 8,000 | **120,000** |
| **Total** | **4,460,000** | **895,000** | **689,000** | **235,000** | **6,279,000** |

*Includes 126 fatal crashes that occurred under unknown light conditions.

**Table 26**
**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 |
| **Rural Fatal Crashes** | | | | | | | | |
| 0 to 10 | 10,521 | 80.0 | 7,492 | 54.9 | 214 | 2.9 | 39 | 0.5 |
| 11 to 20 | 1,814 | 13.8 | 4,740 | 34.7 | 1,335 | 18.0 | 238 | 3.3 |
| 21 to 30 | 415 | 3.2 | 1,016 | 7.4 | 1,937 | 26.1 | 690 | 9.7 |
| 31 to 40 | 138 | 1.0 | 252 | 1.8 | 1,465 | 19.7 | 1,220 | 17.1 |
| 41 to 50 | 82 | 0.6 | 75 | 0.5 | 985 | 13.3 | 1,501 | 21.0 |
| 51 to 60 | 63 | 0.5 | 30 | 0.2 | 590 | 7.9 | 1,275 | 17.9 |
| 61 to 120 | 116 | 0.9 | 46 | 0.3 | 900 | 12.1 | 2,176 | 30.5 |
| **Total*** | **13,149** | **100.0** | **13,651** | **100.0** | **7,426** | **100.0** | **7,139** | **100.0** |
| **Urban Fatal Crashes** | | | | | | | | |
| 0 to 10 | 6,672 | 91.1 | 6,541 | 88.1 | 272 | 6.7 | 62 | 1.5 |
| 11 to 20 | 388 | 5.3 | 734 | 9.9 | 1,291 | 32.0 | 538 | 13.4 |
| 21 to 30 | 130 | 1.8 | 85 | 1.1 | 1,213 | 30.1 | 1,130 | 28.2 |
| 31 to 40 | 57 | 0.8 | 36 | 0.5 | 672 | 16.7 | 970 | 24.2 |
| 41 to 50 | 28 | 0.4 | 11 | 0.1 | 291 | 7.2 | 572 | 14.3 |
| 51 to 60 | 12 | 0.2 | 6 | 0.1 | 162 | 4.0 | 351 | 8.8 |
| 61 to 120 | 40 | 0.5 | 13 | 0.2 | 131 | 3.2 | 378 | 9.4 |
| **Total*** | **7,327** | **100.0** | **7,426** | **100.0** | **4,032** | **100.0** | **4,001** | **100.0** |

*Includes crashes for which both times were known.

**Table 27**
**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 | 6,324 | 11,496 | 1,822 | 949 | 268 | **20,859** |
| Multiple Vehicle | 15,519 | 263 | 223 | 159 | 20 | **16,184** |
| **Total** | **21,843** | **11,759** | **2,045** | **1,108** | **288** | **37,043** |
| **Injury Crashes** | | | | | | |
| Single Vehicle | 168,000 | 338,000 | 25,000 | 31,000 | 31,000 | **592,000** |
| Multiple Vehicle | 1,446,000 | 7,000 | 3,000 | 4,000 | 2,000 | **1,462,000** |
| **Total** | **1,614,000** | **345,000** | **28,000** | **34,000** | **32,000** | **2,054,000** |
| **Property-Damage-Only Crashes** | | | | | | |
| Single Vehicle | 321,000 | 478,000 | 59,000 | 50,000 | 271,000 | **1,178,000** |
| Multiple Vehicle | 2,982,000 | 9,000 | 7,000 | 3,000 | 8,000 | **3,009,000** |
| **Total** | **3,303,000** | **487,000** | **66,000** | **53,000** | **278,000** | **4,188,000** |
| **All Crashes** | | | | | | |
| Single Vehicle | 496,000 | 827,000 | 85,000 | 82,000 | 302,000 | **1,791,000** |
| Multiple Vehicle | 4,444,000 | 17,000 | 11,000 | 7,000 | 9,000 | **4,487,000** |
| **Total** | **4,939,000** | **844,000** | **96,000** | **89,000** | **311,000** | **6,279,000** |

**Table 28**
**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 | 25,182 | 69 | 194 | 1,112 | **26,557** |
| Junction: | | | | | |
| Intersection | 1,654 | 2,259 | 3,154 | 182 | **7,249** |
| Intersection Related | 589 | 432 | 202 | 42 | **1,265** |
| Other/Unknown | 1,440 | 43 | 73 | 416 | **1,972** |
| **Total** | **28,865** | **2,803** | **3,623** | **1,752** | **37,043** |
| **Injury Crashes** | | | | | |
| Nonjunction | 728,000 | 1,000 | 1,000 | 38,000 | **768,000** |
| Junction: | | | | | |
| Intersection | 289,000 | 289,000 | 53,000 | 7,000 | **638,000** |
| Intersection Related | 145,000 | 187,000 | 32,000 | 14,000 | **377,000** |
| Other/Unknown | 231,000 | 16,000 | 5,000 | 19,000 | **271,000** |
| **Total** | **1,392,000** | **493,000** | **91,000** | **77,000** | **2,054,000** |
| **Property-Damage-Only Crashes** | | | | | |
| Nonjunction | 1,656,000 | 3,000 | 1,000 | 62,000 | **1,722,000** |
| Junction: | | | | | |
| Intersection | 434,000 | 374,000 | 72,000 | 23,000 | **903,000** |
| Intersection Related | 306,000 | 426,000 | 99,000 | 46,000 | **878,000** |
| Other/Unknown | 564,000 | 48,000 | 19,000 | 54,000 | **684,000** |
| **Total** | **2,959,000** | **851,000** | **192,000** | **187,000** | **4,188,000** |
| **All Crashes** | | | | | |
| Nonjunction | 2,408,000 | 4,000 | 2,000 | 101,000 | **2,516,000** |
| Junction: | | | | | |
| Intersection | 724,000 | 665,000 | 129,000 | 31,000 | **1,549,000** |
| Intersection Related | 452,000 | 613,000 | 131,000 | 60,000 | **1,257,000** |
| Other/Unknown | 796,000 | 64,000 | 24,000 | 73,000 | **957,000** |
| **Total** | **4,380,000** | **1,347,000** | **286,000** | **266,000** | **6,279,000** |

**Table 29**
**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 | 2,734 | 13.1 | 1,060 | 6.5 | **3,794** | **10.2** |
| 35 or 40 mph | 3,706 | 17.8 | 2,572 | 15.9 | **6,278** | **16.9** |
| 45 or 50 mph | 3,347 | 16.0 | 3,275 | 20.2 | **6,622** | **17.9** |
| 55 mph | 6,355 | 30.5 | 5,794 | 35.8 | **12,149** | **32.8** |
| 60 mph or higher | 4,003 | 19.2 | 3,186 | 19.7 | **7,189** | **19.4** |
| No Statutory Limit | 91 | 0.4 | 33 | 0.2 | **124** | **0.3** |
| Unknown | 623 | 3.0 | 264 | 1.6 | **887** | **2.4** |
| **Total** | **20,859** | **100.0** | **16,184** | **100.0** | **37,043** | **100.0** |
| **Injury Crashes** | | | | | | |
| 30 mph or less | 155,000 | 26.1 | 291,000 | 19.9 | **446,000** | **21.7** |
| 35 or 40 mph | 146,000 | 24.7 | 587,000 | 40.2 | **733,000** | **35.7** |
| 45 or 50 mph | 83,000 | 14.0 | 324,000 | 22.1 | **407,000** | **19.8** |
| 55 mph | 137,000 | 23.1 | 162,000 | 11.1 | **299,000** | **14.5** |
| 60 mph or higher | 67,000 | 11.3 | 95,000 | 6.5 | **162,000** | **7.9** |
| No Statutory Limit | 5,000 | 0.8 | 3,000 | 0.2 | **8,000** | **0.4** |
| **Total** | **592,000** | **100.0** | **1,462,000** | **100.0** | **2,054,000** | **100.0** |
| **Property-Damage-Only Crashes** | | | | | | |
| 30 mph or less | 379,000 | 32.2 | 810,000 | 26.9 | **1,190,000** | **28.4** |
| 35 or 40 mph | 201,000 | 17.0 | 1,074,000 | 35.7 | **1,274,000** | **30.4** |
| 45 or 50 mph | 150,000 | 12.8 | 633,000 | 21.0 | **783,000** | **18.7** |
| 55 mph | 303,000 | 25.7 | 277,000 | 9.2 | **580,000** | **13.9** |
| 60 mph or higher | 134,000 | 11.4 | 204,000 | 6.8 | **339,000** | **8.1** |
| No Statutory Limit | 11,000 | 0.9 | 11,000 | 0.4 | **22,000** | **0.5** |
| **Total** | **1,178,000** | **100.0** | **3,009,000** | **100.0** | **4,188,000** | **100.0** |
| **All Crashes** | | | | | | |
| 30 mph or less | 537,000 | 30.0 | 1,102,000 | 24.6 | **1,639,000** | **26.1** |
| 35 or 40 mph | 350,000 | 19.6 | 1,664,000 | 37.1 | **2,014,000** | **32.1** |
| 45 or 50 mph | 237,000 | 13.2 | 960,000 | 21.4 | **1,196,000** | **19.1** |
| 55 mph | 446,000 | 24.9 | 445,000 | 9.9 | **891,000** | **14.2** |
| 60 mph or higher | 205,000 | 11.5 | 302,000 | 6.7 | **508,000** | **8.1** |
| No Statutory Limit | 16,000 | 0.9 | 14,000 | 0.3 | **30,000** | **0.5** |
| **Total** | **1,791,000** | **100.0** | **4,487,000** | **100.0** | **6,279,000** | **100.0** |

**Table 30**
**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 | 1,005 | 26.5 | 2,748 | 72.4 | 41 | 1.1 | **3,794** | **100.0** |
| 35 or 40 mph | 1,956 | 31.2 | 4,256 | 67.8 | 66 | 1.1 | **6,278** | **100.0** |
| 45 or 50 mph | 3,455 | 52.2 | 3,117 | 47.1 | 50 | 0.8 | **6,622** | **100.0** |
| 55 mph | 9,991 | 82.2 | 2,093 | 17.2 | 65 | 0.5 | **12,149** | **100.0** |
| 60 mph or higher | 5,280 | 73.4 | 1,902 | 26.5 | 7 | 0.1 | **7,189** | **100.0** |
| No Statutory Limit | 100 | 80.6 | 18 | 14.5 | 6 | 4.8 | **124** | **100.0** |
| Unknown | 421 | 47.5 | 454 | 51.2 | 12 | 1.4 | **887** | **100.0** |
| **Total** | **22,208** | **60.0** | **14,588** | **39.4** | **247** | **0.7** | **37,043** | **100.0** |

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

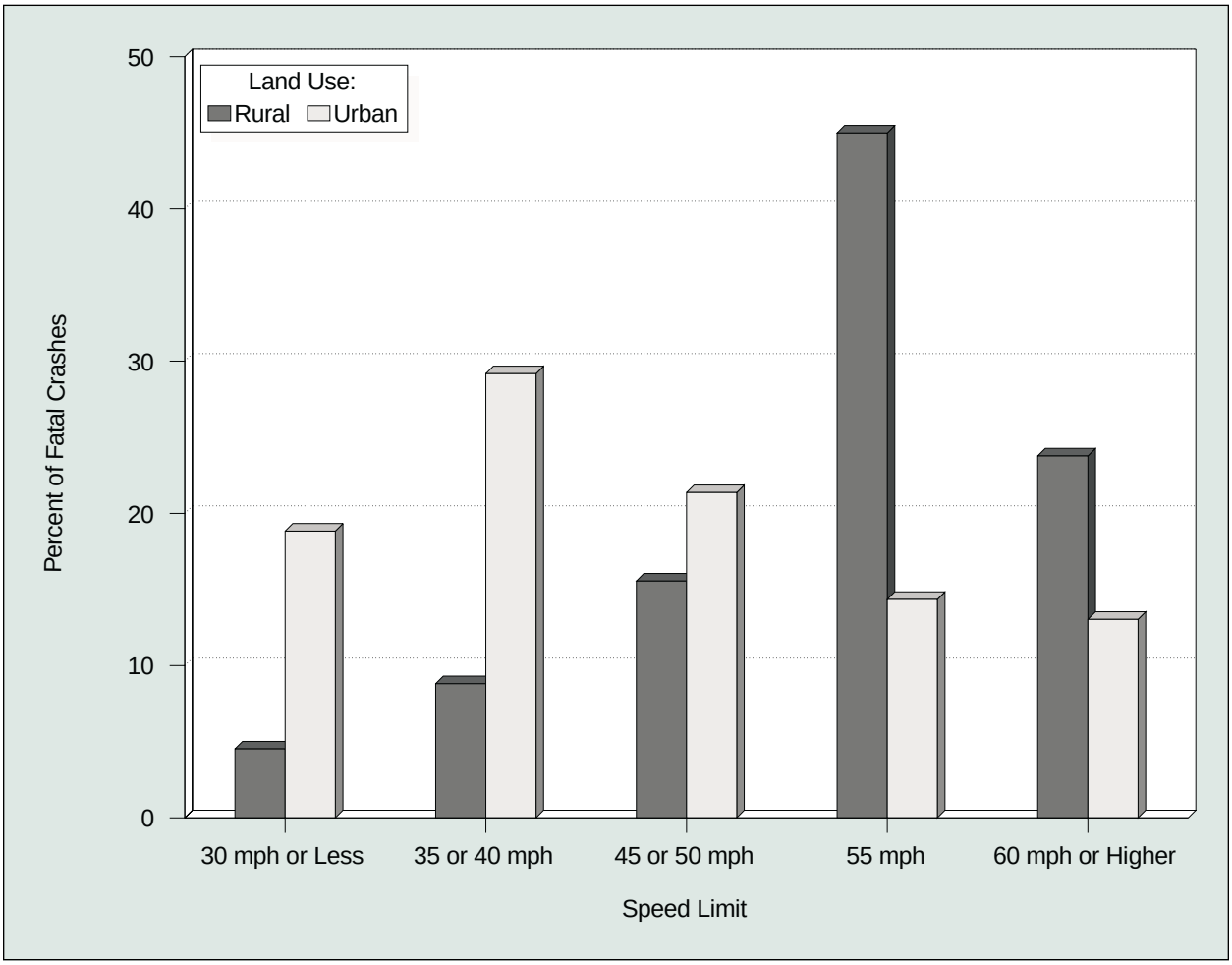


**Table 31**
**Crashes by Number of Lanes, Trafficway Flow, and Crash Severity**

| Number of Lanes | Trafficway Flow | | | | Total |
|---|---|---|---|---|---|
| | Not Divided | Divided | One-Way | Unknown | |
| **Fatal Crashes** | | | | | |
| One Lane | 19 | 111 | 59 | 0 | **189** |
| Two Lanes | 21,552 | 6,974 | 141 | 28 | **28,695** |
| Three Lanes | 313 | 2,084 | 91 | 5 | **2,493** |
| Four Lanes | 2,044 | 1,902 | 14 | 5 | **3,965** |
| More Than Four | 244 | 586 | 7 | 1 | **838** |
| Unknown | 202 | 196 | 16 | 449 | **863** |
| **Total** | **24,374** | **11,853** | **328** | **488** | **37,043** |
| **Injury Crashes** | | | | | |
| One Lane | 4,000 | 10,000 | 24,000 | 1,000 | **39,000** |
| Two Lanes | 687,000 | 190,000 | 15,000 | 39,000 | **931,000** |
| Three Lanes | 61,000 | 133,000 | 12,000 | 11,000 | **217,000** |
| Four Lanes | 149,000 | 106,000 | 6,000 | 11,000 | **272,000** |
| More Than Four | 146,000 | 61,000 | 2,000 | 6,000 | **215,000** |
| Unknown | 105,000 | 37,000 | 15,000 | 224,000 | **381,000** |
| **Total** | **1,151,000** | **537,000** | **74,000** | **292,000** | **2,054,000** |
| **Property-Damage-Only Crashes** | | | | | |
| One Lane | 11,000 | 17,000 | 67,000 | 8,000 | **103,000** |
| Two Lanes | 1,318,000 | 336,000 | 42,000 | 153,000 | **1,849,000** |
| Three Lanes | 130,000 | 217,000 | 25,000 | 37,000 | **409,000** |
| Four Lanes | 283,000 | 140,000 | 11,000 | 34,000 | **468,000** |
| More Than Four | 257,000 | 80,000 | 7,000 | 15,000 | **359,000** |
| Unknown | 200,000 | 104,000 | 21,000 | 674,000 | **999,000** |
| **Total** | **2,199,000** | **896,000** | **173,000** | **920,000** | **4,188,000** |
| **All Crashes** | | | | | |
| One Lane | 15,000 | 27,000 | 91,000 | 8,000 | **142,000** |
| Two Lanes | 2,026,000 | 533,000 | 58,000 | 192,000 | **2,809,000** |
| Three Lanes | 191,000 | 353,000 | 37,000 | 48,000 | **629,000** |
| Four Lanes | 434,000 | 248,000 | 17,000 | 45,000 | **744,000** |
| More Than Four | 404,000 | 142,000 | 8,000 | 21,000 | **575,000** |
| Unknown | 305,000 | 141,000 | 36,000 | 898,000 | **1,381,000** |
| **Total** | **3,375,000** | **1,445,000** | **247,000** | **1,212,000** | **6,279,000** |

**Table 32**
**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 | 7,542 | 20.4 | 699,000 | 34.0 | 1,242,000 | 29.7 | **1,948,000** | **31.0** |
| Rear End | 1,923 | 5.2 | 618,000 | 30.1 | 1,239,000 | 29.6 | **1,859,000** | **29.6** |
| Sideswipe | 605 | 1.6 | 70,000 | 3.4 | 444,000 | 10.6 | **514,000** | **8.2** |
| Head On | 5,166 | 13.9 | 60,000 | 2.9 | 44,000 | 1.1 | **109,000** | **1.7** |
| Other/Unknown | 55 | 0.1 | * | * | 3,000 | 0.1 | **3,000** | * |
| *Subtotal* | *15,291* | *41.3* | *1,447,000* | *70.4* | *2,971,000* | *70.9* | ***4,434,000*** | ***70.6*** |
| **Collision with Fixed Object:** | | | | | | | | |
| Pole/Post | 1,856 | 5.0 | 69,000 | 3.3 | 109,000 | 2.6 | **180,000** | **2.9** |
| Culvert/Curb/Ditch | 1,997 | 5.4 | 77,000 | 3.8 | 118,000 | 2.8 | **197,000** | **3.1** |
| Shrubbery/Tree | 3,010 | 8.1 | 61,000 | 3.0 | 62,000 | 1.5 | **126,000** | **2.0** |
| Guard Rail | 1,047 | 2.8 | 31,000 | 1.5 | 59,000 | 1.4 | **91,000** | **1.5** |
| Embankment | 1,179 | 3.2 | 29,000 | 1.4 | 28,000 | 0.7 | **59,000** | **0.9** |
| Bridge | 354 | 1.0 | 5,000 | 0.2 | 10,000 | 0.2 | **15,000** | **0.2** |
| Other/Unknown | 1,524 | 4.1 | 66,000 | 3.2 | 147,000 | 3.5 | **215,000** | **3.4** |
| *Subtotal* | *10,967* | *29.6* | *339,000* | *16.5* | *533,000* | *12.7* | ***883,000*** | ***14.1*** |
| **Collision with Object Not Fixed:** | | | | | | | | |
| Parked Motor Vehicle | 426 | 1.2 | 32,000 | 1.6 | 297,000 | 7.1 | **329,000** | **5.2** |
| Animal | 144 | 0.4 | 16,000 | 0.8 | 252,000 | 6.0 | **267,000** | **4.3** |
| Pedestrian | 4,578 | 12.4 | 77,000 | 3.7 | 2,000 | 0.1 | **83,000** | **1.3** |
| Pedalcyclist | 740 | 2.0 | 51,000 | 2.5 | 4,000 | 0.1 | **56,000** | **0.9** |
| Train | 251 | 0.7 | 1,000 | * | 1,000 | * | **2,000** | * |
| Other/Unknown | 238 | 0.6 | 5,000 | 0.3 | 32,000 | 0.8 | **37,000** | **0.6** |
| *Subtotal* | *6,377* | *17.2* | *181,000* | *8.8* | *587,000* | *14.0* | ***775,000*** | ***12.3*** |
| **Noncollision:** | | | | | | | | |
| Rollover | 3,937 | 10.6 | 75,000 | 3.7 | 45,000 | 1.1 | **124,000** | **2.0** |
| Other/Unknown | 436 | 1.2 | 12,000 | 0.6 | 51,000 | 1.2 | **63,000** | **1.0** |
| *Subtotal* | *4,373* | *11.8* | *87,000* | *4.3* | *96,000* | *2.3* | ***188,000*** | ***3.0*** |
| **Total** | ****37,043** | **100.0** | **2,054,000** | **100.0** | **4,188,000** | **100.0** | **6,279,000** | **100.0** |

*Less than 500 or less than 0.05 percent.
**Includes 35 fatal crashes with an unknown first harmful event.

**Table 33**
**Two-Vehicle Crashes by Vehicle Type and Crash Severity**

| Vehicle Type | Vehicle Type | | | | | |
|---|---|---|---|---|---|---|
| | Passenger Car | Light Truck | Large Truck | Motorcycle | Bus | Other/Unknown |
| **Fatal Crashes (Total = 13,674)** | | | | | | |
| Passenger Car | 3,059 | 4,690 | 1,730 | 551 | 114 | 168 |
| Light Truck | | 1,379 | 1,038 | 450 | 46 | 124 |
| Large Truck | | | 99 | 88 | 7 | 34 |
| Motorcycle | | | | 37 | 12 | 21 |
| Bus | | | | | 1 | 1 |
| Other/Unknown | | | | | | 25 |
| **Injury Crashes (Total = 1,253,000)** | | | | | | |
| Passenger Car | 537,000 | 494,000 | 43,000 | 14,000 | 7,000 | 3,000 |
| Light Truck | | 121,000 | 16,000 | 7,000 | 2,000 | 2,000 |
| Large Truck | | | 3,000 | 1,000 | 1,000 | 1,000 |
| Motorcycle | | | | 1,000 | * | * |
| **Property-Damage-Only Crashes (Total = 2,827,000)** | | | | | | |
| Passenger Car | 1,057,000 | 1,151,000 | 151,000 | 5,000 | 24,000 | 4,000 |
| Light Truck | | 328,000 | 71,000 | 1,000 | 11,000 | 5,000 |
| Large Truck | | | 13,000 | * | 4,000 | * |

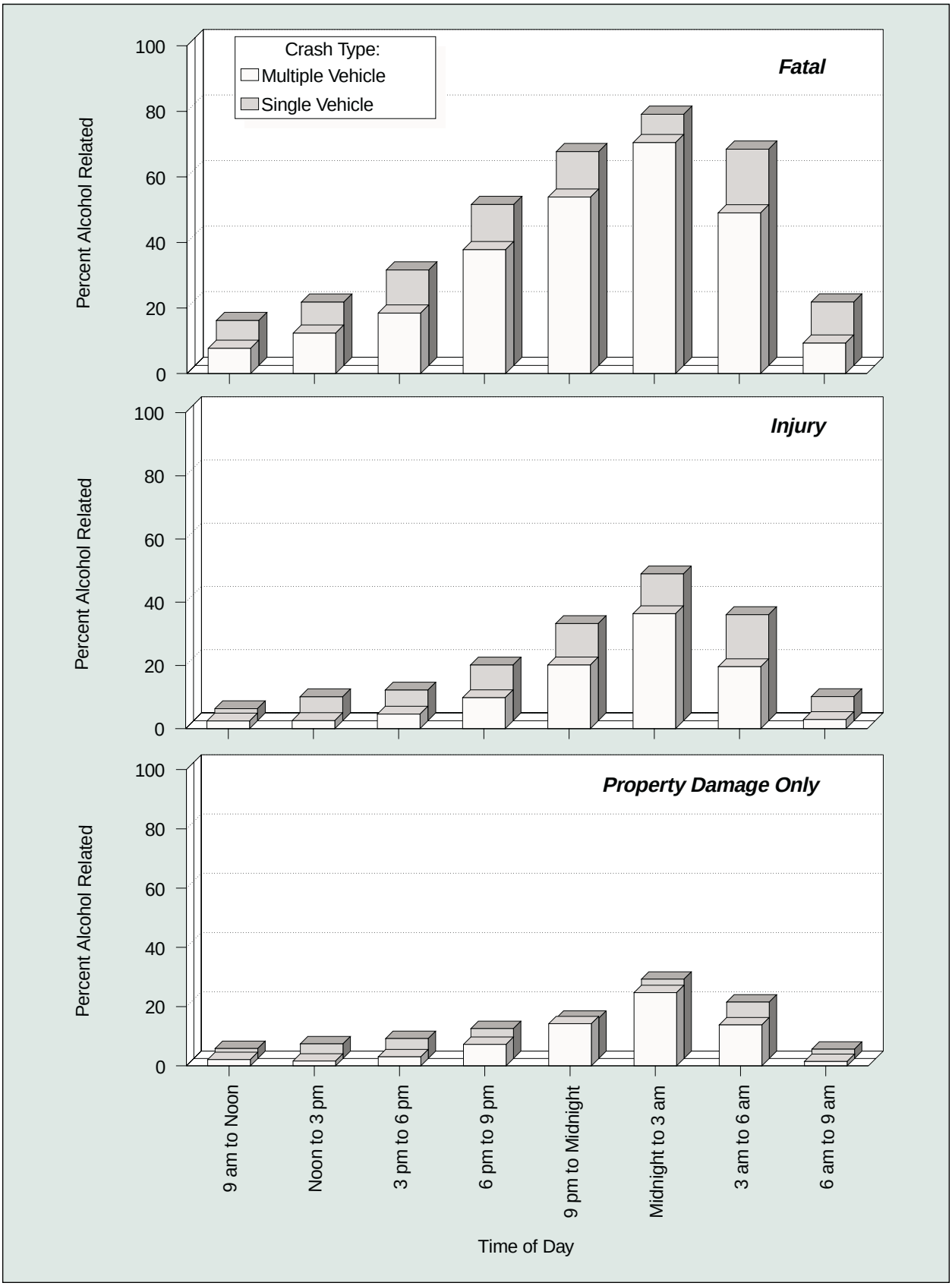
*Less than 500.

## Table 34
## Crashes and Percent Alcohol Related by Time of Day, Crash Type, and Crash Severity

| Time of Day | Crash Type | | | | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|
| | Single Vehicle | | | Multiple Vehicle | | | | | |
| | Number | Alcohol Related | Percent Alcohol Related | Number | Alcohol Related | Percent Alcohol Related | Number | Alcohol Related | Percent Alcohol Related |
| **Fatal Crashes*** | | | | | | | | | |
| Midnight to 3 am | 3,451 | 2,644 | 77 | 1,083 | 763 | 70 | **4,534** | **3,407** | **75** |
| 3 am to 6 am | 2,033 | 1,341 | 66 | 789 | 387 | 49 | **2,822** | **1,728** | **61** |
| 6 am to 9 am | 1,885 | 364 | 19 | 1,858 | 173 | 9 | **3,743** | **537** | **14** |
| 9 am to Noon | 1,580 | 216 | 14 | 2,135 | 164 | 8 | **3,715** | **380** | **10** |
| Noon to 3 pm | 2,031 | 392 | 19 | 2,855 | 352 | 12 | **4,886** | **744** | **15** |
| 3 pm to 6 pm | 2,811 | 819 | 29 | 3,421 | 631 | 18 | **6,232** | **1,449** | **23** |
| 6 pm to 9 pm | 3,324 | 1,632 | 49 | 2,367 | 895 | 38 | **5,691** | **2,527** | **44** |
| 9 pm to Midnight | 3,443 | 2,245 | 65 | 1,660 | 894 | 54 | **5,103** | **3,139** | **62** |
| Unknown | 301 | 193 | 64 | 16 | 5 | 31 | **317** | **198** | **63** |
| **Total** | **20,859** | **9,847** | **47** | **16,184** | **4,262** | **26** | **37,043** | **14,109** | **38** |
| **Injury Crashes**** | | | | | | | | | |
| Midnight to 3 am | 63,000 | 29,000 | 46 | 36,000 | 13,000 | 36 | **99,000** | **42,000** | **43** |
| 3 am to 6 am | 39,000 | 13,000 | 34 | 20,000 | 4,000 | 20 | **59,000** | **17,000** | **29** |
| 6 am to 9 am | 64,000 | 5,000 | 8 | 170,000 | 5,000 | 3 | **234,000** | **10,000** | **4** |
| 9 am to Noon | 58,000 | 2,000 | 4 | 208,000 | 5,000 | 2 | **265,000** | **7,000** | **3** |
| Noon to 3 pm | 86,000 | 6,000 | 8 | 312,000 | 8,000 | 3 | **397,000** | **14,000** | **4** |
| 3 pm to 6 pm | 107,000 | 10,000 | 10 | 413,000 | 19,000 | 5 | **520,000** | **29,000** | **6** |
| 6 pm to 9 pm | 96,000 | 17,000 | 18 | 208,000 | 20,000 | 10 | **305,000** | **37,000** | **12** |
| 9 pm to Midnight | 79,000 | 24,000 | 31 | 96,000 | 19,000 | 20 | **175,000** | **44,000** | **25** |
| **Total** | **592,000** | **108,000** | **18** | **1,462,000** | **93,000** | **6** | **2,054,000** | **201,000** | **10** |
| **Property-Damage-Only Crashes**** | | | | | | | | | |
| Midnight to 3 am | 124,000 | 33,000 | 27 | 61,000 | 15,000 | 25 | **185,000** | **48,000** | **26** |
| 3 am to 6 am | 85,000 | 16,000 | 19 | 31,000 | 4,000 | 14 | **116,000** | **20,000** | **18** |
| 6 am to 9 am | 146,000 | 5,000 | 3 | 404,000 | 6,000 | 1 | **549,000** | **11,000** | **2** |
| 9 am to Noon | 135,000 | 5,000 | 3 | 436,000 | 9,000 | 2 | **571,000** | **14,000** | **2** |
| Noon to 3 pm | 145,000 | 7,000 | 5 | 662,000 | 11,000 | 2 | **807,000** | **18,000** | **2** |
| 3 pm to 6 pm | 182,000 | 12,000 | 7 | 871,000 | 26,000 | 3 | **1,053,000** | **39,000** | **4** |
| 6 pm to 9 pm | 196,000 | 20,000 | 10 | 381,000 | 28,000 | 7 | **576,000** | **47,000** | **8** |
| 9 pm to Midnight | 166,000 | 23,000 | 14 | 164,000 | 23,000 | 14 | **330,000** | **46,000** | **14** |
| **Total** | **1,178,000** | **120,000** | **10** | **3,009,000** | **122,000** | **4** | **4,188,000** | **242,000** | **6** |

*Blood alcohol concentration (BAC) of 0.01 grams per deciliter (g/dl) or greater.
**Police-reported alcohol involvement.

**Figure 13**
**Percent of Crashes Alcohol Related, by Time of Day and Crash Severity**



# Chapter 3 ♦ Vehicles

# 3. VEHICLES

Statistics about the vehicles involved in 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:

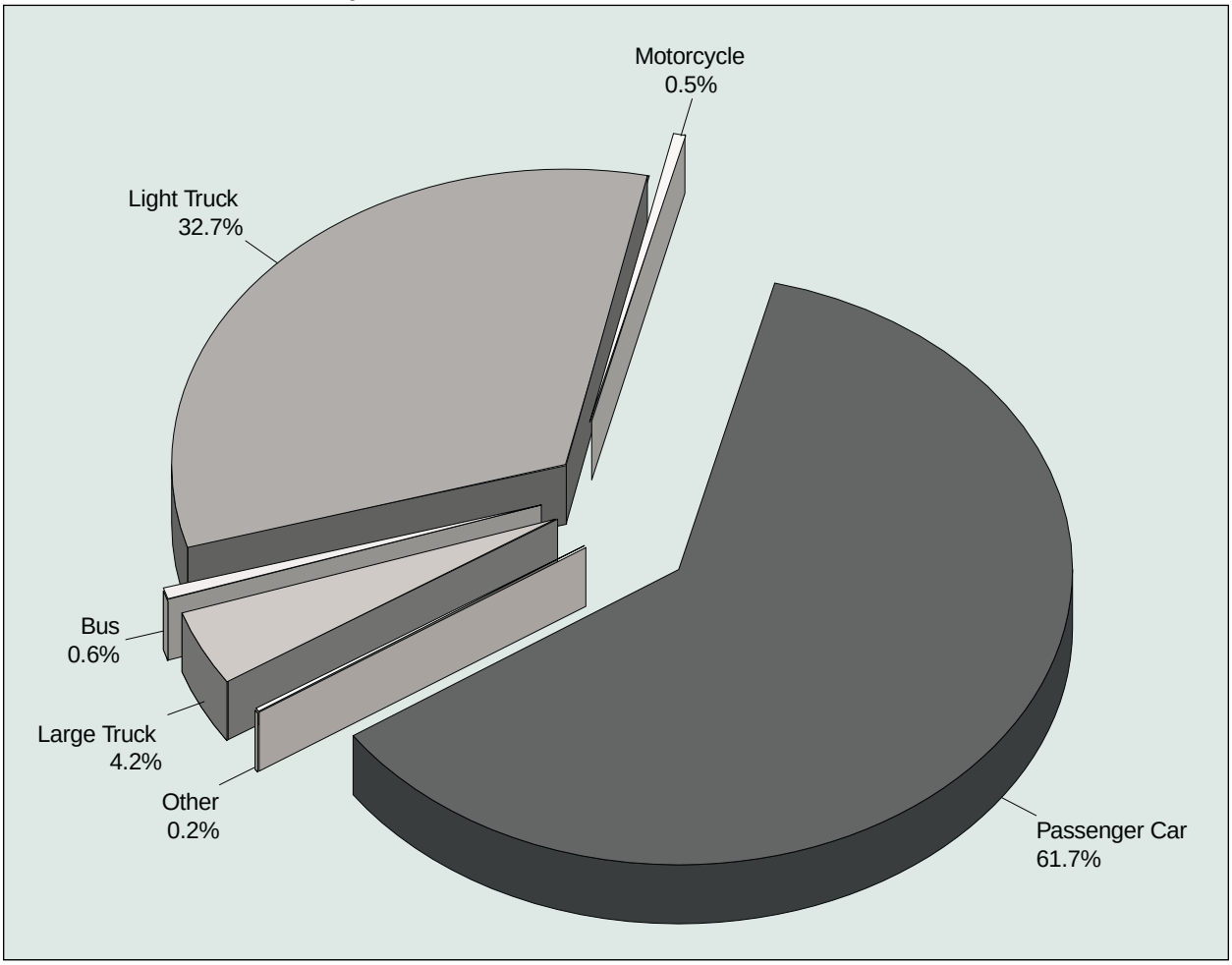
- Ninety-four percent of the 11 million vehicles involved in motor vehicle crashes in 1999 were passenger cars or light trucks.
- Large trucks accounted for 9 percent of the vehicles in fatal crashes, but only 4 percent of the vehicles involved in injury and property-damage-only crashes. Of the 4,898 large trucks involved in fatal crashes, 76 percent were combination trucks.
- The proportion of vehicles that rolled over in fatal crashes (19.7 percent) was more than 4 times as high as the proportion in injury crashes (4.7 percent) and more than 16 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: 37.8 percent in fatal crashes, 10.0 percent in injury crashes, and 2.5 percent in property-damage-only crashes.
- Fires occurred in 0.1 percent of the vehicles involved in all traffic crashes in 1999. For fatal crashes, however, fires occurred in nearly 3 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 (26.7 percent), and buses in fatal crashes had the lowest proportion (2.8 percent).

**Table 35**
**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 | 27,953 | 49.3 | 2,438,000 | 64.6 | 4,469,000 | 60.4 | **6,935,000** | **61.7** |
| Light Truck | 19,895 | 35.1 | 1,165,000 | 30.9 | 2,491,000 | 33.7 | **3,677,000** | **32.7** |
| Large Truck | 4,898 | 8.6 | 101,000 | 2.7 | 369,000 | 5.0 | **475,000** | **4.2** |
| Motorcycle | 2,519 | 4.4 | 46,000 | 1.2 | 10,000 | 0.1 | **59,000** | **0.5** |
| Bus | 318 | 0.6 | 14,000 | 0.4 | 48,000 | 0.7 | **63,000** | **0.6** |
| Other | 529 | 0.9 | 9,000 | 0.2 | 14,000 | 0.2 | **24,000** | **0.2** |
| **Total** | ***56,668** | **100.0** | **3,773,000** | **100.0** | **7,402,000** | **100.0** | **11,232,000** | **100.0** |

*Includes 556 vehicles of unknown type involved in fatal crashes.

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



## Table 36
## Vehicles Involved in Fatal Crashes by Body Type

| Body Type | Number | Percent |
|---|---|---|
| **Passenger Cars** | **27,953** | **49.3** |
| Convertible | 409 | 0.7 |
| 2 Door Sedan, Hardtop, Coupe | 6,828 | 12.0 |
| 3 Door/2 Door Hatchback | 2,474 | 4.4 |
| 4 Door Sedan Hardtop | 16,184 | 28.6 |
| 5 Door/4 Door Hatchback | 569 | 1.0 |
| Station Wagon | 1,060 | 1.9 |
| Hatchback, Doors Unknown | 12 | * |
| Other Auto | 26 | * |
| Unknown Auto | 325 | 0.6 |
| Auto-Based Pickup | 66 | 0.1 |
| **Light Trucks** | **19,895** | **35.1** |
| Compact Utility | 3,882 | 6.9 |
| Large Utility | 713 | 1.3 |
| Utility Station Wagon | 359 | 0.6 |
| Utility, Unknown Body Type | 4 | * |
| Minivan | 2,341 | 4.1 |
| Large Van | 1,322 | 2.3 |
| Step Van | 106 | 0.2 |
| Van-Based School Bus | 9 | * |
| Van-Based Transit Bus | 4 | * |
| Other Van Type | 11 | * |
| Unknown Van Type | 37 | 0.1 |
| Compact Pickup | 4,195 | 7.4 |
| Standard Pickup | 6,748 | 11.9 |
| Pickup with Camper | 40 | 0.1 |
| Unknown Pickup Style Truck | 47 | 0.1 |
| Cab Chassis-Based Light Truck | 58 | 0.1 |
| Truck-Based Panel Truck | 2 | * |
| Other Conventional Light Truck | 1 | * |
| Unknown Light Truck (not pickup) | 4 | * |
| Unknown Light Vehicle Type | 10 | * |
| Unknown Truck | 2 | * |
| **Large Trucks** | **4,898** | **8.6** |
| Step Van | 35 | 0.1 |
| Single Unit Truck (10,000 lb < GVWR ≤ 19,500 lb) | 148 | 0.3 |
| Single Unit Truck (19,500 lb < GVWR ≤ 26,000 lb) | 210 | 0.4 |
| Single Unit Heavy Truck (GVWR > 26,000 lb) | 896 | 1.6 |
| Single Unit Truck, Unknown GVWR | 79 | 0.1 |
| Truck Tractor | 3,491 | 6.2 |
| Unknown Medium Truck (10,000 lb < GVWR ≤ 26,000 lb) | 5 | * |
| Unknown Heavy Truck (GVWR > 26,000 lb) | 2 | * |
| Unknown Large Truck Type | 31 | 0.1 |
| Unknown Truck | 1 | * |
| **Motorcycles** | **2,519** | **4.4** |
| Motorcycle | 2,406 | 4.2 |
| Moped | 38 | 0.1 |
| Three Wheel Motorcycle or Moped | 2 | * |
| Off-Road Motorcycle (Two Wheel) | 47 | 0.1 |
| Other Motorcycle/Minibike | 18 | * |
| Unknown Motorcycle | 8 | * |
| **Buses** | **318** | **0.6** |
| School Bus | 138 | 0.2 |
| Cross Country/Intercity Bus | 38 | 0.1 |
| Transit Bus | 105 | 0.2 |
| Other Bus | 20 | * |
| Unknown Bus | 17 | * |
| **Other Vehicles** | **529** | **0.9** |
| Large Limousine | 2 | * |
| Van-Based Motorhome | 54 | 0.1 |
| Light Truck-Based Motorhome | 6 | * |
| Large Truck-Based Motorhome | 32 | 0.1 |
| Unknown Truck Camper/Motorhome | 23 | * |
| All Terrain Vehicle | 186 | 0.3 |
| Snowmobile | 46 | 0.1 |
| Farm Equipment Except Trucks | 106 | 0.2 |
| Construction Equipment Except Trucks | 23 | * |
| Other Vehicle | 51 | 0.1 |
| **Unknown Body Type** | **556** | **1.0** |
| **Total** | **56,668** | **100.0** |

*Less than 0.05 percent.

## Table 37
## 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 |
| **Fatal Crashes** | | | | | | |
| Passenger Car | 4,411 | 15.8 | 23,542 | 84.2 | **27,953** | **100.0** |
| Light Truck | | | | | | |
| Pickup | 2,838 | 25.7 | 8,192 | 74.3 | **11,030** | **100.0** |
| Utility | 1,876 | 37.8 | 3,082 | 62.2 | **4,958** | **100.0** |
| Van | 714 | 18.6 | 3,116 | 81.4 | **3,830** | **100.0** |
| Other | 15 | 19.5 | 62 | 80.5 | **77** | **100.0** |
| Large Truck | 645 | 13.2 | 4,253 | 86.8 | **4,898** | **100.0** |
| Bus | 9 | 2.8 | 309 | 97.2 | **318** | **100.0** |
| Other/Unknown | 149 | 13.7 | 936 | 86.3 | **1,085** | **100.0** |
| **Total*** | **10,657** | **19.7** | **43,492** | **80.3** | **54,149** | **100.0** |
| **Injury Crashes** | | | | | | |
| Passenger Car | 81,000 | 3.3 | 2,357,000 | 96.7 | **2,438,000** | **100.0** |
| Light Truck | | | | | | |
| Pickup | 38,000 | 7.0 | 509,000 | 93.0 | **547,000** | **100.0** |
| Utility | 32,000 | 10.0 | 288,000 | 90.0 | **320,000** | **100.0** |
| Van | 10,000 | 3.6 | 264,000 | 96.4 | **274,000** | **100.0** |
| Other | 1,000 | 5.9 | 23,000 | 94.1 | **24,000** | **100.0** |
| Large Truck | 12,000 | 12.2 | 88,000 | 87.8 | **101,000** | **100.0** |
| Bus | ** | 0.7 | 14,000 | 99.3 | **14,000** | **100.0** |
| Other/Unknown | 1,000 | 11.0 | 8,000 | 89.0 | **9,000** | **100.0** |
| **Total*** | **176,000** | **4.7** | **3,551,000** | **95.3** | **3,727,000** | **100.0** |
| **Property-Damage-Only Crashes** | | | | | | |
| Passenger Car | 35,000 | 0.8 | 4,434,000 | 99.2 | **4,469,000** | **100.0** |
| Light Truck | | | | | | |
| Pickup | 24,000 | 2.1 | 1,159,000 | 97.9 | **1,184,000** | **100.0** |
| Utility | 17,000 | 2.5 | 674,000 | 97.5 | **691,000** | **100.0** |
| Van | 6,000 | 1.1 | 554,000 | 98.9 | **560,000** | **100.0** |
| Other | ** | 0.9 | 56,000 | 99.1 | **57,000** | **100.0** |
| Large Truck | 7,000 | 1.9 | 362,000 | 98.1 | **369,000** | **100.0** |
| Bus | ** | ** | 48,000 | 100.0 | **48,000** | **100.0** |
| Other/Unknown | ** | ** | 14,000 | 100.0 | **14,000** | **100.0** |
| **Total*** | **90,000** | **1.2** | **7,302,000** | **98.8** | **7,392,000** | **100.0** |
| **All Crashes** | | | | | | |
| Passenger Car | 120,000 | 1.7 | 6,815,000 | 98.3 | **6,935,000** | **100.0** |
| Light Truck | | | | | | |
| Pickup | 66,000 | 3.8 | 1,676,000 | 96.2 | **1,742,000** | **100.0** |
| Utility | 51,000 | 5.0 | 966,000 | 95.0 | **1,016,000** | **100.0** |
| Van | 17,000 | 2.0 | 821,000 | 98.0 | **837,000** | **100.0** |
| Other | 2,000 | 2.4 | 79,000 | 97.6 | **81,000** | **100.0** |
| Large Truck | 20,000 | 4.2 | 455,000 | 95.8 | **475,000** | **100.0** |
| Bus | ** | 0.2 | 63,000 | 99.8 | **63,000** | **100.0** |
| Other/Unknown | 1,000 | 4.8 | 23,000 | 95.2 | **24,000** | **100.0** |
| **Total*** | **277,000** | **2.5** | **10,897,000** | **97.5** | **11,173,000** | **100.0** |

*Excludes motorcycles
**Less than 500 or less than 0.05 percent.

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

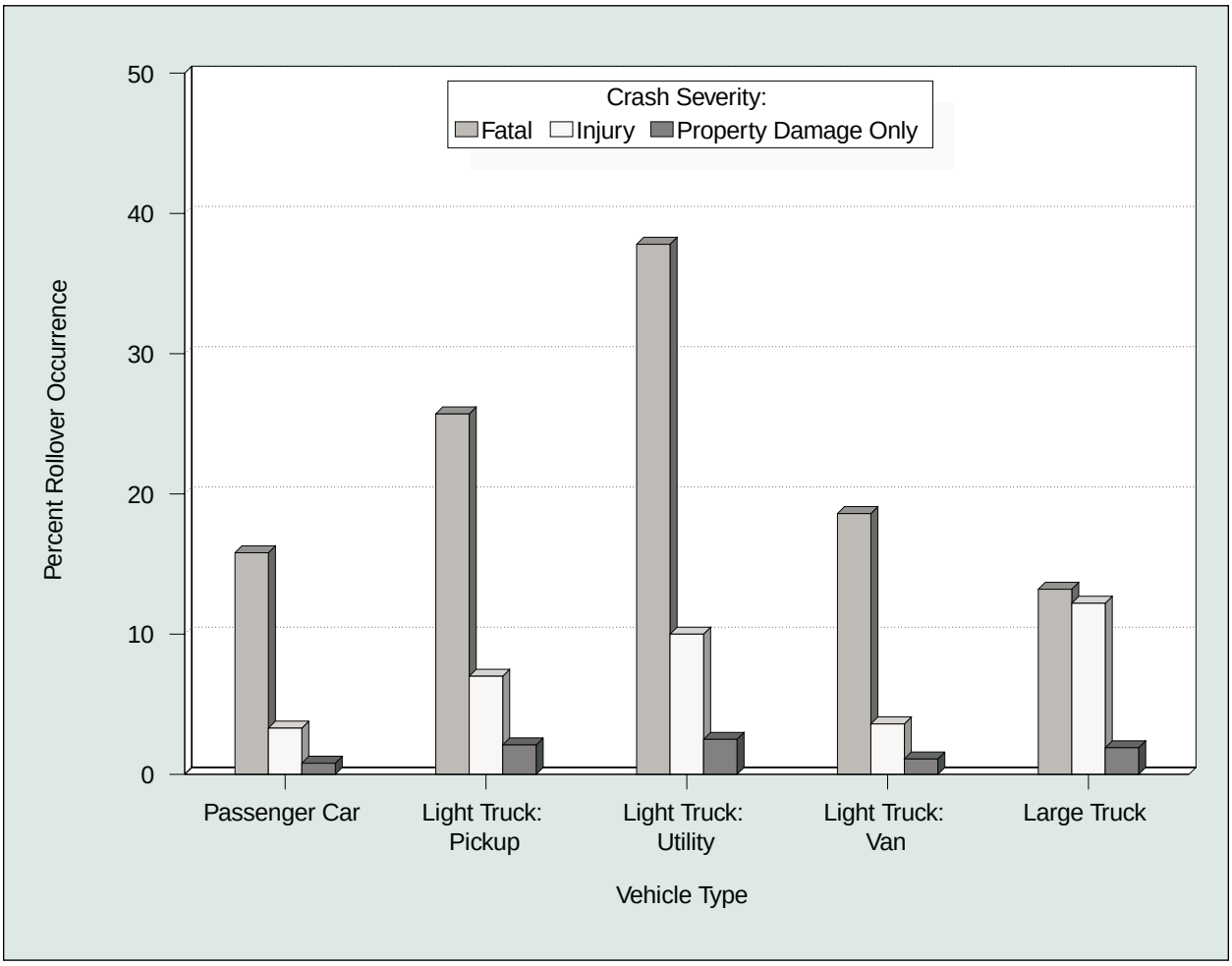


**Table 38**
**Vehicles Involved in Crashes by Vehicle Type, Fire Occurrence, and Crash Severity**

| Vehicle Type | Fire Occurrence | | | | Total | |
|---|---|---|---|---|---|---|
| | Yes | | No | | | |
| | Number | Percent | Number | Percent | Number | Percent |
| **Fatal Crashes** | | | | | | |
| Passenger Car | 784 | 2.8 | 27,169 | 97.2 | **27,953** | **100.0** |
| Light Truck | 557 | 2.8 | 19,338 | 97.2 | **19,895** | **100.0** |
| Large Truck | 267 | 5.5 | 4,631 | 94.5 | **4,898** | **100.0** |
| Motorcycle | 43 | 1.7 | 2,476 | 98.3 | **2,519** | **100.0** |
| Bus | 1 | 0.3 | 317 | 99.7 | **318** | **100.0** |
| Other/Unknown | 16 | 1.5 | 1,069 | 98.5 | **1,085** | **100.0** |
| **Total** | **1,668** | **2.9** | **55,000** | **97.1** | 56,668 | 100.0 |
| **Injury Crashes** | | | | | | |
| Passenger Car | 3,000 | 0.1 | 2,435,000 | 99.9 | **2,438,000** | **100.0** |
| Light Truck | 1,000 | 0.1 | 1,164,000 | 99.9 | **1,165,000** | **100.0** |
| Large Truck | 1,000 | 0.7 | 100,000 | 99.3 | **101,000** | **100.0** |
| Motorcycle | * | 0.1 | 46,000 | 99.9 | **46,000** | **100.0** |
| Bus | * | * | 14,000 | 100.0 | **14,000** | **100.0** |
| Other/Unknown | * | 4.5 | 9,000 | 95.5 | **9,000** | **100.0** |
| **Total** | **5,000** | **0.1** | **3,768,000** | **99.9** | 3,773,000 | 100.0 |
| **Property-Damage-Only Crashes** | | | | | | |
| Passenger Car | 5,000 | 0.1 | 4,465,000 | 99.9 | **4,469,000** | **100.0** |
| Light Truck | 4,000 | 0.2 | 2,488,000 | 99.8 | **2,491,000** | **100.0** |
| Large Truck | 1,000 | 0.1 | 369,000 | 99.9 | **369,000** | **100.0** |
| Motorcycle | * | * | 10,000 | 100.0 | **10,000** | **100.0** |
| Bus | * | * | 48,000 | 100.0 | **48,000** | **100.0** |
| Other/Unknown | * | 1.5 | 14,000 | 98.5 | **14,000** | **100.0** |
| **Total** | **9,000** | **0.1** | **7,393,000** | **99.9** | 7,402,000 | 100.0 |
| **All Crashes** | | | | | | |
| Passenger Car | 8,000 | 0.1 | 6,927,000 | 99.9 | **6,935,000** | **100.0** |
| Light Truck | 6,000 | 0.2 | 3,671,000 | 99.8 | **3,677,000** | **100.0** |
| Large Truck | 2,000 | 0.3 | 473,000 | 99.7 | **475,000** | **100.0** |
| Motorcycle | * | 0.1 | 59,000 | 99.9 | **59,000** | **100.0** |
| Bus | * | * | 63,000 | 100.0 | **63,000** | **100.0** |
| Other/Unknown | 1,000 | 2.7 | 24,000 | 97.4 | **24,000** | **100.0** |
| **Total** | **16,000** | **0.1** | **11,216,000** | **99.9** | 11,232,000 | 100.0 |

*Less than 500 or less than 0.05 percent.

**Table 39**
**Vehicles Involved in Single- and Two-Vehicle Crashes by Vehicle Maneuver and Crash Severity**

| Vehicle Maneuver | Crash Severity | | | | | | Total | |
|---|---|---|---|---|---|---|---|---|
| | Fatal | | Injury | | Property Damage Only | | | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Going Straight | 32,974 | 68.4 | 1,737,000 | 56.2 | 3,361,000 | 49.4 | **5,131,000** | **51.6** |
| Turning Left | 2,846 | 5.9 | 396,000 | 12.8 | 672,000 | 9.9 | **1,071,000** | **10.8** |
| Stopped in Traffic Lane | 641 | 1.3 | 303,000 | 9.8 | 792,000 | 11.6 | **1,096,000** | **11.0** |
| Turning Right | 293 | 0.6 | 81,000 | 2.6 | 278,000 | 4.1 | **360,000** | **3.6** |
| Slowed in Traffic Lane | 308 | 0.6 | 137,000 | 4.4 | 357,000 | 5.3 | **495,000** | **5.0** |
| Merging/Changing Lanes | 739 | 1.5 | 67,000 | 2.2 | 307,000 | 4.5 | **375,000** | **3.8** |
| Negotiating Curve | 7,036 | 14.6 | 157,000 | 5.1 | 209,000 | 3.1 | **374,000** | **3.8** |
| Backing Up | 154 | 0.3 | 18,000 | 0.6 | 216,000 | 3.2 | **235,000** | **2.4** |
| Passing Other Vehicle | 973 | 2.0 | 32,000 | 1.0 | 109,000 | 1.6 | **142,000** | **1.4** |
| Starting in Traffic Lane | 589 | 1.2 | 83,000 | 2.7 | 180,000 | 2.7 | **264,000** | **2.7** |
| Leaving Parking Space | 36 | 0.1 | 8,000 | 0.3 | 58,000 | 0.8 | **66,000** | **0.7** |
| Making U-Turn | 184 | 0.4 | 16,000 | 0.5 | 37,000 | 0.5 | **54,000** | **0.5** |
| Entering Parking Space | 9 | * | 2,000 | 0.1 | 24,000 | 0.3 | **25,000** | **0.3** |
| Disabled in Traffic Lane | 19 | * | 4,000 | 0.1 | 11,000 | 0.2 | **15,000** | **0.2** |
| Other Maneuver | 1,159 | 2.4 | 50,000 | 1.6 | 190,000 | 2.8 | **241,000** | **2.4** |
| **Total** | ****48,207** | **100.0** | **3,092,000** | **100.0** | **6,801,000** | **100.0** | 9,942,000 | **100.0** |

*Less than 0.05 percent.
**Includes 247 vehicles involved in fatal crashes with unknown vehicle maneuver.

**Table 40**
**Vehicles Involved in Fatal Crashes by Roadway Function Class, Crash Type, and Hazardous Cargo**

| Roadway Function Class | Crash Type | | | | Total | |
|---|---|---|---|---|---|---|
| | Single Vehicle | | Multiple Vehicle | | | |
| | Hazardous Cargo | Total | Hazardous Cargo | Total | Hazardous Cargo | Total |
| **Rural Fatal Crashes** | | | | | | |
| Principal Arterial | | | | | | |
| Interstate | 9 | 1,708 | 26 | 2,360 | **35** | **4,068** |
| Other | 10 | 1,723 | 46 | 6,048 | **56** | **7,771** |
| Minor Arterial | 1 | 1,685 | 16 | 4,288 | **17** | **5,973** |
| Major Collector | 7 | 3,027 | 18 | 4,440 | **25** | **7,467** |
| Minor Collector | 3 | 1,069 | 3 | 1,092 | **6** | **2,161** |
| Local Road or Street | 1 | 3,268 | 9 | 2,223 | **10** | **5,491** |
| Unknown Rural | 0 | 204 | 2 | 216 | **2** | **420** |
| **Total** | **31** | **12,684** | **120** | **20,667** | **151** | **33,351** |
| **Urban Fatal Crashes** | | | | | | |
| Principal Arterial | | | | | | |
| Interstate | 6 | 1,160 | 20 | 2,288 | **26** | **3,448** |
| Freeway/Expressway | 2 | 667 | 4 | 1,261 | **6** | **1,928** |
| Other | 4 | 2,153 | 15 | 5,535 | **19** | **7,688** |
| Minor Arterial | 0 | 1,577 | 8 | 3,001 | **8** | **4,578** |
| Collector | 2 | 575 | 2 | 799 | **4** | **1,374** |
| Local Road or Street | 1 | 1,861 | 3 | 1,941 | **4** | **3,802** |
| Unknown Urban | 0 | 53 | 0 | 48 | **0** | **101** |
| **Total** | **15** | **8,046** | **52** | **14,873** | **67** | **22,919** |
| **All Fatal Crashes** | | | | | | |
| Principal Arterial | | | | | | |
| Interstate | 15 | 2,868 | 46 | 4,648 | **61** | **7,516** |
| Freeway/Expressway | 2 | 667 | 4 | 1,261 | **6** | **1,928** |
| Other | 14 | 3,876 | 61 | 11,583 | **75** | **15,459** |
| Minor Arterial | 1 | 3,262 | 24 | 7,289 | **25** | **10,551** |
| Collector | 12 | 4,671 | 23 | 6,331 | **35** | **11,002** |
| Local Road or Street | 2 | 5,129 | 12 | 4,164 | **14** | **9,293** |
| Unknown Rural | 0 | 204 | 2 | 216 | **2** | **420** |
| Unknown Urban | 0 | 53 | 0 | 48 | **0** | **101** |
| Unknown Rural or Urban | 1 | 129 | 1 | 269 | **2** | **398** |
| **Total** | **47** | **20,859** | **173** | **35,809** | **220** | **56,668** |

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

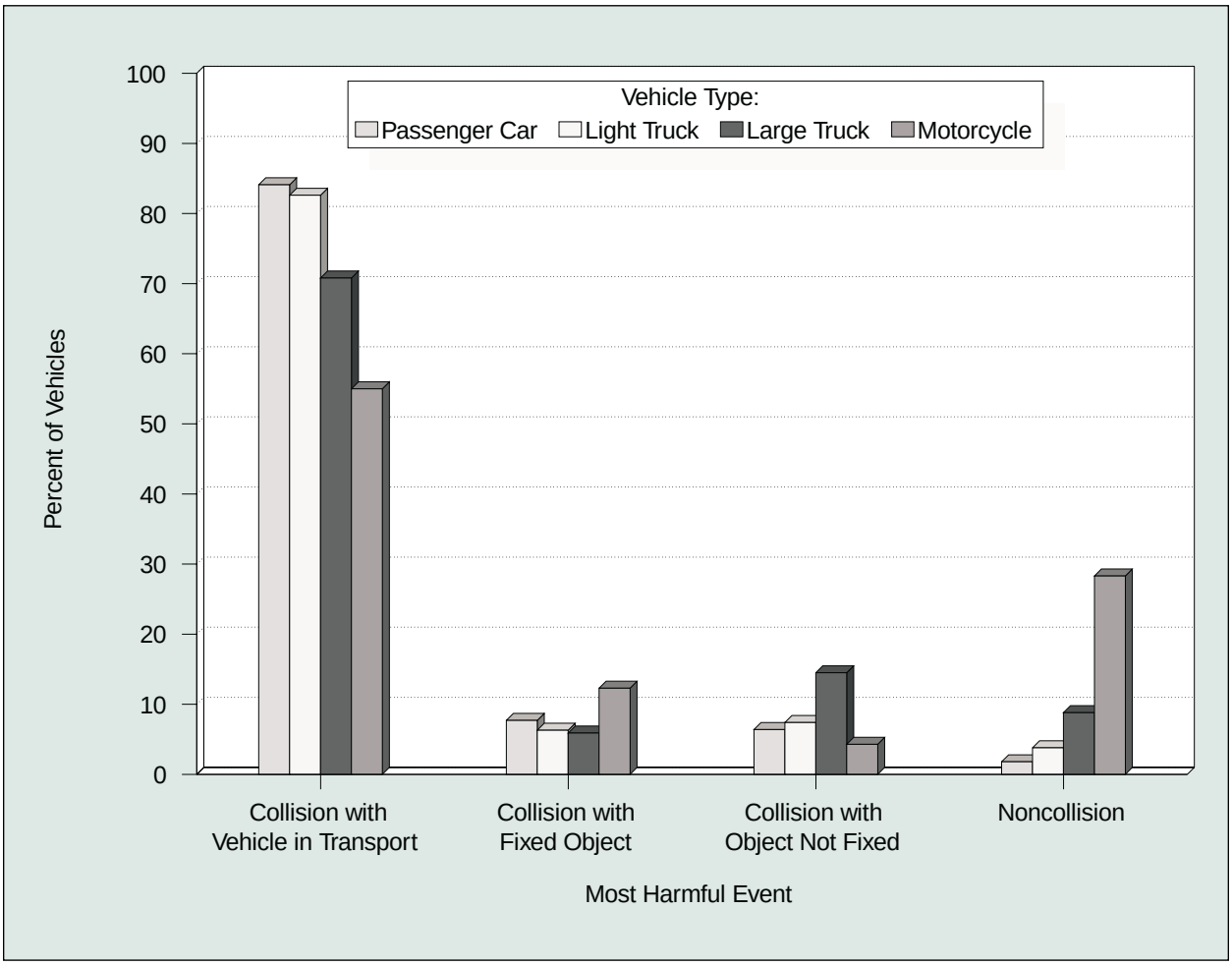
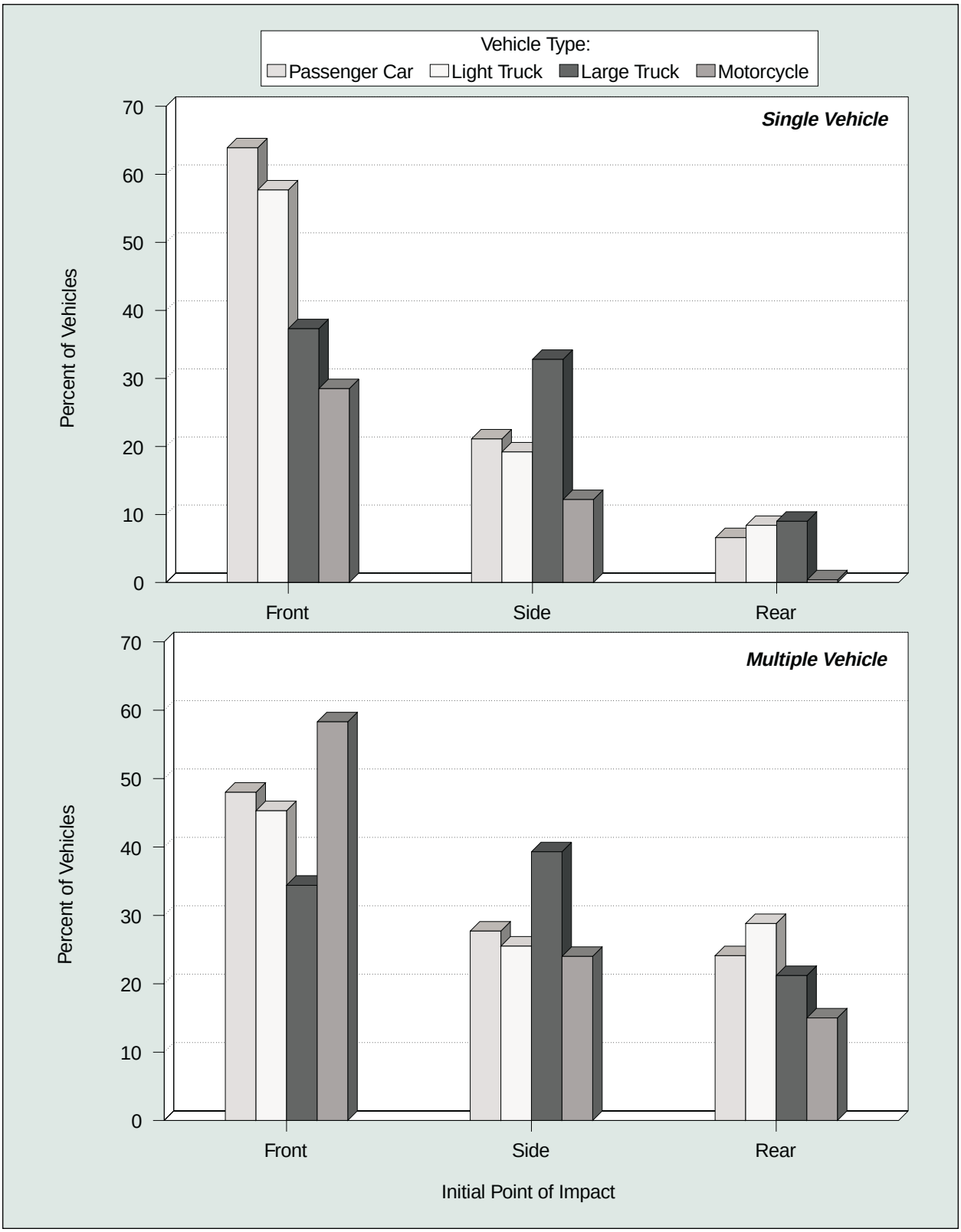


**Figure 17**
**Percent of Vehicles in Crashes by Initial Point of Impact, Crash Type, and Vehicle Type**




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

**Table 41**
**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 | 9,878 | 35.3 | 1,039,000 | 42.6 | 1,757,000 | 39.3 | **2,805,000** | **40.5** |
| Left Side | 2,857 | 10.2 | 261,000 | 10.7 | 597,000 | 13.3 | **860,000** | **12.4** |
| Right Side | 2,305 | 8.2 | 218,000 | 8.9 | 530,000 | 11.9 | **750,000** | **10.8** |
| Rear | 1,258 | 4.5 | 528,000 | 21.7 | 882,000 | 19.7 | **1,412,000** | **20.4** |
| Other/Unknown | 227 | 0.8 | 1,000 | * | 2,000 | * | **2,000** | ***** |
| *Subtotal* | *16,525* | *59.1* | *2,046,000* | *84.0* | *3,767,000* | *84.3* | ***5,830,000*** | ***84.1*** |
| **Collision with Fixed Object** | *4,689* | *16.8* | *193,000* | *7.9* | *338,000* | *7.6* | ***536,000*** | ***7.7*** |
| **Collision with Object Not Fixed:** | | | | | | | | |
| Nonmotorist | 2,905 | 10.4 | 87,000 | 3.6 | 3,000 | 0.1 | **93,000** | **1.3** |
| Other | 407 | 1.5 | 37,000 | 1.5 | 316,000 | 7.1 | **354,000** | **5.1** |
| *Subtotal* | *3,312* | *11.8* | *124,000* | *5.1* | *319,000* | *7.1* | ***447,000*** | ***6.4*** |
| **Noncollision** | *3,414* | *12.2* | *74,000* | *3.0* | *44,000* | *1.0* | ***122,000*** | ***1.8*** |
| **Total** | ****27,953** | **100.0** | **2,438,000** | **100.0** | **4,469,000** | **100.0** | **6,935,000** | **100.0** |

*Less than 0.05 percent.
**Includes 13 passenger cars involved in fatal crashes with unknown most harmful event.

## Table 42
## Passenger Cars 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 | 6,542 | 63.0 | 245,000 | 66.9 | 417,000 | 62.2 | **668,000** | **63.9** |
| Left Side | 937 | 9.0 | 30,000 | 8.2 | 56,000 | 8.4 | **87,000** | **8.3** |
| Right Side | 845 | 8.1 | 41,000 | 11.2 | 92,000 | 13.8 | **134,000** | **12.8** |
| Rear | 272 | 2.6 | 13,000 | 3.5 | 56,000 | 8.4 | **69,000** | **6.6** |
| Noncollision | 1,030 | 9.9 | 30,000 | 8.2 | 23,000 | 3.4 | **54,000** | **5.2** |
| Other/Unknown | 761 | 7.3 | 7,000 | 2.0 | 25,000 | 3.8 | **34,000** | **3.2** |
| **Total** | **10,387** | **100.0** | **366,000** | **100.0** | **670,000** | **100.0** | **1,047,000** | **100.0** |
| **Multiple-Vehicle Crashes** | | | | | | | | |
| Front | 10,453 | 59.5 | 1,048,000 | 50.6 | 1,769,000 | 46.6 | **2,828,000** | **48.0** |
| Left Side | 2,966 | 16.9 | 267,000 | 12.9 | 602,000 | 15.8 | **871,000** | **14.8** |
| Right Side | 2,408 | 13.7 | 223,000 | 10.8 | 534,000 | 14.1 | **760,000** | **12.9** |
| Rear | 1,383 | 7.9 | 531,000 | 25.6 | 884,000 | 23.3 | **1,416,000** | **24.1** |
| Noncollision | 21 | 0.1 | 1,000 | 0.1 | 4,000 | 0.1 | **6,000** | **0.1** |
| Other/Unknown | 335 | 1.9 | 1,000 | * | 6,000 | 0.2 | **7,000** | **0.1** |
| **Total** | **17,566** | **100.0** | **2,071,000** | **100.0** | **3,799,000** | **100.0** | **5,888,000** | **100.0** |
| **All Crashes** | | | | | | | | |
| Front | 16,995 | 60.8 | 1,293,000 | 53.1 | 2,186,000 | 48.9 | **3,496,000** | **50.4** |
| Left Side | 3,903 | 14.0 | 296,000 | 12.2 | 658,000 | 14.7 | **958,000** | **13.8** |
| Right Side | 3,253 | 11.6 | 264,000 | 10.8 | 626,000 | 14.0 | **894,000** | **12.9** |
| Rear | 1,655 | 5.9 | 544,000 | 22.3 | 940,000 | 21.0 | **1,486,000** | **21.4** |
| Noncollision | 1,051 | 3.8 | 31,000 | 1.3 | 27,000 | 0.6 | **60,000** | **0.9** |
| Other/Unknown | 1,096 | 3.9 | 8,000 | 0.3 | 31,000 | 0.7 | **41,000** | **0.6** |
| **Total** | **27,953** | **100.0** | **2,438,000** | **100.0** | **4,469,000** | **100.0** | **6,935,000** | **100.0** |

*Less than 0.05 percent.

**Table 43**
**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 | 8,437 | 42.4 | 500,000 | 42.9 | 874,000 | 35.1 | **1,382,000** | **37.6** |
| Left Side | 968 | 4.9 | 111,000 | 9.5 | 271,000 | 10.9 | **383,000** | **10.4** |
| Right Side | 772 | 3.9 | 91,000 | 7.8 | 291,000 | 11.7 | **384,000** | **10.4** |
| Rear | 847 | 4.3 | 258,000 | 22.1 | 628,000 | 25.2 | **886,000** | **24.1** |
| Other/Unknown | 141 | 0.7 | * | * | 1,000 | * | **1,000** | ***** |
| *Subtotal* | *11,165* | *56.1* | *960,000* | *82.3* | *2,065,000* | *82.9* | ***3,036,000*** | ***82.6*** |
| **Collision with Fixed Object** | *2,185* | *11.0* | *82,000* | *7.1* | *146,000* | *5.9* | ***231,000*** | ***6.3*** |
| **Collision with Object Not Fixed:** | | | | | | | | |
| Nonmotorist | 2,051 | 10.3 | 37,000 | 3.1 | 2,000 | 0.1 | **41,000** | **1.1** |
| Other | 256 | 1.3 | 14,000 | 1.2 | 216,000 | 8.7 | **231,000** | **6.3** |
| *Subtotal* | *2,307* | *11.6* | *51,000* | *4.4* | *219,000* | *8.8* | ***272,000*** | ***7.4*** |
| **Noncollision** | *4,233* | *21.3* | *73,000* | *6.2* | *61,000* | *2.4* | ***138,000*** | ***3.8*** |
| **Total** | ****19,895** | **100.0** | **1,165,000** | **100.0** | **2,491,000** | **100.0** | **3,677,000** | **100.0** |

*Less than 500 or less than 0.05 percent.
**Includes 5 light trucks involved in fatal crashes with unknown most harmful event.

## Table 44
## 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 | 4,353 | 55.5 | 111,000 | 60.6 | 224,000 | 56.4 | **340,000** | **57.7** |
| Left Side | 397 | 5.1 | 11,000 | 6.0 | 29,000 | 7.3 | **40,000** | **6.8** |
| Right Side | 446 | 5.7 | 20,000 | 10.7 | 53,000 | 13.3 | **73,000** | **12.4** |
| Rear | 129 | 1.6 | 4,000 | 2.3 | 45,000 | 11.3 | **50,000** | **8.4** |
| Noncollision | 1,933 | 24.6 | 33,000 | 17.9 | 35,000 | 8.8 | **70,000** | **11.8** |
| Other/Unknown | 589 | 7.5 | 4,000 | 2.4 | 12,000 | 2.9 | **17,000** | **2.8** |
| **Total** | **7,847** | **100.0** | **183,000** | **100.0** | **398,000** | **100.0** | **589,000** | **100.0** |
| **Multiple-Vehicle Crashes** | | | | | | | | |
| Front | 8,882 | 73.7 | 506,000 | 51.5 | 883,000 | 42.2 | **1,398,000** | **45.3** |
| Left Side | 1,065 | 8.8 | 116,000 | 11.8 | 274,000 | 13.1 | **391,000** | **12.7** |
| Right Side | 873 | 7.2 | 97,000 | 9.9 | 296,000 | 14.1 | **394,000** | **12.8** |
| Rear | 997 | 8.3 | 261,000 | 26.5 | 629,000 | 30.0 | **890,000** | **28.8** |
| Noncollision | 15 | 0.1 | 2,000 | 0.2 | 8,000 | 0.4 | **10,000** | **0.3** |
| Other/Unknown | 216 | 1.8 | * | * | 4,000 | 0.2 | **4,000** | **0.1** |
| **Total** | **12,048** | **100.0** | **982,000** | **100.0** | **2,094,000** | **100.0** | **3,088,000** | **100.0** |
| **All Crashes** | | | | | | | | |
| Front | 13,235 | 66.5 | 617,000 | 53.0 | 1,107,000 | 44.4 | **1,738,000** | **47.3** |
| Left Side | 1,462 | 7.3 | 127,000 | 10.9 | 303,000 | 12.2 | **432,000** | **11.7** |
| Right Side | 1,319 | 6.6 | 117,000 | 10.0 | 349,000 | 14.0 | **467,000** | **12.7** |
| Rear | 1,126 | 5.7 | 265,000 | 22.7 | 674,000 | 27.0 | **940,000** | **25.6** |
| Noncollision | 1,948 | 9.8 | 35,000 | 3.0 | 43,000 | 1.7 | **80,000** | **2.2** |
| Other/Unknown | 805 | 4.0 | 5,000 | 0.4 | 15,000 | 0.6 | **21,000** | **0.6** |
| **Total** | **19,895** | **100.0** | **1,165,000** | **100.0** | **2,491,000** | **100.0** | **3,677,000** | **100.0** |

*Less than 500 or less than 0.05 percent.

**Table 45**
**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 | 2,553 | 52.1 | 37,000 | 36.9 | 79,000 | 21.5 | **119,000** | **25.1** |
| Left Side | 404 | 8.2 | 13,000 | 13.1 | 51,000 | 13.8 | **64,000** | **13.6** |
| Right Side | 202 | 4.1 | 12,000 | 12.2 | 63,000 | 17.0 | **75,000** | **15.8** |
| Rear | 677 | 13.8 | 16,000 | 16.3 | 58,000 | 15.8 | **75,000** | **15.9** |
| Other/Unknown | 68 | 1.4 | 1,000 | 0.7 | 1,000 | 0.3 | **2,000** | **0.4** |
| *Subtotal* | *3,904* | *79.7* | *80,000* | *79.1* | *253,000* | *68.4* | ***336,000*** | ***70.8*** |
| **Collision with Fixed Object** | *160* | *3.3* | *3,000* | *3.3* | *25,000* | *6.6* | ***28,000*** | ***5.9*** |
| **Collision with Object Not Fixed:** | | | | | | | | |
| Nonmotorist | 381 | 7.8 | 4,000 | 3.8 | * | 0.1 | **4,000** | **0.9** |
| Other | 43 | 0.9 | 1,000 | 0.6 | 64,000 | 17.3 | **64,000** | **13.6** |
| *Subtotal* | *424* | *8.7* | *4,000* | *4.4* | *64,000* | *17.3* | ***69,000*** | ***14.5*** |
| **Noncollision** | *408* | *8.3* | *13,000* | *13.2* | *28,000* | *7.6* | ***42,000*** | ***8.8*** |
| **Total** | ****4,898** | **100.0** | **101,000** | **100.0** | **369,000** | **100.0** | **475,000** | **100.0** |

*Less than 500.
**Includes 2 large trucks involved in fatal crashes with unknown most harmful event.

## Table 46
## Large 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 | 436 | 54.0 | 6,000 | 36.6 | 37,000 | 37.3 | **43,000** | **37.3** |
| Left Side | 33 | 4.1 | * | 2.5 | 5,000 | 5.6 | **6,000** | **5.1** |
| Right Side | 66 | 8.2 | 2,000 | 10.2 | 30,000 | 30.8 | **32,000** | **27.7** |
| Rear | 45 | 5.6 | * | 1.4 | 10,000 | 10.3 | **10,000** | **9.0** |
| Noncollision | 132 | 16.3 | 7,000 | 43.9 | 11,000 | 11.1 | **18,000** | **15.8** |
| Other/Unknown | 96 | 11.9 | 1,000 | 5.4 | 5,000 | 4.9 | **6,000** | **5.0** |
| **Total** | **808** | **100.0** | **17,000** | **100.0** | **98,000** | **100.0** | **115,000** | **100.0** |
| **Multiple-Vehicle Crashes** | | | | | | | | |
| Front | 2,671 | 65.3 | 39,000 | 46.4 | 82,000 | 30.2 | **124,000** | **34.4** |
| Left Side | 420 | 10.3 | 13,000 | 16.0 | 51,000 | 18.9 | **65,000** | **18.1** |
| Right Side | 216 | 5.3 | 13,000 | 15.2 | 63,000 | 23.3 | **76,000** | **21.2** |
| Rear | 697 | 17.0 | 17,000 | 20.2 | 58,000 | 21.5 | **76,000** | **21.2** |
| Noncollision | 5 | 0.1 | 1,000 | 1.3 | 15,000 | 5.7 | **17,000** | **4.6** |
| Other/Unknown | 81 | 2.0 | 1,000 | 0.8 | 1,000 | 0.3 | **2,000** | **0.5** |
| **Total** | **4,090** | **100.0** | **84,000** | **100.0** | **271,000** | **100.0** | **359,000** | **100.0** |
| **All Crashes** | | | | | | | | |
| Front | 3,107 | 63.4 | 45,000 | 44.8 | 119,000 | 32.1 | **167,000** | **35.1** |
| Left Side | 453 | 9.2 | 14,000 | 13.8 | 57,000 | 15.4 | **71,000** | **15.0** |
| Right Side | 282 | 5.8 | 14,000 | 14.4 | 93,000 | 25.3 | **108,000** | **22.8** |
| Rear | 742 | 15.1 | 17,000 | 17.1 | 69,000 | 18.6 | **87,000** | **18.2** |
| Noncollision | 137 | 2.8 | 8,000 | 8.3 | 26,000 | 7.1 | **35,000** | **7.3** |
| Other/Unknown | 177 | 3.6 | 2,000 | 1.6 | 6,000 | 1.5 | **7,000** | **1.6** |
| **Total** | **4,898** | **100.0** | **101,000** | **100.0** | **369,000** | **100.0** | **475,000** | **100.0** |

*Less than 500.

**Table 47**
**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 | 174 | 14.5 | 1,024 | 85.5 | **1,198** | **100.0** |
| Combination Truck | 471 | 12.7 | 3,229 | 87.3 | **3,700** | **100.0** |
| **Total** | **645** | **13.2** | **4,253** | **86.8** | **4,898** | **100.0** |
| **Injury Crashes** | | | | | | |
| Single-Unit Truck | 4,000 | 9.7 | 39,000 | 90.3 | **44,000** | **100.0** |
| Combination Truck | 8,000 | 14.1 | 49,000 | 85.9 | **57,000** | **100.0** |
| **Total** | **12,000** | **12.2** | **88,000** | **87.8** | **101,000** | **100.0** |
| **Property-Damage-Only Crashes** | | | | | | |
| Single-Unit Truck | 2,000 | 1.0 | 183,000 | 99.0 | **185,000** | **100.0** |
| Combination Truck | 5,000 | 2.9 | 179,000 | 97.1 | **184,000** | **100.0** |
| **Total** | **7,000** | **1.9** | **362,000** | **98.1** | **369,000** | **100.0** |
| **All Crashes** | | | | | | |
| Single-Unit Truck | 6,000 | 2.7 | 224,000 | 97.3 | **230,000** | **100.0** |
| Combination Truck | 14,000 | 5.6 | 231,000 | 94.4 | **244,000** | **100.0** |
| **Total** | **20,000** | **4.2** | **455,000** | **95.8** | **475,000** | **100.0** |

**Table 48**
**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 | 264 | 8.2 | 2,965 | 91.8 | **3,229** | **100.0** |
| Two or More | 18 | 13.4 | 116 | 86.6 | **134** | **100.0** |
| Unknown Number | 0 | 0.0 | 10 | 100.0 | **10** | **100.0** |
| **Total** | **282** | **8.4** | **3,091** | **91.6** | **3,373** | **100.0** |
| **Injury Crashes** | | | | | | |
| One | 2,000 | 4.3 | 44,000 | 95.7 | **46,000** | **100.0** |
| Two or More | * | 8.3 | 1,000 | 91.7 | **1,000** | **100.0** |
| Unknown Number | * | * | * | 100.0 | ***** | **100.0** |
| **Total** | **2,000** | **4.4** | **46,000** | **95.6** | **48,000** | **100.0** |
| **Property-Damage-Only Crashes** | | | | | | |
| One | 3,000 | 2.4 | 134,000 | 97.6 | **138,000** | **100.0** |
| Two or More | * | 11.1 | 3,000 | 88.9 | **4,000** | **100.0** |
| Unknown Number | * | * | 2,000 | 100.0 | **2,000** | **100.0** |
| **Total** | **4,000** | **2.6** | **140,000** | **97.4** | **144,000** | **100.0** |
| **All Crashes** | | | | | | |
| One | 6,000 | 3.0 | 181,000 | 97.0 | **187,000** | **100.0** |
| Two or More | 1,000 | 10.4 | 5,000 | 89.6 | **5,000** | **100.0** |
| Unknown Number | * | * | 3,000 | 100.0 | **3,000** | **100.0** |
| **Total** | **6,000** | **3.2** | **189,000** | **96.8** | **195,000** | **100.0** |

*Less than 500 or less than 0.05 percent.

**Table 49**
**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 | 965 | 38.3 | 15,000 | 32.6 | 4,000 | 34.6 | **20,000** | **33.2** |
| Left Side | 112 | 4.4 | 4,000 | 7.7 | 1,000 | 6.9 | **4,000** | **7.4** |
| Right Side | 102 | 4.0 | 2,000 | 4.1 | 1,000 | 12.4 | **3,000** | **5.6** |
| Rear | 64 | 2.5 | 3,000 | 6.1 | 2,000 | 21.2 | **5,000** | **8.6** |
| Other/Unknown | 76 | 3.0 | * | 0.2 | * | * | ***** | **0.3** |
| *Subtotal* | *1,319* | *52.4* | *23,000* | *50.7* | *8,000* | *75.1* | ***32,000*** | ***55.0*** |
| **Collision with Fixed Object** | *673* | *26.7* | *6,000* | *13.5* | * | *3.4* | ***7,000*** | ***12.3*** |
| **Collision with Object Not Fixed:** | | | | | | | | |
| Nonmotorist | 28 | 1.1 | 1,000 | 1.1 | * | * | **1,000** | **0.9** |
| Other | 95 | 3.8 | 2,000 | 3.5 | * | 2.9 | **2,000** | **3.4** |
| *Subtotal* | *123* | *4.9* | *2,000* | *4.6* | * | *2.9* | ***3,000*** | ***4.3*** |
| **Noncollision** | *401* | *15.9* | *14,000* | *31.2* | *2,000* | *18.6* | ***17,000*** | ***28.3*** |
| **Total** | ****2,519** | **100.0** | **46,000** | **100.0** | **10,000** | **100.0** | **59,000** | **100.0** |

*Less than 500 or less than 0.05 percent.
**Includes 3 motorcycles involved in fatal crashes with unknown most harmful event.

## Table 50
## 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 | 612 | 54.1 | 6,000 | 30.0 | * | 4.3 | **7,000** | **28.5** |
| Left Side | 60 | 5.3 | 1,000 | 6.6 | 1,000 | 21.1 | **2,000** | **8.0** |
| Right Side | 89 | 7.9 | 1,000 | 4.5 | * | * | **1,000** | **4.2** |
| Rear | 7 | 0.6 | * | 0.5 | * | * | ***** | **0.4** |
| Noncollision | 236 | 20.8 | 12,000 | 57.7 | 2,000 | 74.6 | **14,000** | **57.7** |
| Other/Unknown | 128 | 11.3 | * | 0.7 | * | * | ***** | **1.1** |
| **Total** | **1,132** | **100.0** | **21,000** | **100.0** | **3,000** | **100.0** | **25,000** | **100.0** |
| **Multiple-Vehicle Crashes** | | | | | | | | |
| Front | 994 | 71.7 | 15,000 | 61.3 | 4,000 | 46.1 | **20,000** | **58.3** |
| Left Side | 122 | 8.8 | 4,000 | 15.2 | 1,000 | 9.2 | **5,000** | **13.5** |
| Right Side | 109 | 7.9 | 2,000 | 8.8 | 1,000 | 16.5 | **4,000** | **10.5** |
| Rear | 64 | 4.6 | 3,000 | 11.5 | 2,000 | 28.2 | **5,000** | **15.0** |
| Noncollision | 11 | 0.8 | 1,000 | 3.1 | * | * | **1,000** | **2.3** |
| Other/Unknown | 87 | 6.3 | * | 0.1 | * | * | ***** | **0.4** |
| **Total** | **1,387** | **100.0** | **25,000** | **100.0** | **8,000** | **100.0** | **34,000** | **100.0** |
| **All Crashes** | | | | | | | | |
| Front | 1,606 | 63.8 | 22,000 | 46.9 | 4,000 | 35.7 | **27,000** | **45.7** |
| Left Side | 182 | 7.2 | 5,000 | 11.2 | 1,000 | 12.1 | **7,000** | **11.2** |
| Right Side | 198 | 7.9 | 3,000 | 6.8 | 1,000 | 12.4 | **5,000** | **7.8** |
| Rear | 71 | 2.8 | 3,000 | 6.4 | 2,000 | 21.2 | **5,000** | **8.8** |
| Noncollision | 247 | 9.8 | 13,000 | 28.3 | 2,000 | 18.6 | **15,000** | **25.8** |
| Other/Unknown | 215 | 8.5 | * | 0.4 | * | * | ***** | **0.7** |
| **Total** | **2,519** | **100.0** | **46,000** | **100.0** | **10,000** | **100.0** | **59,000** | **100.0** |

*Less than 500 or less than 0.05 percent.

**Table 51**
**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 | 143 | 45.0 | 5,000 | 32.0 | 9,000 | 18.4 | **14,000** | **21.7** |
| Left Side | 11 | 3.5 | 3,000 | 17.4 | 15,000 | 30.4 | **17,000** | **27.3** |
| Right Side | 8 | 2.5 | 2,000 | 15.0 | 7,000 | 15.5 | **10,000** | **15.3** |
| Rear | 51 | 16.0 | 3,000 | 21.4 | 10,000 | 21.4 | **13,000** | **21.4** |
| Other/Unknown | 3 | 0.9 | * | 0.1 | * | * | ***** | ***** |
| *Subtotal* | *216* | *67.9* | *12,000* | *85.9* | *41,000* | *85.8* | ***54,000*** | ***85.7*** |
| **Collision with Fixed Object** | *9* | *2.8* | * | *1.9* | *2,000* | *3.1* | ***2,000*** | ***2.8*** |
| **Collision with Object Not Fixed:** | | | | | | | | |
| Nonmotorist | 82 | 25.8 | 2,000 | 11.4 | * | * | **2,000** | **2.7** |
| Other | 0 | 0.0 | * | * | 5,000 | 11.1 | **5,000** | **8.5** |
| *Subtotal* | *82* | *25.8* | *2,000* | *11.4* | *5,000* | *11.1* | ***7,000*** | ***11.3*** |
| **Noncollision** | *11* | *3.5* | * | *0.7* | * | * | ***** | ***0.2*** |
| **Total** | **318** | **100.0** | **14,000** | **100.0** | **48,000** | **100.0** | **63,000** | **100.0** |

*Less than 500 or less than 0.05 percent.

**Table 52**
**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 | 59 | 65.6 | 1,000 | 34.1 | 1,000 | 11.5 | **1,000** | **17.2** |
| Left Side | 2 | 2.2 | * | 5.4 | 1,000 | 22.1 | **2,000** | **18.1** |
| Right Side | 9 | 10.0 | 1,000 | 53.7 | 4,000 | 55.9 | **5,000** | **54.9** |
| Rear | 8 | 8.9 | * | * | 1,000 | 10.5 | **1,000** | **8.1** |
| Noncollision | 2 | 2.2 | * | 2.7 | * | * | ***** | **0.6** |
| Other/Unknown | 10 | 11.1 | * | 4.1 | * | * | ***** | **1.0** |
| **Total** | **90** | **100.0** | **2,000** | **100.0** | **7,000** | **100.0** | **9,000** | **100.0** |
| **Multiple-Vehicle Crashes** | | | | | | | | |
| Front | 149 | 65.4 | 5,000 | 37.6 | 9,000 | 22.0 | **14,000** | **25.7** |
| Left Side | 13 | 5.7 | 3,000 | 20.2 | 15,000 | 35.2 | **17,000** | **31.6** |
| Right Side | 9 | 3.9 | 2,000 | 17.4 | 7,000 | 18.0 | **10,000** | **17.8** |
| Rear | 53 | 23.2 | 3,000 | 24.8 | 10,000 | 24.8 | **13,000** | **24.8** |
| Noncollision | 0 | 0.0 | * | * | * | * | ***** | ***** |
| Other/Unknown | 4 | 1.8 | * | 0.1 | * | * | ***** | ***** |
| **Total** | **228** | **100.0** | **12,000** | **100.0** | **42,000** | **100.0** | **54,000** | **100.0** |
| **All Crashes** | | | | | | | | |
| Front | 208 | 65.4 | 5,000 | 37.1 | 10,000 | 20.6 | **15,000** | **24.6** |
| Left Side | 15 | 4.7 | 3,000 | 18.1 | 16,000 | 33.4 | **19,000** | **29.8** |
| Right Side | 18 | 5.7 | 3,000 | 22.3 | 11,000 | 23.2 | **14,000** | **22.9** |
| Rear | 61 | 19.2 | 3,000 | 21.4 | 11,000 | 22.9 | **14,000** | **22.5** |
| Noncollision | 2 | 0.6 | * | 0.4 | * | * | ***** | **0.1** |
| Other/Unknown | 14 | 4.4 | * | 0.7 | * | * | ***** | **0.2** |
| **Total** | **318** | **100.0** | **14,000** | **100.0** | **48,000** | **100.0** | **63,000** | **100.0** |

*Less than 500 or less than 0.05 percent.

# Chapter 4 ♦ People

# 4. PEOPLE

This chapter presents statistics about the Drivers , Passengers , Pedestrians , and Pedalcyclists involved in motor vehicle crashes in 1999. 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 41,611 people lost their lives in motor vehicle crashes in 1999. Another 3.3 million people were injured.

- The majority of persons killed or injured in traffic crashes were drivers (64 percent), followed by passengers (32 percent), pedestrians (3 percent), and pedalcyclists (2 percent).

- Persons 16 to 20 years old had the highest fatality and injury rates per 100,000 population. Children under 5 years old had the lowest fatality and injury rates.

- 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 lower for females than for males for people over 74 years old.

- Thirty-eight percent of the persons who were killed in traffic crashes in 1999 died in alcohol-related crashes. Ten percent of the injured persons received their injuries in alcohol-related crashes.

## Table 53
## 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 | 25,210 | 259,000 | 537,000 | 1,266,000 | 2,061,000 | **2,086,000** |
| Passenger | 10,499 | 116,000 | 267,000 | 641,000 | 1,024,000 | **1,034,000** |
| Unknown Occupant | 97 | * | 2,000 | 10,000 | 12,000 | **12,000** |
| *Subtotal* | *35,806* | *375,000* | *805,000* | *1,917,000* | *3,097,000* | ***3,132,000*** |
| **Nonmotorists** | | | | | | |
| Pedestrian | 4,906 | 20,000 | 29,000 | 36,000 | 85,000 | **90,000** |
| Pedalcyclist | 750 | 8,000 | 26,000 | 17,000 | 51,000 | **52,000** |
| Other/Unknown | 149 | * | 1,000 | 2,000 | 3,000 | **3,000** |
| *Subtotal* | *5,805* | *28,000* | *56,000* | *55,000* | *140,000* | ***145,000*** |
| **Total** | **41,611** | **403,000** | **861,000** | **1,972,000** | **3,236,000** | **3,278,000** |

*Less than 500.

## Table 54
## 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 | 733 | 8,000 | 21,000 | 48,000 | 76,000 | **77,000** |
| 5-9 | 795 | 12,000 | 36,000 | 65,000 | 112,000 | **113,000** |
| 10-15 | 1,403 | 25,000 | 57,000 | 104,000 | 185,000 | **186,000** |
| 16-20 | 5,917 | 73,000 | 178,000 | 324,000 | 574,000 | **580,000** |
| 21-24 | 3,884 | 40,000 | 89,000 | 186,000 | 315,000 | **318,000** |
| 25-34 | 6,821 | 75,000 | 162,000 | 390,000 | 627,000 | **634,000** |
| 35-44 | 6,719 | 65,000 | 122,000 | 338,000 | 526,000 | **532,000** |
| 45-54 | 4,908 | 47,000 | 83,000 | 251,000 | 382,000 | **387,000** |
| 55-64 | 3,235 | 26,000 | 43,000 | 124,000 | 193,000 | **197,000** |
| 65-74 | 3,063 | 18,000 | 38,000 | 87,000 | 143,000 | **146,000** |
| >74 | 4,025 | 15,000 | 33,000 | 55,000 | 103,000 | **107,000** |
| **Total** | ***41,611** | **403,000** | **861,000** | **1,972,000** | **3,236,000** | **3,278,000** |

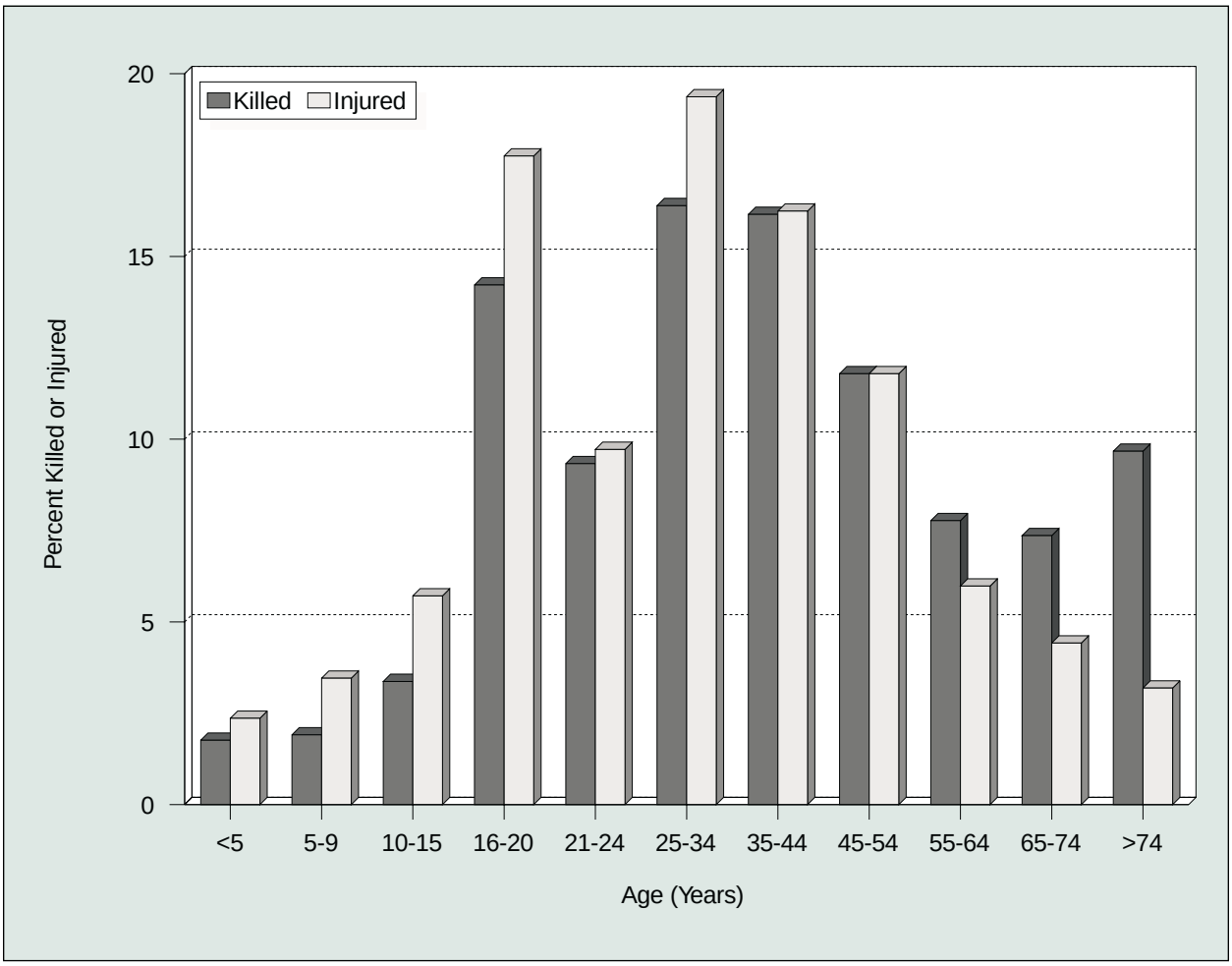
*Includes 108 fatalities of unknown age.

## Table 55
## 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 | 27,973 | 209,000 | 471,000 | 872,000 | 1,552,000 | **1,580,000** |
| Female | 13,627 | 194,000 | 390,000 | 1,099,000 | 1,684,000 | **1,697,000** |
| **Total** | ***41,611** | **403,000** | **861,000** | **1,972,000** | **3,236,000** | **3,278,000** |

*Includes 11 fatalities of unknown sex.

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



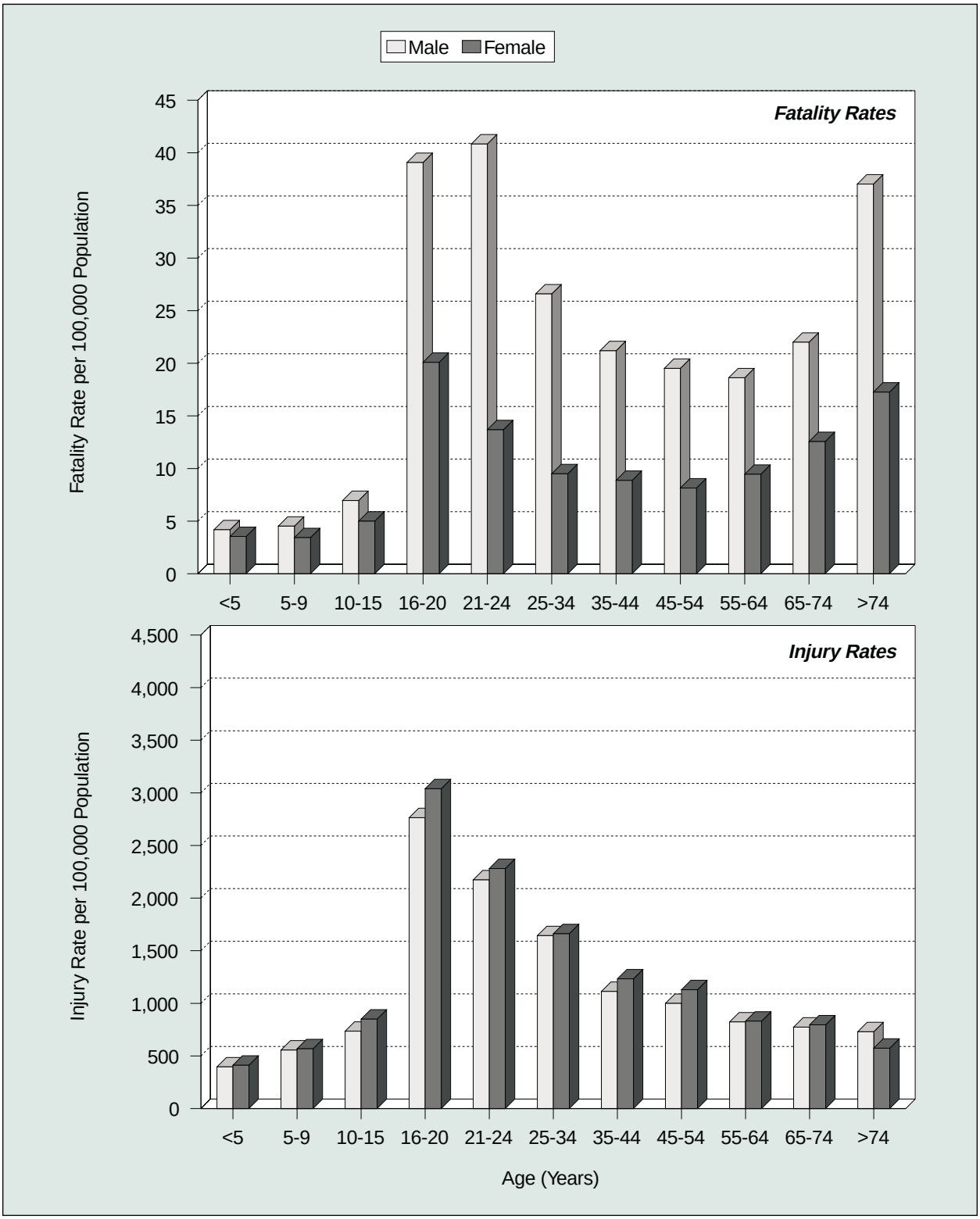
## Table 56
## Persons Killed or Injured and Fatality and Injury Rates per 100,000 Population by Age and Sex

| Age (Years) | Male | | | Female | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|
| | Killed | Population (Thousands) | Rate | Killed | Population (Thousands) | Rate | Killed | Population (Thousands) | Rate |
| <5 | 405 | 9,683 | 4.18 | 328 | 9,259 | 3.54 | **733** | **18,942** | **3.87** |
| 5-9 | 461 | 10,208 | 4.52 | 334 | 9,739 | 3.43 | **795** | **19,947** | **3.99** |
| 10-15 | 833 | 11,974 | 6.96 | 570 | 11,395 | 5.00 | **1,403** | **23,369** | **6.00** |
| 16-20 | 3,981 | 10,187 | 39.08 | 1,936 | 9,638 | 20.09 | **5,917** | **19,826** | **29.85** |
| 21-24 | 2,934 | 7,185 | 40.84 | 950 | 6,943 | 13.68 | **3,884** | **14,128** | **27.49** |
| 25-34 | 5,006 | 18,826 | 26.59 | 1,815 | 19,110 | 9.50 | **6,821** | **37,936** | **17.98** |
| 35-44 | 4,716 | 22,254 | 21.19 | 2,002 | 22,558 | 8.87 | **6,719** | **44,813** | **14.99** |
| 45-54 | 3,415 | 17,499 | 19.52 | 1,491 | 18,303 | 8.15 | **4,908** | **35,802** | **13.71** |
| 55-64 | 2,076 | 11,150 | 18.62 | 1,156 | 12,239 | 9.45 | **3,235** | **23,389** | **13.83** |
| 65-74 | 1,804 | 8,199 | 22.00 | 1,258 | 10,020 | 12.56 | **3,063** | **18,218** | **16.81** |
| >74 | 2,263 | 6,111 | 37.03 | 1,762 | 10,210 | 17.26 | **4,025** | **16,322** | **24.66** |
| Unknown | 79 | * | * | 25 | * | * | **108** | ***** | ***** |
| **Total** | **27,973** | **133,277** | **20.99** | **13,627** | **139,414** | **9.77** | ****41,611** | **272,691** | **15.26** |

| Age (Years) | Male | | | Female | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|
| | Injured | Population (Thousands) | Rate | Injured | Population (Thousands) | Rate | Injured | Population (Thousands) | Rate |
| <5 | 38,000 | 9,683 | 396 | 38,000 | 9,259 | 412 | **76,000** | **18,942** | **404** |
| 5-9 | 57,000 | 10,208 | 556 | 55,000 | 9,739 | 568 | **112,000** | **19,947** | **562** |
| 10-15 | 88,000 | 11,974 | 735 | 97,000 | 11,395 | 850 | **185,000** | **23,369** | **791** |
| 16-20 | 282,000 | 10,187 | 2,764 | 293,000 | 9,638 | 3,039 | **574,000** | **19,826** | **2,898** |
| 21-24 | 156,000 | 7,185 | 2,173 | 158,000 | 6,943 | 2,281 | **315,000** | **14,128** | **2,226** |
| 25-34 | 309,000 | 18,826 | 1,643 | 317,000 | 19,110 | 1,661 | **627,000** | **37,936** | **1,652** |
| 35-44 | 248,000 | 22,254 | 1,113 | 278,000 | 22,558 | 1,233 | **526,000** | **44,813** | **1,173** |
| 45-54 | 175,000 | 17,499 | 999 | 207,000 | 18,303 | 1,130 | **382,000** | **35,802** | **1,066** |
| 55-64 | 92,000 | 11,150 | 823 | 102,000 | 12,239 | 831 | **193,000** | **23,389** | **827** |
| 65-74 | 63,000 | 8,199 | 774 | 80,000 | 10,020 | 795 | **143,000** | **18,218** | **786** |
| >74 | 45,000 | 6,111 | 730 | 59,000 | 10,210 | 574 | **103,000** | **16,322** | **632** |
| **Total** | **1,552,000** | **133,277** | **1,165** | **1,684,000** | **139,414** | **1,208** | **3,236,000** | **272,691** | **1,187** |

*Not applicable.
**Includes 11 fatalities of unknown sex.
Source: Population—Bureau of the Census. Totals may not equal sum of components due to independent rounding.

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



## Table 57
## 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 | |
| **Persons Killed** | | | | | |
| Normal | 19,001 | 5,427 | 10,999 | 1,532 | **37,000** |
| Rain | 1,580 | 478 | 875 | 136 | **3,072** |
| Snow/Sleet | 356 | 67 | 224 | 35 | **682** |
| Other | 205 | 91 | 304 | 53 | **653** |
| Unknown | 62 | 7 | 39 | 3 | **204** |
| **Total** | **21,204** | **6,070** | **12,441** | **1,759** | ***41,611** |
| **Persons Injured** | | | | | |
| Normal | 2,003,000 | 404,000 | 261,000 | 90,000 | **2,757,000** |
| Rain | 238,000 | 73,000 | 33,000 | 19,000 | **364,000** |
| Snow/Sleet | 39,000 | 12,000 | 10,000 | 3,000 | **63,000** |
| Other | 30,000 | 8,000 | 10,000 | 4,000 | **52,000** |
| **Total** | **2,310,000** | **497,000** | **314,000** | **116,000** | **3,236,000** |

*Includes 137 fatalities in crashes that occurred under unknown light conditions.

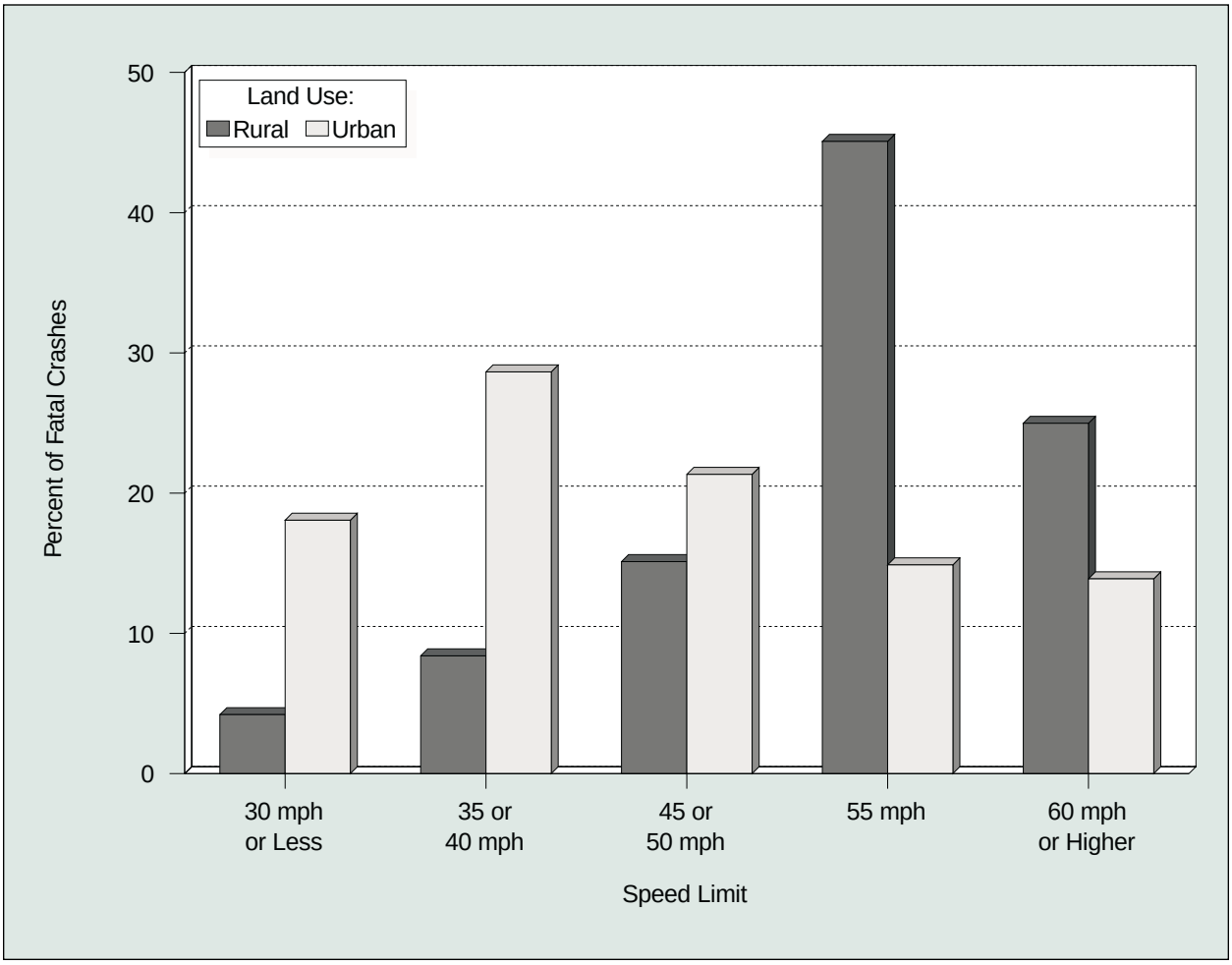
## Table 58
## Persons Killed or Injured in Crashes by Speed Limit and Crash Type

| Speed Limit | Crash Type | | | | Total | |
|---|---|---|---|---|---|---|
| | Single Vehicle | | Multiple Vehicle | | | |
| | Number | Percent | Number | Percent | Number | Percent |
| **Persons Killed** | | | | | | |
| 30 mph or less | 2,845 | 12.7 | 1,140 | 5.9 | **3,985** | **9.6** |
| 35 or 40 mph | 3,925 | 17.5 | 2,835 | 14.8 | **6,760** | **16.2** |
| 45 or 50 mph | 3,566 | 15.9 | 3,728 | 19.4 | **7,294** | **17.5** |
| 55 mph | 6,848 | 30.6 | 7,066 | 36.8 | **13,914** | **33.4** |
| 60 mph or higher | 4,464 | 19.9 | 4,109 | 21.4 | **8,573** | **20.6** |
| No Statutory Limit | 97 | 0.4 | 37 | 0.2 | **134** | **0.3** |
| Unknown | 652 | 2.9 | 299 | 1.6 | **951** | **2.3** |
| **Total** | **22,397** | **100.0** | **19,214** | **100.0** | **41,611** | **100.0** |
| **Persons Injured** | | | | | | |
| 30 mph or less | 187,000 | 24.8 | 464,000 | 18.7 | **651,000** | **20.1** |
| 35 or 40 mph | 178,000 | 23.5 | 989,000 | 39.9 | **1,167,000** | **36.0** |
| 45 or 50 mph | 105,000 | 13.9 | 556,000 | 22.4 | **660,000** | **20.4** |
| 55 mph | 181,000 | 23.9 | 300,000 | 12.1 | **481,000** | **14.9** |
| 60 mph or higher | 96,000 | 12.8 | 168,000 | 6.8 | **265,000** | **8.2** |
| No Statutory Limit | 8,000 | 1.0 | 5,000 | 0.2 | **13,000** | **0.4** |
| **Total** | **755,000** | **100.0** | **2,482,000** | **100.0** | **3,236,000** | **100.0** |

**Table 59**
**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 | 1,071 | 26.9 | 2,872 | 72.1 | 42 | 1.1 | **3,985** | **100.0** |
| 35 or 40 mph | 2,137 | 31.6 | 4,553 | 67.4 | 70 | 1.0 | **6,760** | **100.0** |
| 45 or 50 mph | 3,848 | 52.8 | 3,392 | 46.5 | 54 | 0.7 | **7,294** | **100.0** |
| 55 mph | 11,475 | 82.5 | 2,366 | 17.0 | 73 | 0.5 | **13,914** | **100.0** |
| 60 mph or higher | 6,358 | 74.2 | 2,208 | 25.8 | 7 | 0.1 | **8,573** | **100.0** |
| No Statutory Limit | 109 | 81.3 | 19 | 14.2 | 6 | 4.5 | **134** | **100.0** |
| Unknown | 455 | 47.8 | 484 | 50.9 | 12 | 1.3 | **951** | **100.0** |
| **Total** | **25,453** | **61.2** | **15,894** | **38.2** | **264** | **0.6** | **41,611** | **100.0** |

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



## Table 60
## Persons Killed or Injured in Crashes and Percent Alcohol Related by Time of Day and Crash Type

| Time of Day | Crash Type | | | | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|
| | Single Vehicle | | | Multiple Vehicle | | | | | |
| | Number | Alcohol Related | Percent Alcohol Related | Number | Alcohol Related | Percent Alcohol Related | Number | Alcohol Related | Percent Alcohol Related |
| **Persons Killed*** | | | | | | | | | |
| Midnight to 3 am | 3,784 | 2,880 | 76 | 1,335 | 930 | 70 | **5,119** | **3,810** | **74** |
| 3 am to 6 am | 2,195 | 1,443 | 66 | 943 | 467 | 50 | **3,138** | **1,910** | **61** |
| 6 am to 9 am | 2,026 | 401 | 20 | 2,141 | 226 | 11 | **4,167** | **627** | **15** |
| 9 am to Noon | 1,710 | 233 | 14 | 2,446 | 186 | 8 | **4,156** | **420** | **10** |
| Noon to 3 pm | 2,172 | 421 | 19 | 3,370 | 439 | 13 | **5,542** | **860** | **16** |
| 3 pm to 6 pm | 2,996 | 864 | 29 | 4,055 | 771 | 19 | **7,051** | **1,635** | **23** |
| 6 pm to 9 pm | 3,513 | 1,716 | 49 | 2,861 | 1,098 | 38 | **6,374** | **2,814** | **44** |
| 9 pm to Midnight | 3,676 | 2,383 | 65 | 2,043 | 1,112 | 54 | **5,719** | **3,495** | **61** |
| Unknown | 325 | 209 | 64 | 20 | 7 | 34 | **345** | **216** | **62** |
| **Total** | **22,397** | **10,550** | **47** | **19,214** | **5,237** | **27** | **41,611** | **15,786** | **38** |
| **Persons Injured**** | | | | | | | | | |
| Midnight to 3 am | 82,000 | 39,000 | 48 | 64,000 | 23,000 | 37 | **146,000** | **62,000** | **43** |
| 3 am to 6 am | 49,000 | 18,000 | 36 | 32,000 | 6,000 | 19 | **82,000** | **24,000** | **29** |
| 6 am to 9 am | 78,000 | 6,000 | 7 | 269,000 | 8,000 | 3 | **348,000** | **14,000** | **4** |
| 9 am to Noon | 70,000 | 3,000 | 4 | 344,000 | 8,000 | 2 | **414,000** | **11,000** | **3** |
| Noon to 3 pm | 110,000 | 8,000 | 7 | 519,000 | 14,000 | 3 | **629,000** | **21,000** | **3** |
| 3 pm to 6 pm | 141,000 | 13,000 | 9 | 697,000 | 33,000 | 5 | **838,000** | **46,000** | **5** |
| 6 pm to 9 pm | 123,000 | 22,000 | 18 | 382,000 | 43,000 | 11 | **506,000** | **65,000** | **13** |
| 9 pm to Midnight | 101,000 | 32,000 | 31 | 174,000 | 33,000 | 19 | **275,000** | **65,000** | **24** |
| **Total** | **755,000** | **139,000** | **18** | **2,482,000** | **168,000** | **7** | **3,236,000** | **308,000** | **10** |

*Blood alcohol concentration (BAC) of 0.01 grams per deciliter (g/dl) or greater.
**Police-reported alcohol involvement.

**Figure 21**
**Percent of Persons Killed or Injured in Alcohol-Related Crashes by Time of Day**

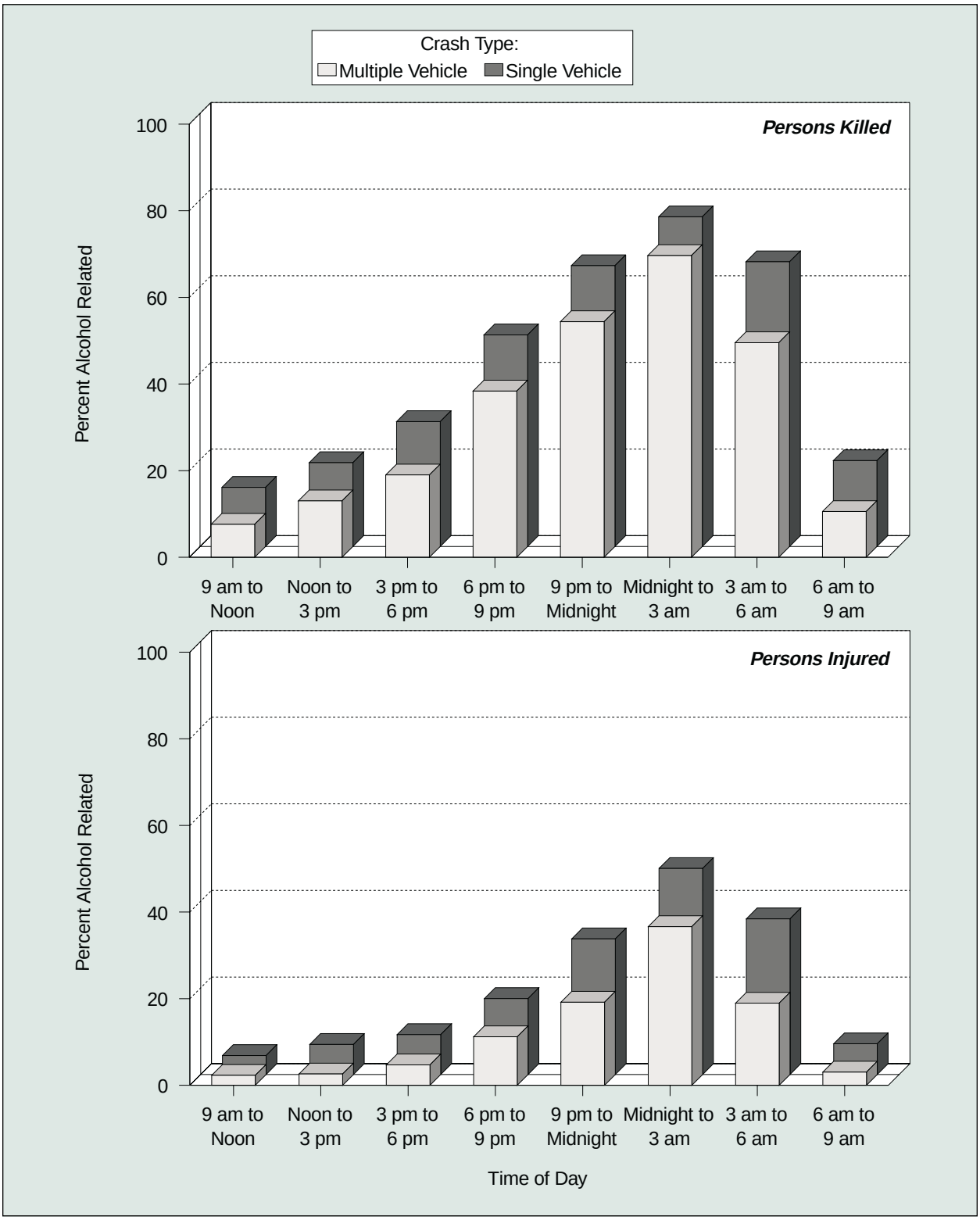


**Table 61**
**Persons Killed in Construction/Maintenance Zones, by Roadway Function Class and Person Type**

| Roadway Function Class | Person Type | | | | | Total |
|---|---|---|---|---|---|---|
| | Driver | Passenger | Pedestrian | Pedalcyclist | Other Nonmotorist | |
| Principal Arterial | | | | | | |
| Interstate | 141 | 85 | 32 | 0 | 2 | **260** |
| Freeway or Expressway | 27 | 17 | 15 | 1 | 0 | **60** |
| Other | 158 | 77 | 31 | 3 | 0 | **269** |
| Minor Arterial | 69 | 30 | 17 | 1 | 2 | **119** |
| Collector | 58 | 21 | 14 | 2 | 0 | **95** |
| Local Road or Street | 36 | 8 | 13 | 0 | 0 | **57** |
| Unknown | 5 | 3 | 0 | 0 | 0 | **8** |
| **Total** | **494** | **241** | **122** | **7** | **4** | **868** |

**Table 62**
**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 | 0 | 0 | **0** | **0** |
| Ambulance Passenger | 0 | 0 | 2 | 1 | **2** | **1** |
| Occupant of Other Vehicle | 0 | 0 | 11 | 6 | **11** | **6** |
| Pedestrian | 2 | 1 | 0 | 0 | **2** | **1** |
| Pedalcyclist | 0 | 0 | 0 | 0 | **0** | **0** |
| **Total** | **2** | **1** | **13** | **7** | **15** | **8** |
| **Fire Truck** | | | | | | |
| Fire Truck Driver | 5 | 3 | 0 | 0 | **5** | **3** |
| Fire Truck Passenger | 2 | 1 | 1 | 1 | **3** | **2** |
| Occupant of Other Vehicle | 0 | 0 | 9 | 8 | **9** | **8** |
| Pedestrian | 0 | 0 | 1 | 1 | **1** | **1** |
| Pedalcyclist | 1 | 1 | 0 | 0 | **1** | **1** |
| **Total** | **8** | **5** | **11** | **10** | **19** | **15** |
| **Police Vehicle** | | | | | | |
| Police Vehicle Driver | 9 | 6 | 8 | 3 | **17** | **9** |
| Police Vehicle Passenger | 4 | 1 | 0 | 0 | **4** | **1** |
| Occupant of Other Vehicle | 0 | 0 | 40 | 14 | **40** | **14** |
| Pedestrian | 8 | 2 | 2 | 2 | **10** | **4** |
| Pedalcyclist | 1 | 1 | 0 | 0 | **1** | **1** |
| **Total** | **22** | **10** | **50** | **19** | **72** | **29** |

*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**

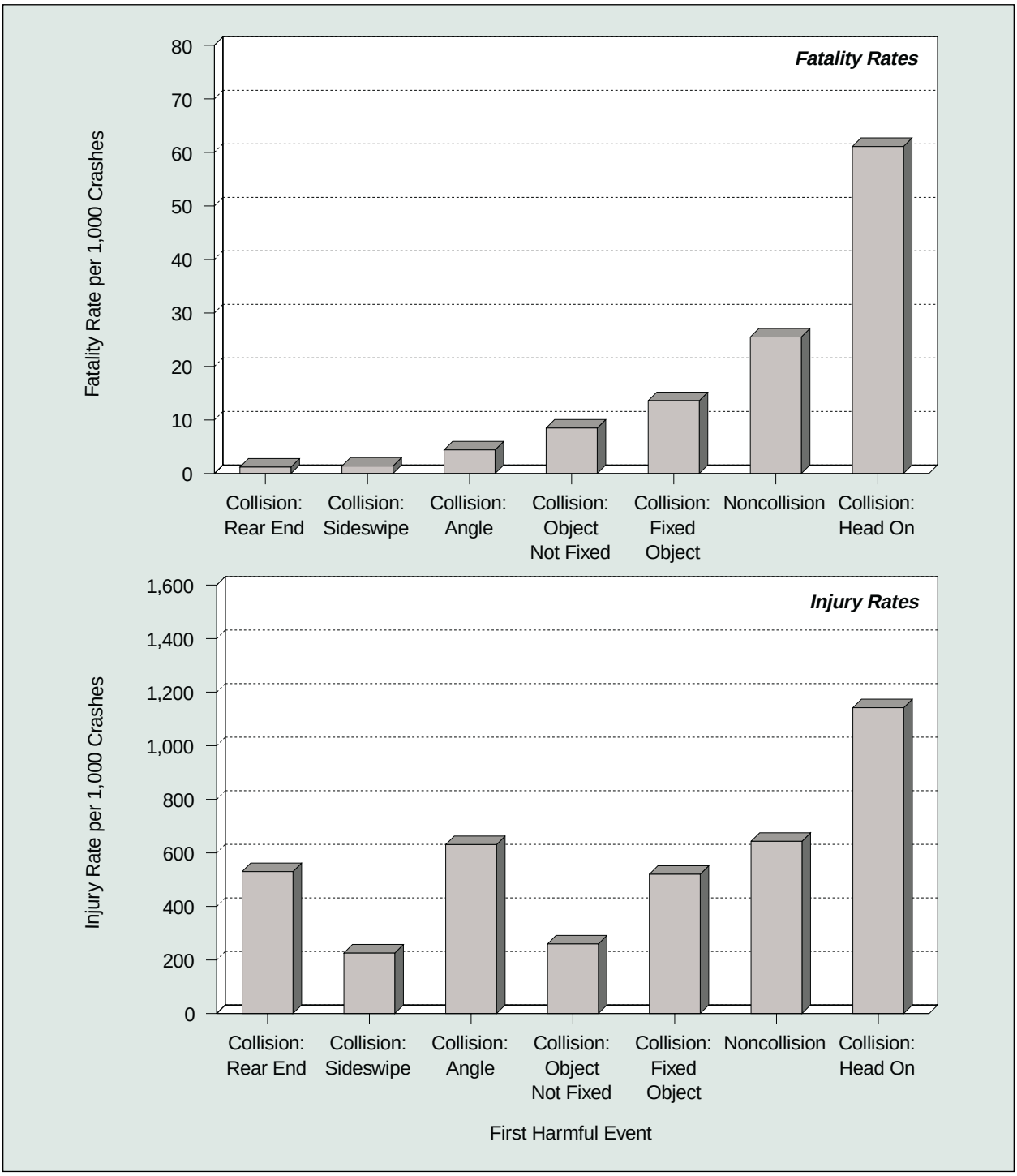


**Figure 23**
**Fatality and Injury Rates per 1,000 Crashes by Time of Day**

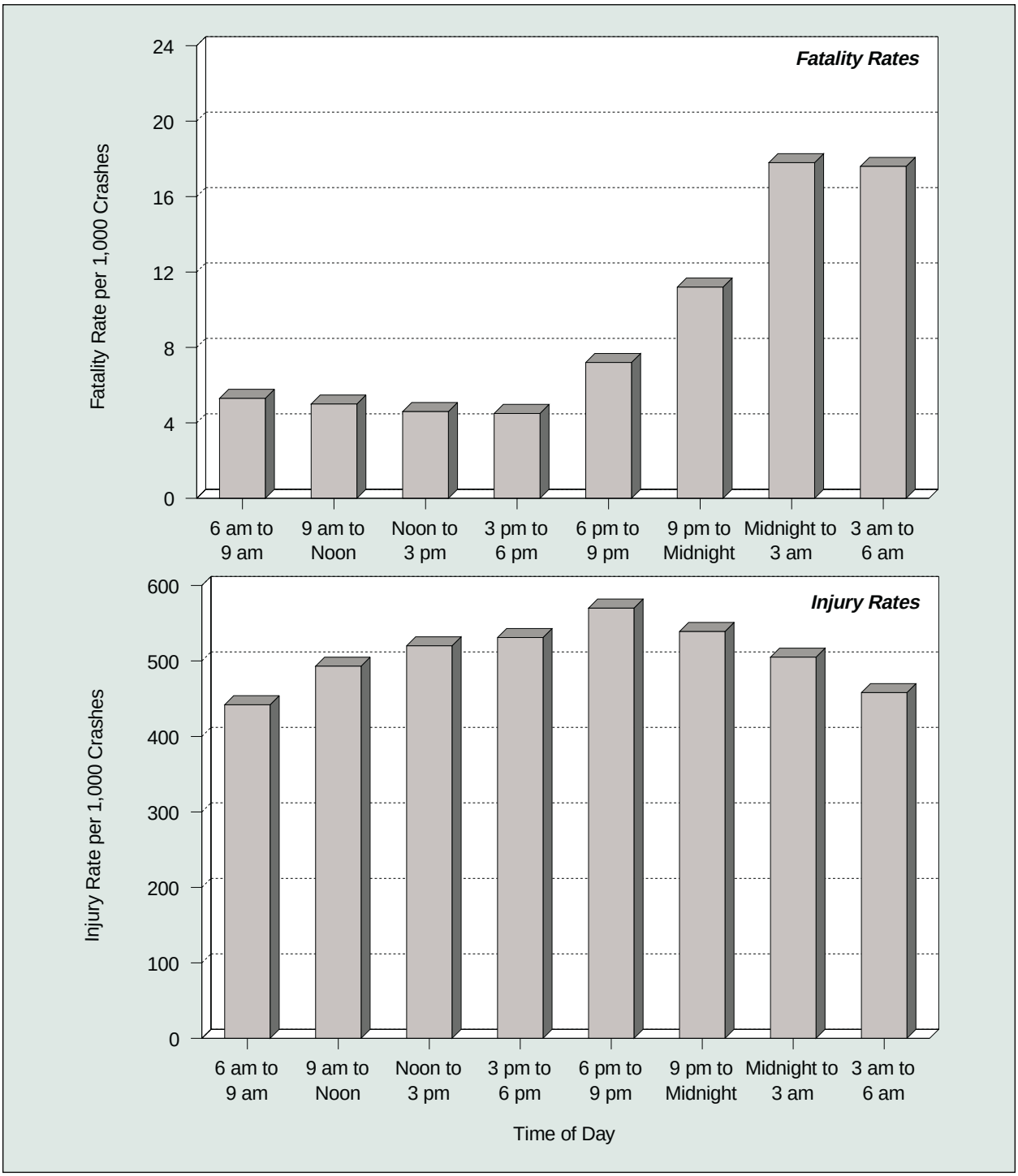
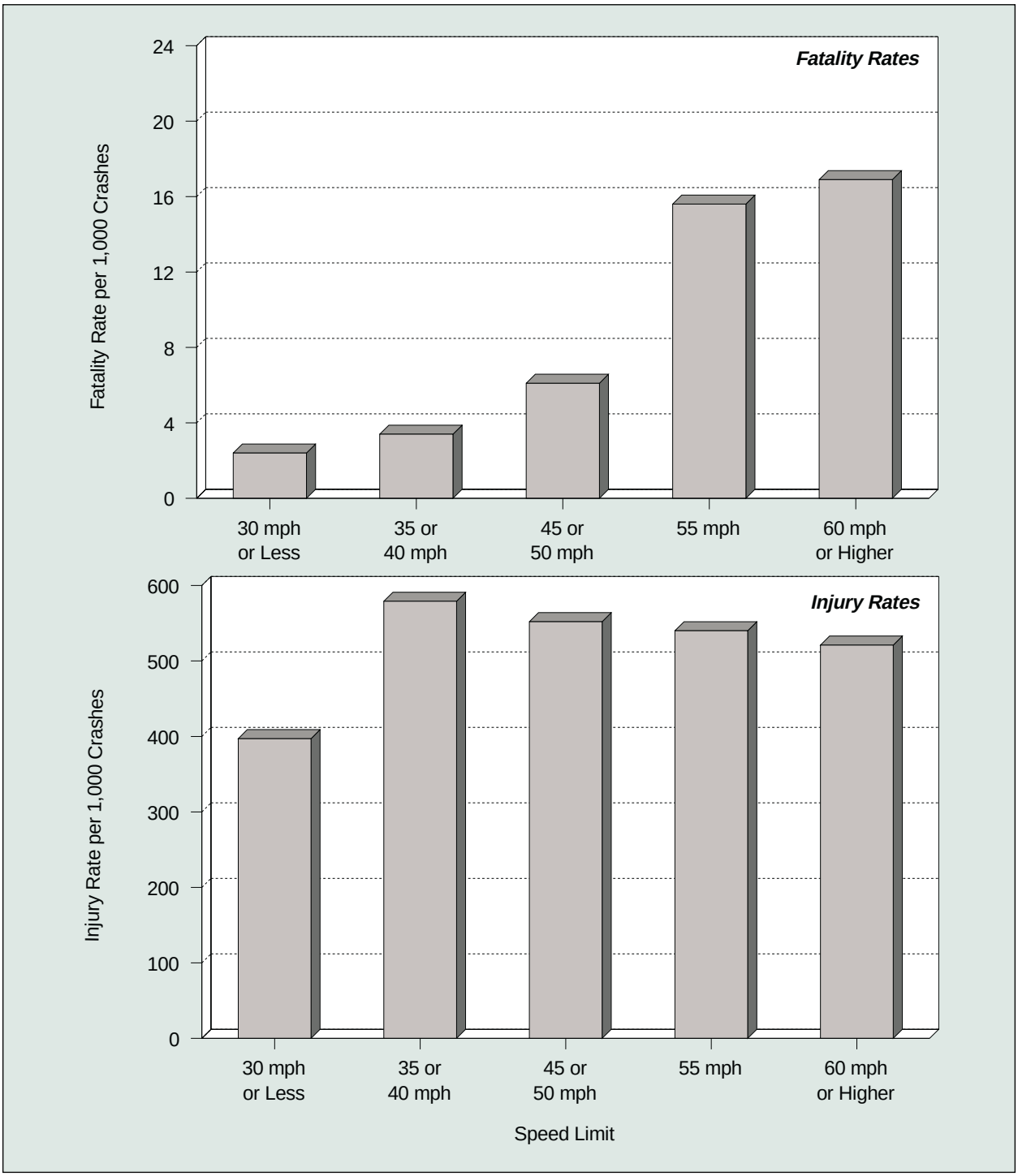


**Figure 24**
**Fatality and Injury Rates per 1,000 Crashes by Speed Limit**

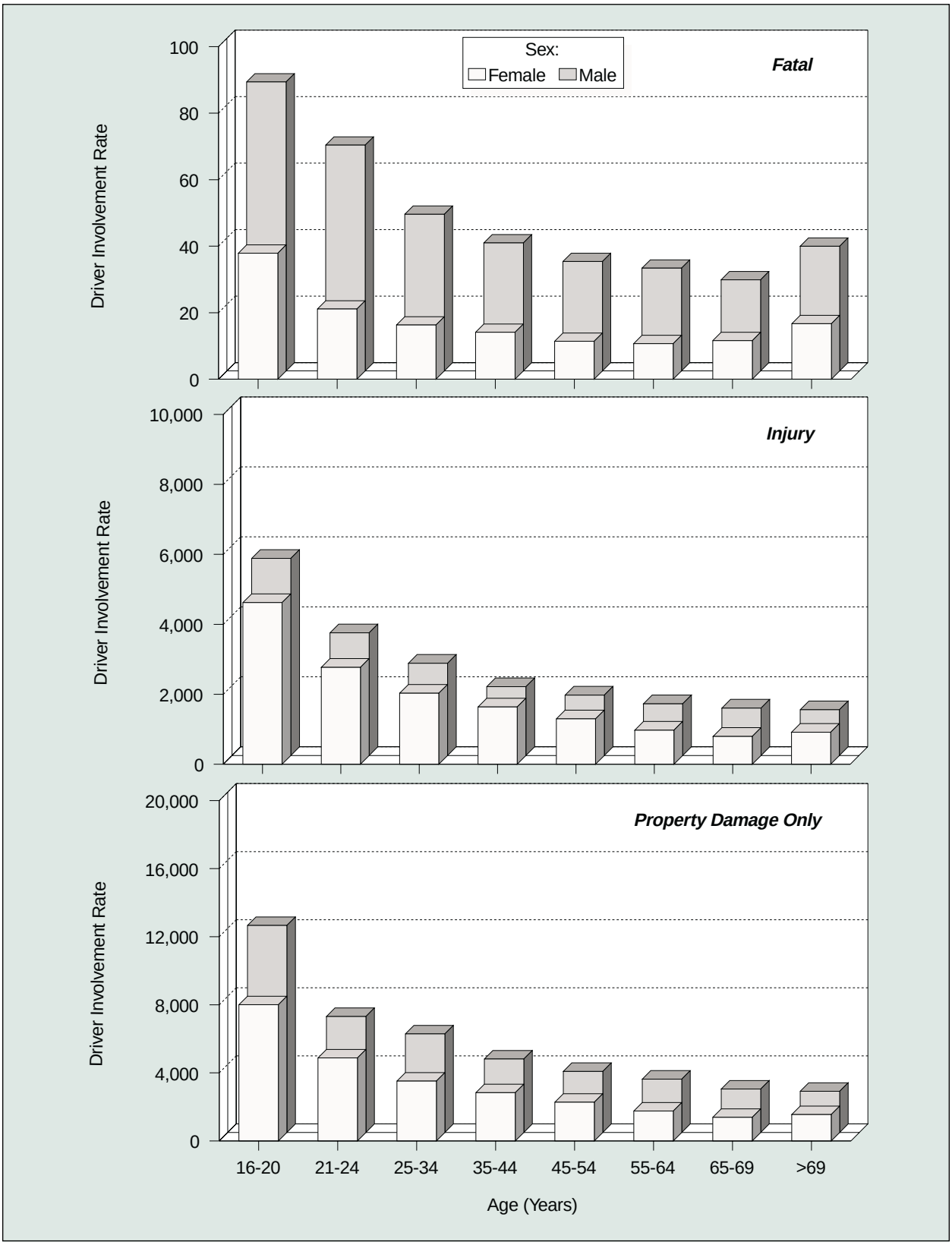


## Table 63
## Driver Involvement Rates per 100,000 Licensed Drivers by Age, Sex, and Crash Severity

| Age (Years) | Sex | | | | Total | |
|---|---|---|---|---|---|---|
| | Male | | Female | | | |
| | Drivers | Involvement Rate | Drivers | Involvement Rate | Drivers | Involvement Rate |
| **Drivers in Fatal Crashes** | | | | | | |
| <16 | 232 | * | 100 | * | **332** | ***** |
| 16-20 | 5,661 | 86.95 | 2,312 | 37.86 | **7,973** | **63.18** |
| 21-24 | 4,330 | 67.87 | 1,290 | 21.12 | **5,620** | **45.00** |
| 25-34 | 8,802 | 47.07 | 2,932 | 16.34 | **11,734** | **32.02** |
| 35-44 | 8,097 | 38.53 | 2,925 | 14.06 | **11,023** | **26.36** |
| 45-54 | 5,730 | 32.88 | 1,969 | 11.37 | **7,700** | **22.16** |
| 55-64 | 3,421 | 30.93 | 1,170 | 10.68 | **4,592** | **20.86** |
| 65-69 | 1,142 | 27.43 | 483 | 11.59 | **1,625** | **19.51** |
| >69 | 3,340 | 37.55 | 1,594 | 16.65 | **4,934** | **26.72** |
| Unknown | 145 | * | 17 | * | **819** | ***** |
| **Total** | **40,900** | **43.43** | **14,792** | **15.90** | ****56,352** | **30.11** |
| **Drivers in Injury Crashes** | | | | | | |
| <16 | 16,000 | * | 9,000 | * | **24,000** | ***** |
| 16-20 | 367,000 | 5,634 | 282,000 | 4,621 | **649,000** | **5,144** |
| 21-24 | 224,000 | 3,506 | 169,000 | 2,771 | **393,000** | **3,146** |
| 25-34 | 493,000 | 2,637 | 365,000 | 2,031 | **858,000** | **2,340** |
| 35-44 | 413,000 | 1,967 | 341,000 | 1,638 | **754,000** | **1,803** |
| 45-54 | 301,000 | 1,726 | 225,000 | 1,298 | **526,000** | **1,512** |
| 55-64 | 164,000 | 1,479 | 107,000 | 974 | **270,000** | **1,228** |
| 65-69 | 56,000 | 1,355 | 33,000 | 796 | **90,000** | **1,075** |
| >69 | 116,000 | 1,308 | 88,000 | 915 | **204,000** | **1,105** |
| **Total** | **2,150,000** | **2,283** | **1,618,000** | **1,739** | **3,767,000** | **2,013** |
| **Drivers in Property-Damage-Only Crashes** | | | | | | |
| <16 | 42,000 | * | 19,000 | * | **61,000** | ***** |
| 16-20 | 792,000 | 12,163 | 489,000 | 8,004 | **1,281,000** | **10,149** |
| 21-24 | 435,000 | 6,814 | 298,000 | 4,877 | **733,000** | **5,866** |
| 25-34 | 1,082,000 | 5,788 | 631,000 | 3,516 | **1,713,000** | **4,675** |
| 35-44 | 907,000 | 4,314 | 590,000 | 2,834 | **1,496,000** | **3,578** |
| 45-54 | 625,000 | 3,587 | 394,000 | 2,274 | **1,019,000** | **2,932** |
| 55-64 | 346,000 | 3,133 | 193,000 | 1,758 | **539,000** | **2,449** |
| 65-69 | 106,000 | 2,549 | 58,000 | 1,386 | **164,000** | **1,967** |
| >69 | 215,000 | 2,419 | 148,000 | 1,550 | **364,000** | **1,969** |
| **Total** | **4,550,000** | **4,832** | **2,819,000** | **3,031** | **7,370,000** | **3,937** |
| **Drivers in All Crashes** | | | | | | |
| <16 | 58,000 | * | 28,000 | * | **86,000** | ***** |
| 16-20 | 1,164,000 | 17,884 | 773,000 | 12,663 | **1,938,000** | **15,356** |
| 21-24 | 663,000 | 10,388 | 468,000 | 7,669 | **1,131,000** | **9,057** |
| 25-34 | 1,584,000 | 8,472 | 999,000 | 5,563 | **2,583,000** | **7,047** |
| 35-44 | 1,328,000 | 6,320 | 934,000 | 4,486 | **2,262,000** | **5,408** |
| 45-54 | 931,000 | 5,346 | 621,000 | 3,583 | **1,552,000** | **4,467** |
| 55-64 | 513,000 | 4,642 | 300,000 | 2,743 | **814,000** | **3,697** |
| 65-69 | 164,000 | 3,931 | 91,000 | 2,194 | **255,000** | **3,062** |
| >69 | 335,000 | 3,765 | 238,000 | 2,482 | **573,000** | **3,100** |
| Unknown | *** | * | *** | * | **1,000** | ***** |
| **Total** | **6,741,000** | **7,159** | **4,452,000** | **4,787** | **11,194,000** | **5,980** |

*Not applicable.
**Includes 657 drivers of unknown sex.
***Less than 500.
Source: Licensed Drivers—Federal Highway Administration.

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



## Table 64
## Drivers Involved in Fatal Crashes by Previous Driving Record and License Status

| Previous Convictions | Valid License (48,961) | | Invalid License (6,009) | | Total (54,970) | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |
| Previous Recorded Crashes | 7,299 | 14.9 | 853 | 14.2 | **8,152** | **14.8** |
| Previous Recorded Suspensions or Revocations | 3,870 | 7.9 | 2,943 | 49.0 | **6,813** | **12.4** |
| Previous DWI Convictions | 929 | 1.9 | 936 | 15.6 | **1,865** | **3.4** |
| Previous Speeding Convictions | 10,370 | 21.2 | 1,156 | 19.2 | **11,526** | **21.0** |
| Previous Other Harmful Moving Convictions | 8,225 | 16.8 | 1,436 | 23.9 | **9,661** | **17.6** |
| Drivers with No Previous Conviction | 28,936 | 59.1 | 2,550 | 42.4 | **31,486** | **57.3** |

Notes: Table does not include 1,382 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.

## Table 65
## Related Factors for Drivers Involved in Fatal Crashes

| Factors | Number | Percent |
|---|---|---|
| Failure to keep in proper lane or running off road | 16,904 | 30.0 |
| Driving too fast for conditions or in excess of posted speed limit | 11,100 | 19.7 |
| Failure to yield right of way | 5,076 | 9.0 |
| Inattentive (talking, eating, etc.) | 3,908 | 6.9 |
| Operating vehicle in erratic, reckless, careless, or negligent manner | 2,985 | 5.3 |
| Failure to obey traffic signs, signals, or officer | 2,817 | 5.0 |
| Swerving or avoiding due to wind, slippery surface, vehicle, object, nonmotorist in roadway, etc. | 1,986 | 3.5 |
| Drowsy, asleep, fatigued, ill, or blackout | 1,808 | 3.2 |
| Overcorrecting/oversteering | 1,793 | 3.2 |
| Making improper turn | 1,323 | 2.3 |
| Vision obscured (rain, snow, glare, lights, building, trees, etc.) | 1,310 | 2.3 |
| Driving wrong way on one-way trafficway or on wrong side of road | 1,256 | 2.2 |
| Other factors | 9,421 | 16.7 |
| None reported | 20,552 | 36.5 |
| Unknown | 601 | 1.1 |
| **Total Drivers** | **56,352** | **100.0** |

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 66**
**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 | 14,158 | 167,000 | 353,000 | 907,000 | 1,427,000 | **1,441,000** |
| Passengers | 6,613 | 75,000 | 180,000 | 448,000 | 703,000 | **709,000** |
| Unknown | 47 | * | 1,000 | 7,000 | 8,000 | **8,000** |
| *Subtotal* | *20,818* | *242,000* | *534,000* | *1,362,000* | *2,138,000* | ***2,158,000*** |
| **Light Truck** | | | | | | |
| Drivers | 7,767 | 70,000 | 153,000 | 332,000 | 554,000 | **562,000** |
| Passengers | 3,441 | 36,000 | 79,000 | 173,000 | 288,000 | **292,000** |
| Unknown | 35 | * | * | 3,000 | 4,000 | **4,000** |
| *Subtotal* | *11,243* | *106,000* | *232,000* | *508,000* | *847,000* | ***858,000*** |
| **Large Truck** | | | | | | |
| Drivers | 643 | 5,000 | 8,000 | 14,000 | 27,000 | **28,000** |
| Passengers | 113 | 1,000 | 2,000 | 3,000 | 6,000 | **6,000** |
| Unknown | 2 | * | * | * | * | ***** |
| *Subtotal* | *758* | *6,000* | *10,000* | *17,000* | *33,000* | ***34,000*** |
| **Motorcycle** | | | | | | |
| Operators | 2,276 | 15,000 | 20,000 | 9,000 | 45,000 | **47,000** |
| Passengers | 195 | 2,000 | 3,000 | 1,000 | 5,000 | **6,000** |
| Unknown | 1 | * | * | * | * | ***** |
| *Subtotal* | *2,472* | *17,000* | *23,000* | *10,000* | *50,000* | ***52,000*** |
| **Bus** | *58* | *1,000* | *4,000* | *18,000* | *22,000* | ***22,000*** |
| **Other/Unknown** | *457* | *2,000* | *3,000* | *2,000* | *7,000* | ***8,000*** |
| **Total** | **35,806** | **375,000** | **805,000** | **1,917,000** | **3,097,000** | **3,132,000** |

*Less than 500.

**Table 67**
**Vehicle Occupants Killed or Injured, by Sex and Vehicle Type**

| Sex | Vehicle Type | | | | | | Total |
|---|---|---|---|---|---|---|---|
| | Passenger Cars | Light Trucks | Large Trucks | Motorcycles | Buses | Other/ Unknown | |
| **Occupants Killed** | | | | | | | |
| Male | 12,179 | 8,224 | 713 | 2,247 | 26 | 384 | **23,773** |
| Female | 8,634 | 3,016 | 44 | 224 | 32 | 73 | **12,023** |
| Unknown | 5 | 3 | 1 | 1 | 0 | 0 | **10** |
| **Total** | **20,818** | **11,243** | **758** | **2,472** | **58** | **457** | **35,806** |
| **Occupants Injured** | | | | | | | |
| Male | 884,000 | 485,000 | 30,000 | 45,000 | 11,000 | 5,000 | **1,460,000** |
| Female | 1,253,000 | 362,000 | 3,000 | 5,000 | 11,000 | 2,000 | **1,637,000** |
| **Total** | **2,138,000** | **847,000** | **33,000** | **50,000** | **22,000** | **7,000** | **3,097,000** |

**Table 68**
**Vehicle Occupants Killed or Injured, by Age and Vehicle Type**

| Age (Years) | Vehicle Type | | | | | | Total |
|---|---|---|---|---|---|---|---|
| | Passenger Cars | Light Trucks | Large Trucks | Motorcycles | Buses | Other/ Unknown | |
| **Occupants Killed** | | | | | | | |
| <5 | 363 | 187 | 3 | 0 | 0 | 2 | **555** |
| 5-9 | 295 | 197 | 3 | 3 | 2 | 7 | **507** |
| 10-15 | 637 | 329 | 3 | 20 | 8 | 49 | **1,046** |
| 16-20 | 3,808 | 1,491 | 9 | 182 | 4 | 73 | **5,567** |
| 21-24 | 2,160 | 1,053 | 49 | 303 | 2 | 39 | **3,606** |
| 25-34 | 3,262 | 1,954 | 138 | 670 | 3 | 82 | **6,109** |
| 35-44 | 2,624 | 2,095 | 208 | 656 | 4 | 61 | **5,648** |
| 45-54 | 1,900 | 1,558 | 194 | 406 | 6 | 41 | **4,105** |
| 55-64 | 1,401 | 969 | 110 | 173 | 6 | 30 | **2,689** |
| 65-74 | 1,682 | 756 | 32 | 43 | 11 | 38 | **2,562** |
| >74 | 2,649 | 639 | 8 | 16 | 12 | 34 | **3,358** |
| Unknown | 37 | 15 | 1 | 0 | 0 | 1 | **54** |
| **Total** | **20,818** | **11,243** | **758** | **2,472** | **58** | **457** | **35,806** |
| **Occupants Injured** | | | | | | | |
| <5 | 51,000 | 21,000 | * | * | * | * | **73,000** |
| 5-9 | 62,000 | 29,000 | * | 1,000 | 3,000 | * | **95,000** |
| 10-15 | 100,000 | 45,000 | * | 2,000 | 5,000 | 2,000 | **155,000** |
| 16-20 | 428,000 | 122,000 | 1,000 | 6,000 | 2,000 | 2,000 | **561,000** |
| 21-24 | 225,000 | 71,000 | 3,000 | 7,000 | 1,000 | * | **306,000** |
| 25-34 | 409,000 | 173,000 | 9,000 | 11,000 | 3,000 | 1,000 | **605,000** |
| 35-44 | 310,000 | 171,000 | 10,000 | 13,000 | 4,000 | 1,000 | **509,000** |
| 45-54 | 237,000 | 116,000 | 6,000 | 7,000 | 2,000 | 1,000 | **368,000** |
| 55-64 | 125,000 | 55,000 | 3,000 | 2,000 | 2,000 | * | **187,000** |
| 65-74 | 107,000 | 29,000 | * | 1,000 | * | 1,000 | **138,000** |
| >74 | 83,000 | 16,000 | * | * | * | * | **100,000** |
| **Total** | **2,138,000** | **847,000** | **33,000** | **50,000** | **22,000** | **7,000** | **3,097,000** |

*Less than 500.

## Table 69
## Vehicle Occupants Killed or Injured, by Age, Person Type, and Sex

| Age (Years) | Person Type | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Drivers | | | | | | Passengers | | | | | |
| | Sex | | | | | | Sex | | | | | |
| | Male | | Female | | Total | | Male | | Female | | Total | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Occupants Killed** | | | | | | | | | | | | |
| <5 | 0 | 0.0 | 0 | 0.0 | **0** | **0.0** | 293 | 52.8 | 262 | 47.2 | **555** | **100.0** |
| 5-9 | 4 | 100.0 | 0 | 0.0 | **4** | **100.0** | 266 | 52.9 | 237 | 47.1 | **503** | **100.0** |
| 10-15 | 113 | 78.5 | 31 | 21.5 | **144** | **100.0** | 472 | 52.3 | 430 | 47.7 | **902** | **100.0** |
| 16-20 | 2,469 | 70.9 | 1,012 | 29.1 | **3,481** | **100.0** | 1,241 | 59.5 | 845 | 40.5 | **2,086** | **100.0** |
| 21-24 | 2,013 | 79.3 | 525 | 20.7 | **2,538** | **100.0** | 705 | 66.0 | 363 | 34.0 | **1,068** | **100.0** |
| 25-34 | 3,647 | 76.6 | 1,117 | 23.4 | **4,764** | **100.0** | 808 | 60.1 | 537 | 39.9 | **1,345** | **100.0** |
| 35-44 | 3,374 | 73.4 | 1,220 | 26.6 | **4,595** | **100.0** | 530 | 50.3 | 523 | 49.7 | **1,053** | **100.0** |
| 45-54 | 2,450 | 73.9 | 864 | 26.1 | **3,315** | **100.0** | 323 | 40.9 | 466 | 59.0 | **790** | **100.0** |
| 55-64 | 1,507 | 71.1 | 613 | 28.9 | **2,121** | **100.0** | 184 | 32.4 | 382 | 67.3 | **568** | **100.0** |
| 65-74 | 1,271 | 67.6 | 608 | 32.4 | **1,879** | **100.0** | 196 | 28.7 | 486 | 71.2 | **683** | **100.0** |
| >74 | 1,583 | 67.4 | 764 | 32.6 | **2,347** | **100.0** | 288 | 28.5 | 723 | 71.5 | **1,011** | **100.0** |
| Unknown | 18 | 81.8 | 1 | 4.5 | **22** | **100.0** | 18 | 56.3 | 14 | 43.8 | **32** | **100.0** |
| **Total** | **18,449** | **73.2** | **6,755** | **26.8** | **25,210** | **100.0** | **5,324** | **50.2** | **5,268** | **49.7** | ***10,596** | **100.0** |
| **Occupants Injured** | | | | | | | | | | | | |
| <5 | 1,000 | 79.4 | ** | ** | **1,000** | **100.0** | 34,000 | 48.8 | 36,000 | 51.2 | **71,000** | **100.0** |
| 5-9 | 1,000 | 75.0 | ** | ** | **1,000** | **100.0** | 44,000 | 47.4 | 49,000 | 52.6 | **93,000** | **100.0** |
| 10-15 | 5,000 | 62.0 | 3,000 | 38.0 | **9,000** | **100.0** | 62,000 | 42.8 | 83,000 | 57.2 | **145,000** | **100.0** |
| 16-20 | 183,000 | 51.4 | 173,000 | 48.6 | **356,000** | **100.0** | 87,000 | 42.7 | 117,000 | 57.3 | **204,000** | **100.0** |
| 21-24 | 109,000 | 49.7 | 110,000 | 50.3 | **219,000** | **100.0** | 40,000 | 45.9 | 47,000 | 54.1 | **86,000** | **100.0** |
| 25-34 | 235,000 | 50.5 | 231,000 | 49.5 | **466,000** | **100.0** | 57,000 | 42.1 | 78,000 | 57.9 | **135,000** | **100.0** |
| 35-44 | 195,000 | 48.1 | 210,000 | 51.9 | **406,000** | **100.0** | 39,000 | 38.8 | 62,000 | 61.2 | **102,000** | **100.0** |
| 45-54 | 142,000 | 48.7 | 150,000 | 51.3 | **292,000** | **100.0** | 24,000 | 31.8 | 52,000 | 68.2 | **76,000** | **100.0** |
| 55-64 | 75,000 | 52.1 | 69,000 | 47.9 | **144,000** | **100.0** | 12,000 | 29.2 | 29,000 | 70.8 | **41,000** | **100.0** |
| 65-74 | 52,000 | 53.7 | 45,000 | 46.3 | **97,000** | **100.0** | 8,000 | 20.1 | 33,000 | 79.9 | **41,000** | **100.0** |
| >74 | 37,000 | 52.7 | 33,000 | 47.3 | **70,000** | **100.0** | 6,000 | 21.6 | 24,000 | 78.4 | **30,000** | **100.0** |
| **Total** | **1,036,000** | **50.3** | **1,025,000** | **49.7** | **2,061,000** | **100.0** | **415,000** | **40.5** | **609,000** | **59.5** | **1,024,000** | **100.0** |

*Includes 6 drivers and 4 passengers of unknown sex.
**Less than 500 or less than 0.05 percent.

## Table 70
## Vehicle Occupants Killed or Injured, by Vehicle Type and Most Harmful Event

| Vehicle Type | Most Harmful Event: Collision with: Motor Vehicle in Transport: Number | Motor Vehicle in Transport: Percent | Object Not Fixed: Number | Object Not Fixed: Percent | Fixed Object: Number | Fixed Object: Percent | Noncollision: Number | Noncollision: Percent | Total: Number | Total: Percent |
|---|---|---|---|---|---|---|---|---|---|---|
| **Occupants Killed** | | | | | | | | | | |
| Passenger Car | 11,519 | 55.3 | 457 | 2.2 | 5,134 | 24.7 | 3,698 | 17.8 | **20,818** | **100.0** |
| Light Truck | 4,150 | 36.9 | 255 | 2.3 | 2,300 | 20.5 | 4,536 | 40.3 | **11,243** | **100.0** |
| Large Truck | 215 | 28.4 | 28 | 3.7 | 156 | 20.6 | 359 | 47.4 | **758** | **100.0** |
| Motorcycle | 1,283 | 51.9 | 102 | 4.1 | 684 | 27.7 | 399 | 16.1 | **2,472** | **100.0** |
| Bus | 17 | 29.3 | 0 | 0.0 | 30 | 51.7 | 11 | 19.0 | **58** | **100.0** |
| Other/Unknown | 168 | 36.8 | 23 | 5.0 | 106 | 23.2 | 136 | 29.8 | **457** | **100.0** |
| **Total** | **17,352** | **48.5** | **865** | **2.4** | **8,410** | **23.5** | **9,139** | **25.5** | ***35,806** | **100.0** |
| **Occupants Injured** | | | | | | | | | | |
| Passenger Car | 1,729,000 | 80.9 | 47,000 | 2.2 | 253,000 | 11.8 | 108,000 | 5.0 | **2,138,000** | **100.0** |
| Light Truck | 626,000 | 73.9 | 16,000 | 1.9 | 105,000 | 12.4 | 100,000 | 11.8 | **847,000** | **100.0** |
| Large Truck | 14,000 | 43.9 | 1,000 | 1.6 | 3,000 | 10.4 | 15,000 | 44.1 | **33,000** | **100.0** |
| Motorcycle | 26,000 | 51.0 | 2,000 | 3.6 | 7,000 | 13.6 | 16,000 | 31.7 | **50,000** | **100.0** |
| Bus | 19,000 | 85.2 | ** | ** | 2,000 | 9.4 | 1,000 | 5.4 | **22,000** | **100.0** |
| Other/Unknown | 3,000 | 40.2 | ** | 1.8 | 1,000 | 15.9 | 3,000 | 42.1 | **7,000** | **100.0** |
| **Total** | **2,417,000** | **78.0** | **66,000** | **2.1** | **371,000** | **12.0** | **243,000** | **7.8** | **3,097,000** | **100.0** |

*Includes 40 fatalities with unknown most harmful event.
**Less than 500 or less than 0.05 percent.

**Table 71**
**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 | Motorcycles | Buses | Other/ Unknown | |
| **Occupants Killed** | | | | | | | |
| Front | 10,821 | 5,873 | 457 | 1,579 | 37 | 211 | **18,978** |
| Left Side | 3,786 | 1,067 | 38 | 172 | 9 | 34 | **5,106** |
| Right Side | 3,211 | 1,055 | 40 | 197 | 3 | 31 | **4,537** |
| Rear | 1,046 | 479 | 27 | 69 | 3 | 37 | **1,661** |
| Other* | 468 | 310 | 27 | 56 | 0 | 6 | **867** |
| Noncollision | 1,123 | 2,157 | 142 | 246 | 4 | 81 | **3,753** |
| Unknown | 363 | 302 | 27 | 153 | 2 | 57 | **904** |
| **Total** | **20,818** | **11,243** | **758** | **2,472** | **58** | **457** | **35,806** |
| **Occupants Injured** | | | | | | | |
| Front | 1,030,000 | 386,000 | 12,000 | 24,000 | 9,000 | 2,000 | **1,464,000** |
| Left Side | 287,000 | 99,000 | 2,000 | 6,000 | 7,000 | ** | **402,000** |
| Right Side | 250,000 | 93,000 | 3,000 | 3,000 | 2,000 | 1,000 | **352,000** |
| Rear | 518,000 | 215,000 | 4,000 | 3,000 | 3,000 | 2,000 | **744,000** |
| Other* | 9,000 | 6,000 | 1,000 | ** | ** | ** | **17,000** |
| Noncollision | 43,000 | 48,000 | 10,000 | 14,000 | ** | 2,000 | **118,000** |
| **Total** | **2,138,000** | **847,000** | **33,000** | **50,000** | **22,000** | **7,000** | **3,097,000** |

*Includes top, undercarriage, override, and underride.
**Less than 500.

**Table 72**
**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 |
| **Occupants Killed** | | | | | | | | |
| Passenger Car | 4,267 | 20.5 | 16,486 | 79.2 | 65 | 0.3 | **20,818** | **100.0** |
| Light Truck | 4,590 | 40.8 | 6,603 | 58.7 | 50 | 0.4 | **11,243** | **100.0** |
| Large Truck | 229 | 30.2 | 520 | 68.6 | 9 | 1.2 | **758** | **100.0** |
| Bus | 14 | 24.1 | 25 | 43.1 | 19 | 32.8 | **58** | **100.0** |
| Other/Unknown | 152 | 33.3 | 273 | 59.7 | 32 | 7.0 | **457** | **100.0** |
| **Total**** | **9,252** | **27.8** | **23,907** | **71.7** | **175** | **0.5** | **33,334** | **100.0** |
| **Occupants Injured** | | | | | | | | |
| Passenger Car | 12,000 | 0.6 | 2,126,000 | 99.4 | **** | **** | **2,138,000** | **100.0** |
| Light Truck | 11,000 | 1.2 | 836,000 | 98.8 | **** | **** | **847,000** | **100.0** |
| Large Truck | 1,000 | 2.0 | 32,000 | 98.0 | **** | **** | **33,000** | **100.0** |
| Bus | *** | *** | 22,000 | 100.0 | **** | **** | **22,000** | **100.0** |
| Other/Unknown | *** | 5.2 | 7,000 | 94.8 | **** | **** | **7,000** | **100.0** |
| **Total**** | **24,000** | **0.8** | **3,023,000** | **99.2** | **** | **** | 3,047,000 | **100.0** |

*Includes total and partial ejection.
**Excludes motorcycle occupants.
***Less than 500 or less than 0.05 percent.
****Not applicable.

## Table 73
## 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 | — | **3,585** |
| Passenger Car | 4,340 | Light Truck | 1,086 | **5,426** |
| Passenger Car | 1,995 | Large Truck | 34 | **2,029** |
| Passenger Car | 12 | Motorcycle | 557 | **569** |
| Passenger Car | 127 | Bus | 1 | **128** |
| Passenger Car | 94 | Other/Unknown | 53 | **147** |
| Light Truck | — | Light Truck | — | **1,592** |
| Light Truck | 1,182 | Large Truck | 33 | **1,215** |
| Light Truck | 3 | Motorcycle | 460 | **463** |
| Light Truck | 46 | Bus | 2 | **48** |
| Light Truck | 73 | Other/Unknown | 61 | **134** |
| Large Truck | — | Large Truck | — | **110** |
| Large Truck | 0 | Motorcycle | 89 | **89** |
| Large Truck | 1 | Bus | 8 | **9** |
| Large Truck | 3 | Other/Unknown | 32 | **35** |
| Motorcycle | — | Motorcycle | — | **46** |
| Motorcycle | 13 | Bus | 0 | **13** |
| Motorcycle | 20 | Other/Unknown | 1 | **21** |
| Bus | — | Bus | — | **1** |
| Bus | 0 | Other/Unknown | 1 | **1** |
| Other/Unknown | — | Other/Unknown | — | **29** |
| **Total Occupants Killed** | | | | **15,690** |

| Vehicle Type | Occupants Injured | Vehicle Type | Occupants Injured | Total Occupants Injured |
|---|---|---|---|---|
| Passenger Car | — | Passenger Car | — | **900,000** |
| Passenger Car | 491,000 | Light Truck | 309,000 | **799,000** |
| Passenger Car | 55,000 | Large Truck | 6,000 | **62,000** |
| Passenger Car | 3,000 | Motorcycle | 16,000 | **19,000** |
| Passenger Car | 6,000 | Bus | 11,000 | **18,000** |
| Passenger Car | 3,000 | Other/Unknown | 2,000 | **4,000** |
| Light Truck | — | Light Truck | — | **200,000** |
| Light Truck | 20,000 | Large Truck | 4,000 | **24,000** |
| Light Truck | 1,000 | Motorcycle | 8,000 | **8,000** |
| Light Truck | 1,000 | Bus | 3,000 | **5,000** |
| Light Truck | 1,000 | Other/Unknown | 1,000 | **2,000** |
| Large Truck | — | Large Truck | — | **4,000** |
| **Total Occupants Injured** | | | | **2,047,000** |

## Table 74
## 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. | % |
| **Passenger Cars** | **47,406** | **50.6** | **20,818** | **58.1** | **Large Trucks** | **5,670** | **6.1** | **758** | **2.1** |
| Convertible | 699 | 0.7 | 298 | 0.8 | Step Van | 42 | * | 4 | * |
| 2 Door Sedan, Hardtop, Coupe | 11,401 | 12.2 | 5,174 | 14.5 | Single Unit Truck | | | | |
| 3 Door/2 Door Hatchback | 4,132 | 4.4 | 2,060 | 5.8 | (10,000 lb < GVWR ≤ 19,500 lb) | 203 | 0.2 | 27 | 0.1 |
| 4 Door Sedan Hardtop | 27,734 | 29.6 | 11,771 | 32.9 | Single Unit Truck | | | | |
| 5 Door/4 Door Hatchback | 1,003 | 1.1 | 509 | 1.4 | (19,500 lb < GVWR ≤ 26,000 lb) | 287 | 0.3 | 44 | 0.1 |
| Station Wagon | 1,803 | 1.9 | 784 | 2.2 | Single Unit Heavy Truck | | | | |
| Hatchback, Doors Unknown | 20 | * | 14 | * | (GVWR > 26,000 lb) | 1,035 | 1.1 | 129 | 0.4 |
| Other Auto | 46 | * | 18 | 0.1 | Single Unit Truck, Unknown GVWR | 100 | 0.1 | 13 | 0.0 |
| Unknown Auto | 465 | 0.5 | 143 | 0.4 | Truck Tractor | 3,945 | 4.2 | 536 | 1.5 |
| Auto-Based Pickup | 103 | 0.1 | 47 | 0.1 | Unknown Medium Truck | | | | |
| | | | | | (10,000 lb < GVWR ≤ 26,000 lb) | 9 | * | 2 | * |
| **Light Trucks** | **35,052** | **37.4** | **11,243** | **31.4** | Unknown Heavy Truck | | | | |
| Compact Utility | 7,135 | 7.6 | 2,479 | 6.9 | (GVWR > 26,000 lb) | 2 | * | 0 | 0.0 |
| Large Utility | 1,346 | 1.4 | 382 | 1.1 | Unknown Large Truck Type | 44 | * | 2 | * |
| Utility Station Wagon | 777 | 0.8 | 154 | 0.4 | Unknown Truck | 3 | * | 1 | * |
| Utility, Unknown Body Type | 4 | * | 1 | * | | | | | |
| Minivan | 5,425 | 5.8 | 1,406 | 3.9 | **Motorcycles** | **2,891** | **3.1** | **2,472** | **6.9** |
| Large Van | 3,118 | 3.3 | 631 | 1.8 | Motorcycle | 2,770 | 3.0 | 2,362 | 6.6 |
| Step Van | 202 | 0.2 | 27 | 0.1 | Moped | 38 | * | 37 | 0.1 |
| Van-Based School Bus | 17 | * | 1 | * | Three Wheel Motorcycle or Moped | 2 | * | 2 | * |
| Van-Based Transit Bus | 6 | * | 1 | * | Off-Road Motorcycle (Two Wheel) | 53 | 0.1 | 45 | 0.1 |
| Other Van Type | 37 | * | 4 | * | Other Motorcycle/Minibike | 20 | * | 18 | 0.1 |
| Unknown Van Type | 81 | 0.1 | 8 | * | Unknown Motorcycle | 8 | * | 8 | * |
| Compact Pickup | 6,082 | 6.5 | 2,756 | 7.7 | | | | | |
| Standard Pickup | 10,569 | 11.3 | 3,319 | 9.3 | **Buses**** | **1,242** | **1.3** | **58** | **0.2** |
| Pickup with Camper | 65 | 0.1 | 30 | 0.1 | School Bus | 469 | 0.5 | 8 | * |
| Unknown Pickup Style Truck | 68 | 0.1 | 20 | 0.1 | Cross Country/Intercity Bus | 441 | 0.5 | 32 | 0.1 |
| Cab Chassis-Based Light Truck | 93 | 0.1 | 15 | * | Transit Bus | 222 | 0.2 | 5 | * |
| Truck-Based Panel Truck | 2 | * | 1 | * | Other Bus | 57 | 0.1 | 4 | * |
| Other Conventional Light Truck | 1 | * | 1 | * | Unknown Bus | 53 | 0.1 | 9 | * |
| Unknown Light Truck (not pickup) | 10 | * | 3 | * | | | | | |
| Unknown Light Vehicle Type | 11 | * | 4 | * | **Other Vehicles** | **791** | **0.8** | **352** | **1.0** |
| Unknown Truck | 3 | * | 0 | 0.0 | Large Limousine | 4 | * | 0 | 0.0 |
| | | | | | Van-Based Motorhome | 122 | 0.1 | 25 | 0.1 |
| | | | | | Light Truck-Based Motorhome | 8 | * | 5 | * |
| | | | | | Large Truck-Based Motorhome | 87 | 0.1 | 10 | * |
| | | | | | Unknown Truck Camper/Motorhome | 47 | 0.1 | 5 | * |
| | | | | | All Terrain Vehicle | 255 | 0.3 | 171 | 0.5 |
| | | | | | Snowmobile | 54 | 0.1 | 39 | 0.1 |
| | | | | | Farm Equipment Except Trucks | 130 | 0.1 | 50 | 0.1 |
| | | | | | Construction Equipment Except Trucks | 22 | * | 7 | * |
| | | | | | Other Vehicle | 62 | 0.1 | 40 | 0.1 |
| | | | | | **Unknown Body Type** | **644** | **0.7** | **105** | **0.3** |
| | | | | | **Total** | **93,696** | **100.0** | **35,806** | **100.0** |

*Less than 0.05 percent.
**Noninjured passengers are not included in this bus occupant count. All bus drivers are included, regardless of injury severity.

**Table 75**
**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) | 2,286 | 4.8 | 1,234 | 5.9 | 54.0 |
| Subcompact (95 to 99 inches) | 7,768 | 16.4 | 3,696 | 17.8 | 47.6 |
| Compact (100 to 104 inches) | 15,400 | 32.5 | 6,967 | 33.5 | 45.2 |
| Intermediate (105 to 109 inches) | 11,474 | 24.2 | 4,743 | 22.8 | 41.3 |
| Full Size (110 to 114 inches) | 5,481 | 11.6 | 2,198 | 10.6 | 40.1 |
| Largest Size (115 inches and over) | 1,959 | 4.1 | 710 | 3.4 | 36.2 |
| Unknown | 3,038 | 6.4 | 1,270 | 6.1 | 41.8 |
| **Total** | **47,406** | **100.0** | **20,818** | **100.0** | **43.9** |

**Table 76**
**Persons Killed or Injured in Alcohol-Related Crashes, by Person Type and Injury Severity**

| Person Type | Persons Killed* | Persons Injured by Injury Severity** | | | Total Injured |
|---|---|---|---|---|---|
| | | Incapacitating | Nonincapacitating | Other | |
| **Vehicle Occupants** | | | | | |
| Driver | 9,630 | 42,000 | 69,000 | 82,000 | **193,000** |
| Passenger | 3,477 | 18,000 | 30,000 | 48,000 | **97,000** |
| Unknown Occupant | 39 | *** | *** | *** | ******* |
| *Subtotal* | *13,145* | *60,000* | *100,000* | *130,000* | ***290,000*** |
| **Nonmotorists** | | | | | |
| Pedestrian | 2,325 | 4,000 | 4,000 | 4,000 | **13,000** |
| Pedalcyclist | 286 | 1,000 | 2,000 | 1,000 | **4,000** |
| Other/Unknown | 31 | *** | *** | *** | ******* |
| *Subtotal* | *2,641* | *5,000* | *6,000* | *6,000* | ***17,000*** |
| **Total** | **15,786** | **66,000** | **106,000** | **136,000** | **308,000** |

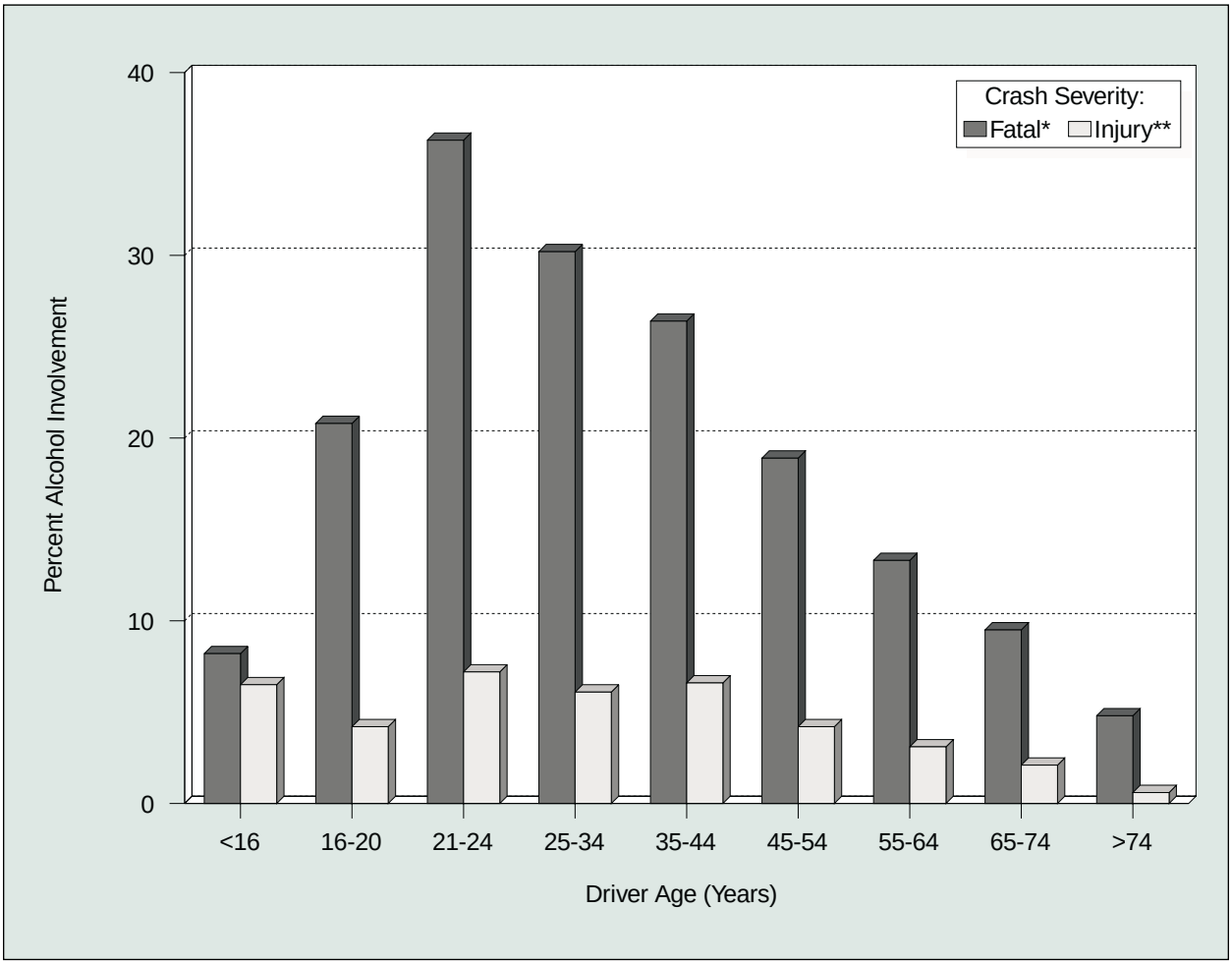
*Blood alcohol concentration (BAC) of 0.01 grams per deciliter (g/dl) or greater in the crash. NHTSA estimates alcohol involvement when alcohol test results are unknown. For more information, see page 7 of this report.
**Police-reported alcohol involvement in the crash.
***Less than 500.

## Table 77
## Drivers Involved in Crashes by Age, Alcohol Involvement, and Crash Severity

| Age (Years) | Alcohol Involvement | | | | Total | |
|---|---|---|---|---|---|---|
| | Yes | | No | | | |
| | Number | Percent | Number | Percent | Number | Percent |
| **Drivers in Fatal Crashes*** | | | | | | |
| <16 | 27 | 8 | 305 | 92 | **332** | **100** |
| 16-20 | 1,660 | 21 | 6,313 | 79 | **7,973** | **100** |
| 21-24 | 2,039 | 36 | 3,581 | 64 | **5,620** | **100** |
| 25-34 | 3,544 | 30 | 8,190 | 70 | **11,734** | **100** |
| 35-44 | 2,912 | 26 | 8,111 | 74 | **11,023** | **100** |
| 45-54 | 1,455 | 19 | 6,245 | 81 | **7,700** | **100** |
| 55-64 | 613 | 13 | 3,979 | 87 | **4,592** | **100** |
| 65-74 | 306 | 10 | 2,922 | 91 | **3,228** | **100** |
| >74 | 160 | 5 | 3,171 | 95 | **3,331** | **100** |
| Unknown | 330 | 40 | 489 | 60 | **819** | **100** |
| **Total** | **13,047** | **23** | **43,305** | **77** | **56,352** | **100** |
| **Drivers in Injury Crashes**** | | | | | | |
| <16 | 2,000 | 6 | 23,000 | 94 | **24,000** | **100** |
| 16-20 | 27,000 | 4 | 622,000 | 96 | **649,000** | **100** |
| 21-24 | 28,000 | 7 | 365,000 | 93 | **393,000** | **100** |
| 25-34 | 52,000 | 6 | 805,000 | 94 | **858,000** | **100** |
| 35-44 | 49,000 | 7 | 705,000 | 93 | **754,000** | **100** |
| 45-54 | 22,000 | 4 | 503,000 | 96 | **526,000** | **100** |
| 55-64 | 8,000 | 3 | 262,000 | 97 | **270,000** | **100** |
| 65-74 | 4,000 | 2 | 169,000 | 98 | **173,000** | **100** |
| >74 | 1,000 | 1 | 120,000 | 99 | **121,000** | **100** |
| **Total** | **194,000** | **5** | **3,573,000** | **95** | **3,767,000** | **100** |
| **Drivers in Property-Damage-Only Crashes**** | | | | | | |
| <16 | 9,000 | 15 | 52,000 | 85 | **61,000** | **100** |
| 16-20 | 41,000 | 3 | 1,240,000 | 97 | **1,281,000** | **100** |
| 21-24 | 26,000 | 4 | 706,000 | 96 | **733,000** | **100** |
| 25-34 | 72,000 | 4 | 1,641,000 | 96 | **1,713,000** | **100** |
| 35-44 | 50,000 | 3 | 1,447,000 | 97 | **1,496,000** | **100** |
| 45-54 | 30,000 | 3 | 989,000 | 97 | **1,019,000** | **100** |
| 55-64 | 10,000 | 2 | 529,000 | 98 | **539,000** | **100** |
| 65-74 | 5,000 | 2 | 308,000 | 98 | **313,000** | **100** |
| >74 | 1,000 | 1 | 213,000 | 99 | **214,000** | **100** |
| **Total** | **245,000** | **3** | **7,125,000** | **97** | **7,370,000** | **100** |

*Blood alcohol concentration (BAC) of 0.01 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.
**Police-reported alcohol involvement.

**Figure 26**
**Percent of Driver Alcohol Involvement for Fatal and Injury Crashes**




*For fatal crashes, alcohol involvement is a blood alcohol concentration (BAC) of 0.01 grams per deciliter (g/dl) or greater.
**For injury crashes, alcohol involvement is police-reported alcohol involvement.

## Table 78
## Drivers Killed or Injured, by Time of Day, Day of Week, Age, Alcohol Involvement, and Crash Type

| Time of Day and Day of Week | Killed* | | | | Injured** | | | |
|---|---|---|---|---|---|---|---|---|
| | Under 21 | | 21 and Older | | Under 21 | | 21 and Older | |
| | Number Killed | Percent with Alcohol Involvement | Number Killed | Percent with Alcohol Involvement | Number Injured | Percent with Alcohol Involvement | Number Injured | Percent with Alcohol Involvement |
| **Single-Vehicle Crashes** | | | | | | | | |
| **Daytime** | **745** | **14** | **4,147** | **27** | **56,000** | **4** | **156,000** | **9** |
| Weekday | 462 | 9 | 2,766 | 21 | 39,000 | 2 | 106,000 | 7 |
| Weekend | 283 | 23 | 1,381 | 38 | 17,000 | 6 | 50,000 | 13 |
| **Nighttime** | **1,289** | **54** | **5,686** | **71** | **62,000** | **21** | **148,000** | **38** |
| Weekday | 560 | 48 | 2,578 | 65 | 29,000 | 19 | 71,000 | 32 |
| Weekend | 729 | 58 | 3,108 | 75 | 33,000 | 24 | 77,000 | 43 |
| **Multiple-Vehicle Crashes** | | | | | | | | |
| **Daytime** | **900** | **6** | **7,533** | **10** | **174,000** | **1** | **1,070,000** | **1** |
| Weekday | 673 | 4 | 5,728 | 8 | 141,000 | *** | 869,000 | 1 |
| Weekend | 227 | 12 | 1,804 | 15 | 32,000 | 3 | 201,000 | 2 |
| **Nighttime** | **663** | **26** | **3,974** | **39** | **75,000** | **3** | **321,000** | **7** |
| Weekday | 296 | 21 | 1,939 | 33 | 36,000 | 2 | 173,000 | 5 |
| Weekend | 367 | 31 | 2,035 | 44 | 38,000 | 3 | 148,000 | 10 |

*Blood alcohol concentration (BAC) of 0.01 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.
**Police-reported alcohol involvement.
***Less than 0.5 percent.

## Table 79
## Drivers Killed in Crashes, by Age and Driver's Blood Alcohol Concentration (BAC)

| Age (Years) | Driver's BAC | | | | | | | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 0.00 | | 0.01-0.09 | | 0.10 or Higher | | 0.01 and Higher | | | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| <16 | 133 | 90 | 8 | 6 | 6 | 4 | 15 | 10 | **148** | **100** |
| 16-20 | 2,455 | 71 | 275 | 8 | 750 | 22 | 1,026 | 29 | **3,481** | **100** |
| 21-24 | 1,257 | 50 | 266 | 10 | 1,015 | 40 | 1,281 | 50 | **2,538** | **100** |
| 25-34 | 2,468 | 52 | 355 | 7 | 1,940 | 41 | 2,296 | 48 | **4,764** | **100** |
| 35-44 | 2,537 | 55 | 294 | 6 | 1,764 | 38 | 2,058 | 45 | **4,595** | **100** |
| 45-54 | 2,236 | 67 | 207 | 6 | 872 | 26 | 1,079 | 33 | **3,315** | **100** |
| 55-64 | 1,665 | 79 | 103 | 5 | 353 | 17 | 456 | 21 | **2,121** | **100** |
| 65-74 | 1,635 | 87 | 71 | 4 | 173 | 9 | 244 | 13 | **1,879** | **100** |
| >74 | 2,215 | 94 | 53 | 2 | 79 | 3 | 132 | 6 | **2,347** | **100** |
| Unknown | 13 | 61 | 2 | 9 | 7 | 30 | 9 | 39 | **22** | **100** |
| **Total** | **16,616** | **66** | **1,635** | **6** | **6,960** | **28** | **8,594** | **34** | **25,210** | **100** |

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

**Figure 27**
**Alcohol Involvement (BAC ≥ 0.01) for Drivers Killed, by Driver Age, Crash Type, Time of Day, and Day of Week**

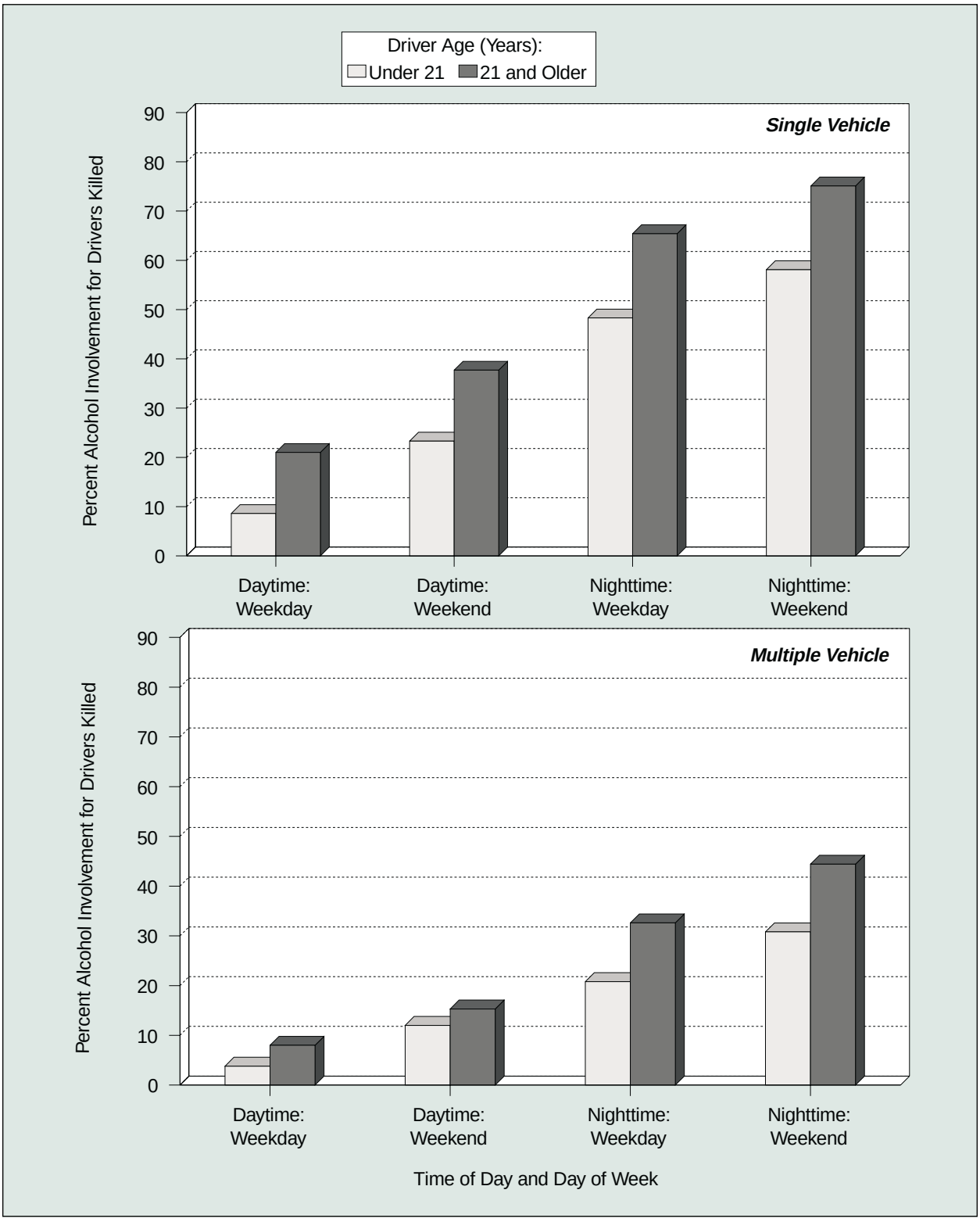


**Table 80**
**Drivers Involved in Crashes by Vehicle Type, Alcohol Involvement, and Crash Severity**

| Vehicle Type | Alcohol Involvement | | | | Total | |
|---|---|---|---|---|---|---|
| | Yes | | No | | | |
| | Number | Percent | Number | Percent | Number | Percent |
| **Drivers in Fatal Crashes*** | | | | | | |
| Passenger Car | 6,514 | 23 | 21,292 | 77 | **27,806** | **100** |
| Light Truck | 5,097 | 26 | 14,704 | 74 | **19,801** | **100** |
| Large Truck | 104 | 2 | 4,743 | 98 | **4,847** | **100** |
| Motorcycle | 951 | 38 | 1,564 | 62 | **2,515** | **100** |
| Bus | 2 | 1 | 315 | 99 | **317** | **100** |
| Other/Unknown | 378 | 36 | 688 | 64 | **1,066** | **100** |
| **Total** | **13,047** | **23** | **43,305** | **77** | **56,352** | **100** |
| **Drivers in Injury Crashes**** | | | | | | |
| Passenger Car | 120,000 | 5 | 2,314,000 | 95 | **2,434,000** | **100** |
| Light Truck | 69,000 | 6 | 1,095,000 | 94 | **1,164,000** | **100** |
| Large Truck | 1,000 | 1 | 99,000 | 99 | **100,000** | **100** |
| Motorcycle | 4,000 | 9 | 42,000 | 91 | **46,000** | **100** |
| Bus | *** | *** | 14,000 | 100 | **14,000** | **100** |
| Other/Unknown | 1,000 | 7 | 8,000 | 93 | **9,000** | **100** |
| **Total** | **194,000** | **5** | **3,573,000** | **95** | **3,767,000** | **100** |
| **Drivers in Property-Damage-Only Crashes**** | | | | | | |
| Passenger Car | 156,000 | 4 | 4,295,000 | 96 | **4,451,000** | **100** |
| Light Truck | 84,000 | 3 | 2,397,000 | 97 | **2,481,000** | **100** |
| Large Truck | 4,000 | 1 | 363,000 | 99 | **366,000** | **100** |
| Motorcycle | *** | 4 | 10,000 | 96 | **10,000** | **100** |
| Bus | *** | *** | 47,000 | 100 | **47,000** | **100** |
| Other/Unknown | *** | 2 | 14,000 | 98 | **14,000** | **100** |
| **Total** | **245,000** | **3** | **7,125,000** | **97** | **7,370,000** | **100** |

*Blood alcohol concentration (BAC) of 0.01 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.
**Police-reported alcohol involvement.
***Less than 500 or less than 0.5 percent.

## Table 81
## Persons Killed, by Age and Highest Blood Alcohol Concentration (BAC) in the Crash

| Age (Years) | Highest BAC in Crash | | | | | | | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 0.00 | | 0.01-0.09 | | 0.10 or Higher | | 0.01 and Higher | | | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| <5 | 578 | 79 | 56 | 8 | 99 | 13 | 155 | 21 | **733** | **100** |
| 5-9 | 643 | 81 | 58 | 7 | 93 | 12 | 152 | 19 | **795** | **100** |
| 10-15 | 1,085 | 77 | 112 | 8 | 207 | 15 | 318 | 23 | **1,403** | **100** |
| 16-20 | 3,792 | 64 | 629 | 11 | 1,496 | 25 | 2,125 | 36 | **5,917** | **100** |
| 21-24 | 1,777 | 46 | 455 | 12 | 1,652 | 43 | 2,107 | 54 | **3,884** | **100** |
| 25-34 | 3,214 | 47 | 651 | 10 | 2,956 | 43 | 3,607 | 53 | **6,821** | **100** |
| 35-44 | 3,304 | 49 | 554 | 8 | 2,861 | 43 | 3,415 | 51 | **6,719** | **100** |
| 45-54 | 2,982 | 61 | 375 | 8 | 1,551 | 32 | 1,926 | 39 | **4,908** | **100** |
| 55-64 | 2,292 | 71 | 228 | 7 | 714 | 22 | 943 | 29 | **3,235** | **100** |
| 65-74 | 2,473 | 81 | 172 | 6 | 418 | 14 | 590 | 19 | **3,063** | **100** |
| >74 | 3,625 | 90 | 165 | 4 | 235 | 6 | 400 | 10 | **4,025** | **100** |
| Unknown | 60 | 55 | 10 | 9 | 39 | 36 | 48 | 45 | **108** | **100** |
| **Total** | **25,825** | **62** | **3,466** | **8** | **12,321** | **30** | **15,786** | **38** | **41,611** | **100** |

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

## Table 82
## Pedestrians Killed, by Pedestrian's and Driver's Blood Alcohol Concentration (BAC)

| Pedestrian's BAC | Driver's BAC | | | | | | Total | |
|---|---|---|---|---|---|---|---|---|
| | 0.00 | | 0.01-0.09 | | 0.10 or Higher | | | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| 0.00 | 2,594 | 54 | 144 | 3 | 276 | 6 | **3,015** | **62** |
| 0.01-0.09 | 229 | 5 | 27 | 1 | 57 | 1 | **313** | **6** |
| 0.10 or Higher | 1,128 | 23 | 130 | 3 | 249 | 5 | **1,507** | **31** |
| **Total*** | **3,951** | **82** | **301** | **6** | **583** | **12** | **4,835** | **100** |

*Does not include pedestrians 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.

## Table 83
## 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 | 15,167 | 54.5 | 9,773 | 35.1 | 2,866 | 10.3 | **27,806** | **100.0** |
| Light Truck | 10,256 | 51.8 | 7,870 | 39.7 | 1,675 | 8.5 | **19,801** | **100.0** |
| Large Truck | 3,398 | 70.1 | 909 | 18.8 | 540 | 11.1 | **4,847** | **100.0** |
| Bus | 234 | 73.8 | 45 | 14.2 | 38 | 12.0 | **317** | **100.0** |
| Other/Unknown | 178 | 16.7 | 392 | 36.8 | 496 | 46.5 | **1,066** | **100.0** |
| **Total*** | **29,233** | **54.3** | **18,989** | **35.3** | **5,615** | **10.4** | 53,837 | **100.0** |
| **Drivers in Injury Crashes** | | | | | | | | |
| Passenger Car | 1,961,000 | 80.6 | 193,000 | 7.9 | 281,000 | 11.5 | **2,434,000** | **100.0** |
| Light Truck | 936,000 | 80.4 | 100,000 | 8.6 | 128,000 | 11.0 | **1,164,000** | **100.0** |
| Large Truck | 71,000 | 70.5 | 9,000 | 9.3 | 20,000 | 20.2 | **100,000** | **100.0** |
| Bus | 11,000 | 77.5 | 1,000 | 7.8 | 2,000 | 14.7 | **14,000** | **100.0** |
| Other/Unknown | 3,000 | 33.8 | 5,000 | 56.0 | 1,000 | 10.1 | **9,000** | **100.0** |
| **Total*** | **2,981,000** | **80.1** | **308,000** | **8.3** | **432,000** | **11.6** | 3,721,000 | **100.0** |
| **Drivers in Property-Damage-Only Crashes** | | | | | | | | |
| Passenger Car | 3,599,000 | 80.9 | 141,000 | 3.2 | 711,000 | 16.0 | **4,451,000** | **100.0** |
| Light Truck | 2,039,000 | 82.2 | 95,000 | 3.8 | 348,000 | 14.0 | **2,481,000** | **100.0** |
| Large Truck | 236,000 | 64.3 | 18,000 | 5.0 | 112,000 | 30.7 | **366,000** | **100.0** |
| Bus | 36,000 | 75.6 | 2,000 | 4.2 | 10,000 | 20.2 | **47,000** | **100.0** |
| Other/Unknown | 7,000 | 50.5 | 4,000 | 25.4 | 3,000 | 24.1 | **14,000** | **100.0** |
| **Total*** | **5,916,000** | **80.4** | **260,000** | **3.5** | **1,184,000** | **16.1** | 7,360,000 | **100.0** |
| **Drivers in All Crashes** | | | | | | | | |
| Passenger Car | 5,575,000 | 80.6 | 344,000 | 5.0 | 994,000 | 14.4 | **6,913,000** | **100.0** |
| Light Truck | 2,985,000 | 81.4 | 203,000 | 5.5 | 478,000 | 13.0 | **3,665,000** | **100.0** |
| Large Truck | 310,000 | 65.7 | 28,000 | 6.0 | 133,000 | 28.3 | **471,000** | **100.0** |
| Bus | 47,000 | 76.0 | 3,000 | 5.1 | 12,000 | 18.9 | **62,000** | **100.0** |
| Other/Unknown | 10,000 | 42.7 | 9,000 | 37.4 | 5,000 | 19.9 | **24,000** | **100.0** |
| **Total*** | **8,926,000** | **80.2** | **587,000** | **5.3** | **1,621,000** | **14.6** | 11,135,000 | **100.0** |

*Excludes motorcycle drivers.
Note: Restraint use is determined by police and may be overreported for survivors.

**Table 84**
**Passenger Car, Light Truck, and Large 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 | 241 | 43.6 | 272 | 49.2 | 40 | 7.2 | **553** | **100.0** |
| 5-9 | 179 | 36.2 | 273 | 55.2 | 43 | 8.7 | **495** | **100.0** |
| 10-15 | 252 | 26.0 | 644 | 66.5 | 73 | 7.5 | **969** | **100.0** |
| 16-20 | 1,535 | 28.9 | 3,320 | 62.5 | 453 | 8.5 | **5,308** | **100.0** |
| 21-24 | 834 | 25.6 | 2,125 | 65.1 | 303 | 9.3 | **3,262** | **100.0** |
| 25-34 | 1,381 | 25.8 | 3,523 | 65.8 | 450 | 8.4 | **5,354** | **100.0** |
| 35-44 | 1,449 | 29.4 | 3,073 | 62.4 | 405 | 8.2 | **4,927** | **100.0** |
| 45-54 | 1,304 | 35.7 | 2,048 | 56.1 | 300 | 8.2 | **3,652** | **100.0** |
| 55-64 | 1,051 | 42.4 | 1,189 | 47.9 | 240 | 9.7 | **2,480** | **100.0** |
| 65-74 | 1,219 | 49.4 | 1,042 | 42.2 | 209 | 8.5 | **2,470** | **100.0** |
| >74 | 1,830 | 55.5 | 1,206 | 36.6 | 260 | 7.9 | **3,296** | **100.0** |
| Unknown | 14 | 26.4 | 26 | 49.1 | 13 | 24.5 | **53** | **100.0** |
| **Total** | **11,289** | **34.4** | **18,741** | **57.1** | **2,789** | **8.5** | **32,819** | **100.0** |
| **Occupants Injured** | | | | | | | | |
| <5 | 55,000 | 76.2 | 11,000 | 15.0 | 6,000 | 8.8 | **72,000** | **100.0** |
| 5-9 | 69,000 | 75.5 | 14,000 | 15.7 | 8,000 | 8.8 | **92,000** | **100.0** |
| 10-15 | 101,000 | 69.2 | 36,000 | 25.0 | 9,000 | 5.8 | **146,000** | **100.0** |
| 16-20 | 393,000 | 71.4 | 113,000 | 20.5 | 44,000 | 8.1 | **550,000** | **100.0** |
| 21-24 | 228,000 | 76.3 | 51,000 | 17.1 | 20,000 | 6.6 | **299,000** | **100.0** |
| 25-34 | 457,000 | 77.3 | 78,000 | 13.2 | 56,000 | 9.5 | **591,000** | **100.0** |
| 35-44 | 396,000 | 80.6 | 55,000 | 11.3 | 40,000 | 8.1 | **491,000** | **100.0** |
| 45-54 | 298,000 | 83.2 | 37,000 | 10.3 | 23,000 | 6.5 | **358,000** | **100.0** |
| 55-64 | 156,000 | 85.3 | 14,000 | 7.6 | 13,000 | 7.1 | **183,000** | **100.0** |
| 65-74 | 114,000 | 83.2 | 9,000 | 6.9 | 14,000 | 9.9 | **137,000** | **100.0** |
| >74 | 82,000 | 82.6 | 9,000 | 9.5 | 8,000 | 7.9 | **99,000** | **100.0** |
| **Total** | **2,348,000** | **77.8** | **429,000** | **14.2** | **240,000** | **8.0** | **3,017,000** | **100.0** |

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

**Table 85**
**Passenger Car, Light Truck, or Large 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 | 1,593 | 74.3 | 454 | 21.2 | 98 | 4.6 | **2,145** | **100.0** |
| 5-9 | 1,258 | 59.4 | 676 | 31.9 | 183 | 8.6 | **2,117** | **100.0** |
| 10-15 | 1,707 | 49.5 | 1,464 | 42.5 | 276 | 8.0 | **3,447** | **100.0** |
| 16-20 | 4,738 | 49.4 | 3,997 | 41.7 | 847 | 8.8 | **9,582** | **100.0** |
| 21-24 | 2,772 | 51.5 | 2,070 | 38.5 | 538 | 10.0 | **5,380** | **100.0** |
| 25-34 | 6,215 | 61.5 | 2,924 | 28.9 | 973 | 9.6 | **10,112** | **100.0** |
| 35-44 | 5,745 | 67.7 | 1,964 | 23.2 | 774 | 9.1 | **8,483** | **100.0** |
| 45-54 | 4,107 | 73.2 | 1,041 | 18.5 | 465 | 8.3 | **5,613** | **100.0** |
| 55-64 | 2,502 | 76.1 | 534 | 16.3 | 250 | 7.6 | **3,286** | **100.0** |
| 65-74 | 1,595 | 78.6 | 300 | 14.8 | 134 | 6.6 | **2,029** | **100.0** |
| >74 | 1,205 | 75.1 | 267 | 16.6 | 133 | 8.3 | **1,605** | **100.0** |
| Unknown | 332 | 22.0 | 340 | 22.5 | 838 | 55.5 | **1,510** | **100.0** |
| **Total** | **33,769** | **61.1** | **16,031** | **29.0** | **5,509** | **10.0** | **55,309** | **100.0** |

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

**Table 86**
**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** | **7,877** | **42.1** | **9,178** | **49.1** | **1,634** | **8.7** | **18,689** | **100.0** |
| Left | 5,902 | 41.7 | 7,002 | 49.4 | 1,258 | 8.9 | **14,162** | **100.0** |
| Middle | 5 | 8.2 | 49 | 80.3 | 7 | 11.5 | **61** | **100.0** |
| Right | 1,970 | 44.2 | 2,116 | 47.5 | 367 | 8.2 | **4,453** | **100.0** |
| Other/Unknown | 0 | 0.0 | 11 | 84.6 | 2 | 15.4 | **13** | **100.0** |
| **Second Seat** | **466** | **24.5** | **1,264** | **66.5** | **170** | **8.9** | **1,900** | **100.0** |
| Left | 196 | 26.9 | 474 | 65.1 | 58 | 8.0 | **728** | **100.0** |
| Middle | 54 | 18.9 | 212 | 74.1 | 20 | 7.0 | **286** | **100.0** |
| Right | 210 | 25.3 | 534 | 64.3 | 87 | 10.5 | **831** | **100.0** |
| Other/Unknown | 6 | 10.9 | 44 | 80.0 | 5 | 9.1 | **55** | **100.0** |
| **Other** | **1** | **2.6** | **34** | **87.2** | **4** | **10.3** | **39** | **100.0** |
| **Unknown** | **8** | **4.2** | **117** | **61.6** | **65** | **34.2** | **190** | **100.0** |
| **Total** | **8,352** | **40.1** | **10,593** | **50.9** | **1,873** | **9.0** | **20,818** | **100.0** |
| **Passenger Car Occupants Injured** | | | | | | | | |
| **Front Seat** | **1,534,000** | **80.3** | **225,000** | **11.8** | **152,000** | **7.9** | **1,912,000** | **100.0** |
| Left | 1,174,000 | 81.3 | 152,000 | 10.6 | 118,000 | 8.2 | **1,444,000** | **100.0** |
| Middle | 9,000 | 67.1 | 3,000 | 23.9 | 1,000 | 8.9 | **13,000** | **100.0** |
| Right | 352,000 | 77.4 | 70,000 | 15.4 | 33,000 | 7.2 | **454,000** | **100.0** |
| **Second Seat** | **147,000** | **66.3** | **55,000** | **25.0** | **19,000** | **8.7** | **221,000** | **100.0** |
| Left | 54,000 | 67.5 | 19,000 | 23.0 | 8,000 | 9.5 | **80,000** | **100.0** |
| Middle | 19,000 | 60.7 | 9,000 | 29.7 | 3,000 | 9.6 | **32,000** | **100.0** |
| Right | 73,000 | 67.1 | 27,000 | 25.0 | 9,000 | 7.9 | **109,000** | **100.0** |
| **Other** | **3,000** | **57.4** | **2,000** | **39.8** | ***** | **2.7** | **5,000** | **100.0** |
| **Total** | **1,684,000** | **78.8** | **282,000** | **13.2** | **171,000** | **8.0** | **2,138,000** | **100.0** |

*Less than 500.
Note: Restraint use is determined by police and may be overreported for survivors.

## Table 87
## 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** | **2,533** | **25.6** | **6,693** | **67.7** | **664** | **6.7** | **9,890** | **100.0** |
| Left | 1,933 | 24.9 | 5,289 | 68.1 | 543 | 7.0 | **7,765** | **100.0** |
| Middle | 9 | 6.4 | 129 | 91.5 | 3 | 2.1 | **141** | **100.0** |
| Right | 591 | 30.0 | 1,266 | 64.2 | 116 | 5.9 | **1,973** | **100.0** |
| Other/Unknown | 0 | 0.0 | 9 | 81.8 | 2 | 18.2 | **11** | **100.0** |
| **Second Seat** | **177** | **22.3** | **552** | **69.4** | **66** | **8.3** | **795** | **100.0** |
| Left | 72 | 25.8 | 177 | 63.4 | 30 | 10.8 | **279** | **100.0** |
| Middle | 25 | 17.6 | 110 | 77.5 | 7 | 4.9 | **142** | **100.0** |
| Right | 75 | 22.7 | 228 | 69.1 | 27 | 8.2 | **330** | **100.0** |
| Other/Unknown | 5 | 11.4 | 37 | 84.1 | 2 | 4.5 | **44** | **100.0** |
| **Other** | **31** | **7.3** | **381** | **89.6** | **13** | **3.1** | **425** | **100.0** |
| **Unknown** | **8** | **6.0** | **98** | **73.7** | **27** | **20.3** | **133** | **100.0** |
| **Total** | **2,749** | **24.5** | **7,724** | **68.7** | **770** | **6.8** | **11,243** | **100.0** |
| **Light Truck Occupants Injured** | | | | | | | | |
| **Front Seat** | **589,000** | **77.0** | **115,000** | **15.1** | **60,000** | **7.9** | **764,000** | **100.0** |
| Left | 442,000 | 78.2 | 76,000 | 13.5 | 47,000 | 8.3 | **565,000** | **100.0** |
| Middle | 11,000 | 63.2 | 6,000 | 33.3 | 1,000 | 3.5 | **18,000** | **100.0** |
| Right | 135,000 | 74.7 | 33,000 | 18.3 | 13,000 | 7.1 | **181,000** | **100.0** |
| **Second Seat** | **50,000** | **74.7** | **13,000** | **18.9** | **4,000** | **6.4** | **67,000** | **100.0** |
| Left | 19,000 | 78.3 | 3,000 | 14.3 | 2,000 | 7.4 | **24,000** | **100.0** |
| Middle | 9,000 | 71.4 | 3,000 | 21.4 | 1,000 | 7.3 | **12,000** | **100.0** |
| Right | 23,000 | 73.2 | 7,000 | 21.5 | 2,000 | 5.3 | **31,000** | **100.0** |
| **Other** | **5,000** | **32.5** | **10,000** | **61.9** | **1,000** | **5.6** | **15,000** | **100.0** |
| **Total** | **644,000** | **76.0** | **138,000** | **16.2** | **65,000** | **7.7** | **847,000** | **100.0** |

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

**Table 88**
**Passenger Car and Light Truck Occupants Killed and Injured, by Restraint Use and Type of Restraint**

| Restraint Use and Type of Restraint | Vehicle Type | | | |
|---|---|---|---|---|
| | Passenger Car | | Light Truck | |
| | Number | Percent | Number | Percent |
| **Occupants Killed** | | | | |
| Restraint Used | | | | |
| Lap/Shoulder Belt | 5,299 | 25.5 | 1,912 | 17.0 |
| Lap Belt | 256 | 1.2 | 128 | 1.1 |
| Shoulder Belt | 245 | 1.2 | 12 | 0.1 |
| Child Safety Seat | 139 | 0.7 | 49 | 0.4 |
| Type Unknown | 471 | 2.3 | 123 | 1.1 |
| Restraint Used, Airbag Deployed | 1,885 | 9.1 | 504 | 4.5 |
| Safety Belt Used Improperly | 57 | 0.3 | 21 | 0.2 |
| *Subtotal* | *8,352* | *40.1* | *2,749* | *24.5* |
| No Restraint Used | 8,835 | 42.4 | 6,947 | 61.8 |
| No Restraint Used, Airbag Deployed | 1,731 | 8.3 | 758 | 6.7 |
| Child Safety Seat Used Improperly | 27 | 0.1 | 19 | 0.2 |
| Restraint Use Unknown | 1,873 | 9.0 | 770 | 6.8 |
| **Total** | **20,818** | **100.0** | **11,243** | **100.0** |
| **Occupants Injured** | | | | |
| Restraint Used | | | | |
| Lap/Shoulder Belt | 1,222,000 | 57.1 | 496,000 | 58.5 |
| Lap Belt | 66,000 | 3.1 | 28,000 | 3.3 |
| Shoulder Belt | 17,000 | 0.8 | 2,000 | 0.2 |
| Child Safety Seat | 25,000 | 1.2 | 11,000 | 1.3 |
| Type Unknown | 134,000 | 6.3 | 50,000 | 5.9 |
| Restraint Used, Airbag Deployed | 219,000 | 10.2 | 57,000 | 6.8 |
| *Subtotal* | *1,684,000* | *78.8* | *644,000* | *76.0* |
| No Restraint Used | 262,000 | 12.2 | 129,000 | 15.2 |
| No Restraint Used, Airbag Deployed | 21,000 | 1.0 | 9,000 | 1.0 |
| Restraint Use Unknown | 171,000 | 8.0 | 65,000 | 7.7 |
| **Total** | **2,138,000** | **100.0** | **847,000** | **100.0** |

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

**Table 89**
**Motorcycle Occupants 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 |
| **Motorcycle Occupants Killed** | | | | | | |
| Midnight to 3 am | 82 | 7.1 | 191 | 14.6 | **273** | **11.0** |
| 3 am to 6 am | 28 | 2.4 | 46 | 3.5 | **74** | **3.0** |
| 6 am to 9 am | 76 | 6.6 | 31 | 2.4 | **107** | **4.3** |
| 9 am to Noon | 91 | 7.9 | 87 | 6.7 | **179** | **7.2** |
| Noon to 3 pm | 168 | 14.5 | 177 | 13.5 | **345** | **14.0** |
| 3 pm to 6 pm | 308 | 26.6 | 230 | 17.6 | **538** | **21.8** |
| 6 pm to 9 pm | 230 | 19.9 | 285 | 21.8 | **515** | **20.8** |
| 9 pm to Midnight | 173 | 14.9 | 246 | 18.8 | **419** | **16.9** |
| Unknown | 2 | 0.2 | 14 | 1.1 | **22** | **0.9** |
| **Total** | **1,158** | **100.0** | **1,307** | **100.0** | ***2,472** | **100.0** |
| **Motorcycle Occupants Injured** | | | | | | |
| Midnight to 3 am | 1,000 | 2.4 | 2,000 | 6.7 | **2,000** | **4.4** |
| 3 am to 6 am | 1,000 | 2.1 | ** | 1.0 | **1,000** | **1.6** |
| 6 am to 9 am | 2,000 | 9.0 | 1,000 | 2.5 | **3,000** | **6.0** |
| 9 am to Noon | 3,000 | 11.0 | 2,000 | 8.5 | **5,000** | **9.8** |
| Noon to 3 pm | 5,000 | 17.6 | 5,000 | 21.4 | **10,000** | **19.4** |
| 3 pm to 6 pm | 7,000 | 27.3 | 6,000 | 23.5 | **13,000** | **25.5** |
| 6 pm to 9 pm | 5,000 | 20.0 | 6,000 | 23.8 | **11,000** | **21.8** |
| 9 pm to Midnight | 3,000 | 10.6 | 3,000 | 12.7 | **6,000** | **11.6** |
| **Total** | **26,000** | **100.0** | **24,000** | **100.0** | **50,000** | **100.0** |

*Includes 7 motorcycle operators killed on unknown day of week.
**Less than 500.

**Figure 28**
**Average Number of Motorcyclists Killed per Hour by Time of Day and Day of Week**

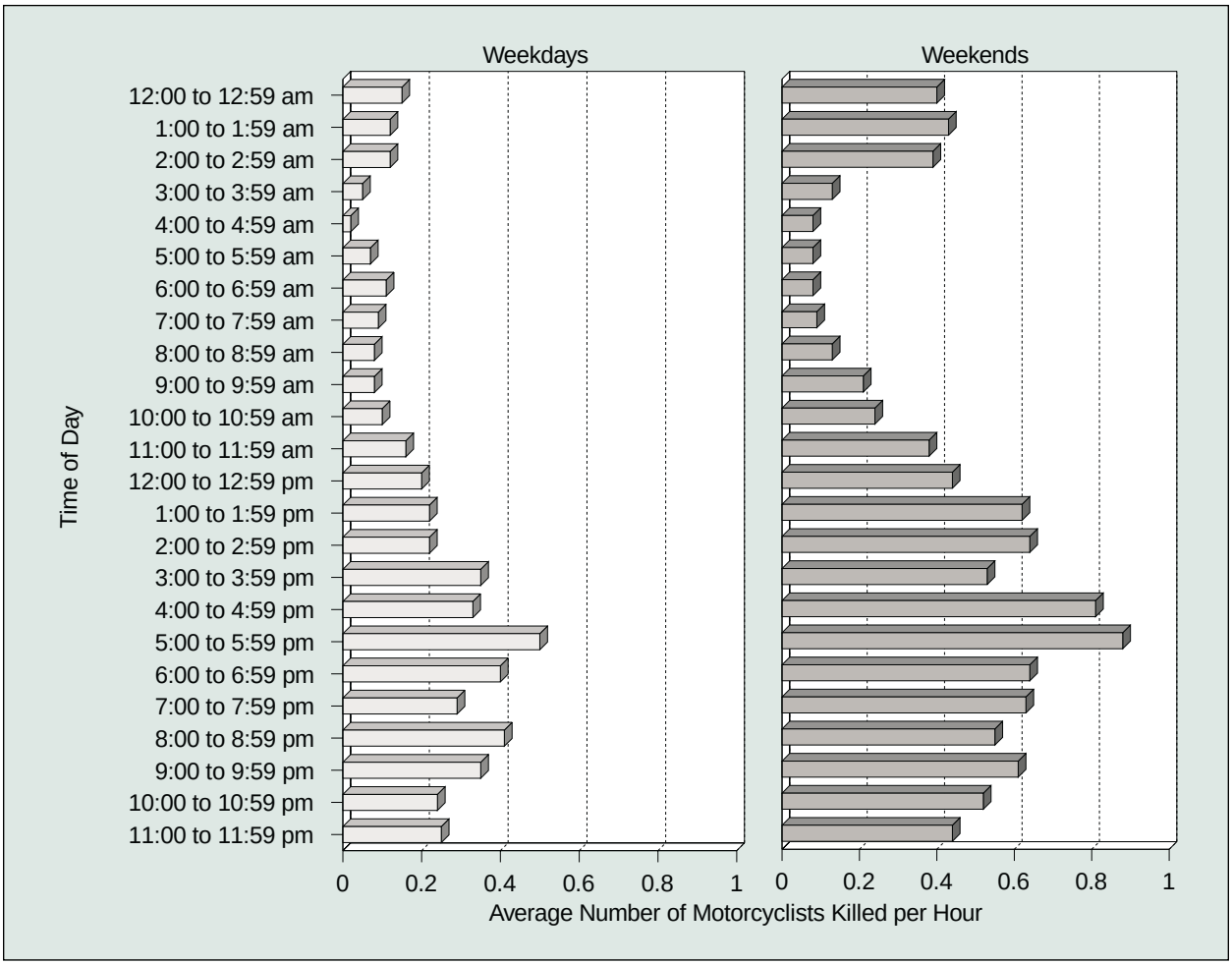


**Table 90**
**Motorcyclists Killed, by Person Type and Helmet Use**

| Person Type | Helmet Use | | | | | | Total | |
|---|---|---|---|---|---|---|---|---|
| | Used | | Not Used | | Unknown | | | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Operators | 1,211 | 53.2 | 981 | 43.1 | 84 | 3.7 | **2,276** | **100.0** |
| Passengers | 89 | 45.4 | 101 | 51.5 | 6 | 3.1 | **196** | **100.0** |
| **Total** | **1,300** | **52.6** | **1,082** | **43.8** | **90** | **3.6** | **2,472** | **100.0** |

**Table 91**
**Motorcycle Operators 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 | 14 | 3 | 0 | 0 | 0 | **17** |
| 16-20 | 18 | 1 | 52 | 101 | 2 | **174** |
| 21-24 | 10 | 0 | 115 | 176 | 8 | **309** |
| 25-34 | 15 | 3 | 235 | 433 | 9 | **695** |
| 35-44 | 17 | 3 | 133 | 505 | 4 | **662** |
| 45-54 | 4 | 2 | 46 | 363 | 5 | **420** |
| 55-64 | 3 | 1 | 20 | 146 | 3 | **173** |
| 65-74 | 2 | 1 | 2 | 41 | 1 | **47** |
| >74 | 1 | 2 | 1 | 11 | 0 | **15** |
| Unknown | 0 | 0 | 0 | 1 | 2 | **3** |
| **Total** | **84** | **16** | **604** | **1,777** | **34** | **2,515** |

**Table 92**
**Pedestrians Killed in School Bus Related Crashes, by Age and Striking Vehicle**

| Age (Years) | Vehicle Type | | Total |
|---|---|---|---|
| | Number | Percent | |
| <5 | 0 | 0 | **0** |
| 5-9 | 10 | 3 | **13** |
| 10-15 | 2 | 2 | **4** |
| >15 | 7 | 1 | **8** |
| **Total** | **19** | **6** | **25** |

**Table 93**
**Persons Killed or Injured in School Bus Related Crashes by Person Type**

| Person Type | Killed | | Injured | |
|---|---|---|---|---|
| | Number | Percent | Number | Percent |
| School Bus Driver | 6 | 3.7 | 1,000 | 7.0 |
| School Bus Passenger | 4 | 2.4 | 8,000 | 45.9 |
| Pedestrian | 25 | 15.2 | * | 2.2 |
| Pedalcyclist | 3 | 1.8 | * | 1.9 |
| Occupant of Other Vehicle | 126 | 76.8 | 8,000 | 43.0 |
| **Total** | **164** | **100.0** | **18,000** | **100.0** |

*Less than 500.

**Table 94**
**Pedestrians Killed or Injured, by Age and Location**

| Age (Years) | Location | | | | Total | |
|---|---|---|---|---|---|---|
| | Intersection | | Nonintersection | | | |
| | Number | Percent | Number | Percent | Number | Percent |
| **Pedestrians Killed** | | | | | | |
| <5 | 16 | 9.8 | 147 | 90.2 | **163** | **100.0** |
| 5-9 | 27 | 13.9 | 167 | 86.1 | **194** | **100.0** |
| 10-15 | 50 | 23.8 | 160 | 76.2 | **210** | **100.0** |
| 16-20 | 36 | 13.2 | 236 | 86.4 | **273** | **100.0** |
| 21-24 | 22 | 9.5 | 209 | 90.5 | **231** | **100.0** |
| 25-34 | 80 | 12.9 | 538 | 86.8 | **620** | **100.0** |
| 35-44 | 136 | 15.0 | 759 | 83.9 | **905** | **100.0** |
| 45-54 | 138 | 19.9 | 550 | 79.5 | **692** | **100.0** |
| 55-64 | 131 | 27.1 | 349 | 72.3 | **483** | **100.0** |
| 65-74 | 138 | 30.9 | 306 | 68.5 | **447** | **100.0** |
| >74 | 225 | 35.3 | 412 | 64.7 | **637** | **100.0** |
| Unknown | 6 | 11.8 | 44 | 86.3 | **51** | **100.0** |
| **Total** | **1,005** | **20.5** | **3,877** | **79.0** | ***4,906** | **100.0** |
| **Pedestrians Injured** | | | | | | |
| <5 | 1,000 | 18.8 | 2,000 | 62.1 | **3,000** | **100.0** |
| 5-9 | 4,000 | 36.1 | 6,000 | 57.5 | **10,000** | **100.0** |
| 10-15 | 7,000 | 52.4 | 7,000 | 47.1 | **14,000** | **100.0** |
| 16-20 | 3,000 | 37.0 | 4,000 | 54.8 | **8,000** | **100.0** |
| 21-24 | 2,000 | 47.9 | 2,000 | 40.2 | **4,000** | **100.0** |
| 25-34 | 6,000 | 43.9 | 7,000 | 49.5 | **14,000** | **100.0** |
| 35-44 | 5,000 | 48.1 | 4,000 | 40.8 | **11,000** | **100.0** |
| 45-54 | 4,000 | 45.6 | 5,000 | 48.7 | **9,000** | **100.0** |
| 55-64 | 3,000 | 53.0 | 2,000 | 38.8 | **5,000** | **100.0** |
| 65-74 | 3,000 | 57.7 | 1,000 | 29.5 | **4,000** | **100.0** |
| >74 | 2,000 | 67.5 | 1,000 | 27.3 | **3,000** | **100.0** |
| **Total** | **39,000** | **45.8** | **40,000** | **46.9** | ****85,000** | **100.0** |

*Includes 24 pedestrians killed at other or unknown locations.
**Includes 6,000 pedestrians injured at other or unknown locations.

## Table 95
## 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 | 102 | 9,683 | 1.05 | 61 | 9,259 | 0.66 | **163** | **18,942** | **0.86** |
| 5-9 | 115 | 10,208 | 1.13 | 79 | 9,739 | 0.81 | **194** | **19,947** | **0.97** |
| 10-15 | 131 | 11,974 | 1.09 | 79 | 11,395 | 0.69 | **210** | **23,369** | **0.90** |
| 16-20 | 201 | 10,187 | 1.97 | 72 | 9,638 | 0.75 | **273** | **19,826** | **1.38** |
| 21-24 | 178 | 7,185 | 2.48 | 53 | 6,943 | 0.76 | **231** | **14,128** | **1.64** |
| 25-34 | 472 | 18,826 | 2.51 | 148 | 19,110 | 0.77 | **620** | **37,936** | **1.63** |
| 35-44 | 667 | 22,254 | 3.00 | 238 | 22,558 | 1.06 | **905** | **44,813** | **2.02** |
| 45-54 | 547 | 17,499 | 3.13 | 145 | 18,303 | 0.79 | **692** | **35,802** | **1.93** |
| 55-64 | 336 | 11,150 | 3.01 | 147 | 12,239 | 1.20 | **483** | **23,389** | **2.07** |
| 65-74 | 292 | 8,199 | 3.56 | 155 | 10,020 | 1.55 | **447** | **18,218** | **2.45** |
| >74 | 366 | 6,111 | 5.99 | 271 | 10,210 | 2.65 | **637** | **16,322** | **3.90** |
| Unknown | 40 | * | * | 10 | * | * | **51** | ***** | ***** |
| **Total** | **3,447** | **133,277** | **2.59** | **1,458** | **139,414** | **1.05** | ****4,906** | **272,691** | **1.80** |

| Age (Years) | Male | | | Female | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|
| | Injured | Population (Thousands) | Rate | Injured | Population (Thousands) | Rate | Injured | Population (Thousands) | Rate |
| <5 | 2,000 | 9,683 | 20 | 1,000 | 9,259 | 15 | **3,000** | **18,942** | **18** |
| 5-9 | 6,000 | 10,208 | 62 | 4,000 | 9,739 | 39 | **10,000** | **19,947** | **51** |
| 10-15 | 7,000 | 11,974 | 62 | 7,000 | 11,395 | 58 | **14,000** | **23,369** | **60** |
| 16-20 | 5,000 | 10,187 | 52 | 2,000 | 9,638 | 23 | **8,000** | **19,826** | **38** |
| 21-24 | 3,000 | 7,185 | 42 | 1,000 | 6,943 | 12 | **4,000** | **14,128** | **27** |
| 25-34 | 8,000 | 18,826 | 45 | 5,000 | 19,110 | 29 | **14,000** | **37,936** | **37** |
| 35-44 | 7,000 | 22,254 | 30 | 4,000 | 22,558 | 17 | **11,000** | **44,813** | **24** |
| 45-54 | 5,000 | 17,499 | 30 | 4,000 | 18,303 | 22 | **9,000** | **35,802** | **26** |
| 55-64 | 2,000 | 11,150 | 16 | 3,000 | 12,239 | 24 | **5,000** | **23,389** | **20** |
| 65-74 | 3,000 | 8,199 | 31 | 2,000 | 10,020 | 18 | **4,000** | **18,218** | **24** |
| >74 | 1,000 | 6,111 | 21 | 2,000 | 10,210 | 21 | **3,000** | **16,322** | **21** |
| **Total** | **50,000** | **133,277** | **38** | **35,000** | **139,414** | **25** | **85,000** | **272,691** | **31** |

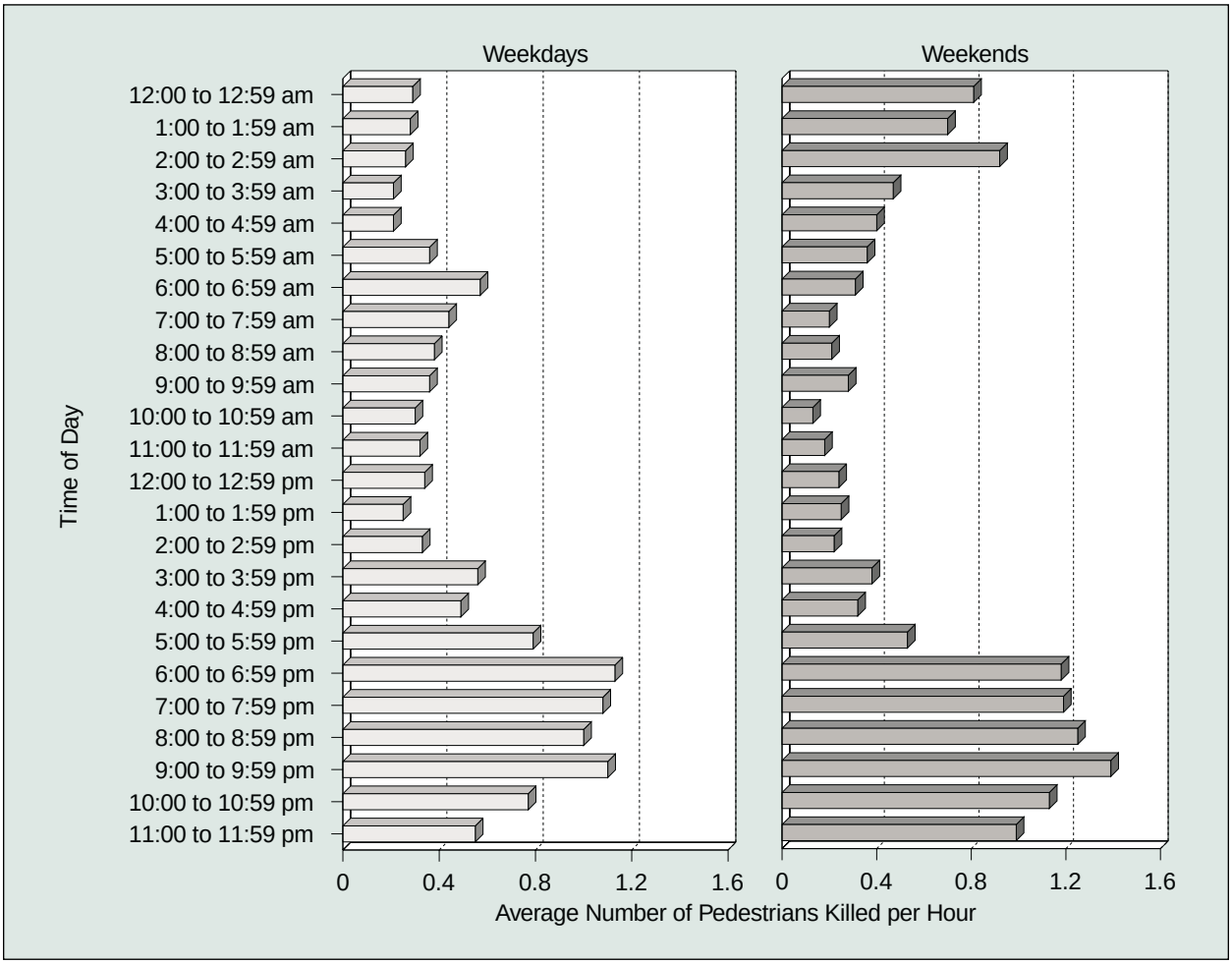
*Not applicable.
**Includes 1 pedestrian fatality of unknown sex.
Source: Population—Bureau of the Census. Totals may not equal sum of components due to independent rounding.

**Table 96**
**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 | 173 | 6.1 | 379 | 18.6 | **553** | **11.3** |
| 3 am to 6 am | 163 | 5.7 | 193 | 9.4 | **356** | **7.3** |
| 6 am to 9 am | 363 | 12.7 | 75 | 3.7 | **438** | **8.9** |
| 9 am to Noon | 257 | 9.0 | 61 | 3.0 | **318** | **6.5** |
| Noon to 3 pm | 242 | 8.5 | 74 | 3.6 | **316** | **6.4** |
| 3 pm to 6 pm | 478 | 16.8 | 127 | 6.2 | **605** | **12.3** |
| 6 pm to 9 pm | 666 | 23.4 | 570 | 27.9 | **1,237** | **25.2** |
| 9 pm to Midnight | 502 | 17.6 | 551 | 27.0 | **1,053** | **21.5** |
| Unknown | 8 | 0.3 | 13 | 0.6 | **30** | **0.6** |
| **Total** | **2,852** | **100.0** | **2,043** | **100.0** | ***4,906** | **100.0** |
| **Pedestrians Injured** | | | | | | |
| Midnight to 3 am | 1,000 | 1.3 | 2,000 | 7.1 | **3,000** | **3.2** |
| 3 am to 6 am | 1,000 | 1.9 | ** | 1.2 | **1,000** | **1.7** |
| 6 am to 9 am | 7,000 | 13.0 | 1,000 | 3.7 | **8,000** | **9.9** |
| 9 am to Noon | 5,000 | 8.6 | 3,000 | 10.5 | **8,000** | **9.2** |
| Noon to 3 pm | 11,000 | 18.4 | 5,000 | 19.1 | **16,000** | **18.6** |
| 3 pm to 6 pm | 17,000 | 29.7 | 5,000 | 19.0 | **22,000** | **26.2** |
| 6 pm to 9 pm | 11,000 | 19.8 | 7,000 | 24.0 | **18,000** | **21.2** |
| 9 pm to Midnight | 4,000 | 7.3 | 4,000 | 15.5 | **9,000** | **10.0** |
| **Total** | **58,000** | **100.0** | **28,000** | **100.0** | **85,000** | **100.0** |

*Includes 11 pedestrians killed at unknown time of day and day of week.
**Less than 500.

**Figure 29**
**Average Number of Pedestrians Killed per Hour by Time of Day and Day of Week**



## Table 97
## Pedestrians Killed or Injured in Single-Vehicle Crashes, by Vehicle Type and Initial Point of Impact

| Vehicle Type | Initial Point of Impact | | | | | | | | | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Front | | Right Side | | Left Side | | Rear | | Other/Unknown | | | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Pedestrians Killed** | | | | | | | | | | | | |
| Passenger Car | 1,987 | 89.9 | 46 | 2.1 | 56 | 2.5 | 25 | 1.1 | 97 | 4.4 | **2,211** | **100.0** |
| Light Truck | 1,388 | 87.6 | 36 | 2.3 | 38 | 2.4 | 43 | 2.7 | 79 | 5.0 | **1,584** | **100.0** |
| Large Truck | 193 | 66.8 | 20 | 6.9 | 9 | 3.1 | 29 | 10.0 | 38 | 13.1 | **289** | **100.0** |
| Motorcycle | 25 | 100.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | **25** | **100.0** |
| Other/Unknown | 218 | 57.8 | 10 | 2.7 | 6 | 1.6 | 9 | 2.4 | 134 | 35.5 | **377** | **100.0** |
| **Total** | **3,811** | **85.0** | **112** | **2.5** | **109** | **2.4** | **106** | **2.4** | **348** | **7.8** | **4,486** | **100.0** |
| **Pedestrians Injured** | | | | | | | | | | | | |
| Passenger Car | 37,000 | 67.0 | 7,000 | 12.7 | 6,000 | 11.7 | 4,000 | 8.0 | * | 0.7 | **55,000** | **100.0** |
| Light Truck | 15,000 | 66.9 | 4,000 | 18.1 | 2,000 | 7.2 | 1,000 | 4.5 | 1,000 | 3.4 | **23,000** | **100.0** |
| Other | 3,000 | 67.5 | 1,000 | 23.4 | * | 3.4 | * | 4.6 | * | 1.0 | **4,000** | **100.0** |
| **Total** | **55,000** | **67.0** | **12,000** | **14.7** | **8,000** | **10.0** | **6,000** | **6.8** | **1,000** | **1.5** | **82,000** | **100.0** |

*Less than 500.

## Table 98
## Pedestrians Killed, by Related Factors

| Factors | Number | Percent |
|---|---|---|
| Improper crossing of roadway or intersection | 1,474 | 30.0 |
| Walking, playing, working, etc., in roadway | 1,420 | 28.9 |
| Failure to yield right of way | 672 | 13.7 |
| Darting or running into road | 640 | 13.0 |
| Not visible | 395 | 8.1 |
| Inattentive (talking, eating, etc.) | 107 | 2.2 |
| Physical impairment | 80 | 1.6 |
| Failure to obey traffic signs, signals, or officer | 68 | 1.4 |
| Emotional (e.g., depression, angry, disturbed) | 21 | 0.4 |
| Nonmotorist pushing vehicle | 20 | 0.4 |
| Getting on/off/in/out of transport vehicle | 16 | 0.3 |
| Ill, blackout | 15 | 0.3 |
| Other factors | 106 | 2.2 |
| None Reported | 1,241 | 25.3 |
| Unknown | 98 | 2.0 |
| **Total Pedestrians** | **4,906** | **100.0** |

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.

**Table 99**
**Pedalcyclists Killed or Injured, by Age and Location**

| Age (Years) | Location | | | | Total | |
|---|---|---|---|---|---|---|
| | Intersection | | Nonintersection | | | |
| | Number | Percent | Number | Percent | Number | Percent |
| **Pedalcyclists Killed** | | | | | | |
| <5 | 2 | 33.3 | 4 | 66.7 | **6** | **100.0** |
| 5-9 | 31 | 37.8 | 51 | 62.2 | **82** | **100.0** |
| 10-15 | 46 | 36.5 | 80 | 63.5 | **126** | **100.0** |
| 16-20 | 28 | 38.4 | 43 | 58.9 | **73** | **100.0** |
| 21-24 | 10 | 27.8 | 25 | 69.4 | **36** | **100.0** |
| 25-34 | 21 | 28.0 | 54 | 72.0 | **75** | **100.0** |
| 35-44 | 40 | 27.2 | 107 | 72.8 | **147** | **100.0** |
| 45-54 | 26 | 27.1 | 70 | 72.9 | **96** | **100.0** |
| 55-64 | 7 | 16.3 | 36 | 83.7 | **43** | **100.0** |
| 65-74 | 10 | 22.2 | 35 | 77.8 | **45** | **100.0** |
| >74 | 6 | 33.3 | 12 | 66.7 | **18** | **100.0** |
| Unknown | 1 | 33.3 | 2 | 66.7 | **3** | **100.0** |
| **Total** | **228** | **30.4** | **519** | **69.2** | ***750** | **100.0** |
| **Pedalcyclists Injured** | | | | | | |
| <5 | ** | 12.7 | ** | 87.3 | ** | **100.0** |
| 5-9 | 3,000 | 49.9 | 3,000 | 45.7 | **7,000** | **100.0** |
| 10-15 | 9,000 | 56.9 | 6,000 | 38.2 | **15,000** | **100.0** |
| 16-20 | 3,000 | 54.4 | 2,000 | 38.0 | **5,000** | **100.0** |
| 21-24 | 2,000 | 52.7 | 2,000 | 46.5 | **4,000** | **100.0** |
| 25-34 | 4,000 | 59.9 | 3,000 | 36.5 | **7,000** | **100.0** |
| 35-44 | 3,000 | 46.4 | 3,000 | 53.3 | **6,000** | **100.0** |
| 45-54 | 2,000 | 56.3 | 2,000 | 41.9 | **4,000** | **100.0** |
| 55-64 | 1,000 | 41.9 | 1,000 | 56.0 | **1,000** | **100.0** |
| 65-74 | ** | 81.5 | ** | 18.5 | ** | **100.0** |
| >74 | ** | 14.0 | ** | 86.0 | ** | **100.0** |
| **Total** | **28,000** | **53.7** | **22,000** | **42.6** | **51,000** | **100.0** |

*Includes 3 pedalcyclists killed at other or unknown location.
**Less than 500.

## Table 100
## 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 | 9,683 | 0.03 | 3 | 9,259 | 0.03 | **6** | **18,942** | **0.03** |
| 5-9 | 67 | 10,208 | 0.66 | 15 | 9,739 | 0.15 | **82** | **19,947** | **0.41** |
| 10-15 | 104 | 11,974 | 0.87 | 22 | 11,395 | 0.19 | **126** | **23,369** | **0.54** |
| 16-20 | 67 | 10,187 | 0.66 | 6 | 9,638 | 0.06 | **73** | **19,826** | **0.37** |
| 21-24 | 31 | 7,185 | 0.43 | 5 | 6,943 | 0.07 | **36** | **14,128** | **0.25** |
| 25-34 | 66 | 18,826 | 0.35 | 9 | 19,110 | 0.05 | **75** | **37,936** | **0.20** |
| 35-44 | 132 | 22,254 | 0.59 | 15 | 22,558 | 0.07 | **147** | **44,813** | **0.33** |
| 45-54 | 88 | 17,499 | 0.50 | 8 | 18,303 | 0.04 | **96** | **35,802** | **0.27** |
| 55-64 | 35 | 11,150 | 0.31 | 8 | 12,239 | 0.07 | **43** | **23,389** | **0.18** |
| 65-74 | 43 | 8,199 | 0.52 | 2 | 10,020 | 0.02 | **45** | **18,218** | **0.25** |
| >74 | 18 | 6,111 | 0.29 | 0 | 10,210 | 0.00 | **18** | **16,322** | **0.11** |
| Unknown | 3 | * | * | 0 | * | * | **3** | ***** | ***** |
| **Total** | **657** | **133,277** | **0.49** | **93** | **139,414** | **0.07** | **750** | **272,691** | **0.28** |

| Age (Years) | Male | | | Female | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|
| | Injured | Population (Thousands) | Rate | Injured | Population (Thousands) | Rate | Injured | Population (Thousands) | Rate |
| <5 | ** | 9,683 | 4 | ** | 9,259 | *** | ****** | **18,942** | **2** |
| 5-9 | 5,000 | 10,208 | 46 | 2,000 | 9,739 | 20 | **7,000** | **19,947** | **34** |
| 10-15 | 12,000 | 11,974 | 101 | 3,000 | 11,395 | 29 | **15,000** | **23,369** | **66** |
| 16-20 | 5,000 | 10,187 | 46 | 1,000 | 9,638 | 8 | **5,000** | **19,826** | **28** |
| 21-24 | 4,000 | 7,185 | 52 | ** | 6,943 | 6 | **4,000** | **14,128** | **29** |
| 25-34 | 5,000 | 18,826 | 29 | 2,000 | 19,110 | 8 | **7,000** | **37,936** | **19** |
| 35-44 | 5,000 | 22,254 | 24 | 1,000 | 22,558 | 5 | **6,000** | **44,813** | **14** |
| 45-54 | 3,000 | 17,499 | 18 | 1,000 | 18,303 | 3 | **4,000** | **35,802** | **10** |
| 55-64 | 1,000 | 11,150 | 10 | ** | 12,239 | 3 | **1,000** | **23,389** | **6** |
| 65-74 | ** | 8,199 | 4 | ** | 10,020 | 2 | ****** | **18,218** | **3** |
| >74 | ** | 6,111 | 3 | ** | 10,210 | *** | ****** | **16,322** | **1** |
| **Total** | **41,000** | **133,277** | **31** | **10,000** | **139,414** | **7** | **51,000** | **272,691** | **19** |

*Not applicable.
**Less than 500.
***Less than 0.5.
Source: Population—Bureau of the Census. Totals may not equal sum of components due to independent rounding.

**Table 101**
**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 | 17 | 3.7 | 35 | 11.9 | **52** | **6.9** |
| 3 am to 6 am | 11 | 2.4 | 14 | 4.7 | **25** | **3.3** |
| 6 am to 9 am | 59 | 13.0 | 6 | 2.0 | **65** | **8.7** |
| 9 am to Noon | 40 | 8.8 | 25 | 8.5 | **65** | **8.7** |
| Noon to 3 pm | 53 | 11.6 | 32 | 10.8 | **85** | **11.3** |
| 3 pm to 6 pm | 131 | 28.8 | 33 | 11.2 | **164** | **21.9** |
| 6 pm to 9 pm | 95 | 20.9 | 104 | 35.3 | **199** | **26.5** |
| 9 pm to Midnight | 48 | 10.5 | 46 | 15.6 | **94** | **12.5** |
| Unknown | 1 | 0.2 | 0 | 0.0 | **1** | **0.1** |
| **Total** | **455** | **100.0** | **295** | **100.0** | **750** | **100.0** |
| **Pedalcyclists Injured** | | | | | | |
| Midnight to 3 am | 1,000 | 1.5 | 1,000 | 4.5 | **1,000** | **2.3** |
| 3 am to 6 am | * | 1.1 | * | 0.5 | ***** | **0.9** |
| 6 am to 9 am | 3,000 | 6.9 | * | 1.6 | **3,000** | **5.5** |
| 9 am to Noon | 5,000 | 13.7 | 2,000 | 14.1 | **7,000** | **13.8** |
| Noon to 3 pm | 6,000 | 15.1 | 3,000 | 21.6 | **9,000** | **16.9** |
| 3 pm to 6 pm | 14,000 | 36.6 | 3,000 | 19.3 | **16,000** | **32.0** |
| 6 pm to 9 pm | 8,000 | 20.8 | 4,000 | 27.2 | **12,000** | **22.5** |
| 9 pm to Midnight | 2,000 | 4.3 | 2,000 | 11.2 | **3,000** | **6.1** |
| **Total** | **38,000** | **100.0** | **14,000** | **100.0** | **51,000** | **100.0** |

*Less than 500.

## Table 102
## Pedalcyclists Killed or Injured in Single-Vehicle Crashes, by Vehicle Type and Initial Point of Impact

| Vehicle Type | Initial Point of Impact | | | | | | | | | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Front | | Right Side | | Left Side | | Rear | | Other/Unknown | | | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Pedalcyclists Killed** | | | | | | | | | | | | |
| Passenger Car | 287 | 88.6 | 19 | 5.9 | 10 | 3.1 | 2 | 0.6 | 6 | 1.9 | **324** | **100.0** |
| Light Truck | 247 | 84.6 | 20 | 6.8 | 8 | 2.7 | 9 | 3.1 | 8 | 2.7 | **292** | **100.0** |
| Large Truck | 25 | 43.9 | 16 | 28.1 | 0 | 0.0 | 6 | 10.5 | 10 | 17.5 | **57** | **100.0** |
| Motorcycle | 1 | 100.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | **1** | **100.0** |
| Other/Unknown | 21 | 52.5 | 6 | 15.0 | 1 | 2.5 | 0 | 0.0 | 12 | 30.0 | **40** | **100.0** |
| **Total** | **581** | **81.4** | **61** | **8.5** | **19** | **2.7** | **17** | **2.4** | **36** | **5.0** | **714** | **100.0** |
| **Pedalcyclists Injured** | | | | | | | | | | | | |
| Passenger Car | 21,000 | 64.0 | 8,000 | 23.1 | 3,000 | 8.3 | 1,000 | 4.1 | * | 0.5 | **33,000** | **100.0** |
| Light Truck | 9,000 | 61.1 | 4,000 | 27.7 | 1,000 | 9.4 | * | 1.8 | * | * | **15,000** | **100.0** |
| Other | 1,000 | 41.6 | 1,000 | 55.0 | * | 1.6 | * | 1.2 | * | 0.6 | **2,000** | **100.0** |
| **Total** | **32,000** | **62.1** | **13,000** | **25.9** | **4,000** | **8.3** | **2,000** | **3.3** | ***** | **0.4** | **51,000** | **100.0** |

*Less than 500 or less than 0.05 percent.

## Table 103
## Pedalcyclists Killed, by Related Factors

| Factors | Number | Percent |
|---|---|---|
| Riding, playing, working, etc., in roadway | 178 | 23.7 |
| Failure to yield right of way | 137 | 18.3 |
| Improper crossing of roadway or intersection | 121 | 16.1 |
| Failure to obey (e.g., signs, control devices, officers) | 47 | 6.3 |
| Not visible | 40 | 5.3 |
| Operating without required equipment | 32 | 4.3 |
| Failure to keep in proper lane or running off road | 30 | 4.0 |
| Darting into road | 27 | 3.6 |
| Inattentive (talking, eating, etc.) | 27 | 3.6 |
| Making improper turn | 27 | 3.6 |
| Erratic, reckless, careless, or negligent operation | 20 | 2.7 |
| Failing to have lights on when required | 18 | 2.4 |
| Improper lane changing | 16 | 2.1 |
| Riding on wrong side of road | 16 | 2.1 |
| Improper entry to or exit from trafficway | 6 | 0.8 |
| Other | 61 | 8.1 |
| None Reported | 192 | 25.6 |
| Unknown | 19 | 2.5 |
| **Total Pedalcyclists** | **750** | **100.0** |

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

# 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 four tables describe each state's safety belt use laws, child passenger protection laws, motorcycle helmet use requirements, and impaired driving legislation. Below are some of the state statistics you will find in this chapter:

- Traffic fatalities increased slightly (by 0.3 percent) from 1998 to 1999 for the nation as a whole. Twenty-five states showed increases, ranging from 1 percent to as much as 29 percent.

- The pedestrian fatality rate per 100,000 population was 1.80 for the nation. Nevada had the highest rate (3.70) and New Hampshire had the lowest (0.42).

- Nearly 2 percent of all traffic crash fatalities in 1999 were pedalcyclists. North Dakota, Rhode Island, and South Dakota reported no pedalcyclists killed.

- Forty-nine states, plus the District of Columbia and Puerto Rico, have safety belt use laws.

- All states, the District of Columbia, and Puerto Rico have laws requiring children of certain ages to be restrained in child safety seats.

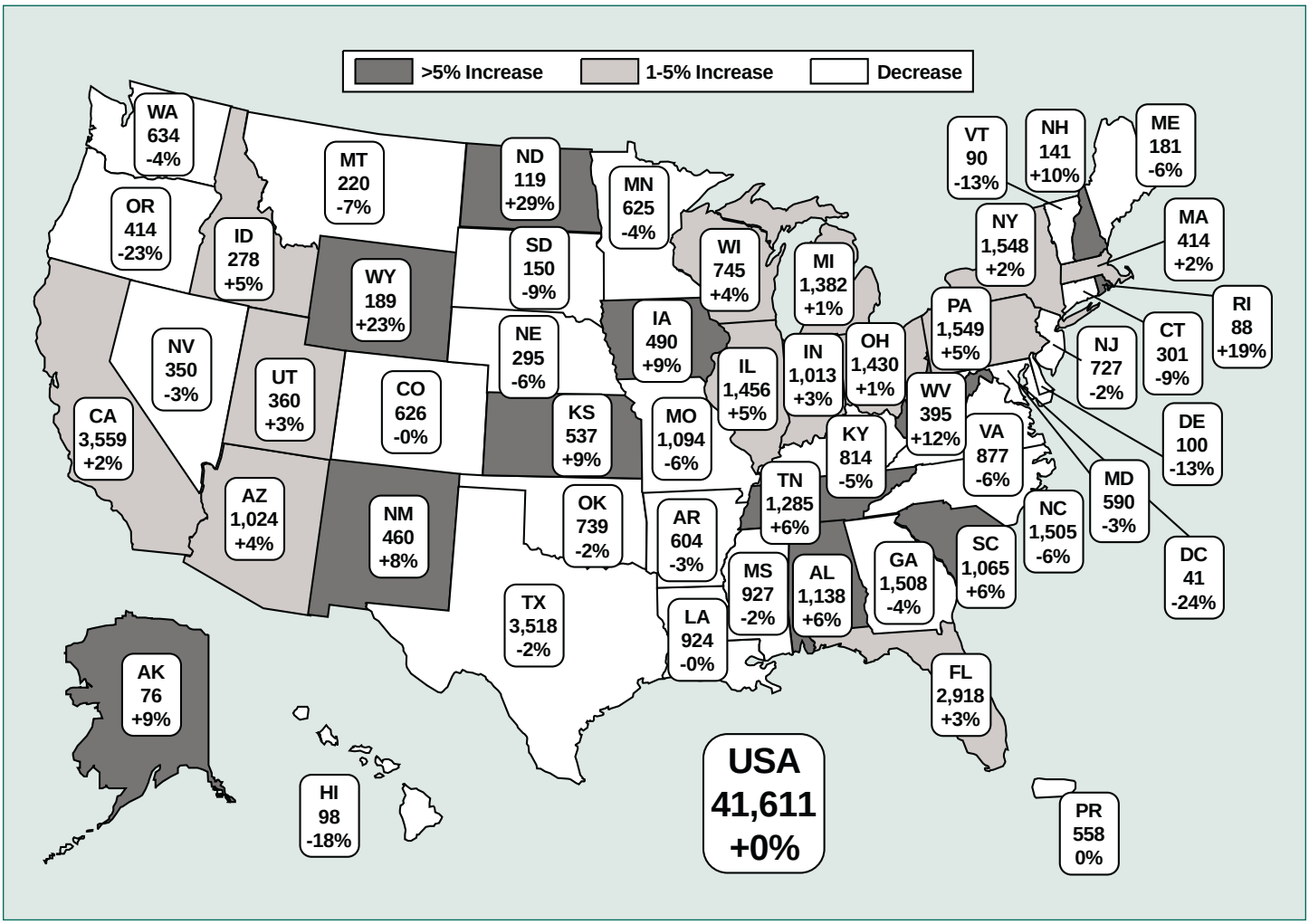
- Motorcycle helmets are required for all riders in 21 states, the District of Columbia, and Puerto Rico. Twenty-six states have helmet requirements with exceptions (age, rider type, roadway type), and three states do not require helmets at all.

- State laws in 31 states make it a criminal offense to operate a motor vehicle at a blood alcohol concentration (BAC) of 0.10 g/dl. Seventeen states and the District of Columbia have adopted 0.08 g/dl. Two states and Puerto Rico do not have illegal per se BAC levels.

**Table 104**
**1999 Traffic Fatalities by State and Percent Change from 1998**

| State | Fatalities | | | State | Fatalities | | |
|---|---|---|---|---|---|---|---|
| | 1998 | 1999 | Percent Change | | 1998 | 1999 | Percent Change |
| AL | 1,071 | 1,138 | +6 | NE | 315 | 295 | -6 |
| AK | 70 | 76 | +9 | NV | 361 | 350 | -3 |
| AZ | 980 | 1,024 | +4 | NH | 128 | 141 | +10 |
| AR | 625 | 604 | -3 | NJ | 741 | 727 | -2 |
| CA | 3,494 | 3,559 | +2 | NM | 424 | 460 | +8 |
| CO | 628 | 626 | -0 | NY | 1,514 | 1,548 | +2 |
| CT | 329 | 301 | -9 | NC | 1,596 | 1,505 | -6 |
| DE | 115 | 100 | -13 | ND | 92 | 119 | +29 |
| DC | 54 | 41 | -24 | OH | 1,422 | 1,430 | +1 |
| FL | 2,825 | 2,918 | +3 | OK | 755 | 739 | -2 |
| GA | 1,568 | 1,508 | -4 | OR | 538 | 414 | -23 |
| HI | 120 | 98 | -18 | PA | 1,481 | 1,549 | +5 |
| ID | 265 | 278 | +5 | RI | 74 | 88 | +19 |
| IL | 1,393 | 1,456 | +5 | SC | 1,002 | 1,065 | +6 |
| IN | 982 | 1,013 | +3 | SD | 165 | 150 | -9 |
| IA | 449 | 490 | +9 | TN | 1,216 | 1,285 | +6 |
| KS | 492 | 537 | +9 | TX | 3,586 | 3,518 | -2 |
| KY | 858 | 814 | -5 | UT | 350 | 360 | +3 |
| LA | 926 | 924 | -0 | VT | 104 | 90 | -13 |
| ME | 192 | 181 | -6 | VA | 935 | 877 | -6 |
| MD | 606 | 590 | -3 | WA | 662 | 634 | -4 |
| MA | 406 | 414 | +2 | WV | 354 | 395 | +12 |
| MI | 1,366 | 1,382 | +1 | WI | 714 | 745 | +4 |
| MN | 650 | 625 | -4 | WY | 154 | 189 | +23 |
| MS | 948 | 927 | -2 | **USA** | **41,501** | **41,611** | **+0** |
| MO | 1,169 | 1,094 | -6 | | | | |
| MT | 237 | 220 | -7 | PR | 558 | 558 | 0 |

**Figure 30**
**1999 Traffic Fatalities by State and Percent Change from 1998**



## Table 105
## Fatal Crashes by State and First Harmful Event

| State | First Harmful Event | | | | | | | | | | | | Total Fatal Crashes | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Collision with | | | | | | | | Non-Collision | | | | | |
| | Motor Vehicle in Transport | | Non-Motorist | | Fixed Object | | Object Not Fixed | | Overturn | | Other | | | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| AL | 422 | 42.5 | 81 | 8.2 | 390 | 39.3 | 18 | 1.8 | 73 | 7.4 | 7 | 0.7 | **992** | **100.0** |
| AK | 28 | 40.0 | 7 | 10.0 | 18 | 25.7 | 3 | 4.3 | 13 | 18.6 | 1 | 1.4 | **70** | **100.0** |
| AZ | 375 | 41.3 | 165 | 18.2 | 144 | 15.9 | 8 | 0.9 | 173 | 19.1 | 16 | 1.8 | **907** | **100.0** |
| AR | 205 | 38.0 | 47 | 8.7 | 183 | 33.9 | 17 | 3.1 | 82 | 15.2 | 4 | 0.7 | **540** | **100.0** |
| CA | 1,017 | 32.3 | 757 | 24.0 | 938 | 29.8 | 86 | 2.7 | 316 | 10.0 | 34 | 1.1 | **3,148** | **100.0** |
| CO | 208 | 37.3 | 67 | 12.0 | 145 | 26.0 | 17 | 3.0 | 115 | 20.6 | 6 | 1.1 | **558** | **100.0** |
| CT | 90 | 33.3 | 52 | 19.3 | 112 | 41.5 | 7 | 2.6 | 8 | 3.0 | 0 | 0.0 | **270** | **100.0** |
| DE | 50 | 54.9 | 13 | 14.3 | 20 | 22.0 | 3 | 3.3 | 4 | 4.4 | 1 | 1.1 | **91** | **100.0** |
| DC | 12 | 30.0 | 15 | 37.5 | 11 | 27.5 | 1 | 2.5 | 0 | 0.0 | 1 | 2.5 | **40** | **100.0** |
| FL | 1,185 | 45.1 | 584 | 22.2 | 530 | 20.2 | 72 | 2.7 | 219 | 8.3 | 36 | 1.4 | **2,626** | **100.0** |
| GA | 610 | 46.4 | 170 | 12.9 | 406 | 30.9 | 21 | 1.6 | 98 | 7.5 | 9 | 0.7 | **1,314** | **100.0** |
| HI | 37 | 41.1 | 20 | 22.2 | 23 | 25.6 | 3 | 3.3 | 7 | 7.8 | 0 | 0.0 | **90** | **100.0** |
| ID | 95 | 38.8 | 18 | 7.3 | 29 | 11.8 | 4 | 1.6 | 89 | 36.3 | 10 | 4.1 | **245** | **100.0** |
| IL | 543 | 41.9 | 195 | 15.1 | 347 | 26.8 | 56 | 4.3 | 134 | 10.3 | 20 | 1.5 | **1,295** | **100.0** |
| IN | 433 | 48.9 | 80 | 9.0 | 296 | 33.4 | 35 | 4.0 | 39 | 4.4 | 1 | 0.1 | **885** | **100.0** |
| IA | 238 | 55.6 | 25 | 5.8 | 76 | 17.8 | 15 | 3.5 | 71 | 16.6 | 3 | 0.7 | **428** | **100.0** |
| KS | 212 | 46.5 | 35 | 7.7 | 117 | 25.7 | 16 | 3.5 | 73 | 16.0 | 3 | 0.7 | **456** | **100.0** |
| KY | 289 | 39.9 | 57 | 7.9 | 283 | 39.1 | 17 | 2.3 | 72 | 9.9 | 6 | 0.8 | **724** | **100.0** |
| LA | 322 | 39.4 | 124 | 15.2 | 266 | 32.6 | 21 | 2.6 | 74 | 9.1 | 10 | 1.2 | **817** | **100.0** |
| ME | 71 | 42.3 | 12 | 7.1 | 58 | 34.5 | 6 | 3.6 | 16 | 9.5 | 5 | 3.0 | **168** | **100.0** |
| MD | 227 | 41.4 | 113 | 20.6 | 178 | 32.5 | 9 | 1.6 | 15 | 2.7 | 3 | 0.5 | **548** | **100.0** |
| MA | 136 | 35.2 | 74 | 19.2 | 141 | 36.5 | 12 | 3.1 | 20 | 5.2 | 3 | 0.8 | **386** | **100.0** |
| MI | 604 | 48.5 | 181 | 14.5 | 329 | 26.4 | 42 | 3.4 | 80 | 6.4 | 9 | 0.7 | **1,245** | **100.0** |
| MN | 289 | 51.0 | 57 | 10.1 | 108 | 19.0 | 20 | 3.5 | 87 | 15.3 | 6 | 1.1 | **567** | **100.0** |
| MS | 337 | 40.5 | 66 | 7.9 | 288 | 34.6 | 24 | 2.9 | 116 | 13.9 | 1 | 0.1 | **832** | **100.0** |
| MO | 409 | 42.4 | 68 | 7.1 | 331 | 34.3 | 31 | 3.2 | 112 | 11.6 | 13 | 1.3 | **964** | **100.0** |
| MT | 46 | 23.7 | 10 | 5.2 | 50 | 25.8 | 4 | 2.1 | 83 | 42.8 | 1 | 0.5 | **194** | **100.0** |
| NE | 125 | 49.0 | 18 | 7.1 | 47 | 18.4 | 7 | 2.7 | 58 | 22.7 | 0 | 0.0 | **255** | **100.0** |
| NV | 102 | 33.2 | 74 | 24.1 | 51 | 16.6 | 1 | 0.3 | 78 | 25.4 | 1 | 0.3 | **307** | **100.0** |
| NH | 47 | 35.9 | 6 | 4.6 | 53 | 40.5 | 4 | 3.1 | 19 | 14.5 | 2 | 1.5 | **131** | **100.0** |

## Table 105
## Fatal Crashes by State and First Harmful Event (Continued)

| State | First Harmful Event | | | | | | | | | | | | Total Fatal Crashes | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Collision with | | | | | | | | Non-Collision | | | | | |
| | Motor Vehicle in Transport | | Non-Motorist | | Fixed Object | | Object Not Fixed | | Overturn | | Other | | | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| NJ | 260 | 39.1 | 166 | 25.0 | 203 | 30.5 | 11 | 1.7 | 16 | 2.4 | 9 | 1.4 | **665** | **100.0** |
| NM | 142 | 36.6 | 60 | 15.5 | 66 | 17.0 | 9 | 2.3 | 106 | 27.3 | 5 | 1.3 | **388** | **100.0** |
| NY | 536 | 37.6 | 374 | 26.2 | 405 | 28.4 | 42 | 2.9 | 53 | 3.7 | 16 | 1.1 | **1,426** | **100.0** |
| NC | 616 | 45.6 | 180 | 13.3 | 452 | 33.5 | 26 | 1.9 | 61 | 4.5 | 15 | 1.1 | **1,350** | **100.0** |
| ND | 48 | 52.2 | 4 | 4.3 | 13 | 14.1 | 2 | 2.2 | 24 | 26.1 | 1 | 1.1 | **92** | **100.0** |
| OH | 585 | 45.6 | 133 | 10.4 | 465 | 36.2 | 42 | 3.3 | 38 | 3.0 | 21 | 1.6 | **1,284** | **100.0** |
| OK | 293 | 47.5 | 57 | 9.2 | 193 | 31.3 | 25 | 4.1 | 37 | 6.0 | 12 | 1.9 | **617** | **100.0** |
| OR | 141 | 38.4 | 51 | 13.9 | 107 | 29.2 | 6 | 1.6 | 56 | 15.3 | 6 | 1.6 | **367** | **100.0** |
| PA | 570 | 41.2 | 188 | 13.6 | 509 | 36.8 | 29 | 2.1 | 70 | 5.1 | 16 | 1.2 | **1,382** | **100.0** |
| RI | 30 | 35.3 | 13 | 15.3 | 37 | 43.5 | 1 | 1.2 | 3 | 3.5 | 1 | 1.2 | **85** | **100.0** |
| SC | 383 | 40.6 | 122 | 12.9 | 320 | 33.9 | 31 | 3.3 | 79 | 8.4 | 9 | 1.0 | **944** | **100.0** |
| SD | 51 | 37.5 | 11 | 8.1 | 29 | 21.3 | 4 | 2.9 | 37 | 27.2 | 4 | 2.9 | **136** | **100.0** |
| TN | 478 | 41.5 | 75 | 6.5 | 461 | 40.0 | 19 | 1.6 | 109 | 9.5 | 10 | 0.9 | **1,152** | **100.0** |
| TX | 1,299 | 41.8 | 433 | 13.9 | 778 | 25.1 | 83 | 2.7 | 470 | 15.1 | 41 | 1.3 | **3,105** | **100.0** |
| UT | 108 | 34.0 | 45 | 14.2 | 36 | 11.3 | 14 | 4.4 | 109 | 34.3 | 6 | 1.9 | **318** | **100.0** |
| VT | 25 | 30.5 | 7 | 8.5 | 38 | 46.3 | 3 | 3.7 | 8 | 9.8 | 1 | 1.2 | **82** | **100.0** |
| VA | 281 | 35.4 | 94 | 11.8 | 330 | 41.6 | 16 | 2.0 | 45 | 5.7 | 28 | 3.5 | **794** | **100.0** |
| WA | 215 | 37.6 | 64 | 11.2 | 187 | 32.7 | 22 | 3.8 | 77 | 13.5 | 7 | 1.2 | **572** | **100.0** |
| WV | 129 | 36.4 | 31 | 8.8 | 138 | 39.0 | 3 | 0.8 | 45 | 12.7 | 8 | 2.3 | **354** | **100.0** |
| WI | 298 | 44.1 | 66 | 9.8 | 200 | 29.6 | 21 | 3.1 | 85 | 12.6 | 5 | 0.7 | **675** | **100.0** |
| WY | 39 | 24.1 | 15 | 9.3 | 32 | 19.8 | 8 | 4.9 | 65 | 40.1 | 3 | 1.9 | **162** | **100.0** |
| **USA** | **15,291** | **41.3** | **5,380** | **14.5** | **10,967** | **29.6** | **997** | **2.7** | **3,937** | **10.6** | **436** | **1.2** | ***37,043** | **100.0** |
| PR | 170 | 32.0 | 200 | 37.7 | 123 | 23.2 | 14 | 2.6 | 9 | 1.7 | 15 | 2.8 | **531** | **100.0** |

*Total includes 35 crashes with unknown first harmful event.

## Table 106
## Fatal Crashes by State and Roadway Function Class

| State | Roadway Function Class | | | | | | | | Total Fatal Crashes |
|---|---|---|---|---|---|---|---|---|---|
| | Principal Arterial | | | | Minor Arterial | Collector | Local | Unknown | |
| | Interstate | | Freeway and Expressway | Other | | | | | |
| | Rural | Urban | | | | | | | |
| AL | 84 | 47 | 2 | 245 | 184 | 285 | 139 | 6 | **992** |
| AK | 15 | 1 | 0 | 14 | 16 | 16 | 8 | 0 | **70** |
| AZ | 124 | 29 | 19 | 275 | 182 | 185 | 89 | 4 | **907** |
| AR | 44 | 19 | 11 | 121 | 87 | 129 | 128 | 1 | **540** |
| CA | 191 | 255 | 297 | 901 | 650 | 486 | 356 | 12 | **3,148** |
| CO | 80 | 24 | 19 | 134 | 76 | 44 | 165 | 16 | **558** |
| CT | 3 | 36 | 12 | 65 | 84 | 32 | 37 | 1 | **270** |
| DE | 0 | 6 | 0 | 39 | 10 | 16 | 14 | 6 | **91** |
| DC | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 0 | **40** |
| FL | 145 | 157 | 76 | 900 | 333 | 104 | 674 | 237 | **2,626** |
| GA | 88 | 96 | 17 | 314 | 277 | 272 | 230 | 20 | **1,314** |
| HI | 0 | 4 | 6 | 27 | 25 | 19 | 8 | 1 | **90** |
| ID | 38 | 6 | 1 | 82 | 26 | 45 | 42 | 5 | **245** |
| IL | 73 | 111 | 7 | 320 | 221 | 209 | 354 | 0 | **1,295** |
| IN | 66 | 17 | 17 | 205 | 186 | 255 | 137 | 2 | **885** |
| IA | 30 | 17 | 1 | 142 | 70 | 108 | 59 | 1 | **428** |
| KS | 24 | 28 | 20 | 130 | 75 | 112 | 67 | 0 | **456** |
| KY | 50 | 22 | 10 | 139 | 89 | 275 | 138 | 1 | **724** |
| LA | 75 | 41 | 4 | 164 | 137 | 278 | 118 | 0 | **817** |
| ME | 14 | 0 | 5 | 28 | 37 | 42 | 37 | 5 | **168** |
| MD | 24 | 33 | 33 | 121 | 107 | 75 | 48 | 107 | **548** |
| MA | 12 | 45 | 13 | 98 | 103 | 56 | 59 | 0 | **386** |
| MI | 38 | 83 | 31 | 346 | 245 | 299 | 198 | 5 | **1,245** |
| MN | 28 | 26 | 11 | 135 | 137 | 146 | 84 | 0 | **567** |
| MS | 98 | 0 | 0 | 127 | 3 | 323 | 277 | 4 | **832** |
| MO | 91 | 76 | 27 | 263 | 109 | 269 | 119 | 10 | **964** |
| MT | 30 | 4 | 0 | 60 | 25 | 29 | 46 | 0 | **194** |
| NE | 31 | 1 | 0 | 76 | 39 | 44 | 64 | 0 | **255** |
| NV | 48 | 15 | 8 | 88 | 73 | 48 | 27 | 0 | **307** |
| NH | 10 | 2 | 1 | 27 | 30 | 25 | 31 | 5 | **131** |

**Table 106**
**Fatal Crashes by State and Roadway Function Class (Continued)**

| State | Roadway Function Class | | | | | | | | Total Fatal Crashes |
|---|---|---|---|---|---|---|---|---|---|
| | Principal Arterial | | | | Minor Arterial | Collector | Local | Unknown | |
| | Interstate | | Freeway and Expressway | Other | | | | | |
| | Rural | Urban | | | | | | | |
| NJ | 9 | 39 | 72 | 189 | 156 | 103 | 92 | 5 | **665** |
| NM | 73 | 15 | 1 | 89 | 48 | 84 | 78 | 0 | **388** |
| NY | 50 | 42 | 103 | 322 | 282 | 261 | 357 | 9 | **1,426** |
| NC | 49 | 64 | 14 | 228 | 202 | 324 | 468 | 1 | **1,350** |
| ND | 8 | 0 | 5 | 24 | 10 | 21 | 24 | 0 | **92** |
| OH | 60 | 86 | 16 | 210 | 190 | 273 | 365 | 84 | **1,284** |
| OK | 60 | 38 | 13 | 147 | 143 | 133 | 83 | 0 | **617** |
| OR | 20 | 12 | 2 | 145 | 69 | 79 | 40 | 0 | **367** |
| PA | 63 | 59 | 33 | 317 | 354 | 272 | 283 | 1 | **1,382** |
| RI | 2 | 14 | 8 | 27 | 20 | 7 | 7 | 0 | **85** |
| SC | 93 | 21 | 2 | 188 | 214 | 309 | 58 | 59 | **944** |
| SD | 9 | 4 | 0 | 46 | 15 | 41 | 21 | 0 | **136** |
| TN | 100 | 74 | 16 | 253 | 266 | 256 | 173 | 14 | **1,152** |
| TX | 198 | 283 | 198 | 683 | 407 | 598 | 737 | 1 | **3,105** |
| UT | 94 | 7 | 0 | 6 | 80 | 4 | 127 | 0 | **318** |
| VT | 12 | 1 | 1 | 12 | 15 | 18 | 23 | 0 | **82** |
| VA | 53 | 35 | 14 | 165 | 206 | 200 | 121 | 0 | **794** |
| WA | 39 | 25 | 31 | 171 | 94 | 148 | 64 | 0 | **572** |
| WV | 44 | 14 | 1 | 49 | 73 | 130 | 43 | 0 | **354** |
| WI | 28 | 13 | 10 | 179 | 137 | 175 | 128 | 5 | **675** |
| WY | 56 | 2 | 2 | 51 | 13 | 29 | 9 | 0 | **162** |
| **USA** | **2,674** | **2,049** | **1,190** | **9,087** | **6,630** | **7,691** | **7,094** | **628** | **37,043** |
| PR | 30 | 69 | 6 | 109 | 110 | 127 | 80 | 0 | **531** |

## Table 107
## Fatalities by State and Roadway Function Class

| State | Roadway Function Class | | | | | | | | Total Fatalities |
|---|---|---|---|---|---|---|---|---|---|
| | Principal Arterial | | | | Minor Arterial | Collector | Local | Unknown | |
| | Interstate | | Freeway and Expressway | Other | | | | | |
| | Rural | Urban | | | | | | | |
| AL | 105 | 57 | 2 | 286 | 207 | 324 | 151 | 6 | **1,138** |
| AK | 17 | 1 | 0 | 14 | 16 | 20 | 8 | 0 | **76** |
| AZ | 142 | 35 | 22 | 302 | 207 | 214 | 98 | 4 | **1,024** |
| AR | 54 | 23 | 11 | 137 | 104 | 139 | 135 | 1 | **604** |
| CA | 239 | 289 | 344 | 1,001 | 730 | 550 | 394 | 12 | **3,559** |
| CO | 96 | 26 | 21 | 152 | 83 | 46 | 184 | 18 | **626** |
| CT | 3 | 49 | 14 | 74 | 86 | 36 | 38 | 1 | **301** |
| DE | 0 | 7 | 0 | 43 | 11 | 17 | 14 | 8 | **100** |
| DC | 0 | 0 | 0 | 0 | 0 | 0 | 41 | 0 | **41** |
| FL | 184 | 181 | 82 | 1,010 | 353 | 113 | 729 | 266 | **2,918** |
| GA | 118 | 109 | 24 | 357 | 321 | 305 | 251 | 23 | **1,508** |
| HI | 0 | 4 | 6 | 32 | 26 | 21 | 8 | 1 | **98** |
| ID | 41 | 6 | 1 | 101 | 30 | 52 | 42 | 5 | **278** |
| IL | 90 | 119 | 8 | 363 | 245 | 230 | 401 | 0 | **1,456** |
| IN | 75 | 23 | 20 | 227 | 213 | 301 | 152 | 2 | **1,013** |
| IA | 35 | 19 | 1 | 163 | 84 | 124 | 63 | 1 | **490** |
| KS | 31 | 31 | 23 | 163 | 91 | 129 | 69 | 0 | **537** |
| KY | 57 | 24 | 13 | 165 | 99 | 303 | 152 | 1 | **814** |
| LA | 86 | 71 | 5 | 181 | 146 | 311 | 124 | 0 | **924** |
| ME | 14 | 0 | 5 | 30 | 40 | 47 | 39 | 6 | **181** |
| MD | 24 | 35 | 35 | 128 | 117 | 87 | 52 | 112 | **590** |
| MA | 12 | 49 | 15 | 108 | 110 | 58 | 62 | 0 | **414** |
| MI | 40 | 101 | 35 | 379 | 267 | 340 | 215 | 5 | **1,382** |
| MN | 31 | 30 | 11 | 158 | 147 | 159 | 89 | 0 | **625** |
| MS | 116 | 0 | 0 | 146 | 4 | 353 | 304 | 4 | **927** |
| MO | 123 | 85 | 32 | 302 | 118 | 290 | 134 | 10 | **1,094** |
| MT | 33 | 4 | 0 | 75 | 26 | 32 | 50 | 0 | **220** |
| NE | 37 | 1 | 0 | 89 | 47 | 49 | 72 | 0 | **295** |
| NV | 59 | 15 | 8 | 106 | 78 | 55 | 29 | 0 | **350** |
| NH | 13 | 2 | 1 | 30 | 32 | 26 | 32 | 5 | **141** |

## Table 107
## Fatalities by State and Roadway Function Class (Continued)

| State | Roadway Function Class | | | | | | | | Total Fatalities |
|---|---|---|---|---|---|---|---|---|---|
| | Principal Arterial | | | | Minor Arterial | Collector | Local | Unknown | |
| | Interstate | | Freeway and Expressway | Other | | | | | |
| | Rural | Urban | | | | | | | |
| NJ | 10 | 48 | 79 | 213 | 164 | 107 | 100 | 6 | **727** |
| NM | 98 | 19 | 1 | 99 | 63 | 100 | 80 | 0 | **460** |
| NY | 54 | 45 | 114 | 349 | 302 | 291 | 384 | 9 | **1,548** |
| NC | 55 | 70 | 15 | 266 | 226 | 368 | 504 | 1 | **1,505** |
| ND | 11 | 0 | 5 | 35 | 16 | 22 | 30 | 0 | **119** |
| OH | 73 | 95 | 19 | 231 | 211 | 315 | 397 | 89 | **1,430** |
| OK | 81 | 44 | 15 | 177 | 169 | 162 | 91 | 0 | **739** |
| OR | 25 | 13 | 2 | 169 | 78 | 86 | 41 | 0 | **414** |
| PA | 83 | 65 | 42 | 363 | 393 | 306 | 296 | 1 | **1,549** |
| RI | 2 | 14 | 9 | 29 | 20 | 7 | 7 | 0 | **88** |
| SC | 118 | 24 | 2 | 209 | 250 | 336 | 59 | 67 | **1,065** |
| SD | 11 | 5 | 0 | 52 | 15 | 46 | 21 | 0 | **150** |
| TN | 131 | 82 | 20 | 280 | 296 | 276 | 185 | 15 | **1,285** |
| TX | 228 | 322 | 218 | 776 | 497 | 681 | 792 | 4 | **3,518** |
| UT | 106 | 7 | 0 | 10 | 100 | 4 | 133 | 0 | **360** |
| VT | 13 | 1 | 1 | 16 | 17 | 18 | 24 | 0 | **90** |
| VA | 62 | 38 | 18 | 181 | 226 | 220 | 132 | 0 | **877** |
| WA | 42 | 27 | 41 | 188 | 103 | 160 | 73 | 0 | **634** |
| WV | 51 | 17 | 1 | 60 | 84 | 137 | 45 | 0 | **395** |
| WI | 36 | 13 | 11 | 200 | 150 | 190 | 140 | 5 | **745** |
| WY | 71 | 2 | 2 | 58 | 17 | 30 | 9 | 0 | **189** |
| **USA** | **3,236** | **2,347** | **1,354** | **10,283** | **7,435** | **8,593** | **7,675** | **688** | **41,611** |
| PR | 34 | 72 | 7 | 115 | 114 | 132 | 84 | 0 | **558** |

## Table 108
## 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 | 3,446 | 33.02 | 4,006 | 28.41 | 4,370 | 26.04 | **1,138** |
| AK | 459 | 16.56 | 586 | 12.97 | 620 | 12.26 | **76** |
| AZ | 3,297 | 31.06 | 3,751 | 27.30 | 4,778 | 21.43 | **1,024** |
| AR | 1,926 | 31.36 | 1,840 | 32.83 | 2,551 | 23.68 | **604** |
| CA | 20,831 | 17.09 | 26,782 | 13.29 | 33,145 | 10.74 | **3,559** |
| CO | 2,991 | 20.93 | 3,953 | 15.84 | 4,056 | 15.43 | **626** |
| CT | 2,374 | 12.68 | 2,820 | 10.67 | 3,282 | 9.17 | **301** |
| DE | 552 | 18.12 | 626 | 15.97 | 754 | 13.26 | **100** |
| DC | 349 | 11.75 | 237 | 17.30 | 519 | 7.90 | **41** |
| FL | 12,401 | 23.53 | 11,625 | 25.10 | 15,111 | 19.31 | **2,918** |
| GA | 5,471 | 27.56 | 7,060 | 21.36 | 7,788 | 19.36 | **1,508** |
| HI | 753 | 13.01 | 737 | 13.30 | 1,185 | 8.27 | **98** |
| ID | 873 | 31.84 | 1,170 | 23.76 | 1,252 | 22.20 | **278** |
| IL | 7,925 | 18.37 | 9,572 | 15.21 | 12,128 | 12.01 | **1,456** |
| IN | 3,856 | 26.27 | 5,605 | 18.07 | 5,943 | 17.05 | **1,013** |
| IA | 1,935 | 25.32 | 3,175 | 15.43 | 2,869 | 17.08 | **490** |
| KS | 1,892 | 28.38 | 2,274 | 23.61 | 2,654 | 20.23 | **537** |
| KY | 2,660 | 30.60 | 2,704 | 30.10 | 3,961 | 20.55 | **814** |
| LA | 2,763 | 33.44 | 3,548 | 26.04 | 4,372 | 21.13 | **924** |
| ME | 912 | 19.85 | 946 | 19.13 | 1,253 | 14.45 | **181** |
| MD | 3,195 | 18.47 | 3,942 | 14.97 | 5,172 | 11.41 | **590** |
| MA | 4,421 | 9.36 | 5,436 | 7.62 | 6,175 | 6.70 | **414** |
| MI | 6,863 | 20.14 | 8,458 | 16.34 | 9,864 | 14.01 | **1,382** |
| MN | 2,907 | 21.50 | 4,137 | 15.11 | 4,776 | 13.09 | **625** |
| MS | 1,788 | 51.85 | 2,349 | 39.46 | 2,769 | 33.48 | **927** |
| MO | 3,840 | 28.49 | 4,462 | 24.52 | 5,468 | 20.01 | **1,094** |
| MT | 660 | 33.33 | 1,020 | 21.57 | 883 | 24.92 | **220** |
| NE | 1,203 | 24.52 | 1,589 | 18.57 | 1,666 | 17.71 | **295** |
| NV | 1,322 | 26.48 | 1,186 | 29.51 | 1,809 | 19.35 | **350** |
| NH | 919 | 15.34 | 1,099 | 12.83 | 1,201 | 11.74 | **141** |

## Table 108
## 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 | 5,551 | 13.10 | 6,208 | 11.71 | 8,143 | 8.93 | **727** |
| NM | 1,222 | 37.64 | 1,607 | 28.62 | 1,740 | 26.44 | **460** |
| NY | 10,627 | 14.57 | 10,900 | 14.20 | 18,197 | 8.51 | **1,548** |
| NC | 5,491 | 27.41 | 5,769 | 26.09 | 7,651 | 19.67 | **1,505** |
| ND | 458 | 25.98 | 721 | 16.50 | 634 | 18.77 | **119** |
| OH | 8,046 | 17.77 | 10,476 | 13.65 | 11,257 | 12.70 | **1,430** |
| OK | 2,313 | 31.95 | 2,985 | 24.76 | 3,358 | 22.01 | **739** |
| OR | 2,462 | 16.82 | 3,080 | 13.44 | 3,316 | 12.48 | **414** |
| PA | 8,478 | 18.27 | 9,209 | 16.82 | 11,994 | 12.91 | **1,549** |
| RI | 689 | 12.77 | 766 | 11.49 | 991 | 8.88 | **88** |
| SC | 2,810 | 37.90 | 3,073 | 34.66 | 3,886 | 27.41 | **1,065** |
| SD | 544 | 27.57 | 808 | 18.56 | 733 | 20.46 | **150** |
| TN | 4,176 | 30.77 | 4,490 | 28.62 | 5,484 | 23.43 | **1,285** |
| TX | 13,359 | 26.33 | 14,238 | 24.71 | 20,044 | 17.55 | **3,518** |
| UT | 1,440 | 25.00 | 1,602 | 22.47 | 2,130 | 16.90 | **360** |
| VT | 496 | 18.15 | 535 | 16.82 | 594 | 15.15 | **90** |
| VA | 4,729 | 18.55 | 5,929 | 14.79 | 6,873 | 12.76 | **877** |
| WA | 4,129 | 15.35 | 4,969 | 12.76 | 5,756 | 11.01 | **634** |
| WV | 1,274 | 31.00 | 1,399 | 28.23 | 1,807 | 21.86 | **395** |
| WI | 3,733 | 19.96 | 4,459 | 16.71 | 5,250 | 14.19 | **745** |
| WY | 363 | 52.07 | 544 | 34.74 | 480 | 39.38 | **189** |
| **USA** | **187,170** | **22.23** | **212,685** | **19.56** | **272,691** | **15.26** | **41,611** |
| PR | 1,729 | 32.27 | 2,104 | 26.52 | 3,890 | 14.34 | **558** |

Note: The number shown for registered vehicles for the USA is approximately 4 percent lower than the sum of the registered vehicle numbers shown for the individual states, due to differing data sources.
Sources: Fatalities—Fatality Analysis Reporting System (FARS); Licensed Drivers (estimated)—Federal Highway Administration; Registered Vehicles by State (estimated)—Federal Highway Administration; Registered Vehicles for USA—R.L. Polk & Co. and Federal Highway Administration; Population—Bureau of the Census.

## Table 109
## Persons Killed, by State and Person Type

| State | Person Type | | | | | | | | | | Total Killed | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Driver | | Passenger | | Pedestrian | | Pedalcyclist | | Other/Unknown | | | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| AL | 763 | 67.0 | 284 | 25.0 | 86 | 7.6 | 3 | 0.3 | 2 | 0.2 | **1,138** | **100.0** |
| AK | 50 | 65.8 | 17 | 22.4 | 7 | 9.2 | 2 | 2.6 | 0 | 0.0 | **76** | **100.0** |
| AZ | 527 | 51.5 | 302 | 29.5 | 143 | 14.0 | 26 | 2.5 | 26 | 2.5 | **1,024** | **100.0** |
| AR | 407 | 67.4 | 148 | 24.5 | 41 | 6.8 | 6 | 1.0 | 2 | 0.3 | **604** | **100.0** |
| CA | 1,807 | 50.8 | 939 | 26.4 | 665 | 18.7 | 112 | 3.1 | 36 | 1.0 | **3,559** | **100.0** |
| CO | 377 | 60.2 | 172 | 27.5 | 63 | 10.1 | 5 | 0.8 | 9 | 1.4 | **626** | **100.0** |
| CT | 169 | 56.1 | 78 | 25.9 | 51 | 16.9 | 3 | 1.0 | 0 | 0.0 | **301** | **100.0** |
| DE | 65 | 65.0 | 21 | 21.0 | 12 | 12.0 | 1 | 1.0 | 1 | 1.0 | **100** | **100.0** |
| DC | 19 | 46.3 | 5 | 12.2 | 16 | 39.0 | 1 | 2.4 | 0 | 0.0 | **41** | **100.0** |
| FL | 1,586 | 54.4 | 711 | 24.4 | 487 | 16.7 | 123 | 4.2 | 11 | 0.4 | **2,918** | **100.0** |
| GA | 929 | 61.6 | 394 | 26.1 | 159 | 10.5 | 22 | 1.5 | 4 | 0.3 | **1,508** | **100.0** |
| HI | 49 | 50.0 | 27 | 27.6 | 21 | 21.4 | 1 | 1.0 | 0 | 0.0 | **98** | **100.0** |
| ID | 160 | 57.6 | 93 | 33.5 | 14 | 5.0 | 4 | 1.4 | 7 | 2.5 | **278** | **100.0** |
| IL | 902 | 62.0 | 338 | 23.2 | 175 | 12.0 | 28 | 1.9 | 13 | 0.9 | **1,456** | **100.0** |
| IN | 688 | 67.9 | 235 | 23.2 | 67 | 6.6 | 14 | 1.4 | 9 | 0.9 | **1,013** | **100.0** |
| IA | 321 | 65.5 | 140 | 28.6 | 17 | 3.5 | 6 | 1.2 | 6 | 1.2 | **490** | **100.0** |
| KS | 338 | 62.9 | 158 | 29.4 | 33 | 6.1 | 7 | 1.3 | 1 | 0.2 | **537** | **100.0** |
| KY | 555 | 68.2 | 193 | 23.7 | 52 | 6.4 | 10 | 1.2 | 4 | 0.5 | **814** | **100.0** |
| LA | 549 | 59.4 | 239 | 25.9 | 106 | 11.5 | 29 | 3.1 | 1 | 0.1 | **924** | **100.0** |
| ME | 123 | 68.0 | 46 | 25.4 | 11 | 6.1 | 1 | 0.6 | 0 | 0.0 | **181** | **100.0** |
| MD | 361 | 61.2 | 107 | 18.1 | 114 | 19.3 | 6 | 1.0 | 2 | 0.3 | **590** | **100.0** |
| MA | 257 | 62.1 | 76 | 18.4 | 74 | 17.9 | 6 | 1.4 | 1 | 0.2 | **414** | **100.0** |
| MI | 855 | 61.9 | 322 | 23.3 | 173 | 12.5 | 26 | 1.9 | 6 | 0.4 | **1,382** | **100.0** |
| MN | 425 | 68.0 | 138 | 22.1 | 51 | 8.2 | 8 | 1.3 | 3 | 0.5 | **625** | **100.0** |
| MS | 626 | 67.5 | 234 | 25.2 | 60 | 6.5 | 6 | 0.6 | 1 | 0.1 | **927** | **100.0** |
| MO | 730 | 66.7 | 286 | 26.1 | 65 | 5.9 | 7 | 0.6 | 6 | 0.5 | **1,094** | **100.0** |
| MT | 142 | 64.5 | 68 | 30.9 | 7 | 3.2 | 3 | 1.4 | 0 | 0.0 | **220** | **100.0** |
| NE | 198 | 67.1 | 73 | 24.7 | 14 | 4.7 | 4 | 1.4 | 6 | 2.0 | **295** | **100.0** |
| NV | 169 | 48.3 | 102 | 29.1 | 67 | 19.1 | 8 | 2.3 | 4 | 1.1 | **350** | **100.0** |
| NH | 98 | 69.5 | 37 | 26.2 | 5 | 3.5 | 1 | 0.7 | 0 | 0.0 | **141** | **100.0** |

## Table 109
## Persons Killed, by State and Person Type (Continued)

| State | Person Type | | | | | | | | | | Total Killed | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Driver | | Passenger | | Pedestrian | | Pedalcyclist | | Other/Unknown | | | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| NJ | 384 | 52.8 | 165 | 22.7 | 154 | 21.2 | 23 | 3.2 | 1 | 0.1 | **727** | **100.0** |
| NM | 237 | 51.5 | 159 | 34.6 | 52 | 11.3 | 10 | 2.2 | 2 | 0.4 | **460** | **100.0** |
| NY | 841 | 54.3 | 300 | 19.4 | 351 | 22.7 | 43 | 2.8 | 13 | 0.8 | **1,548** | **100.0** |
| NC | 952 | 63.3 | 369 | 24.5 | 155 | 10.3 | 28 | 1.9 | 1 | 0.1 | **1,505** | **100.0** |
| ND | 72 | 60.5 | 42 | 35.3 | 4 | 3.4 | 0 | 0.0 | 1 | 0.8 | **119** | **100.0** |
| OH | 940 | 65.7 | 342 | 23.9 | 122 | 8.5 | 18 | 1.3 | 8 | 0.6 | **1,430** | **100.0** |
| OK | 449 | 60.8 | 218 | 29.5 | 59 | 8.0 | 10 | 1.4 | 3 | 0.4 | **739** | **100.0** |
| OR | 246 | 59.4 | 116 | 28.0 | 48 | 11.6 | 3 | 0.7 | 1 | 0.2 | **414** | **100.0** |
| PA | 974 | 62.9 | 368 | 23.8 | 183 | 11.8 | 18 | 1.2 | 6 | 0.4 | **1,549** | **100.0** |
| RI | 57 | 64.8 | 17 | 19.3 | 14 | 15.9 | 0 | 0.0 | 0 | 0.0 | **88** | **100.0** |
| SC | 677 | 63.6 | 262 | 24.6 | 113 | 10.6 | 12 | 1.1 | 1 | 0.1 | **1,065** | **100.0** |
| SD | 92 | 61.3 | 43 | 28.7 | 11 | 7.3 | 0 | 0.0 | 4 | 2.7 | **150** | **100.0** |
| TN | 859 | 66.8 | 333 | 25.9 | 74 | 5.8 | 9 | 0.7 | 10 | 0.8 | **1,285** | **100.0** |
| TX | 2,086 | 59.3 | 945 | 26.9 | 426 | 12.1 | 44 | 1.3 | 17 | 0.5 | **3,518** | **100.0** |
| UT | 209 | 58.1 | 104 | 28.9 | 38 | 10.6 | 7 | 1.9 | 2 | 0.6 | **360** | **100.0** |
| VT | 56 | 62.2 | 26 | 28.9 | 4 | 4.4 | 3 | 3.3 | 1 | 1.1 | **90** | **100.0** |
| VA | 575 | 65.6 | 201 | 22.9 | 85 | 9.7 | 10 | 1.1 | 6 | 0.7 | **877** | **100.0** |
| WA | 398 | 62.8 | 165 | 26.0 | 60 | 9.5 | 9 | 1.4 | 2 | 0.3 | **634** | **100.0** |
| WV | 252 | 63.8 | 110 | 27.8 | 29 | 7.3 | 3 | 0.8 | 1 | 0.3 | **395** | **100.0** |
| WI | 497 | 66.7 | 172 | 23.1 | 54 | 7.2 | 18 | 2.4 | 4 | 0.5 | **745** | **100.0** |
| WY | 112 | 59.3 | 59 | 31.2 | 14 | 7.4 | 3 | 1.6 | 1 | 0.5 | **189** | **100.0** |
| **USA** | **25,210** | **60.6** | **10,499** | **25.2** | **4,906** | **11.8** | **750** | **1.8** | **246** | **0.6** | 41,611 | **100.0** |
| PR | 234 | 41.9 | 114 | 20.4 | 194 | 34.8 | 15 | 2.7 | 1 | 0.2 | **558** | **100.0** |

## Table 110
## 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 | 22 | 23 | 35 | 174 | 105 | 197 | 177 | 146 | 94 | 84 | 81 | 0 | **1,138** |
| AK | 2 | 1 | 2 | 14 | 6 | 15 | 10 | 7 | 9 | 7 | 3 | 0 | **76** |
| AZ | 25 | 18 | 30 | 123 | 102 | 157 | 175 | 136 | 83 | 76 | 91 | 8 | **1,024** |
| AR | 20 | 12 | 28 | 80 | 42 | 109 | 98 | 81 | 41 | 47 | 46 | 0 | **604** |
| CA | 91 | 70 | 114 | 472 | 350 | 610 | 573 | 414 | 274 | 278 | 305 | 8 | **3,559** |
| CO | 7 | 11 | 27 | 85 | 65 | 102 | 110 | 85 | 52 | 35 | 47 | 0 | **626** |
| CT | 3 | 5 | 8 | 35 | 41 | 49 | 47 | 27 | 23 | 21 | 42 | 0 | **301** |
| DE | 2 | 3 | 3 | 11 | 11 | 13 | 19 | 13 | 6 | 8 | 11 | 0 | **100** |
| DC | 0 | 1 | 1 | 6 | 6 | 4 | 7 | 7 | 3 | 4 | 1 | 1 | **41** |
| FL | 37 | 46 | 101 | 335 | 217 | 455 | 455 | 370 | 254 | 244 | 385 | 19 | **2,918** |
| GA | 40 | 46 | 63 | 206 | 117 | 245 | 260 | 201 | 122 | 97 | 108 | 3 | **1,508** |
| HI | 3 | 0 | 3 | 10 | 13 | 19 | 13 | 13 | 4 | 5 | 15 | 0 | **98** |
| ID | 8 | 9 | 23 | 50 | 21 | 38 | 41 | 26 | 16 | 16 | 30 | 0 | **278** |
| IL | 30 | 20 | 37 | 210 | 146 | 255 | 225 | 176 | 102 | 113 | 139 | 3 | **1,456** |
| IN | 17 | 11 | 30 | 157 | 93 | 178 | 140 | 139 | 84 | 62 | 102 | 0 | **1,013** |
| IA | 5 | 14 | 19 | 75 | 41 | 72 | 74 | 62 | 44 | 34 | 50 | 0 | **490** |
| KS | 13 | 7 | 29 | 84 | 44 | 77 | 84 | 61 | 38 | 33 | 67 | 0 | **537** |
| KY | 5 | 15 | 29 | 126 | 65 | 148 | 131 | 105 | 53 | 76 | 61 | 0 | **814** |
| LA | 22 | 19 | 24 | 153 | 105 | 147 | 167 | 83 | 72 | 61 | 68 | 3 | **924** |
| ME | 1 | 1 | 7 | 33 | 19 | 34 | 22 | 11 | 15 | 16 | 22 | 0 | **181** |
| MD | 7 | 7 | 16 | 110 | 47 | 92 | 97 | 73 | 36 | 42 | 63 | 0 | **590** |
| MA | 5 | 2 | 14 | 65 | 45 | 68 | 63 | 38 | 29 | 29 | 56 | 0 | **414** |
| MI | 26 | 28 | 52 | 160 | 135 | 220 | 237 | 173 | 103 | 97 | 151 | 0 | **1,382** |
| MN | 7 | 13 | 21 | 91 | 40 | 97 | 103 | 62 | 56 | 51 | 84 | 0 | **625** |
| MS | 23 | 19 | 34 | 124 | 101 | 158 | 154 | 95 | 74 | 73 | 69 | 3 | **927** |
| MO | 14 | 15 | 41 | 182 | 81 | 161 | 174 | 142 | 82 | 82 | 120 | 0 | **1,094** |
| MT | 1 | 6 | 7 | 46 | 18 | 30 | 34 | 31 | 19 | 11 | 17 | 0 | **220** |
| NE | 2 | 7 | 16 | 46 | 25 | 49 | 46 | 37 | 21 | 24 | 22 | 0 | **295** |
| NV | 6 | 7 | 10 | 29 | 31 | 49 | 69 | 44 | 40 | 30 | 33 | 2 | **350** |
| NH | 0 | 2 | 4 | 22 | 11 | 24 | 23 | 14 | 13 | 10 | 18 | 0 | **141** |

## Table 110
## 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 | 6 | 12 | 25 | 63 | 73 | 108 | 103 | 79 | 68 | 78 | 109 | 3 | **727** |
| NM | 10 | 8 | 24 | 65 | 33 | 81 | 91 | 53 | 31 | 37 | 27 | 0 | **460** |
| NY | 15 | 24 | 49 | 216 | 141 | 255 | 206 | 153 | 131 | 132 | 213 | 13 | **1,548** |
| NC | 22 | 29 | 37 | 202 | 149 | 279 | 244 | 166 | 116 | 124 | 135 | 2 | **1,505** |
| ND | 1 | 1 | 4 | 23 | 19 | 18 | 10 | 13 | 6 | 11 | 13 | 0 | **119** |
| OH | 15 | 22 | 43 | 248 | 148 | 232 | 232 | 175 | 99 | 93 | 122 | 1 | **1,430** |
| OK | 16 | 17 | 30 | 116 | 67 | 112 | 105 | 91 | 62 | 54 | 67 | 2 | **739** |
| OR | 7 | 7 | 13 | 50 | 35 | 56 | 71 | 66 | 28 | 42 | 38 | 1 | **414** |
| PA | 18 | 35 | 50 | 241 | 144 | 235 | 242 | 173 | 97 | 119 | 194 | 1 | **1,549** |
| RI | 1 | 2 | 2 | 6 | 12 | 11 | 16 | 9 | 9 | 7 | 13 | 0 | **88** |
| SC | 21 | 20 | 26 | 145 | 116 | 181 | 169 | 143 | 68 | 86 | 78 | 12 | **1,065** |
| SD | 2 | 5 | 5 | 24 | 17 | 19 | 28 | 17 | 9 | 10 | 14 | 0 | **150** |
| TN | 15 | 35 | 37 | 187 | 115 | 251 | 217 | 151 | 97 | 78 | 100 | 2 | **1,285** |
| TX | 86 | 85 | 122 | 537 | 346 | 588 | 616 | 378 | 265 | 204 | 272 | 19 | **3,518** |
| UT | 9 | 7 | 11 | 62 | 33 | 53 | 63 | 39 | 38 | 22 | 23 | 0 | **360** |
| VT | 0 | 4 | 3 | 16 | 9 | 15 | 16 | 8 | 3 | 9 | 7 | 0 | **90** |
| VA | 16 | 7 | 24 | 114 | 91 | 146 | 146 | 104 | 90 | 58 | 79 | 2 | **877** |
| WA | 9 | 9 | 20 | 87 | 53 | 107 | 106 | 75 | 52 | 44 | 72 | 0 | **634** |
| WV | 5 | 6 | 19 | 65 | 45 | 68 | 60 | 29 | 32 | 29 | 37 | 0 | **395** |
| WI | 12 | 14 | 21 | 110 | 80 | 116 | 106 | 83 | 63 | 44 | 96 | 0 | **745** |
| WY | 3 | 8 | 10 | 26 | 15 | 18 | 44 | 31 | 9 | 16 | 9 | 0 | **189** |
| **USA** | **733** | **795** | **1,403** | **5,917** | **3,884** | **6,821** | **6,719** | **4,908** | **3,235** | **3,063** | **4,025** | **108** | **41,611** |
| PR | 7 | 13 | 17 | 69 | 53 | 80 | 83 | 79 | 58 | 48 | 35 | 16 | **558** |

## Table 111
## Occupants Killed, by State and Vehicle Type

| State | Vehicle Type | | | | | | | | | | | | Unknown | | Total Occupants Killed | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Passenger Cars | | Light Trucks | | Large Trucks | | Motorcycles | | Buses | | Other Vehicles | | | | | |
| | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % |
| AL | 636 | 60.6 | 340 | 32.4 | 29 | 2.8 | 32 | 3.1 | 1 | 0.1 | 11 | 1.0 | 0 | 0.0 | **1,049** | **100.0** |
| AK | 29 | 43.3 | 25 | 37.3 | 0 | 0.0 | 9 | 13.4 | 0 | 0.0 | 4 | 6.0 | 0 | 0.0 | **67** | **100.0** |
| AZ | 389 | 45.7 | 319 | 37.5 | 14 | 1.6 | 73 | 8.6 | 0 | 0.0 | 13 | 1.5 | 43 | 5.1 | **851** | **100.0** |
| AR | 256 | 46.0 | 254 | 45.6 | 18 | 3.2 | 22 | 3.9 | 1 | 0.2 | 6 | 1.1 | 0 | 0.0 | **557** | **100.0** |
| CA | 1,637 | 59.5 | 812 | 29.5 | 46 | 1.7 | 236 | 8.6 | 2 | 0.1 | 18 | 0.7 | 1 | 0.0 | **2,752** | **100.0** |
| CO | 268 | 48.6 | 211 | 38.3 | 9 | 1.6 | 60 | 10.9 | 3 | 0.5 | 0 | 0.0 | 0 | 0.0 | **551** | **100.0** |
| CT | 162 | 65.6 | 44 | 17.8 | 3 | 1.2 | 38 | 15.4 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | **247** | **100.0** |
| DE | 54 | 62.8 | 23 | 26.7 | 1 | 1.2 | 7 | 8.1 | 0 | 0.0 | 1 | 1.2 | 0 | 0.0 | **86** | **100.0** |
| DC | 14 | 58.3 | 6 | 25.0 | 0 | 0.0 | 4 | 16.7 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | **24** | **100.0** |
| FL | 1,413 | 61.5 | 651 | 28.3 | 36 | 1.6 | 177 | 7.7 | 3 | 0.1 | 15 | 0.7 | 2 | 0.1 | **2,297** | **100.0** |
| GA | 784 | 59.3 | 425 | 32.1 | 39 | 2.9 | 59 | 4.5 | 0 | 0.0 | 14 | 1.1 | 2 | 0.2 | **1,323** | **100.0** |
| HI | 38 | 50.0 | 21 | 27.6 | 0 | 0.0 | 17 | 22.4 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | **76** | **100.0** |
| ID | 127 | 49.2 | 113 | 43.8 | 4 | 1.6 | 13 | 5.0 | 0 | 0.0 | 1 | 0.4 | 0 | 0.0 | **258** | **100.0** |
| IL | 784 | 63.2 | 322 | 26.0 | 17 | 1.4 | 103 | 8.3 | 1 | 0.1 | 12 | 1.0 | 1 | 0.1 | **1,240** | **100.0** |
| IN | 540 | 58.4 | 274 | 29.6 | 37 | 4.0 | 67 | 7.2 | 0 | 0.0 | 7 | 0.8 | 0 | 0.0 | **925** | **100.0** |
| IA | 264 | 57.3 | 142 | 30.8 | 12 | 2.6 | 30 | 6.5 | 0 | 0.0 | 12 | 2.6 | 1 | 0.2 | **461** | **100.0** |
| KS | 266 | 53.5 | 203 | 40.8 | 9 | 1.8 | 15 | 3.0 | 0 | 0.0 | 3 | 0.6 | 1 | 0.2 | **497** | **100.0** |
| KY | 439 | 58.5 | 233 | 31.0 | 25 | 3.3 | 42 | 5.6 | 0 | 0.0 | 10 | 1.3 | 2 | 0.3 | **751** | **100.0** |
| LA | 424 | 53.7 | 285 | 36.1 | 16 | 2.0 | 38 | 4.8 | 22 | 2.8 | 4 | 0.5 | 0 | 0.0 | **789** | **100.0** |
| ME | 111 | 65.7 | 38 | 22.5 | 3 | 1.8 | 16 | 9.5 | 0 | 0.0 | 1 | 0.6 | 0 | 0.0 | **169** | **100.0** |
| MD | 310 | 66.1 | 105 | 22.4 | 6 | 1.3 | 44 | 9.4 | 1 | 0.2 | 0 | 0.0 | 3 | 0.6 | **469** | **100.0** |
| MA | 218 | 65.5 | 75 | 22.5 | 2 | 0.6 | 35 | 10.5 | 0 | 0.0 | 2 | 0.6 | 1 | 0.3 | **333** | **100.0** |
| MI | 747 | 63.5 | 315 | 26.8 | 12 | 1.0 | 83 | 7.1 | 1 | 0.1 | 19 | 1.6 | 0 | 0.0 | **1,177** | **100.0** |
| MN | 335 | 59.4 | 172 | 30.5 | 10 | 1.8 | 30 | 5.3 | 0 | 0.0 | 17 | 3.0 | 0 | 0.0 | **564** | **100.0** |
| MS | 516 | 59.9 | 291 | 33.8 | 18 | 2.1 | 18 | 2.1 | 0 | 0.0 | 16 | 1.9 | 2 | 0.2 | **861** | **100.0** |
| MO | 608 | 59.5 | 335 | 32.8 | 32 | 3.1 | 37 | 3.6 | 2 | 0.2 | 8 | 0.8 | 0 | 0.0 | **1,022** | **100.0** |
| MT | 83 | 39.5 | 108 | 51.4 | 3 | 1.4 | 15 | 7.1 | 0 | 0.0 | 1 | 0.5 | 0 | 0.0 | **210** | **100.0** |
| NE | 149 | 53.8 | 104 | 37.5 | 11 | 4.0 | 8 | 2.9 | 0 | 0.0 | 5 | 1.8 | 0 | 0.0 | **277** | **100.0** |
| NV | 146 | 53.9 | 98 | 36.2 | 8 | 3.0 | 17 | 6.3 | 0 | 0.0 | 2 | 0.7 | 0 | 0.0 | **271** | **100.0** |
| NH | 70 | 51.9 | 30 | 22.2 | 1 | 0.7 | 32 | 23.7 | 0 | 0.0 | 2 | 1.5 | 0 | 0.0 | **135** | **100.0** |

## Table 111
## Occupants Killed, by State and Vehicle Type (Continued)

| State | Vehicle Type | | | | | | | | | | | | Unknown | | Total Occupants Killed | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Passenger Cars | | Light Trucks | | Large Trucks | | Motorcycles | | Buses | | Other Vehicles | | | | | |
| | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % |
| NJ | 397 | 72.3 | 101 | 18.4 | 6 | 1.1 | 42 | 7.7 | 1 | 0.2 | 1 | 0.2 | 1 | 0.2 | **549** | **100.0** |
| NM | 152 | 38.3 | 193 | 48.6 | 13 | 3.3 | 23 | 5.8 | 8 | 2.0 | 6 | 1.5 | 2 | 0.5 | **397** | **100.0** |
| NY | 748 | 65.1 | 244 | 21.2 | 21 | 1.8 | 107 | 9.3 | 4 | 0.3 | 19 | 1.7 | 6 | 0.5 | **1,149** | **100.0** |
| NC | 797 | 60.3 | 387 | 29.3 | 24 | 1.8 | 106 | 8.0 | 0 | 0.0 | 7 | 0.5 | 0 | 0.0 | **1,321** | **100.0** |
| ND | 60 | 52.2 | 50 | 43.5 | 0 | 0.0 | 3 | 2.6 | 0 | 0.0 | 1 | 0.9 | 1 | 0.9 | **115** | **100.0** |
| OH | 787 | 61.3 | 321 | 25.0 | 40 | 3.1 | 120 | 9.3 | 0 | 0.0 | 15 | 1.2 | 1 | 0.1 | **1,284** | **100.0** |
| OK | 359 | 53.8 | 255 | 38.2 | 14 | 2.1 | 33 | 4.9 | 1 | 0.1 | 5 | 0.7 | 0 | 0.0 | **667** | **100.0** |
| OR | 214 | 59.1 | 119 | 32.9 | 8 | 2.2 | 18 | 5.0 | 0 | 0.0 | 3 | 0.8 | 0 | 0.0 | **362** | **100.0** |
| PA | 869 | 64.6 | 317 | 23.6 | 31 | 2.3 | 111 | 8.2 | 3 | 0.2 | 15 | 1.1 | 0 | 0.0 | **1,346** | **100.0** |
| RI | 47 | 63.5 | 13 | 17.6 | 2 | 2.7 | 12 | 16.2 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | **74** | **100.0** |
| SC | 573 | 61.0 | 267 | 28.4 | 14 | 1.5 | 65 | 6.9 | 0 | 0.0 | 5 | 0.5 | 15 | 1.6 | **939** | **100.0** |
| SD | 77 | 55.4 | 44 | 31.7 | 7 | 5.0 | 10 | 7.2 | 0 | 0.0 | 1 | 0.7 | 0 | 0.0 | **139** | **100.0** |
| TN | 729 | 61.0 | 361 | 30.2 | 35 | 2.9 | 59 | 4.9 | 0 | 0.0 | 12 | 1.0 | 0 | 0.0 | **1,196** | **100.0** |
| TX | 1,542 | 50.9 | 1,227 | 40.5 | 60 | 2.0 | 182 | 6.0 | 2 | 0.1 | 18 | 0.6 | 0 | 0.0 | **3,031** | **100.0** |
| UT | 130 | 41.3 | 145 | 46.0 | 12 | 3.8 | 23 | 7.3 | 0 | 0.0 | 4 | 1.3 | 1 | 0.3 | **315** | **100.0** |
| VT | 49 | 59.0 | 24 | 28.9 | 1 | 1.2 | 7 | 8.4 | 0 | 0.0 | 2 | 2.4 | 0 | 0.0 | **83** | **100.0** |
| VA | 476 | 61.0 | 222 | 28.5 | 20 | 2.6 | 38 | 4.9 | 1 | 0.1 | 6 | 0.8 | 17 | 2.2 | **780** | **100.0** |
| WA | 322 | 57.1 | 188 | 33.3 | 11 | 2.0 | 38 | 6.7 | 0 | 0.0 | 4 | 0.7 | 1 | 0.2 | **564** | **100.0** |
| WV | 225 | 62.0 | 95 | 26.2 | 9 | 2.5 | 23 | 6.3 | 1 | 0.3 | 9 | 2.5 | 1 | 0.3 | **363** | **100.0** |
| WI | 385 | 57.4 | 204 | 30.4 | 4 | 0.6 | 66 | 9.8 | 0 | 0.0 | 12 | 1.8 | 0 | 0.0 | **671** | **100.0** |
| WY | 63 | 36.6 | 92 | 53.5 | 5 | 2.9 | 9 | 5.2 | 0 | 0.0 | 3 | 1.7 | 0 | 0.0 | **172** | **100.0** |
| **USA** | **20,818** | **58.1** | **11,243** | **31.4** | **758** | **2.1** | **2,472** | **6.9** | **58** | **0.2** | **352** | **1.0** | **105** | **0.3** | **35,806** | **100.0** |
| PR | 247 | 71.0 | 63 | 18.1 | 3 | 0.9 | 35 | 10.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | **348** | **100.0** |

## Table 112
## Passenger Car 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 | 232 | 36.5 | 380 | 59.7 | 24 | 3.8 | **636** | **100.0** |
| AK | 11 | 37.9 | 17 | 58.6 | 1 | 3.4 | **29** | **100.0** |
| AZ | 145 | 37.3 | 197 | 50.6 | 47 | 12.1 | **389** | **100.0** |
| AR | 70 | 27.3 | 156 | 60.9 | 30 | 11.7 | **256** | **100.0** |
| CA | 833 | 50.9 | 548 | 33.5 | 256 | 15.6 | **1,637** | **100.0** |
| CO | 126 | 47.0 | 142 | 53.0 | 0 | 0.0 | **268** | **100.0** |
| CT | 60 | 37.0 | 86 | 53.1 | 16 | 9.9 | **162** | **100.0** |
| DE | 18 | 33.3 | 36 | 66.7 | 0 | 0.0 | **54** | **100.0** |
| DC | 4 | 28.6 | 6 | 42.9 | 4 | 28.6 | **14** | **100.0** |
| FL | 584 | 41.3 | 794 | 56.2 | 35 | 2.5 | **1,413** | **100.0** |
| GA | 324 | 41.3 | 370 | 47.2 | 90 | 11.5 | **784** | **100.0** |
| HI | 14 | 36.8 | 19 | 50.0 | 5 | 13.2 | **38** | **100.0** |
| ID | 40 | 31.5 | 84 | 66.1 | 3 | 2.4 | **127** | **100.0** |
| IL | 283 | 36.1 | 353 | 45.0 | 148 | 18.9 | **784** | **100.0** |
| IN | 235 | 43.5 | 261 | 48.3 | 44 | 8.1 | **540** | **100.0** |
| IA | 110 | 41.7 | 104 | 39.4 | 50 | 18.9 | **264** | **100.0** |
| KS | 101 | 38.0 | 127 | 47.7 | 38 | 14.3 | **266** | **100.0** |
| KY | 141 | 32.1 | 279 | 63.6 | 19 | 4.3 | **439** | **100.0** |
| LA | 138 | 32.5 | 212 | 50.0 | 74 | 17.5 | **424** | **100.0** |
| ME | 51 | 45.9 | 46 | 41.4 | 14 | 12.6 | **111** | **100.0** |
| MD | 167 | 53.9 | 128 | 41.3 | 15 | 4.8 | **310** | **100.0** |
| MA | 58 | 26.6 | 125 | 57.3 | 35 | 16.1 | **218** | **100.0** |
| MI | 348 | 46.6 | 322 | 43.1 | 77 | 10.3 | **747** | **100.0** |
| MN | 131 | 39.1 | 151 | 45.1 | 53 | 15.8 | **335** | **100.0** |
| MS | 131 | 25.4 | 368 | 71.3 | 17 | 3.3 | **516** | **100.0** |
| MO | 207 | 34.0 | 329 | 54.1 | 72 | 11.8 | **608** | **100.0** |
| MT | 18 | 21.7 | 60 | 72.3 | 5 | 6.0 | **83** | **100.0** |
| NE | 40 | 26.8 | 89 | 59.7 | 20 | 13.4 | **149** | **100.0** |
| NV | 62 | 42.5 | 75 | 51.4 | 9 | 6.2 | **146** | **100.0** |
| NH | 22 | 31.4 | 38 | 54.3 | 10 | 14.3 | **70** | **100.0** |

**Table 112**
**Passenger Car 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 | 149 | 37.5 | 220 | 55.4 | 28 | 7.1 | **397** | **100.0** |
| NM | 64 | 42.1 | 82 | 53.9 | 6 | 3.9 | **152** | **100.0** |
| NY | 316 | 42.2 | 345 | 46.1 | 87 | 11.6 | **748** | **100.0** |
| NC | 388 | 48.7 | 306 | 38.4 | 103 | 12.9 | **797** | **100.0** |
| ND | 25 | 41.7 | 34 | 56.7 | 1 | 1.7 | **60** | **100.0** |
| OH | 309 | 39.3 | 419 | 53.2 | 59 | 7.5 | **787** | **100.0** |
| OK | 154 | 42.9 | 204 | 56.8 | 1 | 0.3 | **359** | **100.0** |
| OR | 113 | 52.8 | 81 | 37.9 | 20 | 9.3 | **214** | **100.0** |
| PA | 263 | 30.3 | 450 | 51.8 | 156 | 18.0 | **869** | **100.0** |
| RI | 15 | 31.9 | 31 | 66.0 | 1 | 2.1 | **47** | **100.0** |
| SC | 219 | 38.2 | 353 | 61.6 | 1 | 0.2 | **573** | **100.0** |
| SD | 18 | 23.4 | 53 | 68.8 | 6 | 7.8 | **77** | **100.0** |
| TN | 197 | 27.0 | 486 | 66.7 | 46 | 6.3 | **729** | **100.0** |
| TX | 808 | 52.4 | 696 | 45.1 | 38 | 2.5 | **1,542** | **100.0** |
| UT | 48 | 36.9 | 78 | 60.0 | 4 | 3.1 | **130** | **100.0** |
| VT | 13 | 26.5 | 26 | 53.1 | 10 | 20.4 | **49** | **100.0** |
| VA | 176 | 37.0 | 269 | 56.5 | 31 | 6.5 | **476** | **100.0** |
| WA | 130 | 40.4 | 170 | 52.8 | 22 | 6.8 | **322** | **100.0** |
| WV | 78 | 34.7 | 133 | 59.1 | 14 | 6.2 | **225** | **100.0** |
| WI | 148 | 38.4 | 212 | 55.1 | 25 | 6.5 | **385** | **100.0** |
| WY | 17 | 27.0 | 43 | 68.3 | 3 | 4.8 | **63** | **100.0** |
| USA | 8,352 | 40.1 | 10,593 | 50.9 | 1,873 | 9.0 | **20,818** | **100.0** |
| PR | 72 | 29.1 | 175 | 70.9 | 0 | 0.0 | **247** | **100.0** |

**Table 113**
**1999 Ranking of State Pedestrian Fatality Rates**

| Rank | State | Pedestrians Killed | Population (Thousands) | Pedestrian Fatality Rate per 100,000 Population |
|---|---|---|---|---|
| 1 | Nevada | 67 | 1,809 | 3.70 |
| 2 | Florida | 487 | 15,111 | 3.22 |
| 3 | District of Columbia | 16 | 519 | 3.08 |
| 4 | Arizona | 143 | 4,778 | 2.99 |
| 5 | New Mexico | 52 | 1,740 | 2.99 |
| 6 | Wyoming | 14 | 480 | 2.92 |
| 7 | South Carolina | 113 | 3,886 | 2.91 |
| 8 | Louisiana | 106 | 4,372 | 2.42 |
| 9 | Maryland | 114 | 5,172 | 2.20 |
| 10 | Mississippi | 60 | 2,769 | 2.17 |
| 11 | Texas | 426 | 20,044 | 2.13 |
| 12 | Georgia | 159 | 7,788 | 2.04 |
| 13 | North Carolina | 155 | 7,651 | 2.03 |
| 14 | California | 665 | 33,145 | 2.01 |
| 15 | Alabama | 86 | 4,370 | 1.97 |
| 16 | New York | 351 | 18,197 | 1.93 |
| 17 | New Jersey | 154 | 8,143 | 1.89 |
| 18 | Utah | 38 | 2,130 | 1.78 |
| 19 | Hawaii | 21 | 1,185 | 1.77 |
| 20 | Oklahoma | 59 | 3,358 | 1.76 |
| 21 | Michigan | 173 | 9,864 | 1.75 |
| 22 | Arkansas | 41 | 2,551 | 1.61 |
| 23 | West Virginia | 29 | 1,807 | 1.60 |
| 24 | Delaware | 12 | 754 | 1.59 |
| 25 | Connecticut | 51 | 3,282 | 1.55 |
| 26 | Colorado | 63 | 4,056 | 1.55 |
| 27 | Pennsylvania | 183 | 11,994 | 1.53 |
| 28 | South Dakota | 11 | 733 | 1.50 |

**Table 113**
**1999 Ranking of State Pedestrian Fatality Rates (Continued)**

| Rank | State | Pedestrians Killed | Population (Thousands) | Pedestrian Fatality Rate per 100,000 Population |
|---|---|---|---|---|
| 29 | Oregon | 48 | 3,316 | 1.45 |
| 30 | Illinois | 175 | 12,128 | 1.44 |
| 31 | Rhode Island | 14 | 991 | 1.41 |
| 32 | Tennessee | 74 | 5,484 | 1.35 |
| 33 | Kentucky | 52 | 3,961 | 1.31 |
| 34 | Kansas | 33 | 2,654 | 1.24 |
| 35 | Virginia | 85 | 6,873 | 1.24 |
| 36 | Massachusetts | 74 | 6,175 | 1.20 |
| 37 | Missouri | 65 | 5,468 | 1.19 |
| 38 | Alaska | 7 | 620 | 1.13 |
| 39 | Indiana | 67 | 5,943 | 1.13 |
| 40 | Idaho | 14 | 1,252 | 1.12 |
| 41 | Ohio | 122 | 11,257 | 1.08 |
| 42 | Minnesota | 51 | 4,776 | 1.07 |
| 43 | Washington | 60 | 5,756 | 1.04 |
| 44 | Wisconsin | 54 | 5,250 | 1.03 |
| 45 | Maine | 11 | 1,253 | 0.88 |
| 46 | Nebraska | 14 | 1,666 | 0.84 |
| 47 | Montana | 7 | 883 | 0.79 |
| 48 | Vermont | 4 | 594 | 0.67 |
| 49 | North Dakota | 4 | 634 | 0.63 |
| 50 | Iowa | 17 | 2,869 | 0.59 |
| 51 | New Hampshire | 5 | 1,201 | 0.42 |
| | **USA** | **4,906** | **272,691** | **1.80** |
| | Puerto Rico | 194 | 3,890 | 4.99 |

## Table 114
## Persons Killed, by State and Highest Blood Alcohol Concentration in the Crash

| State | Highest Blood Alcohol Concentration in Crash | | | | | | Total Killed in Alcohol-Related Crashes | | Total Killed | |
|---|---|---|---|---|---|---|---|---|---|---|
| | BAC = 0.00 | | BAC = 0.01-0.09 | | BAC = 0.10+ | | | | | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| AL | 708 | 62 | 77 | 7 | 353 | 31 | 430 | 38 | **1,138** | **100** |
| AK | 36 | 47 | 8 | 10 | 32 | 43 | 40 | 53 | **76** | **100** |
| AZ | 618 | 60 | 78 | 8 | 328 | 32 | 406 | 40 | **1,024** | **100** |
| AR | 414 | 69 | 49 | 8 | 140 | 23 | 190 | 31 | **604** | **100** |
| CA | 2,208 | 62 | 343 | 10 | 1,009 | 28 | 1,351 | 38 | **3,559** | **100** |
| CO | 406 | 65 | 49 | 8 | 171 | 27 | 220 | 35 | **626** | **100** |
| CT | 167 | 55 | 33 | 11 | 101 | 34 | 134 | 45 | **301** | **100** |
| DE | 60 | 60 | 6 | 6 | 34 | 34 | 40 | 40 | **100** | **100** |
| DC | 19 | 47 | 6 | 14 | 16 | 39 | 22 | 53 | **41** | **100** |
| FL | 1,875 | 64 | 214 | 7 | 829 | 28 | 1,043 | 36 | **2,918** | **100** |
| GA | 1,002 | 66 | 137 | 9 | 368 | 24 | 506 | 34 | **1,508** | **100** |
| HI | 55 | 56 | 11 | 12 | 31 | 32 | 43 | 44 | **98** | **100** |
| ID | 176 | 63 | 26 | 9 | 76 | 28 | 102 | 37 | **278** | **100** |
| IL | 819 | 56 | 134 | 9 | 504 | 35 | 637 | 44 | **1,456** | **100** |
| IN | 671 | 66 | 77 | 8 | 265 | 26 | 342 | 34 | **1,013** | **100** |
| IA | 330 | 67 | 41 | 8 | 119 | 24 | 160 | 33 | **490** | **100** |
| KS | 351 | 65 | 43 | 8 | 143 | 27 | 186 | 35 | **537** | **100** |
| KY | 533 | 65 | 51 | 6 | 229 | 28 | 281 | 35 | **814** | **100** |
| LA | 497 | 54 | 101 | 11 | 326 | 35 | 427 | 46 | **924** | **100** |
| ME | 122 | 68 | 8 | 5 | 51 | 28 | 59 | 32 | **181** | **100** |
| MD | 411 | 70 | 42 | 7 | 137 | 23 | 179 | 30 | **590** | **100** |
| MA | 211 | 51 | 63 | 15 | 140 | 34 | 203 | 49 | **414** | **100** |
| MI | 835 | 60 | 106 | 8 | 442 | 32 | 547 | 40 | **1,382** | **100** |
| MN | 424 | 68 | 39 | 6 | 162 | 26 | 201 | 32 | **625** | **100** |
| MS | 565 | 61 | 62 | 7 | 300 | 32 | 362 | 39 | **927** | **100** |
| MO | 653 | 60 | 116 | 11 | 325 | 30 | 441 | 40 | **1,094** | **100** |
| MT | 117 | 53 | 16 | 7 | 87 | 40 | 103 | 47 | **220** | **100** |
| NE | 170 | 58 | 38 | 13 | 87 | 30 | 125 | 42 | **295** | **100** |
| NV | 194 | 55 | 52 | 15 | 105 | 30 | 156 | 45 | **350** | **100** |
| NH | 75 | 53 | 24 | 17 | 42 | 30 | 66 | 47 | **141** | **100** |

## Table 114
## Persons Killed, by State and Highest Blood Alcohol Concentration in the Crash (Continued)

| State | Highest Blood Alcohol Concentration in Crash | | | | | | Total Killed in Alcohol-Related Crashes | | Total Killed | |
|---|---|---|---|---|---|---|---|---|---|---|
| | BAC = 0.00 | | BAC = 0.01-0.09 | | BAC = 0.10+ | | | | | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| NJ | 436 | 60 | 79 | 11 | 211 | 29 | 291 | 40 | **727** | **100** |
| NM | 254 | 55 | 37 | 8 | 169 | 37 | 206 | 45 | **460** | **100** |
| NY | 1,204 | 78 | 92 | 6 | 252 | 16 | 344 | 22 | **1,548** | **100** |
| NC | 969 | 64 | 123 | 8 | 413 | 27 | 536 | 36 | **1,505** | **100** |
| ND | 63 | 53 | 11 | 10 | 45 | 38 | 56 | 47 | **119** | **100** |
| OH | 972 | 68 | 78 | 5 | 380 | 27 | 458 | 32 | **1,430** | **100** |
| OK | 494 | 67 | 49 | 7 | 196 | 27 | 245 | 33 | **739** | **100** |
| OR | 244 | 59 | 29 | 7 | 141 | 34 | 170 | 41 | **414** | **100** |
| PA | 944 | 61 | 111 | 7 | 494 | 32 | 605 | 39 | **1,549** | **100** |
| RI | 52 | 59 | 12 | 14 | 23 | 27 | 36 | 41 | **88** | **100** |
| SC | 732 | 69 | 50 | 5 | 283 | 27 | 333 | 31 | **1,065** | **100** |
| SD | 85 | 57 | 9 | 6 | 56 | 37 | 65 | 43 | **150** | **100** |
| TN | 796 | 62 | 107 | 8 | 382 | 30 | 489 | 38 | **1,285** | **100** |
| TX | 1,784 | 51 | 393 | 11 | 1,341 | 38 | 1,734 | 49 | **3,518** | **100** |
| UT | 286 | 79 | 18 | 5 | 56 | 15 | 74 | 21 | **360** | **100** |
| VT | 56 | 62 | 9 | 10 | 25 | 28 | 34 | 38 | **90** | **100** |
| VA | 557 | 64 | 74 | 8 | 246 | 28 | 320 | 36 | **877** | **100** |
| WA | 369 | 58 | 41 | 6 | 225 | 35 | 265 | 42 | **634** | **100** |
| WV | 250 | 63 | 26 | 7 | 119 | 30 | 145 | 37 | **395** | **100** |
| WI | 436 | 59 | 53 | 7 | 256 | 34 | 309 | 41 | **745** | **100** |
| WY | 119 | 63 | 15 | 8 | 56 | 29 | 70 | 37 | **189** | **100** |
| **USA** | **25,825** | **62** | **3,466** | **8** | **12,321** | **30** | **15,786** | **38** | **41,611** | **100** |
| PR | 299 | 54 | 63 | 11 | 196 | 35 | 259 | 46 | **558** | **100** |

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

## Table 115
## Drivers Involved in Fatal Crashes, by State and Blood Alcohol Concentration of the Driver

| State | Blood Alcohol Concentration of Driver | | | | | | | | Total Drivers Involved in Fatal Crashes | |
|---|---|---|---|---|---|---|---|---|---|---|
| | No Alcohol (BAC = 0.00) | | Low Alcohol (BAC = 0.01-0.09) | | High Alcohol (BAC = 0.10+) | | Any Alcohol (BAC = 0.01+) | | | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| AL | 1,155 | 76 | 72 | 5 | 286 | 19 | 358 | 24 | **1,513** | **100** |
| AK | 65 | 64 | 9 | 9 | 27 | 27 | 36 | 36 | **101** | **100** |
| AZ | 1,090 | 79 | 67 | 5 | 226 | 16 | 293 | 21 | **1,383** | **100** |
| AR | 618 | 79 | 46 | 6 | 120 | 15 | 166 | 21 | **784** | **100** |
| CA | 3,591 | 78 | 287 | 6 | 712 | 16 | 999 | 22 | **4,590** | **100** |
| CO | 650 | 77 | 52 | 6 | 138 | 16 | 189 | 23 | **839** | **100** |
| CT | 283 | 71 | 33 | 8 | 82 | 21 | 115 | 29 | **398** | **100** |
| DE | 121 | 80 | 5 | 3 | 26 | 17 | 31 | 20 | **152** | **100** |
| DC | 39 | 68 | 7 | 13 | 11 | 20 | 18 | 32 | **57** | **100** |
| FL | 3,421 | 81 | 192 | 5 | 587 | 14 | 780 | 19 | **4,201** | **100** |
| GA | 1,681 | 81 | 116 | 6 | 280 | 13 | 396 | 19 | **2,077** | **100** |
| HI | 100 | 71 | 8 | 5 | 33 | 23 | 41 | 29 | **141** | **100** |
| ID | 256 | 74 | 24 | 7 | 67 | 19 | 91 | 26 | **347** | **100** |
| IL | 1,501 | 74 | 127 | 6 | 401 | 20 | 529 | 26 | **2,030** | **100** |
| IN | 1,104 | 79 | 75 | 5 | 217 | 16 | 291 | 21 | **1,395** | **100** |
| IA | 561 | 80 | 42 | 6 | 98 | 14 | 140 | 20 | **701** | **100** |
| KS | 542 | 77 | 43 | 6 | 115 | 16 | 158 | 23 | **700** | **100** |
| KY | 818 | 77 | 45 | 4 | 193 | 18 | 239 | 23 | **1,057** | **100** |
| LA | 833 | 69 | 100 | 8 | 275 | 23 | 375 | 31 | **1,208** | **100** |
| ME | 202 | 79 | 9 | 4 | 44 | 17 | 54 | 21 | **256** | **100** |
| MD | 718 | 84 | 38 | 4 | 103 | 12 | 141 | 16 | **859** | **100** |
| MA | 383 | 67 | 64 | 11 | 123 | 22 | 187 | 33 | **570** | **100** |
| MI | 1,545 | 77 | 108 | 5 | 347 | 17 | 455 | 23 | **2,000** | **100** |
| MN | 735 | 81 | 35 | 4 | 142 | 16 | 177 | 19 | **912** | **100** |
| MS | 891 | 73 | 61 | 5 | 262 | 22 | 323 | 27 | **1,214** | **100** |
| MO | 1,097 | 74 | 114 | 8 | 278 | 19 | 392 | 26 | **1,489** | **100** |
| MT | 158 | 62 | 15 | 6 | 80 | 32 | 96 | 38 | **254** | **100** |
| NE | 290 | 73 | 32 | 8 | 76 | 19 | 108 | 27 | **398** | **100** |
| NV | 332 | 73 | 44 | 9 | 82 | 18 | 126 | 27 | **458** | **100** |
| NH | 124 | 66 | 25 | 13 | 38 | 20 | 64 | 34 | **188** | **100** |

## Table 115
## Drivers Involved in Fatal Crashes, by State and Blood Alcohol Concentration of the Driver (Continued)

| State | Blood Alcohol Concentration of Driver | | | | | | | | Total Drivers Involved in Fatal Crashes | |
|---|---|---|---|---|---|---|---|---|---|---|
| | No Alcohol (BAC = 0.00) | | Low Alcohol (BAC = 0.01-0.09) | | High Alcohol (BAC = 0.10+) | | Any Alcohol (BAC = 0.01+) | | | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| NJ | 759 | 77 | 81 | 8 | 150 | 15 | 230 | 23 | **989** | **100** |
| NM | 396 | 71 | 38 | 7 | 125 | 22 | 163 | 29 | **559** | **100** |
| NY | 1,821 | 88 | 66 | 3 | 190 | 9 | 256 | 12 | **2,077** | **100** |
| NC | 1,705 | 81 | 100 | 5 | 309 | 15 | 409 | 19 | **2,114** | **100** |
| ND | 96 | 67 | 10 | 7 | 37 | 26 | 47 | 33 | **143** | **100** |
| OH | 1,630 | 81 | 69 | 3 | 315 | 16 | 384 | 19 | **2,014** | **100** |
| OK | 764 | 79 | 43 | 5 | 154 | 16 | 197 | 21 | **961** | **100** |
| OR | 431 | 76 | 31 | 5 | 106 | 19 | 137 | 24 | **568** | **100** |
| PA | 1,602 | 75 | 107 | 5 | 415 | 20 | 522 | 25 | **2,124** | **100** |
| RI | 83 | 71 | 12 | 11 | 22 | 18 | 34 | 29 | **117** | **100** |
| SC | 1,154 | 82 | 37 | 3 | 219 | 16 | 256 | 18 | **1,410** | **100** |
| SD | 135 | 70 | 9 | 5 | 49 | 25 | 58 | 30 | **193** | **100** |
| TN | 1,316 | 75 | 100 | 6 | 332 | 19 | 432 | 25 | **1,748** | **100** |
| TX | 3,267 | 68 | 413 | 9 | 1,102 | 23 | 1,515 | 32 | **4,782** | **100** |
| UT | 372 | 86 | 15 | 3 | 47 | 11 | 62 | 14 | **434** | **100** |
| VT | 83 | 74 | 10 | 9 | 20 | 18 | 29 | 26 | **112** | **100** |
| VA | 895 | 77 | 65 | 6 | 199 | 17 | 264 | 23 | **1,159** | **100** |
| WA | 615 | 73 | 41 | 5 | 185 | 22 | 226 | 27 | **841** | **100** |
| WV | 394 | 77 | 24 | 5 | 95 | 19 | 119 | 23 | **513** | **100** |
| WI | 726 | 72 | 53 | 5 | 233 | 23 | 286 | 28 | **1,012** | **100** |
| WY | 154 | 74 | 11 | 5 | 45 | 21 | 56 | 26 | **210** | **100** |
| **USA** | **43,305** | **77** | **3,229** | **6** | **9,818** | **17** | **13,047** | **23** | **56,352** | **100** |
| PR | 500 | 69 | 68 | 9 | 154 | 21 | 223 | 31 | **723** | **100** |

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

## Table 116
## Drivers Killed in Fatal Crashes, by State and Blood Alcohol Concentration of the Driver

| State | Blood Alcohol Concentration of Driver | | | | | | | | Total Drivers Killed | |
|---|---|---|---|---|---|---|---|---|---|---|
| | No Alcohol (BAC = 0.00) | | Low Alcohol (BAC = 0.01-0.09) | | High Alcohol (BAC = 0.10+) | | Any Alcohol (BAC = 0.01+) | | | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| AL | 516 | 68 | 36 | 5 | 211 | 28 | 247 | 32 | **763** | **100** |
| AK | 25 | 51 | 4 | 8 | 21 | 41 | 25 | 50 | **50** | **100** |
| AZ | 352 | 67 | 31 | 6 | 144 | 27 | 175 | 33 | **527** | **100** |
| AR | 287 | 71 | 26 | 6 | 94 | 23 | 120 | 29 | **407** | **100** |
| CA | 1,189 | 66 | 139 | 8 | 479 | 27 | 618 | 34 | **1,807** | **100** |
| CO | 251 | 67 | 27 | 7 | 99 | 26 | 126 | 33 | **377** | **100** |
| CT | 99 | 59 | 16 | 10 | 54 | 32 | 70 | 41 | **169** | **100** |
| DE | 42 | 64 | 2 | 3 | 21 | 32 | 23 | 36 | **65** | **100** |
| DC | 12 | 62 | 2 | 9 | 6 | 30 | 7 | 38 | **19** | **100** |
| FL | 1,097 | 69 | 98 | 6 | 391 | 25 | 489 | 31 | **1,586** | **100** |
| GA | 658 | 71 | 57 | 6 | 214 | 23 | 271 | 29 | **929** | **100** |
| HI | 24 | 50 | 2 | 5 | 22 | 45 | 25 | 50 | **49** | **100** |
| ID | 99 | 62 | 15 | 10 | 46 | 29 | 61 | 38 | **160** | **100** |
| IL | 542 | 60 | 67 | 7 | 293 | 32 | 360 | 40 | **902** | **100** |
| IN | 475 | 69 | 49 | 7 | 164 | 24 | 213 | 31 | **688** | **100** |
| IA | 230 | 72 | 21 | 7 | 70 | 22 | 91 | 28 | **321** | **100** |
| KS | 226 | 67 | 22 | 7 | 90 | 27 | 112 | 33 | **338** | **100** |
| KY | 377 | 68 | 21 | 4 | 157 | 28 | 178 | 32 | **555** | **100** |
| LA | 307 | 56 | 49 | 9 | 193 | 35 | 242 | 44 | **549** | **100** |
| ME | 86 | 70 | 3 | 3 | 34 | 27 | 37 | 30 | **123** | **100** |
| MD | 275 | 76 | 18 | 5 | 68 | 19 | 86 | 24 | **361** | **100** |
| MA | 153 | 60 | 30 | 12 | 73 | 28 | 104 | 40 | **257** | **100** |
| MI | 555 | 65 | 51 | 6 | 249 | 29 | 300 | 35 | **855** | **100** |
| MN | 297 | 70 | 19 | 4 | 109 | 26 | 128 | 30 | **425** | **100** |
| MS | 396 | 63 | 30 | 5 | 200 | 32 | 230 | 37 | **626** | **100** |
| MO | 487 | 67 | 52 | 7 | 192 | 26 | 243 | 33 | **730** | **100** |
| MT | 71 | 50 | 8 | 5 | 64 | 45 | 71 | 50 | **142** | **100** |
| NE | 118 | 60 | 25 | 13 | 55 | 28 | 80 | 40 | **198** | **100** |
| NV | 105 | 62 | 20 | 12 | 43 | 26 | 64 | 38 | **169** | **100** |
| NH | 47 | 48 | 19 | 19 | 32 | 33 | 51 | 52 | **98** | **100** |

## Table 116
## Drivers Killed in Fatal Crashes, by State and Blood Alcohol Concentration of the Driver (Continued)

| State | Blood Alcohol Concentration of Driver | | | | | | | | Total Drivers Killed | |
|---|---|---|---|---|---|---|---|---|---|---|
| | No Alcohol (BAC = 0.00) | | Low Alcohol (BAC = 0.01-0.09) | | High Alcohol (BAC = 0.10+) | | Any Alcohol (BAC = 0.01+) | | | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| NJ | 269 | 70 | 29 | 8 | 87 | 23 | 115 | 30 | **384** | **100** |
| NM | 133 | 56 | 18 | 8 | 86 | 36 | 104 | 44 | **237** | **100** |
| NY | 683 | 81 | 34 | 4 | 124 | 15 | 158 | 19 | **841** | **100** |
| NC | 664 | 70 | 64 | 7 | 224 | 24 | 288 | 30 | **952** | **100** |
| ND | 39 | 54 | 2 | 3 | 31 | 42 | 33 | 46 | **72** | **100** |
| OH | 662 | 70 | 50 | 5 | 228 | 24 | 278 | 30 | **940** | **100** |
| OK | 319 | 71 | 20 | 5 | 110 | 24 | 130 | 29 | **449** | **100** |
| OR | 148 | 60 | 15 | 6 | 83 | 34 | 98 | 40 | **246** | **100** |
| PA | 612 | 63 | 58 | 6 | 304 | 31 | 362 | 37 | **974** | **100** |
| RI | 33 | 59 | 8 | 14 | 15 | 27 | 24 | 41 | **57** | **100** |
| SC | 476 | 70 | 25 | 4 | 176 | 26 | 201 | 30 | **677** | **100** |
| SD | 59 | 64 | 4 | 5 | 29 | 32 | 33 | 36 | **92** | **100** |
| TN | 550 | 64 | 60 | 7 | 248 | 29 | 309 | 36 | **859** | **100** |
| TX | 1,199 | 57 | 167 | 8 | 721 | 35 | 887 | 43 | **2,086** | **100** |
| UT | 169 | 81 | 8 | 4 | 32 | 15 | 40 | 19 | **209** | **100** |
| VT | 37 | 66 | 5 | 9 | 14 | 25 | 19 | 34 | **56** | **100** |
| VA | 393 | 68 | 40 | 7 | 142 | 25 | 182 | 32 | **575** | **100** |
| WA | 246 | 62 | 19 | 5 | 133 | 34 | 152 | 38 | **398** | **100** |
| WV | 165 | 65 | 12 | 5 | 76 | 30 | 87 | 35 | **252** | **100** |
| WI | 291 | 59 | 29 | 6 | 177 | 36 | 206 | 41 | **497** | **100** |
| WY | 69 | 62 | 7 | 6 | 35 | 32 | 43 | 38 | **112** | **100** |
| **USA** | **16,616** | **66** | **1,635** | **6** | **6,960** | **28** | **8,594** | **34** | 25,210 | 100 |
| PR | 137 | 58 | 22 | 9 | 76 | 32 | 97 | 42 | **234** | **100** |

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

## Table 117
## Surviving Drivers Involved in Fatal Crashes, by State and Blood Alcohol Concentration of the Driver

| State | Blood Alcohol Concentration of Driver | | | | | | | | Total Surviving Drivers in Fatal Crashes | |
|---|---|---|---|---|---|---|---|---|---|---|
| | No Alcohol (BAC = 0.00) | | Low Alcohol (BAC = 0.01-0.09) | | High Alcohol (BAC = 0.10+) | | Any Alcohol (BAC = 0.01+) | | | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| AL | 639 | 85 | 36 | 5 | 75 | 10 | 111 | 15 | **750** | **100** |
| AK | 40 | 78 | 5 | 10 | 6 | 13 | 11 | 22 | **51** | **100** |
| AZ | 738 | 86 | 37 | 4 | 82 | 10 | 118 | 14 | **856** | **100** |
| AR | 331 | 88 | 20 | 5 | 26 | 7 | 46 | 12 | **377** | **100** |
| CA | 2,402 | 86 | 148 | 5 | 232 | 8 | 381 | 14 | **2,783** | **100** |
| CO | 398 | 86 | 25 | 5 | 39 | 8 | 64 | 14 | **462** | **100** |
| CT | 184 | 80 | 17 | 7 | 28 | 12 | 45 | 20 | **229** | **100** |
| DE | 79 | 91 | 3 | 4 | 5 | 5 | 8 | 9 | **87** | **100** |
| DC | 27 | 71 | 6 | 15 | 5 | 14 | 11 | 29 | **38** | **100** |
| FL | 2,324 | 89 | 94 | 4 | 197 | 8 | 291 | 11 | **2,615** | **100** |
| GA | 1,023 | 89 | 58 | 5 | 66 | 6 | 125 | 11 | **1,148** | **100** |
| HI | 76 | 82 | 5 | 6 | 11 | 12 | 16 | 18 | **92** | **100** |
| ID | 157 | 84 | 9 | 5 | 21 | 11 | 30 | 16 | **187** | **100** |
| IL | 959 | 85 | 60 | 5 | 109 | 10 | 169 | 15 | **1,128** | **100** |
| IN | 628 | 89 | 26 | 4 | 53 | 7 | 79 | 11 | **707** | **100** |
| IA | 332 | 87 | 21 | 5 | 28 | 7 | 48 | 13 | **380** | **100** |
| KS | 316 | 87 | 20 | 6 | 25 | 7 | 46 | 13 | **362** | **100** |
| KY | 442 | 88 | 24 | 5 | 36 | 7 | 60 | 12 | **502** | **100** |
| LA | 526 | 80 | 51 | 8 | 82 | 12 | 133 | 20 | **659** | **100** |
| ME | 116 | 87 | 6 | 5 | 10 | 8 | 17 | 13 | **133** | **100** |
| MD | 443 | 89 | 20 | 4 | 35 | 7 | 55 | 11 | **498** | **100** |
| MA | 230 | 73 | 34 | 11 | 50 | 16 | 83 | 27 | **313** | **100** |
| MI | 990 | 86 | 57 | 5 | 98 | 9 | 155 | 14 | **1,145** | **100** |
| MN | 438 | 90 | 16 | 3 | 33 | 7 | 49 | 10 | **487** | **100** |
| MS | 495 | 84 | 31 | 5 | 62 | 11 | 93 | 16 | **588** | **100** |
| MO | 611 | 80 | 63 | 8 | 86 | 11 | 148 | 20 | **759** | **100** |
| MT | 88 | 78 | 8 | 7 | 17 | 15 | 24 | 22 | **112** | **100** |
| NE | 172 | 86 | 7 | 4 | 21 | 11 | 28 | 14 | **200** | **100** |
| NV | 227 | 78 | 23 | 8 | 39 | 14 | 62 | 22 | **289** | **100** |
| NH | 77 | 86 | 6 | 7 | 7 | 7 | 13 | 14 | **90** | **100** |

## Table 117
## Surviving Drivers Involved in Fatal Crashes, by State and Blood Alcohol Concentration of the Driver (Continued)

| State | Blood Alcohol Concentration of Driver | | | | | | | | Total Surviving Drivers in Fatal Crashes | |
|---|---|---|---|---|---|---|---|---|---|---|
| | No Alcohol (BAC = 0.00) | | Low Alcohol (BAC = 0.01-0.09) | | High Alcohol (BAC = 0.10+) | | Any Alcohol (BAC = 0.01+) | | | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| NJ | 490 | 81 | 52 | 9 | 63 | 10 | 115 | 19 | **605** | **100** |
| NM | 263 | 82 | 20 | 6 | 39 | 12 | 59 | 18 | **322** | **100** |
| NY | 1,138 | 92 | 32 | 3 | 66 | 5 | 98 | 8 | **1,236** | **100** |
| NC | 1,041 | 90 | 37 | 3 | 84 | 7 | 121 | 10 | **1,162** | **100** |
| ND | 57 | 80 | 7 | 10 | 7 | 10 | 14 | 20 | **71** | **100** |
| OH | 968 | 90 | 19 | 2 | 87 | 8 | 106 | 10 | **1,074** | **100** |
| OK | 445 | 87 | 23 | 5 | 44 | 9 | 67 | 13 | **512** | **100** |
| OR | 283 | 88 | 16 | 5 | 23 | 7 | 39 | 12 | **322** | **100** |
| PA | 990 | 86 | 49 | 4 | 111 | 10 | 160 | 14 | **1,150** | **100** |
| RI | 50 | 83 | 4 | 7 | 6 | 10 | 10 | 17 | **60** | **100** |
| SC | 678 | 92 | 11 | 2 | 44 | 6 | 55 | 8 | **733** | **100** |
| SD | 77 | 76 | 4 | 4 | 20 | 20 | 24 | 24 | **101** | **100** |
| TN | 766 | 86 | 39 | 4 | 84 | 9 | 123 | 14 | **889** | **100** |
| TX | 2,068 | 77 | 247 | 9 | 382 | 14 | 628 | 23 | **2,696** | **100** |
| UT | 202 | 90 | 7 | 3 | 15 | 7 | 23 | 10 | **225** | **100** |
| VT | 46 | 82 | 4 | 8 | 6 | 10 | 10 | 18 | **56** | **100** |
| VA | 502 | 86 | 25 | 4 | 57 | 10 | 82 | 14 | **584** | **100** |
| WA | 369 | 83 | 22 | 5 | 52 | 12 | 74 | 17 | **443** | **100** |
| WV | 230 | 88 | 12 | 5 | 19 | 7 | 31 | 12 | **261** | **100** |
| WI | 434 | 84 | 24 | 5 | 56 | 11 | 81 | 16 | **515** | **100** |
| WY | 85 | 87 | 3 | 3 | 10 | 10 | 13 | 13 | **98** | **100** |
| **USA** | **26,689** | **86** | **1,595** | **5** | **2,858** | **9** | **4,453** | **14** | 31,142 | **100** |
| PR | 364 | 74 | 47 | 10 | 79 | 16 | 125 | 26 | **489** | **100** |

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

## Table 118
## Speeding-Related Traffic Fatalities and Costs by Road Type and Speed Limit

| State | Total Traffic Fatalities | Speeding-Related Fatalities by Road Type and Speed Limit | | | | | | | | | | Estimated Costs of Speeding-Related Crashes by Road Type (Million 1994 Dollars) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Total | Interstate | | Non-Interstate | | | | | | | | | |
| | | | >55 mph | ≤55 mph | 55 mph | 50 mph | 45 mph | 40 mph | 35 mph | <35 mph | Total | Total | Interstate | Non-Interstate |
| AL | 1,138 | 407 | 37 | 4 | 97 | 14 | 154 | 30 | 39 | 19 | 463 | 55 | 408 | |
| AK | 76 | 38 | 3 | 7 | 9 | 4 | 2 | 2 | 6 | 3 | 71 | 14 | 57 | |
| AZ | 1,024 | 383 | 49 | 15 | 51 | 31 | 64 | 51 | 40 | 25 | 563 | 91 | 471 | |
| AR | 604 | 171 | 14 | 1 | 83 | 5 | 23 | 4 | 13 | 16 | 261 | 31 | 230 | |
| CA | 3,559 | 1,307 | 191 | 25 | 356 | 60 | 86 | 100 | 153 | 115 | 2,948 | 446 | 2,502 | |
| CO | 626 | 265 | 27 | 15 | 44 | 19 | 26 | 27 | 36 | 37 | 428 | 65 | 362 | |
| CT | 301 | 113 | 4 | 9 | 5 | 3 | 24 | 8 | 9 | 48 | 397 | 53 | 343 | |
| DE | 100 | 21 | 0 | 1 | 5 | 7 | 0 | 0 | 2 | 2 | 62 | 7 | 54 | |
| DC | 41 | 12 | 0 | 0 | 0 | 2 | 2 | 0 | 1 | 6 | 79 | 9 | 70 | |
| FL | 2,918 | 524 | 51 | 20 | 76 | 13 | 90 | 55 | 51 | 59 | 1,448 | 212 | 1,236 | |
| GA | 1,508 | 318 | 39 | 14 | 118 | 5 | 51 | 13 | 42 | 26 | 739 | 112 | 628 | |
| HI | 98 | 29 | 0 | 1 | 1 | 0 | 2 | 0 | 11 | 13 | 107 | 12 | 94 | |
| ID | 278 | 95 | 13 | 0 | 20 | 13 | 8 | 0 | 12 | 4 | 119 | 17 | 102 | |
| IL | 1,456 | 480 | 50 | 51 | 203 | 5 | 43 | 19 | 58 | 50 | 1,200 | 200 | 1,000 | |
| IN | 1,013 | 233 | 15 | 10 | 81 | 10 | 28 | 16 | 33 | 37 | 515 | 67 | 448 | |
| IA | 490 | 52 | 7 | 0 | 21 | 0 | 1 | 2 | 2 | 15 | 198 | 28 | 170 | |
| KS | 537 | 134 | 15 | 0 | 29 | 5 | 6 | 12 | 8 | 21 | 242 | 31 | 211 | |
| KY | 814 | 215 | 10 | 1 | 152 | 4 | 11 | 2 | 24 | 4 | 383 | 42 | 342 | |
| LA | 924 | 133 | 5 | 4 | 64 | 8 | 16 | 5 | 20 | 9 | 423 | 54 | 369 | |
| ME | 181 | 79 | 5 | 0 | 5 | 10 | 26 | 8 | 10 | 11 | 140 | 15 | 124 | |
| MD | 590 | 191 | 7 | 3 | 11 | 29 | 5 | 30 | 25 | 33 | 601 | 73 | 528 | |
| MA | 414 | 127 | 15 | 9 | 2 | 7 | 16 | 18 | 20 | 38 | 677 | 102 | 575 | |
| MI | 1,382 | 314 | 24 | 13 | 154 | 4 | 19 | 10 | 37 | 34 | 931 | 131 | 800 | |
| MN | 625 | 155 | 18 | 3 | 88 | 6 | 6 | 7 | 2 | 17 | 349 | 49 | 300 | |
| MS | 927 | 206 | 30 | 1 | 72 | 24 | 32 | 9 | 13 | 15 | 253 | 37 | 216 | |
| MO | 1,094 | 373 | 57 | 12 | 133 | 5 | 23 | 9 | 35 | 42 | 623 | 101 | 522 | |
| MT | 220 | 86 | 7 | 0 | 13 | 3 | 5 | 0 | 9 | 9 | 99 | 12 | 87 | |
| NE | 295 | 69 | 9 | 0 | 6 | 27 | 6 | 0 | 8 | 4 | 157 | 22 | 135 | |
| NV | 350 | 139 | 29 | 5 | 13 | 5 | 22 | 5 | 9 | 17 | 237 | 46 | 190 | |
| NH | 141 | 50 | 3 | 0 | 2 | 2 | 0 | 6 | 10 | 24 | 95 | 10 | 85 | |

## Table 118
## Speeding-Related Traffic Fatalities and Costs by Road Type and Speed Limit (Continued)

| State | Total Traffic Fatalities | Speeding-Related Fatalities by Road Type and Speed Limit | | | | | | | | | Estimated Costs of Speeding-Related Crashes by Road Type (Million 1994 Dollars) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Interstate | | Non-Interstate | | | | | | | | |
| | | Total | >55 mph | ≤55 mph | 55 mph | 50 mph | 45 mph | 40 mph | 35 mph | <35 mph | Total | Interstate | Non-Interstate |
| NJ | 727 | 69 | 1 | 3 | 4 | 15 | 9 | 5 | 5 | 22 | 970 | 132 | 838 |
| NM | 460 | 166 | 18 | 4 | 28 | 9 | 14 | 11 | 19 | 25 | 228 | 31 | 197 |
| NY | 1,548 | 445 | 12 | 14 | 180 | 15 | 20 | 35 | 17 | 75 | 2,216 | 285 | 1,931 |
| NC | 1,505 | 568 | 36 | 13 | 314 | 12 | 107 | 2 | 70 | 7 | 980 | 116 | 864 |
| ND | 119 | 48 | 4 | 1 | 24 | 2 | 0 | 4 | 1 | 6 | 56 | 7 | 50 |
| OH | 1,430 | 363 | 40 | 9 | 186 | 10 | 29 | 15 | 26 | 19 | 1,215 | 173 | 1,042 |
| OK | 739 | 276 | 56 | 3 | 40 | 9 | 41 | 21 | 16 | 16 | 374 | 66 | 307 |
| OR | 414 | 128 | 11 | 4 | 75 | 2 | 7 | 9 | 7 | 10 | 257 | 34 | 223 |
| PA | 1,549 | 589 | 35 | 38 | 166 | 11 | 99 | 85 | 104 | 44 | 1,136 | 153 | 983 |
| RI | 88 | 25 | 4 | 1 | 2 | 3 | 1 | 0 | 6 | 8 | 82 | 13 | 69 |
| SC | 1,065 | 502 | 55 | 9 | 193 | 11 | 84 | 18 | 52 | 30 | 551 | 78 | 473 |
| SD | 150 | 59 | 4 | 0 | 23 | 2 | 4 | 2 | 5 | 2 | 79 | 8 | 71 |
| TN | 1,285 | 363 | 30 | 22 | 105 | 13 | 71 | 38 | 28 | 49 | 584 | 84 | 501 |
| TX | 3,518 | 1,332 | 166 | 47 | 208 | 38 | 108 | 89 | 103 | 105 | 2,334 | 354 | 1,980 |
| UT | 360 | 97 | 30 | 3 | 11 | 1 | 5 | 6 | 12 | 10 | 166 | 36 | 130 |
| VT | 90 | 37 | 4 | 0 | 0 | 20 | 0 | 3 | 8 | 1 | 51 | 6 | 45 |
| VA | 877 | 232 | 16 | 10 | 114 | 4 | 35 | 6 | 30 | 14 | 583 | 77 | 506 |
| WA | 634 | 226 | 21 | 0 | 22 | 31 | 9 | 17 | 59 | 37 | 602 | 76 | 525 |
| WV | 395 | 114 | 18 | 0 | 43 | 1 | 18 | 11 | 9 | 11 | 189 | 28 | 161 |
| WI | 745 | 203 | 17 | 2 | 108 | 0 | 22 | 2 | 17 | 24 | 448 | 56 | 392 |
| WY | 189 | 67 | 26 | 1 | 8 | 0 | 2 | 1 | 2 | 2 | 76 | 24 | 52 |
| **USA** | **41,611** | ***12,628** | **1,338** | **408** | **3,768** | **539** | **1,482** | **828** | **1,334** | **1,270** | **27,985** | **3,985** | **24,000** |
| PR | 558 | 273 | 0 | 56 | 5 | 13 | 53 | 38 | 76 | 32 | 605 | 124 | 481 |

*Of the total number of speeding-related fatalities in 1999, 5,779 occurred on roads with posted speed limits between 55 and 65 mph, and 880 occurred on roads with speed limits above 65 mph.
Notes: Totals may not equal sum of components due to independent rounding. The total column for speeding-related fatalities includes fatalities that occurred on roads for which the speed limit was unknown. The total column for costs of speeding-related crashes includes costs for crashes that occurred on unknown road types. Costs are based on preliminary estimates.

## Table 119
## 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 | 12.69 | 90.3 | 12.38 | 89.0 | 33.71 | 91.9 | 53.54 | 91.9 | **691** |
| AK | 7.00 | 23.9 | 17.20 | 10.9 | 31.13 | 47.8 | 49.26 | 50.0 | **46** |
| AZ | 4.82 | 27.2 | 16.59 | 25.7 | 51.20 | 98.9 | 72.17 | 98.7 | **459** |
| AR | 7.47 | 15.7 | 11.96 | 12.6 | NA | NA | NA | NA | **420** |
| CA | 5.17 | 99.1 | 7.67 | 99.1 | 68.00 | 99.9 | 58.00 | 99.8 | **1,259** |
| CO | 7.53 | 12.9 | 12.98 | 7.1 | 34.97 | 45.6 | 50.81 | 46.5 | **340** |
| CT | 0.98 | 37.8 | 7.32 | 10.8 | 34.92 | 48.7 | 41.66 | 48.7 | **74** |
| DE | 6.09 | 0.0 | 8.00 | 0.0 | 28.80 | 30.2 | 38.55 | 32.6 | **43** |
| DC | 2.00 | 0.0 | 3.00 | 0.0 | 5.00 | 0.0 | 10.00 | 0.0 | **1** |
| FL | 5.81 | 19.2 | 8.71 | 14.9 | NA | NA | NA | NA | **1,196** |
| GA | 2.60 | 9.1 | 9.37 | 8.0 | 38.60 | 29.8 | 49.28 | 30.8 | **766** |
| HI | 4.17 | 10.6 | 8.67 | 2.1 | 40.11 | 42.6 | 51.15 | 42.6 | **47** |
| ID | 7.10 | 10.0 | 14.38 | 5.7 | NA | NA | NA | NA | **210** |
| IL | 7.58 | 14.0 | 19.83 | 93.7 | 28.94 | 94.2 | 73.47 | 94.2 | **552** |
| IN | NA | NA | NA | NA | NA | NA | NA | NA | **621** |
| IA | 7.41 | 10.3 | 11.14 | 4.7 | 37.01 | 31.0 | 52.03 | 35.4 | **339** |
| KS | 8.91 | 18.2 | 11.68 | 15.2 | 37.78 | 25.5 | 53.54 | 31.3 | **329** |
| KY | 5.94 | 7.9 | 10.49 | 6.0 | 36.47 | 33.2 | 50.66 | 34.5 | **579** |
| LA | 8.21 | 14.1 | 12.74 | 5.1 | 37.65 | 33.6 | 55.64 | 35.7 | **569** |
| ME | 6.69 | 13.1 | 9.97 | 0.7 | 41.70 | 32.9 | 55.24 | 33.6 | **137** |
| MD | NA | NA | NA | NA | NA | NA | NA | NA | **210** |
| MA | 10.49 | 26.7 | 8.53 | 7.9 | 35.20 | 35.6 | 50.00 | 36.6 | **101** |
| MI | 4.33 | 22.1 | 9.25 | 20.8 | NA | NA | NA | NA | **621** |
| MN | 4.76 | 24.0 | 11.81 | 23.0 | 31.27 | 46.0 | 44.94 | 49.2 | **417** |
| MS | 15.87 | 26.3 | 17.62 | 26.1 | 20.63 | 20.4 | 53.61 | 20.9 | **824** |
| MO | 8.32 | 21.8 | 11.45 | 3.8 | 38.90 | 64.9 | 53.75 | 66.2 | **692** |
| MT | 11.21 | 11.4 | 16.76 | 2.8 | 37.47 | 30.1 | 58.87 | 36.4 | **176** |
| NE | 9.78 | 25.0 | 10.71 | 15.1 | 30.29 | 35.9 | 48.96 | 40.6 | **212** |
| NV | 11.22 | 16.4 | 20.08 | 9.6 | 41.36 | 42.5 | 62.89 | 49.3 | **146** |
| NH | 3.39 | 11.5 | 11.36 | 13.8 | 36.78 | 89.7 | 49.22 | 89.7 | **87** |

## Table 119
## Rural Fatal Crashes by State and Average Emergency Medical Services (EMS) Response Times (Continued)

| 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 | |
| NJ | NA | NA | NA | NA | NA | NA | NA | NA | **178** |
| NM | NA | NA | NA | NA | NA | NA | NA | NA | **293** |
| NY | 3.68 | 25.7 | 7.88 | 23.4 | 36.70 | 48.7 | 46.59 | 49.6 | **816** |
| NC | 6.59 | 27.8 | 10.60 | 24.1 | 41.65 | 38.7 | 55.50 | 42.0 | **816** |
| ND | 12.94 | 17.1 | 13.89 | 2.4 | 44.95 | 20.7 | 58.71 | 37.8 | **82** |
| OH | 7.84 | 84.3 | 11.73 | 86.8 | 36.29 | 92.0 | 54.22 | 92.2 | **772** |
| OK | 8.53 | 33.6 | 10.17 | 16.2 | 39.78 | 38.6 | 52.98 | 41.3 | **438** |
| OR | 4.02 | 11.1 | 11.63 | 3.8 | 44.30 | 38.9 | 54.68 | 42.4 | **262** |
| PA | 6.02 | 42.1 | 10.34 | 28.5 | 36.57 | 52.2 | 49.98 | 53.2 | **799** |
| RI | 2.33 | 30.8 | 6.69 | 0.0 | 32.80 | 23.1 | 41.00 | 23.1 | **13** |
| SC | 5.75 | 99.5 | 15.50 | 99.8 | NA | NA | 22.50 | 99.8 | **806** |
| SD | 8.52 | 23.9 | 13.17 | 18.8 | 35.07 | 28.2 | 53.69 | 31.6 | **117** |
| TN | 11.60 | 58.0 | 11.13 | 44.4 | 35.56 | 84.0 | 49.65 | 84.3 | **730** |
| TX | 8.00 | 34.4 | 13.05 | 33.1 | 40.54 | 61.6 | 59.80 | 63.1 | **1,743** |
| UT | 5.48 | 20.9 | 13.99 | 25.2 | 35.38 | 92.2 | 44.25 | 93.5 | **306** |
| VT | 8.00 | 43.8 | 11.78 | 20.6 | 37.24 | 37.0 | 49.58 | 48.0 | **73** |
| VA | NA | NA | NA | NA | NA | NA | NA | NA | **500** |
| WA | 8.16 | 20.3 | 9.96 | 6.7 | 47.51 | 40.6 | 60.33 | 43.8 | **345** |
| WV | 5.01 | 8.6 | 11.45 | 0.3 | 42.70 | 28.2 | 54.65 | 31.6 | **291** |
| WI | 4.80 | 7.8 | 10.58 | 3.8 | 33.51 | 40.0 | 47.43 | 42.3 | **523** |
| WY | 9.62 | 19.9 | 17.91 | 11.4 | 40.63 | 46.1 | 59.50 | 51.8 | **141** |
| **USA** | **7.06** | **40.8** | **11.59** | **38.5** | **36.62** | **66.6** | **52.89** | **67.9** | **22,208** |
| PR | 10.85 | 77.5 | 12.65 | 76.5 | NA | NA | NA | NA | **204** |

*Includes crashes for which both times were known.
NA = not available or not applicable.

## Table 120
## 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 | 15.96 | 92.2 | 6.67 | 90.9 | 23.00 | 92.9 | 30.26 | 93.6 | **295** |
| AK | 2.50 | 8.3 | 5.22 | 4.2 | 20.44 | 25.0 | 27.89 | 20.8 | **24** |
| AZ | 2.44 | 40.0 | 6.29 | 35.6 | 27.17 | 98.7 | 34.67 | 98.7 | **447** |
| AR | 3.38 | 14.2 | 5.82 | 10.8 | 12.00 | 99.2 | 17.00 | 99.2 | **120** |
| CA | 3.91 | 98.3 | 5.44 | 98.7 | 24.83 | 99.7 | 41.76 | 99.1 | **1,889** |
| CO | 3.87 | 14.4 | 6.79 | 7.9 | 23.15 | 38.6 | 32.45 | 39.6 | **202** |
| CT | 1.62 | 28.7 | 5.42 | 14.9 | 23.97 | 39.5 | 30.46 | 37.4 | **195** |
| DE | 3.79 | 0.0 | 4.93 | 0.0 | 20.50 | 28.6 | 29.97 | 28.6 | **42** |
| DC | 2.71 | 2.6 | 4.26 | 0.0 | 12.05 | 0.0 | 19.21 | 2.6 | **39** |
| FL | 3.84 | 30.4 | 5.80 | 26.4 | NA | NA | NA | NA | **1,430** |
| GA | 2.02 | 9.4 | 6.45 | 7.9 | 28.13 | 23.4 | 36.53 | 23.6 | **534** |
| HI | 2.38 | 23.8 | 8.33 | 0.0 | 29.57 | 16.7 | 38.86 | 16.7 | **42** |
| ID | 3.26 | 2.9 | 7.43 | 0.0 | NA | NA | NA | NA | **35** |
| IL | 7.96 | 6.1 | 8.34 | 79.0 | 22.53 | 81.0 | 52.92 | 80.8 | **743** |
| IN | NA | NA | NA | NA | NA | NA | NA | NA | **263** |
| IA | 3.59 | 9.0 | 5.91 | 3.4 | 26.50 | 21.4 | 35.30 | 24.7 | **89** |
| KS | 4.56 | 18.9 | 6.58 | 11.0 | 25.77 | 26.0 | 35.92 | 25.2 | **127** |
| KY | 3.09 | 23.5 | 6.28 | 19.3 | 27.17 | 34.5 | 36.19 | 34.5 | **145** |
| LA | 6.41 | 21.0 | 7.00 | 6.1 | 26.39 | 31.5 | 37.03 | 33.9 | **248** |
| ME | 4.28 | 13.8 | 4.79 | 0.0 | 26.82 | 24.1 | 34.36 | 24.1 | **29** |
| MD | NA | NA | 5.00 | 99.6 | 29.00 | 99.6 | 34.00 | 99.6 | **257** |
| MA | 6.58 | 40.0 | 5.64 | 12.3 | 29.04 | 28.4 | 36.23 | 30.2 | **285** |
| MI | 2.85 | 40.3 | 5.49 | 36.3 | 31.00 | 99.8 | 38.00 | 99.8 | **620** |
| MN | 2.00 | 30.0 | 7.01 | 30.0 | 22.67 | 50.0 | 31.80 | 50.7 | **150** |
| MS | 14.25 | 20.0 | 18.75 | 20.0 | 20.75 | 20.0 | 53.75 | 20.0 | **5** |
| MO | 5.49 | 24.4 | 7.21 | 8.1 | 24.88 | 43.5 | 33.93 | 44.3 | **271** |
| MT | 1.76 | 5.6 | 5.24 | 5.6 | 20.08 | 33.3 | 26.42 | 33.3 | **18** |
| NE | 3.10 | 2.3 | 4.21 | 2.3 | 17.68 | 14.0 | 24.95 | 11.6 | **43** |
| NV | 3.13 | 15.5 | 6.28 | 9.9 | 24.66 | 36.0 | 34.10 | 36.0 | **161** |
| NH | 1.18 | 20.9 | 6.67 | 16.3 | 38.67 | 93.0 | 45.67 | 93.0 | **43** |

## Table 120
## Urban Fatal Crashes by State and Average Emergency Medical Services (EMS) Response Times (Continued)

| 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 | |
| NJ | 1.70 | 97.9 | 5.56 | 98.1 | 26.43 | 98.6 | 33.29 | 98.6 | **484** |
| NM | NA | NA | NA | NA | NA | NA | NA | NA | **95** |
| NY | 5.12 | 76.4 | 6.98 | 76.0 | 27.49 | 83.5 | 35.59 | 84.4 | **601** |
| NC | 4.85 | 19.0 | 7.80 | 16.3 | 31.35 | 30.4 | 42.53 | 32.1 | **533** |
| ND | 4.60 | 0.0 | 3.70 | 0.0 | 14.44 | 10.0 | 23.22 | 10.0 | **10** |
| OH | 3.05 | 90.2 | 5.85 | 90.7 | 26.00 | 94.2 | 34.32 | 94.2 | **430** |
| OK | 3.64 | 44.1 | 6.03 | 19.6 | 25.85 | 33.5 | 32.05 | 34.6 | **179** |
| OR | 1.35 | 15.2 | 4.33 | 2.9 | 29.65 | 37.1 | 35.38 | 38.1 | **105** |
| PA | 3.51 | 39.3 | 6.24 | 22.0 | 25.52 | 38.4 | 32.44 | 39.3 | **583** |
| RI | 5.43 | 29.2 | 3.96 | 1.4 | 23.81 | 25.0 | 28.96 | 26.4 | **72** |
| SC | NA | NA | NA | NA | NA | NA | NA | NA | **138** |
| SD | 1.47 | 21.1 | 4.94 | 10.5 | 25.54 | 31.6 | 31.54 | 31.6 | **19** |
| TN | 5.24 | 86.8 | 7.65 | 83.3 | 23.77 | 92.7 | 35.24 | 92.9 | **408** |
| TX | 4.76 | 32.3 | 7.65 | 30.7 | 28.74 | 60.2 | 39.81 | 60.3 | **1,362** |
| UT | 2.42 | 0.0 | 5.00 | 0.0 | 74.00 | 91.7 | 78.00 | 91.7 | **12** |
| VT | 6.17 | 33.3 | 9.00 | 0.0 | 33.00 | 0.0 | 45.11 | 0.0 | **9** |
| VA | NA | NA | NA | NA | NA | NA | NA | NA | **294** |
| WA | 3.55 | 16.3 | 5.49 | 2.2 | 35.81 | 27.8 | 43.21 | 27.8 | **227** |
| WV | 3.11 | 3.2 | 5.68 | 0.0 | 31.47 | 28.6 | 40.02 | 28.6 | **63** |
| WI | 3.43 | 12.5 | 5.85 | 2.6 | 26.45 | 28.3 | 34.80 | 30.3 | **152** |
| WY | 9.00 | 14.3 | 6.30 | 4.8 | 22.39 | 14.3 | 36.78 | 14.3 | **21** |
| **USA** | **4.26** | **49.8** | **6.43** | **49.1** | **27.06** | **72.4** | **36.72** | **72.6** | **14,588** |
| PR | 7.21 | 78.0 | 10.99 | 77.7 | NA | NA | NA | NA | **327** |

*Includes crashes for which both times were known.
NA = not available or not applicable.

## Table 121
## Persons Killed, Population, and Fatality Rates by City

| City | State | Fatalities | | | Population | Total Fatality Rate per 100,000 Population |
|---|---|---|---|---|---|---|
| | | Total Killed | Pedestrians Killed | | | |
| | | | Number | Percent of Total Killed | | |
| New York | NY | 361 | 164 | 45.4 | 7,428,162 | 4.86 |
| Los Angeles | CA | 272 | 96 | 35.3 | 3,633,591 | 7.49 |
| Chicago | IL | 219 | 63 | 28.8 | 2,799,050 | 7.82 |
| Houston | TX | 231 | 47 | 20.3 | 1,845,967 | 12.51 |
| Philadelphia | PA | 133 | 34 | 25.6 | 1,417,601 | 9.38 |
| San Diego | CA | 120 | 38 | 31.7 | 1,238,974 | 9.69 |
| Phoenix | AZ | 203 | 51 | 25.1 | 1,211,466 | 16.76 |
| San Antonio | TX | 108 | 25 | 23.1 | 1,147,213 | 9.41 |
| Dallas | TX | 167 | 43 | 25.7 | 1,076,214 | 15.52 |
| Detroit | MI | 155 | 50 | 32.3 | 965,084 | 16.06 |
| San Jose | CA | 50 | 15 | 30.0 | 867,675 | 5.76 |
| San Francisco | CA | 45 | 26 | 57.8 | 746,777 | 6.03 |
| Indianapolis | IN | 42 | 11 | 26.2 | 738,907 | 5.68 |
| Jacksonville | FL | 114 | 18 | 15.8 | 695,877 | 16.38 |
| Columbus | OH | 58 | 14 | 24.1 | 671,247 | 8.64 |
| Baltimore | MD | 45 | 19 | 42.2 | 632,681 | 7.11 |
| El Paso | TX | 58 | 15 | 25.9 | 612,770 | 9.47 |
| Memphis | TN | 89 | 18 | 20.2 | 606,109 | 14.68 |
| Austin | TX | 58 | 17 | 29.3 | 587,873 | 9.87 |
| Milwaukee | WI | 33 | 5 | 15.2 | 572,424 | 5.76 |
| Boston | MA | 27 | 8 | 29.6 | 555,249 | 4.86 |
| Seattle | WA | 24 | 7 | 29.2 | 537,150 | 4.47 |
| Charlotte | NC | 54 | 11 | 20.4 | 520,829 | 10.37 |
| Washington | DC | 41 | 16 | 39.0 | 519,000 | 7.90 |
| Nashville-Davidson | TN | 84 | 8 | 9.5 | 506,385 | 16.59 |
| Portland | OR | 36 | 15 | 41.7 | 503,637 | 7.15 |
| Fort Worth | TX | 57 | 11 | 19.3 | 502,369 | 11.35 |
| Cleveland | OH | 49 | 8 | 16.3 | 501,662 | 9.77 |
| Denver | CO | 52 | 18 | 34.6 | 499,775 | 10.40 |
| Oklahoma City | OK | 58 | 5 | 8.6 | 475,322 | 12.20 |
| Tucson | AZ | 60 | 15 | 25.0 | 466,591 | 12.86 |
| New Orleans | LA | 80 | 12 | 15.0 | 460,913 | 17.36 |
| Kansas City | MO | 67 | 9 | 13.4 | 437,764 | 15.31 |

Source: Population—Bureau of the Census.

## Table 121
## 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 | | |
| Long Beach | CA | 28 | 6 | 21.4 | 435,027 | 6.44 |
| Virginia Beach | VA | 23 | 5 | 21.7 | 433,461 | 5.31 |
| Albuquerque | NM | 58 | 10 | 17.2 | 420,578 | 13.79 |
| Las Vegas | NV | 43 | 14 | 32.6 | 418,658 | 10.27 |
| Sacramento | CA | 33 | 13 | 39.4 | 406,899 | 8.11 |
| Fresno | CA | 50 | 10 | 20.0 | 404,141 | 12.37 |
| Atlanta | GA | 68 | 23 | 33.8 | 401,726 | 16.93 |
| Honolulu | HI | 12 | 5 | 41.7 | 395,327 | 3.04 |
| Omaha | NE | 26 | 4 | 15.4 | 386,742 | 6.72 |
| Tulsa | OK | 56 | 13 | 23.2 | 381,579 | 14.68 |
| Miami | FL | 63 | 18 | 28.6 | 369,253 | 17.06 |
| Mesa | AZ | 29 | 1 | 3.4 | 368,811 | 7.86 |
| Oakland | CA | 39 | 10 | 25.6 | 365,210 | 10.68 |
| Minneapolis | MN | 14 | 6 | 42.9 | 353,395 | 3.96 |
| Colorado Springs | CO | 22 | 3 | 13.6 | 350,199 | 6.28 |
| Pittsburgh | PA | 19 | 4 | 21.1 | 336,882 | 5.64 |
| Wichita | KS | 35 | 3 | 8.6 | 335,562 | 10.43 |
| St. Louis | MO | 44 | 11 | 25.0 | 333,960 | 13.18 |
| Cincinnati | OH | 20 | 4 | 20.0 | 330,914 | 6.04 |
| Arlington | TX | 20 | 2 | 10.0 | 311,962 | 6.41 |
| Santa Ana | CA | 14 | 7 | 50.0 | 309,290 | 4.53 |
| Toledo | OH | 29 | 8 | 27.6 | 307,946 | 9.42 |
| Anaheim | CA | 17 | 5 | 29.4 | 300,650 | 5.65 |
| Buffalo | NY | 14 | 4 | 28.6 | 295,619 | 4.74 |
| Tampa | FL | 50 | 19 | 38.0 | 290,973 | 17.18 |
| Corpus Christi | TX | 26 | 7 | 26.9 | 281,791 | 9.23 |
| Riverside | CA | 28 | 8 | 28.6 | 265,721 | 10.54 |
| Newark | NJ | 46 | 15 | 32.6 | 263,087 | 17.48 |
| Raleigh | NC | 33 | 5 | 15.2 | 261,205 | 12.63 |
| Anchorage | AK | 20 | 4 | 20.0 | 257,808 | 7.76 |
| St. Paul | MN | 15 | 5 | 33.3 | 256,213 | 5.85 |
| Louisville | KY | 46 | 11 | 23.9 | 253,128 | 18.17 |
| Aurora | CO | 22 | 5 | 22.7 | 252,956 | 8.70 |

Source: Population—Bureau of the Census.

## Table 121
## 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 | | |
| Birmingham | AL | 32 | 6 | 18.8 | 249,459 | 12.83 |
| Stockton | CA | 20 | 4 | 20.0 | 245,020 | 8.16 |
| Lexington-Fayette | KY | 18 | 3 | 16.7 | 243,785 | 7.38 |
| St. Petersburg | FL | 38 | 10 | 26.3 | 234,647 | 16.19 |
| Plano | TX | 8 | 0 | 0.0 | 232,904 | 3.43 |
| Jersey City | NJ | 11 | 5 | 45.5 | 230,458 | 4.77 |
| Norfolk | VA | 24 | 5 | 20.8 | 225,875 | 10.63 |
| Bakersfield | CA | 18 | 2 | 11.1 | 222,352 | 8.10 |
| Lincoln | NE | 8 | 0 | 0.0 | 215,928 | 3.70 |
| Rochester | NY | 15 | 7 | 46.7 | 214,470 | 6.99 |
| Hialeah | FL | 38 | 8 | 21.1 | 212,547 | 17.88 |
| Akron | OH | 11 | 0 | 0.0 | 211,822 | 5.19 |
| Madison | WI | 3 | 0 | 0.0 | 210,674 | 1.42 |
| Baton Rouge | LA | 27 | 6 | 22.2 | 210,667 | 12.82 |
| Fremont | CA | 4 | 1 | 25.0 | 208,620 | 1.92 |
| Chesapeake | VA | 12 | 2 | 16.7 | 202,759 | 5.92 |
| Glendale | AZ | 15 | 5 | 33.3 | 201,456 | 7.45 |
| Mobile | AL | 15 | 3 | 20.0 | 200,206 | 7.49 |
| Scottsdale | AZ | 18 | 1 | 5.6 | 199,943 | 9.00 |
| Huntington Beach | CA | 14 | 5 | 35.7 | 199,618 | 7.01 |
| Greensboro | NC | 21 | 4 | 19.0 | 199,562 | 10.52 |
| Fort Wayne | IN | 15 | 3 | 20.0 | 196,708 | 7.63 |
| Montgomery | AL | 12 | 3 | 25.0 | 195,690 | 6.13 |
| Garland | TX | 15 | 5 | 33.3 | 193,272 | 7.76 |
| Yonkers | NY | 8 | 3 | 37.5 | 191,458 | 4.18 |
| Des Moines | IA | 12 | 3 | 25.0 | 190,958 | 6.28 |
| Lubbock | TX | 31 | 1 | 3.2 | 190,002 | 16.32 |
| Richmond | VA | 9 | 3 | 33.3 | 189,700 | 4.74 |
| San Bernardino | CA | 22 | 9 | 40.9 | 188,924 | 11.64 |
| Modesto | CA | 16 | 4 | 25.0 | 188,253 | 8.50 |
| Shreveport | LA | 35 | 5 | 14.3 | 187,393 | 18.68 |
| Glendale | CA | 4 | 1 | 25.0 | 186,903 | 2.14 |

Source: Population—Bureau of the Census.

## Table 121
## 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 | | |
| Augusta-Richmnd Co | GA | 21 | 5 | 23.8 | 186,206 | 11.28 |
| Grand Rapids | MI | 13 | 3 | 23.1 | 185,009 | 7.03 |
| Spokane | WA | 13 | 4 | 30.8 | 184,323 | 7.05 |
| Laredo | TX | 13 | 1 | 7.7 | 183,160 | 7.10 |
| Columbus | GA | 14 | 1 | 7.1 | 181,547 | 7.71 |
| Jackson | MS | 34 | 3 | 8.8 | 180,664 | 18.82 |
| Orlando | FL | 33 | 11 | 33.3 | 180,308 | 18.30 |
| Tacoma | WA | 18 | 4 | 22.2 | 180,020 | 10.00 |
| Irving | TX | 17 | 2 | 11.8 | 179,520 | 9.47 |
| Durham | NC | 21 | 5 | 23.8 | 179,212 | 11.72 |
| Newport News | VA | 11 | 3 | 27.3 | 179,138 | 6.14 |
| Huntsville | AL | 26 | 4 | 15.4 | 177,893 | 14.62 |
| Little Rock | AR | 18 | 4 | 22.2 | 176,136 | 10.22 |
| Knoxville | TN | 34 | 4 | 11.8 | 174,860 | 19.44 |
| Arlington CDP | VA | 0 | 0 | 0.0 | 174,838 | 0.00 |
| Amarillo | TX | 10 | 2 | 20.0 | 171,959 | 5.82 |
| Salt Lake City | UT | 20 | 5 | 25.0 | 171,151 | 11.69 |
| Dayton | OH | 12 | 4 | 33.3 | 169,338 | 7.09 |
| Chandler | AZ | 4 | 0 | 0.0 | 169,053 | 2.37 |
| Boise | ID | 4 | 1 | 25.0 | 168,370 | 2.38 |
| Winston-Salem | NC | 16 | 6 | 37.5 | 168,086 | 9.52 |
| Tempe | AZ | 19 | 1 | 5.3 | 167,740 | 11.33 |
| Worcester | MA | 8 | 2 | 25.0 | 167,132 | 4.79 |
| Reno | NV | 13 | 8 | 61.5 | 166,650 | 7.80 |
| Henderson | NV | 10 | 2 | 20.0 | 166,399 | 6.01 |
| Chula Vista | CA | 16 | 6 | 37.5 | 164,914 | 9.70 |
| Oceanside | CA | 13 | 2 | 15.4 | 156,538 | 8.30 |
| Oxnard | CA | 8 | 0 | 0.0 | 156,372 | 5.12 |
| Fort Lauderdale | FL | 38 | 16 | 42.1 | 154,021 | 24.67 |
| Garden Grove | CA | 7 | 5 | 71.4 | 153,534 | 4.56 |
| Syracuse | NY | 8 | 2 | 25.0 | 150,563 | 5.31 |

Source: Population—Bureau of the Census.

## Table 122
## Fatalities and Fatality Rates by State, 1975-1999

| State | Fatalities | | | | | | Fatality Rate per 100 Million Vehicle Miles Traveled | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1975 | 1980 | 1985 | 1990 | 1999 | Difference, 1975-1999 | 1975 | 1980 | 1985 | 1990 | 1999 | Difference, 1975-1999 |
| AL | 902 | 940 | 882 | 1,121 | 1,138 | **+26%** | 3.6 | 3.2 | 2.5 | 2.6 | 2.0 | **-44%** |
| AK | 112 | 88 | 127 | 98 | 76 | **-32%** | 4.4 | 3.3 | 3.2 | 2.5 | 1.7 | **-61%** |
| AZ | 670 | 947 | 893 | 869 | 1,024 | **+53%** | 4.2 | 5.3 | 4.1 | 2.5 | 2.2 | **-48%** |
| AR | 559 | 588 | 534 | 604 | 604 | **+8%** | 4.0 | 3.6 | 3.1 | 2.9 | 2.1 | **-48%** |
| CA | 4,092 | 5,496 | 4,960 | 5,192 | 3,559 | **-13%** | 3.1 | 3.5 | 2.4 | 2.0 | 1.2 | **-61%** |
| CO | 581 | 709 | 579 | 544 | 626 | **+8%** | 3.5 | 3.2 | 2.2 | 2.0 | 1.5 | **-57%** |
| CT | 389 | 575 | 448 | 385 | 301 | **-23%** | 2.1 | 3.0 | 2.0 | 1.5 | 1.0 | **-52%** |
| DE | 122 | 153 | 104 | 138 | 100 | **-18%** | 3.4 | 3.6 | 1.9 | 2.1 | 1.2 | **-65%** |
| DC | 70 | 41 | 60 | 48 | 41 | **-41%** | 2.3 | 1.2 | 1.9 | 1.4 | 1.2 | **-48%** |
| FL | 1,998 | 2,825 | 2,832 | 2,891 | 2,918 | **+46%** | 3.2 | 3.6 | 3.2 | 2.6 | 2.1 | **-34%** |
| GA | 1,360 | 1,508 | 1,361 | 1,562 | 1,508 | **+11%** | 3.5 | 3.5 | 2.5 | 2.2 | 1.5 | **-57%** |
| HI | 144 | 186 | 126 | 177 | 98 | **-32%** | 3.5 | 3.3 | 1.9 | 2.2 | 1.2 | **-66%** |
| ID | 281 | 331 | 255 | 244 | 278 | **-1%** | 4.8 | 4.8 | 3.3 | 2.5 | 2.0 | **-58%** |
| IL | 2,041 | 1,975 | 1,534 | 1,589 | 1,456 | **-29%** | 3.6 | 3.0 | 2.2 | 1.9 | 1.4 | **-61%** |
| IN | 1,128 | 1,166 | 974 | 1,049 | 1,013 | **-10%** | 3.0 | 3.0 | 2.4 | 2.0 | 1.4 | **-53%** |
| IA | 670 | 626 | 474 | 465 | 490 | **-27%** | 3.8 | 3.3 | 2.3 | 2.0 | 1.7 | **-55%** |
| KS | 509 | 595 | 486 | 444 | 537 | **+6%** | 3.3 | 3.4 | 2.5 | 1.9 | 1.9 | **-42%** |
| KY | 863 | 820 | 712 | 849 | 814 | **-6%** | 3.5 | 3.2 | 2.5 | 2.5 | 1.7 | **-51%** |
| LA | 934 | 1,219 | 931 | 959 | 924 | **-1%** | 4.6 | 5.0 | 2.8 | 2.5 | 2.2 | **-52%** |
| ME | 223 | 265 | 206 | 213 | 181 | **-19%** | 3.1 | 3.5 | 2.2 | 1.8 | 1.3 | **-58%** |
| MD | 670 | 756 | 729 | 707 | 590 | **-12%** | 2.7 | 2.6 | 2.2 | 1.7 | 1.2 | **-56%** |
| MA | 864 | 881 | 742 | 605 | 414 | **-52%** | 2.7 | 2.5 | 1.9 | 1.3 | 0.8 | **-70%** |
| MI | 1,779 | 1,750 | 1,545 | 1,571 | 1,382 | **-22%** | 3.1 | 2.8 | 2.3 | 1.9 | 1.4 | **-55%** |
| MN | 754 | 848 | 608 | 566 | 625 | **-17%** | 2.9 | 3.0 | 1.9 | 1.5 | 1.2 | **-59%** |
| MS | 546 | 695 | 662 | 750 | 927 | **+70%** | 3.8 | 4.2 | 3.5 | 3.1 | 2.7 | **-29%** |
| MO | 1,045 | 1,175 | 931 | 1,097 | 1,094 | **+5%** | 3.4 | 3.4 | 2.4 | 2.2 | 1.6 | **-53%** |
| MT | 291 | 325 | 223 | 212 | 220 | **-24%** | 5.1 | 4.9 | 3.0 | 2.5 | 2.2 | **-57%** |
| NE | 369 | 396 | 237 | 262 | 295 | **-20%** | 3.3 | 3.5 | 2.0 | 1.9 | 1.6 | **-52%** |
| NV | 218 | 346 | 259 | 343 | 350 | **+61%** | 4.7 | 5.7 | 3.4 | 3.4 | 2.0 | **-57%** |
| NH | 151 | 194 | 191 | 158 | 141 | **-7%** | 2.9 | 3.0 | 2.5 | 1.6 | 1.2 | **-59%** |

## Table 122
## Fatalities and Fatality Rates by State, 1975-1999 (Continued)

| State | Fatalities | | | | | | Fatality Rate per 100 Million Vehicle Miles Traveled | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1975 | 1980 | 1985 | 1990 | 1999 | Difference, 1975-1999 | 1975 | 1980 | 1985 | 1990 | 1999 | Difference, 1975-1999 |
| NJ | 1,043 | 1,120 | 964 | 886 | 727 | **-30%** | 2.2 | 2.2 | 1.8 | 1.5 | 1.1 | **-50%** |
| NM | 555 | 606 | 535 | 499 | 460 | **-17%** | 5.6 | 5.4 | 4.0 | 3.1 | 2.1 | **-63%** |
| NY | 2,366 | 2,610 | 2,006 | 2,217 | 1,548 | **-35%** | 3.6 | 3.4 | 2.2 | 2.1 | 1.2 | **-67%** |
| NC | 1,506 | 1,503 | 1,482 | 1,385 | 1,505 | **+0%** | 4.1 | 3.6 | 3.0 | 2.2 | 1.7 | **-59%** |
| ND | 167 | 151 | 90 | 112 | 119 | **-29%** | 3.7 | 2.9 | 1.6 | 1.9 | 1.6 | **-57%** |
| OH | 1,766 | 2,033 | 1,646 | 1,638 | 1,430 | **-19%** | 2.8 | 2.8 | 2.2 | 1.8 | 1.4 | **-50%** |
| OK | 757 | 959 | 744 | 641 | 739 | **-2%** | 3.3 | 3.5 | 2.4 | 1.9 | 1.7 | **-48%** |
| OR | 562 | 646 | 559 | 579 | 414 | **-26%** | 3.5 | 3.4 | 2.6 | 2.2 | 1.2 | **-66%** |
| PA | 2,078 | 2,089 | 1,771 | 1,646 | 1,549 | **-25%** | 3.3 | 2.9 | 2.3 | 1.9 | 1.5 | **-55%** |
| RI | 110 | 129 | 109 | 84 | 88 | **-20%** | 1.9 | 2.4 | 1.9 | 1.1 | 1.1 | **-42%** |
| SC | 820 | 852 | 951 | 979 | 1,065 | **+30%** | 4.0 | 3.8 | 3.6 | 2.8 | 2.4 | **-40%** |
| SD | 195 | 228 | 130 | 153 | 150 | **-23%** | 3.8 | 3.7 | 2.1 | 2.2 | 1.8 | **-53%** |
| TN | 1,126 | 1,153 | 1,101 | 1,177 | 1,285 | **+14%** | 3.4 | 3.4 | 3.0 | 2.5 | 2.0 | **-41%** |
| TX | 3,372 | 4,366 | 3,678 | 3,250 | 3,518 | **+4%** | 4.0 | 3.8 | 2.6 | 2.1 | 1.7 | **-58%** |
| UT | 272 | 334 | 303 | 272 | 360 | **+32%** | 3.4 | 3.1 | 2.5 | 1.9 | 1.6 | **-53%** |
| VT | 143 | 137 | 115 | 90 | 90 | **-37%** | 4.3 | 3.7 | 2.5 | 1.5 | 1.3 | **-70%** |
| VA | 993 | 1,045 | 976 | 1,079 | 877 | **-12%** | 2.9 | 2.7 | 2.0 | 1.8 | 1.2 | **-59%** |
| WA | 758 | 971 | 744 | 825 | 634 | **-16%** | 3.2 | 3.4 | 2.2 | 1.8 | 1.2 | **-63%** |
| WV | 461 | 523 | 420 | 481 | 395 | **-14%** | 4.4 | 4.9 | 3.3 | 3.1 | 2.1 | **-52%** |
| WI | 930 | 972 | 744 | 769 | 745 | **-20%** | 3.3 | 3.1 | 2.0 | 1.7 | 1.3 | **-61%** |
| **WY** | 210 | 245 | 152 | 125 | 189 | **-10%** | 5.4 | 4.9 | 2.8 | 2.1 | 2.4 | **-56%** |
| **USA** | **44,525** | **51,091** | **43,825** | **44,599** | **41,611** | **-7%** | **3.4** | **3.3** | **2.5** | **2.1** | **1.5** | **-56%** |
| PR | 496 | 520 | 600 | 473 | 558 | **+13%** | 7.3 | 6.0 | 5.7 | 3.7 | 3.3 | **-55%** |

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

## Table 123
## Child Passenger Protection Laws

| State | Effective Date | Restraint Requirement Age[1,2] | Safety Seat Required | Must Use Safety Seat or Seat Belt | Penalty |
|---|---|---|---|---|---|
| AL | 7/83 | Under 6 | Under 6 | Age 4 or 5 | $10 |
| AK | 6/85 | Under 16 | Under 4 | No | $50, 2 points |
| AZ | 8/83 | Under 5 | Under 5 | No | $50 |
| AR | 8/83 | Under 5 | Under 5 | No | $25-$100 |
| CA | 1/83 | Under 16 | Under 4[3] | No | $100, 1 Point[4] |
| CO | 1/84 | Under 16 | Under 4[5] | No | $50 + $6 surcharge |
| CT | 5/82 | Under 16 | Under 4[5] | Over 40 pounds | $100-$2,000[6] |
| DE | 6/82 | Under 16[7] | Under 4 | No | $28.75 |
| DC | 7/83 | Under 16 | Under 4 | Age 3 through 16 | $55, 2 points |
| FL | 7/83 | Under 16 | Under 6 | Age 4 or 5 | $60 + $10 court cost |
| GA | 7/84 | Under 16 | Under 5 | Age 3 or 4 | $50-$100, 1-2 points |
| HI | 7/83 | Under 4 | Under 3 | Age 3 | $100-$500 |
| ID | 1/85 | Under 4 | Under 4[5] | No | $100 |
| IL | 7/83 | Under 16 | Under 4 | Age 4 or 5 | $25-$50 |
| IN | 1/84 | Under 12 | Under 4 | Age 4 through 11 | $25, 4 points |
| IA | 1/85 | Under 6 | Under 3 | Age 3 through 5 | $10 |
| KS | 1/82 | Under 14 | Under 4 | No | $20 |
| KY | 7/82 | Under 16 | 40" and under | No | $50 |
| LA | 9/84 | Under 13 | Under 3 | Age 3 through 12 | $50-$100 |
| ME | 9/83 | Under 16 | Under 4 | Age 4 through 16 | $25-$500 |
| MD | 1/84 | Under 16 | Under 4[3] | Over 40 pounds | $25 |
| MA | 1/82 | Under 16 | Under 6 | No | $25 |
| MI | 4/82 | Under 16 | Under 4 | Age 1 through 4 in rear | $10 |
| MN | 8/83 | Under 11 | Under 4 | No | $50 |
| MS | 7/83 | Under 8 | Under 4 | No | $25 |
| MO | 1/84 | Under 16 | Under 4 | No | $25 + court costs |
| MT | 1/84 | Under 16 | Under 2 | Age 2 through 4 | $100 |
| NE | 8/83 | Under 5 | Under 4[3] | Over 40 pounds | $25 |
| NV | 7/83 | Under 16 | Under 5[3] | No | $35-$100 |
| NH | 7/83 | Under 16 | Under 4 | No | $25-$50 |
| NJ | 4/83 | Under 16 | Under 5 | No | $10-$25 |
| NM | 6/83 | Under 11 | Under 5 | Age 1 through 5 in rear | $25 |
| NY | 4/82 | Under 10 | Under 4 | No | $25-$100, 3 points |
| NC | 7/82 | Under 16 | Under 4 | Age 4 through 15 | $25 |
| ND | 1/84 | Under 18 | Under 4 | Age 4 through 17 | No fine, 1 point |
| OH | 3/83 | Under 4[3] | Under 4[3] | No | $100-$250[8] |
| OK | 11/83 | Under 5 | Under 4[9] | Age 4 or 5 | $10-$15 |
| OR | 1/84 | Under 16 | Under 4[5] | Age 4 or Over | $75 |
| PA | 1/84 | Under 16 | Under 4 | No | $25 |
| RI | 7/80 | Under 16 | Under 6[10] | Age 4 or 5 | $50 |
| SC | 7/83 | Under 16 | Under 4 | Age 4 or 5 | $25 |
| SD | 7/84 | Under 16 | Under 5 | Over 40 pounds | $20 |
| TN | 1/78 | Under 12 | Under 4 | Age 4 through 12 | $50 maximum[11] |
| TX | 10/84 | Under 15 | Under 2 | Age 3 or 4 | $25-$50 |
| UT | 7/84 | Under 10 | Under 2 | Age 2 through 10 | $75 |
| VT | 7/84 | Under 16 | Under 5 | No | $25 |
| VA | 1/83 | Under 16 | Under 4 | Age 3[12] | $50, 3 points |
| WA | 1/84 | Under 16 | Under 3 | Age 3 through 10 | $250 maximum |
| WV | 7/81 | Under 16 | Under 3 | Age 3 through 8 | $10-$20 |
| WI | 11/82 | Under 8 | Under 4 | Age 4 through 8 | $30-$75 |
| WY | 4/85 | Under 5[5] | Under 5[5] | No | $50-$100 |
| PR | 1/89 | Under 16 | Under 4 | No | $10 |

[1]Table covers laws applicable to children under 16 years old. [2]All States have laws requiring front seat occupants under 16 years of age to be restrained by seat belts or child safety seats. [3]Or less than 40 pounds. [4]Second or subsequent offense. [5]And less than 40 pounds. [6]Third offense can result in 1 year imprisonment. [7]Children under 12 years old and less than 66 inches tall may not occupy front seat if equipped with passenger-side airbag. [8]Subsequent offenses can result in 30 days imprisonment. [9]And less than or equal to 60 pounds. [10]Children under age 6 must be transported in the back seat. [11]Can result in 30 days imprisonment. [12]Seat belts can be substituted only if the size and weight of the child make the use of a seat belt practical and the use of a child restraint device impractical.

## Table 124
## Status of State Motorcycle Helmet Use Requirements

| State | Original Law | Subsequent Action, Date(s) and Current Status |
|---|---|---|
| AL | 11/06/67 | Helmet use required for all riders. |
| AK | 01/01/71 | Repealed effective 7-1-76 except for persons under 18 years of age, and all passengers. |
| AZ | 01/01/69 | Repealed effective 5-27-76 except for persons under 18 years of age. |
| AR | 07/10/67 | Helmet use required for all riders. Repealed effective 8/1/97 except for certain riders. |
| CA | 01/01/85 | Helmet use required by riders under 15 1/2 years of age. Effective 1-1-92 helmet use required for all riders. |
| CO | 07/01/69 | Repealed effective 5-20-77. |
| CT | 10/01/67 | Not enforced until 2-1-74. Repealed effective 6-1-76. Effective 1-1-90 adopted requirement for helmet use by persons under 18. |
| DE | 10/01/68 | Repealed effective 6-10-78 except for persons under 19 years of age. Also requires that a helmet be carried on the motorcycle for persons 19 and older. |
| DC | 10/12/70 | Helmet use required for all riders. |
| FL | 09/05/67 | Helmet use required for all riders. |
| GA | 08/31/66 | Helmet use required for all riders. |
| HI | 05/01/68 | Repealed effective 6-7-77 except for persons under 18 years of age. |
| ID | 01/01/68 | Repealed effective 3-29-78 except for persons under 18 years of age. |
| IL | 01/01/68 | Repealed effective 6-17-69 after being declared unconstitutional by the State Supreme Court on 5-28-69. |
| IN | 07/01/67 | Repealed effective 9-1-77. Effective 6-1-85 adopted requirement for helmet use by persons under 18. |
| IA | 09/01/75 | Repealed effective 7-1-76. |
| KS | 07/01/67 | 7-1-67 to 3-17-70 for all cyclists. 3-17-70 to 7-1-72 only for cyclists under 21 years of age. 7-1-72 to 7-1-76 for all cyclists. 7-1-76 to 7-1-82 applied only to persons under 16 years of age. After 7-1-82 applies only to persons under 18 years of age. to 7-1-82 applied only to persons under 16 years of age. After 7-1-82 applies only to persons under 18 years of age. |
| KY | 07/01/68 | Helmet use required for riders under 21 years of age, riders operating with instruction permits, riders with less than 1 year of riding experience, and/or riders who do not provide proof of health insurance to county. |
| LA | 07/31/68 | Repealed effective 10-1-76 except for persons under 18 years of age. Readopted for all cyclists effective 1-1-82. Repealed effective 8-15-99 except for riders under age 18 and those who do not have a health insurance policy with medical benefits of at least $10,000. |
| ME | 10/07/67 | Repealed effective 10-24-77. Amended effective 7-3-80 to require use by cyclists under 15 years of age. |
| MD | 09/01/68 | Repealed effective 5-29-79 except for persons under 18 years of age. Effective 10-1-92 helmet use required for all riders. |
| MA | 02/27/67 | Helmet use required for all riders. |
| MI | 03/10/67 | Repealed effective 6-12-68. New law adopted effective 9-1-69. Helmet use required for all riders. |
| MN | 05/01/68 | Repealed effective 4-6-77 except for persons under 18 years of age. |
| MS | 03/28/74 | Helmet use required for all riders. |
| MO | 10/13/67 | Helmet use required for all riders. |
| MT | 07/01/73 | Repealed effective 7-1-77 except for persons under 18 years of age. |
| NE | 05/29/67 | Never enforced. Declared unconstitutional by State Supreme Court and repealed effective 9-1-77. Effective 1-1-89 helmet use required for all riders. required for all riders. |
| NV | 01/01/72 | Helmet use required for all riders. |
| NH | 09/03/67 | Repealed effective 8-7-77 except for persons under 18 years of age. |
| NJ | 01/01/68 | Helmet use required for all riders. |
| NM | 05/01/67 | Initial law applied only to cyclists under 18 years of age and to all passengers. Law requiring helmet use by all cyclists adopted effective 7-1-73. Repealed effective 6-17-77 except for persons under 18 years of age. effective 7-1-73. Repealed effective 6-17-77 except for persons under 18 years of age. |
| NY | 01/01/67 | Helmet use required for all riders. |
| NC | 01/01/68 | Helmet use required for all riders. |
| ND | 07/01/67 | Repealed effective 7-1-77 except for persons under 18 years of age. |
| OH | 04/02/68 | Repealed effective 7-1-78 except for persons under 18 years and first year novices. |
| OK | 04/27/67 | 4-27-67 to 4-7-69 helmet use required for all motorcyclists. From 4-7-69 to 5-3-76 for cyclists under 21 years of age. 5-3-76 for cyclists under 18 years of age. cyclists under 18 years of age. |
| OR | 01/01/68 | Repealed effective 10-4-77, except for persons under 18 years of age. Effective 6-16-89 helmet use required for all riders. |
| PA | 09/13/68 | Helmet use required for all riders. |
| RI | 06/30/67 | Repealed effective 5-21-76 except for passengers on motorcycles. Effective 7-01-92 helmet use required for operators under 21 years of age, all passengers, and first year novices. years of age, all passengers, and first year novices. |
| SC | 07/01/67 | Repealed for ages 21 and over effective 6-16-80. |
| SD | 07/01/67 | Repealed effective 7-1-77 except for persons under 18 years of age. |
| TN | 06/05/67 | Helmet use required for all riders. |
| TX | 01/01/68 | Repealed effective 9-1-77 except for persons under 18 years of age. Effective 9-1-89 helmet use required for all riders. Effective 9-1-97 helmets required for riders under 21, those who have not completed a rider training course, and those without $10,000 medical insurance. 9-1-97 helmets required for riders under 21, those who have not completed a rider training course, and those without $10,000 medical insurance. |
| UT | 05/13/69 | Helmets required only on roads with speed limits of 35 mph or higher. Effective 5-8-77 law changed to require helmet use only by persons under 18 years of age. by persons under 18 years of age. |
| VT | 07/01/68 | Helmet use required for all riders. |
| VA | 01/01/71 | Helmet use required for all riders. |
| WA | 07/01/67 | Repealed effective 7-1-77. 7-1-87 helmet use required for riders under 18. Effective 6-8-90 helmet use required for all riders. |
| WV | 05/21/68 | Helmet use required for all riders. |
| WI | 07/01/68 | Repealed effective 3-19-78 except for persons under 18 years of age, and for all holders of learner's permits. |
| WY | 05/25/73 | Repealed effective 5-27-83 except for persons under 18 years of age. |
| PR | 07/20/60 | Helmet use required for all riders. |

- 21 states plus the District of Columbia and Puerto Rico require helmet use for all riders.
- 26 states require helmet use for certain riders.
- 3 states do not require helmet use for riders.

## Table 125
## Impaired Driving High-Priority Legislation

| State | Administrative Per Se (BAC Level) | Illegal Per Se (BAC Level) | Lower BAC for Youthful DWI Offenders (BAC Level and Age) | License Sanction (Mandatory Minimum for a DWI Conviction) | | |
|---|---|---|---|---|---|---|
| | | | | First Offense | Second Offense | Third Offense |
| AL | Y-0.08 | 0.08 | Y-0.02 (<21) | S-90 days | R-1 yr | R-3 yrs |
| AK | Y-0.10 | 0.10 | Y-0.00 (<21) | R-30 days | R-1 yr | R-10 yrs |
| AZ | Y-0.10 | 0.10 | Y-0.00 (<21) | S-90 days | R-1 yr | R-3 yrs |
| AR | Y-0.10 | 0.10 | Y-0.02 (<21) | — | — | — |
| CA | Y-0.08 | 0.08 | Y-0.01 (<21) | — | — | R-18 mos |
| CO | Y-0.10 | 0.10 | Y-0.02 (<21) | — | R-1 yr | R-1 yr |
| CT | Y-0.10 | 0.10 | Y-0.02 (<21) | — | — | — |
| DE | Y-0.10 | 0.10 | Y-0.02 (<21) | — | R-6 mos | R-6 mos |
| DC | Y-0.05 | 0.08 | Y-0.00 (<21) | R-6 mos | R-1 yr | R-2 yrs |
| FL | Y-0.08 | 0.08 | Y-0.02 (<21) | — | R-12 mos | R-24 mos |
| GA | Y-0.10 | 0.10 | Y-0.02 (<21) | — | S-120 days | R-5 yrs |
| HI | Y-0.08 | 0.08 | Y-0.02 (<21) | S-30 days | S-1 yr | R-1 yr |
| ID | Y-0.08 | 0.08 | Y-0.02 (<21) | S-30 days | S-1 yr | S-1 yr |
| IL | Y-0.08 | 0.08 | Y-0.02 (<21) | — | — | — |
| IN | Y-0.10 | 0.10 | Y-0.02 (<21) | S-30 days | S-1 yr | S-1 yr |
| IA | Y-0.10 | 0.10 | Y-0.02 (<21) | R-30 days | R-1 yr | R-1 yr |
| KS | Y-0.08 | 0.08 | Y-0.02 (<21) | S-30 days | S-1 yr | S-1 yr |
| KY | A | 0.10 | Y-0.02 (<21) | S-30 days | R-12 mos | R-24 mos |
| LA | Y-0.10 | 0.10 | Y-0.02 (<21) | — | — | — |
| ME | Y-0.08 | 0.08 | Y-0.00 (<21) | S-60 days | S-18 mos | S-4 yrs |
| MD | Y-0.10 | 0.10 | Y-0.02 (<21) | — | — | — |
| MA | Y-0.08 | No | Y-0.02 (<21) | S-45 days | R-6 mos | R-2 yrs |
| MI | N | 0.10 | Y-0.02 (<21) | — | R-1 yr | S-5 yrs |
| MN | Y-0.10 | 0.10 | Y-0.00 (<21) | R-15 days | R-90 days | R-90 days |
| MS | Y-0.10 | 0.10 | Y-0.02 (<21) | S-30 days | S-1 yr | S-3 yrs |
| MO | Y-0.10 | 0.10 | Y-0.02 (<21) | S-30 days | R-2 yrs | R-3 yrs |
| MT | N | 0.10 | Y-0.02 (<21) | — | R-3 mos | R-3 mos |
| NE | Y-0.10 | 0.10 | Y-0.02 (<21) | R-60 days | R-1 yr | R-1 yr |
| NV | Y-0.10 | 0.10 | Y-0.02 (<21) | R-45 days | R-1 yr | R-1.5 yrs |
| NH | Y-0.08 | 0.08 | Y-0.02 (<21) | R-90 days | R-3 yrs | R-3 yrs |

## Table 125
## Impaired Driving High-Priority Legislation (Continued)

| State | Administrative Per Se (BAC Level) | Illegal Per Se (BAC Level) | Lower BAC for Youthful DWI Offenders (BAC Level and Age) | License Sanction (Mandatory Minimum for a DWI Conviction) | | |
|---|---|---|---|---|---|---|
| | | | | First Offense | Second Offense | Third Offense |
| NJ | N | 0.10 | Y-0.01 (<21) | R-6 mos | R-2 yrs | R-10 yrs |
| NM | Y-0.08 | 0.08 | Y-0.02 (<21) | — | R-30 days | R-30 days |
| NY | A | 0.10 | Y-0.02 (<21) | — | R-1 yr | R-1 yr |
| NC | Y-0.08 | 0.08 | Y-0.00 (<21) | — | R-2 yrs | R-3 yrs |
| ND | Y-0.10 | 0.10 | Y-0.02 (<21) | S-30 days | S-365 days | S-2 yrs |
| OH | Y-0.10 | 0.10 | Y-0.02 (<21) | S-15 days | S-30 days | S-180 days |
| OK | Y-0.10 | 0.10 | Y-0.00 (<21) | — | — | — |
| OR | Y-0.08 | 0.08 | Y-0.00 (<21) | — | S-90 days | S-1 yr |
| PA | N | 0.10 | Y-0.02 (<21) | S-1 mo | S-12 mos | S-12 mos |
| RI | N | 0.10 | Y-0.02 (<21) | S-3 mos | S-1 yr | S-2 yrs |
| SC | Y-0.15 | No | Y-0.02 (<21) | — | S-1 yr | S-4 yrs |
| SD | N | 0.10 | Y-0.02 (<21) | — | R-1 yr | R-1 yr |
| TN | N | 0.10 | Y-0.02 (<21) | — | R-2 yrs | R-3 yrs |
| TX | Y-0.08 | 0.08 | Y-0.00 (<21) | — | — | — |
| UT | Y-0.08 | 0.08 | Y-0.00 (<21) | S-180 days | R-2 yrs | R-2 yrs |
| VT | Y-0.08 | 0.08 | Y-0.02 (<21) | S-90 days | S-18 mos | R-2 yrs |
| VA | Y-0.08 | 0.08 | Y-0.02 (<21) | — | R-4 mos | R-3 yrs |
| WA | Y-0.08 | 0.08 | Y-0.02 (<21) | S-30 days | R-1 yr | R-2 yrs |
| WV | Y-0.10 | 0.10 | Y-0.02 (<21) | R-30 days | R-1 yr | R-1 yr |
| WI | Y-0.10 | 0.10 | Y-0.02 (<21) | — | R-60 days | R-90 days |
| WY | Y-0.10 | 0.10 | Y-0.02 (<21) | — | S-1 yr | R-3 yrs |
| **USA** | **Y - 42** | **0.08 - 18**<br>**0.10 - 31**<br>**No - 2** | **Y - 51** | **S - 18**<br>**R - 9** | **S - 15**<br>**R - 28** | **S - 12**<br>**R - 32** |
| | Y = Yes<br>N = No<br>A = Alternative | | Y = Yes | | S = Suspension<br>R = Revocation | |
| PR | N | No | — | — | — | — |

Notes: An “administrative per se law” refers to a statute that allows a state’s driver licensing agency to either suspend or revoke a driver’s license based either on a specific alcohol (or drug) concentration or on some other criterion related to alcohol or drug use and driving. Such action is completely independent of any licensing action related to a DWI criminal offense. 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. In those columns showing mandatory sanctions, a “blank” space does not mean that a state does not have a sanction. It only means that the state does not have a mandatory sanction for that offense or violation.
Source: “Digest of State Alcohol-Highway Safety Related Legislation,” U.S. Department of Transportation/ National Highway Traffic Administration, DOT HS 808 652.

## Table 126
## Key Provisions of Safety Belt Use Laws

| State | Effective[1] | Enforcement | Fine | Seats | Vehicles Exempted[2] |
|---|---|---|---|---|---|
| AL | 07/18/92 | Primary | $25 | Front | Designed for more than 10 passengers. |
| AK | 09/12/90 | Secondary | $15 | All | School bus. |
| AZ | 01/01/91 | Secondary | $10 | Front | Designed for more than 10 passengers; model year before 1972. |
| AR | 07/15/91 | Secondary | $25[3] | Front | School bus, church bus, public bus. |
| CA | 01/01/86 | Primary | $20[4] | All | None. |
| CO | 07/01/87 | Secondary | $15 | Front | Passenger bus, school bus. |
| CT | 01/01/86 | Primary | $15 | Front | Truck or bus over 15,000 lbs. |
| DE | 01/01/92 | Secondary | $20 | Front | None. |
| DC | 12/12/85 | Primary | $50[5] | All | Seating more than 8 people. |
| FL | 07/01/86 | Secondary | $30 | Front | School bus, public bus, truck over 5,000 lbs. |
| GA | 09/01/88 | Primary | $15 | Front | Designed for more than 10 passengers, pickup. |
| HI | 02/16/85 | Primary | $20 | Front | Bus or school bus over 10,000 lbs. |
| ID | 07/01/86 | Secondary | $ 5 | Front | Over 8,000 lbs. |
| IL | 07/01/85 | Secondary | $25 | Front | None. |
| IN | 07/01/87 | Primary | $25 | Front | Truck, tractor, RV. |
| IA | 07/01/86 | Primary | $10 | Front | None. |
| KS | 07/01/86 | Secondary | $10 | Front | Designed for more than 10 people, truck over 12,000 lbs. |
| KY | 07/13/94 | Secondary | $25 | All | Designed for more than 10 people. |
| LA | 07/01/86 | Primary | $25[4] | Front | Manufactured before 1/1/81. |
| ME | 12/27/95 | Secondary | $25 | All | None. |
| MD | 07/01/86 | Primary | $25 | Front | Historic vehicle. |
| MA | 02/01/94 | Secondary | $25 | All | Truck over 18,000 lbs., bus, taxi. |
| MI | 07/01/85 | Primary | $25 | Front | Bus. |
| MN | 08/01/86 | Secondary | $25 | Front | Farm pickup truck. |
| MS | 03/20/90 | Secondary | $25 | Front | Farm vehicle, bus. |
| MO | 09/28/85 | Secondary | $10 | Front | Designed for more than 10 people, truck over 12,000 lbs. |
| MT | 10/01/87 | Secondary | $20 | All | None. |
| NE | 01/01/93 | Secondary | $25 | Front | Manufactured before 1973, bus. |
| NV | 07/01/87 | Secondary | $25 | All | Taxi, bus, school bus. |
| NH | — | | | | |
| NJ | 03/01/85 | Secondary | $20 | Front | None. |
| NM | 01/01/86 | Primary | $25 | Front | Vehicle over 10,000 lbs. |
| NY | 12/01/84 | Primary | $50 | Front | Bus, school bus, taxi. |
| NC | 10/01/85 | Primary | $25 | Front | Designed for more than 10 people. |
| ND | 07/14/94 | Secondary | $20 | Front | Designed for more than 10 people. |
| OH | 05/06/86 | Secondary | $25 | Front | None. |
| OK | 02/01/87 | Primary | $20 | Front | Farm vehicle, truck, truck tractor, RV. |
| OR | 12/07/90 | Primary | $75 | All | None. |
| PA | 11/23/87 | Secondary | $10 | Front | Truck over 7,000 lbs. |
| RI | 06/18/91 | Secondary | $50 | All | None. |
| SC | 07/01/89 | Secondary | $10 | All | School bus, public bus. |
| SD | 01/01/95 | Secondary | $20 | Front | Bus, school bus. |
| TN | 04/21/86 | Secondary | $50[6] | Front | Vehicle over 8,500 lbs. |
| TX | 09/01/85 | Primary | $50 | Front | Designed for more than 10 people, truck over 15,000 lbs. |
| UT | 04/28/86 | Secondary | $10 | Front | Vehicle over 10,000 lbs., school/public bus, taxi. |
| VT | 01/01/94 | Secondary | $10 | All | Bus, taxi. |
| VA | 01/01/88 | Secondary | $25 | Front | Designed for more than 10 people, taxi. |
| WA | 06/11/86 | Secondary | $35 | All | Designed for more than 10 people. |
| WV | 09/01/93 | Secondary | $25 | Front | Designed for more than 10 people. |
| WI | 12/01/87 | Secondary | $10 | All | Taxi, farm truck. |
| WY | 06/08/89 | Secondary | None | Front | Designed for more than 10 people, bus. |
| PR | 01/19/75 | Primary | $10 | Front | None. |

[1]Effective date of first belt law in the state. [2]Most states exempt vehicles not manufactured with seat belts. [3]Plus 3 points on license.
[4]Fine for first offense. [5]Plus 2 points on license. [6]Penalty could include 30 days in jail.
Total states with safety belt use laws: 49 plus DC and Puerto Rico.
Notes: The safety belt use rates shown here may not correspond to the seats and vehicles covered by the individual state laws. The national safety belt use rate shown here was obtained from the Mini-National Occupant Protection Use Survey conducted by the National Highway Traffic Safety Administration in December 1999.

# APPENDIX A ♦ FARS DATA ELEMENTS

## 1999 Fatality Analysis Reporting System Data Elements

### Crash Level

Crash Date
Atmospheric Condition
City
Construction/Maintenance Zone
County
Day of Week
Emergency Medical Services (EMS) Notification Time
EMS Arrival Time at Hospital
EMS Arrival Time at Scene
First Harmful Event
Global Position
Hit and Run
Light Condition
Manner of Collision
Milepoint
National Highway System
Number of Drinking Drivers in Crash
Number of Fatalities in Crash
Number of Nonmotorist Forms Submitted
Number of Person Forms Submitted
Number of Travel Lanes
Number of Vehicle Forms Submitted
Rail Grade Crossing Identifier
Related Factors—Crash Level
Relation to Junction
Relation to Roadway
Roadway Alignment
Roadway Function Class
Roadway Profile
Roadway Surface Condition
Roadway Surface Type
Route Signing
School Bus Related
Special Jurisdiction
Speed Limit
State
Time
Traffic Control Device
Traffic Control Device Functioning
Trafficway Flow
Trafficway Identifier

### Vehicle Level

Body Type
Cargo Body Type
Crash Avoidance Maneuver
Emergency Use
Extent of Deformation
Fire Occurrence
Truck Gross Vehicle Weight Rating
Hazardous Cargo
Impact Point—Initial
Impact Point—Principal
Jackknife
Manner of Leaving Scene
Most Harmful Event
Motor Carrier Identification Number
Motorcycle Displacement
Number of Axles
Number of Deaths in Vehicle
Number of Occupants in Vehicle
Number of Vehicle Forms Submitted
Passenger Car Weight
Passenger Car Wheelbase
Registered Vehicle Owner
Registration State
Related Factors—Vehicle Level
Rollover
Special Use
State Information
Travel Speed

### Vehicle Level (Continued)

Truck Fuel Type
Underride/Override
Vehicle Configuration
Vehicle Identification Number
Vehicle Make
Vehicle Maneuver
Vehicle Model
Vehicle Model Year
Vehicle Number
Vehicle Role
Vehicle Trailering

### Driver Level

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

### Person Level

Age
Air Bag Availability/Deployment
Alcohol Test Results
Alcohol Test Type
Death Certificate Number
Death Date
Death Time
Drug Test Results
Drug Test Type
Ejection
Ejection Path
Extrication
Fatal Injury at Work
Hispanic Origin
Injury Severity
Method of Alcohol Determination
Method of Other Drug Determination by Police
Nonmotorist Location
Nonmotorist Striking Vehicle Number
Person Number
Person Type
Police-Reported Alcohol Involvement
Police-Reported Other Drug Involvement
Race
Related Factors—Person Level
Restraint System Use
Seating Position
Sex
Taken to Hospital or Treatment Facility
Time of Crash to Time of Death
Vehicle Number

# APPENDIX B ♦ GES DATA ELEMENTS

## 1999 General Estimates System Data Elements

### Crash Level

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

### Vehicle/Driver Level

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

### Vehicle/Driver Level (Continued)

Vehicle Make
Vehicle Model
Vehicle Number
Vehicle Role
Vehicle Trailing
Violations Charged

### Person Level

Age
Air Bag Availability/Function
Ejection
Injury Severity
Nonmotorist Action
Nonmotorist Location
Nonmotorist Safety Equipment Use
Nonmotorist Striking Vehicle Number
Person Number
Person Type
Person's Physical Impairment
Police-Reported Alcohol Involvement
Police-Reported Drug Involvement
Restraint System Use
Seating Position
Sex
Taken to Hospital or Treatment Facility
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 the following table. 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 February is given in Table 23 as 144,000. To calculate one standard error for this crash estimate, use the table on the following page. Since 144,000 does not appear in the Crash Estimate column, use linear interpolation from the standard error values for 100,000 (8,300) and 200,000 (14,600). One standard error would be approximately 11,100. The 95 percent confidence interval for this estimate would be 144,000 ± 2 × 11,100 or 121,800 to 166,200.

## 1999 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 | 1,000 |
| 6,000 | 1,100 | 10,000 | 1,500 | 10,000 | 1,500 |
| 7,000 | 1,300 | 20,000 | 2,400 | 20,000 | 2,300 |
| 8,000 | 1,400 | 30,000 | 3,200 | 30,000 | 3,100 |
| 9,000 | 1,500 | 40,000 | 3,900 | 40,000 | 3,800 |
| 10,000 | 1,600 | 50,000 | 4,600 | 50,000 | 4,400 |
| 20,000 | 2,500 | 60,000 | 5,300 | 60,000 | 5,100 |
| 30,000 | 3,300 | 70,000 | 6,000 | 70,000 | 5,700 |
| 40,000 | 4,100 | 80,000 | 6,700 | 80,000 | 6,300 |
| 50,000 | 4,800 | 90,000 | 7,300 | 90,000 | 6,900 |
| 60,000 | 5,500 | 100,000 | 8,000 | 100,000 | 7,500 |
| 70,000 | 6,200 | 200,000 | 14,200 | 200,000 | 13,000 |
| 80,000 | 6,900 | 300,000 | 20,200 | 300,000 | 18,200 |
| 90,000 | 7,600 | 400,000 | 26,100 | 400,000 | 23,300 |
| 100,000 | 8,300 | 500,000 | 32,000 | 500,000 | 28,400 |
| 200,000 | 14,600 | 600,000 | 37,800 | 600,000 | 33,400 |
| 300,000 | 20,800 | 700,000 | 43,700 | 700,000 | 38,300 |
| 400,000 | 26,800 | 800,000 | 49,600 | 800,000 | 43,300 |
| 500,000 | 32,800 | 900,000 | 55,500 | 900,000 | 48,200 |
| 600,000 | 38,800 | 1,000,000 | 61,400 | 1,000,000 | 53,200 |
| 700,000 | 44,700 | 2,000,000 | 122,100 | 2,000,000 | 103,000 |
| 800,000 | 50,700 | 3,000,000 | 185,400 | 3,000,000 | 154,000 |
| 900,000 | 56,700 | 4,000,000 | 251,000 | 4,000,000 | 206,200 |
| 1,000,000 | 62,700 | 5,000,000 | 318,800 | 5,000,000 | 259,600 |
| 2,000,000 | 124,100 | 6,000,000 | 388,600 | 6,000,000 | 314,100 |
| 3,000,000 | 187,800 | 7,000,000 | 460,300 | 7,000,000 | 369,600 |
| 4,000,000 | 253,800 | 8,000,000 | 533,600 | 8,000,000 | 426,200 |
| 5,000,000 | 321,800 | 9,000,000 | 608,600 | 9,000,000 | 483,700 |
| 6,000,000 | 391,700 | 10,000,000 | 685,200 | 10,000,000 | 542,100 |
| 6,500,000 | 427,300 | 11,000,000 | 763,100 | 11,000,000 | 601,400 |
| 7,000,000 | 463,300 | 12,000,000 | 842,600 | 12,000,000 | 661,500 |
| $*SE = e^{a+b(\ln x)^2}$, *where* $a = 4.414534$, $b = 0.034746$ | | $**SE = e^{a+b(\ln x)^2}$, *where* $a = 4.348017$, $b = 0.034987$ | | $***SE = e^{a+b(\ln x)^2}$, *where* $a = 4.452860$, $b = 0.033682$ | |

## 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). The table below gives the reader the proportion of unknown values prior to imputation for variables with imputed values that were used in this report.

**Percent of Unknowns for 1999 GES Data Elements**

| | | | |
|---|---|---|---|
| **Crash Level** | | | |
| Alcohol Involved in Crash | 6.1% | Manner of Collision | 0.3% |
| Atmospheric Condition | 1.1% | Minute of Crash | 0.6% |
| Crash Severity | 7.0% | Relation to Junction | 0.1% |
| Day of Week | 0.0% | Relation to Roadway | 0.3% |
| First Harmful Event | <0.1% | Roadway Surface Condition | 1.4% |
| Hour of Crash | 0.6% | Speed Limit | 17.7% |
| Light Condition | 1.2% | Traffic Control Device | 1.0% |
| **Vehicle/Driver Level** | | | |
| Driver Drinking in Vehicle | 9.5% | Most Harmful Event | <0.1% |
| Initial Point of Impact | 2.2% | Vehicle Type | 2.0% |
| **Person Level** | | | |
| Age | 8.9% | Seating Position | 1.7% |
| Injury Severity | 4.0% | Sex | 6.6% |
| Police-Reported Alcohol Involvement | 3.6% | | |

## GES Note

In the 1999 General Estimates System (GES), changes were made to the coding of selected variables to improve compatibility with the Fatality Analysis Reporting System (FARS). Therefore, comparing GES data from previous years with the 1999 data could result in shifts in trend data.

# GLOSSARY

**Alcohol Involvement**

NHTSA defines a fatal crash as alcohol-related or alcohol-involved if either a driver or a nonmotorist (usually a pedestrian) had a measurable or estimated blood alcohol concentration (BAC) of 0.01 grams per deciliter (g/dl) or above.

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.

**Blood Alcohol Concentration**

The BAC is measured as a percentage by weight of alcohol in the blood (grams/deciliter). A positive BAC level (0.01 g/dl and higher) indicates that alcohol was consumed by the person tested. A BAC level of 0.10 g/dl or more indicates that the person was intoxicated.

**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.

**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.

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

**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.

**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.

**Nonmotorist**
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.

**Nonmotorist Location**
The location of nonmotorists at time of impact. Intersection locations are coded only if nonmotorists were struck in the area formed by a junction of two or more trafficways. Non-intersection location may include nonmotorists struck on a junction of a driveway/alley access and a named trafficway. Nonmotorists 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.

***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 statewide 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.

# INDEX

## O



## P



## R

## S



## T



## V



## W