U.S. Department of Transportation

NHTSA

TRAFFIC SAFETY FACTS 2016

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

2016 NATIONAL STATISTICS

POLICE-REPORTED MOTOR VEHICLE TRAFFIC CRASHES

Fatal	34,439
Injury	NA
Property Damage Only	NA
Total	**NA**

TRAFFIC CRASH VICTIMS

	Killed	Injured
Occupants	**25,096**	**NA**
Drivers	18,610	NA
Passengers	6,407	NA
Unknown	79	NA
Motorcyclists	**5,286**	**NA**
Nonoccupants	**7,079**	**NA**
Pedestrians	5,987	NA
Pedalcyclists	840	NA
Other/Unknown	252	NA
Total	**37,461**	**NA**

OTHER NATIONAL STATISTICS

Vehicle Miles Traveled	3,174,408,000,000
Resident Population	323,127,513
Registered Vehicles	288,033,900
Licensed Drivers	221,711,918
Economic Cost of Traffic Crashes (2010) (estimate for reported and unreported crashes)	$242 billion

NATIONAL RATES: FATALITIES

Fatalities per 100 Million Vehicle Miles Traveled	1.18
Fatalities per 100,000 Population	11.59
Fatalities per 100,000 Registered Vehicles	13.01
Fatalities per 100,000 Licensed Drivers	16.90

NATIONAL RATES: INJURED PERSONS

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

NA = not available.
Sources: Crashes, Fatalities, Injuries, and Costs—National Highway Traffic Safety Administration.
Population—U.S. Bureau of the Census.
Vehicle Miles Traveled—Federal Highway Administration (FHWA).
Registered Vehicles—FHWA and Polk data from R.L. Polk & Co., a foundation of IHS Markit automotive solutions.

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DOT HS 812 554

May 2018

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National Highway Traffic Safety Administration

National Center for Statistics and Analysis

U.S. Department of Transportation

Washington, DC 20590

FOR MORE INFORMATION

Information on traffic fatalities is available from the National Center for Statistics and Analysis (NCSA), NSA-230, 1200 New Jersey Avenue, SE, Washington, DC 20590. NCSA can be contacted at 800-934-8517 or e-mail ncsaweb@dot.gov. General information on highway traffic safety is online at **www.nhtsa.gov/NCSA**. To report a safety-related problem or to inquire about motor vehicle safety information, contact the Vehicle Safety Hotline at 888-327-4236. Fact sheets available from the National Center for Statistics and Analysis are *Alcohol-Impaired Driving*, *Bicyclists and Other Cyclists*, *Children*, *Large Trucks*, *Motorcycles*, *Occupant Protection in Passenger Vehicles*, *Older Population*, *Overview*, *Passenger Vehicles*, *Pedestrians*, *Rural/Urban Comparisons*, *School Transportation-Related Crashes*, *Speeding*, *State Alcohol Estimates*, *State Traffic Data*, and *Young Drivers*. The fact sheets and annual *Traffic Safety Facts* reports can be accessed online at **https://crashstats.nhtsa.dot.gov.**

TABLE OF CONTENTS

Introduction 1

FARS Operations 3

GES Operations 5

About This Report 7

Data Availability 9

1. Trends 13

2. Crashes 61

3. Vehicles 71

4. People 93

5. States 137

Appendix A. FARS Data Elements 183

Crash Level 183

Vehicle Level 183

Driver Level 184

Person (Motor Vehicle Occupant) Level 184

Person (Not Motor Vehicle Occupant) Level 184

Appendix B. GES Data Elements 185

Crash Level 185

Vehicle Level 185

Driver Level 186

Person (Motor Vehicle Occupant) Level 186

Person (Not Motor Vehicle Occupant) Level 186

Appendix C. GES Technical Notes 187

Standard Errors 187

Unknowns 189

Glossary 191

Index 195

TABLES

TRENDS: General

1. Crashes by Crash Severity, 1988-2016 15
2. Persons Killed or Injured and Fatality and Injury Rates per Population, Licensed Drivers, Registered Vehicles, and Vehicle Miles Traveled, 1966-2016 16
3. Vehicles Involved in Crashes and Involvement Rates per Vehicle Miles of Travel and per Registered Vehicle by Vehicle Type and Crash Severity, 1975-2016 19
4. Persons Killed or Injured by Person Type and Vehicle Type, 1975-2016 21
5. Drivers Involved in Crashes and Involvement Rates per Licensed Driver by Sex and Crash Severity, 1975-2016 23

TRENDS: Occupants

6. Motor Vehicle Occupant and Motorcyclist Fatality and Injury Rates per Population by Age Group, 1975-2016 26
7. Passenger Car Occupants Killed or Injured and Fatality and Injury Rates per Registered Vehicle and Vehicle Miles of Travel, 1975-2016 28
8. Light Truck Occupants Killed or Injured and Fatality and Injury Rates per Registered Vehicle and Vehicle Miles of Travel, 1975-2016 30
9. Large Truck Occupants Killed or Injured and Fatality and Injury Rates per Registered Vehicle and Vehicle Miles of Travel, 1975-2016 32
10. Motorcyclists Killed or Injured and Fatality and Injury Rates per Registered Vehicle and Vehicle Miles of Travel, 1975-2016 34

TRENDS: Large Truck Related

11. Persons Killed or Injured in Crashes Involving a Large Truck by Person Type and Crash Type, 1975-2016 36

TRENDS: Nonoccupants

12. Nonoccupant Fatality and Injury Rates per Population by Age Group, 1975-2016 38

TRENDS: Alcohol

13. Persons Killed, by Highest Driver Blood Alcohol Concentration (BAC) in the Crash, 1982-2016 40
14. Persons Killed and Percent Alcohol-Impaired Driving During Holiday Periods, 1982-2016 42
15. Drivers in Fatal Crashes by Blood Alcohol Concentration (BAC) and Time of Day, 1982-2016 44
16. Drivers in Fatal Crashes by Blood Alcohol Concentration (BAC) and Sex, 1982-2016 45
17. Drivers in Fatal Crashes by Blood Alcohol Concentration (BAC) and Vehicle Type, 1982-2016 46
18. Drivers in Fatal Crashes by Blood Alcohol Concentration (BAC) and Age, 1982-2016 48
19. Drivers in Fatal Crashes by Blood Alcohol Concentration (BAC) and Survival Status, 1982-2016 52
20. Pedestrians Killed, 14 Years and Older, by Blood Alcohol Concentration (BAC), 1982-2016 53

TRENDS: Restraints

21. Drivers of Passenger Cars and Light Trucks in Crashes by Crash Severity and Restraint Use, 1975-2016 54
22. Occupants of Passenger Cars and Light Trucks Killed or Injured, by Restraint Use, 1975-2016 56

TRENDS: Rollover

23. Passenger Car and Light Truck Occupants Killed, by Vehicle Type and Rollover Occurrence, 1982-2016 58

Tables (Continued)

CRASHES: Time

24. Fatal Crashes and Crash Rates by Month 62
25. Fatal Crashes by Time of Day and Day of Week 62
26. Fatal Crashes by Weather Condition and Light Condition 63
27. Fatal Crashes by Emergency Medical Services (EMS) Response Times Within Designated Minutes and by Land Use 64

CRASHES: Location

28. Fatal Crashes by Crash Type and Relation to Roadway 64

CRASHES: Circumstances

29. Fatal Crashes by First Harmful Event and Manner of Collision 65
30. Two-Vehicle Fatal Crashes by Vehicle Type 66

CRASHES: Alcohol

31. Fatal Crashes and Percent Alcohol-Impaired Driving, by Time of Day and Crash Type 66

VEHICLES: All Vehicles

32. Vehicles Involved in Fatal Crashes by Relation to Junction and Traffic Control Device 72
33. Vehicles Involved in Fatal Crashes by Speed Limit and Crash Type 72
34. Vehicles Involved in Fatal Crashes by Speed Limit and Land Use 72
35. Vehicles Involved in Fatal Crashes by Number of Lanes and Trafficway Flow 73
36. Vehicles Involved in Fatal Crashes by Vehicle Type 73
37. Vehicles Involved in Fatal Crashes by Body Type 75
38. Vehicles Involved in Fatal Crashes by Vehicle Type and Rollover Occurrence 76
39. Vehicles Involved in Fatal Crashes by Vehicle Type and Fire Occurrence 77
40. Vehicles Involved in Single-Vehicle and Two-Vehicle Fatal Crashes by Vehicle Maneuver 77
41. Vehicles Involved in Fatal Crashes by Roadway Function Class, Crash Type, and Hazardous Cargo 78

VEHICLES: Passenger Cars

42. Passenger Cars Involved in Fatal Crashes by Most Harmful Event 81
43. Passenger Cars Involved in Fatal Crashes by Initial Point of Impact and Crash Type 82

VEHICLES: Light Trucks

44. Light Trucks Involved in Fatal Crashes by Most Harmful Event 83
45. Light Trucks Involved in Fatal Crashes by Initial Point of Impact and Crash Type 84

VEHICLES: Large Trucks

46. Large Trucks Involved in Fatal Crashes by Most Harmful Event 85
47. Large Trucks Involved in Fatal Crashes by Initial Point of Impact and Crash Type 86
48. Large Trucks Involved in Fatal Crashes by Truck Type and Rollover Occurrence 87
49. Truck Tractors with Trailers Involved in Fatal Crashes by Number of Trailers and Jackknife Occurrence 87

Tables (Continued)

VEHICLES: Motorcycles

50. Motorcycles Involved in Fatal Crashes by Most Harmful Event 87
51. Motorcycles Involved in Fatal Crashes by Initial Point of Impact and Crash Type 88

VEHICLES: Buses

52. Buses Involved in Fatal Crashes by Most Harmful Event 89
53. Buses Involved in Fatal Crashes by Initial Point of Impact and Crash Type 90

PEOPLE: All Victims

54. Persons Killed, by Person Type 94
55. Persons Killed, by Age 94
56. Persons Killed, by Sex 94
57. Persons Killed and Fatality Rates per 100,000 Population, by Age and Sex 96
58. Persons Killed in Crashes, by Weather Condition and Light Condition 97
59. Persons Killed in Crashes and Percent Alcohol-Impaired Driving Fatalities, by Time of Day and Crash Type 97
60. Persons Killed in Work Zones, by Roadway Function Class and Person Type 99
61. Persons Killed in Crashes Involving Emergency Vehicles, by Person Type, Crash Type, and Vehicle Type 99

PEOPLE: Drivers

62. Driver Involvement Rates in Fatal Crashes per 100,000 Licensed Drivers, by Age and Sex 101
63. Drivers and Motorcycle Riders Involved in Fatal Crashes, by Previous Driving Record and License Type Compliance 102
64. Related Factors for Drivers and Motorcycle Riders Involved in Fatal Crashes 103

PEOPLE: Occupants

65. Vehicle Occupants Killed, by Vehicle Type and Person Type 104
66. Vehicle Occupants Killed in Crashes, by Speed Limit and Crash Type 105
67. Vehicle Occupants Killed in Crashes, by Speed Limit and Land Use 105
68. Vehicle Occupants Killed, by Sex and Vehicle Type 106
69. Vehicle Occupants Killed, by Age and Vehicle Type 107
70. Vehicle Occupants Killed, by Age, Person Type, and Sex 107
71. Vehicle Occupants Killed, by Vehicle Type and Most Harmful Event 108
72. Vehicle Occupants Killed, by Initial Point of Impact and Vehicle Type 108
73. Vehicle Occupants Killed, by Vehicle Type and Ejection 109
74. Occupants Killed in Two-Vehicle Crashes, by Vehicle Types Involved 109
75. Occupants Involved in Fatal Crashes and Occupant Fatalities, by Vehicle Body Type 110
76. Passenger Car Occupants Involved in Fatal Crashes and Occupants Killed, by Car Wheelbase Size . . 111

Tables (Continued)

PEOPLE: Alcohol

77. Persons Killed and Alcohol-Impaired Driving Fatalities, by Person Type 111
78. Drivers and Motorcycle Riders Involved in Fatal Crashes, by Age and Driver's Blood Alcohol Concentration (BAC) 112
79. Drivers and Motorcycle Riders Killed in Crashes, by Time of Day, Day of Week, Age, Alcohol Impairment, and Crash Type 114
80. Drivers and Motorcycle Riders Killed in Crashes, by Age and Driver's Blood Alcohol Concentration (BAC) 114
81. Drivers and Motorcycle Riders Involved in Fatal Crashes, by Vehicle Type and Driver's Blood Alcohol Concentration (BAC) 116
82. Persons Killed, by Age and Highest Driver Blood Alcohol Concentration (BAC) in the Crash 117
83. Pedestrians Killed, by Pedestrian's and Driver's Blood Alcohol Concentration (BAC) 118

PEOPLE: Restraints

84. Drivers Involved in Fatal Crashes, by Vehicle Type and Restraint Use 118
85. Passenger Car and Light Truck Occupants Killed, by Age and Restraint Use 119
86. Passenger Car and Light Truck Occupant Survivors of Fatal Crashes, by Age and Restraint Use 119
87. Passenger Car Occupants Killed, by Seating Position and Restraint Use 120
88. Light Truck Occupants Killed, by Seating Position and Restraint Use 120
89. Passenger Car and Light Truck Occupants Killed, by Restraint Use and Type of Restraint 121

PEOPLE: Rollover

90. Passenger Car and Light Truck Occupants Killed, by Crash Type, Vehicle Type, and Rollover Occurrence 122

PEOPLE: Motorcyclists

91. Motorcyclists Killed, by Time of Day and Day of Week 123
92. Motorcyclists Killed, by Person Type and Helmet Use 125
93. Motorcycle Riders Involved in Fatal Crashes, by Age and License Compliance 125

PEOPLE: School Bus Related

94. Pedestrians Killed in School Bus Related Crashes, by Age and Striking Vehicle 126
95. Persons Killed in School Bus Related Crashes, by Person Type 126

PEOPLE: Pedestrians

96. Pedestrians Killed, by Age and Location 127
97. Pedestrians Killed and Fatality Rates per 100,000 Population, by Age and Sex 127
98. Pedestrians Killed, by Time of Day and Day of Week 128
99. Pedestrians Killed in Single-Vehicle Crashes, by Vehicle Type and Initial Point of Impact 128
100. Pedestrians Killed, by Related Factors 130

Tables (Continued)

PEOPLE: Pedalcyclists

101. Pedalcyclists Killed, by Age and Location 131
102. Pedalcyclists Killed and Fatality Rates per 100,000 Population, by Age and Sex 131
103. Pedalcyclists Killed, by Time of Day and Day of Week 132
104. Pedalcyclists Killed in Single-Vehicle Crashes, by Vehicle Type and Initial Point of Impact 132
105. Pedalcyclists Killed, by Related Factors 133

STATES: Crashes and All Victims

106. 2016 Traffic Fatalities by State and Percent Change from 2015 138
107. Fatal Crashes, by State and First Harmful Event 140
108. Fatal Crashes, by State and Roadway Function Class 142
109. Fatalities, by State and Roadway Function Class 144
110. Persons Killed, Licensed Drivers, Registered Vehicles, Population, and Fatality Rates by State 146
111. Persons Killed, by State and Person Type 148
112. Persons Killed, by State and Age Group 150

STATES: Occupants

113. Occupants Killed, by State and Vehicle Type 152
114. Passenger Car and Light Truck Occupants Killed, by State and Restraint Use 154

STATES: Rollover

115. Passenger Car and Light Truck Occupants Killed, by State, Vehicle Type, and Rollover Occurrence 156

STATES: Pedestrians

116. 2016 Ranking of State Pedestrian Fatality Rates 158

STATES: Alcohol

117. Persons Killed, by State and Highest Driver Blood Alcohol Concentration (BAC) in the Crash 160
118. Drivers Involved in Fatal Crashes, by State and Blood Alcohol Concentration (BAC) of the Driver . . 162
119. Drivers Killed in Fatal Crashes, by State and Blood Alcohol Concentration (BAC) of the Driver 164
120. Surviving Drivers Involved in Fatal Crashes, by State and Blood Alcohol Concentration (BAC) of the Driver 166

STATES: Speeding

121. Speeding-Related Traffic Fatalities, by State and Roadway Function Class 168

STATES: Emergency Medical Services

122. Rural Fatal Crashes, by State and Average Emergency Medical Services (EMS) Response Times 170
123. Urban Fatal Crashes, by State and Average Emergency Medical Services (EMS) Response Times . . . 172

Tables (Continued)

STATES: City Rates

124. Persons Killed, Population, and Fatality Rates by City 174

STATES: Fatalities and Fatality Rates

125. Fatalities and Fatality Rates by State, 1975-2016 178

FIGURES

TRENDS

1. Fatal Crashes, 1975-2016 14
2. Motor Vehicle Fatality and Injury Rates per 100 Million Vehicle Miles Traveled, 1966-2016 18
3. Driver Involvement Rates per 100,000 Licensed Drivers 16 Years and Older by Sex and Crash Severity, 1975-2016 25
4. Passenger Car Occupant Fatality and Injury Rates per 100 Million Vehicle Miles Traveled, 1975-2016 29
5. Light Truck Occupant Fatality and Injury Rates per 100 Million Vehicle Miles Traveled, 1975-2016 31
6. Large Truck Occupant Fatality and Injury Rates per 100 Million Vehicle Miles Traveled, 1975-2016 33
7. Motorcyclist Fatality and Injury Rates per 100 Million Vehicle Miles Traveled, 1975-2016 35
8. Proportion of Persons Killed, by Highest Driver Blood Alcohol Concentration (BAC) in the Crash, 1982-2016 41
9. Proportion of Drivers Involved in Fatal Crashes with BAC = .08+ by Vehicle Type, 1982-2016 47
10. Proportion of Drivers in Fatal Crashes with BAC = .08+ by Age, 1982-2016 51

CRASHES

11. Average Fatal Crashes per Hour, by Time of Day, Weekdays and Weekends 63
12. Percent of Fatal Crashes Involving Alcohol-Impaired Driving, by Time of Day and Crash Type 67

VEHICLES

13. Proportion of Vehicles Involved in Traffic Crashes 74
14. Percent Rollover Occurrence in Fatal Crashes by Vehicle Type 76
15. Percent of Vehicles in Fatal Crashes, by Most Harmful Event and Vehicle Type 79
16. Percent of Vehicles in Crashes, by Initial Point of Impact, Crash Type, and Vehicle Type 80

Figures (Continued)

PEOPLE

17. Percent of Persons Killed, by Age 95
18. Fatality Rates per 100,000 Population, by Age and Sex 96
19. Percent of Persons Killed in Alcohol-Impaired Driving Crashes, by Time of Day 98
20. Fatality Rates per 1,000 Crashes, by First Harmful Event and Manner of Collision 100
21. Fatality Rates per 1,000 Crashes, by Time of Day 101
22. Driver Involvement Rates in Fatal Crashes per 100,000 Licensed Drivers, by Age and Sex 102
23. Percent of Vehicle Occupants Killed, by Speed Limit and Land Use 106
24. Percent Alcohol Impairment (BAC .08 or Higher) for Drivers and Motorcycle Riders Involved in Fatal Crashes, by Age 113
25. Percent of Drivers and Motorcycle Riders Killed Who Were Alcohol-Impaired (BAC .08 or Higher), by Driver Age, Crash Type, Time of Day, and Day of Week 115
26. Average Number of Motorcyclists Killed per Hour, by Time of Day and Day of Week 124
27. Average Number of Pedestrians Killed per Hour, by Time of Day and Day of Week 129

STATES

28. 2016 Traffic Fatalities by State and Percent Change from 2015 139

INTRODUCTION

In this annual report, *Traffic Safety Facts 2016: 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

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

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

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

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

From these documents, the analysts code more than 100 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 2016 FARS data file used for the statistics in this report was created in August 2017; however, the 2016 FARS file officially closed in January 2018. 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 2015 are reflected in this report. The updated final counts for 2016 will be reflected in the 2017 annual report.

GES OPERATIONS

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

GES data collectors make weekly visits to 410 police jurisdictions in 60 sites across the United States, where they randomly sample about 55,000 PARs per year. The collectors obtain copies of the PARs and send them to the NASS quality control centers for coding. No other data are collected beyond the selected PARs—no driver license, vehicle registration, or medical information is obtained.

Trained data entry personnel interpret and code data directly from the PARs into an electronic data file. Approximately 90 data elements are coded into a common format. 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.

Crash Report Sampling System (CRSS) Replaces NASS GES

NHTSA's National Center for Statistics and Analysis (NCSA) has redesigned the nationally representative sample of police-reported traffic crashes, which estimates the number of police-reported injury and property damage only crashes in the United States. The new system, Crash Report Sampling System (CRSS), replaced NASS GES in 2016. However, the 2016 CRSS data were not available when this report was finalized.

In FY 2012, Congress provided NHTSA with funds to modernize its crash data collection systems by:

1. Improving the information technology infrastructure for both NASS and FARS
2. Reviewing and updating the data collected in NASS
3. Re-examining the NASS sample size and reselecting the NASS sample sites.

NHTSA conducted an internal data needs assessment in 2011 and an external data needs assessment, including a listening session, in 2013. Based on these assessments, as well as current data, NCSA designed and selected two new systems: CRSS and Crash Investigation Sampling System (CISS).

The CRSS sample includes crashes of all severities involving all vehicle types. The 2016 data year is the first data collection year of CRSS. The 2016 CRSS data were collected in 53 new data collection sites. The Agency gained cooperation and access to police crash reports in many new State and local police agencies. Staff were then trained to sample police crash reports and code the data into a uniform format.

ABOUT THIS REPORT

Fatal crash data from FARS and nonfatal crash data from GES are presented in this report. Chapter 1, "Trends," presents data from all years of FARS (1975 through 2016) and GES (1988 through 2015). The remaining chapters present only FARS data from 2016. 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.

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 non-sampling errors. (See Appendix C for more information on these errors.) To emphasize this difference, FARS numbers are not rounded, while GES estimates have been rounded to the nearest thousand. As a result of the rounding, for some tables, the sum of the row or column entries may not equal the row or column total. In addition, percentages have been calculated prior to rounding.

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

Changes from the *Traffic Safety Facts 2015* Report

NHTSA's NCSA has redesigned the nationally representative sample of police-reported traffic crashes, which estimates the number of police-reported injury and property damage only crashes in the United States. The new system, Crash Report Sampling System (CRSS), replaced NASS GES in 2016. However, the 2016 CRSS data were not available when this report was finalized. Thus, injury and property-damage-only crash estimates for 2016 are not included in this report. For more information, see GES Operations on page 5.

Registered Vehicles and Vehicle Miles Traveled (VMT) by Vehicle Type

Vehicle registration data for passenger vehicles (cars and light trucks) were obtained from R.L. Polk's National Vehicle Population Profile (NVPP), which is a compilation of all passenger vehicles that have been registered in compliance with State requirements. (R.L. Polk is a foundation of IHS Markit automotive solutions.) Subsequently, overall registrations and passenger car and light truck vehicle miles traveled were revised by NHTSA, using a combination of Polk and Federal Highway Administration (FHWA) exposure data.

About This Report

Polk recently enhanced the data quality of its NVPP, which resulted in a complete rewrite of the data, as a result of: (1) enhanced business rules for vehicles on the road, (2) more consistent reporting/processing across States, and (3) upgraded basis for vehicle coding. A comparison of Polk's Old NVPP and New NVPP for 2011 shows that the enhancements resulted in an increase of more than 3 percent in NHTSA's passenger vehicle registration counts, consisting of a 5.6 percent decrease in the 2011 passenger car count and a 14.6 percent increase in the 2011 light truck count from the Old NVPP to the New NVPP, as shown in the Registered Vehicles table below. This report uses 2016, 2015, 2014, 2013, and 2012 data, as well as 2011 data updated from the data presented in the *Traffic Safety Facts 2012* report, for passenger car and light truck registrations based on Polk's New NVPP. Consequently, the data in this report for vehicle registrations and vehicle miles traveled from 2011 through 2016 are not strictly comparable with the data for all prior years, which were based on Polk's Old NVPP.

Registered Vehicles: NCSA Revised Using Polk and FHWA Data

Year	Passenger Cars (Polk)	Light Truck (Polk)	Motorcycles (FHWA)	Buses (FHWA)	Large Trucks (FHWA)	NCSA Revised Total
2009 (Old NVPP)	137,203,972	102,008,600	7,929,724	841,993	10,973,214	258,957,503
2010 (Old NVPP)	135,310,480	102,376,147	8,009,503	846,051	10,770,054	257,312,235
2011 (Old NVPP)	134,543,655	103,594,529	8,437,502	666,064	10,270,693	257,512,443
2011 (New NVPP)	126,966,714	118,702,389	8,437,502	666,064	10,270,693	265,043,362
2012 (New NVPP)	127,077,676	118,690,690	8,454,939	764,509	10,659,380	265,647,194
2013 (New NVPP)	128,936,225	120,491,485	8,404,687	864,549	10,597,356	269,294,302
2014 (New NVPP)	131,138,925	123,470,278	8,417,718	872,027	10,905,956	274,804,904
2015 (New NVPP)	133,218,366	127,401,053	8,600,936	888,907	11,203,184	281,312,446
2016 (New NVPP)	134,879,198	132,000,600	8,679,380	976,161	11,498,561	288,033,900

Vehicle Miles Traveled: Polk and FHWA

Year	Passenger Cars (Revised FHWA Using Polk)	Light Trucks (Revised FHWA Using Polk)	Motorcycles (FHWA)	Buses (FHWA)	Large Trucks (FHWA)	Total (FHWA)
2009 (Old NVPP)	1,510,339	1,122,909	20,822	14,387	288,306	2,956,764
2010 (Old NVPP)	1,507,716	1,140,740	18,513	13,770	286,527	2,967,266
2011 (Old NVPP)	1,497,460	1,152,998	18,542	13,807	267,594	2,950,402
2011 (New NVPP)	1,369,810	1,280,648	18,542	13,807	267,594	2,950,402
2012 (New NVPP)	1,377,486	1,286,574	21,385	14,781	269,207	2,969,433
2013 (New NVPP)	1,384,194	1,293,536	20,366	15,167	275,017	2,988,280
2014 (New NVPP)	1,396,098	1,314,458	19,970	15,999	279,132	3,025,656
2015 (New NVPP)	1,420,869	1,358,824	19,606	16,230	279,844	3,095,373
2016 (New NVPP)	1,440,228	1,409,490	20,445	16,350	287,895	3,174,408

Note: NHTSA NCSA revises FHWA's Passenger Car and Light Truck vehicle miles traveled (VMT) using Polk's registration counts.

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 (although 2016 was the first data collection year for CRSS, the 2016 data files were not available when this report was finalized). Additional data from FARS (1975 through 2016) or from GES (1988 through 2015) are available in four ways:

- Modest requests for specific data will be answered by NCSA at no charge. Response usually requires about two weeks, depending on the nature and complexity of the data requested.
- FARS and GES data can be obtained by downloading any of the published files from the Internet, at ftp://ftp.nhtsa.dot.gov/FARS or ftp://ftp.nhtsa.dot.gov/GES. The files are available in SAS, sequential ASCII, and (for FARS only, not GES) DBF file formats. This will enable you to process the data using your own computer system. The CRSS data, which were released in May 2018, can be obtained at ftp://ftp.nhtsa.dot.gov/CRSS.
- FARS data can also be accessed on the Web at www-fars.nhtsa.dot.gov. This Web site provides instant access to the 1995 through 2016 FARS data via the Create-a-Query, Create-a-Map, and Reports features. The Create-a-Query feature will enable you to process the data using our interactive user interface. The Create-a-Map feature will enable you to create State-by-State and county-by-county map displays from an inventory of report selections. The Reports feature is an inventory of the fatality statistical reports found in this publication. These are national reports for current and past years that may be customized by selection of State; and for State reports, county tabulation may be selected.
- Requests for more information may also be submitted online via NCSA's Customer Motor Vehicle Traffic Crash Data Resource Page (CrashStats):

  https://crashstats.nhtsa.dot.gov/#/

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

VEHICLE SAFETY HOTLINE

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

Chapter 1

TRENDS

CHAPTER 1 ■ TRENDS

The tables in this chapter present statistics about police-reported motor vehicle crashes over time. Trends for fatal crashes and fatalities generally are presented from 1975 (when FARS began operation) to 2016; however, tables with alcohol data from FARS show data only for the years these data are available—1982 to 2016. Trends for nonfatal crashes and injured are presented from 1988 (when GES began operation) to 2015. 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 increased by 5.8 percent from 2015 to 2016, and the fatality rate rose to 1.18 fatalities per 100 million vehicle miles of travel in 2016.
- The occupant fatality rate (including motorcyclists) per 100,000 population, which declined by 22.7 percent from 1975 to 1992, decreased by 27.1 percent from 1992 to 2016.
- The nonoccupant fatality rate per 100,000 population has declined by 45.1 percent from 1975 to 2016.
- The percent of alcohol-impaired driving fatalities has declined from 48 percent in 1982 to 28 percent in 2016.

Figure 1
Fatal Crashes, 1975-2016

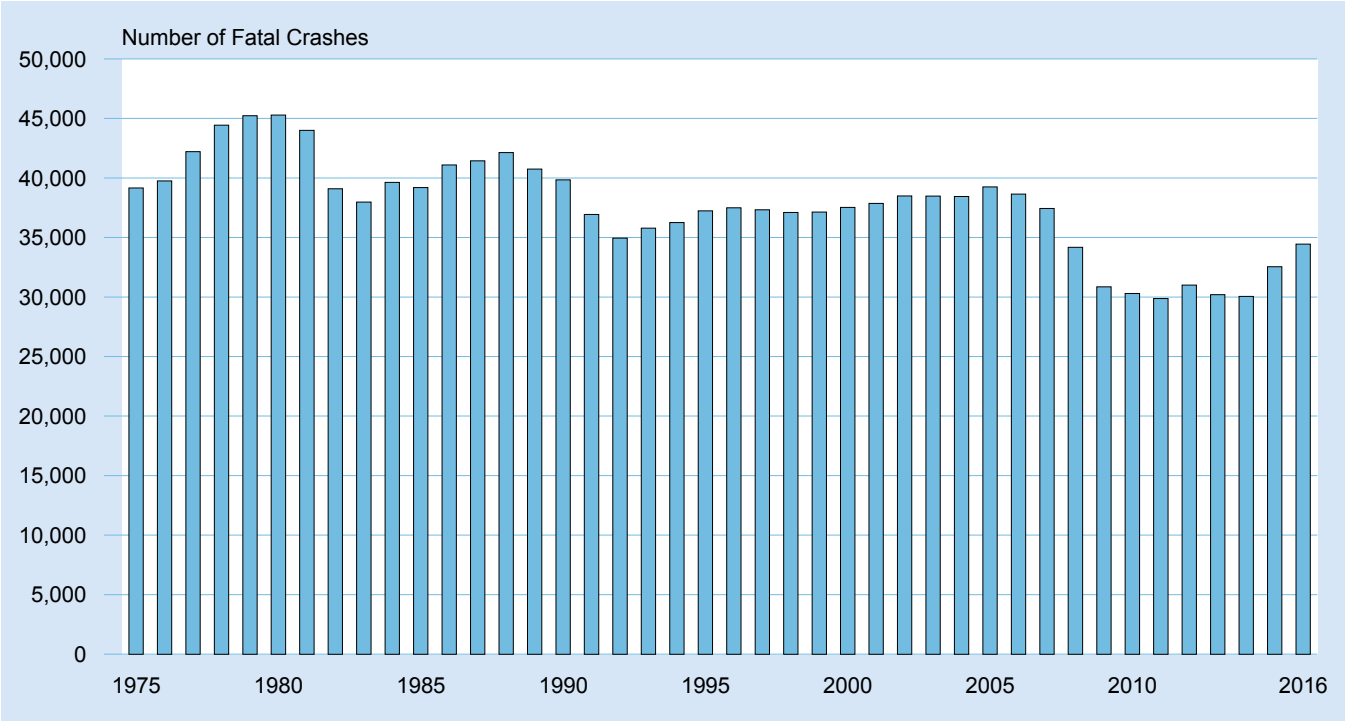


Table 1

Crashes by Crash Severity, 1988-2016

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	37,140	0.6	2,054,000	32.7	4,188,000	66.7	**6,279,000**	**100.0**
2000	37,526	0.6	2,070,000	32.4	4,286,000	67.0	**6,394,000**	**100.0**
2001	37,862	0.6	2,003,000	31.7	4,282,000	67.7	**6,323,000**	**100.0**
2002	38,491	0.6	1,929,000	30.5	4,348,000	68.8	**6,316,000**	**100.0**
2003	38,477	0.6	1,925,000	30.4	4,365,000	69.0	**6,328,000**	**100.0**
2004	38,444	0.6	1,862,000	30.1	4,281,000	69.3	**6,181,000**	**100.0**
2005	39,252	0.6	1,816,000	29.5	4,304,000	69.9	**6,159,000**	**100.0**
2006	38,648	0.6	1,746,000	29.2	4,189,000	70.1	**5,973,000**	**100.0**
2007	37,435	0.6	1,711,000	28.4	4,275,000	71.0	**6,024,000**	**100.0**
2008	34,172	0.6	1,630,000	28.1	4,146,000	71.4	**5,811,000**	**100.0**
2009	30,862	0.6	1,517,000	27.6	3,957,000	71.9	**5,505,000**	**100.0**
2010	30,296	0.6	1,542,000	28.5	3,847,000	71.0	**5,419,000**	**100.0**
2011	29,867	0.6	1,530,000	28.7	3,778,000	70.8	**5,338,000**	**100.0**
2012	31,006	0.6	1,634,000	29.1	3,950,000	70.3	**5,615,000**	**100.0**
2013	30,202	0.5	1,591,000	28.0	4,066,000	71.5	**5,687,000**	**100.0**
2014	30,056	0.5	1,648,000	27.2	4,387,000	72.3	**6,064,000**	**100.0**
2015	32,539	0.5	1,715,000	27.2	4,548,000	72.2	**6,296,000**	**100.0**
2016	34,439	NA	NA	NA	NA	NA	**NA**	**NA**

Note: Data for 2016 injury and property damage only crashes were not available when this report was finalized (NA). For more details, see page 5, "Crash Report Sampling System (CRSS) Replaces the National Automotive Sampling System (NASS) General Estimates System (GES)."

Table 2

Persons Killed or Injured and Fatality and Injury Rates per Population, Licensed Drivers, Registered Vehicles, and Vehicle Miles Traveled, 1966-2016

	Killed								
Year	Fatalities	Resident Population (Thousands)	Fatality Rate per 100,000 Population	Licensed Drivers (Thousands)	Fatality Rate per 100,000 Licensed Drivers	Registered Motor Vehicles (Thousands)	Fatality Rate per 100,000 Registered Vehicles	Vehicle Miles Traveled (Billions)	Fatality Rate per 100 Million Vehicle Miles Traveled
1966	50,894	196,560	25.89	100,998	50.39	95,703	53.18	926	5.50
1967	50,724	198,712	25.53	103,172	49.16	98,859	51.31	964	5.26
1968	52,725	200,706	26.27	105,410	50.02	102,987	51.20	1,016	5.19
1969	53,543	202,677	26.42	108,306	49.44	107,412	49.85	1,062	5.04
1970	52,627	205,052	25.67	111,543	47.18	111,242	47.31	1,110	4.74
1971	52,542	207,661	25.30	114,426	45.92	116,330	45.17	1,179	4.46
1972	54,589	209,896	26.01	118,414	46.10	122,557	44.54	1,260	4.33
1973	54,052	211,909	25.51	121,546	44.47	130,025	41.57	1,313	4.12
1974	45,196	213,854	21.13	125,427	36.03	134,900	33.50	1,281	3.53
1975	44,525	215,973	20.62	129,791	34.31	126,153	35.29	1,328	3.35
1976	45,523	218,035	20.88	134,036	33.96	130,793	34.81	1,402	3.25
1977	47,878	220,239	21.74	138,121	34.66	134,514	35.59	1,467	3.26
1978	50,331	222,585	22.61	140,844	35.74	140,374	35.85	1,545	3.26
1979	51,093	225,055	22.70	143,284	35.66	144,317	35.40	1,529	3.34
1980	51,091	227,225	22.48	145,295	35.16	146,845	34.79	1,527	3.35
1981	49,301	229,466	21.49	147,075	33.52	149,330	33.01	1,555	3.17
1982	43,945	231,664	18.97	150,234	29.25	151,148	29.07	1,595	2.76
1983	42,589	233,792	18.22	154,389	27.59	153,830	27.69	1,653	2.58
1984	44,257	235,825	18.77	155,424	28.48	158,900	27.85	1,720	2.57
1985	43,825	237,924	18.42	156,868	27.94	166,047	26.39	1,775	2.47
1986	46,087	240,133	19.19	159,486	28.90	168,545	27.34	1,835	2.51
1987	46,390	242,289	19.15	161,816	28.67	172,750	26.85	1,921	2.41
1988	47,087	244,499	19.26	162,854	28.91	177,455	26.53	2,026	2.32
1989	45,582	246,819	18.47	165,554	27.53	181,165	25.16	2,096	2.17
1990	44,599	249,464	17.88	167,015	26.70	184,275	24.20	2,144	2.08
1991	41,508	252,153	16.46	168,995	24.56	186,370	22.27	2,172	1.91
1992	39,250	255,030	15.39	173,125	22.67	184,938	21.22	2,247	1.75
1993	40,150	257,783	15.58	173,149	23.19	188,350	21.32	2,296	1.75
1994	40,716	260,327	15.64	175,403	23.21	192,497	21.15	2,358	1.73
1995	41,817	262,803	15.91	176,628	23.68	197,065	21.22	2,423	1.73
1996	42,065	265,229	15.86	179,539	23.43	201,631	20.86	2,484	1.69
1997	42,013	267,784	15.69	182,709	22.99	203,568	20.64	2,552	1.65
1998	41,501	270,248	15.36	184,861	22.45	208,076	19.95	2,628	1.58
1999	41,717	272,691	15.30	187,170	22.29	212,685	19.61	2,690	1.55
2000	41,945	282,162	14.87	190,625	22.00	217,028	19.33	2,747	1.53
2001	42,196	284,969	14.81	191,276	22.06	221,230	19.07	2,796	1.51
2002	43,005	287,625	14.95	194,602	22.10	225,685	19.06	2,856	1.51
2003	42,884	290,108	14.78	196,166	21.86	230,633	18.59	2,890	1.48
2004	42,836	292,805	14.63	198,889	21.54	237,949	18.00	2,965	1.44
2005	43,510	295,517	14.72	200,549	21.70	245,628	17.71	2,989	1.46
2006	42,708	298,380	14.31	202,810	21.06	251,415	16.99	3,014	1.42
2007	41,259	301,231	13.70	205,742	20.05	257,472	16.02	3,031	1.36
2008	37,423	304,094	12.31	208,321	17.96	259,360	14.43	2,977	1.26
2009	33,883	306,772	11.05	209,618	16.16	258,958	13.08	2,957	1.15
2010	32,999	309,348	10.67	210,115	15.71	257,312	12.82	2,967	1.11
2011	32,479	311,663	10.42	211,875	15.33	265,043	12.25	2,950	1.10
2012	33,782	313,998	10.76	211,815	15.95	265,647	12.72	2,969	1.14
2013	32,893	316,205	10.40	212,160	15.50	269,294	12.21	2,988	1.10
2014	32,744	318,563	10.28	214,092	15.29	274,805	11.92	3,026	1.08
2015	35,485	320,897	11.06	218,084	16.27	281,312	12.61	3,095	1.15
2016	37,461	323,128	11.59	221,712	16.90	288,034	13.01	3,174	1.18

Notes: Some States include restricted driver licenses and graduated driver licenses in their licensed driver counts. Due to an enhancement in the registration data provided by R.L. Polk & Co., a foundation of IHS Markit automotive solutions, for 2011 and later years, registration counts for those years changed considerably from the counts provided for 2010 and earlier years. This should be taken into account when comparing registration numbers and rates per registered vehicle for 2010 and earlier years with those for 2011 and later years.

Sources: Vehicle Miles of Travel and Licensed Drivers—Federal Highway Administration (FHWA); Registered Vehicles, 1966-1974—FHWA; Registered Vehicles, 1975-2016—FHWA and Polk data from R.L. Polk & Co., a foundation of IHS Markit automotive solutions; 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, 1975-2016—Fatality Analysis Reporting System (FARS), NHTSA, 30-day traffic deaths.

Table 2

Persons Killed or Injured and Fatality and Injury Rates per Population, Licensed Drivers, Registered Vehicles, and Vehicle Miles Traveled, 1966-2016 (Continued)

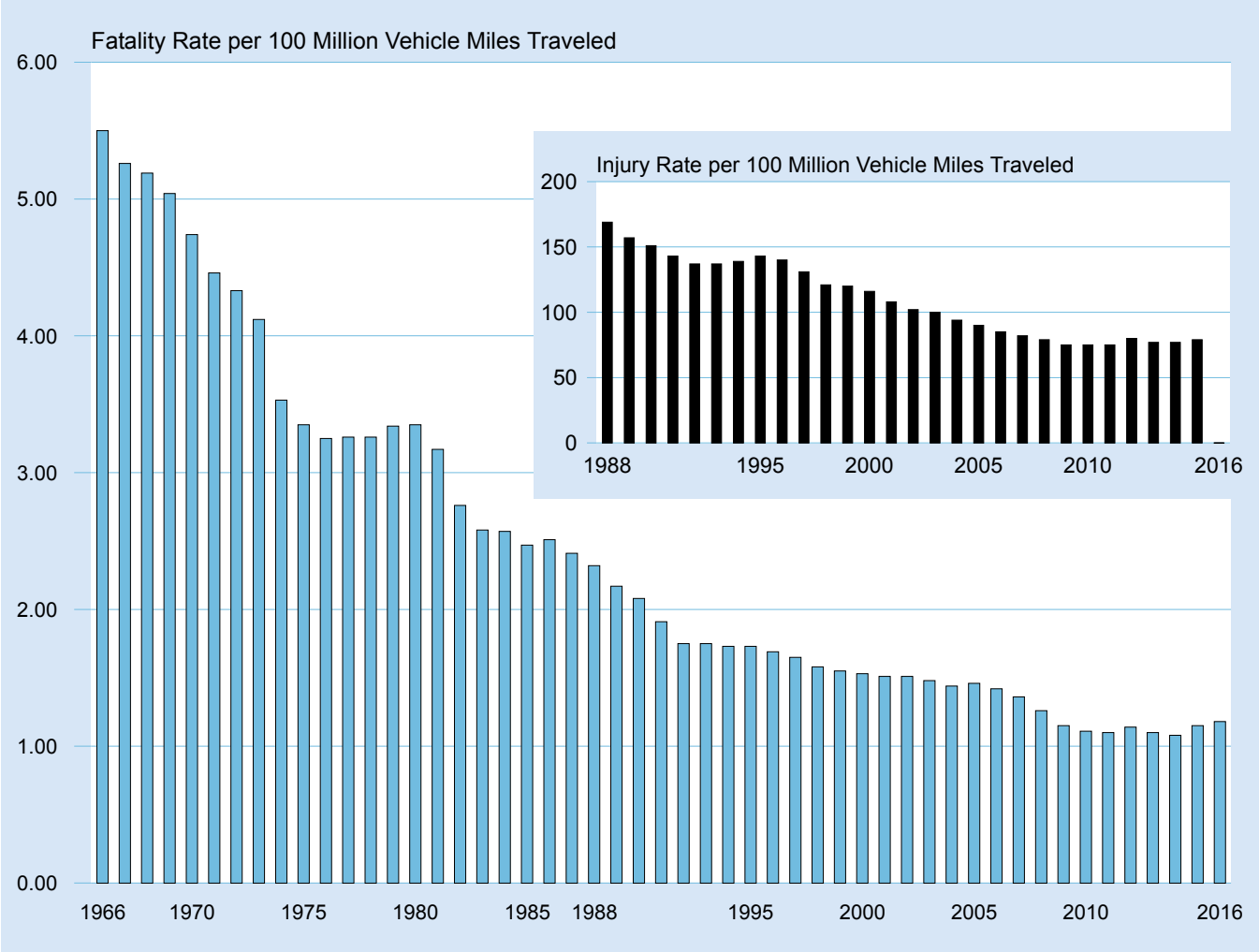
	Injured								
Year	Injured	Resident Population (Thousands)	Injury Rate per 100,000 Population	Licensed Drivers (Thousands)	Injury Rate per 100,000 Licensed Drivers	Registered Motor Vehicles (Thousands)	Injury Rate per 100,000 Registered Vehicles	Vehicle Miles Traveled (Billions)	Injury Rate per 100 Million Vehicle Miles Traveled
1988	3,416,000	244,499	1,397	162,854	2,098	177,455	1,925	2,026	169
1989	3,284,000	246,819	1,330	165,554	1,984	181,165	1,813	2,096	157
1990	3,231,000	249,464	1,295	167,015	1,934	184,275	1,753	2,144	151
1991	3,097,000	252,153	1,228	168,995	1,833	186,370	1,662	2,172	143
1992	3,070,000	255,030	1,204	173,125	1,773	184,938	1,660	2,247	137
1993	3,149,000	257,783	1,222	173,149	1,819	188,350	1,672	2,296	137
1994	3,266,000	260,327	1,255	175,403	1,862	192,497	1,697	2,358	139
1995	3,465,000	262,803	1,319	176,628	1,962	197,065	1,758	2,423	143
1996	3,483,000	265,229	1,313	179,539	1,940	201,631	1,728	2,484	140
1997	3,348,000	267,784	1,250	182,709	1,832	203,568	1,644	2,552	131
1998	3,192,000	270,248	1,181	184,861	1,727	208,076	1,534	2,628	121
1999	3,236,000	272,691	1,187	187,170	1,729	212,685	1,522	2,690	120
2000	3,189,000	282,162	1,130	190,625	1,673	217,028	1,469	2,747	116
2001	3,033,000	284,969	1,064	191,276	1,585	221,230	1,371	2,796	108
2002	2,926,000	287,625	1,017	194,602	1,503	225,685	1,296	2,856	102
2003	2,889,000	290,108	996	196,166	1,473	230,633	1,252	2,890	100
2004	2,788,000	292,805	952	198,889	1,402	237,949	1,172	2,965	94
2005	2,699,000	295,517	913	200,549	1,346	245,628	1,099	2,989	90
2006	2,575,000	298,380	863	202,810	1,269	251,415	1,024	3,014	85
2007	2,491,000	301,231	827	205,742	1,211	257,472	967	3,031	82
2008	2,346,000	304,094	771	208,321	1,126	259,360	904	2,977	79
2009	2,217,000	306,772	723	209,618	1,058	258,958	856	2,957	75
2010	2,239,000	309,348	724	210,115	1,066	257,312	870	2,967	75
2011	2,217,000	311,663	711	211,875	1,046	265,043	836	2,950	75
2012	2,362,000	313,998	752	211,815	1,115	265,647	889	2,969	80
2013	2,313,000	316,205	731	212,160	1,090	269,294	859	2,988	77
2014	2,338,000	318,563	734	214,092	1,092	274,805	851	3,026	77
2015	2,443,000	320,897	761	218,084	1,120	281,312	869	3,095	79
2016	NA	323,128	NA	221,712	NA	288,034	NA	3,174	NA

Notes: Some States include restricted driver licenses and graduated driver licenses in their licensed driver counts. Due to an enhancement in the registration data provided by R.L. Polk & Co., a foundation of IHS Markit automotive solutions, for 2011 and later years, registration counts for those years changed considerably from the counts provided for 2010 and earlier years. This should be taken into account when comparing registration numbers and rates per registered vehicle for 2010 and earlier years with those for 2011 and later years. Injury data for 2016 were not available when this report was finalized. For more details, see page 5, "Crash Report Sampling System (CRSS) Replaces the National Automotive Sampling System (NASS) General Estimates System (GES)."

Sources: Vehicle Miles of Travel and Licensed Drivers—Federal Highway Administration; Registered Vehicles, 1966-1974—Federal Highway Administration. Registered Vehicles, 1975-2016—Polk data from R.L. Polk & Co., a foundation of IHS Markit automotive solutions; 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). Persons Injured—General Estimates System(GES), NHTSA.

Figure 2

Motor Vehicle Fatality and Injury Rates per 100 Million Vehicle Miles Traveled, 1966-2016



Note: Injury data for 2016 were not available when this report was finalized. For more details, see page 5, "Crash Report Sampling System (CRSS) Replaces the National Automotive Sampling System (NASS) General Estimates System (GES)."

Table 3

Vehicles Involved in Crashes and Involvement Rates per Vehicle Miles of Travel and per Registered Vehicle by Vehicle Type and Crash Severity, 1975-2016

	Vehicle Type											
	Passenger Cars			Light Trucks			Large Trucks			Motorcycles		
Year	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	3.68	40.11	8,636	4.23	41.35	3,977	4.89	74.16	3,265	58.00	65.77
1976	37,206	3.48	38.35	9,300	3.98	40.80	4,435	5.15	79.55	3,343	55.69	67.76
1977	39,038	3.54	39.45	10,400	4.04	42.57	5,164	5.43	90.76	4,164	65.59	84.41
1978	40,544	3.57	39.81	11,898	4.11	43.61	5,759	5.45	98.28	4,643	64.86	95.38
1979	39,999	3.60	38.63	12,544	4.27	43.36	6,084	5.58	103.27	4,916	56.92	90.67
1980	39,059	3.53	37.28	12,680	4.29	42.18	5,379	4.96	92.89	5,194	50.85	91.22
1981	38,864	3.46	36.66	12,331	4.01	39.48	5,230	4.81	91.49	4,963	46.43	85.11
1982	34,334	3.00	32.11	11,317	3.51	35.03	4,646	4.17	83.11	4,495	45.36	78.12
1983	33,298	2.80	30.52	11,118	3.32	33.62	4,877	4.20	88.54	4,302	49.11	77.03
1984	34,648	2.83	30.89	11,973	3.34	33.96	5,124	4.21	94.87	4,659	53.04	85.02
1985	34,277	2.74	29.46	12,464	3.21	33.09	5,153	4.17	85.94	4,608	50.72	84.64
1986	36,195	2.83	30.87	13,327	3.20	33.52	5,097	4.02	89.09	4,570	48.63	87.90
1987	36,580	2.75	30.52	14,514	3.27	34.81	5,108	3.83	89.33	4,067	42.78	83.24
1988	36,977	2.67	30.43	15,286	3.13	34.27	5,241	3.80	85.40	3,715	37.06	81.04
1989	35,410	2.50	28.85	15,700	3.00	33.31	4,984	3.49	80.05	3,192	30.78	72.21
1990	34,085	2.39	27.65	15,620	2.81	31.29	4,776	3.27	77.08	3,276	34.28	76.91
1991	31,291	2.22	25.37	14,832	2.49	28.49	4,347	2.91	70.43	2,829	30.82	67.72
1992	29,817	2.08	24.78	14,648	2.28	27.21	4,035	2.63	66.75	2,439	25.52	60.00
1993	30,233	2.09	24.97	15,332	2.27	27.10	4,328	2.71	71.09	2,477	25.01	62.27
1994	30,273	2.07	24.81	16,353	2.30	27.49	4,644	2.73	70.49	2,339	22.84	62.26
1995	30,940	2.09	25.11	17,587	2.35	28.13	4,472	2.51	66.55	2,268	23.15	58.20
1996	30,727	2.05	24.66	18,246	2.32	27.88	4,755	2.60	67.81	2,176	21.94	56.20
1997	30,059	1.97	24.11	18,628	2.26	27.68	4,917	2.57	69.42	2,160	21.43	56.45
1998	29,040	1.87	23.05	19,363	2.25	27.75	4,955	2.52	64.08	2,334	22.70	60.16
1999	28,027	1.79	22.05	19,959	2.22	27.37	4,920	2.43	63.15	2,532	23.92	60.98
2000	27,802	1.76	21.73	20,498	2.18	26.98	4,995	2.43	62.26	2,975	28.42	68.45
2001	27,586	1.73	21.38	20,831	2.14	26.48	4,823	2.31	61.38	3,265	33.89	66.59
2002	27,374	1.70	21.00	21,668	2.14	26.54	4,587	2.14	57.86	3,365	35.23	67.24
2003	26,562	1.65	20.17	22,299	2.14	26.21	4,721	2.17	60.86	3,802	39.70	70.80
2004	25,682	1.58	19.25	22,486	2.05	25.04	4,902	2.22	59.99	4,121	40.71	71.45
2005	25,169	1.56	18.60	22,964	2.03	24.23	4,951	2.22	58.37	4,682	44.79	75.19
2006	24,260	1.50	17.70	22,411	1.94	22.85	4,766	2.14	54.04	4,963	41.19	74.31
2007	22,856	1.47	16.57	21,810	1.92	21.63	4,633	1.52	43.09	5,306	24.80	74.33
2008	20,474	1.34	14.73	19,179	1.73	19.01	4,089	1.32	37.61	5,409	25.99	69.77
2009	18,413	1.22	13.42	17,958	1.60	17.60	3,211	1.11	29.26	4,603	22.11	58.05
2010	17,804	1.18	13.16	17,491	1.53	17.09	3,494	1.22	32.44	4,651	25.12	58.07
2011	17,508	1.28	13.79	16,806	1.31	14.16	3,633	1.36	35.37	4,769	25.72	56.52
2012	18,269	1.33	14.38	17,350	1.35	14.62	3,825	1.42	35.88	5,113	23.91	60.47
2013	17,957	1.30	13.93	16,928	1.31	14.05	3,921	1.43	37.00	4,800	23.57	57.11
2014	17,895	1.28	13.65	17,160	1.31	13.90	3,749	1.34	34.38	4,705	23.56	55.89
2015	19,809	1.39	14.87	18,870	1.39	14.81	4,074	1.46	36.36	5,131	26.17	59.66
2016	20,839	1.45	15.45	20,069	1.42	15.20	4,213	1.46	36.64	5,421	26.52	62.46

Notes: See Tables 7 through 10 for notes regarding an enhanced methodology used to estimate registered vehicles and vehicle miles traveled for 2007 and after.Some States include restricted driver licenses and graduated driver licenses in their licensed driver counts. Due to an enhancement in the passenger car and light truck registration data provided by R.L. Polk & Co. for 2011 and later years, registration counts for those years changed considerably from the counts provided for 2010 and earlier years. This should be taken into account when comparing registration numbers and rates per registered vehicle for 2010 and earlier years with those for 2011 and later years. For more details see page 7, "Registered Vehicles and Vehicle Miles Traveled (VMT) by Vehicle Type."

Sources: Vehicle Miles of Travel—Federal Highway Administration, revised by NHTSA for passenger cars and light trucks; Registered Passenger Cars and Light Trucks—Polk data from R.L. Polk & Co., a foundation of IHS Markit automotive solutions; Registered Large Trucks and Motorcycles—Federal Highway Administration.

Table 3

Vehicles Involved in Crashes and Involvement Rates per Vehicle Miles of Travel and per Registered Vehicle by Vehicle Type and Crash Severity, 1975-2016 (Continued)

	Vehicle Type											
	Passenger Cars			Light Trucks			Large Trucks			Motorcycles		
Year	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
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	155	1,918	1,165,000	129	1,598	101,000	50	1,292	46,000	436	1,111
2000	2,396,000	151	1,873	1,209,000	129	1,591	101,000	49	1,253	53,000	509	1,226
2001	2,279,000	143	1,766	1,218,000	125	1,548	90,000	43	1,143	57,000	588	1,155
2002	2,136,000	132	1,639	1,210,000	120	1,482	94,000	44	1,189	58,000	612	1,167
2003	2,129,000	132	1,617	1,233,000	118	1,449	89,000	41	1,145	64,000	665	1,185
2004	1,990,000	122	1,491	1,246,000	114	1,387	87,000	39	1,062	70,000	694	1,217
2005	1,893,000	117	1,399	1,209,000	107	1,275	82,000	37	971	80,000	769	1,291
2006	1,794,000	111	1,309	1,202,000	104	1,225	80,000	36	911	84,000	694	1,251
2007	1,708,000	110	1,239	1,163,000	102	1,153	76,000	25	705	98,000	458	1,374
2008	1,624,000	107	1,168	1,095,000	99	1,086	66,000	21	608	90,000	433	1,162
2009	1,507,000	100	1,098	1,066,000	95	1,045	53,000	19	487	84,000	405	1,065
2010	1,579,000	105	1,167	1,053,000	92	1,029	58,000	20	541	78,000	419	968
2011	1,571,000	115	1,238	1,026,000	80	864	63,000	23	609	77,000	413	907
2012	1,683,000	122	1,325	1,087,000	84	916	77,000	28	719	89,000	416	1,052
2013	1,662,000	120	1,289	1,076,000	83	893	73,000	27	690	84,000	413	1,001
2014	1,685,000	121	1,285	1,138,000	87	922	88,000	32	811	87,000	435	1,033
2015	1,785,000	126	1,340	1,198,000	88	941	87,000	31	779	84,000	430	980
2016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Property-Damage-Only 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	3,517	2,491,000	277	3,416	369,000	182	4,739	10,000	96	246
2000	4,467,000	282	3,491	2,621,000	279	3,450	351,000	171	4,377	14,000	133	321
2001	4,399,000	276	3,409	2,679,000	275	3,406	335,000	160	4,261	14,000	150	295
2002	4,443,000	275	3,408	2,757,000	273	3,376	336,000	156	4,232	17,000	173	330
2003	4,356,000	270	3,308	2,804,000	269	3,297	363,000	167	4,681	14,000	142	253
2004	4,216,000	259	3,160	2,886,000	263	3,213	324,000	147	3,970	13,000	132	231
2005	4,169,000	258	3,081	2,919,000	258	3,080	354,000	159	4,176	18,000	174	291
2006	4,046,000	250	2,953	2,932,000	254	2,990	300,000	135	3,398	15,000	128	230
2007	4,014,000	258	2,910	3,007,000	265	2,983	333,000	110	3,098	20,000	93	278
2008	3,931,000	258	2,827	2,848,000	258	2,824	309,000	100	2,845	18,000	88	235
2009	3,686,000	244	2,687	2,866,000	255	2,810	239,000	83	2,181	17,000	80	211
2010	3,754,000	249	2,774	2,704,000	237	2,642	214,000	75	1,986	14,000	77	178
2011	3,740,000	273	2,945	2,582,000	202	2,175	221,000	83	2,154	18,000	98	216
2012	3,875,000	281	3,049	2,706,000	210	2,280	253,000	94	2,372	18,000	84	211
2013	3,989,000	288	3,094	2,776,000	215	2,304	265,000	96	2,500	18,000	86	210
2014	4,279,000	306	3,263	3,028,000	230	2,452	346,000	124	3,171	19,000	94	224
2015	4,438,000	312	3,331	3,197,000	235	2,509	342,000	122	3,049	13,000	66	150
2016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: See Tables 7 through 10 for notes regarding an enhanced methodology used to estimate registered vehicles and vehicle miles traveled for 2007 and after. Some States include restricted driver licenses and graduated driver licenses in their licensed driver counts. Due to an enhancement in the registration data provided by R.L. Polk & Co. for 2011 and later years, registration counts for those years changed considerably from the counts provided for 2010 and earlier years. This should be taken into account when comparing registration numbers and rates per registered vehicle for 2010 and earlier years with those for 2011 and later years. For more details see page 7, "Registered Vehicles and Vehicle Miles Traveled (VMT) by Vehicle Type." Data for 2016 injury and property damage only crashes were not available when this report was finalized (NA). For more details, see page 5, "Crash Report Sampling System (CRSS) Replaces the National Automotive Sampling System (NASS) General Estimates System (GES)."

Sources: Vehicle Miles of Travel—Federal Highway Administration, revised by NHTSA for passenger cars and light trucks; Registered Passenger Cars and Light Trucks—Polk data from R.L. Polk & Co., a foundation of IHS Markit automotive solutions; Registered Large Trucks and Motorcycles—Federal Highway Administration.

Table 4

Persons Killed or Injured by Person Type and Vehicle Type, 1975-2016

Year	Person Type											
	Occupants by Vehicle Type							Nonoccupants				
	Passenger Cars	Light Trucks	Large Trucks	Buses	Other/ Unknown	Total	Motor-cyclists	Pedestrian	Pedalcyclist	Other/ Unknown	Total	Total
	Killed											
1975	25,929	4,856	961	53	937	*32,736*	*3,189*	7,516	1,003	81	*8,600*	**44,525**
1976	26,166	5,438	1,132	73	981	*33,790*	*3,312*	7,427	914	80	*8,421*	**45,523**
1977	26,782	5,976	1,287	42	959	*35,046*	*4,104*	7,732	922	74	*8,728*	**47,878**
1978	28,153	6,745	1,395	41	622	*36,956*	*4,577*	7,795	892	111	*8,798*	**50,331**
1979	27,808	7,178	1,432	39	579	*37,036*	*4,894*	8,096	932	135	*9,163*	**51,093**
1980	27,449	7,486	1,262	46	540	*36,783*	*5,144*	8,070	965	129	*9,164*	**51,091**
1981	26,645	7,081	1,133	56	603	*35,518*	*4,906*	7,837	936	104	*8,877*	**49,301**
1982	23,330	6,359	944	35	525	*31,193*	*4,453*	7,331	883	85	*8,299*	**43,945**
1983	22,979	6,202	982	53	362	*30,578*	*4,265*	6,826	839	81	*7,746*	**42,589**
1984	23,620	6,496	1,074	46	440	*31,676*	*4,608*	7,025	849	99	*7,973*	**44,257**
1985	23,212	6,689	977	57	544	*31,479*	*4,564*	6,808	890	84	*7,782*	**43,825**
1986	24,944	7,317	926	39	442	*33,668*	*4,566*	6,779	941	133	*7,853*	**46,087**
1987	25,132	8,058	852	51	436	*34,529*	*4,036*	6,745	948	132	*7,825*	**46,390**
1988	25,808	8,306	911	54	429	*35,508*	*3,662*	6,870	911	136	*7,917*	**47,087**
1989	25,063	8,551	858	50	424	*34,946*	*3,141*	6,556	832	107	*7,495*	**45,582**
1990	24,092	8,601	705	32	460	*33,890*	*3,244*	6,482	859	124	*7,465*	**44,599**
1991	22,385	8,391	661	31	466	*31,934*	*2,806*	5,801	843	124	*6,768*	**41,508**
1992	21,387	8,098	585	28	387	*30,485*	*2,395*	5,549	723	98	*6,370*	**39,250**
1993	21,566	8,511	605	18	425	*31,125*	*2,449*	5,649	816	111	*6,576*	**40,150**
1994	21,997	8,904	670	18	409	*31,998*	*2,320*	5,489	802	107	*6,398*	**40,716**
1995	22,423	9,568	648	33	392	*33,064*	*2,227*	5,584	833	109	*6,526*	**41,817**
1996*	22,505	9,932	621	21	455	*33,534*	*2,161*	5,449	765	154	*6,368*	**42,065**
1997	22,199	10,249	723	18	420	*33,609*	*2,116*	5,321	814	153	*6,288*	**42,013**
1998	21,194	10,705	742	38	409	*33,088*	*2,294*	5,228	760	131	*6,119*	**41,501**
1999	20,862	11,265	759	59	447	*33,392*	*2,483*	4,939	754	149	*5,842*	**41,717**
2000	20,699	11,526	754	22	450	*33,451*	*2,897*	4,763	693	141	*5,597*	**41,945**
2001	20,320	11,723	708	34	458	*33,243*	*3,197*	4,901	732	123	*5,756*	**42,196**
2002	20,569	12,274	689	45	528	*34,105*	*3,270*	4,851	665	114	*5,630*	**43,005**
2003	19,725	12,546	726	41	589	*33,627*	*3,714*	4,774	629	140	*5,543*	**42,884**
2004	19,192	12,674	766	42	602	*33,276*	*4,028*	4,675	727	130	*5,532*	**42,836**
2005	18,512	13,037	804	58	659	*33,070*	*4,576*	4,892	786	186	*5,864*	**43,510**
2006	17,925	12,761	805	27	601	*32,119*	*4,837*	4,795	772	185	*5,752*	**42,708**
2007	16,614	12,458	805	36	614	*30,527*	*5,174*	4,699	701	158	*5,558*	**41,259**
2008	14,646	10,816	682	67	580	*26,791*	*5,312*	4,414	718	188	*5,320*	**37,423**
2009	13,135	10,312	499	26	554	*24,526*	*4,469*	4,109	628	151	*4,888*	**33,883**
2010	12,491	9,782	530	44	524	*23,371*	*4,518*	4,302	623	185	*5,110*	**32,999**
2011	12,014	9,302	640	55	499	*22,510*	*4,630*	4,457	682	200	*5,339*	**32,479**
2012	12,361	9,418	697	39	502	*23,017*	*4,986*	4,818	734	227	*5,779*	**33,782**
2013	12,037	9,186	695	54	511	*22,483*	*4,692*	4,779	749	190	*5,718*	**32,893**
2014	11,947	9,103	656	44	557	*22,307*	*4,594*	4,910	729	204	*5,843*	**32,744**
2015	12,761	9,878	665	49	544	*23,897*	*5,029*	5,495	829	235	*6,559*	**35,485**
2016	13,412	10,302	722	40	620	*25,096*	*5,286*	5,987	840	252	*7,079*	**37,461**

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

Table 4
Persons Killed or Injured by Person Type and Vehicle Type, 1975-2016 (Continued)

Year	Person Type											
	Occupants by Vehicle Type							Nonoccupants				
	Passenger Cars	Light Trucks	Large Trucks	Buses	Other/ Unknown	Total	Motor-cyclists	Pedestrian	Pedalcyclist	Other/ Unknown	Total	Total
						Injured						
1988	2,585,000	478,000	37,000	15,000	4,000	*3,119,000*	*105,000*	110,000	75,000	8,000	*192,000*	**3,416,000**
1989	2,431,000	511,000	43,000	15,000	5,000	*3,005,000*	*83,000*	112,000	73,000	11,000	*196,000*	**3,284,000**
1990	2,376,000	505,000	42,000	33,000	4,000	*2,960,000*	*84,000*	105,000	75,000	7,000	*187,000*	**3,231,000**
1991	2,235,000	563,000	28,000	21,000	4,000	*2,850,000*	*80,000*	88,000	67,000	11,000	*166,000*	**3,097,000**
1992	2,232,000	545,000	34,000	20,000	12,000	*2,843,000*	*65,000*	89,000	63,000	10,000	*162,000*	**3,070,000**
1993	2,265,000	601,000	32,000	17,000	4,000	*2,919,000*	*59,000*	94,000	68,000	9,000	*171,000*	**3,149,000**
1994	2,364,000	631,000	30,000	16,000	4,000	*3,045,000*	*57,000*	92,000	62,000	9,000	*164,000*	**3,266,000**
1995	2,469,000	722,000	30,000	19,000	4,000	*3,246,000*	*57,000*	86,000	67,000	10,000	*162,000*	**3,465,000**
1996	2,458,000	761,000	33,000	20,000	4,000	*3,277,000*	*55,000*	82,000	58,000	11,000	*151,000*	**3,483,000**
1997	2,341,000	755,000	31,000	17,000	6,000	*3,149,000*	*53,000*	77,000	58,000	11,000	*146,000*	**3,348,000**
1998	2,201,000	763,000	29,000	16,000	4,000	*3,012,000*	*49,000*	69,000	53,000	8,000	*131,000*	**3,192,000**
1999	2,138,000	847,000	33,000	22,000	7,000	*3,047,000*	*50,000*	85,000	51,000	3,000	*140,000*	**3,236,000**
2000	2,052,000	887,000	31,000	18,000	10,000	*2,997,000*	*58,000*	78,000	51,000	5,000	*134,000*	**3,189,000**
2001	1,927,000	861,000	29,000	15,000	9,000	*2,841,000*	*60,000*	78,000	45,000	8,000	*131,000*	**3,033,000**
2002	1,805,000	879,000	26,000	19,000	6,000	*2,735,000*	*65,000*	71,000	48,000	7,000	*126,000*	**2,926,000**
2003	1,756,000	889,000	27,000	18,000	7,000	*2,697,000*	*67,000*	70,000	46,000	8,000	*124,000*	**2,889,000**
2004	1,643,000	900,000	27,000	16,000	7,000	*2,594,000*	*76,000*	68,000	41,000	9,000	*118,000*	**2,788,000**
2005	1,573,000	872,000	27,000	11,000	10,000	*2,494,000*	*87,000*	64,000	45,000	8,000	*118,000*	**2,699,000**
2006	1,475,000	857,000	23,000	10,000	11,000	*2,375,000*	*88,000*	61,000	44,000	7,000	*112,000*	**2,575,000**
2007	1,379,000	841,000	23,000	12,000	8,000	*2,264,000*	*103,000*	70,000	43,000	10,000	*124,000*	**2,491,000**
2008	1,304,000	768,000	23,000	15,000	9,000	*2,120,000*	*96,000*	69,000	52,000	9,000	*130,000*	**2,346,000**
2009	1,216,000	759,000	17,000	12,000	7,000	*2,011,000*	*90,000*	59,000	51,000	7,000	*116,000*	**2,217,000**
2010	1,253,000	733,000	20,000	17,000	5,000	*2,027,000*	*82,000*	70,000	52,000	8,000	*130,000*	**2,239,000**
2011	1,240,000	728,000	23,000	13,000	6,000	*2,010,000*	*81,000*	69,000	48,000	9,000	*126,000*	**2,217,000**
2012	1,328,000	762,000	25,000	12,000	6,000	*2,134,000*	*93,000*	76,000	49,000	10,000	*136,000*	**2,362,000**
2013	1,296,000	750,000	24,000	23,000	5,000	*2,099,000*	*88,000*	66,000	48,000	11,000	*125,000*	**2,313,000**
2014	1,292,000	782,000	27,000	14,000	6,000	*2,121,000*	*92,000*	65,000	50,000	10,000	*125,000*	**2,338,000**
2015	1,378,000	803,000	30,000	12,000	8,000	*2,230,000*	*88,000*	70,000	45,000	10,000	*125,000*	**2,443,000**
2016	NA	NA	NA	NA	NA	*NA*	*NA*	NA	NA	NA	*NA*	**NA**

Note: Injury data for 2016 were not available when this report was finalized (NA). For more details, see page 5, "Crash Report Sampling System (CRSS) Replaces the National Automotive Sampling System (NASS) General Estimates System (GES)."

Table 5

Drivers Involved in Crashes and Involvement Rates per Licensed Driver by Sex and Crash Severity, 1975-2016

Year	Sex								
	Male (>15 Years Old)			Female (>15 Years Old)			Total (>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	89,184	45.75	14,043	87,386	16.07	54,847	176,570	31.06
1996	40,899	90,503	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	93,023	43.47	14,967	91,805	16.30	55,404	184,828	29.98
1999	40,639	94,149	43.16	14,717	92,988	15.83	55,359	187,137	29.58
2000	41,443	95,782	43.27	14,682	94,816	15.48	56,126	190,598	29.45
2001	41,548	95,779	43.38	14,829	95,471	15.53	56,380	191,250	29.48
2002	41,995	97,595	43.03	14,876	96,978	15.34	56,874	194,574	29.23
2003	42,177	98,209	42.95	15,106	97,919	15.43	57,285	196,128	29.21
2004	41,876	99,559	42.06	15,272	99,305	15.38	57,152	198,864	28.74
2005	42,947	100,240	42.84	14,967	100,285	14.92	57,921	200,525	28.88
2006	41,912	101,010	41.49	14,661	101,589	14.43	56,577	202,599	27.93
2007	40,764	102,338	39.83	14,101	103,152	13.67	54,872	205,490	26.70
2008	36,825	103,449	35.60	12,536	104,537	11.99	49,369	207,986	23.74
2009	32,690	104,056	31.42	11,797	105,153	11.22	44,492	209,209	21.27
2010	31,897	104,175	30.62	11,796	105,542	11.18	43,697	209,717	20.84
2011	31,771	104,720	30.34	11,227	106,794	10.51	43,001	211,514	20.33
2012	33,209	104,920	31.65	11,557	106,767	10.82	44,773	211,688	21.15
2013	32,457	104,976	30.92	11,382	107,121	10.63	43,849	212,097	20.67
2014	32,462	105,876	30.66	11,250	108,154	10.40	43,721	214,030	20.43
2015	35,679	107,617	33.15	12,332	110,402	11.17	48,029	218,019	22.03
2016	37,352	109,556	34.09	13,208	112,093	11.78	50,581	221,649	22.82

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

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

Table 5

Drivers Involved in Crashes and Involvement Rates per Licensed Driver by Sex and Crash Severity, 1975-2016 (Continued)

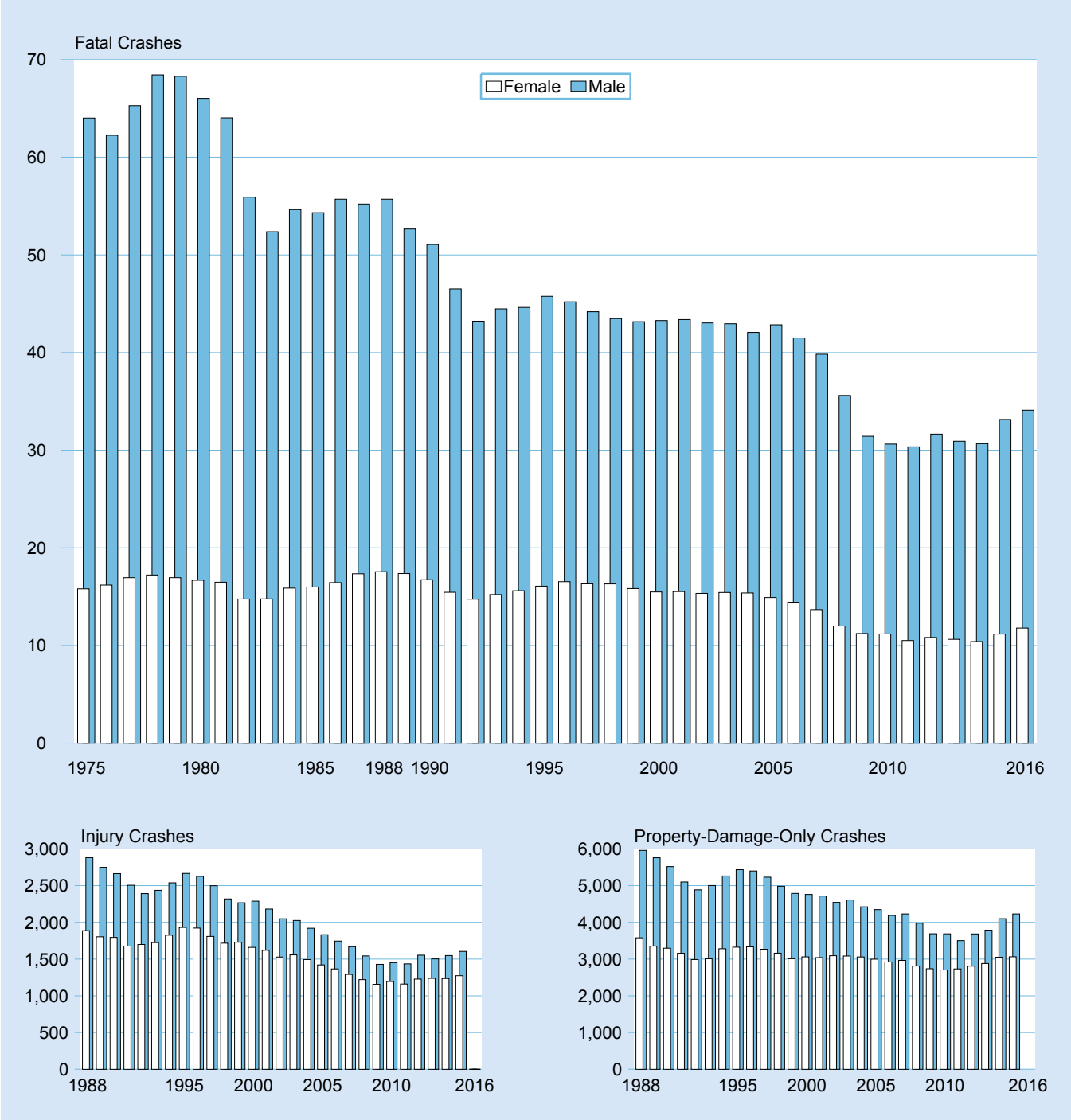
Year	Sex						Total (>15 Years Old)*		
	Male (>15 Years Old)			Female (>15 Years Old)					
	Number Involved in Crashes	Licensed Drivers (Thousands)	Involvement Rate per 100,000 Licensed Drivers	Number Involved in Crashes	Licensed Drivers (Thousands)	Involvement Rate per 100,000 Licensed Drivers	Number Involved in Crashes	Licensed Drivers (Thousands)	Involvement Rate per 100,000 Licensed Drivers
Drivers in 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	89,184	2,667	1,687,000	87,386	1,931	4,066,000	176,570	2,303
1996	2,378,000	90,503	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	93,023	2,319	1,576,000	91,805	1,717	3,734,000	184,828	2,020
1999	2,134,000	94,149	2,267	1,609,000	92,988	1,730	3,743,000	187,137	2,000
2000	2,192,000	95,782	2,289	1,573,000	94,816	1,659	3,765,000	190,598	1,975
2001	2,090,000	95,779	2,182	1,547,000	95,471	1,620	3,637,000	191,250	1,902
2002	2,000,000	97,595	2,049	1,481,000	96,978	1,528	3,482,000	194,574	1,789
2003	1,990,000	98,209	2,026	1,525,000	97,919	1,557	3,514,000	196,128	1,792
2004	1,912,000	99,559	1,920	1,482,000	99,305	1,493	3,394,000	198,864	1,707
2005	1,837,000	100,240	1,832	1,425,000	100,285	1,421	3,262,000	200,525	1,627
2006	1,763,000	101,010	1,745	1,387,000	101,589	1,366	3,150,000	202,599	1,555
2007	1,708,000	102,338	1,669	1,333,000	103,152	1,292	3,041,000	205,490	1,480
2008	1,596,000	103,449	1,543	1,276,000	104,537	1,221	2,872,000	207,986	1,381
2009	1,487,000	104,056	1,429	1,217,000	105,153	1,157	2,704,000	209,209	1,292
2010	1,511,000	104,175	1,451	1,261,000	105,542	1,195	2,773,000	209,717	1,322
2011	1,503,000	104,720	1,435	1,240,000	106,794	1,161	2,743,000	211,514	1,297
2012	1,630,000	104,920	1,553	1,311,000	106,767	1,228	2,940,000	211,688	1,389
2013	1,578,000	104,976	1,503	1,327,000	107,121	1,239	2,905,000	212,097	1,370
2014	1,639,000	105,876	1,548	1,336,000	108,154	1,236	2,976,000	214,030	1,390
2015	1,728,000	107,617	1,605	1,407,000	110,402	1,274	3,134,000	218,019	1,438
2016	NA	109,556	NA	NA	112,093	NA	NA	221,649	NA
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	89,184	5,434	2,905,000	87,386	3,325	7,752,000	176,570	4,390
1996	4,888,000	90,503	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	93,023	4,982	2,902,000	91,805	3,162	7,536,000	184,828	4,078
1999	4,509,000	94,149	4,789	2,800,000	92,988	3,011	7,309,000	187,137	3,906
2000	4,559,000	95,782	4,760	2,904,000	94,816	3,062	7,463,000	190,598	3,915
2001	4,518,000	95,779	4,717	2,903,000	95,471	3,041	7,421,000	191,250	3,880
2002	4,436,000	97,595	4,545	2,999,000	96,978	3,093	7,435,000	194,574	3,821
2003	4,528,000	98,209	4,610	3,020,000	97,919	3,084	7,547,000	196,128	3,848
2004	4,405,000	99,559	4,424	3,037,000	99,305	3,058	7,442,000	198,864	3,742
2005	4,357,000	100,240	4,347	3,007,000	100,285	2,998	7,364,000	200,525	3,672
2006	4,232,000	101,010	4,190	2,968,000	101,589	2,922	7,200,000	202,599	3,554
2007	4,329,000	102,338	4,230	3,058,000	103,152	2,964	7,386,000	205,490	3,594
2008	4,115,000	103,449	3,978	2,940,000	104,537	2,812	7,055,000	207,986	3,392
2009	3,839,000	104,056	3,689	2,879,000	105,153	2,738	6,718,000	209,209	3,211
2010	3,841,000	104,175	3,687	2,855,000	105,542	2,705	6,696,000	209,717	3,193
2011	3,669,000	104,720	3,503	2,918,000	106,794	2,732	6,586,000	211,514	3,114
2012	3,867,000	104,920	3,685	2,998,000	106,767	2,808	6,865,000	211,688	3,243
2013	3,978,000	104,976	3,789	3,085,000	107,121	2,880	7,063,000	212,097	3,330
2014	4,342,000	105,876	4,101	3,299,000	108,154	3,051	7,641,000	214,030	3,570
2015	4,551,000	107,617	4,229	3,383,000	110,402	3,065	7,934,000	218,019	3,639
2016	NA	109,556	NA	NA	112,093	NA	NA	221,649	NA

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

Notes: Drivers in this table include motorcycle riders. Some States include restricted driver licenses and graduated driver licenses in their licensed driver counts.
Source: Licensed Drivers—Federal Highway Administration. Data for 2016 injury and property damage only crashes were not available when this report was finalized (NA). For more details, see page 5, "Crash Report Sampling System (CRSS) Replaces the National Automotive Sampling System (NASS) General Estimates System (GES)."

Figure 3

Driver Involvement Rates per 100,000 Licensed Drivers 16 Years and Older by Sex and Crash Severity, 1975-2016



Note: Data for 2016 injury and property damage only crashes were not available when this report was finalized. For more details, see page 5, "Crash Report Sampling System (CRSS) Replaces the National Automotive Sampling System (NASS) General Estimates System (GES)."

Table 6

Motor Vehicle Occupant and Motorcyclist Fatality and Injury Rates per Population by Age Group, 1975-2016

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	29.58	27.30	17.03	12.49	11.01	11.42	13.67	20.87	**13.43**
1996	3.40	2.34	5.07	29.43	27.31	16.78	12.60	11.14	11.58	14.20	20.84	**13.46**
1997	3.16	2.42	4.96	28.38	25.53	16.49	12.23	11.57	11.96	14.46	22.09	**13.34**
1998	3.03	2.60	4.60	27.61	25.06	15.81	12.60	11.44	11.53	14.31	21.28	**13.09**
1999	2.94	2.54	4.49	28.10	25.56	16.13	12.62	11.48	11.52	14.17	20.70	**13.16**
2000	2.82	2.38	4.27	27.76	25.29	15.55	12.81	11.51	11.38	12.88	19.51	**12.88**
2001	2.68	2.27	3.77	27.76	24.94	15.67	12.93	11.35	11.01	12.76	19.35	**12.79**
2002	2.44	2.13	4.07	28.84	25.88	15.75	13.03	11.85	11.10	12.61	18.81	**12.99**
2003	2.48	2.14	4.13	27.26	24.87	15.54	13.07	12.02	11.24	12.45	19.27	**12.87**
2004	2.57	2.28	4.25	26.69	24.94	15.82	12.48	12.07	11.05	12.30	18.16	**12.74**
2005	2.35	2.24	3.49	25.26	25.71	16.33	12.92	11.99	11.60	12.46	17.29	**12.74**
2006	2.32	1.85	3.31	24.59	26.07	16.37	12.68	11.80	10.95	11.31	15.73	**12.39**
2007	1.98	1.78	3.17	22.86	25.02	15.40	12.20	11.52	10.58	10.93	15.41	**11.85**
2008	1.50	1.44	2.42	18.71	21.56	14.28	11.03	10.54	9.82	10.02	14.16	**10.56**
2009	1.62	1.40	2.17	16.41	17.62	12.45	9.90	9.89	8.78	9.18	13.42	**9.45**
2010	1.48	1.26	1.95	13.92	17.60	11.84	9.45	9.15	8.88	8.95	14.01	**9.02**
2011	1.38	1.22	1.82	14.00	16.67	11.50	9.05	8.97	8.36	9.11	12.62	**8.71**
2012	1.54	1.17	1.70	13.26	16.94	12.18	9.54	9.27	8.86	9.11	12.16	**8.92**
2013	1.44	1.19	1.75	12.37	16.09	11.65	9.08	8.86	8.62	8.80	12.45	**8.59**
2014	1.24	1.23	1.70	12.46	15.90	11.53	8.69	8.99	8.39	8.22	12.15	**8.44**
2015	1.42	1.29	1.78	13.20	16.74	12.42	9.41	9.44	8.94	9.09	12.61	**9.01**
2016	1.53	1.41	1.87	13.35	17.54	13.18	10.02	9.52	9.34	9.30	13.23	**9.40**

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

Table 6

Motor Vehicle Occupant and Motorcyclist Fatality and Injury Rates per Population by Age Group, 1975-2016 (Continued)

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	
	Injury Rate per 100,000 Population											
1988	417	444	734	3,283	2,666	1,800	1,308	1,030	876	710	656	**1,319**
1989	370	469	727	3,210	2,467	1,672	1,280	985	801	713	618	**1,251**
1990	329	430	674	3,110	2,494	1,672	1,227	989	844	750	514	**1,220**
1991	384	470	709	2,921	2,317	1,574	1,144	977	801	727	521	**1,162**
1992	323	438	685	2,988	2,253	1,573	1,101	971	783	722	586	**1,140**
1993	367	471	657	2,885	2,307	1,606	1,195	956	821	707	592	**1,155**
1994	411	468	706	2,958	2,369	1,667	1,225	987	857	756	598	**1,192**
1995	418	483	742	3,193	2,456	1,722	1,291	1,132	926	755	624	**1,257**
1996	418	533	731	3,132	2,432	1,766	1,295	1,085	904	788	654	**1,256**
1997	400	461	684	2,981	2,401	1,689	1,257	1,012	815	761	641	**1,196**
1998	403	440	677	2,780	2,123	1,586	1,158	1,029	873	696	587	**1,133**
1999	383	477	662	2,828	2,169	1,596	1,135	1,028	801	759	610	**1,136**
2000	350	405	547	2,690	2,096	1,450	1,159	948	830	723	665	**1,083**
2001	311	372	510	2,451	2,032	1,392	1,094	931	754	666	578	**1,018**
2002	304	380	513	2,371	1,905	1,318	1,033	873	761	614	549	**974**
2003	302	375	468	2,255	1,853	1,336	1,022	873	728	604	523	**953**
2004	286	352	476	2,115	1,710	1,214	1,009	876	724	598	494	**912**
2005	265	322	472	1,962	1,720	1,225	951	830	680	538	467	**873**
2006	270	286	403	1,828	1,583	1,155	922	762	662	553	490	**825**
2007	266	288	354	1,713	1,523	1,135	841	751	625	550	433	**786**
2008	242	265	353	1,533	1,389	1,039	798	717	598	489	402	**729**
2009	220	260	322	1,342	1,378	965	735	695	566	503	397	**685**
2010	191	251	314	1,313	1,332	935	804	706	569	460	416	**682**
2011	229	242	299	1,251	1,255	957	785	689	583	456	384	**671**
2012	197	266	276	1,307	1,351	1,018	826	740	618	512	422	**709**
2013	228	264	283	1,248	1,342	974	777	716	624	503	437	**692**
2014	228	240	300	1,188	1,268	1,008	819	758	620	492	403	**695**
2015	235	280	305	1,337	1,382	1,024	846	741	642	531	404	**722**
2016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**NA**

Notes: Population estimates for historical years are periodically revised. Data for 2016 injury and property damage only crashes were not available when this report was finalized (NA). For more details, see page 5, "Crash Report Sampling System (CRSS) Replaces the National Automotive Sampling System (NASS) General Estimates System (GES)."

Source: U.S. Bureau of the Census.

Table 7

Passenger Car Occupants Killed or Injured and Fatality and Injury Rates per Registered Vehicle and Vehicle Miles of Travel, 1975-2016

Year	Registered Passenger Cars	Vehicle Miles Traveled (Millions)	Passenger Car Occupants Killed	Fatality Rate per 100,000 Registered Passenger Cars	Fatality Rate per 100 Million Vehicle Miles Traveled	Passenger Car Occupants Injured	Injury Rate per 100,000 Registered Passenger Cars	Injury Rate per 100 Million Vehicle Miles Traveled
1975	94,478,029	1,030,376	25,929	27.44	2.52	*	*	*
1976	97,011,684	1,070,667	26,166	26.97	2.44	*	*	*
1977	98,967,665	1,102,726	26,782	27.06	2.43	*	*	*
1978	101,855,551	1,136,459	28,153	27.64	2.48	*	*	*
1979	103,543,788	1,111,705	27,808	26.86	2.50	*	*	*
1980	104,770,998	1,107,056	27,449	26.20	2.48	*	*	*
1981	106,002,720	1,122,092	26,645	25.14	2.37	*	*	*
1982	106,936,590	1,145,828	23,330	21.82	2.04	*	*	*
1983	109,085,444	1,187,760	22,979	21.07	1.93	*	*	*
1984	112,177,361	1,226,461	23,620	21.06	1.93	*	*	*
1985	116,348,085	1,248,980	23,212	19.95	1.86	*	*	*
1986	117,268,114	1,277,550	24,944	21.27	1.95	*	*	*
1987	119,848,784	1,328,460	25,132	20.97	1.89	*	*	*
1988	121,519,139	1,384,047	25,808	21.24	1.86	2,585,000	2,127	187
1989	122,758,478	1,415,213	25,063	20.42	1.77	2,431,000	1,980	172
1990	123,276,600	1,427,178	24,092	19.54	1.69	2,376,000	1,928	167
1991	123,327,336	1,411,655	22,385	18.15	1.59	2,235,000	1,812	158
1992	120,346,747	1,436,035	21,387	17.77	1.49	2,232,000	1,854	155
1993	121,055,398	1,445,106	21,566	17.81	1.49	2,265,000	1,871	157
1994	121,996,580	1,459,208	21,997	18.03	1.51	2,364,000	1,937	162
1995	123,241,881	1,478,352	22,423	18.19	1.52	2,469,000	2,004	167
1996	124,612,787	1,499,139	22,505	18.06	1.50	2,458,000	1,973	164
1997	124,672,920	1,528,399	22,199	17.81	1.45	2,341,000	1,877	153
1998	125,965,709	1,555,901	21,194	16.83	1.36	2,201,000	1,748	141
1999	127,083,019	1,569,455	20,862	16.42	1.33	2,138,000	1,682	136
2000	127,933,707	1,583,127	20,699	16.18	1.31	2,052,000	1,604	130
2001	129,044,240	1,596,579	20,320	15.75	1.27	1,927,000	1,493	121
2002	130,349,393	1,613,749	20,569	15.78	1.27	1,805,000	1,385	112
2003	131,665,783	1,613,543	19,725	14.98	1.22	1,756,000	1,334	109
2004	133,414,552	1,629,955	19,192	14.39	1.18	1,643,000	1,231	101
2005	135,324,121	1,616,908	18,512	13.68	1.14	1,573,000	1,163	97
2006	137,031,279	1,616,328	17,925	13.08	1.11	1,475,000	1,076	91
2007	137,929,951	1,554,673	16,614	12.05	1.07	1,379,000	1,000	89
2008	139,028,041	1,524,331	14,646	10.53	0.96	1,304,000	938	86
2009	137,203,972	1,510,339	13,135	9.57	0.87	1,216,000	887	81
2010	135,310,480	1,507,716	12,491	9.23	0.83	1,253,000	926	83
2011	126,966,714	1,369,810	12,014	9.46	0.88	1,240,000	976	90
2012	127,077,676	1,377,486	12,361	9.73	0.90	1,328,000	1,045	96
2013	128,936,225	1,384,194	12,037	9.34	0.87	1,296,000	1,005	94
2014	131,138,925	1,396,098	11,947	9.11	0.86	1,292,000	985	93
2015	133,218,366	1,420,869	12,761	9.58	0.90	1,378,000	1,035	97
2016	134,879,198	1,440,228	13,412	9.94	0.93	NA	NA	NA

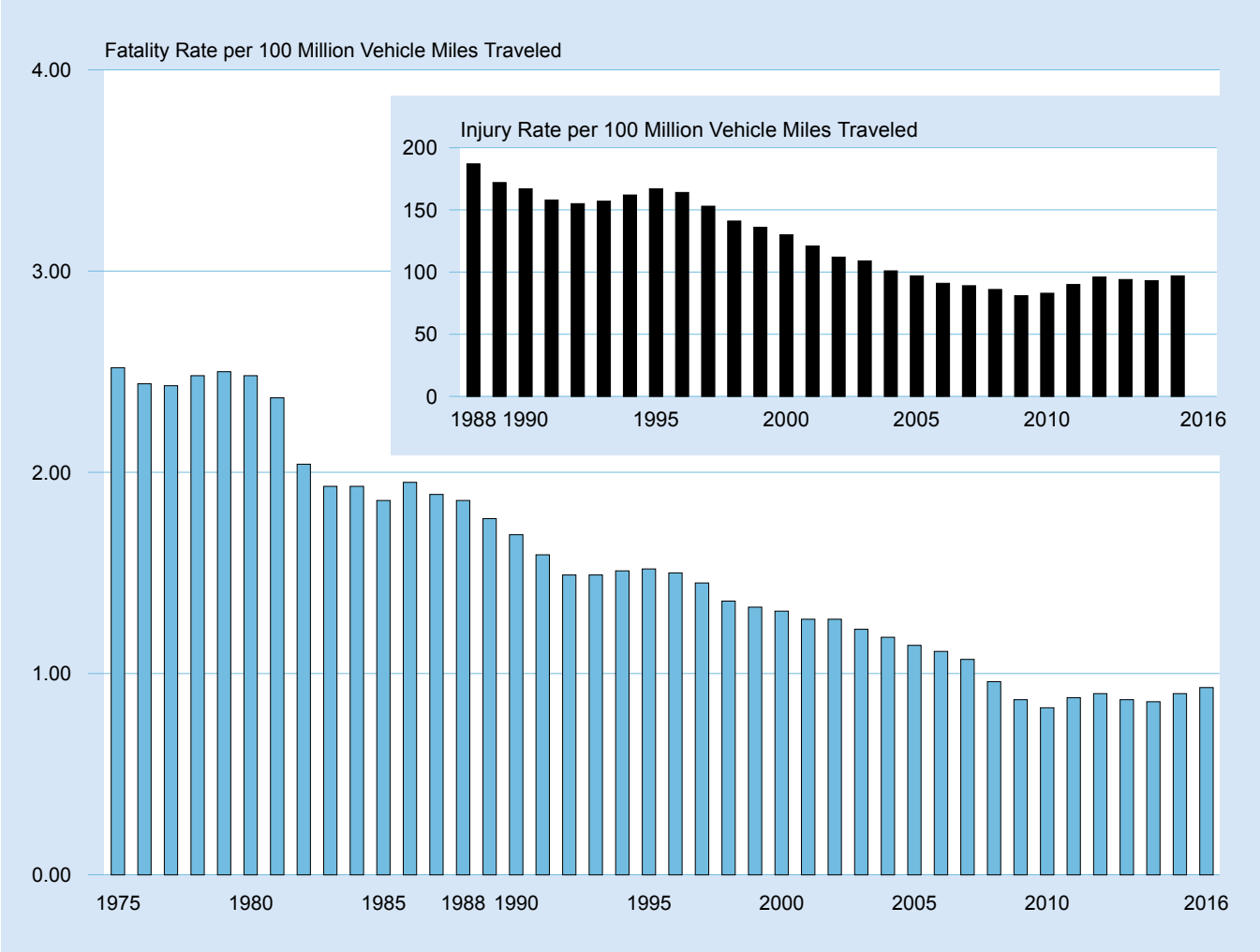
*Injury data not available before 1988.

Notes: In 2011, the Federal Highway Administration implemented an enhanced methodology for estimating registered vehicles and vehicle miles traveled by vehicle type. These revisions were applied to data from 2007and later. In some cases the changes were significant and should be taken into account when comparing registered vehicle counts and/or vehicle miles traveled for 2006 and earlier years with the numbers for 2007 and later years. Due to an enhancement in the passenger vehicle registration data provided by R.L. Polk & Co. for 2011 and later, registration counts for those years changed considerably from the counts provided for 2010 and earlier years. This should be taken into account when comparing registration numbers and rates per registered vehicle for passenger cars for 2010 and earlier years with those for 2011 and later years. For more details see page 7, "Registered Vehicles and Vehicle Miles Traveled (VMT) by Vehicle Type." Injury data for 2016 were not available when this report was finalized (NA). For more details, see page 5, "Crash Report Sampling System (CRSS) Replaces the National Automotive Sampling System (NASS) General Estimates System (GES)."

Sources: Vehicle Miles of Travel—Federal Highway Administration, revised by NHTSA; Registered Passenger Cars—R.L. Polk & Co., a foundation of IHS Markit automotive solutions.

Figure 4

Passenger Car Occupant Fatality and Injury Rates per 100 Million Vehicle Miles Traveled, 1975-2016



Note: Injury data for 2016 were not available when this report was finalized. For more details, see page 5, "Crash Report Sampling System (CRSS) Replaces the National Automotive Sampling System (NASS) General Estimates System (GES)."

Table 8

Light Truck Occupants Killed or Injured and Fatality and Injury Rates per Registered Vehicle and Vehicle Miles of Travel, 1975-2016

Year	Registered Light Trucks	Vehicle Miles Traveled (Millions)	Light Truck Occupants Killed	Fatality Rate per 100,000 Registered Light Trucks	Fatality Rate per 100 Million Vehicle Miles Traveled	Light Truck Occupants Injured	Injury Rate per 100,000 Registered Light Trucks	Injury Rate per 100 Million Vehicle Miles Traveled
1975	20,886,680	204,274	4,856	23.25	2.38	*	*	*
1976	22,794,702	233,382	5,438	23.86	2.33	*	*	*
1977	24,432,701	257,108	5,976	24.46	2.32	*	*	*
1978	27,285,497	289,463	6,745	24.72	2.33	*	*	*
1979	28,932,820	293,840	7,178	24.81	2.44	*	*	*
1980	30,060,754	295,475	7,486	24.90	2.53	*	*	*
1981	31,236,287	307,583	7,081	22.67	2.30	*	*	*
1982	32,307,692	322,026	6,359	19.68	1.97	*	*	*
1983	33,068,138	334,937	6,202	18.76	1.85	*	*	*
1984	35,257,788	358,588	6,496	18.42	1.81	*	*	*
1985	37,665,180	388,779	6,689	17.76	1.72	*	*	*
1986	39,763,446	416,532	7,317	18.40	1.76	*	*	*
1987	41,695,017	444,392	8,058	19.33	1.81	*	*	*
1988	44,599,500	488,431	8,306	18.62	1.70	478,000	1,071	98
1989	47,134,148	522,483	8,551	18.14	1.64	511,000	1,084	98
1990	49,916,497	555,659	8,601	17.23	1.55	505,000	1,012	91
1991	52,062,064	595,924	8,391	16.12	1.41	563,000	1,081	94
1992	53,836,046	642,397	8,098	15.04	1.26	545,000	1,012	85
1993	56,573,835	675,353	8,511	15.04	1.26	601,000	1,062	89
1994	59,485,995	711,515	8,904	14.97	1.25	631,000	1,061	89
1995	62,520,872	749,971	9,568	15.30	1.28	722,000	1,156	96
1996	65,438,877	787,255	9,932	15.18	1.26	761,000	1,164	97
1997	67,287,470	824,896	10,249	15.23	1.24	755,000	1,122	92
1998	69,783,500	861,951	10,705	15.34	1.24	763,000	1,093	88
1999	72,929,502	900,667	11,265	15.45	1.25	847,000	1,161	94
2000	75,979,775	940,219	11,526	15.17	1.23	887,000	1,167	94
2001	78,675,630	973,401	11,723	14.90	1.20	861,000	1,094	88
2002	81,643,269	1,010,759	12,274	15.03	1.21	879,000	1,077	87
2003	85,063,823	1,042,444	12,546	14.75	1.20	889,000	1,045	85
2004	89,799,406	1,097,099	12,674	14.11	1.16	900,000	1,002	82
2005	94,787,880	1,132,564	13,037	13.75	1.15	872,000	920	77
2006	98,064,117	1,156,697	12,761	13.01	1.10	857,000	874	74
2007	100,817,496	1,136,361	12,458	12.36	1.10	841,000	835	74
2008	100,862,944	1,105,882	10,816	10.72	0.98	768,000	762	69
2009	102,008,600	1,122,909	10,312	10.11	0.92	759,000	744	68
2010	102,376,147	1,140,740	9,782	9.55	0.86	733,000	716	64
2011	118,702,389	1,280,648	9,302	7.84	0.73	728,000	614	57
2012	118,690,690	1,286,574	9,418	7.93	0.73	762,000	642	59
2013	120,491,485	1,293,536	9,186	7.62	0.71	750,000	622	58
2014	123,470,278	1,314,458	9,103	7.37	0.69	782,000	633	60
2015	127,401,053	1,358,824	9,878	7.75	0.73	803,000	630	59
2016	132,000,600	1,409,490	10,302	7.80	0.73	NA	NA	NA

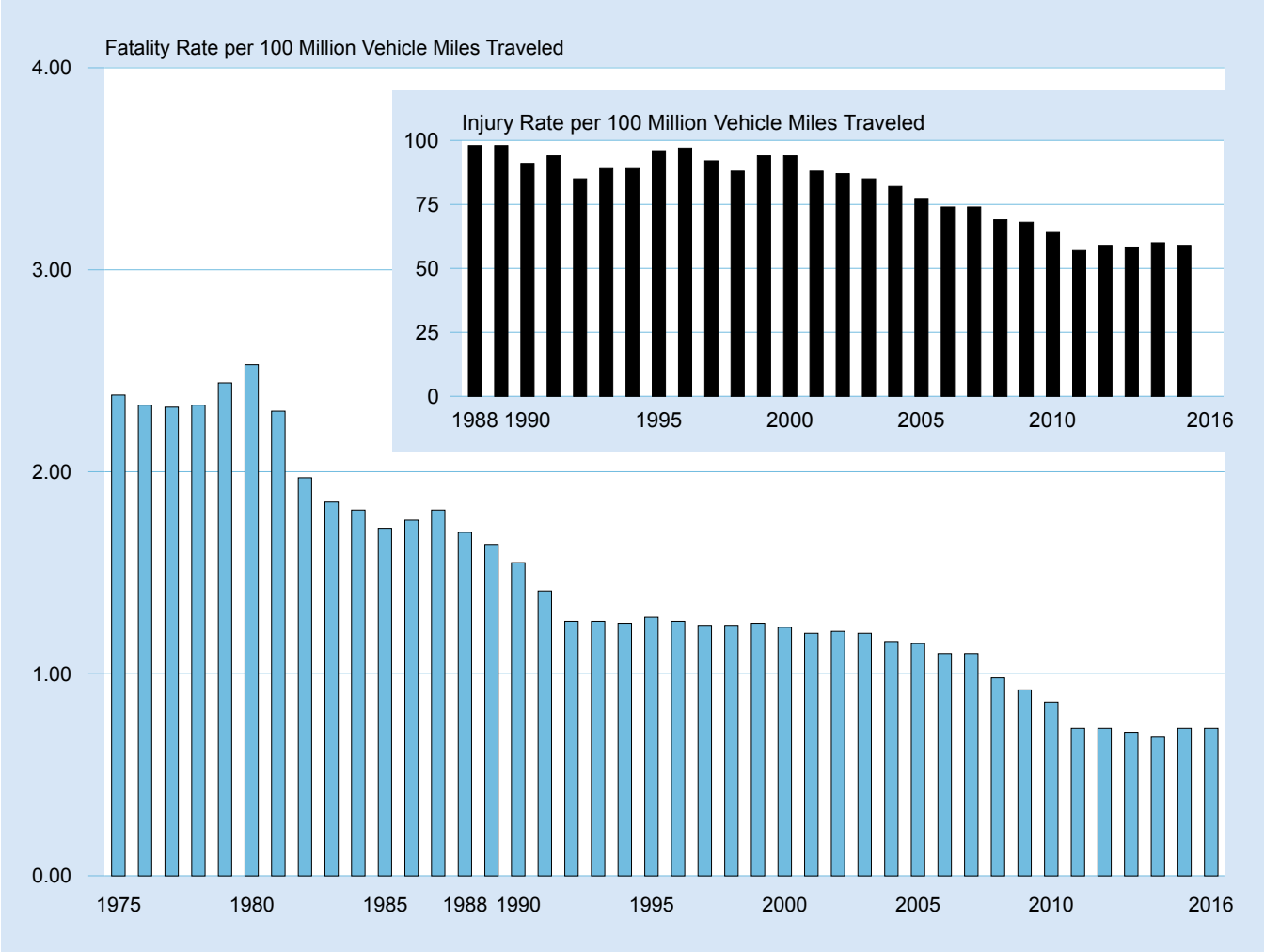
*Injury data not available before 1988.

Notes: In 2011, the Federal Highway Administration implemented an enhanced methodology for estimating registered vehicles and vehicle miles traveled by vehicle type. These revisions were applied to data from 2007and later. In some cases the changes were significant and should be taken into account when comparing registered vehicle counts and/or vehicle miles traveled for 2006 and earlier years with the numbers for 2007 and later years. Due to an enhancement in the passenger vehicle registration data provided by R.L. Polk & Co. for 2011 and later years, registration counts for those years changed considerably from the counts provided for 2010 and earlier years. This should be taken into account when comparing registration numbers and rates per registered vehicle for light trucks for 2010 and earlier years with those for 2011 and later years. For more details see page 7, "Registered Vehicles and Vehicle Miles Traveled (VMT) by Vehicle Type." Injury data for 2016 were not available when this report was finalized (NA). For more details, see page 5, "Crash Report Sampling System (CRSS) Replaces the National Automotive Sampling System (NASS) General Estimates System (GES)."

Sources: Vehicle Miles of Travel—Federal Highway Administration, revised by NHTSA; Registered Light Trucks—R.L. Polk & Co., a foundation of IHS Markit automotive solutions.

Figure 5

Light Truck Occupant Fatality and Injury Rates per 100 Million Vehicle Miles Traveled, 1975-2016



Note: Injury data for 2016 were not available when this report was finalized (NA). For more details, see page 5, "Crash Report Sampling System (CRSS) Replaces the National Automotive Sampling System (NASS) General Estimates System (GES)."

Table 9

Large Truck Occupants Killed or Injured and Fatality and Injury Rates per Registered Vehicle and Vehicle Miles of Travel, 1975-2016

Year	Registered Large Trucks	Vehicle Miles Traveled (Millions)	Large Truck Occupants Killed	Fatality Rate per 100,000 Registered Large Trucks	Fatality Rate per 100 Million Vehicle Miles Traveled	Large Truck Occupants Injured	Injury Rate per 100,000 Registered Large Trucks	Injury Rate per 100 Million Vehicle Miles Traveled
1975	5,362,369	81,330	961	17.92	1.18	*	*	*
1976	5,575,185	86,070	1,132	20.30	1.32	*	*	*
1977	5,689,903	95,021	1,287	22.62	1.35	*	*	*
1978	5,859,807	105,739	1,395	23.81	1.32	*	*	*
1979	5,891,571	109,004	1,432	24.31	1.31	*	*	*
1980	5,790,653	108,491	1,262	21.79	1.16	*	*	*
1981	5,716,278	108,702	1,133	19.82	1.04	*	*	*
1982	5,590,415	111,423	944	16.89	0.85	*	*	*
1983	5,508,392	116,132	982	17.83	0.85	*	*	*
1984	5,401,075	121,796	1,074	19.88	0.88	*	*	*
1985	5,996,337	123,504	977	16.29	0.79	*	*	*
1986	5,720,880	126,675	926	16.19	0.73	*	*	*
1987	5,718,266	133,517	852	14.90	0.64	*	*	*
1988	6,136,884	137,985	911	14.84	0.66	37,000	611	27
1989	6,226,482	142,749	858	13.78	0.60	43,000	687	30
1990	6,195,876	146,242	705	11.38	0.48	42,000	675	29
1991	6,172,146	149,543	661	10.71	0.44	28,000	454	19
1992	6,045,205	153,384	585	9.68	0.38	34,000	559	22
1993	6,088,155	159,888	605	9.94	0.38	32,000	527	20
1994	6,587,885	170,216	670	10.17	0.39	30,000	459	18
1995	6,719,421	178,156	648	9.64	0.36	30,000	452	17
1996	7,012,615	182,971	621	8.86	0.34	33,000	467	18
1997	7,083,326	191,477	723	10.21	0.38	31,000	436	16
1998	7,732,270	196,380	742	9.60	0.38	29,000	372	15
1999	7,791,426	202,688	759	9.74	0.37	33,000	422	16
2000	8,022,649	205,520	754	9.40	0.37	31,000	384	15
2001	7,857,675	208,928	708	9.01	0.34	29,000	374	14
2002	7,927,280	214,603	689	8.69	0.32	26,000	331	12
2003	7,756,888	217,876	726	9.36	0.33	27,000	347	12
2004	8,171,364	220,811	766	9.37	0.35	27,000	334	12
2005	8,481,999	222,523	804	9.48	0.36	27,000	322	12
2006	8,819,007	222,513	805	9.13	0.36	23,000	259	10
2007	10,752,019	304,178	805	7.49	0.26	23,000	217	8
2008	10,873,275	310,680	682	6.27	0.22	23,000	211	7
2009	10,973,214	288,306	499	4.55	0.17	17,000	151	6
2010	10,770,054	286,527	530	4.92	0.18	20,000	183	7
2011	10,270,693	267,594	640	6.23	0.24	23,000	221	8
2012	10,659,380	269,207	697	6.54	0.26	25,000	238	9
2013	10,597,356	275,017	695	6.56	0.25	24,000	227	9
2014	10,905,956	279,132	656	6.02	0.24	27,000	245	10
2015	11,203,184	279,844	665	5.94	0.24	30,000	264	11
2016	11,498,561	287,895	722	6.28	0.25	NA	NA	NA

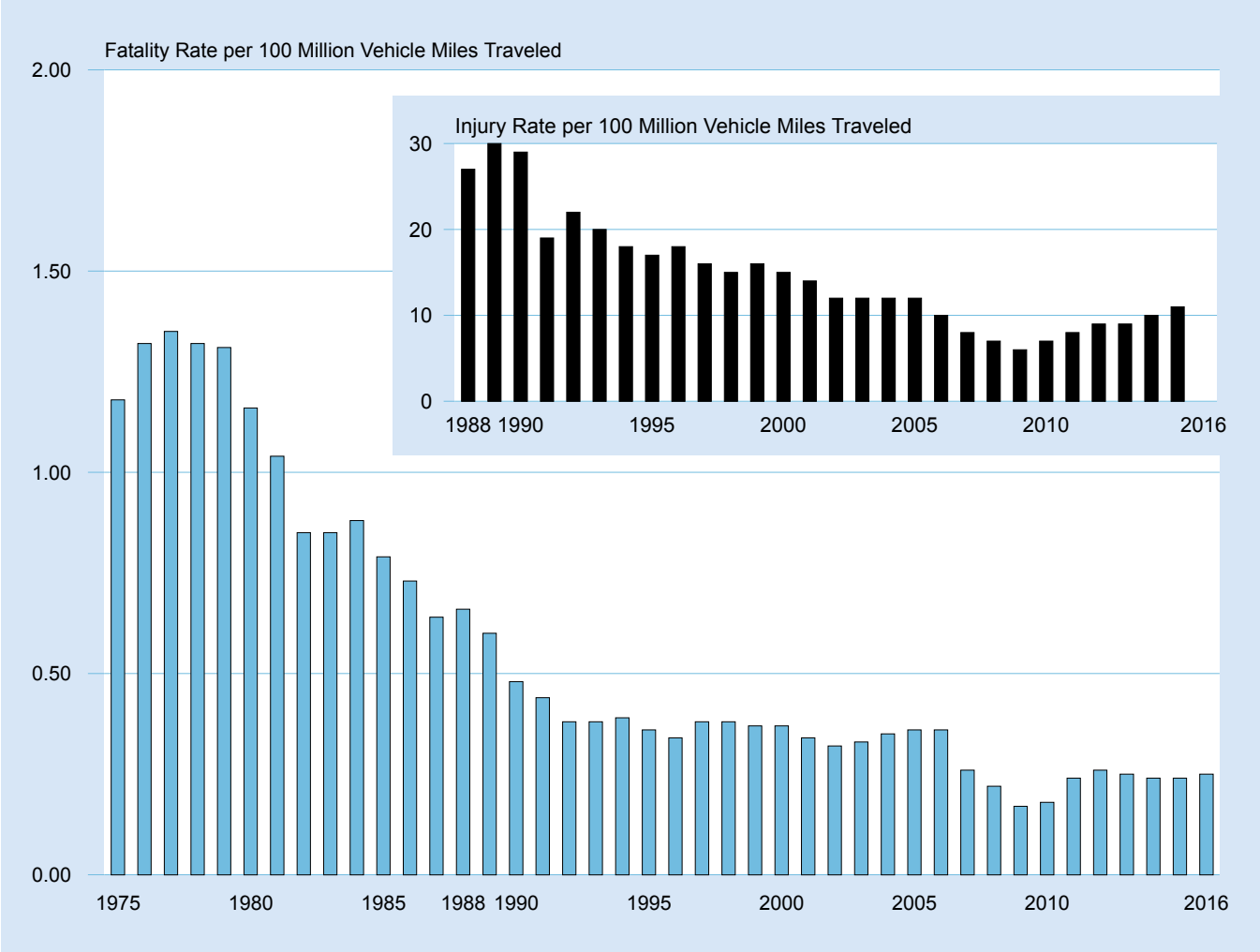
*Injury data not available before 1988.

Notes: In 2011, the Federal Highway Administration implemented an enhanced methodology for estimating registered vehicles and vehicle miles traveled by vehicle type. These revisions were applied to data from 2007 and later years. In some cases the changes were significant and should be taken into account when comparing registered vehicle counts and/or vehicle miles traveled for 2006 and earlier years with the numbers for 2007 and later years. Injury data for 2016 were not available when this report was finalized (NA). For more details, see page 5, "Crash Report Sampling System (CRSS) Replaces the National Automotive Sampling System (NASS) General Estimates System (GES)."

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

Figure 6

Large Truck Occupant Fatality and Injury Rates per 100 Million Vehicle Miles Traveled, 1975-2016



Note: Injury data for 2016 were not available when this report was finalized. For more details, see page 5, "Crash Report Sampling System (CRSS) Replaces the National Automotive Sampling System (NASS) General Estimates System (GES)."

Table 10

Motorcyclists Killed or Injured and Fatality and Injury Rates per Registered Vehicle and Vehicle Miles of Travel, 1975-2016

Year	Registered Motorcycles	Vehicle Miles Traveled (Millions)	Motorcyclists Killed	Fatality Rate per 100,000 Registered Motorcycles	Fatality Rate per 100 Million Vehicle Miles Traveled	Motorcyclists Injured	Injury Rate per 100,000 Registered Motorcycles	Injury Rate per 100 Million Vehicle Miles Traveled
1975	4,964,070	5,629	3,189	64.24	56.65	*	*	*
1976	4,933,332	6,003	3,312	67.14	55.17	*	*	*
1977	4,933,256	6,349	4,104	83.19	64.64	*	*	*
1978	4,867,855	7,158	4,577	94.02	63.94	*	*	*
1979	5,422,132	8,637	4,894	90.26	56.66	*	*	*
1980	5,693,940	10,214	5,144	90.34	50.36	*	*	*
1981	5,831,132	10,690	4,906	84.13	45.89	*	*	*
1982	5,753,858	9,910	4,453	77.39	44.93	*	*	*
1983	5,585,112	8,760	4,265	76.36	48.69	*	*	*
1984	5,479,822	8,784	4,608	84.09	52.46	*	*	*
1985	5,444,404	9,086	4,564	83.83	50.23	*	*	*
1986	5,198,993	9,397	4,566	87.82	48.59	*	*	*
1987	4,885,772	9,506	4,036	82.61	42.46	*	*	*
1988	4,584,284	10,024	3,662	79.88	36.53	105,000	2,294	1,049
1989	4,420,420	10,371	3,141	71.06	30.29	83,000	1,888	805
1990	4,259,462	9,557	3,244	76.16	33.94	84,000	1,979	882
1991	4,177,365	9,178	2,806	67.17	30.57	80,000	1,925	876
1992	4,065,118	9,557	2,395	58.92	25.06	65,000	1,601	681
1993	3,977,856	9,906	2,449	61.57	24.72	59,000	1,494	600
1994	3,756,555	10,240	2,320	61.76	22.66	57,000	1,528	561
1995	3,897,191	9,797	2,227	57.14	22.73	57,000	1,475	587
1996	3,871,599	9,920	2,161	55.82	21.78	55,000	1,428	557
1997	3,826,373	10,081	2,116	55.30	20.99	53,000	1,374	522
1998	3,879,450	10,283	2,294	59.13	22.31	49,000	1,262	476
1999	4,152,433	10,584	2,483	59.80	23.46	50,000	1,204	472
2000	4,346,068	10,469	2,897	66.66	27.67	58,000	1,328	551
2001	4,903,056	9,633	3,197	65.20	33.19	60,000	1,229	625
2002	5,004,156	9,552	3,270	65.35	34.23	65,000	1,293	677
2003	5,370,035	9,576	3,714	69.16	38.78	67,000	1,250	701
2004	5,767,934	10,122	4,028	69.83	39.79	76,000	1,324	755
2005	6,227,146	10,454	4,576	73.48	43.77	87,000	1,402	835
2006	6,678,958	12,049	4,837	72.42	40.14	88,000	1,312	727
2007	7,138,476	21,396	5,174	72.48	24.18	103,000	1,443	481
2008	7,752,926	20,811	5,312	68.52	25.52	96,000	1,238	461
2009	7,929,724	20,822	4,469	56.36	21.46	90,000	1,130	430
2010	8,009,503	18,513	4,518	56.41	24.40	82,000	1,024	443
2011	8,437,502	18,542	4,630	54.87	24.97	81,000	965	439
2012	8,454,939	21,385	4,986	58.97	23.32	93,000	1,099	434
2013	8,404,687	20,366	4,692	55.83	23.04	88,000	1,052	434
2014	8,417,718	19,970	4,594	54.58	23.00	92,000	1,088	459
2015	8,600,936	19,606	5,029	58.47	25.65	88,000	1,028	451
2016	8,679,380	20,445	5,286	60.90	25.85	NA	NA	NA

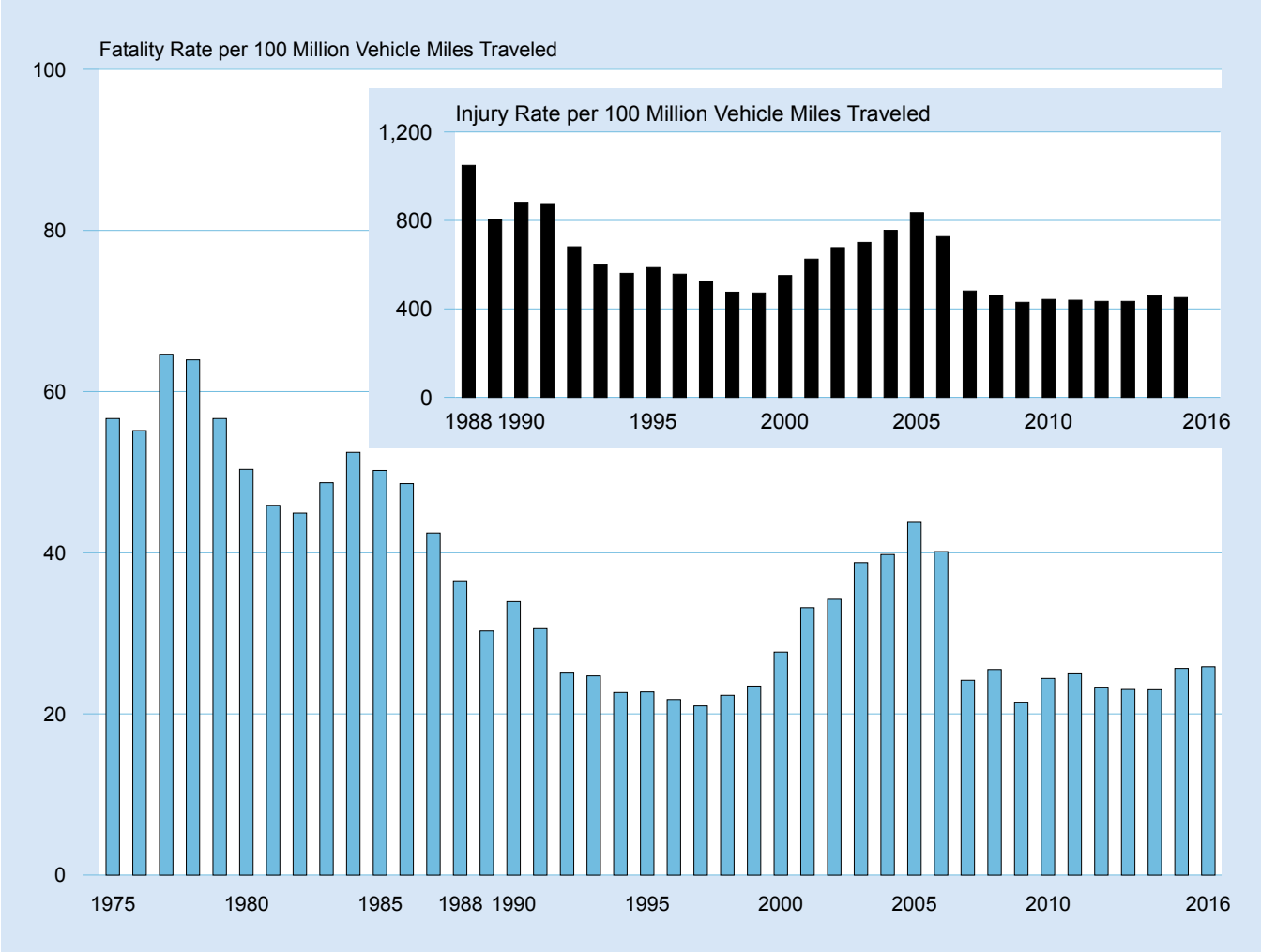
*Injury data not available before 1988.

Notes: In 2011, the Federal Highway Administration implemented an enhanced methodology for estimating registered vehicles and vehicle miles traveled by vehicle type. These revisions were applied to data from 2007 and later years. In some cases the changes were significant and should be taken into account when comparing registered vehicle counts and/or vehicle miles traveled for 2006 and earlier years with the numbers for 2007 and later years. Injury data for 2016 were not available when this report was finalized (NA). For more details, see page 5, "Crash Report Sampling System (CRSS) Replaces the National Automotive Sampling System (NASS) General Estimates System (GES)."

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

Figure 7

Motorcyclist Fatality and Injury Rates per 100 Million Vehicle Miles Traveled, 1975-2016



Note: Injury data for 2016 were not available when this report was finalized. For more details, see page 5, "Crash Report Sampling System (CRSS) Replaces the National Automotive Sampling System (NASS) General Estimates System (GES)."

Table 11

Persons Killed or Injured in Crashes Involving a Large Truck by Person Type and Crash Type, 1975-2016

Year	Person Type					Total
	Truck Occupants by Crash Type			Other Vehicle Occupants	Nonoccupants	
	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	480	279	*759*	4,180	441	**5,380**
2000	484	270	*754*	4,114	414	**5,282**
2001	474	234	*708*	3,962	441	**5,111**
2002	449	240	*689*	3,886	364	**4,939**
2003	457	269	*726*	3,919	391	**5,036**
2004	469	297	*766*	4,042	427	**5,235**
2005	478	326	*804*	3,971	465	**5,240**
2006	500	305	*805*	3,797	425	**5,027**
2007	502	303	*805*	3,608	409	**4,822**
2008	430	252	*682*	3,151	412	**4,245**
2009	333	166	*499*	2,558	323	**3,380**
2010	339	191	*530*	2,797	359	**3,686**
2011	408	232	*640*	2,713	428	**3,781**
2012	423	274	*697*	2,857	390	**3,944**
2013	431	264	*695*	2,845	441	**3,981**
2014	405	251	*656*	2,859	393	**3,908**
2015	395	270	*665*	3,015	414	**4,094**
2016	460	262	*722*	3,127	468	**4,317**

Table 11

Persons Killed or Injured in Crashes Involving a Large Truck by Person Type and Crash Type, 1975-2016 (Continued)

Year	Person Type					Total
	Truck Occupants by Crash Type			Other Vehicle Occupants	Nonoccupants	
	Single Vehicle	Multiple Vehicle	Total			
			Injured			
1988	17,000	20,000	*37,000*	89,000	4,000	**130,000**
1989	20,000	23,000	*43,000*	111,000	2,000	**156,000**
1990	16,000	26,000	*42,000*	106,000	2,000	**150,000**
1991	13,000	15,000	*28,000*	80,000	2,000	**110,000**
1992	13,000	20,000	*34,000*	102,000	3,000	**139,000**
1993	13,000	19,000	*32,000*	95,000	6,000	**133,000**
1994	11,000	19,000	*30,000*	99,000	3,000	**133,000**
1995	15,000	15,000	*30,000*	84,000	2,000	**117,000**
1996	15,000	18,000	*33,000*	95,000	3,000	**130,000**
1997	14,000	17,000	*31,000*	98,000	2,000	**131,000**
1998	14,000	14,000	*29,000*	97,000	2,000	**127,000**
1999	15,000	18,000	*33,000*	105,000	4,000	**142,000**
2000	16,000	14,000	*31,000*	106,000	3,000	**140,000**
2001	13,000	16,000	*29,000*	99,000	3,000	**131,000**
2002	12,000	14,000	*26,000*	100,000	4,000	**130,000**
2003	11,000	16,000	*27,000*	92,000	3,000	**122,000**
2004	13,000	14,000	*27,000*	85,000	4,000	**116,000**
2005	10,000	17,000	*27,000*	84,000	2,000	**114,000**
2006	11,000	12,000	*23,000*	81,000	2,000	**106,000**
2007	10,000	13,000	*23,000*	75,000	2,000	**101,000**
2008	10,000	13,000	*23,000*	64,000	3,000	**90,000**
2009	7,000	9,000	*17,000*	56,000	1,000	**74,000**
2010	9,000	11,000	*20,000*	58,000	2,000	**80,000**
2011	7,000	15,000	*23,000*	64,000	2,000	**88,000**
2012	9,000	17,000	*25,000*	76,000	3,000	**104,000**
2013	9,000	15,000	*24,000*	69,000	2,000	**95,000**
2014	10,000	17,000	*27,000*	82,000	2,000	**111,000**
2015	10,000	19,000	*30,000*	84,000	3,000	**116,000**
2016	NA	NA	*NA*	NA	NA	**NA**

Note: Injury data for 2016 were not available when this report was finalized (NA). For more details, see page 5, "Crash Report Sampling System (CRSS) Replaces the National Automotive Sampling System (NASS) General Estimates System (GES)."
Source: U.S. Bureau of the Census.

Table 12
Nonoccupant Fatality and Injury Rates per Population by Age Group, 1975-2016

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	1.45	1.54	1.76	2.01	1.88	2.41	2.26	2.35	2.78	4.14	**2.14**
2000	0.88	1.17	1.38	1.58	1.75	1.75	2.28	2.28	2.22	2.40	3.82	**1.98**
2001	0.70	1.06	1.33	1.78	2.01	1.68	2.36	2.38	2.13	2.44	4.11	**2.02**
2002	0.71	0.94	1.18	1.64	1.71	1.77	2.24	2.37	2.10	2.76	3.68	**1.96**
2003	0.62	0.89	1.26	1.76	1.78	1.63	2.25	2.23	2.26	2.34	3.55	**1.91**
2004	0.63	0.87	1.10	1.56	1.84	1.72	2.15	2.39	2.03	2.41	3.55	**1.89**
2005	0.64	0.78	1.10	1.63	2.11	1.81	2.25	2.58	2.14	2.50	3.57	**1.98**
2006	0.59	0.81	0.93	1.56	1.97	1.87	2.11	2.61	2.19	2.32	3.35	**1.93**
2007	0.56	0.63	0.99	1.60	2.00	1.80	2.09	2.48	1.86	2.32	3.11	**1.85**
2008	0.53	0.55	0.89	1.59	1.94	1.67	1.86	2.47	2.02	2.03	2.76	**1.75**
2009	0.51	0.49	0.77	1.26	1.80	1.53	1.76	2.17	1.89	2.02	2.50	**1.59**
2010	0.52	0.47	0.75	1.51	1.89	1.63	1.64	2.17	2.06	2.01	2.79	**1.65**
2011	0.40	0.47	0.75	1.47	2.09	1.70	1.63	2.43	2.12	2.19	2.65	**1.71**
2012	0.49	0.54	0.78	1.63	2.19	1.85	1.72	2.53	2.35	2.19	2.96	**1.84**
2013	0.54	0.48	0.62	1.48	2.05	1.79	1.78	2.48	2.48	2.13	2.77	**1.81**
2014	0.46	0.49	0.57	1.66	1.94	1.87	1.79	2.34	2.61	2.21	2.85	**1.83**
2015	0.48	0.44	0.68	1.65	2.15	2.00	2.22	2.87	2.96	2.32	2.71	**2.04**
2016	0.45	0.45	0.78	1.74	2.30	2.24	2.30	2.91	3.11	2.61	3.03	**2.19**

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

Table 12

Nonoccupant Fatality and Injury Rates per Population by Age Group, 1975-2016 (Continued)

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	
	Injury Rate per 100,000 Population											
1988	35	178	195	116	117	74	45	38	35	25	45	**79**
1989	32	179	198	127	96	69	53	43	42	33	39	**79**
1990	34	139	181	128	109	76	52	37	26	29	38	**75**
1991	26	138	157	96	91	70	41	37	31	31	29	**66**
1992	33	120	165	93	98	57	45	35	29	30	27	**63**
1993	27	116	170	93	95	66	49	45	26	27	38	**66**
1994	24	112	151	119	88	60	47	36	33	24	29	**63**
1995	33	104	160	93	87	62	52	27	22	30	26	**62**
1996	31	91	156	87	80	57	38	36	26	26	22	**57**
1997	27	93	132	75	67	51	50	34	29	29	22	**55**
1998	19	77	121	70	68	49	40	33	25	21	17	**48**
1999	20	85	129	70	58	56	38	38	26	27	22	**51**
2000	18	99	91	64	71	50	41	30	29	21	20	**48**
2001	17	64	106	75	52	46	38	35	30	29	19	**46**
2002	16	60	92	61	37	55	40	29	35	26	21	**44**
2003	15	59	92	62	50	46	42	32	26	23	21	**43**
2004	19	55	81	59	53	42	39	35	21	22	19	**40**
2005	17	61	78	67	59	34	28	35	37	22	16	**40**
2006	11	37	72	66	42	37	35	33	34	23	20	**38**
2007	11	44	76	66	63	48	37	38	24	23	23	**41**
2008	12	36	82	82	65	40	38	40	34	25	24	**43**
2009	14	39	65	61	72	47	23	38	29	20	18	**38**
2010	12	35	70	71	66	49	38	40	30	29	22	**42**
2011	11	31	58	87	63	43	32	39	37	27	21	**40**
2012	11	33	67	67	67	52	45	41	37	28	19	**43**
2013	8	23	52	72	82	53	35	40	29	22	21	**40**
2014	9	21	47	71	70	51	39	36	36	28	19	**39**
2015	9	17	51	65	62	46	37	45	38	31	16	**39**
2016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**NA**

Notes: Population estimates for historical years are revised periodically. Injury data for 2016 were not available when this report was finalized (NA). For more details, see page 5, "Crash Report Sampling System (CRSS) Replaces the National Automotive Sampling System (NASS) General Estimates System (GES)."

Source: U.S. Bureau of the Census.

Table 13

Persons Killed, by Highest Driver Blood Alcohol Concentration (BAC) in the Crash, 1982-2016

	BAC = .00		BAC = .01-.07		Alcohol-Impaired Driving Fatalities (BAC = .08+)		BAC = .01+		Total Fatalities*	
Year	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1982	19,771	45	2,912	7	21,113	48	24,025	55	43,945	100
1983	19,787	46	2,588	6	20,051	47	22,639	53	42,589	100
1984	21,429	48	3,007	7	19,638	44	22,645	51	44,257	100
1985	22,589	52	2,974	7	18,125	41	21,098	48	43,825	100
1986	22,896	50	3,487	8	19,554	42	23,041	50	46,087	100
1987	24,186	52	3,238	7	18,813	41	22,051	48	46,390	100
1988	25,164	53	3,156	7	18,611	40	21,767	46	47,087	100
1989	25,152	55	2,793	6	17,521	38	20,314	45	45,582	100
1990	23,823	53	2,901	7	17,705	40	20,607	46	44,599	100
1991	23,025	55	2,480	6	15,827	38	18,307	44	41,508	100
1992	22,726	58	2,352	6	14,049	36	16,401	42	39,250	100
1993	23,979	60	2,300	6	13,739	34	16,039	40	40,150	100
1994	24,948	61	2,236	5	13,390	33	15,626	38	40,716	100
1995	25,768	62	2,416	6	13,478	32	15,893	38	41,817	100
1996	26,052	62	2,415	6	13,451	32	15,866	38	42,065	100
1997	26,902	64	2,216	5	12,757	30	14,973	36	42,013	100
1998	26,477	64	2,353	6	12,546	30	14,899	36	41,501	100
1999	26,798	64	2,235	5	12,555	30	14,790	35	41,717	100
2000	26,082	62	2,422	6	13,324	32	15,746	38	41,945	100
2001	26,334	62	2,441	6	13,290	31	15,731	37	42,196	100
2002	27,080	63	2,321	5	13,472	31	15,793	37	43,005	100
2003	27,328	64	2,327	5	13,096	31	15,423	36	42,884	100
2004	27,413	64	2,212	5	13,099	31	15,311	36	42,836	100
2005	27,423	63	2,404	6	13,582	31	15,985	37	43,510	100
2006	26,633	62	2,479	6	13,491	32	15,970	37	42,708	100
2007	25,611	62	2,494	6	13,041	32	15,534	38	41,259	100
2008	23,499	63	2,115	6	11,711	31	13,826	37	37,423	100
2009	21,051	62	1,972	6	10,759	32	12,731	38	33,883	100
2010	21,005	64	1,771	5	10,136	31	11,906	36	32,999	100
2011	20,848	64	1,662	5	9,865	30	11,527	35	32,479	100
2012	21,563	64	1,782	5	10,336	31	12,118	36	33,782	100
2013	20,865	63	1,834	6	10,084	31	11,918	36	32,893	100
2014	20,913	64	1,800	5	9,943	30	11,743	36	32,744	100
2015	23,119	65	1,937	5	10,320	29	12,257	35	35,485	100
2016	24,851	66	2,017	5	10,497	28	12,514	33	37,461	100

*Totals include fatalities in crashes in which there was no driver present.
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 Driver Blood Alcohol Concentration (BAC) in the Crash, 1982-2016

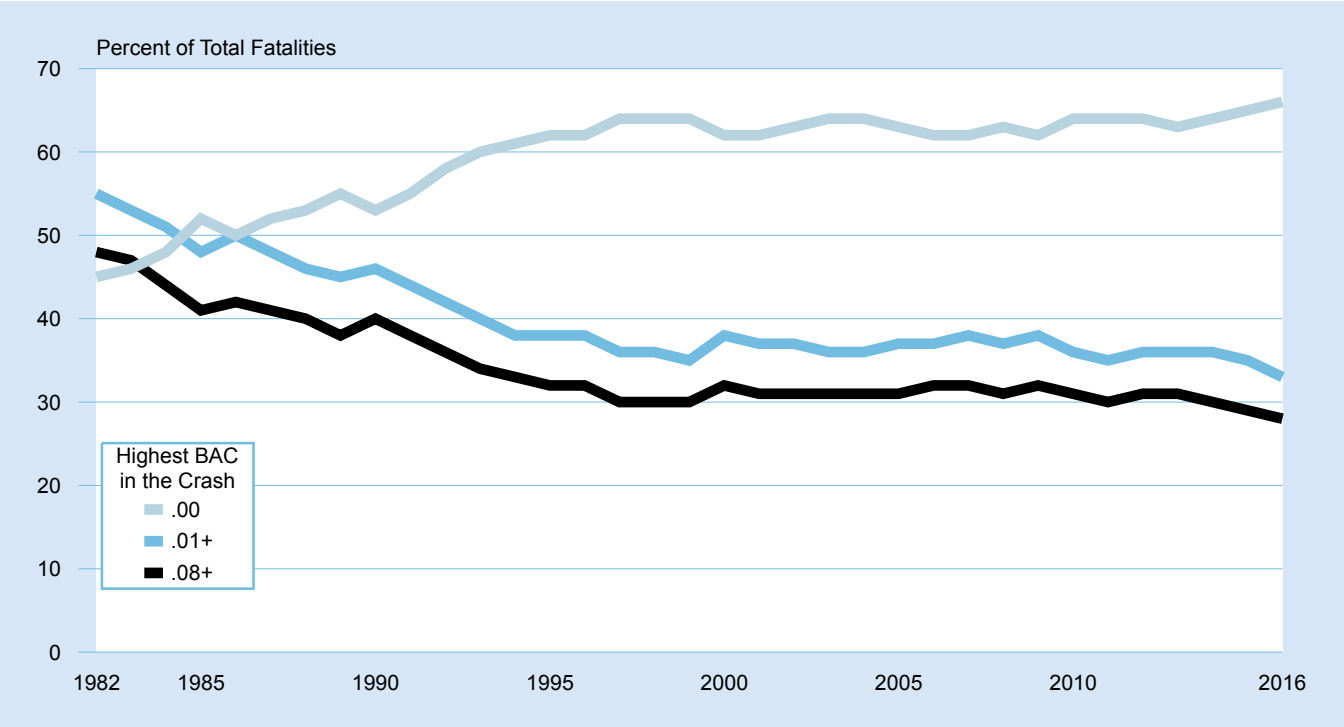


Table 14

Persons Killed and Percent Alcohol-Impaired Driving During Holiday Periods, 1982-2016

Year	Killed	Percent Alcohol-Impaired Driving*	Killed	Percent Alcohol-Impaired Driving*	Killed	Percent Alcohol-Impaired Driving*
	Holiday Period**					
	New Year's Day		Memorial Day		Fourth of July	
1982	***	***	498 (3)	58	600 (3)	59
1983	375 (3)	60	539 (3)	55	620 (3)	55
1984	346 (3)	55	527 (3)	57	223 (1)	55
1985	496 (4)	50	557 (3)	51	689 (4)	49
1986	223 (1)	53	616 (3)	52	611 (3)	55
1987	535 (4)	48	519 (3)	51	556 (3)	48
1988	407 (3)	49	529 (3)	51	631 (3)	51
1989	443 (3)	41	594 (3)	47	748 (4)	47
1990	421 (3)	44	589 (3)	50	268 (1)	55
1991	441 (4)	47	533 (3)	50	718 (4)	45
1992	164 (1)	55	438 (3)	46	535 (3)	45
1993	370 (3)	46	454 (3)	40	525 (3)	42
1994	372 (3)	47	482 (3)	41	519 (3)	44
1995	392 (3)	38	483 (3)	40	661 (4)	37
1996	420 (3)	40	514 (3)	43	629 (4)	36
1997	192 (1)	53	511 (3)	40	508 (3)	40
1998	545 (4)	39	393 (3)	40	479 (3)	43
1999	354 (3)	43	500 (3)	42	509 (3)	35
2000	469 (3)	47	466 (3)	46	717 (4)	39
2001	357 (3)	40	515 (3)	44	207 (1)	44
2002	575 (4)	41	494 (3)	37	685 (4)	36
2003	220 (1)	49	481 (3)	37	519 (3)	43
2004	563 (4)	40	514 (3)	38	524 (3)	40
2005	472 (3)	38	532 (3)	39	591 (3)	44
2006	456 (3)	42	511 (3)	40	659 (4)	37
2007	391 (3)	40	492 (3)	37	202 (1)	45
2008	424 (4)	41	425 (3)	41	494 (3)	44
2009	467 (4)	40	473 (3)	42	412 (3)	39
2010	297 (3)	48	399 (3)	40	393 (3)	38
2011	318 (3)	43	408 (3)	40	429 (3)	37
2012	356 (3)	39	379 (3)	44	180 (1)	45
2013	366 (4)	44	385 (3)	38	513 (4)	39
2014	153 (1)	51	376 (3)	37	401 (3)	41
2015	391 (4)	36	428 (3)	40	410 (3)	36
2016	328 (3)	36	445 (3)	36	458 (1)	41

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

**The number of whole days in the holiday period is shown in parentheses. The length of the holiday period depends on the day on which the legal holiday falls, as follows:
- If the holiday falls on *Monday*, the holiday period is from 6:00 pm Friday to 5:59 am Tuesday.
- If the holiday falls on *Tuesday*, the holiday period is from 6:00 pm Friday to 5:59 am Wednesday.
- If the holiday falls on *Wednesday*, the holiday period is from 6:00 pm Tuesday to 5:59 am Thursday.
- If the holiday falls on *Thursday*, the holiday period is from 6:00 pm Wednesday to 5:59 am Monday.
- If the holiday falls on *Friday*, the holiday period is from 6:00 pm Thursday to 5:59 am Monday.
- Number of days and number of hours incorporated: 1 day (36 hours), 2 days (60 hours), 3 days (84 hours), 4 days (108 hours).

***No data available.

Table 14

Persons Killed and Percent Alcohol-Impaired Driving During Holiday Periods, 1982-2016 (Continued)

Year	Killed	Percent Alcohol-Impaired Driving*	Killed	Percent Alcohol-Impaired Driving*	Killed	Percent Alcohol-Impaired Driving*
	Holiday Period**					
	Labor Day		Thanksgiving		Christmas	
1982	628 (3)	55	601 (4)	51	458 (3)	50
1983	636 (3)	60	533 (4)	50	352 (3)	54
1984	609 (3)	53	558 (4)	51	643 (4)	54
1985	605 (3)	51	566 (4)	47	152 (1)	47
1986	663 (3)	52	598 (4)	48	508 (4)	48
1987	630 (3)	53	659 (4)	45	409 (3)	47
1988	592 (3)	52	601 (4)	47	511 (3)	48
1989	588 (3)	48	561 (4)	47	553 (3)	49
1990	599 (3)	52	563 (4)	44	567 (4)	42
1991	577 (3)	46	546 (4)	42	135 (1)	36
1992	460 (3)	42	403 (4)	47	410 (3)	39
1993	522 (3)	47	569 (4)	38	402 (3)	43
1994	494 (3)	46	575 (4)	40	455 (3)	40
1995	511 (3)	40	527 (4)	41	358 (3)	40
1996	525 (3)	43	588 (4)	38	167 (1)	37
1997	507 (3)	42	571 (4)	31	480 (4)	33
1998	464 (3)	40	602 (4)	38	364 (3)	41
1999	485 (3)	38	581 (4)	36	485 (3)	41
2000	529 (3)	43	509 (4)	41	442 (3)	40
2001	481 (3)	40	590 (4)	39	604 (4)	39
2002	543 (3)	45	551 (4)	36	131 (1)	40
2003	507 (3)	38	562 (4)	36	520 (4)	37
2004	502 (3)	38	574 (4)	30	389 (3)	38
2005	507 (3)	40	629 (4)	37	402 (3)	40
2006	508 (3)	37	635 (4)	34	395 (3)	42
2007	520 (3)	42	553 (4)	35	478 (4)	38
2008	493 (3)	40	507 (4)	35	426 (4)	32
2009	362 (3)	38	413 (4)	34	262 (3)	36
2010	406 (3)	35	431 (4)	40	264 (3)	35
2011	382 (3)	37	384 (4)	32	267 (3)	36
2012	394 (3)	38	421 (4)	41	374 (4)	35
2013	424 (3)	39	411 (4)	34	106 (1)	38
2014	403 (3)	42	467 (4)	34	406 (4)	34
2015	463 (3)	35	455 (4)	36	330 (3)	37
2016	433 (3)	36	483 (4)	34	354 (3)	32

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

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

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

***No data available.

Table 15

Drivers in Fatal Crashes by Blood Alcohol Concentration (BAC) and Time of Day, 1982-2016

	Day*			Night*			Total Drivers		
		Percent			Percent			Percent	
Year	Total	BAC = .01+	BAC = .08+	Total	BAC = .01+	BAC = .08+	Total	BAC = .01+	BAC = .08+
1982	23,725	19	15	32,085	57	49	56,029	41	35
1983	24,381	18	15	30,037	57	50	54,656	39	34
1984	26,415	17	14	30,775	55	47	57,512	38	32
1985	27,578	16	12	30,008	52	44	57,883	35	29
1986	28,434	16	13	31,543	53	45	60,335	36	30
1987	29,227	15	12	31,854	51	43	61,442	34	28
1988	30,196	14	11	31,715	50	43	62,253	33	28
1989	29,953	13	11	30,170	49	42	60,435	31	27
1990	28,797	14	11	29,778	51	44	58,893	33	28
1991	26,829	13	10	27,249	49	43	54,391	31	27
1992	26,236	12	10	25,380	47	40	51,901	30	25
1993	27,770	11	9	25,355	46	39	53,401	28	24
1994	29,134	11	9	25,112	44	38	54,549	27	23
1995	30,066	11	9	25,755	43	37	56,164	26	22
1996	30,802	11	8	25,864	43	37	57,001	26	22
1997	30,979	10	8	25,368	41	35	56,688	24	20
1998	31,389	10	8	24,879	42	36	56,604	24	20
1999	31,212	10	8	24,968	41	35	56,502	24	20
2000	31,236	11	8	25,710	43	37	57,280	26	21
2001	31,620	11	8	25,661	43	37	57,586	25	21
2002	31,135	11	8	26,653	42	36	58,113	25	21
2003	31,863	10	8	26,258	41	36	58,517	24	21
2004	31,686	11	8	26,360	41	35	58,395	24	21
2005	31,820	11	9	27,085	41	36	59,220	25	21
2006	30,566	12	9	26,949	42	36	57,846	26	22
2007	29,307	11	9	26,367	42	36	56,019	26	22
2008	26,377	11	9	23,760	42	36	50,416	26	22
2009	23,673	11	9	21,379	43	37	45,337	26	22
2010	23,840	11	9	20,541	42	36	44,599	26	22
2011	23,460	11	8	20,178	41	36	43,840	25	21
2012	24,068	12	9	21,346	40	34	45,664	25	21
2013	23,894	12	9	20,682	41	35	44,803	25	21
2014	23,514	12	9	20,925	40	34	44,671	25	21
2015	25,917	12	9	22,990	37	31	49,162	24	20
2016	27,087	11	9	24,546	36	30	51,914	23	19

*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, 1982-2016

	Male			Female		
		Percent			Percent	
Year	Total	BAC = .01+	BAC = .08+	Total	BAC = .01+	BAC = .08+
1982	44,370	44	38	10,675	27	22
1983	42,812	43	37	10,958	25	22
1984	44,723	41	35	11,907	25	20
1985	44,846	38	32	12,142	22	18
1986	46,653	40	33	12,744	22	17
1987	46,884	37	32	13,614	21	17
1988	47,402	37	31	13,951	20	16
1989	45,448	35	30	14,054	19	16
1990	44,281	37	32	13,726	20	16
1991	40,731	35	30	12,825	19	16
1992	38,598	33	28	12,596	18	15
1993	39,556	32	27	13,082	17	14
1994	40,233	30	26	13,567	17	14
1995	41,235	30	25	14,184	16	13
1996	41,376	29	25	14,850	16	13
1997	40,954	28	24	14,954	15	12
1998	40,816	28	23	15,089	15	12
1999	41,012	28	23	14,835	14	12
2000	41,795	29	24	14,790	16	13
2001	41,901	29	24	14,919	15	13
2002	42,377	29	25	14,999	15	12
2003	42,586	28	24	15,211	14	12
2004	42,250	28	24	15,384	15	12
2005	43,282	28	24	15,059	16	13
2006	42,223	29	24	14,753	18	15
2007	41,053	29	24	14,184	16	13
2008	37,061	29	25	12,627	16	13
2009	32,882	30	25	11,864	16	13
2010	32,079	28	24	11,859	17	15
2011	31,918	28	24	11,265	16	14
2012	33,351	28	24	11,604	16	14
2013	32,608	28	23	11,429	18	14
2014	32,630	28	23	11,293	18	15
2015	35,850	26	22	12,381	17	14
2016	37,564	25	21	13,279	17	14

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

Table 17

Drivers in Fatal Crashes by Blood Alcohol Concentration (BAC) and Vehicle Type, 1982-2016

	Passenger Car			Light Truck			Large Truck			Motorcycle		
		Percent			Percent			Percent			Percent	
Year	Total	BAC = .01+	BAC = .08+	Total	BAC = .01+	BAC = .08+	Total	BAC = .01+	BAC = .08+	Total	BAC = .01+	BAC = .08+
1982	34,121	42	36	11,199	44	39	4,582	10	6	4,490	55	47
1983	33,069	40	35	11,017	43	39	4,790	10	7	4,288	57	48
1984	34,395	39	33	11,866	41	35	5,056	9	7	4,650	55	46
1985	34,071	36	30	12,372	37	32	5,091	7	5	4,598	53	43
1986	35,959	36	30	13,208	38	33	5,015	7	5	4,558	56	46
1987	36,371	35	29	14,407	37	31	5,046	5	3	4,061	51	43
1988	36,769	34	28	15,167	37	31	5,141	6	4	3,704	51	42
1989	35,204	32	27	15,579	35	30	4,903	4	3	3,182	53	45
1990	33,893	34	29	15,501	36	31	4,709	5	3	3,269	52	43
1991	31,102	31	27	14,702	35	30	4,291	4	3	2,816	52	44
1992	29,670	30	25	14,540	33	28	3,980	3	2	2,435	49	40
1993	30,060	28	24	15,207	31	27	4,271	4	2	2,471	45	38
1994	30,103	28	24	16,235	29	25	4,592	3	2	2,330	41	33
1995	30,773	27	23	17,483	29	25	4,410	4	2	2,262	42	33
1996	30,595	27	23	18,118	28	24	4,703	3	2	2,175	43	35
1997	29,896	26	22	18,502	26	23	4,859	3	2	2,159	41	32
1998	28,907	26	21	19,247	26	22	4,905	2	1	2,333	41	34
1999	27,878	25	21	19,865	26	22	4,868	3	1	2,528	40	33
2000	27,661	28	24	20,393	26	22	4,948	3	1	2,971	40	32
2001	27,444	27	23	20,704	27	23	4,779	2	1	3,261	37	29
2002	27,236	27	22	21,562	27	23	4,550	3	2	3,363	39	31
2003	26,422	26	22	22,172	25	22	4,658	2	1	3,800	36	29
2004	25,568	27	23	22,367	25	21	4,837	2	1	4,116	34	27
2005	25,046	28	24	22,879	25	22	4,900	3	1	4,679	34	27
2006	24,162	27	23	22,307	28	24	4,729	2	1	4,961	34	26
2007	22,765	27	23	21,719	27	23	4,601	2	1	5,306	35	27
2008	20,379	27	23	19,095	26	23	4,040	3	2	5,405	36	29
2009	18,344	27	23	17,878	27	23	3,182	3	2	4,601	36	29
2010	17,710	27	24	17,385	25	22	3,456	2	1	4,647	36	28
2011	17,401	27	24	16,706	25	21	3,594	3	1	4,761	37	29
2012	18,171	26	23	17,230	25	21	3,774	3	2	5,108	35	28
2013	17,850	27	23	16,810	25	21	3,872	4	2	4,795	35	27
2014	17,802	26	22	17,040	25	22	3,702	3	2	4,703	37	29
2015	19,688	25	21	18,763	24	21	4,019	2	1	5,126	34	26
2016	20,730	24	21	19,951	23	20	4,152	3	2	5,414	32	25

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

Figure 9

Proportion of Drivers Involved in Fatal Crashes with BAC = .08+ by Vehicle Type, 1982-2016

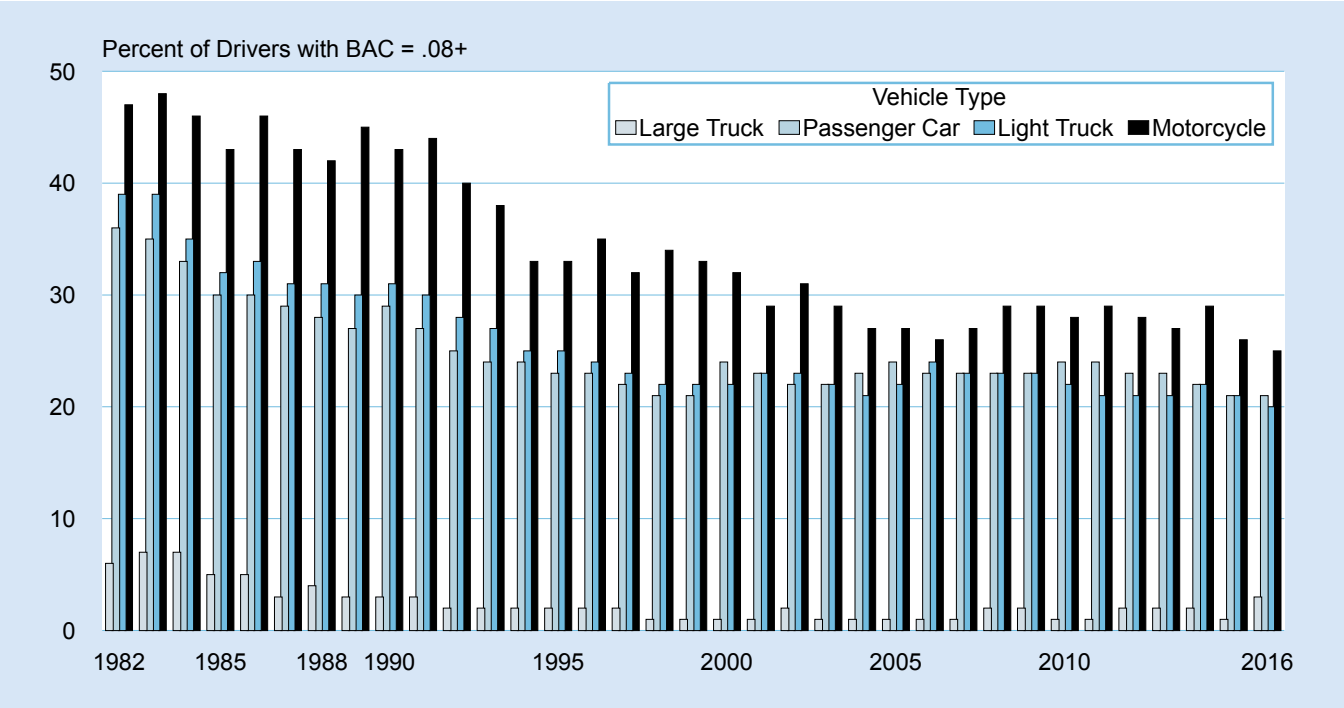


Table 18

Drivers in Fatal Crashes by Blood Alcohol Concentration (BAC) and Age, 1982-2016

Year	<16 Years			16-20 Years			21-24 Years		
	Total	Percent		Total	Percent		Total	Percent	
		BAC = .01+	BAC = .08+		BAC = .01+	BAC = .08+		BAC = .01+	BAC = .08+
1982	412	20	17	9,858	45	36	9,018	53	46
1983	416	19	16	9,334	43	35	8,432	53	46
1984	446	20	15	9,804	40	31	8,963	52	44
1985	479	21	15	9,386	35	26	9,046	47	40
1986	504	22	15	10,163	37	28	9,129	49	41
1987	469	20	14	9,910	33	25	8,808	47	39
1988	448	17	12	10,171	33	25	8,555	47	39
1989	402	15	11	9,442	30	23	7,723	45	38
1990	409	19	14	8,821	33	25	7,195	46	39
1991	364	18	11	8,002	30	23	6,748	45	38
1982	350	18	11	7,192	27	21	6,323	42	35
1983	383	14	9	7,256	24	18	6,406	40	34
1994	397	16	12	7,723	24	18	6,291	39	33
1995	410	14	9	7,725	21	16	6,263	38	32
1996	413	13	9	7,824	23	17	6,205	38	31
1997	345	11	8	7,719	22	17	5,705	36	30
1998	361	15	11	7,767	22	17	5,613	37	32
1999	333	13	10	7,985	22	17	5,639	38	31
2000	320	15	10	8,024	24	18	5,950	38	32
2001	293	16	12	7,992	23	18	6,037	39	33
2002	335	13	9	8,128	23	18	6,316	39	33
2003	345	13	9	7,744	24	19	6,276	38	32
2004	345	14	10	7,755	23	18	6,413	39	33
2005	304	16	10	7,334	22	17	6,585	39	33
2006	277	16	12	7,315	24	19	6,480	39	33
2007	239	17	12	6,894	23	18	6,287	41	34
2008	215	12	9	5,750	22	17	5,342	40	34
2009	181	11	6	5,073	24	19	4,612	41	34
2010	159	7	6	4,505	22	18	4,608	40	34
2011	115	11	8	4,307	24	20	4,488	37	32
2012	121	11	8	4,241	22	18	4,765	38	32
2013	139	10	7	3,908	22	17	4,630	38	32
2014	137	7	6	3,815	22	17	4,664	36	30
2015	155	13	9	4,258	20	16	5,015	33	28
2016	179	13	8	4,412	19	15	5,233	31	26

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

Table 18

Drivers in Fatal Crashes by Blood Alcohol Concentration (BAC) and Age, 1982-2016 (Continued)

Year	25-34 Years			35-44 Years			45-54 Years		
	Total	Percent		Total	Percent		Total	Percent	
		BAC = .01+	BAC = .08+		BAC = .01+	BAC = .08+		BAC = .01+	BAC = .08+
1982	14,787	46	41	7,984	38	33	4,980	32	28
1983	14,470	46	41	8,068	37	33	4,992	29	25
1984	15,233	44	39	8,563	35	31	5,084	28	24
1985	15,257	42	37	8,892	32	29	5,150	26	22
1986	16,179	43	38	9,240	33	29	5,077	26	22
1987	16,562	43	37	9,778	32	28	5,470	23	20
1988	16,398	42	36	10,077	32	28	5,761	23	20
1989	15,928	40	35	10,106	32	28	6,038	24	21
1990	15,764	43	37	10,177	33	30	5,867	24	20
1991	14,151	41	36	9,482	32	28	5,458	23	20
1992	13,049	40	35	9,284	31	27	5,672	22	19
1993	13,038	37	32	9,738	30	27	5,970	21	18
1994	12,891	36	31	9,951	29	26	6,493	21	18
1995	13,048	35	30	10,677	30	26	6,815	21	18
1996	12,889	34	30	10,955	29	25	7,127	21	18
1997	12,453	32	27	10,904	29	26	7,522	20	17
1998	11,925	32	28	11,241	28	24	7,690	21	18
1999	11,763	32	28	11,059	28	25	7,708	20	17
2000	11,739	33	28	11,132	30	26	8,234	22	18
2001	11,584	32	28	11,261	29	25	8,346	22	19
2002	11,483	33	29	10,973	29	26	8,558	22	19
2003	11,288	31	27	11,053	28	24	9,024	22	19
2004	11,242	32	27	10,743	27	23	9,148	22	19
2005	11,467	33	29	10,793	28	24	9,434	23	19
2006	11,279	34	29	10,379	29	25	9,234	23	19
2007	10,773	34	29	9,936	28	25	9,028	24	20
2008	9,800	36	31	8,806	29	25	8,355	24	20
2009	8,630	36	31	7,779	30	26	7,686	26	22
2010	8,567	35	30	7,333	29	25	7,517	25	21
2011	8,549	34	30	7,084	28	24	7,513	24	21
2012	9,019	34	29	7,365	28	24	7,660	24	21
2013	8,808	35	30	7,220	28	24	7,376	24	20
2014	8,992	33	29	6,910	28	24	7,370	24	20
2015	9,993	31	27	7,768	27	23	7,914	23	19
2016	10,815	31	27	8,116	26	22	7,946	23	19

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

Table 18

Drivers in Fatal Crashes by Blood Alcohol Concentration (BAC) and Age, 1982-2016 (Continued)

Year	55-64 Years			65-74 Years			>74 Years		
	Total	Percent		Total	Percent		Total	Percent	
		BAC = .01+	BAC = .08+		BAC = .01+	BAC = .08+		BAC = .01+	BAC = .08+
1982	3,941	25	21	2,343	17	14	1,551	11	8
1983	3,862	23	20	2,434	14	12	1,592	10	8
1984	4,059	22	18	2,620	16	13	1,696	10	7
1985	4,112	19	16	2,650	14	11	1,829	8	5
1986	4,019	20	16	2,844	14	11	2,037	8	5
1987	4,223	18	15	2,987	13	10	2,091	7	5
1988	4,320	18	15	3,079	14	10	2,297	8	5
1989	4,202	17	15	3,107	12	9	2,324	7	5
1990	4,068	17	14	3,161	12	9	2,340	8	5
1991	3,695	16	13	3,017	12	9	2,454	7	4
1992	3,688	16	13	3,024	12	9	2,450	6	4
1993	3,824	17	14	3,031	10	8	2,817	7	4
1994	3,828	15	12	3,194	11	9	2,867	6	4
1995	4,079	16	14	3,251	10	8	2,989	6	4
1996	4,237	15	12	3,319	11	8	3,068	6	5
1997	4,394	14	11	3,401	10	8	3,314	6	4
1998	4,478	14	11	3,399	9	7	3,291	6	4
1999	4,608	14	11	3,251	10	7	3,346	6	4
2000	4,766	15	12	3,134	11	8	3,147	6	4
2001	4,714	14	12	3,156	9	7	3,290	6	4
2002	5,093	14	12	3,100	9	7	3,223	6	4
2003	5,455	14	11	3,116	10	8	3,329	6	5
2004	5,612	15	12	3,070	10	8	3,169	7	5
2005	6,075	16	13	3,217	10	7	3,016	6	4
2006	5,894	17	13	3,029	11	8	2,967	7	5
2007	6,037	15	12	3,038	10	7	2,879	6	4
2008	5,717	16	12	2,927	9	6	2,672	6	4
2009	5,276	15	13	2,876	9	7	2,560	5	3
2010	5,577	17	14	2,902	10	8	2,688	6	4
2011	5,572	17	14	2,960	10	8	2,528	7	5
2012	5,930	16	13	3,239	11	8	2,554	7	5
2013	5,947	17	14	3,373	11	8	2,586	7	5
2014	6,004	19	16	3,316	12	10	2,650	7	5
2015	6,525	18	14	3,794	12	9	2,762	8	6
2016	6,966	18	14	4,122	12	9	2,971	8	5

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

Figure 10

Proportion of Drivers in Fatal Crashes with BAC = .08+ by Age, 1982-2016

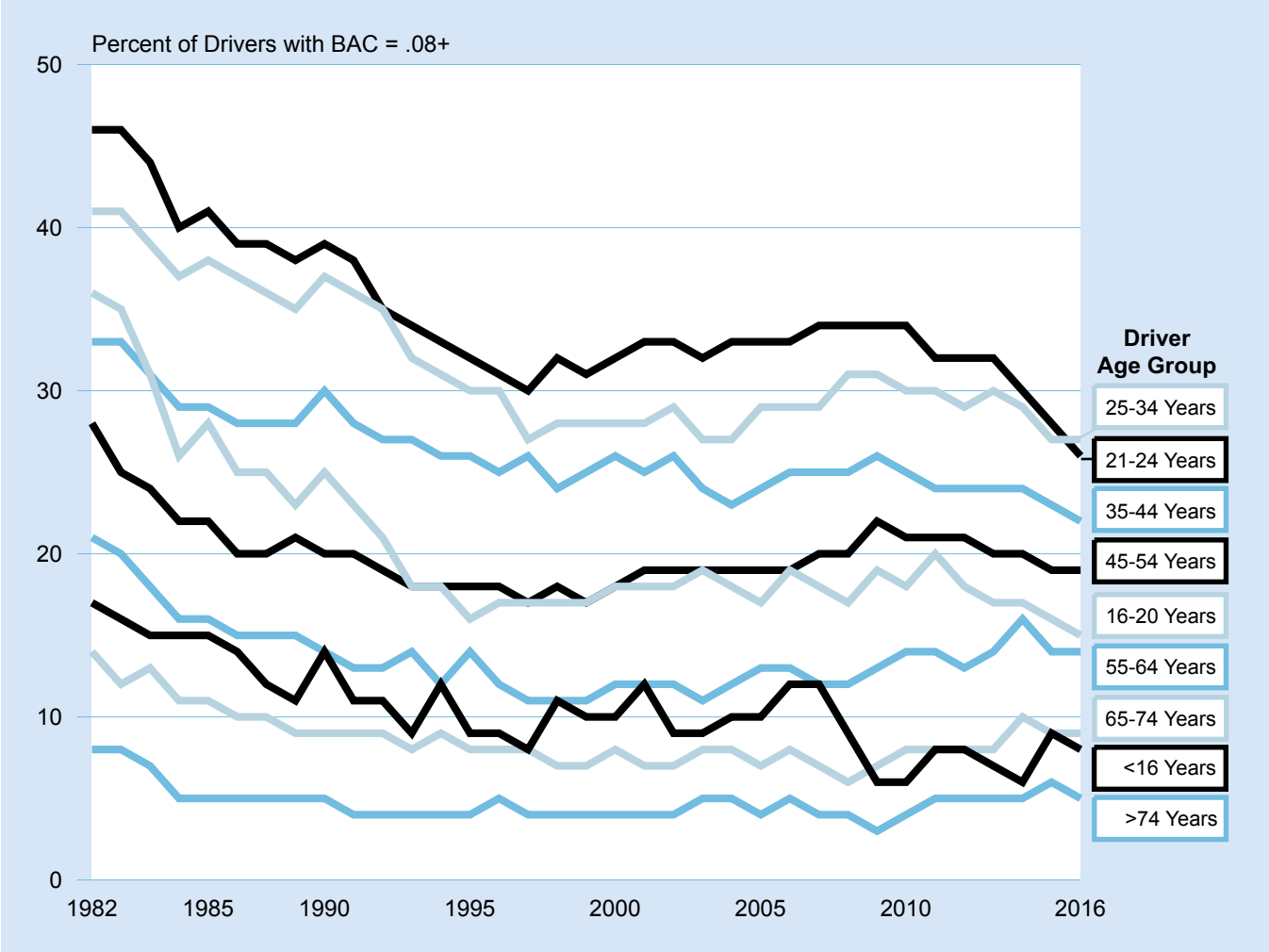


Table 19

Drivers in Fatal Crashes by Blood Alcohol Concentration (BAC) and Survival Status, 1982-2016

Year	Driver Survival Status								All Drivers in Fatal Crashes			
	Surviving Drivers				Killed Drivers							
	BAC = .00	BAC = .01-.07	BAC = .08+	Total	BAC = .00	BAC = .01-.07	BAC = .08+	Total	BAC = .00	BAC = .01-.07	BAC = .08+	Total
1982	22,187	1,615	7,537	31,339	11,015	1,537	12,139	24,690	33,202	3,152	19,676	**56,029**
1983	21,885	1,410	7,223	30,518	11,189	1,406	11,543	24,138	33,075	2,816	18,765	**54,656**
1984	23,367	1,620	6,936	31,923	12,477	1,614	11,499	25,589	35,843	3,234	18,435	**57,512**
1985	24,921	1,451	6,174	32,546	12,960	1,692	10,685	25,337	37,880	3,143	16,860	**57,883**
1986	25,265	1,758	6,681	33,705	13,343	1,878	11,409	26,630	38,608	3,636	18,091	**60,335**
1987	26,570	1,612	6,426	34,609	14,054	1,722	11,058	26,833	40,624	3,334	17,484	**61,442**
1988	27,270	1,565	6,165	35,000	14,418	1,732	11,103	27,253	41,688	3,297	17,268	**62,253**
1989	27,193	1,301	5,552	34,046	14,246	1,507	10,637	26,389	41,438	2,808	16,189	**60,435**
1990	25,582	1,469	6,092	33,143	13,858	1,497	10,395	25,750	39,440	2,966	16,487	**58,893**
1991	24,157	1,245	5,059	30,461	13,138	1,307	9,485	23,930	37,295	2,552	14,544	**54,391**
1992	23,678	1,172	4,467	29,317	12,906	1,226	8,452	22,584	36,584	2,398	12,919	**51,901**
1993	24,858	1,147	4,254	30,259	13,652	1,168	8,322	23,142	38,510	2,315	12,576	**53,401**
1994	25,331	1,078	4,449	30,858	14,612	1,166	7,913	23,691	39,943	2,244	12,362	**54,549**
1995	26,633	1,082	4,059	31,774	14,841	1,242	8,307	24,390	41,474	2,324	12,366	**56,164**
1996	27,158	1,136	4,173	32,467	15,134	1,225	8,175	24,534	42,292	2,361	12,348	**57,001**
1997	27,258	1,027	3,736	32,021	15,670	1,154	7,843	24,667	42,929	2,180	11,579	**56,688**
1998	27,026	1,108	3,727	31,861	15,738	1,171	7,834	24,743	42,764	2,279	11,561	**56,604**
1999	26,733	983	3,529	31,245	16,126	1,213	7,918	25,257	42,858	2,196	11,447	**56,502**
2000	26,527	1,092	4,094	31,713	16,116	1,285	8,167	25,567	42,643	2,376	12,261	**57,280**
2001	26,601	1,135	3,981	31,717	16,332	1,285	8,253	25,869	42,932	2,420	12,233	**57,586**
2002	26,524	1,040	3,889	31,454	16,863	1,281	8,515	26,659	43,388	2,321	12,405	**58,113**
2003	27,081	976	3,681	31,738	17,107	1,319	8,354	26,779	44,187	2,295	12,035	**58,517**
2004	26,661	960	3,903	31,524	17,450	1,266	8,155	26,871	44,111	2,226	12,057	**58,395**
2005	26,650	998	4,082	31,729	17,628	1,374	8,489	27,491	44,278	2,371	12,571	**59,220**
2006	25,509	1,016	3,973	30,498	17,315	1,455	8,578	27,348	42,823	2,472	12,551	**57,846**
2007	24,831	1,136	3,483	29,449	16,591	1,361	8,617	26,570	41,422	2,497	12,100	**56,019**
2008	22,312	913	2,937	26,162	15,067	1,226	7,961	24,254	37,379	2,139	10,898	**50,416**
2009	19,803	883	2,816	23,502	13,520	1,102	7,213	21,835	33,324	1,985	10,029	**45,337**
2010	19,747	761	3,019	23,527	13,442	1,051	6,579	21,072	33,190	1,812	9,598	**44,599**
2011	19,615	647	2,762	23,025	13,290	1,001	6,524	20,815	32,906	1,648	9,287	**43,840**
2012	20,519	709	2,946	24,174	13,674	1,082	6,735	21,490	34,193	1,791	9,680	**45,664**
2013	20,106	825	2,929	23,860	13,372	1,025	6,546	20,943	33,478	1,850	9,475	**44,803**
2014	20,010	863	3,010	23,883	13,428	974	6,387	20,788	33,438	1,837	9,396	**44,671**
2015	22,593	884	3,337	26,814	14,879	1,093	6,376	22,348	37,472	1,977	9,713	**49,162**
2016	24,084	863	3,407	28,354	15,901	1,181	6,479	23,560	39,985	2,044	9,885	**51,914**

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), 1982-2016

Year	BAC = .00		BAC = .01-.07		BAC = .08+		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1982	3,132	51	321	5	2,701	44	**6,154**	**100**
1983	2,905	51	297	5	2,508	44	**5,710**	**100**
1984	3,159	53	283	5	2,465	42	**5,907**	**100**
1985	3,072	54	342	6	2,288	40	**5,702**	**100**
1986	3,104	54	334	6	2,264	40	**5,702**	**100**
1987	3,188	56	344	6	2,183	38	**5,715**	**100**
1988	3,364	58	287	5	2,173	37	**5,825**	**100**
1989	3,164	56	300	5	2,193	39	**5,658**	**100**
1990	3,185	57	260	5	2,150	38	**5,595**	**100**
1991	2,862	57	236	5	1,907	38	**5,005**	**100**
1992	2,712	56	231	5	1,868	39	**4,812**	**100**
1993	2,792	57	199	4	1,869	38	**4,860**	**100**
1994	2,782	59	230	5	1,725	36	**4,737**	**100**
1995	2,871	59	225	5	1,801	37	**4,896**	**100**
1996	2,749	58	212	4	1,816	38	**4,777**	**100**
1997	2,889	61	177	4	1,649	35	**4,715**	**100**
1998	2,743	59	248	5	1,689	36	**4,680**	**100**
1999	2,568	58	194	4	1,657	37	**4,419**	**100**
2000	2,535	59	213	5	1,541	36	**4,288**	**100**
2001	2,666	60	220	5	1,567	35	**4,453**	**100**
2002	2,670	60	193	4	1,589	36	**4,451**	**100**
2003	2,621	60	192	4	1,570	36	**4,383**	**100**
2004	2,563	60	208	5	1,535	36	**4,306**	**100**
2005	2,778	61	197	4	1,566	34	**4,541**	**100**
2006	2,580	58	222	5	1,661	37	**4,463**	**100**
2007	2,585	59	207	5	1,594	36	**4,386**	**100**
2008	2,409	58	183	4	1,553	37	**4,145**	**100**
2009	2,290	59	174	5	1,404	36	**3,869**	**100**
2010	2,447	60	192	5	1,416	35	**4,055**	**100**
2011	2,498	59	198	5	1,546	36	**4,241**	**100**
2012	2,715	59	223	5	1,629	36	**4,568**	**100**
2013	2,743	61	193	4	1,591	35	**4,527**	**100**
2014	2,880	62	199	4	1,600	34	**4,679**	**100**
2015	3,225	61	241	5	1,779	34	**5,245**	**100**
2016	3,482	61	278	5	1,944	34	**5,704**	**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, 1975-2016

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	24,166	50.1	19,427	40.3	4,663	9.7	**48,256**	**100.0**
1996	25,207	51.7	18,759	38.5	4,747	9.7	**48,713**	**100.0**
1997	25,313	52.3	18,286	37.8	4,799	9.9	**48,398**	**100.0**
1998	25,854	53.7	17,601	36.6	4,699	9.8	**48,154**	**100.0**
1999	25,498	53.4	17,693	37.1	4,552	9.5	**47,743**	**100.0**
2000	26,690	55.5	16,995	35.4	4,369	9.1	**48,054**	**100.0**
2001	27,222	56.5	16,528	34.3	4,398	9.1	**48,148**	**100.0**
2002	27,813	57.0	16,710	34.2	4,275	8.8	**48,798**	**100.0**
2003	28,822	59.3	15,491	31.9	4,281	8.8	**48,594**	**100.0**
2004	29,072	60.6	15,120	31.5	3,743	7.8	**47,935**	**100.0**
2005	29,264	61.1	14,984	31.3	3,677	7.7	**47,925**	**100.0**
2006	28,285	60.9	14,434	31.1	3,750	8.1	**46,469**	**100.0**
2007	27,622	62.1	13,215	29.7	3,647	8.2	**44,484**	**100.0**
2008	24,649	62.4	11,770	29.8	3,055	7.7	**39,474**	**100.0**
2009	22,963	63.4	10,486	28.9	2,773	7.7	**36,222**	**100.0**
2010	22,712	64.7	9,598	27.3	2,785	7.9	**35,095**	**100.0**
2011	22,183	65.0	9,321	27.3	2,603	7.6	**34,107**	**100.0**
2012	23,191	65.5	9,431	26.6	2,779	7.9	**35,401**	**100.0**
2013	23,089	66.6	8,729	25.2	2,842	8.2	**34,660**	**100.0**
2014	23,347	67.0	8,636	24.8	2,859	8.2	**34,842**	**100.0**
2015	26,085	67.8	9,156	23.8	3,210	8.3	**38,451**	**100.0**
2016	27,587	67.8	9,657	23.7	3,437	8.4	**40,681**	**100.0**

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

Table 21

Drivers of Passenger Cars and Light Trucks in Crashes by Crash Severity and Restraint Use, 1975-2016 (Continued)

Year	Restraint Used		Restraint Not Used		Restraint Use Unknown		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
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**
2000	2,959,000	82.2	252,000	7.0	390,000	10.8	**3,600,000**	**100.0**
2001	2,882,000	82.5	234,000	6.7	376,000	10.8	**3,491,000**	**100.0**
2002	2,787,000	83.5	208,000	6.2	343,000	10.3	**3,338,000**	**100.0**
2003	2,844,000	84.7	180,000	5.4	332,000	9.9	**3,356,000**	**100.0**
2004	2,785,000	86.2	138,000	4.3	307,000	9.5	**3,230,000**	**100.0**
2005	2,666,000	86.1	141,000	4.5	290,000	9.4	**3,097,000**	**100.0**
2006	2,577,000	86.2	124,000	4.1	290,000	9.7	**2,990,000**	**100.0**
2007	2,475,000	86.4	116,000	4.0	274,000	9.6	**2,865,000**	**100.0**
2008	2,369,000	87.2	105,000	3.9	241,000	8.9	**2,715,000**	**100.0**
2009	2,257,000	87.8	87,000	3.4	226,000	8.8	**2,570,000**	**100.0**
2010	2,294,000	87.3	84,000	3.2	250,000	9.5	**2,629,000**	**100.0**
2011	2,275,000	87.7	80,000	3.1	238,000	9.2	**2,593,000**	**100.0**
2012	2,428,000	87.8	82,000	3.0	255,000	9.2	**2,765,000**	**100.0**
2013	2,425,000	88.6	72,000	2.6	239,000	8.8	**2,736,000**	**100.0**
2014	2,478,000	87.9	75,000	2.7	266,000	9.4	**2,819,000**	**100.0**
2015	2,634,000	88.4	72,000	2.4	273,000	9.2	**2,979,000**	**100.0**
2016	NA	NA	NA	NA	NA	NA	**NA**	**NA**
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**
2000	5,846,000	82.7	173,000	2.4	1,050,000	14.9	**7,069,000**	**100.0**
2001	5,897,000	83.6	161,000	2.3	1,000,000	14.2	**7,058,000**	**100.0**
2002	6,093,000	84.9	157,000	2.2	923,000	12.9	**7,173,000**	**100.0**
2003	6,042,000	84.7	135,000	1.9	960,000	13.4	**7,137,000**	**100.0**
2004	6,106,000	86.2	106,000	1.5	870,000	12.3	**7,083,000**	**100.0**
2005	6,087,000	86.1	104,000	1.5	880,000	12.4	**7,071,000**	**100.0**
2006	5,940,000	85.3	95,000	1.4	925,000	13.3	**6,960,000**	**100.0**
2007	6,011,000	85.8	91,000	1.3	900,000	12.9	**7,003,000**	**100.0**
2008	5,862,000	86.7	95,000	1.4	802,000	11.9	**6,758,000**	**100.0**
2009	5,708,000	87.4	71,000	1.1	751,000	11.5	**6,531,000**	**100.0**
2010	5,720,000	88.8	76,000	1.2	644,000	10.0	**6,440,000**	**100.0**
2011	5,599,000	88.8	55,000	0.9	652,000	10.3	**6,306,000**	**100.0**
2012	5,832,000	88.8	64,000	1.0	673,000	10.3	**6,568,000**	**100.0**
2013	6,018,000	89.2	57,000	0.8	675,000	10.0	**6,749,000**	**100.0**
2014	6,519,000	89.4	85,000	1.2	686,000	9.4	**7,289,000**	**100.0**
2015	6,843,000	89.8	67,000	0.9	710,000	9.3	**7,620,000**	**100.0**
2016	NA	NA	NA	NA	NA	NA	**NA**	**NA**

Notes: Restraint use is determined by police and may be overreported for survivors. Data for 2016 injury and property damage only crashes were not available when this report was finalized (NA). For more details, see page 5, "Crash Report Sampling System (CRSS) Replaces the National Automotive Sampling System (NASS) General Estimates System (GES)."

Table 22

Occupants of Passenger Cars and Light Trucks Killed or Injured, by Restraint Use, 1975-2016

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	9,642	31.2	18,636	60.3	2,623	8.5	**30,901**	**100.0**
1995	10,159	31.8	19,123	59.8	2,709	8.5	**31,991**	**100.0**
1996	10,716	33.0	18,848	58.1	2,873	8.9	**32,437**	**100.0**
1997	10,995	33.9	18,642	57.5	2,811	8.7	**32,448**	**100.0**
1998	11,213	35.2	18,022	56.5	2,664	8.4	**31,899**	**100.0**
1999	11,174	34.8	18,316	57.0	2,637	8.2	**32,127**	**100.0**
2000	11,787	36.6	17,810	55.3	2,628	8.2	**32,225**	**100.0**
2001	11,946	37.3	17,517	54.7	2,580	8.1	**32,043**	**100.0**
2002	12,533	38.2	17,797	54.2	2,513	7.7	**32,843**	**100.0**
2003	12,967	40.2	16,764	51.9	2,540	7.9	**32,271**	**100.0**
2004	13,250	41.6	16,432	51.6	2,184	6.9	**31,866**	**100.0**
2005	13,064	41.4	16,247	51.5	2,238	7.1	**31,549**	**100.0**
2006	12,710	41.4	15,635	51.0	2,341	7.6	**30,686**	**100.0**
2007	12,322	42.4	14,446	49.7	2,304	7.9	**29,072**	**100.0**
2008	10,691	42.0	12,925	50.8	1,846	7.3	**25,462**	**100.0**
2009	10,190	43.5	11,545	49.2	1,712	7.3	**23,447**	**100.0**
2010	9,969	44.8	10,590	47.5	1,714	7.7	**22,273**	**100.0**
2011	9,471	44.4	10,215	47.9	1,630	7.6	**21,316**	**100.0**
2012	9,746	44.7	10,370	47.6	1,663	7.6	**21,779**	**100.0**
2013	9,840	46.4	9,622	45.3	1,761	8.3	**21,223**	**100.0**
2014	9,961	47.3	9,410	44.7	1,679	8.0	**21,050**	**100.0**
2015	10,762	47.5	9,968	44.0	1,909	8.4	**22,639**	**100.0**
2016	11,282	47.6	10,428	44.0	2,004	8.5	**23,714**	**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 or Injured, by Restraint Use, 1975-2016 (Continued)

Year	Restraint Used		Restraint Not Used		Restraint Use Unknown		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
				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**
2000	2,369,000	80.6	369,000	12.6	200,000	6.8	**2,938,000**	**100.0**
2001	2,249,000	80.7	324,000	11.6	214,000	7.7	**2,787,000**	**100.0**
2002	2,195,000	81.8	284,000	10.6	205,000	7.7	**2,684,000**	**100.0**
2003	2,204,000	83.3	248,000	9.4	193,000	7.3	**2,646,000**	**100.0**
2004	2,156,000	84.8	206,000	8.1	181,000	7.1	**2,543,000**	**100.0**
2005	2,077,000	84.9	207,000	8.5	161,000	6.6	**2,446,000**	**100.0**
2006	1,992,000	85.5	183,000	7.8	156,000	6.7	**2,331,000**	**100.0**
2007	1,894,000	85.3	170,000	7.6	157,000	7.1	**2,221,000**	**100.0**
2008	1,784,000	86.1	141,000	6.8	147,000	7.1	**2,072,000**	**100.0**
2009	1,716,000	86.8	125,000	6.3	135,000	6.8	**1,976,000**	**100.0**
2010	1,698,000	85.5	115,000	5.8	173,000	8.7	**1,986,000**	**100.0**
2011	1,680,000	85.3	113,000	5.8	175,000	8.9	**1,968,000**	**100.0**
2012	1,758,000	84.1	112,000	5.4	221,000	10.6	**2,091,000**	**100.0**
2013	1,724,000	84.2	100,000	4.9	223,000	10.9	**2,046,000**	**100.0**
2014	1,779,000	85.8	105,000	5.1	190,000	9.1	**2,074,000**	**100.0**
2015	1,888,000	86.5	98,000	4.5	195,000	9.0	**2,181,000**	**100.0**
2016	NA	NA	NA	NA	NA	NA	**NA**	**NA**

Notes: Restraint use is determined by police and may be overreported for survivors. Injury data for 2016 were not available when this report was finalized (NA). For more details, see page 5, "Crash Report Sampling System (CRSS) Replaces the National Automotive Sampling System (NASS) General Estimates System (GES)."

Table 23

Passenger Car and Light Truck Occupants Killed, by Vehicle Type and Rollover Occurrence, 1982-2016

Year	Passenger Cars			Light Trucks									Total*		
				Pickup			Utility			Van					
	Total Killed	Rollover		Total Killed	Rollover		Total Killed	Rollover		Total Killed	Rollover		Total Killed	Rollover	
		Number	Percent		Number	Percent		Number	Percent		Number	Percent		Number	Percent
1982	23,330	5,529	23.7	4,605	1,895	41.2	735	504	68.6	814	285	35.0	**29,689**	**8,298**	**27.9**
1983	22,979	5,434	23.6	4,496	1,903	42.3	769	527	68.5	712	267	37.5	**29,181**	**8,219**	**28.2**
1984	23,620	5,569	23.6	4,686	1,994	42.6	723	496	68.6	764	299	39.1	**30,116**	**8,497**	**28.2**
1985	23,212	5,290	22.8	4,640	1,972	42.5	855	567	66.3	791	314	39.7	**29,901**	**8,284**	**27.7**
1986	24,944	6,015	24.1	5,090	2,301	45.2	927	608	65.6	879	349	39.7	**32,261**	**9,474**	**29.4**
1987	25,132	6,028	24.0	5,502	2,497	45.4	1,050	688	65.5	1,025	384	37.5	**33,190**	**9,801**	**29.5**
1988	25,808	6,248	24.2	5,880	2,713	46.1	1,040	651	62.6	1,001	374	37.4	**34,114**	**10,138**	**29.7**
1989	25,063	5,707	22.8	5,870	2,660	45.3	1,135	722	63.6	1,214	463	38.1	**33,614**	**9,689**	**28.8**
1990	24,092	5,593	23.2	5,979	2,698	45.1	1,214	762	62.8	1,154	451	39.1	**32,693**	**9,619**	**29.4**
1991	22,385	5,328	23.8	5,671	2,543	44.8	1,476	882	59.8	1,143	472	41.3	**30,776**	**9,258**	**30.1**
1992	21,387	4,738	22.2	5,385	2,460	45.7	1,335	834	62.5	1,292	564	43.7	**29,485**	**8,636**	**29.3**
1993	21,566	4,648	21.6	5,538	2,403	43.4	1,521	934	61.4	1,365	541	39.6	**30,077**	**8,561**	**28.5**
1994	21,997	4,870	22.1	5,574	2,409	43.2	1,757	1,063	60.5	1,508	610	40.5	**30,901**	**8,981**	**29.1**
1995	22,423	5,076	22.6	5,938	2,571	43.3	1,935	1,210	62.5	1,639	650	39.7	**31,991**	**9,537**	**29.8**
1996	22,505	4,997	22.2	5,904	2,545	43.1	2,147	1,384	64.5	1,832	681	37.2	**32,437**	**9,624**	**29.7**
1997	22,199	4,765	21.5	5,887	2,479	42.1	2,380	1,489	62.6	1,914	768	40.1	**32,448**	**9,527**	**29.4**
1998	21,194	4,672	22.0	5,921	2,560	43.2	2,713	1,705	62.8	2,042	823	40.3	**31,899**	**9,773**	**30.6**
1999	20,862	4,718	22.6	6,127	2,724	44.5	3,026	1,902	62.9	2,088	784	37.5	**32,127**	**10,140**	**31.6**
2000	20,699	4,548	22.0	6,003	2,558	42.6	3,358	2,064	61.5	2,129	771	36.2	**32,225**	**9,959**	**30.9**
2001	20,320	4,559	22.4	6,139	2,651	43.2	3,530	2,149	60.9	2,019	786	38.9	**32,043**	**10,157**	**31.7**
2002	20,569	4,794	23.3	6,100	2,755	45.2	4,031	2,471	61.3	2,109	699	33.1	**32,843**	**10,729**	**32.7**
2003	19,725	4,464	22.6	5,957	2,580	43.3	4,483	2,661	59.4	2,080	728	35.0	**32,271**	**10,442**	**32.4**
2004	19,192	4,353	22.7	5,838	2,597	44.5	4,760	2,929	61.5	2,046	695	34.0	**31,866**	**10,590**	**33.2**
2005	18,512	4,371	23.6	6,067	2,796	46.1	4,831	2,895	59.9	2,112	794	37.6	**31,549**	**10,870**	**34.5**
2006	17,925	4,376	24.4	5,993	2,844	47.5	4,928	2,899	58.8	1,815	609	33.6	**30,686**	**10,742**	**35.0**
2007	16,614	4,055	24.4	5,847	2,748	47.0	4,834	2,861	59.2	1,764	572	32.4	**29,072**	**10,240**	**35.2**
2008	14,646	3,653	24.9	5,097	2,435	47.8	4,214	2,435	57.8	1,492	514	34.5	**25,462**	**9,043**	**35.5**
2009	13,135	3,230	24.6	4,801	2,295	47.8	4,104	2,303	56.1	1,396	457	32.7	**23,447**	**8,291**	**35.4**
2010	12,491	2,933	23.5	4,486	2,098	46.8	3,942	2,264	57.4	1,346	413	30.7	**22,273**	**7,710**	**34.6**
2011	12,014	2,849	23.7	4,270	1,993	46.7	3,884	2,172	55.9	1,128	375	33.2	**21,316**	**7,400**	**34.7**
2012	12,361	3,025	24.5	4,343	2,012	46.3	3,885	2,161	55.6	1,167	326	27.9	**21,779**	**7,527**	**34.6**
2013	12,037	2,823	23.5	4,175	1,903	45.6	3,831	1,966	51.3	1,142	326	28.5	**21,223**	**7,030**	**33.1**
2014	11,947	2,663	22.3	4,249	1,907	44.9	3,800	1,965	51.7	1,021	305	29.9	**21,050**	**6,849**	**32.5**
2015	12,761	2,878	22.6	4,470	1,942	43.4	4,213	2,073	49.2	1,128	308	27.3	**22,639**	**7,224**	**31.9**
2016	13,412	2,950	22.0	4,538	1,963	43.3	4,432	2,151	48.5	1,223	343	28.0	**23,714**	**7,461**	**31.5**

*Total includes occupants of other and unknown light trucks.

Chapter 2

CRASHES

CHAPTER 2 ■ CRASHES

This chapter presents statistics about police-reported fatal motor vehicle crashes in 2016. 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:

- A total of 34,439 police-reported fatal motor vehicle crashes occurred in the United States in 2016.
- Midnight to 3 a.m. and 6 p.m. to 9 p.m. on Saturdays proved to be the deadliest 3-hour periods throughout 2016, with 1,015 and 1,001 fatal crashes, respectively.
- Fifty-eight percent of fatal crashes involved only one vehicle.
- Collision with another motor vehicle in transport was the most common first harmful event in fatal crashes (38 percent of all fatal crashes). Collisions with fixed objects and noncollisions together accounted for 40 percent of all fatal crashes.

Table 24

Fatal Crashes and Crash Rates by Month

Month	Number	Rate*
January	2,344	0.99
February	2,421	1.06
March	2,682	0.99
April	2,701	1.01
May	2,980	1.08
June	3,007	1.08
July	3,008	1.07
August	3,106	1.11
September	3,120	1.19
October	3,249	1.20
November	2,998	1.16
December	2,823	1.09
Total	**34,439**	**1.08**

*Crashes per 100 million vehicle miles traveled.

Sources: Vehicle miles traveled (VMT), Federal Highway Administration, *Traffic Volume Trends*, December 2017 (monthly), and *2016 Highway Statistics* (VM-1) (annual).

Table 25

Fatal Crashes by Time of Day and Day of Week

	Day of Week							
Time of Day	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total
Midnight to 3 am	996	408	307	367	375	495	1,015	**3,963**
3 am to 6 am	635	377	305	298	357	413	619	**3,004**
6 am to 9 am	360	523	529	524	521	505	425	**3,387**
9 am to Noon	417	500	444	423	465	473	511	**3,233**
Noon to 3 pm	596	578	625	637	617	667	675	**4,395**
3 pm to 6 pm	770	753	668	745	780	886	850	**5,452**
6 pm to 9 pm	855	757	658	783	830	921	1,001	**5,805**
9 pm to Midnight	618	573	565	580	690	951	957	**4,934**
Unknown	56	32	28	31	27	41	51	**266**
Total	**5,303**	**4,501**	**4,129**	**4,388**	**4,662**	**5,352**	**6,104**	**34,439**

Figure 11

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

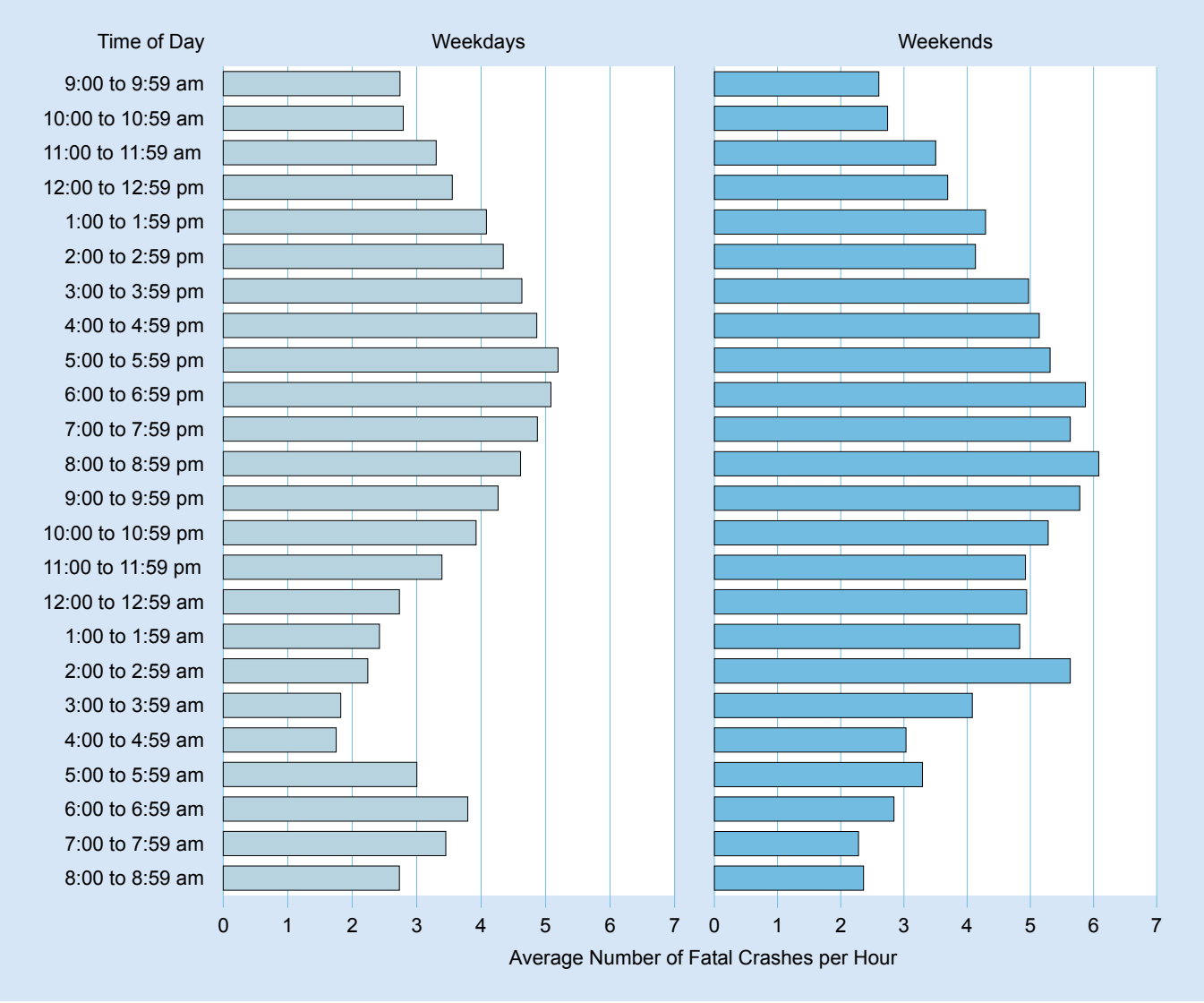


Table 26

Fatal Crashes by Weather Condition and Light Condition

Weather Condition	Light Condition					Total
	Daylight	Dark, But Lighted	Dark	Dawn or Dusk	Other	
Normal	14,307	5,875	8,151	1,183	8	**29,581**
Rain	875	497	681	87	3	**2,148**
Snow/Sleet	219	51	156	17	0	**445**
Other	125	54	220	40	3	**448**
Unknown	810	255	548	71	0	**1,817**
Total*	**16,336**	**6,732**	**9,756**	**1,398**	**14**	***34,439**

*Includes 203 fatal crashes for which light conditions were unknown.

Table 27

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

Response Time (Minutes)	Time of Crash to EMS Notification		EMS Notification to EMS Arrival		EMS Arrival at Scene to Hospital Arrival		Time of Crash to Hospital Arrival	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Rural Fatal Crashes								
0 to 10	5,816	85.6	3,915	49.2	91	2.1	25	0.6
11 to 20	602	8.9	2,876	36.1	466	11.0	136	3.3
21 to 30	172	2.5	769	9.7	922	21.8	357	8.7
31 to 40	74	1.1	236	3.0	930	21.9	662	16.2
41 to 50	27	0.4	81	1.0	696	16.4	731	17.9
51 to 60	38	0.6	41	0.5	469	11.1	650	15.9
61 to 120	68	1.0	39	0.5	665	15.7	1,528	37.4
Total*	**6,797**	**100.0**	**7,957**	**100.0**	**4,239**	**100.0**	**4,089**	**100.0**
Urban Fatal Crashes								
0 to 10	6,383	93.6	5,961	84.4	268	5.9	45	1.0
11 to 20	275	4.0	933	13.2	1,371	30.2	570	12.7
21 to 30	73	1.1	123	1.7	1,399	30.8	1,269	28.4
31 to 40	27	0.4	24	0.3	786	17.3	1,107	24.7
41 to 50	11	0.2	13	0.2	370	8.1	665	14.9
51 to 60	13	0.2	3	0.0	182	4.0	387	8.6
61 to 120	38	0.6	7	0.1	170	3.7	433	9.7
Total*	**6,820**	**100.0**	**7,064**	**100.0**	**4,546**	**100.0**	**4,476**	**100.0**

*Includes crashes for which both times were known.

Table 28

Fatal Crashes by Crash Type and Relation to Roadway

Crash Type	Relation to Roadway					Total
	On Roadway	Off Roadway	Shoulder	Median	Other/Unknown	
Single Vehicle	7,113	11,047	423	1,164	347	**20,094**
Multiple Vehicle	13,691	329	119	183	23	**14,345**
Total	**20,804**	**11,376**	**542**	**1,347**	**370**	**34,439**

Table 29

Fatal Crashes by First Harmful Event and Manner of Collision

First Harmful Event	Number	Percent
Collision with Motor Vehicle in Transport:		
Angle	6,122	17.8
Rear End	2,350	6.8
Sideswipe	940	2.7
Head On	3,511	10.2
Other/Unknown	174	0.5
Subtotal	*13,097*	*38.0*
Collision with Fixed Object:		
Pole/Post	1,416	4.1
Culvert/Curb/Ditch	2,516	7.3
Shrubbery/Tree	2,585	7.5
Guard Rail	896	2.6
Embankment	947	2.7
Bridge	231	0.7
Other/Unknown	1,835	5.3
Subtotal	*10,426*	*30.3*
Collision with Object Not Fixed:		
Parked Motor Vehicle	392	1.1
Animal	181	0.5
Pedestrian	5,548	16.1
Pedalcyclist	822	2.4
Train	102	0.3
Other/Unknown	383	1.1
Subtotal	*7,428*	*21.6*
Noncollision:		
Rollover	3,067	8.9
Other/Unknown	396	1.1
Subtotal	*3,463*	*10.1*
Total	***34,439**	**100.0**

*Includes 25 fatal crashes with unknown first harmful event.

Table 30
Two-Vehicle Fatal Crashes by Vehicle Type

Vehicle Type	Vehicle Type					
	Passenger Car	Light Truck	Large Truck	Motorcycle	Bus	Other/Unknown
Total Fatal Crashes = 11,933						
Passenger Car	1,797	3,414	1,065	1,109	53	120
Light Truck		1,480	949	1,217	38	130
Large Truck			120	218	3	33
Motorcycle				87	28	53
Bus					1	0
Other/Unknown						18

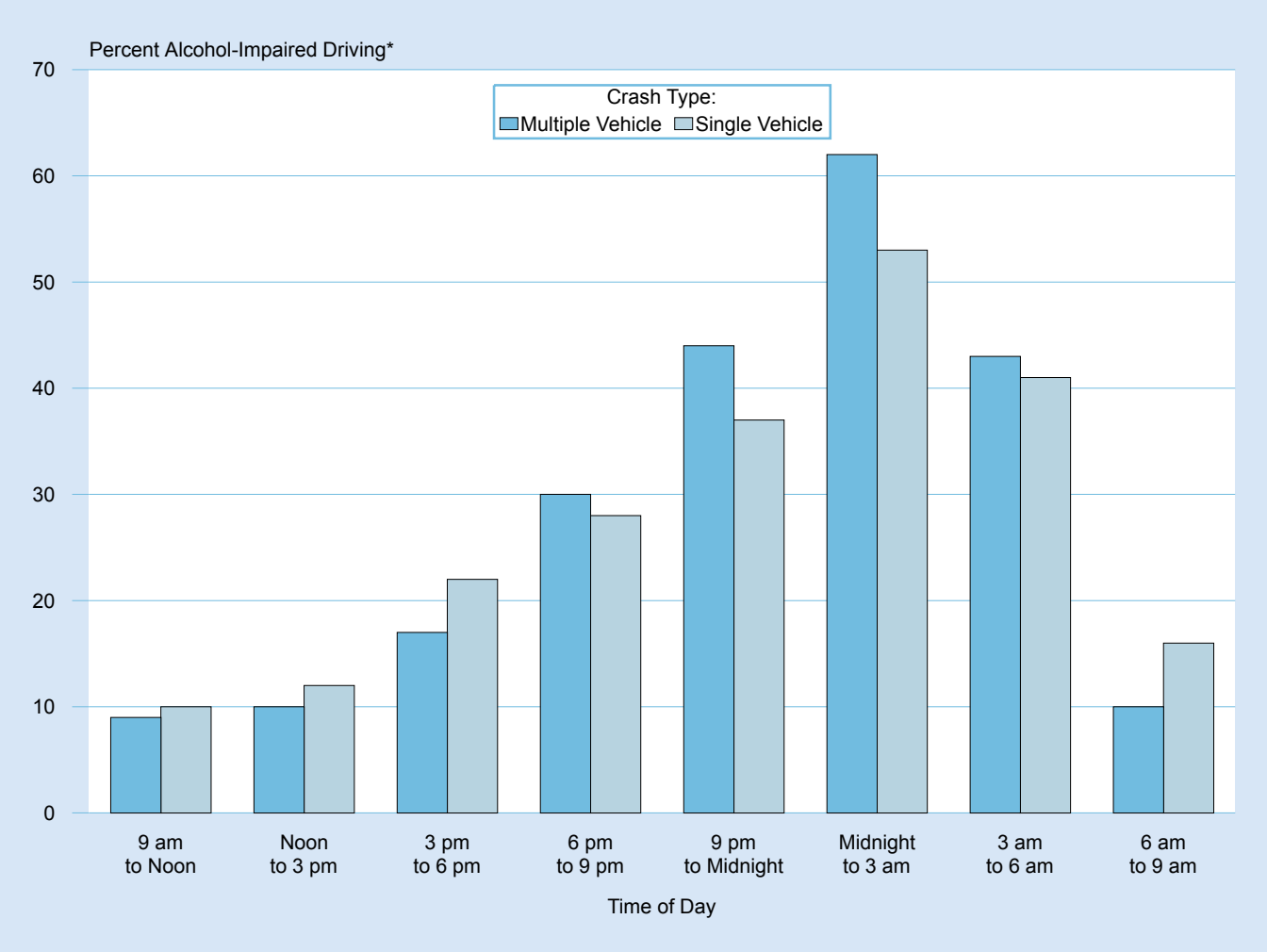
Table 31
Fatal Crashes and Percent Alcohol-Impaired Driving, by Time of Day and Crash Type

Time of Day	Crash Type						Total		
	Single Vehicle			Multiple Vehicle					
	Number	Alcohol-Impaired Driving*	Percent Alcohol-Impaired Driving*	Number	Alcohol-Impaired Driving*	Percent Alcohol-Impaired Driving*	Number	Alcohol-Impaired Driving*	Percent Alcohol-Impaired Driving*
Midnight to 3 am	2,937	1,564	53	1,026	632	62	**3,963**	**2,196**	**55**
3 am to 6 am	2,074	848	41	930	402	43	**3,004**	**1,250**	**42**
6 am to 9 am	1,800	296	16	1,587	155	10	**3,387**	**451**	**13**
9 am to Noon	1,559	155	10	1,674	150	9	**3,233**	**305**	**9**
Noon to 3 pm	2,005	235	12	2,390	248	10	**4,395**	**482**	**11**
3 pm to 6 pm	2,605	573	22	2,847	492	17	**5,452**	**1,064**	**20**
6 pm to 9 pm	3,553	1,011	28	2,252	680	30	**5,805**	**1,691**	**29**
9 pm to Midnight	3,318	1,223	37	1,616	718	44	**4,934**	**1,942**	**39**
Unknown	243	88	36	23	7	30	**266**	**95**	**36**
Total	**20,094**	**5,993**	**30**	**14,345**	**3,484**	**24**	**34,439**	**9,477**	**28**

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

Figure 12

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



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

Chapter 3

VEHICLES

CHAPTER 3 ■ VEHICLES

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

- Ninety-five percent of the 52.2 thousand vehicles involved in fatal motor vehicle crashes in 2016 were passenger cars or light trucks.
- Large trucks accounted for 8 percent of the vehicles in fatal crashes in 2016. Of the 4,213 large trucks involved in fatal crashes, 71 percent were combination trucks.
- Vehicles that rolled over in fatal crashes—excluding motorcycles—accounted for 17.9 percent of all fatal crashes in 2016.
- Compared with passenger cars, pickup trucks, vans, large trucks, and buses, utility vehicles experienced the highest rollover rate in fatal crashes (25.6 percent).
- Fires occurred in 3.2 percent of the vehicles involved in fatal traffic crashes in 2016.
- The majority of vehicles in single- and two-vehicle fatal crashes were going straight prior to the crash; the next most common vehicle maneuver was negotiating a curve.
- Motorcycles in fatal crashes had the highest proportion of collisions with fixed objects (23.0 percent), and buses in fatal crashes had the lowest proportion (2.6 percent).

Table 32
Vehicles Involved in Fatal Crashes by Relation to Junction and Traffic Control Device

Relation to Junction	Traffic Control Device				Total
	None	Traffic Signal	Stop Sign	Other/Unknown	
Nonjunction	31,616	58	17	1,261	**32,952**
Junction:					
Intersection	4,504	4,002	2,248	190	**10,944**
Intersection Related	1,899	1,590	466	134	**4,089**
Other/Unknown	3,752	94	86	314	**4,246**
Total	**41,771**	**5,744**	**2,817**	**1,899**	**52,231**

Table 33
Vehicles Involved in Fatal Crashes by Speed Limit and Crash Type

Speed Limit	Crash Type				Total	
	Single Vehicle		Multiple Vehicle			
	Number	Percent	Number	Percent	Number	Percent
30 mph or less	2,695	13.4	2,214	6.9	**4,909**	**9.4**
35 or 40 mph	3,999	19.9	5,010	15.6	**9,009**	**17.2**
45 or 50 mph	3,866	19.2	6,616	20.6	**10,482**	**20.1**
55 mph	4,877	24.3	9,003	28.0	**13,880**	**26.6**
60 mph or higher	3,837	19.1	7,864	24.5	**11,701**	**22.4**
No Statutory Limit	101	0.5	259	0.8	**360**	**0.7**
Unknown	719	3.6	1,171	3.6	**1,890**	**3.6**
Total	**20,094**	**100.0**	**32,137**	**100.0**	**52,231**	**100.0**

Table 34
Vehicles Involved in 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	845	17.2	3,748	76.3	316	6.4	**4,909**	**100.0**
35 or 40 mph	1,933	21.5	6,495	72.1	581	6.4	**9,009**	**100.0**
45 or 50 mph	3,970	37.9	6,260	59.7	252	2.4	**10,482**	**100.0**
55 mph	10,399	74.9	3,401	24.5	80	0.6	**13,880**	**100.0**
60 mph or higher	7,150	61.1	4,433	37.9	118	1.0	**11,701**	**100.0**
No Statutory Limit	126	35.0	189	52.5	45	12.5	**360**	**100.0**
Unknown	552	29.2	1,193	63.1	145	7.7	**1,890**	**100.0**
Total	**24,975**	**47.8**	**25,719**	**49.2**	**1,537**	**2.9**	**52,231**	**100.0**

Table 35

Vehicles Involved in Fatal Crashes by Number of Lanes and Trafficway Flow

Number of Lanes	Trafficway Flow					Total
	Not Divided	Divided	One-Way	Entrance/Exit Ramps	Unknown	
One Lane	39	130	114	338	7	**628**
Two Lanes	25,039	8,045	247	276	12	**33,619**
Three Lanes	1,511	4,121	185	38	6	**5,861**
Four Lanes	2,607	3,361	65	1	5	**6,039**
More Than Four	3,635	1,815	24	0	5	**5,479**
Unknown	72	53	2	13	166	**306**
Total*	**32,903**	**17,525**	**637**	**666**	**201**	**52,231**

*Totals include vehicles in non-trafficway areas.

Table 36

Vehicles Involved in Fatal Crashes by Vehicle Type

Vehicle Type	Number	Percent
Passenger Car	20,839	39.9
Light Truck	20,069	38.4
Large Truck	4,213	8.1
Motorcycle	5,421	10.4
Bus	227	0.4
Other	621	1.2
Total	***52,231**	**100.0**

*Includes 841 vehicles of unknown type.

Figure 13
Proportion of Vehicles Involved in Fatal Traffic Crashes

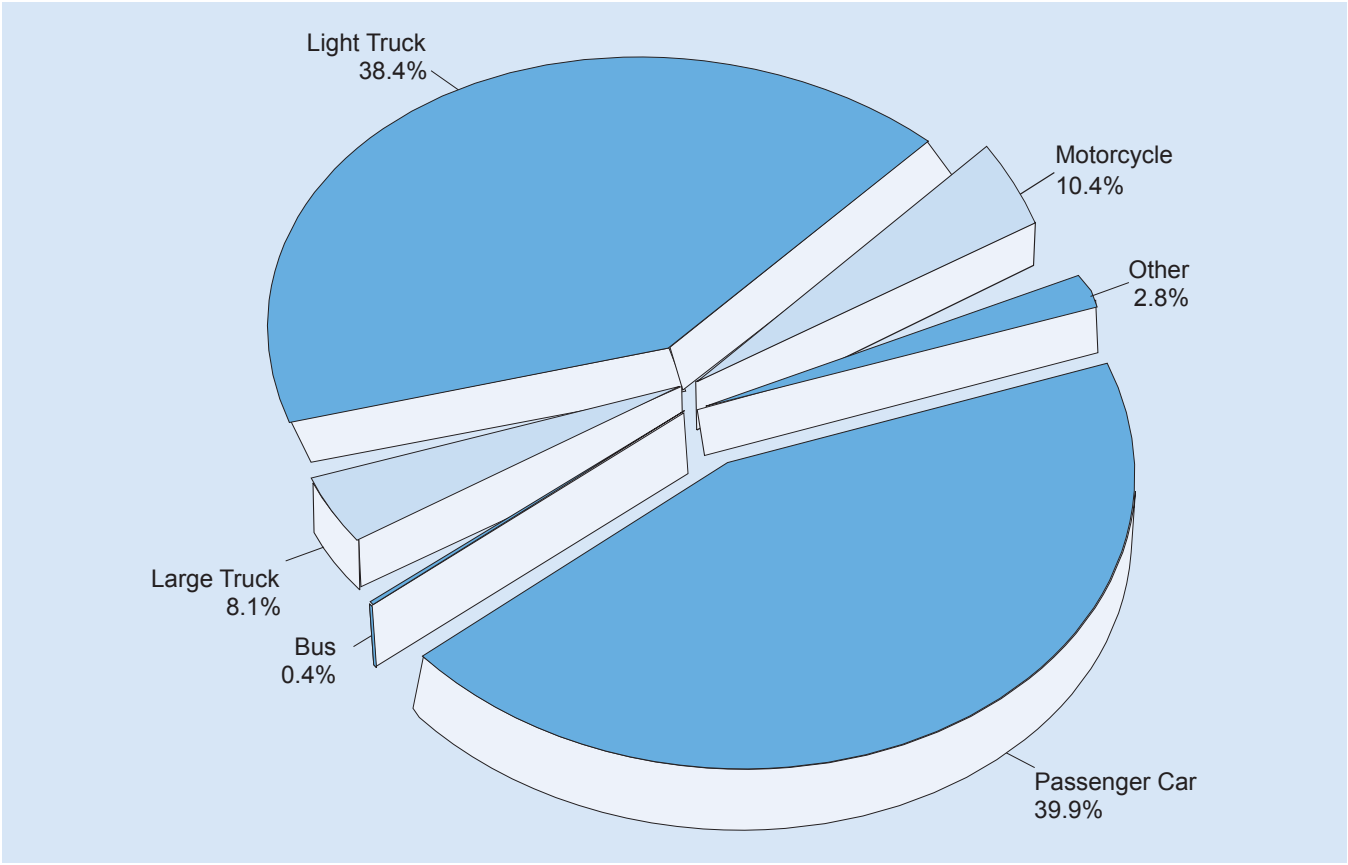


Table 37
Vehicles Involved in Fatal Crashes by Body Type

Body Type	Number	Percent
Passenger Cars	**20,839**	**39.9**
Convertible	341	0.7
2 Door Sedan, Hardtop, Coupe	2,242	4.3
3 Door/2 Door Hatchback	601	1.2
4 Door Sedan Hardtop	14,895	28.5
5 Door/4 Door Hatchback	817	1.6
Station Wagon	1,743	3.3
Hatchback, Doors Unknown	3	*
Other Auto	17	*
Unknown Auto	146	0.3
Auto-Based Pickup	17	*
3-Door Coupe	17	*
Light Trucks	**20,069**	**38.4**
Compact Utility	6,135	11.7
Large Utility	2,085	4.0
Utility Station Wagon	270	0.5
Utility, Unknown Body Type	3	*
Minivan	1,666	3.2
Large Van	643	1.2
Step Van	22	*
Other Van Type	18	*
Unknown Van Type	31	0.1
Compact Pickup	1,703	3.3
Standard Pickup	7,204	13.8
Pickup with Camper	27	0.1
Unknown Pickup Style Truck	31	0.1
Cab Chassis-Based Light Truck	170	0.3
Unknown Light Truck Type (not pickup)	19	*
Unknown Light Vehicle Type	42	0.1
Large Trucks	**4,213**	**8.1**
Step Van	5	*
Single Unit Truck (10,000 lb < GVWR ≤ 19,500 lb)	212	0.4
Single Unit Truck (19,500 lb < GVWR ≤ 26,000 lb)	169	0.3
Single Unit Heavy Truck (GVWR > 26,000 lb)	523	1.0
Single Unit Truck, Unknown GVWR	250	0.5
Truck Tractor	2,817	5.4
Medium/Heavy Pickup (Ford Super Duty 450/550)	175	0.3
Unknown Medium Truck (10,000 lb < GVWR ≤ 26,000 lb)	12	*
Unknown Heavy Truck (GVWR > 26,000 lb)	7	*
Unknown Large Truck Type	40	0.1
Unknown Truck	3	*

Body Type	Number	Percent
Motorcycles	**5,421**	**10.4**
Motorcycle	5,049	9.7
Moped	136	0.3
Three Wheel Motorcycle or Moped	45	0.1
Off-Road Motorcycle (Two Wheel)	56	0.1
Other Motorcycle/Minibike	114	0.2
Unknown Motorcycle	21	*
Buses	**227**	**0.4**
School Bus	87	0.2
Cross Country/Intercity Bus	16	*
Transit Bus	94	0.2
Van-Based Bus (GVWR > 10,000 lb)	6	*
Other Bus	18	*
Unknown Bus	6	*
Other Vehicles	**621**	**1.2**
Large Limousine	2	*
Medium/Heavy Truck-Based Motorhome	24	*
Camper/Motorhome Unknown Truck Type	17	*
All Terrain Vehicle	350	0.7
Snowmobile	16	*
Farm Equipment Except Trucks	92	0.2
Construction Equipment Except Trucks	16	*
Motorized Wheelchair	1	*
Golf Cart	31	0.1
Other Vehicle	72	0.1
Unknown Body Type	**841**	**1.6**
Total	**52,231**	**100.0**

*Less than 0.05 percent.

Table 38

Vehicles Involved in Fatal Crashes by Vehicle Type and Rollover Occurrence

	Rollover Occurrence				Total	
	Yes		No			
Vehicle Type	Number	Percent	Number	Percent	Number	Percent
Passenger Car	2,823	13.5	18,016	86.5	**20,839**	**100.0**
Light Truck						
Pickup	2,083	23.2	6,882	76.8	**8,965**	**100.0**
Utility	2,171	25.6	6,322	74.4	**8,493**	**100.0**
Van	347	14.6	2,033	85.4	**2,380**	**100.0**
Other	60	26.0	171	74.0	**231**	**100.0**
Large Truck	587	13.9	3,626	86.1	**4,213**	**100.0**
Bus	6	2.6	221	97.4	**227**	**100.0**
Other/Unknown	299	20.5	1,163	79.5	**1,462**	**100.0**
Total*	**8,376**	**17.9**	**38,434**	**82.1**	**46,810**	**100.0**

*Excludes motorcycles.

Figure 14

Percent Rollover Occurrence in Fatal Crashes by Vehicle Type

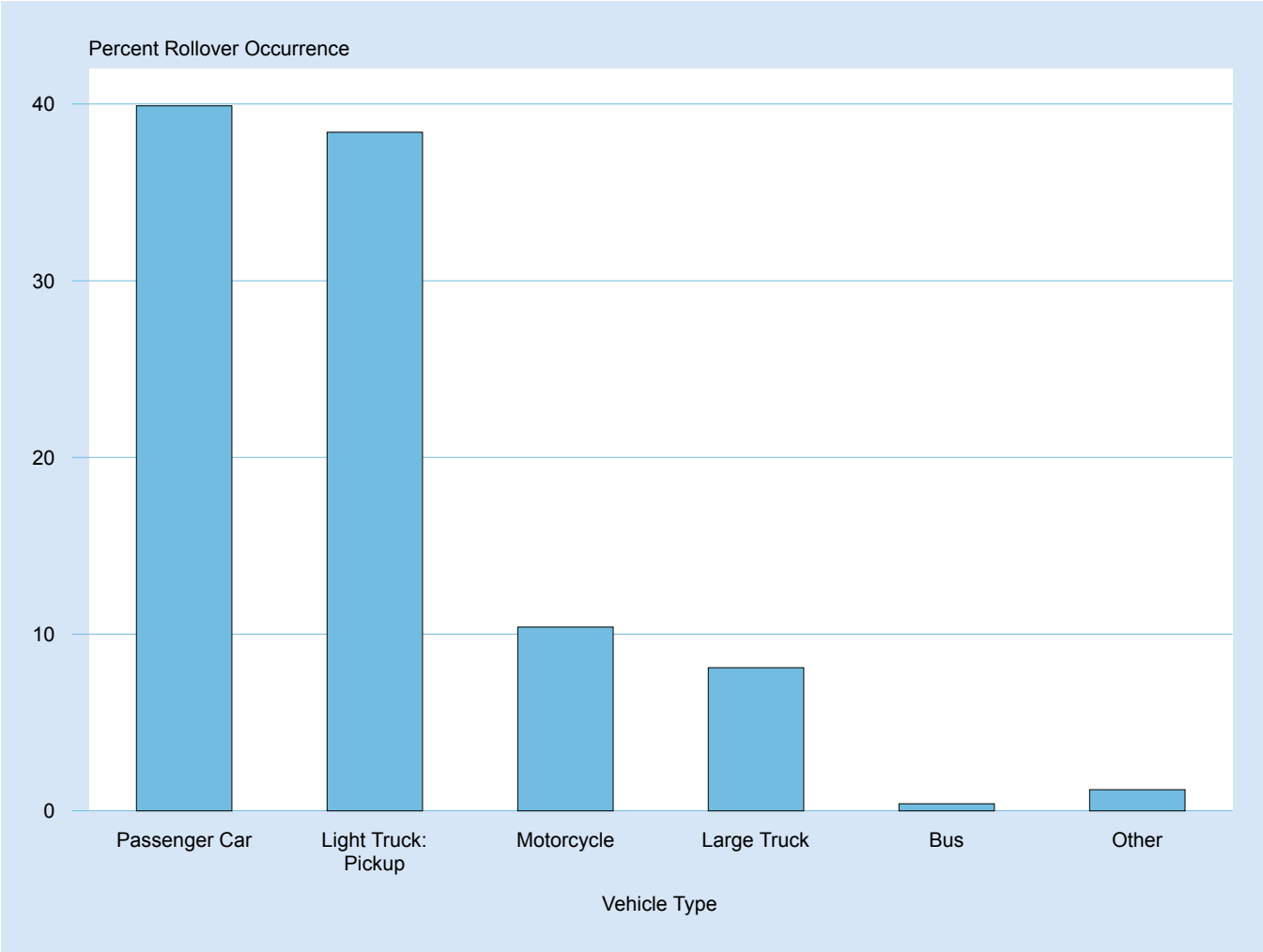


Table 39

Vehicles Involved in Fatal Crashes by Vehicle Type and Fire Occurrence

Vehicle Type	Fire Occurrence				Total	
	Yes		No			
	Number	Percent	Number	Percent	Number	Percent
Passenger Car	703	3.4	20,136	96.6	**20,839**	**100.0**
Light Truck	605	3.0	19,464	97.0	**20,069**	**100.0**
Large Truck	253	6.0	3,960	94.0	**4,213**	**100.0**
Motorcycle	98	1.8	5,323	98.2	**5,421**	**100.0**
Bus	4	1.8	223	98.2	**227**	**100.0**
Other/Unknown	20	1.4	1,442	98.6	**1,462**	**100.0**
Total	**1,683**	**3.2**	**50,548**	**96.8**	**52,231**	**100.0**

Table 40

Vehicles Involved in Single-Vehicle and Two-Vehicle Fatal Crashes by Vehicle Maneuver

Vehicle Maneuver	Number	Percent
Going Straight	27,913	63.8
Turning Left	3,151	7.2
Stopped in Traffic Lane	576	1.3
Turning Right	374	0.9
Slowed in Traffic Lane	395	0.9
Merging/Changing Lanes	754	1.7
Negotiating Curve	8,305	19.0
Backing Up	141	0.3
Passing Other Vehicle	798	1.8
Starting in Traffic Lane	247	0.6
Leaving Parking Space	24	0.1
Making U-Turn	184	0.4
Entering Parking Space	9	*
Disabled or Parked in Traffic Lane	28	0.1
Other Maneuver	445	1.0
Total	****43,782**	**100.0**

*Less than 0.05 percent.

**Includes 438 vehicles involved in crashes with unknown vehicle maneuver.

Table 41

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	7	1,172	24	2,063	**31**	**3,235**
Freeway/Expressway	1	392	5	789	**6**	**1,181**
Other	7	1,938	31	5,230	**38**	**7,168**
Minor Arterial	3	1,599	14	3,172	**17**	**4,771**
Major Collector	1	2,234	9	2,611	**10**	**4,845**
Minor Collector	2	728	1	509	**3**	**1,237**
Local Road or Street	2	1,771	1	723	**3**	**2,494**
Unknown Trafficway	0	24	0	20	**0**	**44**
Total	**23**	**9,858**	**85**	**15,117**	**108**	**24,975**
Urban Fatal Crashes						
Principal Arterial						
Interstate	5	1,397	15	2,695	**20**	**4,092**
Freeway/Expressway	0	584	1	1,007	**1**	**1,591**
Other	2	2,910	10	6,472	**12**	**9,382**
Minor Arterial	0	1,961	3	3,424	**3**	**5,385**
Major Collector	0	891	3	1,243	**3**	**2,134**
Minor Collector	0	251	0	342	**0**	**593**
Local Road or Street	2	1,390	1	1,096	**3**	**2,486**
Unknown Trafficway	0	32	0	24	**0**	**56**
Total	**9**	**9,416**	**33**	**16,303**	**42**	**25,719**
All Fatal Crashes						
Principal Arterial						
Interstate	12	2,570	39	4,763	**51**	**7,333**
Freeway/Expressway	1	976	6	1,796	**7**	**2,772**
Other	9	4,849	41	11,702	**50**	**16,551**
Minor Arterial	3	3,560	17	6,599	**20**	**10,159**
Major Collector	1	3,125	12	3,854	**13**	**6,979**
Minor Collector	2	979	1	851	**3**	**1,830**
Local Road or Street	4	3,163	2	1,819	**6**	**4,982**
Unknown	1	872	0	753	**1**	**1,625**
Total	**33**	**20,094**	**118**	**32,137**	**151**	**52,231**

Figure 15

Percent of Vehicles in Fatal Crashes, by Most Harmful Event and Vehicle Type

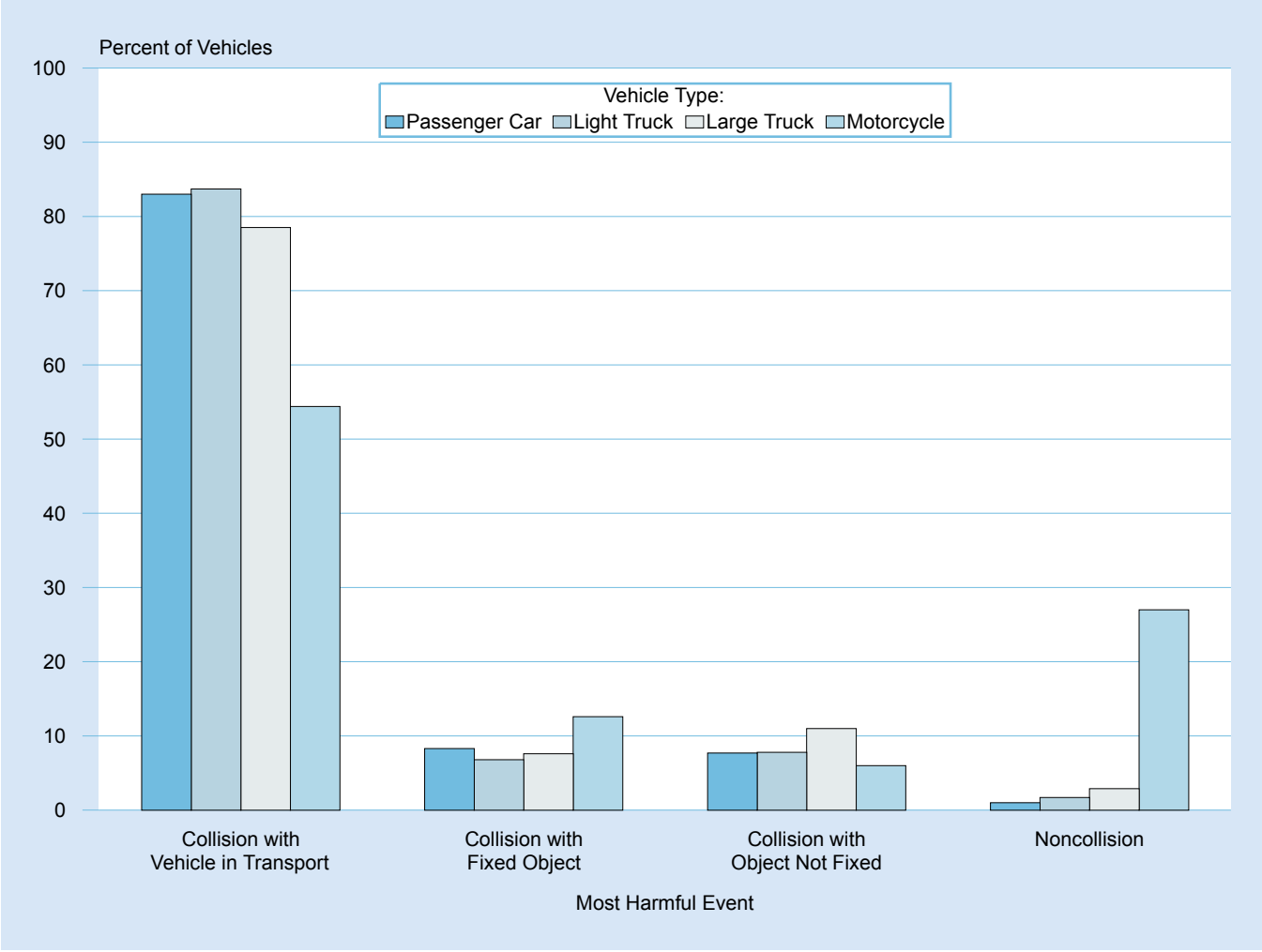
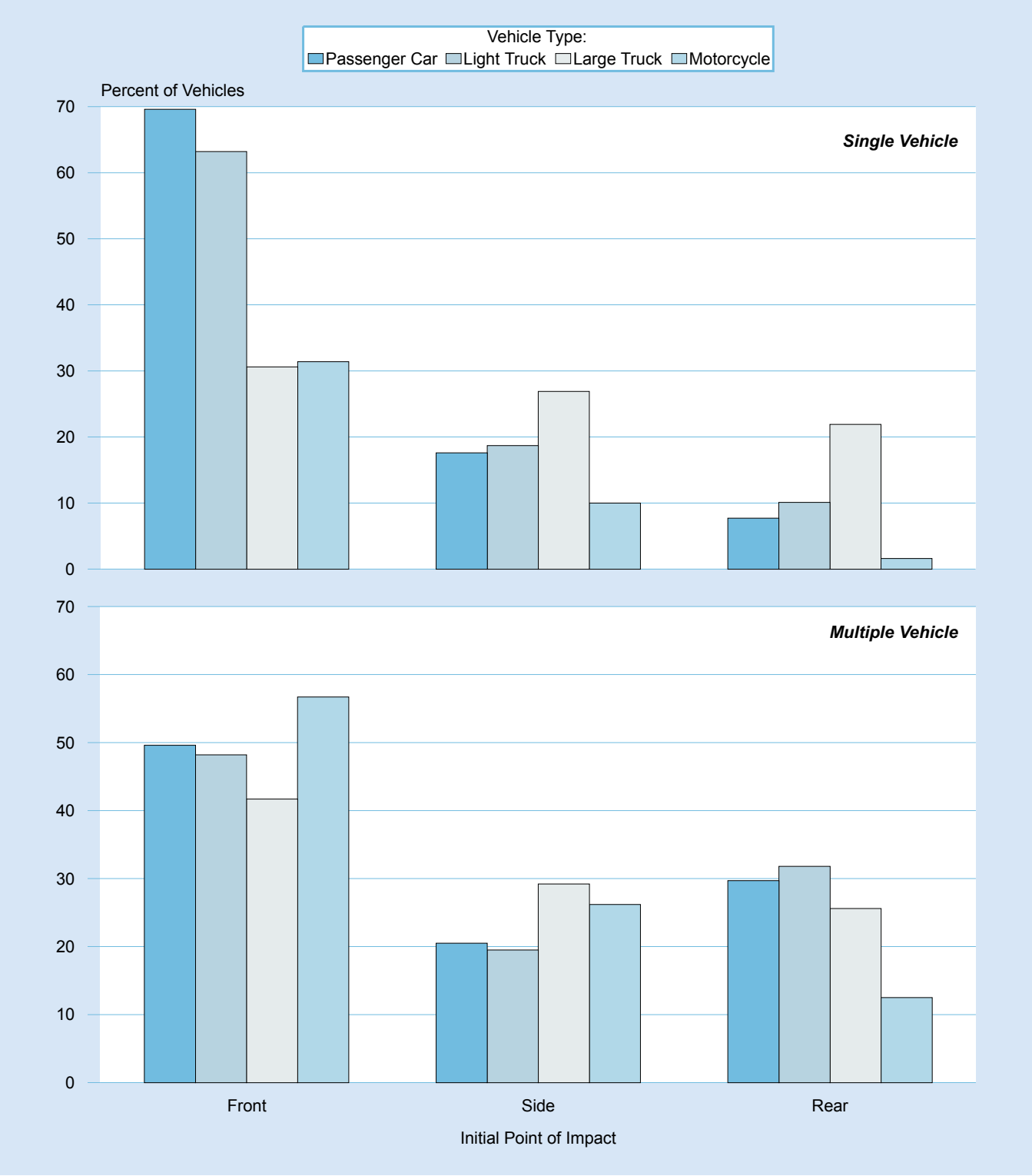


Figure 16

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



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

Table 42

Passenger Cars Involved in Fatal Crashes by Most Harmful Event

Most Harmful Event	Number	Percent
Collision with Motor Vehicle in Transport by Initial Point of Impact:		
Front	6,928	33.2
Left Side	1,788	8.6
Right Side	1,496	7.2
Rear	1,397	6.7
Other/Unknown	182	0.9
Subtotal	*11,791*	*56.6*
Collision with Fixed Object	**3,520**	**16.9**
Collision with Object Not Fixed:		
Nonoccupant	2,990	14.3
Other	501	2.4
Subtotal	*3,491*	*16.8*
Noncollision	**2,025**	**9.7**
Total	***20,839**	**100.0**

*Includes 12 passenger cars involved in fatal crashes with unknown most harmful event.

Table 43

Passenger Cars Involved in Fatal Crashes by Initial Point of Impact and Crash Type

Initial Point of Impact	Number	Percent
Single-Vehicle Crashes		
Front	5,177	65.2
Left Side	601	7.6
Right Side	600	7.6
Rear	138	1.7
Noncollision	606	7.6
Other/Unknown	818	10.3
Total	**7,940**	**100.0**
Multiple-Vehicle Crashes		
Front	7,539	58.4
Left Side	1,895	14.7
Right Side	1,595	12.4
Rear	1,482	11.5
Noncollision	26	0.2
Other/Unknown	362	2.8
Total	**12,899**	**100.0**
All Crashes		
Front	12,716	61.0
Left Side	2,496	12.0
Right Side	2,195	10.5
Rear	1,620	7.8
Noncollision	632	3.0
Other/Unknown	1,180	5.7
Total	**20,839**	**100.0**

Table 44

Light Trucks Involved in Fatal Crashes by Most Harmful Event

Most Harmful Event	Number	Percent
Collision with Motor Vehicle in Transport by Initial Point of Impact:		
Front	7,378	36.8
Left Side	1,149	5.7
Right Side	840	4.2
Rear	1,199	6.0
Other/Unknown	144	0.7
Subtotal	*10,710*	*53.4*
Collision with Fixed Object	**2,597**	**12.9**
Collision with Object Not Fixed:		
Nonmotorist	2,962	14.8
Other	482	2.4
Subtotal	*3,444*	*17.2*
Noncollision	**3,300**	**16.4**
Total	***20,069**	**100.0**

*Includes 18 light trucks involved in fatal crashes with unknown first harmful event.

Table 45

Light Trucks Involved in Fatal Crashes by Initial Point of Impact and Crash Type

Initial Point of Impact	Number	Percent
Single-Vehicle Crashes		
Front	4,941	60.7
Left Side	438	5.4
Right Side	481	5.9
Rear	116	1.4
Noncollision	1,457	17.9
Other/Unknown	705	8.7
Total	**8,138**	**100.0**
Multiple-Vehicle Crashes		
Front	7,989	67.0
Left Side	1,269	10.6
Right Side	950	8.0
Rear	1,364	11.4
Noncollision	60	0.5
Other/Unknown	299	2.5
Total	**11,931**	**100.0**
All Crashes		
Front	12,930	64.4
Left Side	1,707	8.5
Right Side	1,431	7.1
Rear	1,480	7.4
Noncollision	1,517	7.6
Other/Unknown	1,004	5.0
Total	**20,069**	**100.0**

Table 46

Large Trucks Involved in Fatal Crashes by Most Harmful Event

Most Harmful Event	Number	Percent
Collision with Motor Vehicle in Transport by Initial Point of Impact:		
Front	1,799	42.7
Left Side	358	8.5
Right Side	175	4.2
Rear	707	16.8
Other/Unknown	71	1.7
Subtotal	*3,110*	*73.8*
Collision with Fixed Object	**174**	**4.1**
Collision with Object Not Fixed:		
Nonoccupant	415	9.9
Other	103	2.4
Subtotal	*518*	*12.3*
Noncollision	**406**	**9.6**
Total	***4,213**	**100.0**

*Includes 5 large trucks involved in fatal crashes with unknown first harmful event.

Table 47

Large Trucks Involved in Fatal Crashes by Initial Point of Impact and Crash Type

Initial Point of Impact	Number	Percent
Single-Vehicle Crashes		
Front	461	54.9
Left Side	38	4.5
Right Side	75	8.9
Rear	26	3.1
Noncollision	163	19.4
Other/Unknown	77	9.2
Total	**840**	**100.0**
Multiple-Vehicle Crashes		
Front	1,926	57.1
Left Side	392	11.6
Right Side	187	5.5
Rear	733	21.7
Noncollision	32	0.9
Other/Unknown	103	3.1
Total	**3,373**	**100.0**
All Crashes		
Front	2,387	56.7
Left Side	430	10.2
Right Side	262	6.2
Rear	759	18.0
Noncollision	195	4.6
Other/Unknown	180	4.3
Total	**4,213**	**100.0**

Table 48
Large Trucks Involved in Fatal Crashes by Truck Type and Rollover Occurrence

Truck Type	Rollover Occurrence				Total	
	Yes		No			
	Number	Percent	Number	Percent	Number	Percent
Single-Unit Truck	188	15.6	1,020	84.4	**1,208**	**100.0**
Combination Truck	399	13.3	2,606	86.7	**3,005**	**100.0**
Total	**587**	**13.9**	**3,626**	**86.1**	**4,213**	**100.0**

Table 49
Truck Tractors with Trailers Involved in Fatal Crashes by Number of Trailers and Jackknife Occurrence

Number of Trailers	Jackknife Occurrence				Total	
	Yes		No			
	Number	Percent	Number	Percent	Number	Percent
One	165	6.3	2,455	93.7	**2,620**	**100.0**
Two or More	11	9.6	104	90.4	**115**	**100.0**
Total	**176**	**6.4**	**2,559**	**93.6**	**2,735**	**100.0**

Table 50
Motorcycles Involved in Fatal Crashes by Most Harmful Event

Most Harmful Event	Number	Percent
Collision with Motor Vehicle in Transport by Initial Point of Impact:		
Front	2,102	38.8
Left Side	215	4.0
Right Side	167	3.1
Rear	264	4.9
Other/Unknown	228	4.2
Subtotal	*2,976*	*54.9*
Collision with Fixed Object	**1,248**	**23.0**
Collision with Object Not Fixed:		
Nonmotorist	54	1.0
Other	225	4.2
Subtotal	*279*	*5.1*
Noncollision	**911**	**16.8**
Total	***5,421**	**100.0**

*Includes 7 motorcycles involved in fatal crashes with unknown most harmful event.

Table 51

Motorcycles Involved in Fatal Crashes by Initial Point of Impact and Crash Type

Initial Point of Impact	Number	Percent
Single-Vehicle Crashes		
Front	921	43.6
Left Side	86	4.1
Right Side	125	5.9
Rear	10	0.5
Noncollision	675	31.9
Other/Unknown	296	14.0
Total	**2,113**	**100.0**
Multiple-Vehicle Crashes		
Front	2,191	66.2
Left Side	240	7.3
Right Side	193	5.8
Rear	276	8.3
Noncollision	284	8.6
Other/Unknown	124	3.7
Total	**3,308**	**100.0**
All Crashes		
Front	3,112	57.4
Left Side	326	6.0
Right Side	318	5.9
Rear	286	5.3
Noncollision	959	17.7
Other/Unknown	420	7.7
Total	**5,421**	**100.0**

Table 52

Buses Involved in Fatal Crashes by Most Harmful Event

Most Harmful Event	Number	Percent
Collision with Motor Vehicle in Transport by Initial Point of Impact:		
Front	74	32.6
Left Side	13	5.7
Right Side	17	7.5
Rear	41	18.1
Other/Unknown	3	1.3
Subtotal	*148*	*65.2*
Collision with Fixed Object	**6**	**2.6**
Collision with Object Not Fixed:		
Nonoccupant	62	27.3
Other	5	2.2
Subtotal	*67*	*29.5*
Noncollision	**6**	**2.6**
Total	**227**	**100.0**

Table 53

Buses Involved in Fatal Crashes by Initial Point of Impact and Crash Type

Initial Point of Impact	Number	Percent
Single-Vehicle Crashes		
Front	39	53.4
Left Side	4	5.5
Right Side	10	13.7
Rear	3	4.1
Noncollision	5	6.8
Other/Unknown	12	16.4
Total	**73**	**100.0**
Multiple-Vehicle Crashes		
Front	75	48.7
Left Side	15	9.7
Right Side	17	11.0
Rear	43	27.9
Noncollision	0	0.0
Other/Unknown	4	2.6
Total	**154**	**100.0**
All Crashes		
Front	114	50.2
Left Side	19	8.4
Right Side	27	11.9
Rear	46	20.3
Noncollision	5	2.2
Other/Unknown	16	7.0
Total	**227**	**100.0**

Chapter 4

PEOPLE

CHAPTER 4 ■ PEOPLE

This chapter presents statistics about the Drivers, Passengers, Pedestrians, and Pedalcyclists involved in police-reported fatal motor vehicle crashes in 2016. The tables and figures are presented in nine groups: all persons killed, 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 37,461 people lost their lives in motor vehicle crashes in 2016.
- The majority of persons killed in traffic crashes were drivers (50 percent), followed by passengers (17 percent), pedestrians (16 percent), motorcyclists (14 percent), and pedalcyclists (2 percent).
- Per 100,000 population, persons 21 to 24 years old had the highest fatality rate. Children 5 to 9 years old had the lowest fatality rate per 100,000 population.
- For every age group except children less than 5 years old, the fatality rate per 100,000 population was lower for females than for males.
- Of the persons who were killed in traffic crashes in 2016, 28 percent died in alcohol-impaired driving crashes.

Table 54
Persons Killed, by Person Type

Person Type	Persons Killed
Vehicle Occupants	
Driver	18,610
Passenger	6,407
Unknown Occupant	79
Subtotal	*25,096*
Motorcyclists	**5,286**
Nonoccupants	
Pedestrian	5,987
Pedalcyclist	840
Other/Unknown	252
Subtotal	*7,079*
Total	**37,461**

*Less than 500.

Table 55
Persons Killed, by Age

Age (Years)	Persons Killed
<5	394
5-9	379
10-15	657
16-20	3,202
21-24	3,590
25-34	6,891
35-44	4,985
45-54	5,317
55-64	5,163
65-74	3,412
>74	3,352
Total	***37,461**

*Includes 119 fatalities of unknown age.

Table 56
Persons Killed, by Sex

Sex	Persons Killed
Male	26,515
Female	10,900
Total	***37,461**

*Includes 46 fatalities of unknown sex.

Figure 17
Percent of Persons Killed, by Age

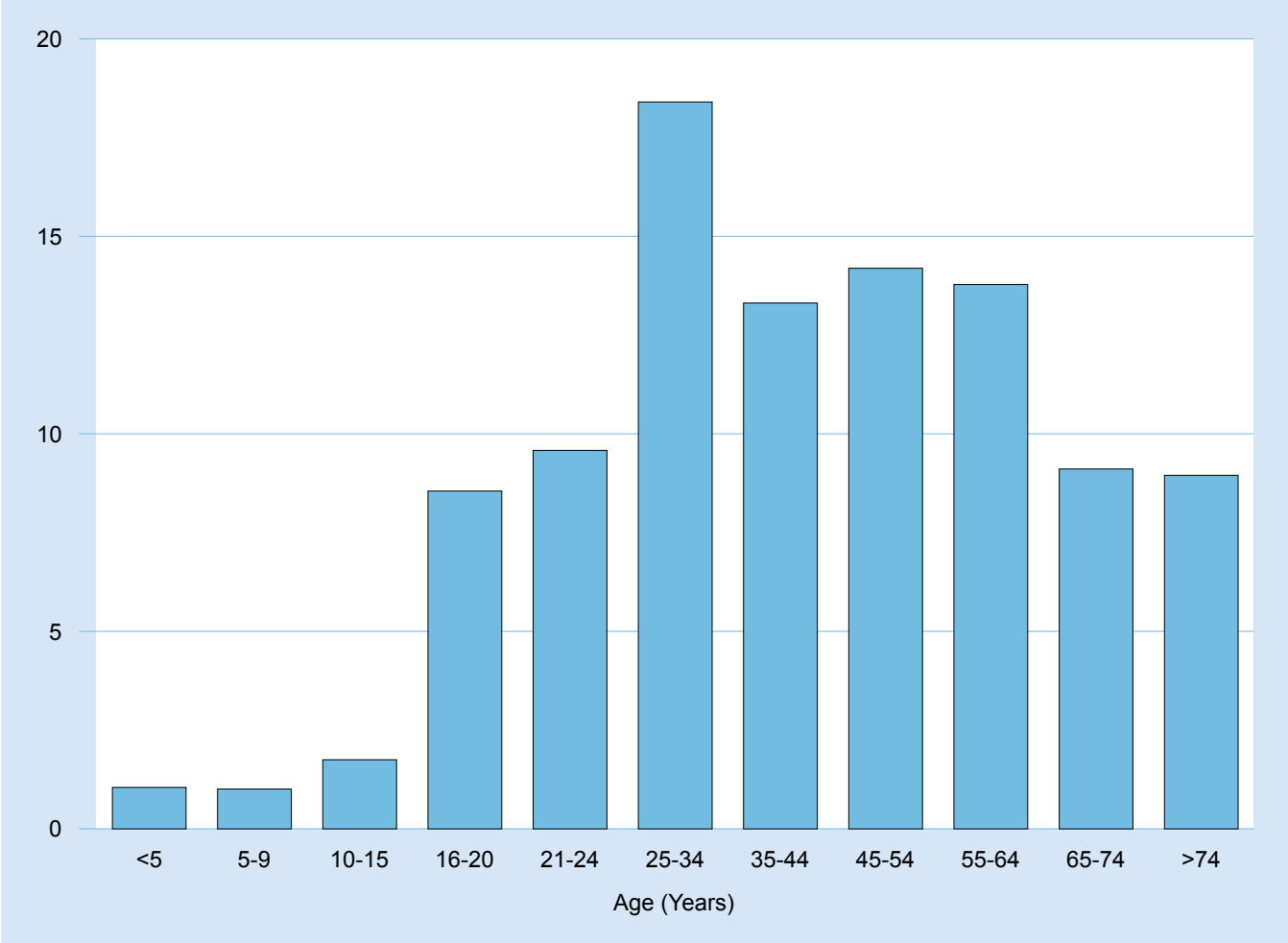


Table 57
Persons Killed and Fatality Rates per 100,000 Population, by Age and Sex

Age (Years)	Male			Female			Total		
	Killed	Population (Thousands)	Rate	Killed	Population (Thousands)	Rate	Killed	Population (Thousands)	Rate
<5	193	10,187	1.89	201	9,740	2.06	**394**	**19,927**	**1.98**
5-9	211	10,430	2.02	168	10,000	1.68	**379**	**20,430**	**1.86**
10-15	379	12,661	2.99	278	12,154	2.29	**657**	**24,815**	**2.65**
16-20	2,164	10,857	19.93	1,037	10,362	10.01	**3,202**	**21,219**	**15.09**
21-24	2,660	9,294	28.62	927	8,801	10.53	**3,590**	**18,095**	**19.84**
25-34	5,084	22,600	22.50	1,805	22,078	8.18	**6,891**	**44,677**	**15.42**
35-44	3,723	20,153	18.47	1,260	20,317	6.20	**4,985**	**40,470**	**12.32**
45-54	3,876	21,106	18.36	1,441	21,681	6.65	**5,317**	**42,787**	**12.43**
55-64	3,850	19,999	19.25	1,310	21,464	6.10	**5,163**	**41,463**	**12.45**
65-74	2,314	13,391	17.28	1,098	15,239	7.21	**3,412**	**28,630**	**11.92**
>74	2,003	8,402	23.84	1,348	12,212	11.04	**3,352**	**20,614**	**16.26**
Unknown	58	*	*	27	*	*	**119**	*	*
Total	**26,515**	**159,079**	**16.67**	**10,900**	**164,049**	**6.64**	****37,461**	**323,128**	**11.59**

*Not applicable.
**Includes 46 fatalities of unknown sex.
Note: Totals may not equal sum of components due to independent rounding.
Source: Population—U.S. Bureau of the Census.

Figure 18
Fatality Rates per 100,000 Population, by Age and Sex

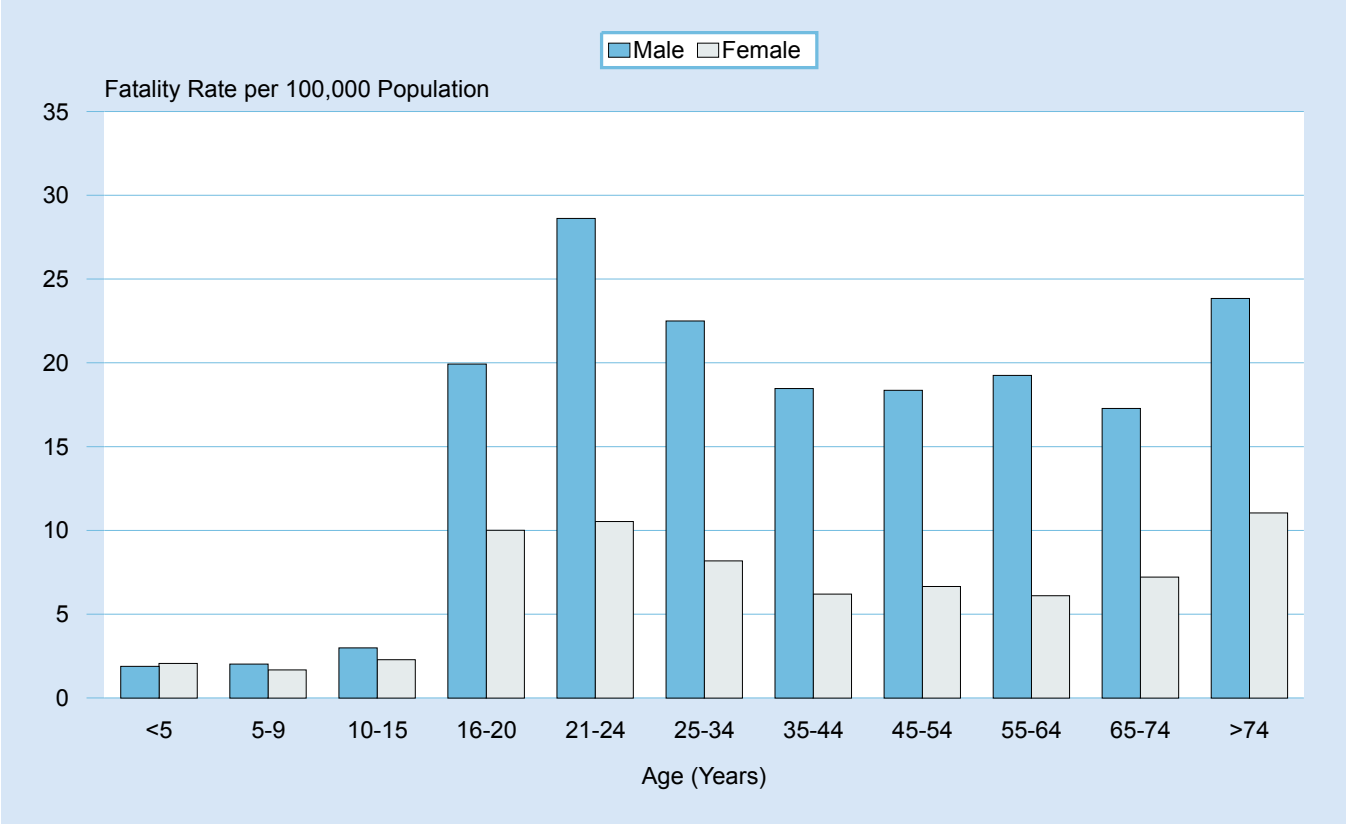


Table 58
Persons Killed in Crashes, by Weather Condition and Light Condition

Weather Condition	Light Condition					Total
	Daylight	Dark, But Lighted	Dark	Dawn or Dusk	Other	
Normal	15,557	6,307	8,956	1,288	8	**32,177**
Rain	991	524	750	98	3	**2,371**
Snow/Sleet	239	54	166	21	0	**482**
Other	138	60	244	41	3	**492**
Unknown	861	269	594	75	0	**1,939**
Total	**17,786**	**7,214**	**10,710**	**1,523**	**14**	***37,461**

*Includes 214 fatalities in crashes with unknown light conditions.

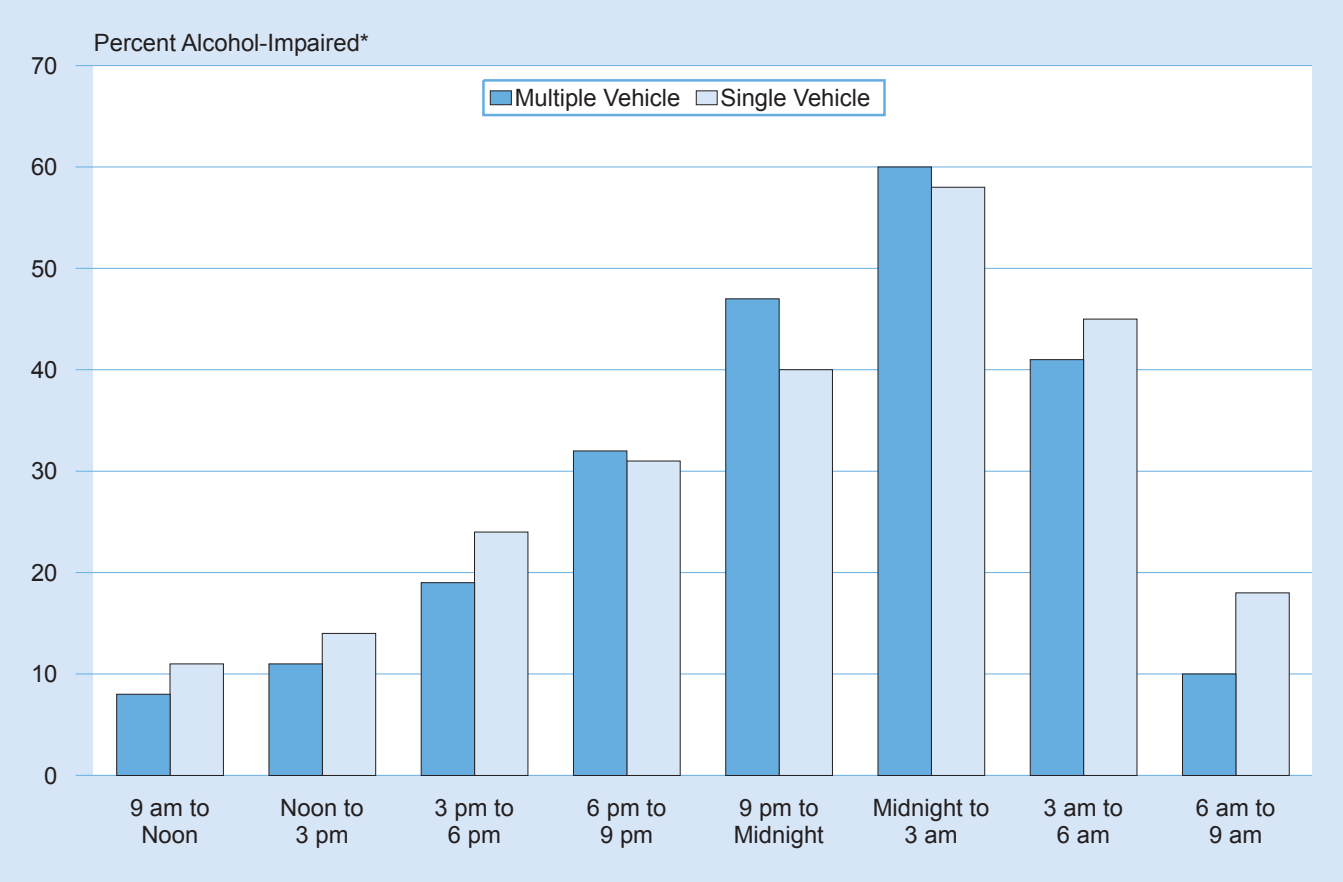
Table 59
Persons Killed in Crashes and Percent Alcohol-Impaired Driving Fatalities, by Time of Day and Crash Type

Time of Day	Crash Type						Total		
	Single Vehicle			Multiple Vehicle					
	Number	Alcohol-Impaired Driving*		Number	Alcohol-Impaired Driving*		Number	Alcohol-Impaired Driving*	
		Number	Percent		Number	Percent		Number	Percent
Midnight to 3 am	3,131	1,690	54	1,250	792	63	**4,381**	**2,482**	**57**
3 am to 6 am	2,190	910	42	1,075	478	45	**3,265**	**1,389**	**43**
6 am to 9 am	1,889	318	17	1,757	172	10	**3,646**	**490**	**13**
9 am to Noon	1,624	162	10	1,869	167	9	**3,493**	**329**	**9**
Noon to 3 pm	2,105	250	12	2,682	282	11	**4,787**	**532**	**11**
3 pm to 6 pm	2,734	608	22	3,247	573	18	**5,981**	**1,181**	**20**
6 pm to 9 pm	3,692	1,062	29	2,563	774	30	**6,255**	**1,836**	**29**
9 pm to Midnight	3,481	1,297	37	1,892	860	45	**5,373**	**2,157**	**40**
Unknown	256	94	37	24	7	30	**280**	**101**	**36**
Total	**21,102**	**6,391**	**30**	**16,359**	**4,105**	**25**	**37,461**	**10,497**	**28**

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

Figure 19

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



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

Table 60
Persons Killed in Work Zones, by Roadway Function Class and Person Type

Roadway Function Class	Person Type					Total
	Driver*	Passenger**	Pedestrian	Pedalcyclist	Other Nonoccupant	
Principal Arterial						
Interstate	176	83	33	1	1	**294**
Freeway/Expressway	43	12	11	0	0	**66**
Other	135	33	30	6	1	**205**
Minor Arterial	56	28	16	3	2	**105**
Collector	34	7	14	1	1	**57**
Local Road or Street	13	3	6	0	0	**22**
Unknown	11	1	2	1	0	**15**
Total	**468**	**167**	**112**	**12**	**5**	**764**

*Includes motorcycle riders.
**Includes motorcycle passengers.

Table 61
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	1	1	**1**	**1**
Ambulance Passenger	5	1	5	1	**10**	**2**
Occupant of Other Vehicle	0	0	16	7	**16**	**7**
Pedestrian	1	0	0	0	**1**	**0**
Pedalcyclist	0	0	0	0	**0**	**0**
Total	**6**	**1**	**22**	**9**	**28**	**10**
Fire Truck						
Fire Truck Driver	3	2	1	1	**4**	**3**
Fire Truck Passenger	3	0	0	0	**3**	**0**
Occupant of Other Vehicle	0	0	12	10	**12**	**10**
Pedestrian	2	1	2	1	**4**	**2**
Pedalcyclist	0	0	0	0	**0**	**0**
Total	**8**	**3**	**15**	**12**	**23**	**15**
Police Vehicle						
Police Vehicle Driver	7	6	11	8	**18**	**14**
Police Vehicle Passenger	0	0	1	0	**1**	**0**
Occupant of Other Vehicle	0	0	42	18	**42**	**18**
Pedestrian	16	2	2	1	**18**	**3**
Pedalcyclist	2	2	0	0	**2**	**2**
Total	**25**	**10**	**56**	**27**	**81**	**37**

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

Figure 20

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

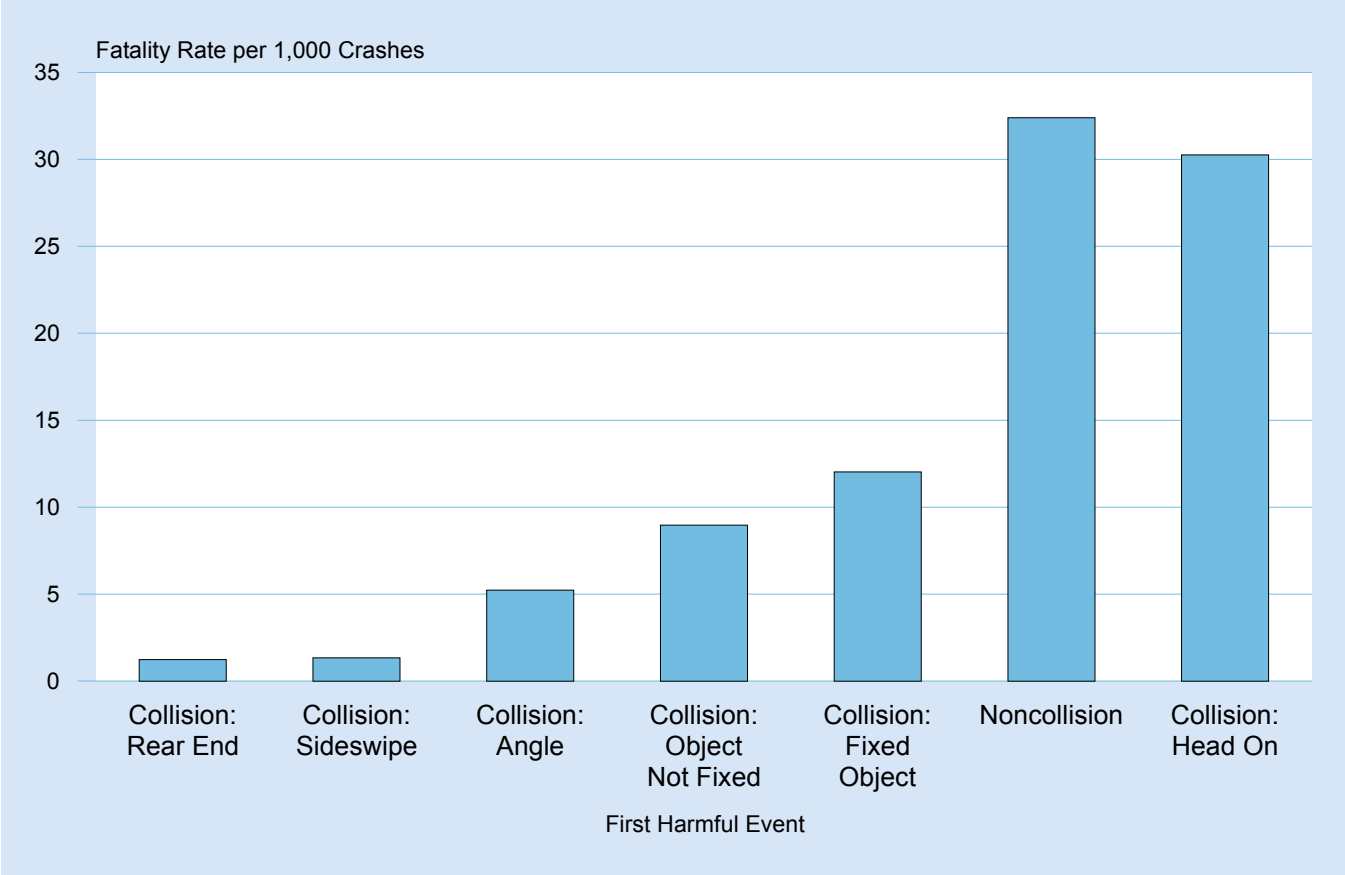


Figure 21

Fatality Rates per 1,000 Crashes, by Time of Day

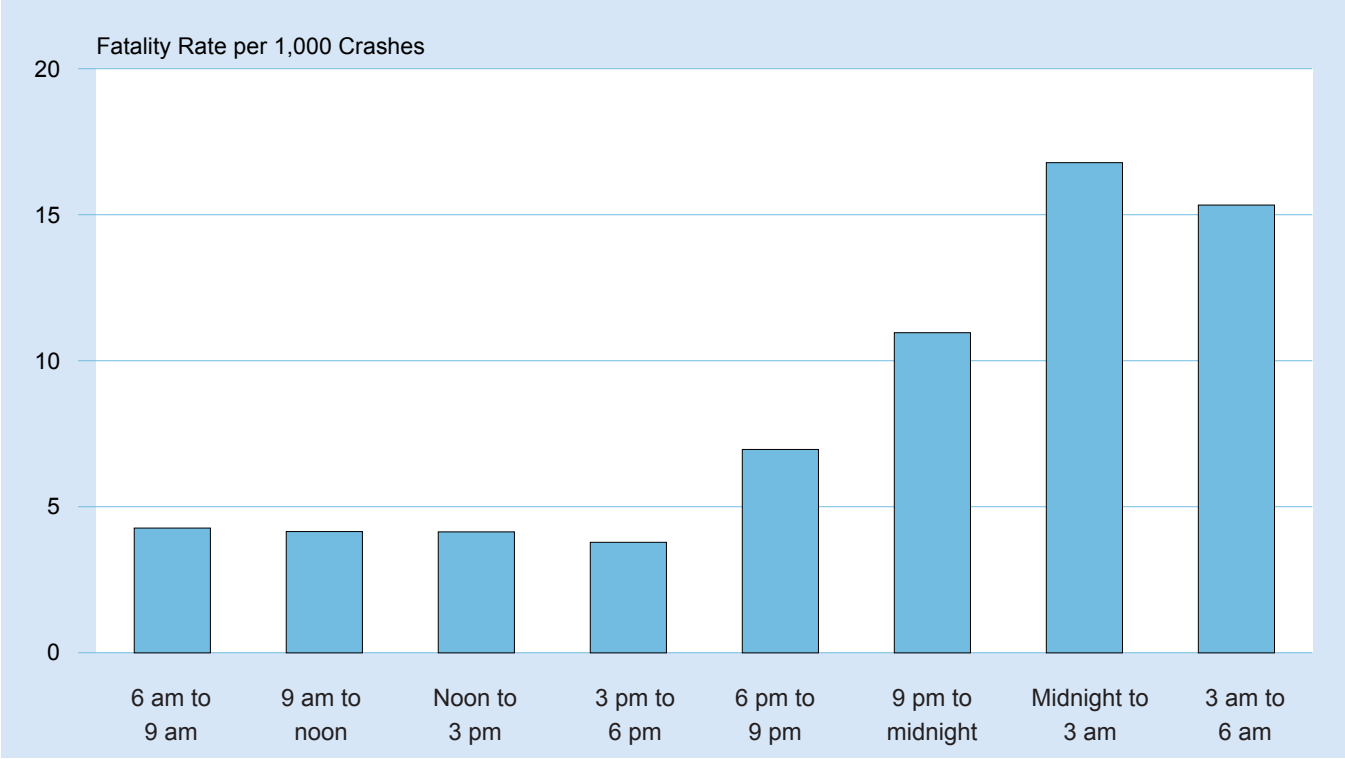


Table 62

Driver Involvement Rates in Fatal Crashes per 100,000 Licensed Drivers, by Age and Sex

Age (Years)	Sex				Total	
	Male		Female			
	Drivers	Involvement Rate	Drivers	Involvement Rate	Drivers	Involvement Rate
<16	125	*	54	*	**179**	*
16-20	3,061	50.24	1,348	22.81	**4,412**	**36.76**
21-24	3,851	52.68	1,379	19.29	**5,233**	**36.19**
25-34	7,986	40.89	2,824	14.36	**10,815**	**27.59**
35-44	6,095	33.69	2,018	10.96	**8,116**	**22.24**
45-54	5,988	30.62	1,954	9.84	**7,946**	**20.16**
55-64	5,335	28.33	1,629	8.33	**6,966**	**18.15**
65-74	2,994	23.55	1,127	8.44	**4,122**	**15.81**
>74	2,042	27.49	929	11.32	**2,971**	**19.00**
Unknown	87	*	17	*	**1,154**	*
Total	**37,564**	**34.28**	**13,279**	**11.84**	****51,914**	**23.42**

*Not applicable.

**Includes 1,071 drivers of unknown sex.

Notes: Drivers include motorcycle riders. Some States include restricted driver licenses and graduated driver licenses in their licensed driver counts.

Source: Licensed Drivers—Federal Highway Administration.

Figure 22

Driver Involvement Rates in Fatal Crashes per 100,000 Licensed Drivers, by Age and Sex

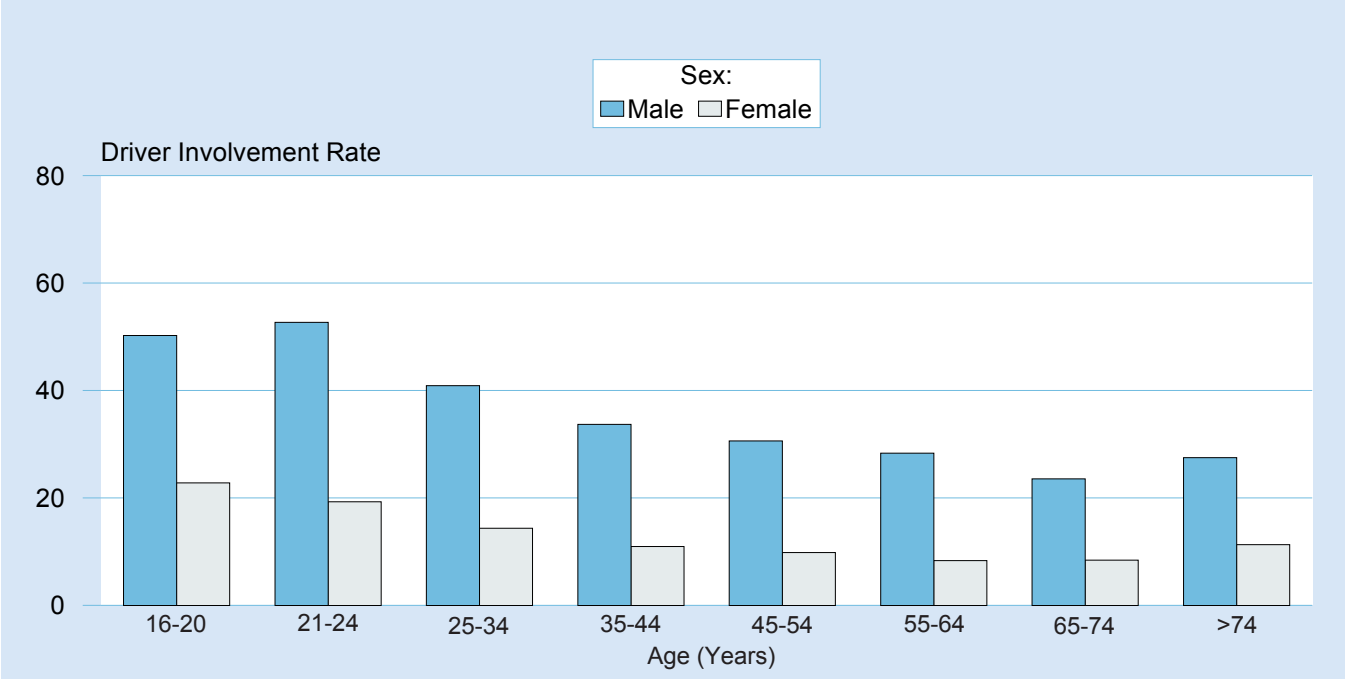


Table 63

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

Previous Convictions	Valid License (42,944)		Invalid License (7,304)		Total (50,248)	
	Number	Percent	Number	Percent	Number	Percent
Previous Recorded Crashes	6,958	16.2	1,141	15.6	**8,099**	**16.1**
Previous Recorded Suspensions or Revocations	4,515	10.5	3,130	42.9	**7,645**	**15.2**
Previous DWI Convictions	998	2.3	829	11.3	**1,827**	**3.6**
Previous Speeding Convictions	8,884	20.7	1,504	20.6	**10,388**	**20.7**
Previous Other Harmful Moving Convictions	8,502	19.8	2,120	29.0	**10,622**	**21.1**
Drivers with No Previous Convictions	24,243	56.5	3,129	42.8	**27,372**	**54.5**

Notes: Table does not include 1,666 drivers with unknown license compliance. FARS records prior driving records (convictions only, not violations) for events occurring within 5 years of the date of the crash. The same driver can have one or more of these convictions. License type compliance refers to the type of drivers license possessed or not possessed by the driver for the class of vehicle being driven at the time of the crash.

Table 64

Related Factors for Drivers and Motorcycle Riders Involved in Fatal Crashes

Factors	Number	Percent
Driving too fast for conditions or in excess of posted speed limit	9,234	17.8
Under the influence of alcohol, drugs or medication	5,592	10.8
Failure to keep in proper lane or running off road	3,890	7.5
Failure to yield right of way	3,659	7.0
Distracted (phone, talking, eating, etc.)	3,210	6.2
Operating vehicle in a careless manner	2,696	5.2
Failure to obey traffic signs, signals, or officer	2,064	4.0
Operating vehicle in erratic, reckless, or negligent manner	2,002	3.9
Overcorrecting/oversteering	1,967	3.8
Vision obscured (rain, snow, glare, lights, building, trees, etc.)	1,566	3.0
Drowsy, asleep, fatigued, ill, or blackout	1,310	2.5
Swerving or avoiding due to wind, slippery surface, vehicle, object, nonmotorist in roadway, etc.	1,307	2.5
Driving wrong way on one-way trafficway or on wrong side of road	1,169	2.3
Making improper turn	348	0.7
Other factors	6,130	11.8
None reported	15,970	30.8
Unknown	8,479	16.3
Total Drivers	**51,914**	**100.0**

Notes: 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 65

Vehicle Occupants Killed, by Vehicle Type and Person Type

Vehicle and Person Type	Occupants Killed
Passenger Car	
Drivers	9,913
Passengers	3,471
Unknown	28
Subtotal	*13,412*
Light Truck	
Drivers	7,567
Passengers	2,704
Unknown	31
Subtotal	*10,302*
Large Truck	
Drivers	638
Passengers	80
Unknown	4
Subtotal	*722*
Bus	*40*
Other/Unknown	*620*
Subtotal*	***25,096***
Motorcycle	
Riders	4,950
Passengers	333
Unknown	3
Subtotal	***5,286***
Total	**30,382**

*Excluding motorcycles.

Table 66

Vehicle Occupants Killed in Crashes, by Speed Limit and Crash Type

Speed Limit	Crash Type				Total	
	Single Vehicle		Multiple Vehicle			
	Number	Percent	Number	Percent	Number	Percent
30 mph or less	1,547	10.6	1,060	6.7	**2,607**	**8.6**
35 or 40 mph	2,341	16.0	2,356	14.9	**4,697**	**15.5**
45 or 50 mph	2,563	17.5	3,133	19.9	**5,696**	**18.7**
55 mph	4,297	29.4	4,622	29.3	**8,919**	**29.4**
60 mph or higher	3,389	23.2	3,826	24.3	**7,215**	**23.7**
No Statutory Limit	56	0.4	127	0.8	**183**	**0.6**
Unknown	424	2.9	641	4.1	**1,065**	**3.5**
Total	**14,617**	**100.0**	**15,765**	**100.0**	**30,382**	**100.0**

Table 67

Vehicle Occupants 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	605	23.2	1,809	69.4	193	7.4	**2,607**	**100.0**
35 or 40 mph	1,368	29.1	3,021	64.3	308	6.6	**4,697**	**100.0**
45 or 50 mph	2,614	45.9	2,937	51.6	145	2.5	**5,696**	**100.0**
55 mph	7,090	79.5	1,776	19.9	53	0.6	**8,919**	**100.0**
60 mph or higher	4,725	65.5	2,413	33.4	77	1.1	**7,215**	**100.0**
No Statutory Limit	99	54.1	72	39.3	12	6.6	**183**	**100.0**
Unknown	422	39.6	565	53.1	78	7.3	**1,065**	**100.0**
Total	**16,923**	**55.7**	**12,593**	**41.4**	**866**	**2.9**	**30,382**	**100.0**

Figure 23

Percent of Vehicle Occupants Killed, by Speed Limit and Land Use

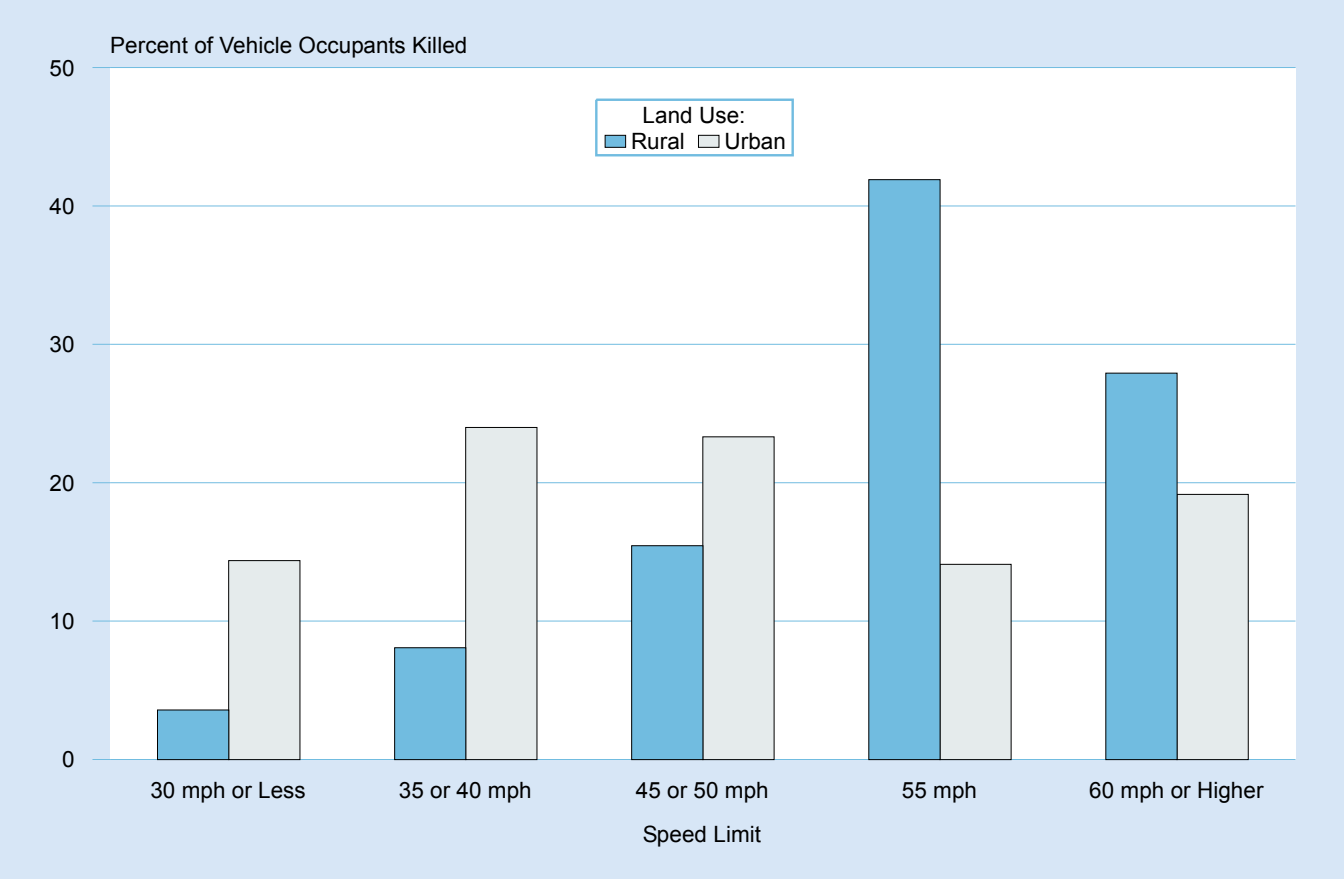


Table 68

Vehicle Occupants Killed, by Sex and Vehicle Type

Sex	Vehicle Type							Total
	Passenger Cars	Light Trucks	Large Trucks	Buses	Other/ Unknown	Subtotal	Motorcycles	
Male	8,126	7,285	692	17	496	*16,616*	*4,825*	**21,441**
Female	5,283	3,011	30	23	121	*8,468*	*458*	**8,926**
Unknown	3	6	0	0	3	*12*	*3*	**15**
Total	**13,412**	**10,302**	**722**	**40**	**620**	***25,096***	***5,286***	**30,382**

Table 69
Vehicle Occupants Killed, by Age and Vehicle Type

Age (Years)	Vehicle Type							Total
	Passenger Cars	Light Trucks	Large Trucks	Buses	Other/ Unknown	Subtotal	Motorcycles	
<5	172	125	0	1	6	*304*	*0*	**304**
5-9	131	139	3	6	6	*285*	*3*	**288**
10-15	200	184	3	3	52	*442*	*21*	**463**
16-20	1,649	849	9	1	53	*2,561*	*271*	**2,832**
21-24	1,669	896	29	1	49	*2,644*	*529*	**3,173**
25-34	2,641	1,884	89	0	102	*4,716*	*1,173*	**5,889**
35-44	1,578	1,380	159	1	84	*3,202*	*853*	**4,055**
45-54	1,348	1,430	174	6	81	*3,039*	*1,034*	**4,073**
55-64	1,295	1,411	166	8	79	*2,959*	*915*	**3,874**
65-74	1,106	1,024	77	7	57	*2,271*	*393*	**2,664**
>74	1,606	968	11	6	48	*2,639*	*89*	**2,728**
Unknown	17	12	2	0	3	*34*	*5*	**39**
Total	**13,412**	**10,302**	**722**	**40**	**620**	***25,096***	***5,286***	**30,382**

Table 70
Vehicle Occupants Killed, 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
<5	0	0.0	0	0.0	**0**	**0.0**	143	47.0	161	53.0	**304**	**100.0**
5-9	2	66.7	1	33.3	**3**	**100.0**	150	52.6	135	47.4	**285**	**100.0**
10-15	64	76.2	20	23.8	**84**	**100.0**	186	49.1	193	50.9	**379**	**100.0**
16-20	1,363	73.0	502	26.9	**1,866**	**100.0**	543	56.2	423	43.8	**966**	**100.0**
21-24	1,920	78.9	510	21.0	**2,432**	**100.0**	433	58.4	308	41.6	**741**	**100.0**
25-34	3,790	78.9	1,011	21.0	**4,803**	**100.0**	579	53.3	507	46.7	**1,086**	**100.0**
35-44	2,700	80.0	673	19.9	**3,374**	**100.0**	345	50.7	336	49.3	**681**	**100.0**
45-54	2,687	77.7	769	22.3	**3,456**	**100.0**	267	43.3	350	56.7	**617**	**100.0**
55-64	2,659	80.1	659	19.8	**3,320**	**100.0**	211	38.1	343	61.9	**554**	**100.0**
65-74	1,646	74.5	564	25.5	**2,210**	**100.0**	126	27.8	328	72.2	**454**	**100.0**
>74	1,381	69.3	613	30.7	**1,994**	**100.0**	224	30.5	510	69.5	**734**	**100.0**
Unknown	9	50.0	3	16.7	**18**	**100.0**	13	61.9	7	33.3	**21**	**100.0**
Total	**18,221**	**77.3**	**5,325**	**22.6**	***23,560**	**100.0**	**3,220**	**47.2**	**3,601**	**52.8**	****6,822**	**100.0**

*Includes 14 drivers of unknown sex.
**Includes 1 passenger of unknown sex.
Note: Drivers include motorcycle riders; passengers include motorcycle passengers.

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

	Most Harmful Event									
	Collision with									
	Motor Vehicle in Transport		Object Not Fixed		Fixed Object		Noncollision		Total	
Vehicle Type	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Passenger Car	7,208	53.7	255	1.9	3,763	28.1	2,179	16.2	**13,412**	**100.0**
Light Truck	3,929	38.1	234	2.3	2,700	26.2	3,426	33.3	**10,302**	**100.0**
Large Truck	187	25.9	25	3.5	166	23.0	341	47.2	**722**	**100.0**
Bus	12	30.0	1	2.5	8	20.0	19	47.5	**40**	**100.0**
Other/Unknown	169	27.3	21	3.4	130	21.0	275	44.4	**620**	**100.0**
Subtotal	*11,505*	*45.8*	*536*	*2.1*	*6,767*	*27.0*	*6,240*	*24.9*	***25,096***	***100.0***
Motorcycle	*2,892*	*54.7*	*224*	*4.2*	*1,267*	*24.0*	*896*	*17.0*	***5,286***	***100.0***
Total	**14,397**	**47.4**	**760**	**2.5**	**8,034**	**26.4**	**7,136**	**23.5**	***30,382**	**100.0**

*Includes 55 fatalities with unknown most harmful event.

Table 72
Vehicle Occupants Killed, by Initial Point of Impact and Vehicle Type

	Vehicle Type							
Initial Point of Impact	Passenger Cars	Light Trucks	Large Trucks	Buses	Other/ Unknown	Subtotal	Motorcycles	Total
Front	7,188	5,517	393	15	210	*13,323*	*3,071*	**16,394**
Left Side	2,037	1,066	54	3	40	*3,200*	*302*	**3,502**
Right Side	1,831	919	39	2	29	*2,820*	*313*	**3,133**
Rear	834	494	16	1	64	*1,409*	*246*	**1,655**
Other	218	161	13	6	9	*407*	*20*	**427**
Noncollision	673	1,621	174	13	204	*2,685*	*956*	**3,641**
Unknown	631	524	33	0	64	*1,252*	*378*	**1,630**
Total	**13,412**	**10,302**	**722**	**40**	**620**	***25,096***	***5,286***	**30,382**

Table 73
Vehicle Occupants Killed, by Vehicle Type and Ejection

Vehicle Type	Ejected*		Not Ejected		Unknown		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Passenger Car	2,222	16.6	11,129	83.0	61	0.5	**13,412**	**100.0**
Light Truck	3,254	31.6	6,984	67.8	64	0.6	**10,302**	**100.0**
Large Truck	174	24.1	540	74.8	8	1.1	**722**	**100.0**
Bus	7	17.5	32	80.0	1	2.5	**40**	**100.0**
Other/Unknown	358	57.7	242	39.0	20	3.2	**620**	**100.0**
Total**	**6,015**	**24.0**	**18,927**	**75.4**	**154**	**0.6**	**25,096**	**100.0**

*Includes total and partial ejection.
**Excludes motorcyclists.

Table 74
Occupants Killed in Two-Vehicle Crashes, by Vehicle Types Involved

Vehicle Type	Occupants Killed	Vehicle Type	Occupants Killed	Total Occupants Killed
Passenger Car	—	Passenger Car	—	**2,030**
Passenger Car	2,882	Light Truck	875	**3,757**
Passenger Car	1,173	Large Truck	24	**1,197**
Passenger Car	13	Motorcycle	1,128	**1,141**
Passenger Car	60	Bus	4	**64**
Passenger Car	42	Other/Unknown	51	**93**
Light Truck	—	Light Truck	—	**1,679**
Light Truck	1,025	Large Truck	33	**1,058**
Light Truck	15	Motorcycle	1,259	**1,274**
Light Truck	39	Bus	1	**40**
Light Truck	53	Other/Unknown	71	**124**
Large Truck	—	Large Truck	—	**127**
Large Truck	0	Motorcycle	223	**223**
Large Truck	1	Bus	5	**6**
Large Truck	2	Other/Unknown	31	**33**
Motorcycle	—	Motorcycle	—	**93**
Motorcycle	27	Bus	0	**27**
Motorcycle	50	Other/Unknown	3	**53**
Bus	—	Bus	—	**2**
Other/Unknown	—	Other/Unknown	—	**18**
Total Occupants Killed				**13,039**

Table 75
Occupants Involved in Fatal Crashes and Occupant Fatalities, by Vehicle Body Type

Body Type	Occupants Involved No.	Occupants Involved %	Occupants Killed No.	Occupants Killed %
Passenger Cars	**31,494**	**40.6**	**13,412**	**44.1**
Convertible	503	0.6	256	0.8
2 Door Sedan, Hardtop, Coupe	3,366	4.3	1,620	5.3
3 Door/2 Door Hatchback	852	1.1	467	1.5
4 Door Sedan Hardtop	22,512	29.0	9,576	31.5
5 Door/4 Door Hatchback	1,214	1.6	462	1.5
Station Wagon	2,794	3.6	937	3.1
Hatchback, Doors Unknown	3	*	1	*
Other Auto	23	*	6	*
Unknown Auto	185	0.2	57	0.2
Auto-Based Pickup	19	*	14	*
3 Door Coupe	23	*	16	0.1
Light Trucks	**32,549**	**41.9**	**10,302**	**33.9**
Compact Utility	9,927	12.8	3,298	10.9
Large Utility	4,051	5.2	962	3.2
Utility Station Wagon	610	0.8	171	0.6
Utility, Unknown Body Type	3	*	1	*
Minivan	3,316	4.3	935	3.1
Large Van	1,242	1.6	264	0.9
Step Van	41	0.1	9	*
Other Van Type	27	*	6	*
Unknown Van Type	53	0.1	9	*
Compact Pickup	2,226	2.9	1,078	3.5
Standard Pickup	10,665	13.7	3,434	11.3
Pickup with Camper	42	0.1	15	*
Unknown Pickup Style Truck	35	*	11	*
Cab Chassis-Based Light Truck	234	0.3	87	0.3
Unknown Light Truck Type (Not Pickup)	23	*	7	*
Unknown Light Vehicle Type	54	0.1	15	*

Body Type	Occupants Involved No.	Occupants Involved %	Occupants Killed No.	Occupants Killed %
Large Trucks	**4,867**	**6.3**	**722**	**2.4**
Step Van	5	*	1	*
Single Unit Truck (10,000 lb < GVWR ≤ 19,500 lb)	284	0.4	45	0.1
Single Unit Truck (19,500 lb < GVWR ≤ 26,000 lb)	220	0.3	29	0.1
Single Unit Heavy Truck (GVWR > 26,000 lb)	594	0.8	80	0.3
Single Unit Truck, Unknown GVWR	313	0.4	50	0.2
Truck Tractor	3,113	4.0	470	1.5
Medium/Heavy Pickup (Ford Super Duty 450/550)	255	0.3	37	0.1
Unknown Medium Truck (10,000 lb < GVWR ≤ 26,000 lb)	15	*	3	*
Unknown Heavy Truck (GVWR > 26,000 lb)	10	*	1	*
Unknown Large Truck Type	53	0.1	6	*
Unknown Truck	5	*	0	0.0
Motorcycles	**6,020**	**7.8**	**5,286**	**17.4**
Motorcycle	5,620	7.2	4,924	16.2
Moped	140	0.2	133	0.4
Three Wheel Motorcycle or Moped	58	0.1	44	0.1
Off-Road Motorcycle (Two Wheel)	60	0.1	52	0.2
Other Motorcycle/Minibike	119	0.2	111	0.4
Unknown Motorcycle	23	*	22	0.1
Buses**	**859**	**1.1**	**40**	**0.1**
School Bus	287	0.4	9	*
Cross Country/Intercity Bus	96	0.1	6	*
Transit Bus	257	0.3	8	*
Van-Based Bus (GVWR > 10,000 lb)	16	*	3	*
Other Bus	195	0.3	14	*
Unknown Bus	8	*	0	0.0
Other Vehicles	**915**	**1.2**	**539**	**1.8**
Large Limousine	8	*	1	*
Medium/Heavy Truck-Based Motorhome	65	0.1	10	*
Camper/Motorhome Unknown Truck Type	29	*	8	*
All Terrain Vehicle	475	0.6	351	1.2
Snowmobile	18	*	16	0.1
Farm Equipment Except Trucks	104	0.1	49	0.2
Construction Equipment Except Trucks	19	*	4	*
Motorized Wheelchair	4	*	1	*
Golf Cart	63	0.1	32	0.1
Other Vehicle	130	0.2	67	0.2
Unknown	**908**	**1.2**	**81**	**0.3**
Not Reported	4	*	0	0.0
Unknown Body Type	904	1.2	81	0.3
Total	**77,612**	**100.0**	**30,382**	**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 76
Passenger Car Occupants Involved in Fatal Crashes and Occupants Killed, by Car Wheelbase Size

Passenger Car Wheelbase Size	Occupants Involved in Fatal Crashes		Occupants Killed		Percent of Occupants Killed by Car Wheelbase Size
	Number	Percent of Total	Number	Percent of Total	
Minicompact (under 95 inches)	227	0.7	138	1.0	60.8
Subcompact (95 to 99 inches)	1,784	5.7	924	6.9	51.8
Compact (100 to 104 inches)	7,583	24.1	3,634	27.1	47.9
Intermediate (105 to 109 inches)	11,924	37.9	4,938	36.8	41.4
Full Size (110 to 114 inches)	6,404	20.3	2,528	18.8	39.5
Largest Size (115 inches and over)	2,436	7.7	867	6.5	35.6
Unknown	1,136	3.6	383	2.9	33.7
Total	**31,494**	**100.0**	**13,412**	**100.0**	**42.6**

Table 77
Persons Killed and Alcohol-Impaired Driving Fatalities, by Person Type

Person Type	Total Killed	Alcohol-Impaired Driving Fatalities*	
		Number	Percent
Vehicle Occupants			
Driver	18,610	6,067	33
Passenger	6,407	1,880	29
Unknown Occupant	79	2	2
Subtotal	*25,096*	*7,949*	*32*
Motorcyclists	*5,286*	*1,600*	*30*
Nonoccupants			
Pedestrian	5,987	807	13
Pedalcyclist	840	91	11
Other/Unknown	252	50	20
Subtotal	*7,079*	*948*	*13*
Total	**37,461**	**10,497**	**28**

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

Table 78

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

Age (Years)	Driver's BAC								Total	
	.00		.01-.07		.08 or Higher*		.01 and Higher			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<16	157	87	7	4	15	8	23	13	**179**	**100**
16-20	3,567	81	182	4	663	15	845	19	**4,412**	**100**
21-24	3,594	69	271	5	1,368	26	1,639	31	**5,233**	**100**
25-34	7,463	69	482	4	2,870	27	3,352	31	**10,815**	**100**
35-44	6,032	74	317	4	1,767	22	2,084	26	**8,116**	**100**
45-54	6,125	77	304	4	1,517	19	1,821	23	**7,946**	**100**
55-64	5,739	82	240	3	987	14	1,227	18	**6,966**	**100**
65-74	3,642	88	116	3	365	9	480	12	**4,122**	**100**
>74	2,744	92	63	2	163	5	227	8	**2,971**	**100**
Unknown	922	80	63	5	170	15	233	20	**1,154**	**100**
Total	**39,985**	**77**	**2,044**	**4**	**9,885**	**19**	**11,929**	**23**	**51,914**	**100**

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

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

Figure 24

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

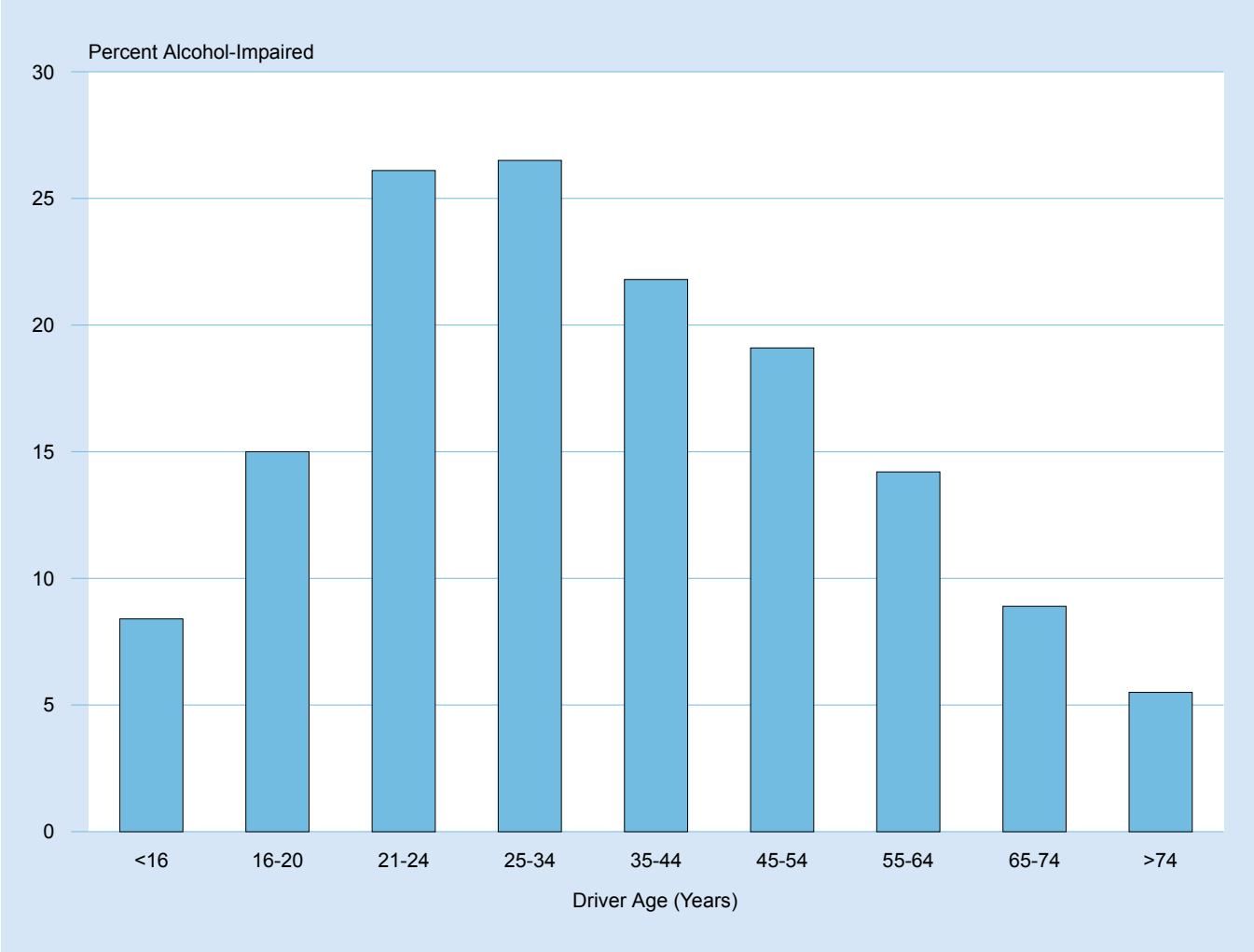


Table 79

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

Time of Day and Day of Week	Under 21		21 and Older	
	Number Killed	Percent Alcohol-Impaired*	Number Killed	Percent Alcohol-Impaired*
Single-Vehicle Crashes				
Daytime	**423**	**12**	**4,550**	**21**
Weekday	278	12	3,018	18
Weekend	145	13	1,532	28
Nighttime	**664**	**35**	**5,610**	**57**
Weekday	269	31	2,541	51
Weekend	395	38	3,069	62
Multiple-Vehicle Crashes				
Daytime	**452**	**5**	**6,852**	**8**
Weekday	341	4	5,214	7
Weekend	111	8	1,638	10
Nighttime	**392**	**14**	**4,383**	**31**
Weekday	194	12	2,202	26
Weekend	198	17	2,181	36

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

Table 80

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

Age (Years)	Driver's BAC								Total	
	.00		.01-.07		.08 or Higher*		.01 and Higher			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<16	75	86	5	6	7	8	12	14	**87**	**100**
16-20	1,426	76	78	4	362	19	440	24	**1,866**	**100**
21-24	1,405	58	150	6	877	36	1,027	42	**2,432**	**100**
25-34	2,662	55	275	6	1,866	39	2,142	45	**4,803**	**100**
35-44	1,974	59	194	6	1,206	36	1,400	41	**3,374**	**100**
45-54	2,184	63	189	5	1,083	31	1,272	37	**3,456**	**100**
55-64	2,452	74	160	5	708	21	868	26	**3,320**	**100**
65-74	1,880	85	83	4	247	11	330	15	**2,210**	**100**
>74	1,832	92	45	2	117	6	162	8	**1,994**	**100**
Unknown	12	67	1	7	5	27	6	33	**18**	**100**
Total	**15,901**	**67**	**1,181**	**5**	**6,479**	**27**	**7,659**	**33**	**23,560**	**100**

Figure 25

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

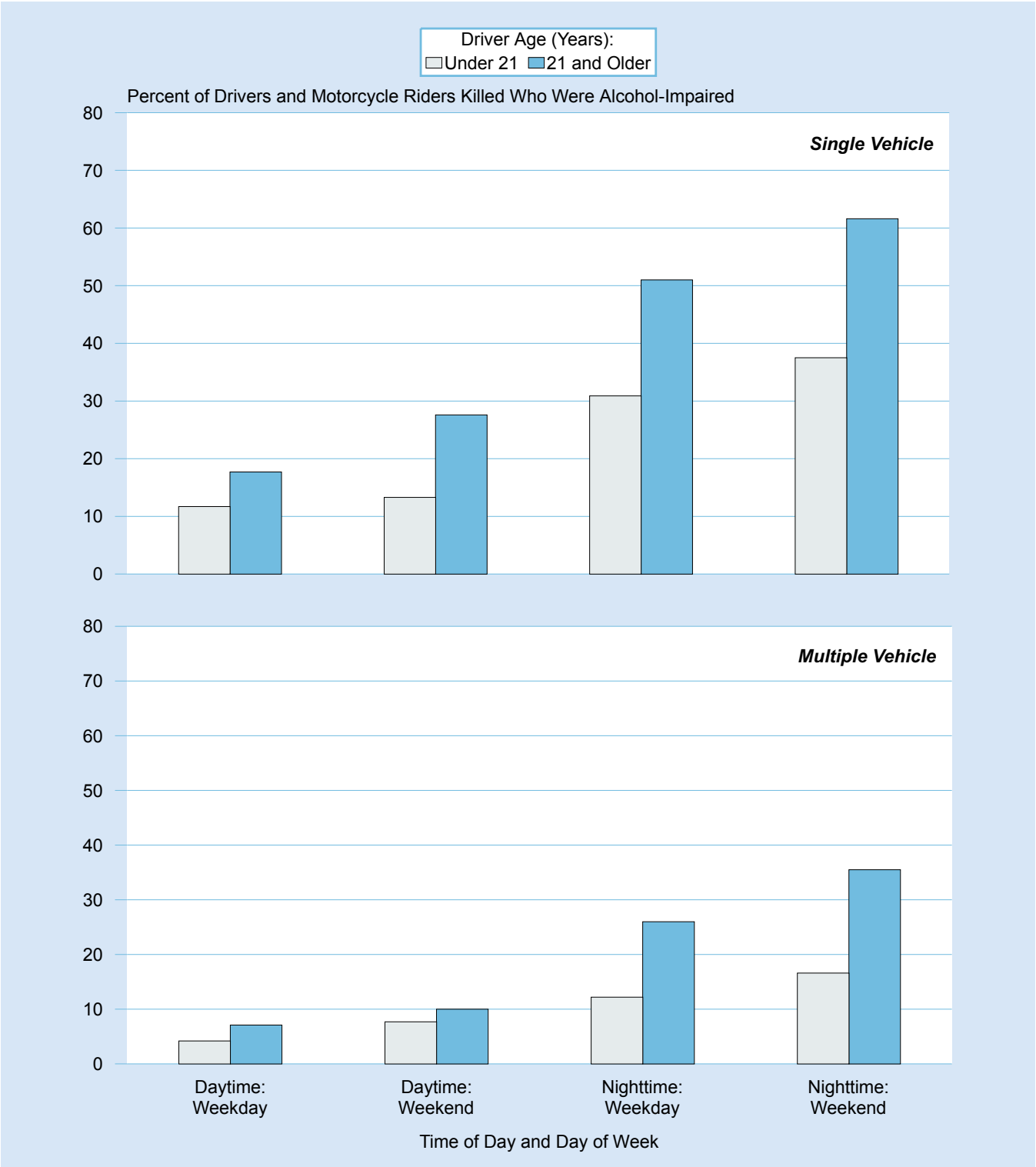


Table 81

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

	Driver's BAC								Total	
	.00		.01-.07		.08 or Higher*		.01 and Higher			
Vehicle Type	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Passenger Car	15,724	76	757	4	4,250	21	5,006	24	**20,730**	**100**
Light Truck	15,295	77	734	4	3,922	20	4,657	23	**19,951**	**100**
Large Truck	4,029	97	40	1	83	2	123	3	**4,152**	**100**
Bus	214	95	6	3	6	2	12	5	**226**	**100**
Other/Unknown	1,057	73	110	8	274	19	384	27	**1,441**	**100**
Subtotal	*36,318*	*78*	*1,647*	*4*	*8,534*	*18*	*10,182*	*22*	***46,500***	***100***
Motorcycle	3,667	68	396	7	1,351	25	1,747	32	**5,414**	**100**
Total	**39,985**	**77**	**2,044**	**4**	**9,885**	**19**	**11,929**	**23**	**51,914**	**100**

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

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

Table 82

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

Age (Years)	Highest Driver BAC in Crash								Total**	
	.00		.01-.07		.08 or Higher*		.01 and Higher			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<5	299	76	21	5	75	19	95	24	**394**	**100**
5-9	290	76	14	4	75	20	88	23	**379**	**100**
10-15	529	80	28	4	100	15	127	19	**657**	**100**
16-20	2,220	69	183	6	782	24	966	30	**3,202**	**100**
21-24	1,936	54	256	7	1,394	39	1,649	46	**3,590**	**100**
25-34	3,769	55	416	6	2,688	39	3,104	45	**6,891**	**100**
35-44	2,925	59	306	6	1,746	35	2,052	41	**4,985**	**100**
45-54	3,400	64	287	5	1,617	30	1,904	36	**5,317**	**100**
55-64	3,735	72	252	5	1,167	23	1,420	27	**5,163**	**100**
65-74	2,751	81	142	4	509	15	651	19	**3,412**	**100**
>74	2,907	87	109	3	323	10	432	13	**3,352**	**100**
Unknown	92	77	4	4	21	17	25	21	**119**	**100**
Total	**24,851**	**66**	**2,017**	**5**	**10,497**	**28**	**12,514**	**33**	**37,461**	**100**

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

**Total includes fatalities in crashes in which there was no driver present.

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

Table 83

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

Pedestrian's BAC	Driver's BAC						Total	
	.00		.01-.07		.08 or Higher*			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
.00	3,120	53	134	2	441	7	**3,694**	**62**
.01-.07	227	4	13	0	41	1	**280**	**5**
.08 or Higher	1,591	27	83	1	281	5	**1,955**	**33**
Total**	**4,937**	**83**	**230**	**4**	**762**	**13**	**5,929**	**100**

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

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

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

Table 84

Drivers Involved in Fatal Crashes, by Vehicle Type and Restraint Use

Vehicle Type	Restraint Use						Total	
	Used		Not Used		Unknown			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Passenger Car	14,173	68.4	4,671	22.5	1,886	9.1	**20,730**	**100.0**
Light Truck	13,414	67.2	4,986	25.0	1,551	7.8	**19,951**	**100.0**
Large Truck	3,457	83.3	397	9.6	298	7.2	**4,152**	**100.0**
Bus	192	85.0	10	4.4	24	10.6	**226**	**100.0**
Other/Unknown	151	10.5	482	33.4	808	56.1	**1,441**	**100.0**
Total*	**31,387**	**67.5**	**10,546**	**22.7**	**4,567**	**9.8**	**46,500**	**100.0**

*Excludes motorcycle riders.

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

Table 85

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

Age (Years)	Restraint Use						Total	
	Used		Not Used		Unknown			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<5	210	70.7	57	19.2	30	10.1	**297**	**100.0**
5-9	137	50.7	108	40.0	25	9.3	**270**	**100.0**
10-15	161	41.9	191	49.7	32	8.3	**384**	**100.0**
16-20	1,056	42.3	1,211	48.5	231	9.2	**2,498**	**100.0**
21-24	973	37.9	1,322	51.5	270	10.5	**2,565**	**100.0**
25-34	1,669	36.9	2,391	52.8	465	10.3	**4,525**	**100.0**
35-44	1,230	41.6	1,486	50.2	242	8.2	**2,958**	**100.0**
45-54	1,269	45.7	1,290	46.4	219	7.9	**2,778**	**100.0**
55-64	1,443	53.3	1,066	39.4	197	7.3	**2,706**	**100.0**
65-74	1,356	63.7	651	30.6	123	5.8	**2,130**	**100.0**
>74	1,768	68.7	645	25.1	161	6.3	**2,574**	**100.0**
Unknown	10	34.5	10	34.5	9	31.0	**29**	**100.0**
Total	**11,282**	**47.6**	**10,428**	**44.0**	**2,004**	**8.5**	**23,714**	**100.0**

Table 86

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

Age (Years)	Restraint Use						Total	
	Used		Not Used		Unknown			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<5	1,445	88.4	111	6.8	79	4.8	**1,635**	**100.0**
5-9	1,286	81.0	223	14.0	79	5.0	**1,588**	**100.0**
10-15	1,557	74.6	398	19.1	131	6.3	**2,086**	**100.0**
16-20	3,635	71.1	1,053	20.6	428	8.4	**5,116**	**100.0**
21-24	3,086	72.5	746	17.5	425	10.0	**4,257**	**100.0**
25-34	5,840	74.9	1,226	15.7	729	9.4	**7,795**	**100.0**
35-44	4,227	81.1	588	11.3	397	7.6	**5,212**	**100.0**
45-54	3,764	85.6	340	7.7	294	6.7	**4,398**	**100.0**
55-64	3,145	87.3	238	6.6	220	6.1	**3,603**	**100.0**
65-74	2,107	90.1	131	5.6	100	4.3	**2,338**	**100.0**
>74	1,242	91.2	66	4.8	54	4.0	**1,362**	**100.0**
Unknown	199	21.2	34	3.6	706	75.2	**939**	**100.0**
Total	**31,533**	**78.2**	**5,154**	**12.8**	**3,642**	**9.0**	**40,329**	**100.0**

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

Table 87

Passenger Car Occupants Killed, by Seating Position and Restraint Use

Seating Position	Restraint Use						Total	
	Used		Not Used		Unknown			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Front Seat	***6,648***	***54.2***	***4,569***	***37.3***	***1,041***	***8.5***	***12,258***	***100.0***
Left	5,266	53.1	3,807	38.4	841	8.5	**9,914**	**100.0**
Middle	2	50.0	2	50.0	0	0.0	**4**	**100.0**
Right	1,380	59.2	755	32.4	198	8.5	**2,333**	**100.0**
Other/Unknown	0	0.0	5	71.4	2	28.6	**7**	**100.0**
Second Seat	***432***	***41.9***	***493***	***47.9***	***105***	***10.2***	***1,030***	***100.0***
Left	174	42.9	195	48.0	37	9.1	**406**	**100.0**
Middle	44	37.6	65	55.6	8	6.8	**117**	**100.0**
Right	212	44.6	211	44.4	52	10.9	**475**	**100.0**
Other/Unknown	2	6.3	22	68.8	8	25.0	**32**	**100.0**
Other	***6***	***28.6***	***15***	***71.4***	***0***	***0.0***	***21***	***100.0***
Unknown	***5***	***4.9***	***51***	***49.5***	***47***	***45.6***	***103***	***100.0***
Total	**7,091**	**52.9**	**5,128**	**38.2**	**1,193**	**8.9**	**13,412**	**100.0**

Table 88

Light Truck Occupants Killed, by Seating Position and Restraint Use

Seating Position	Restraint Use						Total	
	Used		Not Used		Unknown			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Front Seat	***3,862***	***42.2***	***4,611***	***50.3***	***685***	***7.5***	***9,158***	***100.0***
Left	3,160	41.8	3,834	50.7	573	7.6	**7,567**	**100.0**
Middle	5	11.6	33	76.7	5	11.6	**43**	**100.0**
Right	696	45.2	738	47.9	107	6.9	**1,541**	**100.0**
Other/Unknown	1	14.3	6	85.7	0	0.0	**7**	**100.0**
Second Seat	***279***	***35.1***	***450***	***56.5***	***67***	***8.4***	***796***	***100.0***
Left	124	39.2	168	53.2	24	7.6	**316**	**100.0**
Middle	32	26.7	76	63.3	12	10.0	**120**	**100.0**
Right	122	35.9	189	55.6	29	8.5	**340**	**100.0**
Other/Unknown	1	5.0	17	85.0	2	10.0	**20**	**100.0**
Other	***44***	***19.4***	***167***	***73.6***	***16***	***7.0***	***227***	***100.0***
Unknown	***6***	***5.0***	***72***	***59.5***	***43***	***35.5***	**121**	**100.0**
Total	**4,191**	**40.7**	**5,300**	**51.4**	**811**	**7.9**	**10,302**	**100.0**

Table 89

Passenger Car and Light Truck Occupants Killed, by Restraint Use and Type of Restraint

Restraint Use and Type of Restraint	Vehicle Type			
	Passenger Car		Light Truck	
	Number	Percent	Number	Percent
Restraint Used				
Lap/Shoulder Belt	1,863	13.9	1,506	14.6
Lap Belt	30	0.2	34	0.3
Shoulder Belt	20	0.1	12	0.1
Child Safety Seat	89	0.7	64	0.6
Type Unknown	63	0.5	35	0.3
Restraint Used, Airbag Deployed	4,967	37.0	2,489	24.2
Seat Belt Used Improperly	36	0.3	33	0.3
Child Safety Seat Used Improperly	23	0.2	18	0.2
Subtotal	*7,091*	*52.9*	*4,191*	*40.7*
No Restraint Used	1,900	14.2	3,187	30.9
No Restraint Used, Airbag Deployed	3,228	24.1	2,113	20.5
Restraint Use Unknown	1,193	8.9	811	7.9
Total	**13,412**	**100.0**	**10,302**	**100.0**

Table 90

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

Vehicle Type	Rollover Occurrence				Total	
	Yes		No			
	Number	Percent	Number	Percent	Number	Percent
Single-Vehicle Crashes						
Passenger Car	2,410	41.7	3,364	58.3	**5,774**	**100.0**
Light Truck						
Pickup	1,580	57.1	1,186	42.9	**2,766**	**100.0**
Utility	1,649	64.7	898	35.3	**2,547**	**100.0**
Van	217	50.0	217	50.0	**434**	**100.0**
Other	44	63.8	25	36.2	**69**	**100.0**
Total	**5,900**	**50.9**	**5,690**	**49.1**	**11,590**	**100.0**
Multiple-Vehicle Crashes						
Passenger Car	540	7.1	7,098	92.9	**7,638**	**100.0**
Light Truck						
Pickup	383	21.6	1,389	78.4	**1,772**	**100.0**
Utility	502	26.6	1,383	73.4	**1,885**	**100.0**
Van	126	16.0	663	84.0	**789**	**100.0**
Other	10	25.0	30	75.0	**40**	**100.0**
Total	**1,561**	**12.9**	**10,563**	**87.1**	**12,124**	**100.0**
All Crashes						
Passenger Car	2,950	22.0	10,462	78.0	**13,412**	**100.0**
Light Truck						
Pickup	1,963	43.3	2,575	56.7	**4,538**	**100.0**
Utility	2,151	48.5	2,281	51.5	**4,432**	**100.0**
Van	343	28.0	880	72.0	**1,223**	**100.0**
Other	54	49.5	55	50.5	**109**	**100.0**
Total	**7,461**	**31.5**	**16,253**	**68.5**	**23,714**	**100.0**

Table 91

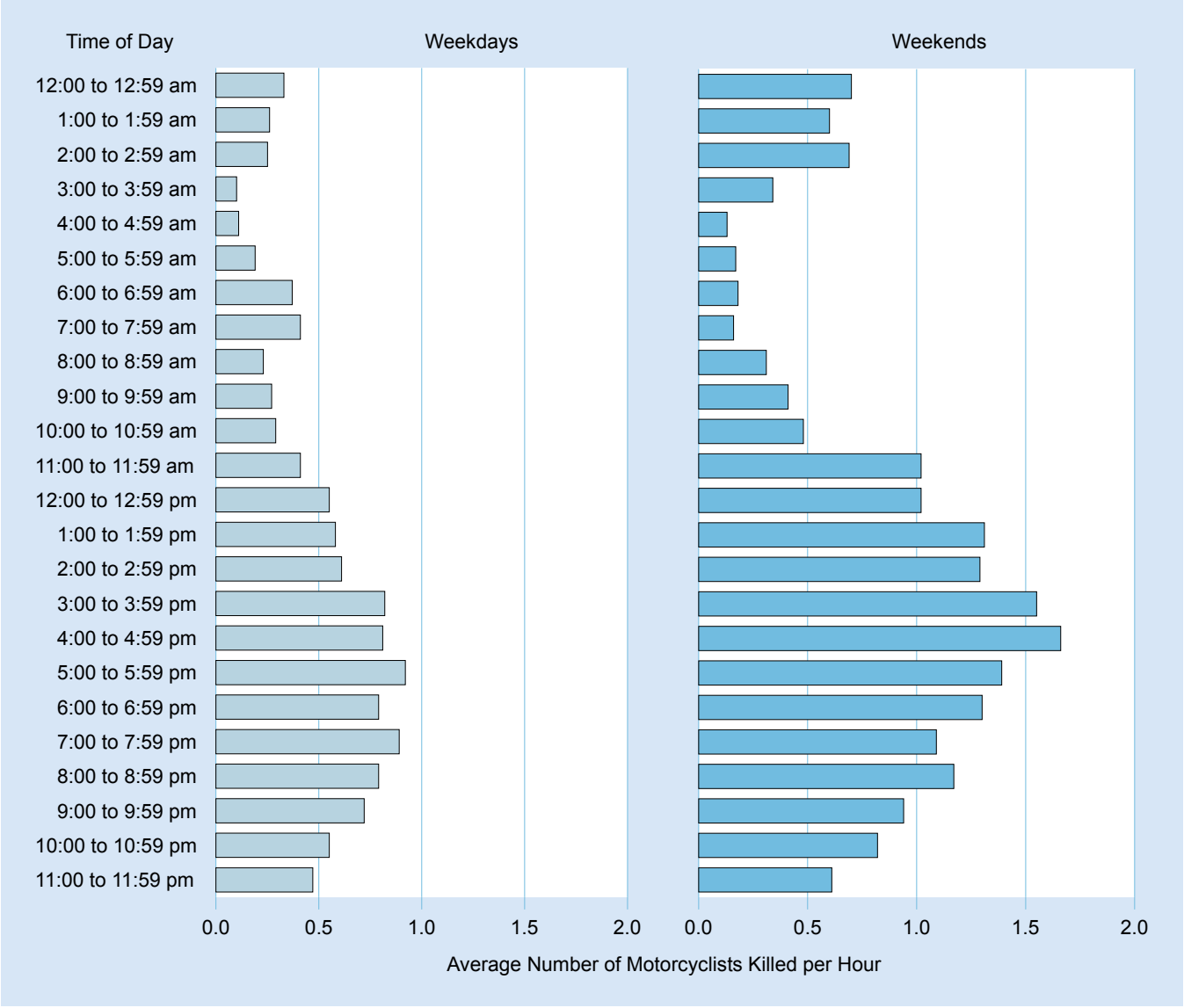
Motorcyclists Killed, by Time of Day and Day of Week

Time of Day	Day of Week				Total	
	Weekday		Weekend			
	Number	Percent	Number	Percent	Number	Percent
Midnight to 3 am	174	6.3	313	12.5	**487**	**9.2**
3 am to 6 am	81	2.9	100	4.0	**181**	**3.4**
6 am to 9 am	264	9.5	69	2.8	**333**	**6.3**
9 am to Noon	252	9.1	200	8.0	**452**	**8.6**
Noon to 3 pm	456	16.4	380	15.2	**836**	**15.8**
3 pm to 6 pm	665	23.9	483	19.3	**1,148**	**21.7**
6 pm to 9 pm	515	18.5	562	22.5	**1,077**	**20.4**
9 pm to Midnight	362	13.0	375	15.0	**737**	**13.9**
Unknown	9	0.3	15	0.6	**35**	**0.7**
Total	**2,778**	**100.0**	**2,497**	**100.0**	***5,286**	**100.0**

*Includes 11 motorcyclists killed on unknown day of week.

Figure 26

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



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

Table 92

Motorcyclists Killed, by Person Type and Helmet Use

Person Type	Helmet Use						Total	
	Used		Not Used		Unknown			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Riders	2,911	58.8	1,904	38.5	135	2.7	**4,950**	**100.0**
Passengers	143	42.6	185	55.1	8	2.4	**336**	**100.0**
Total	**3,054**	**57.8**	**2,089**	**39.5**	**143**	**2.7**	**5,286**	**100.0**

Table 93

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

Age (Years)	License Compliance					Total
	Not Licensed	No Motorcycle License Required	No Valid Motorcycle License	Valid Motorcycle License	Unknown	
<16	15	4	1	3	0	**23**
16-20	28	0	87	152	2	**269**
21-24	23	4	189	323	0	**539**
25-34	66	8	384	722	11	**1,191**
35-44	29	6	236	602	12	**885**
45-54	22	15	228	779	11	**1,055**
55-64	10	14	111	804	8	**947**
65-74	3	0	34	367	7	**411**
>74	1	5	7	73	2	**88**
Unknown	0	0	1	0	5	**6**
Total	**197**	**56**	**1,278**	**3,825**	**58**	**5,414**

Table 94

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

Age (Years)	Vehicle Type		Total
	Bus	Other Vehicle	
<5	1	0	**1**
5-9	2	1	**3**
10-15	1	0	**1**
>15	11	4	**15**
Total	**15**	**5**	**20**

Table 95

Persons Killed in School Bus Related Crashes, by Person Type

Person Type	Number	Percent
School Bus Driver	4	3.4
School Bus Passenger	9	7.6
Pedestrian	20	16.8
Pedalcyclist	4	3.4
Occupant of Other Vehicle	80	67.2
Other Nonoccupants	2	1.7
Total	**119**	**100.0**

Table 96
Pedestrians Killed, by Age and Location

Age (Years)	Location						Total	
	At Intersection		Not At Intersection		Other*			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<5	11	14.5	48	63.2	15	19.7	**76**	**100.0**
5-9	5	7.4	53	77.9	8	11.8	**68**	**100.0**
10-15	32	23.4	85	62.0	18	13.1	**137**	**100.0**
16-20	45	14.7	208	67.8	48	15.6	**307**	**100.0**
21-24	50	13.6	271	73.4	42	11.4	**369**	**100.0**
25-34	105	11.9	674	76.3	89	10.1	**883**	**100.0**
35-44	78	9.6	629	77.1	93	11.4	**816**	**100.0**
45-54	168	16.0	762	72.5	100	9.5	**1,051**	**100.0**
55-64	221	21.0	721	68.4	95	9.0	**1,054**	**100.0**
65-74	155	25.0	395	63.8	54	8.7	**619**	**100.0**
>74	167	31.0	313	58.1	50	9.3	**539**	**100.0**
Unknown	15	22.1	46	67.6	4	5.9	**68**	**100.0**
Total	**1,052**	**17.6**	**4,205**	**70.2**	**616**	**10.3**	****5,987**	**100.0**

*"Other" locations include sidewalk, bicycle lane, median/crossing island, parking lane/zone, shoulder/roadside, driveway access, shared-use path, and non-traffic area—which may or may not have been at an intersection but were not distinguished in the data collected. Thus, "At Intersection" and "Not At Intersection" do not include those in the "Other" location category that were at or not at intersections.

**Includes 114 pedestrians killed at unknown locations.

Table 97
Pedestrians Killed and Fatality 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	40	10,187	0.39	36	9,740	0.37	**76**	**19,927**	**0.38**
5-9	43	10,430	0.41	25	10,000	0.25	**68**	**20,430**	**0.33**
10-15	84	12,661	0.66	53	12,154	0.44	**137**	**24,815**	**0.55**
16-20	209	10,857	1.93	98	10,362	0.95	**307**	**21,219**	**1.45**
21-24	268	9,294	2.88	100	8,801	1.14	**369**	**18,095**	**2.04**
25-34	624	22,600	2.76	259	22,078	1.17	**883**	**44,677**	**1.98**
35-44	584	20,153	2.90	231	20,317	1.14	**816**	**40,470**	**2.02**
45-54	756	21,106	3.58	295	21,681	1.36	**1,051**	**42,787**	**2.46**
55-64	781	19,999	3.91	272	21,464	1.27	**1,054**	**41,463**	**2.54**
65-74	436	13,391	3.26	183	15,239	1.20	**619**	**28,630**	**2.16**
>74	324	8,402	3.86	214	12,212	1.75	**539**	**20,614**	**2.61**
Unknown	30	*	*	17	*	*	**68**	*	*
Total	**4,179**	**159,079**	**2.63**	**1,783**	**164,049**	**1.09**	****5,987**	**323,128**	**1.85**

*Not applicable.

**Includes 25 pedestrian fatalities of unknown sex.

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

Source: Population—U.S. Bureau of the Census.

Table 98
Pedestrians Killed, by Time of Day and Day of Week

Time of Day	Day of Week				Total	
	Weekday		Weekend			
	Number	Percent	Number	Percent	Number	Percent
Midnight to 3 am	261	7.6	441	17.3	**702**	**11.7**
3 am to 6 am	309	9.0	334	13.1	**643**	**10.7**
6 am to 9 am	442	12.9	99	3.9	**541**	**9.0**
9 am to Noon	218	6.3	63	2.5	**281**	**4.7**
Noon to 3 pm	220	6.4	78	3.1	**298**	**5.0**
3 pm to 6 pm	428	12.5	147	5.8	**575**	**9.6**
6 pm to 9 pm	849	24.7	680	26.7	**1,529**	**25.5**
9 pm to Midnight	696	20.3	694	27.3	**1,390**	**23.2**
Unknown	11	0.3	7	0.3	**28**	**0.5**
Total	**3,434**	**100.0**	**2,543**	**100.0**	***5,987**	**100.0**

*Includes 10 pedestrians killed at unknown time of day and day of week.

Table 99
Pedestrians Killed 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
Passenger Car	1,982	87.6	73	3.2	58	2.6	20	0.9	130	5.7	**2,263**	**100.0**
Light Truck	1,990	86.6	83	3.6	50	2.2	44	1.9	131	5.7	**2,298**	**100.0**
Large Truck	218	73.4	24	8.1	11	3.7	17	5.7	27	9.1	**297**	**100.0**
Bus	29	59.2	5	10.2	2	4.1	3	6.1	10	20.4	**49**	**100.0**
Other/Unknown	272	50.3	8	1.5	1	0.2	4	0.7	256	47.3	**541**	**100.0**
Total	**4,491**	**82.4**	**193**	**3.5**	**122**	**2.2**	**88**	**1.6**	**554**	**10.2**	**5,448**	**100.0**

Figure 27

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

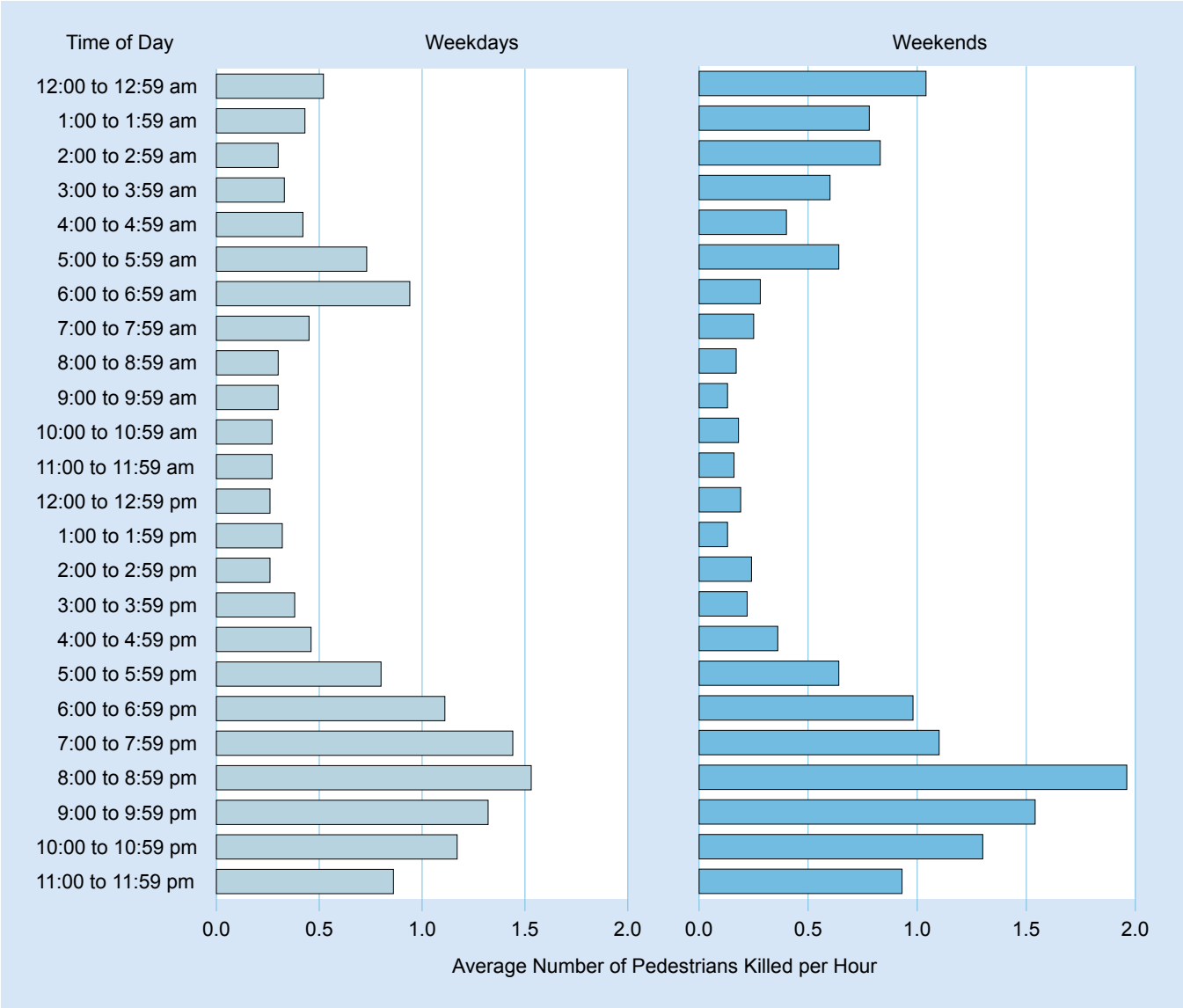


Table 100

Pedestrians Killed, by Related Factors

Factors	Number	Percent
Failure to yield right of way	1,733	28.9
Improper crossing of roadway or intersection	1,142	19.1
Not visible (dark clothing, no lighting, etc.)	906	15.1
In roadway improperly (standing, lying, working, playing)	880	14.7
Under the influence of alcohol, drugs, or medication	664	11.1
Darting or running into road	599	10.0
Failure to obey traffic signs, signals, or officer	235	3.9
Inattentive (talking, eating, etc.)	114	1.9
Physical impairment	114	1.9
Traveling on prohibited trafficways	94	1.6
Wrong-way walking	90	1.5
Emotional (e.g. depression, angry, disturbed)	44	0.7
Entering/exiting parked or stopped vehicle	40	0.7
Ill, blackout	25	0.4
Vision obscured (by rain, snow, parked vehicle, sign, etc.)	16	0.3
Nonmotorist pushing vehicle	6	0.1
Portable electronics	6	0.1
Asleep or fatigued	2	0.0
Other factors	195	3.3
None reported	767	12.8
Unknown	959	16.0
Total Pedestrians	**5,987**	**100.0**

Notes: 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 101
Pedalcyclists Killed, by Age and Location

Age (Years)	Location						Total	
	At Intersection		Not At Intersection		Other*			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<5	1	20.0	3	60.0	0	0.0	**5**	**100.0**
5-9	8	53.3	6	40.0	1	6.7	**15**	**100.0**
10-15	18	38.3	26	55.3	3	6.4	**47**	**100.0**
16-20	16	40.0	22	55.0	2	5.0	**40**	**100.0**
21-24	13	32.5	23	57.5	2	5.0	**40**	**100.0**
25-34	27	27.8	55	56.7	9	9.3	**97**	**100.0**
35-44	25	26.6	53	56.4	10	10.6	**94**	**100.0**
45-54	42	25.0	101	60.1	23	13.7	**168**	**100.0**
55-64	47	24.4	113	58.5	29	15.0	**193**	**100.0**
65-74	25	28.7	44	50.6	17	19.5	**87**	**100.0**
>74	14	32.6	23	53.5	4	9.3	**43**	**100.0**
Unknown	6	54.5	3	27.3	2	18.2	**11**	**100.0**
Total	**242**	**28.8**	**472**	**56.2**	**102**	**12.1**	****840**	**100.0**

*"Other" locations include sidewalk, bicycle lane, median/crossing island, parking lane/zone, shoulder/roadside, driveway access, shared-use path, and non-traffic area—which may or may not have been at an intersection but were not distinguished in the data collected. Thus, "At Intersection" and "Not At Intersection" do not include those in the "Other" location category that were at or not at intersections.

**Includes 24 pedalcyclists killed at unknown locations.

Table 102
Pedalcyclists Killed and Fatality 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	5	10,187	0.05	0	9,740	0.00	**5**	**19,927**	**0.03**
5-9	11	10,430	0.11	4	10,000	0.04	**15**	**20,430**	**0.07**
10-15	38	12,661	0.30	9	12,154	0.07	**47**	**24,815**	**0.19**
16-20	32	10,857	0.29	8	10,362	0.08	**40**	**21,219**	**0.19**
21-24	32	9,294	0.34	8	8,801	0.09	**40**	**18,095**	**0.22**
25-34	74	22,600	0.33	23	22,078	0.10	**97**	**44,677**	**0.22**
35-44	77	20,153	0.38	17	20,317	0.08	**94**	**40,470**	**0.23**
45-54	144	21,106	0.68	24	21,681	0.11	**168**	**42,787**	**0.39**
55-64	168	19,999	0.84	25	21,464	0.12	**193**	**41,463**	**0.47**
65-74	78	13,391	0.58	9	15,239	0.06	**87**	**28,630**	**0.30**
>74	41	8,402	0.49	2	12,212	0.02	**43**	**20,614**	**0.21**
Unknown	5	*	*	0	*	*	**11**	*	*
Total	**705**	**159,079**	**0.44**	**129**	**164,049**	**0.08**	****840**	**323,128**	**0.26**

*Not applicable.

**Includes 6 pedalcyclists killed of unknown sex.

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

Source: Population—U.S. Bureau of the Census.

Table 103
Pedalcyclists Killed, by Time of Day and Day of Week

Time of Day	Day of Week				Total	
	Weekday		Weekend			
	Number	Percent	Number	Percent	Number	Percent
Midnight to 3 am	32	5.7	32	11.7	**64**	**7.6**
3 am to 6 am	25	4.4	18	6.6	**43**	**5.1**
6 am to 9 am	91	16.1	19	6.9	**110**	**13.1**
9 am to Noon	65	11.5	24	8.8	**89**	**10.6**
Noon to 3 pm	70	12.4	26	9.5	**96**	**11.4**
3 pm to 6 pm	92	16.3	27	9.9	**119**	**14.2**
6 pm to 9 pm	113	20.0	70	25.5	**183**	**21.8**
9 pm to Midnight	75	13.3	57	20.8	**132**	**15.7**
Unknown	2	0.4	1	0.4	**4**	**0.5**
Total	**565**	**100.0**	**274**	**100.0**	***840**	**100.0**

*Includes 1 pedalcyclist killed on unknown day of week.

Table 104
Pedalcyclists Killed 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
Passenger Car	263	88.6	15	5.1	3	1.0	1	0.3	15	5.1	**297**	**100.0**
Light Truck	276	82.6	33	9.9	9	2.7	4	1.2	12	3.6	**334**	**100.0**
Large Truck	41	48.2	19	22.4	8	9.4	6	7.1	11	12.9	**85**	**100.0**
Bus	6	50.0	3	25.0	2	16.7	0	0.0	1	8.3	**12**	**100.0**
Other/Unknown	39	54.2	4	5.6	0	0.0	1	1.4	28	38.9	**72**	**100.0**
Total	**625**	**78.1**	**74**	**9.3**	**22**	**2.8**	**12**	**1.5**	**67**	**8.4**	**800**	**100.0**

Table 105

Pedalcyclists Killed, by Related Factors

Factors	Number	Percent
Failure to yield right of way	216	25.7
Not visible (dark clothing, no lighting, etc.)	87	10.4
Failure to obey traffic signs, signals, or officer	83	9.9
Under the influence of alcohol, drugs, or medication	53	6.3
Making improper turn	43	5.1
Improper crossing of roadway or intersection	39	4.6
Operating without required equipment	31	3.7
Wrong-way riding	31	3.7
Failure to keep in proper lane or running off road	22	2.6
Riding on wrong side of the road	20	2.4
Inattentive (talking, eating, etc.)	17	2.0
Darting or running into road	16	1.9
Improper or erratic lane changing	15	1.8
Failing to have lights on when required	8	1.0
Physical impairment	7	0.8
Vision obscured (reflected glare, parked vehicle, sign, etc.)	6	0.7
In roadway improperly (standing, lying, working, playing)	5	0.6
Making improper entry or exit from trafficway	4	0.5
Ill, blackout	3	0.4
Improper passing	3	0.4
Traveling on prohibited trafficways	2	0.2
Erratic, reckless, careless, or negligent operation	1	0.1
Passing with insufficient distance	1	0.1
Other factors	26	3.1
None reported	163	19.4
Unknown	204	24.3
Total Pedalcyclists	**840**	**100.0**

Notes: The sums of the numbers and percentages are greater than total pedalcyclists killed as more than one factor may be present for the same pedalcyclist.

Chapter 5

STATES

CHAPTER 5 ■ STATES

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

- Traffic fatalities increased by 6 percent from 2015 to 2016 for the Nation as a whole. Twelve States and Puerto Rico showed decreases, ranging from less than 1 percent to as much as 23 percent.
- The pedestrian fatality rate per 100,000 population was 1.85 for the Nation. New Mexico had the highest rate (3.51), and Nebraska had the lowest rate (0.63).
- About 2.2 percent of all traffic crash fatalities in 2016 were pedalcyclists. Hawaii and South Dakota reported no pedalcyclists killed.
- In 2016, all 50 States, the District of Columbia, and Puerto Rico had seat belt use laws. All 50 States, the District of Columbia, and Puerto Rico also had laws requiring children of certain ages to be restrained in child safety seats.
- Motorcycle helmets were required for all riders in 19 States, the District of Columbia, and Puerto Rico in 2016. Twenty-eight States had helmet requirements with exceptions (age, rider type, roadway type), and three States (Illinois, Iowa, and New Hampshire) did not require helmets at all.
- In 2016, it was a criminal offense to operate a motor vehicle at a blood alcohol concentration (BAC) of .08 g/dL or above in all 50 States, the District of Columbia, and Puerto Rico.

Table 106

2016 Traffic Fatalities by State and Percent Change from 2015

State	Fatalities			State	Fatalities		
	2015	2016	Percent Change		2015	2016	Percent Change
AL	850	1,038	+22	NE	246	218	-11
AK	65	84	+29	NV	326	328	+1
AZ	897	962	+7	NH	114	136	+19
AR	550	545	-1	NJ	561	601	+7
CA	3,387	3,623	+7	NM	298	402	+35
CO	547	608	+11	NY	1,136	1,025	-10
CT	270	293	+9	NC	1,379	1,450	+5
DE	131	119	-9	ND	131	113	-14
DC	23	27	+17	OH	1,110	1,132	+2
FL	2,938	3,174	+8	OK	645	683	+6
GA	1,432	1,554	+9	OR	446	495	+11
HI	93	120	+29	PA	1,200	1,188	-1
ID	216	253	+17	RI	45	51	+13
IL	998	1,082	+8	SC	979	1,015	+4
IN	817	821	+0	SD	134	116	-13
IA	320	404	+26	TN	962	1,041	+8
KS	355	429	+21	TX	3,582	3,776	+5
KY	761	834	+10	UT	278	281	+1
LA	752	757	+1	VT	57	62	+9
ME	156	161	+3	VA	754	760	+1
MD	520	505	-3	WA	551	537	-3
MA	345	389	+13	WV	268	269	+0
MI	967	1,064	+10	WI	566	607	+7
MN	411	392	-5	WY	145	112	-23
MS	677	690	+2	**USA**	**35,485**	**37,461**	**+6**
MO	870	945	+9				
MT	224	190	-15	PR	310	279	-10

Figure 28
2016 Traffic Fatalities by State and Percent Change from 2015

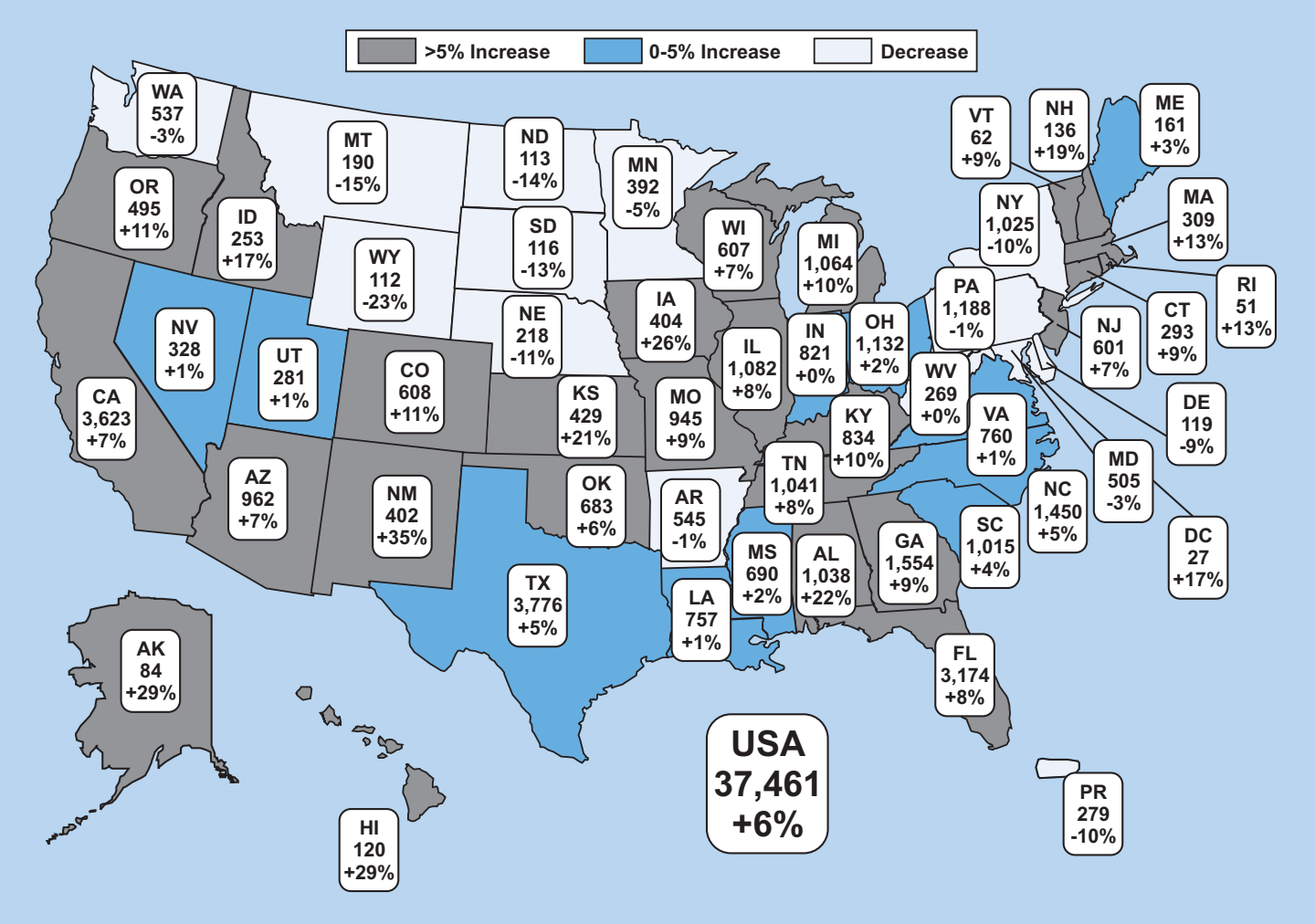


Table 107
Fatal Crashes, by State and First Harmful Event

State	First Harmful Event												Total Fatal Crashes	
	Collision with								Non-Collision					
	Motor Vehicle in Transport		Nonoccupant		Fixed Object		Object Not Fixed		Overturn		Other			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
AL	328	35.0	108	11.5	391	41.7	17	1.8	81	8.6	12	1.3	**937**	**100.0**
AK	23	29.5	12	15.4	25	32.1	1	1.3	14	17.9	2	2.6	**78**	**100.0**
AZ	307	35.5	217	25.1	159	18.4	15	1.7	134	15.5	14	1.6	**865**	**100.0**
AR	202	41.4	44	9.0	173	35.5	16	3.3	50	10.2	3	0.6	**488**	**100.0**
CA	1,108	33.0	946	28.2	941	28.0	108	3.2	235	7.0	19	0.6	**3,357**	**100.0**
CO	225	40.3	95	17.0	136	24.4	10	1.8	89	15.9	3	0.5	**558**	**100.0**
CT	98	34.9	59	21.0	109	38.8	6	2.1	7	2.5	2	0.7	**281**	**100.0**
DE	42	36.2	28	24.1	35	30.2	4	3.4	4	3.4	3	2.6	**116**	**100.0**
DC	7	26.9	9	34.6	9	34.6	0	0.0	0	0.0	1	3.8	**26**	**100.0**
FL	1,190	40.6	787	26.8	650	22.2	52	1.8	204	7.0	50	1.7	**2,933**	**100.0**
GA	564	39.7	247	17.4	458	32.2	24	1.7	115	8.1	14	1.0	**1,422**	**100.0**
HI	35	32.1	31	28.4	39	35.8	2	1.8	1	0.9	1	0.9	**109**	**100.0**
ID	77	33.2	22	9.5	67	28.9	3	1.3	62	26.7	1	0.4	**232**	**100.0**
IL	424	42.3	166	16.6	294	29.3	28	2.8	71	7.1	20	2.0	**1,003**	**100.0**
IN	330	43.0	95	12.4	251	32.7	31	4.0	47	6.1	14	1.8	**768**	**100.0**
IA	156	43.8	31	8.7	90	25.3	10	2.8	64	18.0	5	1.4	**356**	**100.0**
KS	160	42.0	43	11.3	118	31.0	11	2.9	47	12.3	2	0.5	**381**	**100.0**
KY	316	41.4	84	11.0	270	35.4	19	2.5	66	8.7	8	1.0	**763**	**100.0**
LA	272	38.6	135	19.2	212	30.1	21	3.0	56	8.0	8	1.1	**704**	**100.0**
ME	46	30.5	21	13.9	68	45.0	5	3.3	11	7.3	0	0.0	**151**	**100.0**
MD	186	39.4	116	24.6	137	29.0	12	2.5	16	3.4	3	0.6	**472**	**100.0**
MA	107	29.8	88	24.5	136	37.9	15	4.2	11	3.1	2	0.6	**359**	**100.0**
MI	450	45.9	185	18.9	242	24.7	31	3.2	58	5.9	14	1.4	**980**	**100.0**
MN	176	49.3	60	16.8	69	19.3	9	2.5	40	11.2	3	0.8	**357**	**100.0**
MS	236	37.6	60	9.6	244	38.9	16	2.5	70	11.1	2	0.3	**628**	**100.0**
MO	322	37.1	99	11.4	321	37.0	19	2.2	98	11.3	9	1.0	**868**	**100.0**
MT	36	21.1	14	8.2	53	31.0	7	4.1	56	32.7	5	2.9	**171**	**100.0**
NE	86	44.3	12	6.2	64	33.0	6	3.1	24	12.4	2	1.0	**194**	**100.0**
NV	105	34.7	83	27.4	60	19.8	8	2.6	42	13.9	5	1.7	**303**	**100.0**
NH	34	26.2	20	15.4	65	50.0	2	1.5	6	4.6	3	2.3	**130**	**100.0**

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

State	First Harmful Event												Total Fatal Crashes	
	Collision with								Non-Collision					
	Motor Vehicle in Transport		Nonoccupant		Fixed Object		Object Not Fixed		Overturn		Other			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
NJ	192	33.7	168	29.5	181	31.8	11	1.9	13	2.3	4	0.7	**569**	**100.0**
NM	104	29.1	77	21.5	68	19.0	10	2.8	89	24.9	10	2.8	**358**	**100.0**
NY	302	31.3	330	34.2	264	27.4	31	3.2	27	2.8	11	1.1	**965**	**100.0**
NC	528	39.2	208	15.4	506	37.5	15	1.1	75	5.6	16	1.2	**1,348**	**100.0**
ND	34	33.3	10	9.8	24	23.5	2	2.0	31	30.4	1	1.0	**102**	**100.0**
OH	444	42.2	143	13.6	387	36.8	27	2.6	43	4.1	9	0.9	**1,053**	**100.0**
OK	251	40.2	86	13.8	200	32.1	13	2.1	68	10.9	6	1.0	**624**	**100.0**
OR	178	39.9	85	19.1	112	25.1	10	2.2	59	13.2	2	0.4	**446**	**100.0**
PA	403	37.0	178	16.4	377	34.7	46	4.2	71	6.5	13	1.2	**1,088**	**100.0**
RI	11	22.9	15	31.3	19	39.6	2	4.2	1	2.1	0	0.0	**48**	**100.0**
SC	361	38.6	164	17.5	327	34.9	13	1.4	64	6.8	6	0.6	**936**	**100.0**
SD	32	31.1	6	5.8	20	19.4	3	2.9	41	39.8	1	1.0	**103**	**100.0**
TN	383	39.6	104	10.8	358	37.1	18	1.9	90	9.3	13	1.3	**966**	**100.0**
TX	1,366	40.1	676	19.8	882	25.9	111	3.3	327	9.6	44	1.3	**3,407**	**100.0**
UT	103	39.8	43	16.6	54	20.8	8	3.1	46	17.8	5	1.9	**259**	**100.0**
VT	13	22.8	5	8.8	25	43.9	2	3.5	12	21.1	0	0.0	**57**	**100.0**
VA	240	33.2	127	17.6	298	41.3	12	1.7	38	5.3	7	1.0	**722**	**100.0**
WA	181	35.9	99	19.6	137	27.2	14	2.8	71	14.1	1	0.2	**504**	**100.0**
WV	83	33.2	25	10.0	95	38.0	6	2.4	35	14.0	6	2.4	**250**	**100.0**
WI	210	38.6	62	11.4	185	34.0	25	4.6	51	9.4	11	2.0	**544**	**100.0**
WY	30	30.0	4	4.0	21	21.0	9	9.0	36	36.0	0	0.0	**100**	**100.0**
USA	**13,097**	**38.0**	**6,532**	**19.0**	**10,426**	**30.3**	**896**	**2.6**	**3,067**	**8.9**	**396**	**1.1**	***34,439**	**100.0**
PR	74	27.5	95	35.3	88	32.7	3	1.1	2	0.7	7	2.6	**269**	**100.0**

*Total includes 25 crashes with unknown first harmful event.

Table 108
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	61	57	4	234	196	202	121	62	**937**
AK	16	10	0	11	12	17	11	1	**78**
AZ	71	40	44	301	179	119	105	6	**865**
AR	33	29	7	154	103	95	67	0	**488**
CA	181	288	706	824	606	488	156	108	**3,357**
CO	48	39	23	217	107	81	43	0	**558**
CT	2	45	17	67	69	35	41	5	**281**
DE	0	6	9	34	22	33	12	0	**116**
DC	0	3	0	0	0	0	23	0	**26**
FL	150	140	152	1,259	329	663	215	25	**2,933**
GA	54	131	13	351	391	284	198	0	**1,422**
HI	0	4	0	71	29	3	1	1	**109**
ID	38	10	2	67	29	45	29	12	**232**
IL	49	85	8	285	243	179	152	2	**1,003**
IN	54	35	13	188	164	207	104	3	**768**
IA	27	14	0	113	73	86	43	0	**356**
KS	27	21	12	156	47	36	80	2	**381**
KY	51	40	15	167	110	276	103	1	**763**
LA	44	63	11	166	131	177	108	4	**704**
ME	3	0	2	42	31	36	35	2	**151**
MD	11	55	20	147	98	71	64	6	**472**
MA	2	53	14	108	93	37	52	0	**359**
MI	19	74	36	260	267	207	112	5	**980**
MN	11	20	8	84	122	73	38	1	**357**
MS	74	2	1	143	188	161	59	0	**628**
MO	44	71	47	218	154	202	131	1	**868**
MT	28	2	0	48	24	40	28	1	**171**
NE	18	6	4	55	50	7	54	0	**194**
NV	21	20	12	84	81	44	31	10	**303**
NH	9	11	0	38	20	18	34	0	**130**

Table 108

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	6	51	59	191	132	58	68	4	**569**
NM	61	27	11	119	50	52	34	4	**358**
NY	46	30	35	290	123	85	356	0	**965**
NC	62	70	22	726	73	85	305	5	**1,348**
ND	11	0	0	30	17	22	22	0	**102**
OH	27	90	30	191	221	325	160	9	**1,053**
OK	38	44	18	161	125	157	80	1	**624**
OR	27	13	0	175	85	115	31	0	**446**
PA	64	39	20	304	240	198	210	13	**1,088**
RI	1	7	4	17	4	2	13	0	**48**
SC	55	36	31	287	386	54	87	0	**936**
SD	9	3	3	26	11	35	16	0	**103**
TN	48	87	15	256	226	210	120	4	**966**
TX	197	433	245	799	436	433	0	864	**3,407**
UT	33	18	1	94	39	38	34	2	**259**
VT	3	0	0	13	15	17	9	0	**57**
VA	57	57	15	153	161	171	67	41	**722**
WA	26	38	27	142	102	120	44	5	**504**
WV	15	24	2	61	58	67	22	1	**250**
WI	25	12	12	160	112	135	81	7	**544**
WY	31	4	0	27	8	17	13	0	**100**
USA	**1,988**	**2,457**	**1,730**	**10,114**	**6,592**	**6,318**	**4,022**	**1,218**	**34,439**
PR	32	14	1	73	74	54	21	0	**269**

Table 109
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	63	61	4	272	223	216	134	65	**1,038**
AK	17	10	0	11	15	19	11	1	**84**
AZ	85	53	47	334	194	132	111	6	**962**
AR	37	31	11	172	114	105	75	0	**545**
CA	206	311	783	870	645	523	165	120	**3,623**
CO	57	42	23	233	112	95	46	0	**608**
CT	2	49	18	68	72	36	43	5	**293**
DE	0	6	9	35	23	34	12	0	**119**
DC	0	3	0	0	0	0	24	0	**27**
FL	173	167	160	1,358	346	706	235	29	**3,174**
GA	64	145	15	392	418	310	210	0	**1,554**
HI	0	4	0	80	30	4	1	1	**120**
ID	39	11	2	71	32	52	33	13	**253**
IL	60	95	9	306	255	193	162	2	**1,082**
IN	65	35	13	201	171	223	110	3	**821**
IA	35	15	0	128	85	97	44	0	**404**
KS	34	24	12	185	52	37	83	2	**429**
KY	61	42	18	186	117	303	106	1	**834**
LA	50	64	11	174	148	195	111	4	**757**
ME	3	0	2	44	34	38	37	3	**161**
MD	12	56	20	163	104	73	71	6	**505**
MA	3	62	15	117	99	38	55	0	**389**
MI	24	81	40	277	295	220	122	5	**1,064**
MN	14	22	8	92	136	79	40	1	**392**
MS	85	2	1	155	213	169	65	0	**690**
MO	50	78	58	242	166	212	138	1	**945**
MT	34	3	0	55	26	42	29	1	**190**
NE	27	6	4	65	53	8	55	0	**218**
NV	24	21	12	93	86	49	32	11	**328**
NH	9	11	0	39	21	22	34	0	**136**

Table 109

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	8	55	65	199	136	64	70	4	**601**
NM	68	34	12	133	55	59	37	4	**402**
NY	54	36	39	306	133	85	372	0	**1,025**
NC	64	75	23	786	82	94	321	5	**1,450**
ND	12	0	0	38	18	22	23	0	**113**
OH	29	106	30	206	235	352	165	9	**1,132**
OK	41	47	19	186	136	166	87	1	**683**
OR	31	15	0	199	95	123	32	0	**495**
PA	77	50	23	336	262	209	218	13	**1,188**
RI	1	9	4	18	4	2	13	0	**51**
SC	68	37	32	311	416	57	94	0	**1,015**
SD	10	3	3	31	12	40	17	0	**116**
TN	56	105	17	273	237	224	125	4	**1,041**
TX	224	464	273	917	500	485	0	913	**3,776**
UT	42	19	1	97	42	43	35	2	**281**
VT	3	0	0	14	16	18	11	0	**62**
VA	62	59	17	166	167	177	71	41	**760**
WA	30	40	29	145	109	132	46	6	**537**
WV	19	29	2	62	61	73	22	1	**269**
WI	30	13	12	174	131	154	85	8	**607**
WY	34	4	0	33	8	19	14	0	**112**
USA	**2,296**	**2,710**	**1,896**	**11,048**	**7,140**	**6,828**	**4,252**	**1,291**	**37,461**
PR	34	14	1	76	78	55	21	0	**279**

Table 110

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

State	Licensed Drivers (Thousands)	Fatalities per 100,000 Drivers	Registered Vehicles (Thousands)	Fatalities per 100,000 Registered Vehicles	Population (Thousands)	Fatalities per 100,000 Population	Total Killed
AL	3,943	26.32	5,468	18.98	4,863	21.34	**1,038**
AK	535	15.71	795	10.57	742	11.32	**84**
AZ	5,082	18.93	5,787	16.62	6,931	13.88	**962**
AR	2,391	22.79	2,808	19.41	2,988	18.24	**545**
CA	26,199	13.83	30,221	11.99	39,250	9.23	**3,623**
CO	4,067	14.95	5,116	11.88	5,541	10.97	**608**
CT	2,611	11.22	2,842	10.31	3,576	8.19	**293**
DE	756	15.73	1,004	11.85	952	12.50	**119**
DC	490	5.51	337	8.01	681	3.96	**27**
FL	14,675	21.63	16,600	19.12	20,612	15.40	**3,174**
GA	6,976	22.28	8,240	18.86	10,310	15.07	**1,554**
HI	932	12.88	1,232	9.74	1,429	8.40	**120**
ID	1,161	21.79	1,842	13.73	1,683	15.03	**253**
IL	8,515	12.71	10,277	10.53	12,802	8.45	**1,082**
IN	4,553	18.03	6,141	13.37	6,633	12.38	**821**
IA	2,246	17.99	3,676	10.99	3,135	12.89	**404**
KS	2,030	21.13	2,650	16.19	2,907	14.76	**429**
KY	3,031	27.51	4,225	19.74	4,437	18.80	**834**
LA	3,395	22.30	3,905	19.39	4,682	16.17	**757**
ME	1,021	15.76	1,108	14.53	1,331	12.09	**161**
MD	4,265	11.84	4,179	12.08	6,016	8.39	**505**
MA	5,041	7.72	5,070	7.67	6,812	5.71	**389**
MI	7,075	15.04	8,333	12.77	9,928	10.72	**1,064**
MN	3,378	11.60	5,358	7.32	5,520	7.10	**392**
MS	2,019	34.18	2,067	33.38	2,989	23.09	**690**
MO	4,250	22.24	5,685	16.62	6,093	15.51	**945**
MT	797	23.84	1,795	10.59	1,043	18.23	**190**
NE	1,404	15.52	1,952	11.17	1,907	11.43	**218**
NV	1,872	17.52	2,399	13.67	2,940	11.16	**328**
NH	1,096	12.41	1,323	10.28	1,335	10.19	**136**

Table 110

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

State	Licensed Drivers (Thousands)	Fatalities per 100,000 Drivers	Registered Vehicles (Thousands)	Fatalities per 100,000 Registered Vehicles	Population (Thousands)	Fatalities per 100,000 Population	Total Killed
NJ	6,238	9.63	5,941	10.12	8,944	6.72	**601**
NM	1,522	26.42	1,824	22.04	2,081	19.32	**402**
NY	11,948	8.58	11,122	9.22	19,745	5.19	**1,025**
NC	7,267	19.95	8,271	17.53	10,147	14.29	**1,450**
ND	556	20.33	895	12.63	758	14.91	**113**
OH	7,975	14.19	10,686	10.59	11,614	9.75	**1,132**
OK	2,498	27.34	3,737	18.27	3,924	17.41	**683**
OR	2,856	17.33	3,812	12.99	4,093	12.09	**495**
PA	8,997	13.20	10,749	11.05	12,784	9.29	**1,188**
RI	753	6.77	876	5.82	1,056	4.83	**51**
SC	3,747	27.09	4,324	23.47	4,961	20.46	**1,015**
SD	623	18.63	1,246	9.31	865	13.40	**116**
TN	5,198	20.03	5,710	18.23	6,651	15.65	**1,041**
TX	15,880	23.78	21,766	17.35	27,863	13.55	**3,776**
UT	1,960	14.33	2,317	12.13	3,051	9.21	**281**
VT	554	11.20	616	10.07	625	9.93	**62**
VA	5,912	12.86	7,301	10.41	8,412	9.03	**760**
WA	5,636	9.53	7,048	7.62	7,288	7.37	**537**
WV	1,159	23.20	1,705	15.78	1,831	14.69	**269**
WI	4,207	14.43	5,564	10.91	5,779	10.50	**607**
WY	421	26.60	855	13.10	586	19.13	**112**
USA	**221,712**	**16.90**	**288,034**	**13.01**	**323,128**	**11.59**	**37,461**
PR	—	—	2,647	10.54	3,411	8.18	**279**

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

Sources: Fatalities—Fatality Analysis Reporting System (FARS); Licensed Drivers (estimated)—Federal Highway Administration (FHWA); Registered Vehicles for States—FHWA; Registered Vehicles for USA—FHWA and Polk data from R.L. Polk & Co., a foundation of IHS Markit automotive solutions; Population—U.S. Bureau of the Census.

Table 111
Persons Killed, by State and Person Type

State	Person Type												Total Killed	
	Driver		Passenger		Motorcyclist		Pedestrian		Pedalcyclist		Other/Unknown			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
AL	602	58.0	215	20.7	103	9.9	111	10.7	2	0.2	5	0.5	**1,038**	**100.0**
AK	45	53.6	19	22.6	6	7.1	12	14.3	1	1.2	1	1.2	**84**	**100.0**
AZ	372	38.7	200	20.8	146	15.2	190	19.8	31	3.2	23	2.4	**962**	**100.0**
AR	323	59.3	93	17.1	80	14.7	44	8.1	3	0.6	2	0.4	**545**	**100.0**
CA	1,454	40.1	557	15.4	548	15.1	867	23.9	147	4.1	50	1.4	**3,623**	**100.0**
CO	276	45.4	105	17.3	125	20.6	79	13.0	16	2.6	7	1.2	**608**	**100.0**
CT	143	48.8	34	11.6	52	17.7	54	18.4	5	1.7	5	1.7	**293**	**100.0**
DE	56	47.1	17	14.3	14	11.8	27	22.7	2	1.7	3	2.5	**119**	**100.0**
DC	10	37.0	2	7.4	6	22.2	8	29.6	1	3.7	0	0.0	**27**	**100.0**
FL	1,263	39.8	497	15.7	586	18.5	652	20.5	138	4.3	38	1.2	**3,174**	**100.0**
GA	873	56.2	242	15.6	172	11.1	232	14.9	29	1.9	6	0.4	**1,554**	**100.0**
HI	45	37.5	19	15.8	24	20.0	29	24.2	0	0.0	3	2.5	**120**	**100.0**
ID	147	58.1	58	22.9	22	8.7	17	6.7	6	2.4	3	1.2	**253**	**100.0**
IL	563	52.0	188	17.4	155	14.3	148	13.7	20	1.8	8	0.7	**1,082**	**100.0**
IN	470	57.2	139	16.9	101	12.3	85	10.4	19	2.3	7	0.9	**821**	**100.0**
IA	216	53.5	93	23.0	60	14.9	22	5.4	8	2.0	5	1.2	**404**	**100.0**
KS	263	61.3	65	15.2	52	12.1	41	9.6	5	1.2	3	0.7	**429**	**100.0**
KY	473	56.7	155	18.6	111	13.3	81	9.7	9	1.1	5	0.6	**834**	**100.0**
LA	383	50.6	129	17.0	94	12.4	127	16.8	22	2.9	2	0.3	**757**	**100.0**
ME	95	59.0	27	16.8	18	11.2	17	10.6	4	2.5	0	0.0	**161**	**100.0**
MD	237	46.9	70	13.9	75	14.9	104	20.6	16	3.2	3	0.6	**505**	**100.0**
MA	195	50.1	57	14.7	42	10.8	80	20.6	10	2.6	5	1.3	**389**	**100.0**
MI	511	48.0	190	17.9	152	14.3	162	15.2	38	3.6	11	1.0	**1,064**	**100.0**
MN	214	54.6	54	13.8	56	14.3	58	14.8	7	1.8	3	0.8	**392**	**100.0**
MS	451	65.4	123	17.8	50	7.2	58	8.4	5	0.7	3	0.4	**690**	**100.0**
MO	545	57.7	163	17.2	127	13.4	96	10.2	8	0.8	6	0.6	**945**	**100.0**
MT	115	60.5	43	22.6	17	8.9	11	5.8	3	1.6	1	0.5	**190**	**100.0**
NE	140	64.2	38	17.4	20	9.2	12	5.5	1	0.5	7	3.2	**218**	**100.0**
NV	114	34.8	50	15.2	74	22.6	80	24.4	6	1.8	4	1.2	**328**	**100.0**
NH	77	56.6	20	14.7	19	14.0	17	12.5	2	1.5	1	0.7	**136**	**100.0**

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

State	Person Type												Total Killed	
	Driver		Passenger		Motorcyclist		Pedestrian		Pedalcyclist		Other/Unknown			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
NJ	262	43.6	86	14.3	71	11.8	162	27.0	18	3.0	2	0.3	**601**	**100.0**
NM	176	43.8	96	23.9	47	11.7	73	18.2	4	1.0	6	1.5	**402**	**100.0**
NY	407	39.7	130	12.7	134	13.1	304	29.7	38	3.7	12	1.2	**1,025**	**100.0**
NC	796	54.9	243	16.8	185	12.8	200	13.8	17	1.2	9	0.6	**1,450**	**100.0**
ND	66	58.4	23	20.4	12	10.6	7	6.2	3	2.7	2	1.8	**113**	**100.0**
OH	583	51.5	190	16.8	199	17.6	134	11.8	18	1.6	8	0.7	**1,132**	**100.0**
OK	382	55.9	117	17.1	88	12.9	87	12.7	5	0.7	4	0.6	**683**	**100.0**
OR	270	54.5	87	17.6	54	10.9	72	14.5	10	2.0	2	0.4	**495**	**100.0**
PA	604	50.8	198	16.7	191	16.1	169	14.2	16	1.3	10	0.8	**1,188**	**100.0**
RI	23	45.1	8	15.7	4	7.8	14	27.5	2	3.9	0	0.0	**51**	**100.0**
SC	506	49.9	149	14.7	185	18.2	144	14.2	25	2.5	6	0.6	**1,015**	**100.0**
SD	65	56.0	23	19.8	22	19.0	6	5.2	0	0.0	0	0.0	**116**	**100.0**
TN	591	56.8	192	18.4	147	14.1	97	9.3	9	0.9	5	0.5	**1,041**	**100.0**
TX	1,816	48.1	708	18.8	490	13.0	672	17.8	65	1.7	25	0.7	**3,776**	**100.0**
UT	128	45.6	68	24.2	41	14.6	35	12.5	5	1.8	4	1.4	**281**	**100.0**
VT	33	53.2	13	21.0	11	17.7	4	6.5	1	1.6	0	0.0	**62**	**100.0**
VA	429	56.4	118	15.5	79	10.4	122	16.1	10	1.3	2	0.3	**760**	**100.0**
WA	248	46.2	102	19.0	81	15.1	84	15.6	17	3.2	5	0.9	**537**	**100.0**
WV	169	62.8	41	15.2	29	10.8	24	8.9	1	0.4	5	1.9	**269**	**100.0**
WI	333	54.9	125	20.6	85	14.0	51	8.4	11	1.8	2	0.3	**607**	**100.0**
WY	52	46.4	28	25.0	24	21.4	5	4.5	1	0.9	2	1.8	**112**	**100.0**
USA	**18,610**	**49.7**	**6,407**	**17.1**	**5,286**	**14.1**	**5,987**	**16.0**	**840**	**2.2**	**331**	**0.9**	37,461	100.0
PR	112	40.1	22	7.9	45	16.1	89	31.9	9	3.2	2	0.7	**279**	**100.0**

Table 112
Persons Killed, by State and Age Group

State	Age Group (Years)											Unknown	Total Killed
	<5	5-9	10-15	16-20	21-24	25-34	35-44	45-54	55-64	65-74	>74		
AL	14	10	23	101	67	226	169	156	122	92	55	3	**1,038**
AK	0	0	4	16	8	17	10	7	13	4	5	0	**84**
AZ	13	7	22	71	94	143	131	162	138	87	90	4	**962**
AR	4	7	7	44	43	96	79	77	89	46	51	2	**545**
CA	38	25	53	323	406	708	435	512	493	328	299	3	**3,623**
CO	3	6	16	51	68	112	67	82	94	53	56	0	**608**
CT	3	2	3	21	30	53	36	41	46	27	31	0	**293**
DE	0	1	2	9	12	19	22	17	16	10	11	0	**119**
DC	0	0	0	1	6	8	5	4	2	0	1	0	**27**
FL	30	31	48	233	315	564	390	460	424	301	331	47	**3,174**
GA	16	24	30	139	140	299	212	215	210	149	118	2	**1,554**
HI	1	0	2	14	10	27	10	16	14	11	14	1	**120**
ID	3	4	7	19	23	47	32	30	38	23	27	0	**253**
IL	10	9	15	98	93	232	123	139	143	91	129	0	**1,082**
IN	7	3	8	81	83	143	117	106	119	74	78	2	**821**
IA	4	4	17	33	45	74	51	49	45	40	41	1	**404**
KS	3	6	11	36	32	69	57	57	61	47	49	1	**429**
KY	9	9	13	61	81	138	108	127	133	86	66	3	**834**
LA	11	11	12	68	63	167	107	124	94	51	44	5	**757**
ME	1	1	2	11	14	30	16	30	15	20	20	1	**161**
MD	5	5	6	41	58	96	62	78	65	45	41	3	**505**
MA	3	3	5	36	50	64	40	48	53	45	42	0	**389**
MI	7	6	25	103	91	163	138	141	163	97	130	0	**1,064**
MN	2	6	6	26	36	65	50	54	55	44	48	0	**392**
MS	13	10	20	59	59	119	95	110	92	64	49	0	**690**
MO	14	10	19	94	90	158	144	112	126	79	97	2	**945**
MT	3	0	6	15	18	34	28	22	36	18	10	0	**190**
NE	5	2	5	19	22	48	24	23	23	22	25	0	**218**
NV	4	0	2	21	31	64	43	47	51	39	26	0	**328**
NH	0	0	0	12	19	22	18	16	23	15	11	0	**136**

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

State	Age Group (Years)											Unknown	Total Killed
	<5	5-9	10-15	16-20	21-24	25-34	35-44	45-54	55-64	65-74	>74		
NJ	3	5	5	36	45	135	74	74	86	60	75	3	**601**
NM	10	4	10	35	42	86	54	53	48	30	29	1	**402**
NY	10	2	15	80	84	182	113	132	149	115	137	6	**1,025**
NC	13	21	25	134	133	262	215	208	194	131	112	2	**1,450**
ND	1	2	3	9	9	20	18	16	20	9	6	0	**113**
OH	6	13	20	107	80	182	156	185	179	115	89	0	**1,132**
OK	12	9	16	50	69	133	102	99	91	58	44	0	**683**
OR	3	3	13	40	40	88	57	76	77	51	47	0	**495**
PA	13	13	13	97	131	203	153	163	157	101	134	10	**1,188**
RI	0	0	0	9	8	11	3	3	3	7	7	0	**51**
SC	11	10	14	80	96	188	152	177	140	76	71	0	**1,015**
SD	3	1	4	14	17	25	12	13	8	16	3	0	**116**
TN	9	14	19	83	90	173	165	123	148	113	103	1	**1,041**
TX	42	50	74	326	381	764	553	555	514	269	235	13	**3,776**
UT	6	7	10	34	22	48	36	32	36	25	25	0	**281**
VT	0	0	1	3	11	17	5	8	4	6	7	0	**62**
VA	11	7	4	70	72	130	111	103	105	68	78	1	**760**
WA	5	3	11	48	51	77	77	80	81	58	44	2	**537**
WV	3	3	1	22	28	41	41	46	34	28	22	0	**269**
WI	7	7	9	56	67	102	57	88	76	57	81	0	**607**
WY	0	3	1	13	7	19	12	21	17	11	8	0	**112**
USA	**394**	**379**	**657**	**3,202**	**3,590**	**6,891**	**4,985**	**5,317**	**5,163**	**3,412**	**3,352**	**119**	**37,461**
PR	2	1	0	25	29	48	35	37	33	22	14	14	**279**

Table 113
Occupants Killed, by State and Vehicle Type

State	Vehicle Type														Motorcycles		Total Occupants Killed	
	Passenger Cars		Light Trucks		Large Trucks		Buses		Other Vehicles		Unknown		Subtotal					
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
AL	400	43.4	360	39.1	33	3.6	0	0.0	23	2.5	2	0.2	*818*	*88.8*	*103*	*11.2*	**921**	**100.0**
AK	16	22.5	42	59.2	2	2.8	0	0.0	5	7.0	0	0.0	*65*	*91.5*	*6*	*8.5*	**71**	**100.0**
AZ	261	35.6	246	33.5	17	2.3	0	0.0	28	3.8	36	4.9	*588*	*80.1*	*146*	*19.9*	**734**	**100.0**
AR	183	36.9	210	42.3	11	2.2	0	0.0	11	2.2	1	0.2	*416*	*83.9*	*80*	*16.1*	**496**	**100.0**
CA	1,297	50.6	645	25.2	49	1.9	3	0.1	18	0.7	2	0.1	*2,014*	*78.6*	*548*	*21.4*	**2,562**	**100.0**
CO	187	36.8	175	34.4	18	3.5	1	0.2	2	0.4	0	0.0	*383*	*75.4*	*125*	*24.6*	**508**	**100.0**
CT	115	50.0	54	23.5	7	3.0	1	0.4	1	0.4	0	0.0	*178*	*77.4*	*52*	*22.6*	**230**	**100.0**
DE	42	47.7	31	35.2	1	1.1	0	0.0	0	0.0	0	0.0	*74*	*84.1*	*14*	*15.9*	**88**	**100.0**
DC	8	44.4	4	22.2	0	0.0	0	0.0	0	0.0	0	0.0	*12*	*66.7*	*6*	*33.3*	**18**	**100.0**
FL	1,048	44.5	652	27.7	30	1.3	6	0.3	28	1.2	6	0.3	*1,770*	*75.1*	*586*	*24.9*	**2,356**	**100.0**
GA	583	45.2	467	36.2	33	2.6	4	0.3	29	2.2	1	0.1	*1,117*	*86.7*	*172*	*13.3*	**1,289**	**100.0**
HI	40	45.5	23	26.1	1	1.1	0	0.0	0	0.0	0	0.0	*64*	*72.7*	*24*	*27.3*	**88**	**100.0**
ID	74	32.5	118	51.8	4	1.8	0	0.0	9	3.9	1	0.4	*206*	*90.4*	*22*	*9.6*	**228**	**100.0**
IL	407	44.9	297	32.8	23	2.5	0	0.0	23	2.5	1	0.1	*751*	*82.9*	*155*	*17.1*	**906**	**100.0**
IN	329	46.3	249	35.1	14	2.0	0	0.0	16	2.3	1	0.1	*609*	*85.8*	*101*	*14.2*	**710**	**100.0**
IA	154	41.4	140	37.6	11	3.0	0	0.0	7	1.9	0	0.0	*312*	*83.9*	*60*	*16.1*	**372**	**100.0**
KS	151	39.4	161	42.0	14	3.7	0	0.0	4	1.0	1	0.3	*331*	*86.4*	*52*	*13.6*	**383**	**100.0**
KY	353	47.8	236	31.9	16	2.2	0	0.0	23	3.1	0	0.0	*628*	*85.0*	*111*	*15.0*	**739**	**100.0**
LA	254	41.9	233	38.4	11	1.8	0	0.0	14	2.3	0	0.0	*512*	*84.5*	*94*	*15.5*	**606**	**100.0**
ME	60	42.9	61	43.6	0	0.0	0	0.0	1	0.7	0	0.0	*122*	*87.1*	*18*	*12.9*	**140**	**100.0**
MD	190	49.7	100	26.2	11	2.9	0	0.0	5	1.3	1	0.3	*307*	*80.4*	*75*	*19.6*	**382**	**100.0**
MA	163	55.4	79	26.9	2	0.7	0	0.0	0	0.0	8	2.7	*252*	*85.7*	*42*	*14.3*	**294**	**100.0**
MI	377	44.1	287	33.6	12	1.4	0	0.0	27	3.2	0	0.0	*703*	*82.2*	*152*	*17.8*	**855**	**100.0**
MN	144	44.4	107	33.0	9	2.8	0	0.0	8	2.5	0	0.0	*268*	*82.7*	*56*	*17.3*	**324**	**100.0**
MS	273	43.5	275	43.9	13	2.1	0	0.0	12	1.9	4	0.6	*577*	*92.0*	*50*	*8.0*	**627**	**100.0**
MO	368	43.9	298	35.6	21	2.5	0	0.0	24	2.9	0	0.0	*711*	*84.8*	*127*	*15.2*	**838**	**100.0**
MT	53	30.1	93	52.8	5	2.8	0	0.0	8	4.5	0	0.0	*159*	*90.3*	*17*	*9.7*	**176**	**100.0**
NE	80	39.0	88	42.9	12	5.9	0	0.0	5	2.4	0	0.0	*185*	*90.2*	*20*	*9.8*	**205**	**100.0**
NV	87	36.4	65	27.2	7	2.9	0	0.0	6	2.5	0	0.0	*165*	*69.0*	*74*	*31.0*	**239**	**100.0**
NH	57	49.1	39	33.6	0	0.0	0	0.0	1	0.9	0	0.0	*97*	*83.6*	*19*	*16.4*	**116**	**100.0**

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

State	Vehicle Type														Motorcycles		Total Occupants Killed	
	Passenger Cars		Light Trucks		Large Trucks		Buses		Other Vehicles		Unknown		Subtotal					
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
NJ	234	55.8	103	24.6	6	1.4	3	0.7	2	0.5	0	0.0	*348*	*83.1*	*71*	*16.9*	**419**	**100.0**
NM	115	35.7	153	47.5	5	1.6	0	0.0	2	0.6	0	0.0	*275*	*85.4*	*47*	*14.6*	**322**	**100.0**
NY	324	48.3	192	28.6	11	1.6	0	0.0	8	1.2	2	0.3	*537*	*80.0*	*134*	*20.0*	**671**	**100.0**
NC	582	47.5	417	34.0	20	1.6	4	0.3	17	1.4	1	0.1	*1,041*	*84.9*	*185*	*15.1*	**1,226**	**100.0**
ND	36	35.3	41	40.2	9	8.8	0	0.0	4	3.9	0	0.0	*90*	*88.2*	*12*	*11.8*	**102**	**100.0**
OH	471	48.5	278	28.6	14	1.4	0	0.0	10	1.0	0	0.0	*773*	*79.5*	*199*	*20.5*	**972**	**100.0**
OK	206	35.0	261	44.4	27	4.6	0	0.0	6	1.0	0	0.0	*500*	*85.0*	*88*	*15.0*	**588**	**100.0**
OR	180	43.8	160	38.9	9	2.2	0	0.0	5	1.2	3	0.7	*357*	*86.9*	*54*	*13.1*	**411**	**100.0**
PA	494	49.6	263	26.4	26	2.6	1	0.1	18	1.8	2	0.2	*804*	*80.8*	*191*	*19.2*	**995**	**100.0**
RI	19	54.3	11	31.4	1	2.9	0	0.0	0	0.0	0	0.0	*31*	*88.6*	*4*	*11.4*	**35**	**100.0**
SC	364	43.2	269	31.9	17	2.0	1	0.1	6	0.7	0	0.0	*657*	*78.0*	*185*	*22.0*	**842**	**100.0**
SD	29	26.4	52	47.3	2	1.8	0	0.0	5	4.5	0	0.0	*88*	*80.0*	*22*	*20.0*	**110**	**100.0**
TN	421	45.3	315	33.9	21	2.3	6	0.6	20	2.2	0	0.0	*783*	*84.2*	*147*	*15.8*	**930**	**100.0**
TX	1,218	40.4	1,164	38.6	108	3.6	10	0.3	27	0.9	0	0.0	*2,527*	*83.8*	*490*	*16.2*	**3,017**	**100.0**
UT	85	35.9	89	37.6	4	1.7	0	0.0	11	4.6	7	3.0	*196*	*82.7*	*41*	*17.3*	**237**	**100.0**
VT	28	49.1	17	29.8	0	0.0	0	0.0	1	1.8	0	0.0	*46*	*80.7*	*11*	*19.3*	**57**	**100.0**
VA	308	49.2	206	32.9	25	4.0	0	0.0	8	1.3	0	0.0	*547*	*87.4*	*79*	*12.6*	**626**	**100.0**
WA	192	44.5	140	32.5	10	2.3	0	0.0	7	1.6	1	0.2	*350*	*81.2*	*81*	*18.8*	**431**	**100.0**
WV	85	35.1	101	41.7	6	2.5	0	0.0	21	8.7	0	0.0	*213*	*88.0*	*29*	*12.0*	**242**	**100.0**
WI	250	46.0	181	33.3	7	1.3	0	0.0	20	3.7	0	0.0	*458*	*84.3*	*85*	*15.7*	**543**	**100.0**
WY	17	16.2	54	51.4	7	6.7	0	0.0	3	2.9	0	0.0	*81*	*77.1*	*24*	*22.9*	**105**	**100.0**
USA	**13,412**	**44.1**	**10,302**	**33.9**	**722**	**2.4**	**40**	**0.1**	**539**	**1.8**	**81**	**0.3**	***25,096***	***82.6***	***5,286***	***17.4***	30,382	**100.0**
PR	92	51.4	38	21.2	0	0.0	0	0.0	3	1.7	1	0.6	*134*	*74.9*	*45*	*25.1*	**179**	**100.0**

Table 114

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

State	Restraint Used		No Restraint Used		Restraint Use Unknown		Total Occupants Killed	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
AL	288	37.9	412	54.2	60	7.9	**760**	**100.0**
AK	17	29.3	37	63.8	4	6.9	**58**	**100.0**
AZ	199	39.3	241	47.5	67	13.2	**507**	**100.0**
AR	166	42.2	194	49.4	33	8.4	**393**	**100.0**
CA	1,211	62.4	586	30.2	145	7.5	**1,942**	**100.0**
CO	166	45.9	186	51.4	10	2.8	**362**	**100.0**
CT	73	43.2	62	36.7	34	20.1	**169**	**100.0**
DE	36	49.3	31	42.5	6	8.2	**73**	**100.0**
DC	2	16.7	6	50.0	4	33.3	**12**	**100.0**
FL	890	52.4	745	43.8	65	3.8	**1,700**	**100.0**
GA	483	46.0	476	45.3	91	8.7	**1,050**	**100.0**
HI	22	34.9	22	34.9	19	30.2	**63**	**100.0**
ID	68	35.4	114	59.4	10	5.2	**192**	**100.0**
IL	358	50.9	268	38.1	78	11.1	**704**	**100.0**
IN	256	44.3	251	43.4	71	12.3	**578**	**100.0**
IA	154	52.4	111	37.8	29	9.9	**294**	**100.0**
KS	142	45.5	150	48.1	20	6.4	**312**	**100.0**
KY	271	46.0	318	54.0	0	0.0	**589**	**100.0**
LA	212	43.5	225	46.2	50	10.3	**487**	**100.0**
ME	57	47.1	61	50.4	3	2.5	**121**	**100.0**
MD	151	52.1	113	39.0	26	9.0	**290**	**100.0**
MA	73	30.2	106	43.8	63	26.0	**242**	**100.0**
MI	356	53.6	198	29.8	110	16.6	**664**	**100.0**
MN	146	58.2	72	28.7	33	13.1	**251**	**100.0**
MS	247	45.1	300	54.7	1	0.2	**548**	**100.0**
MO	234	35.1	384	57.7	48	7.2	**666**	**100.0**
MT	47	32.2	94	64.4	5	3.4	**146**	**100.0**
NE	61	36.3	86	51.2	21	12.5	**168**	**100.0**
NV	68	44.7	71	46.7	13	8.6	**152**	**100.0**
NH	25	26.0	69	71.9	2	2.1	**96**	**100.0**

Table 114

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

State	Restraint Used		No Restraint Used		Restraint Use Unknown		Total Occupants Killed	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
NJ	179	53.1	148	43.9	10	3.0	**337**	**100.0**
NM	119	44.4	136	50.7	13	4.9	**268**	**100.0**
NY	290	56.2	152	29.5	74	14.3	**516**	**100.0**
NC	525	52.6	432	43.2	42	4.2	**999**	**100.0**
ND	21	27.3	48	62.3	8	10.4	**77**	**100.0**
OH	327	43.7	355	47.4	67	8.9	**749**	**100.0**
OK	200	42.8	224	48.0	43	9.2	**467**	**100.0**
OR	192	56.5	76	22.4	72	21.2	**340**	**100.0**
PA	249	32.9	401	53.0	107	14.1	**757**	**100.0**
RI	14	46.7	15	50.0	1	3.3	**30**	**100.0**
SC	286	45.2	315	49.8	32	5.1	**633**	**100.0**
SD	20	24.7	58	71.6	3	3.7	**81**	**100.0**
TN	349	47.4	336	45.7	51	6.9	**736**	**100.0**
TX	1,238	52.0	929	39.0	215	9.0	**2,382**	**100.0**
UT	83	47.7	77	44.3	14	8.0	**174**	**100.0**
VT	24	53.3	20	44.4	1	2.2	**45**	**100.0**
VA	216	42.0	296	57.6	2	0.4	**514**	**100.0**
WA	173	52.1	109	32.8	50	15.1	**332**	**100.0**
WV	73	39.2	80	43.0	33	17.7	**186**	**100.0**
WI	204	47.3	184	42.7	43	10.0	**431**	**100.0**
WY	21	29.6	48	67.6	2	2.8	**71**	**100.0**
USA	**11,282**	**47.6**	**10,428**	**44.0**	**2,004**	**8.5**	**23,714**	**100.0**
PR	48	36.9	82	63.1	0	0.0	**130**	**100.0**

Table 115

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

State	Passenger Cars			Light Trucks									Total*		
				Pickup			Utility			Van					
	Total Killed	Rollover		Total Killed	Rollover		Total Killed	Rollover		Total Killed	Rollover		Total Killed	Rollover	
		Number	Percent		Number	Percent		Number	Percent		Number	Percent		Number	Percent
AL	400	104	26.0	165	61	37.0	163	83	50.9	23	5	21.7	**760**	**258**	**33.9**
AK	16	4	25.0	18	9	50.0	18	11	61.1	6	6	100.0	**58**	**30**	**51.7**
AZ	261	62	23.8	101	64	63.4	110	72	65.5	31	16	51.6	**507**	**215**	**42.4**
AR	183	47	25.7	108	51	47.2	79	39	49.4	20	7	35.0	**393**	**146**	**37.2**
CA	1,297	323	24.9	265	135	50.9	298	161	54.0	76	25	32.9	**1,942**	**647**	**33.3**
CO	187	61	32.6	66	44	66.7	85	62	72.9	24	13	54.2	**362**	**180**	**49.7**
CT	115	14	12.2	10	2	20.0	35	10	28.6	9	1	11.1	**169**	**27**	**16.0**
DE	42	6	14.3	8	1	12.5	14	6	42.9	8	3	37.5	**73**	**16**	**21.9**
DC	8	0	0.0	0	0	0.0	4	2	50.0	0	0	0.0	**12**	**2**	**16.7**
FL	1,048	169	16.1	289	109	37.7	262	135	51.5	93	18	19.4	**1,700**	**437**	**25.7**
GA	583	120	20.6	216	86	39.8	210	110	52.4	39	11	28.2	**1,050**	**328**	**31.2**
HI	40	10	25.0	8	2	25.0	7	1	14.3	3	1	33.3	**63**	**15**	**23.8**
ID	74	32	43.2	60	32	53.3	48	40	83.3	8	6	75.0	**192**	**112**	**58.3**
IL	407	84	20.6	96	36	37.5	150	62	41.3	45	10	22.2	**704**	**195**	**27.7**
IN	329	74	22.5	116	36	31.0	98	35	35.7	33	7	21.2	**578**	**153**	**26.5**
IA	154	38	24.7	54	24	44.4	54	22	40.7	32	8	25.0	**294**	**92**	**31.3**
KS	151	35	23.2	74	40	54.1	64	36	56.3	21	10	47.6	**312**	**123**	**39.4**
KY	353	83	23.5	116	45	38.8	88	31	35.2	32	7	21.9	**589**	**166**	**28.2**
LA	254	49	19.3	138	54	39.1	74	27	36.5	17	8	47.1	**487**	**138**	**28.3**
ME	60	10	16.7	31	4	12.9	21	4	19.0	8	1	12.5	**121**	**20**	**16.5**
MD	190	25	13.2	33	5	15.2	47	11	23.4	20	4	20.0	**290**	**45**	**15.5**
MA	163	28	17.2	22	7	31.8	40	14	35.0	13	5	38.5	**242**	**56**	**23.1**
MI	377	51	13.5	97	33	34.0	140	43	30.7	49	8	16.3	**664**	**136**	**20.5**
MN	144	33	22.9	41	14	34.1	52	18	34.6	13	1	7.7	**251**	**67**	**26.7**
MS	273	60	22.0	135	54	40.0	111	59	53.2	24	5	20.8	**548**	**180**	**32.8**
MO	368	111	30.2	142	63	44.4	117	59	50.4	39	11	28.2	**666**	**244**	**36.6**
MT	53	27	50.9	44	27	61.4	41	35	85.4	7	5	71.4	**146**	**95**	**65.1**
NE	80	22	27.5	46	21	45.7	29	16	55.2	12	1	8.3	**168**	**61**	**36.3**
NV	87	27	31.0	22	11	50.0	35	23	65.7	7	3	42.9	**152**	**65**	**42.8**
NH	57	19	33.3	23	11	47.8	14	7	50.0	1	0	0.0	**96**	**38**	**39.6**

Table 115

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

State	Passenger Cars			Light Trucks									Total*		
				Pickup			Utility			Van					
	Total Killed	Rollover		Total Killed	Rollover		Total Killed	Rollover		Total Killed	Rollover		Total Killed	Rollover	
		Number	Percent		Number	Percent		Number	Percent		Number	Percent		Number	Percent
NJ	234	26	11.1	32	12	37.5	53	21	39.6	16	6	37.5	**337**	**66**	**19.6**
NM	115	41	35.7	73	52	71.2	72	53	73.6	6	4	66.7	**268**	**152**	**56.7**
NY	324	64	19.8	70	20	28.6	90	20	22.2	32	7	21.9	**516**	**111**	**21.5**
NC	582	146	25.1	177	65	36.7	184	80	43.5	55	19	34.5	**999**	**310**	**31.0**
ND	36	18	50.0	25	17	68.0	13	9	69.2	3	1	33.3	**77**	**45**	**58.4**
OH	471	92	19.5	99	39	39.4	135	56	41.5	40	12	30.0	**749**	**201**	**26.8**
OK	206	54	26.2	143	69	48.3	87	47	54.0	31	10	32.3	**467**	**180**	**38.5**
OR	180	31	17.2	67	26	38.8	68	24	35.3	24	1	4.2	**340**	**83**	**24.4**
PA	494	96	19.4	88	41	46.6	136	61	44.9	37	12	32.4	**757**	**211**	**27.9**
RI	19	7	36.8	4	1	25.0	6	3	50.0	0	0	0.0	**30**	**11**	**36.7**
SC	364	80	22.0	118	42	35.6	118	61	51.7	30	8	26.7	**633**	**192**	**30.3**
SD	29	12	41.4	27	19	70.4	21	17	81.0	4	1	25.0	**81**	**49**	**60.5**
TN	421	99	23.5	137	55	40.1	146	72	49.3	31	6	19.4	**736**	**232**	**31.5**
TX	1,218	248	20.4	634	282	44.5	435	225	51.7	84	19	22.6	**2,382**	**778**	**32.7**
UT	85	19	22.4	38	22	57.9	43	28	65.1	8	3	37.5	**174**	**72**	**41.4**
VT	28	13	46.4	2	0	0.0	15	5	33.3	0	0	0.0	**45**	**18**	**40.0**
VA	308	61	19.8	82	32	39.0	88	32	36.4	30	9	30.0	**514**	**137**	**26.7**
WA	192	33	17.2	54	19	35.2	64	29	45.3	19	4	21.1	**332**	**85**	**25.6**
WV	85	18	21.2	47	28	59.6	39	17	43.6	14	1	7.1	**186**	**65**	**34.9**
WI	250	60	24.0	57	25	43.9	85	41	48.2	38	11	28.9	**431**	**137**	**31.8**
WY	17	4	23.5	20	16	80.0	26	16	61.5	8	3	37.5	**71**	**39**	**54.9**
USA	**13,412**	**2,950**	**22.0**	**4,538**	**1,963**	**43.3**	**4,432**	**2,151**	**48.5**	**1,223**	**343**	**28.0**	**23,714**	**7,461**	**31.5**
PR	92	2	2.2	6	2	33.3	29	8	27.6	3	0	0.0	**130**	**12**	**9.2**

*Total includes occupants of other and unknown light trucks.

Table 116
2016 Ranking of State Pedestrian Fatality Rates

Rank	State	Pedestrians Killed	Population (Thousands)	Pedestrian Fatality Rate per 100,000 Population
1	New Mexico	73	2,081	3.51
2	Florida	652	20,612	3.16
3	South Carolina	144	4,961	2.90
4	Delaware	27	952	2.84
5	Arizona	190	6,931	2.74
6	Nevada	80	2,940	2.72
7	Louisiana	127	4,682	2.71
8	Texas	672	27,863	2.41
9	Alabama	111	4,863	2.28
10	Georgia	232	10,310	2.25
11	Oklahoma	87	3,924	2.22
12	California	867	39,250	2.21
13	Hawaii	29	1,429	2.03
14	North Carolina	200	10,147	1.97
15	Mississippi	58	2,989	1.94
16	Kentucky	81	4,437	1.83
17	New Jersey	162	8,944	1.81
18	Oregon	72	4,093	1.76
19	Maryland	104	6,016	1.73
20	Michigan	162	9,928	1.63
21	Alaska	12	742	1.62
22	Missouri	96	6,093	1.58
23	New York	304	19,745	1.54
24	Connecticut	54	3,576	1.51
25	Arkansas	44	2,988	1.47
26	Tennessee	97	6,651	1.46
27	Virginia	122	8,412	1.45

Table 116
2016 Ranking of State Pedestrian Fatality Rates (Continued)

Rank	State	Pedestrians Killed	Population (Thousands)	Pedestrian Fatality Rate per 100,000 Population
28	Colorado	79	5,541	1.43
29	Kansas	41	2,907	1.41
30	Rhode Island	14	1,056	1.33
31	Pennsylvania	169	12,784	1.32
32	West Virginia	24	1,831	1.31
33	Indiana	85	6,633	1.28
34	Maine	17	1,331	1.28
35	New Hampshire	17	1,335	1.27
36	District of Columbia	8	681	1.17
37	Massachusetts	80	6,812	1.17
38	Illinois	148	12,802	1.16
39	Ohio	134	11,614	1.15
40	Washington	84	7,288	1.15
41	Utah	35	3,051	1.15
42	Montana	11	1,043	1.06
43	Minnesota	58	5,520	1.05
44	Idaho	17	1,683	1.01
45	North Dakota	7	758	0.92
46	Wisconsin	51	5,779	0.88
47	Wyoming	5	586	0.85
48	Iowa	22	3,135	0.70
49	South Dakota	6	865	0.69
50	Vermont	4	625	0.64
51	Nebraska	12	1,907	0.63
	USA	**5,987**	**323,128**	**1.85**
	Puerto Rico	89	3,411	2.61

Source: Population—U.S. Bureau of the Census.

Table 117

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

State	Highest Driver* Blood Alcohol Concentration in Crash								Total Killed**	
	BAC = .00		BAC = .01-.07		Alcohol-Impaired Driving Fatalities (BAC = .08+)		BAC = .01+			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
AL	717	69	42	4	279	27	321	31	**1,038**	**100**
AK	46	55	7	8	30	36	37	44	**84**	**100**
AZ	659	68	57	6	232	24	289	30	**962**	**100**
AR	394	72	34	6	117	21	150	28	**545**	**100**
CA	2,368	65	188	5	1,059	29	1,247	34	**3,623**	**100**
CO	409	67	34	6	161	27	195	32	**608**	**100**
CT	169	58	22	8	100	34	123	42	**293**	**100**
DE	75	63	6	5	37	31	43	36	**119**	**100**
DC	13	49	4	13	10	38	14	51	**27**	**100**
FL	2,175	69	147	5	841	26	987	31	**3,174**	**100**
GA	1,117	72	65	4	368	24	433	28	**1,554**	**100**
HI	80	66	6	5	34	28	40	33	**120**	**100**
ID	162	64	13	5	77	30	89	35	**253**	**100**
IL	707	65	60	6	315	29	375	35	**1,082**	**100**
IN	580	71	31	4	211	26	241	29	**821**	**100**
IA	275	68	20	5	106	26	126	31	**404**	**100**
KS	318	74	13	3	94	22	107	25	**429**	**100**
KY	618	74	41	5	175	21	216	26	**834**	**100**
LA	488	64	44	6	225	30	268	35	**757**	**100**
ME	94	59	13	8	54	33	67	41	**161**	**100**
MD	349	69	26	5	130	26	156	31	**505**	**100**
MA	233	60	37	10	119	31	156	40	**389**	**100**
MI	766	72	58	5	236	22	294	28	**1,064**	**100**
MN	275	70	25	6	93	24	117	30	**392**	**100**
MS	527	76	35	5	128	19	164	24	**690**	**100**
MO	642	68	58	6	244	26	301	32	**945**	**100**
MT	95	50	10	5	85	45	95	50	**190**	**100**
NE	134	61	20	9	62	29	82	38	**218**	**100**
NV	213	65	13	4	101	31	114	35	**328**	**100**
NH	86	63	8	6	40	30	49	36	**136**	**100**

Table 117

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

State	Highest Driver* Blood Alcohol Concentration in Crash								Total Killed**	
	BAC = .00		BAC = .01-.07		Alcohol-Impaired Driving Fatalities (BAC = .08+)		BAC = .01+			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
NJ	423	70	40	7	137	23	177	29	**601**	**100**
NM	252	63	30	7	118	29	148	37	**402**	**100**
NY	697	68	46	4	283	28	328	32	**1,025**	**100**
NC	972	67	120	8	354	24	474	33	**1,450**	**100**
ND	57	50	5	4	50	45	55	49	**113**	**100**
OH	739	65	67	6	324	29	391	35	**1,132**	**100**
OK	482	71	21	3	180	26	200	29	**683**	**100**
OR	323	65	18	4	154	31	172	35	**495**	**100**
PA	815	69	42	4	327	28	369	31	**1,188**	**100**
RI	29	56	4	7	19	37	22	44	**51**	**100**
SC	617	61	65	6	331	33	396	39	**1,015**	**100**
SD	62	53	8	7	46	39	54	47	**116**	**100**
TN	760	73	57	5	223	21	280	27	**1,041**	**100**
TX	2,100	56	233	6	1,438	38	1,670	44	**3,776**	**100**
UT	223	79	6	2	52	19	59	21	**281**	**100**
VT	31	50	4	7	27	43	31	50	**62**	**100**
VA	508	67	31	4	220	29	251	33	**760**	**100**
WA	351	65	25	5	161	30	186	35	**537**	**100**
WV	189	70	12	5	68	25	80	30	**269**	**100**
WI	365	60	48	8	193	32	241	40	**607**	**100**
WY	77	69	3	2	32	29	35	31	**112**	**100**
USA	**24,851**	**66**	**2,017**	**5**	**10,497**	**28**	**12,514**	**33**	**37,461**	**100**
PR	160	57	26	9	92	33	118	42	**279**	**100**

*Includes motorcycle riders.

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

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

Table 118

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

State	Blood Alcohol Concentration of Driver*								Total Drivers* Involved in Fatal Crashes	
	BAC = .00		BAC = .01-.07		BAC = .08+		BAC = .01+			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
AL	1,048	78	43	3	261	19	304	22	**1,352**	**100**
AK	72	67	7	6	29	27	36	33	**108**	**100**
AZ	1,046	80	51	4	210	16	261	20	**1,307**	**100**
AR	605	81	33	4	110	15	143	19	**748**	**100**
CA	3,831	76	199	4	990	20	1,189	24	**5,020**	**100**
CO	698	79	32	4	150	17	182	21	**880**	**100**
CT	300	70	27	6	102	24	128	30	**428**	**100**
DE	125	74	9	5	37	21	45	26	**170**	**100**
DC	24	63	4	9	10	27	14	37	**38**	**100**
FL	3,647	80	149	3	784	17	933	20	**4,580**	**100**
GA	1,744	81	63	3	343	16	406	19	**2,150**	**100**
HI	113	74	6	4	34	22	40	26	**153**	**100**
ID	241	75	10	3	70	22	80	25	**321**	**100**
IL	1,207	77	65	4	295	19	360	23	**1,566**	**100**
IN	965	81	31	3	195	16	226	19	**1,191**	**100**
IA	428	79	20	4	94	17	115	21	**542**	**100**
KS	458	82	13	2	85	15	98	18	**556**	**100**
KY	971	83	37	3	167	14	204	17	**1,175**	**100**
LA	811	76	46	4	210	20	256	24	**1,067**	**100**
ME	143	69	12	6	51	25	63	31	**206**	**100**
MD	587	79	28	4	126	17	154	21	**741**	**100**
MA	356	71	39	8	107	21	145	29	**501**	**100**
MI	1,239	81	59	4	225	15	285	19	**1,523**	**100**
MN	456	81	21	4	89	16	110	19	**565**	**100**
MS	774	84	35	4	114	12	149	16	**923**	**100**
MO	1,004	78	58	4	227	18	285	22	**1,288**	**100**
MT	129	61	7	3	76	36	83	39	**212**	**100**
NE	225	75	15	5	62	20	77	25	**302**	**100**
NV	351	76	15	3	96	21	112	24	**462**	**100**
NH	126	73	8	5	39	23	47	27	**173**	**100**

Table 118

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

State	Blood Alcohol Concentration of Driver*								Total Drivers* Involved in Fatal Crashes	
	BAC = .00		BAC = .01-.07		BAC = .08+		BAC = .01+			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
NJ	656	79	36	4	134	16	170	21	**826**	**100**
NM	370	74	28	6	103	21	131	26	**501**	**100**
NY	1,044	76	51	4	273	20	324	24	**1,368**	**100**
NC	1,562	78	122	6	328	16	450	22	**2,012**	**100**
ND	88	64	6	5	44	32	50	36	**138**	**100**
OH	1,257	77	69	4	308	19	377	23	**1,634**	**100**
OK	734	79	19	2	174	19	193	21	**927**	**100**
OR	508	77	18	3	138	21	156	23	**664**	**100**
PA	1,341	80	44	3	300	18	344	20	**1,685**	**100**
RI	44	67	4	5	19	28	22	33	**66**	**100**
SC	1,025	73	65	5	307	22	372	27	**1,397**	**100**
SD	91	66	7	5	40	29	47	34	**138**	**100**
TN	1,197	82	54	4	209	14	263	18	**1,460**	**100**
TX	3,584	68	260	5	1,413	27	1,673	32	**5,257**	**100**
UT	349	87	7	2	47	12	53	13	**402**	**100**
VT	50	65	3	4	24	31	27	35	**77**	**100**
VA	797	76	33	3	213	20	246	24	**1,043**	**100**
WA	587	77	25	3	154	20	178	23	**765**	**100**
WV	284	79	10	3	64	18	74	21	**358**	**100**
WI	577	72	44	5	177	22	220	28	**797**	**100**
WY	119	79	3	2	29	19	32	21	**151**	**100**
USA	**39,985**	**77**	**2,044**	**4**	**9,885**	**19**	**11,929**	**23**	51,914	**100**
PR	226	65	28	8	92	27	120	35	**346**	**100**

*Includes motorcycle riders.

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

Table 119

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

State	Blood Alcohol Concentration of Driver*								Total Drivers* Killed	
	BAC = .00		BAC = .01-.07		BAC = .08+		BAC = .01+			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
AL	488	70	27	4	182	26	210	30	**698**	**100**
AK	27	53	4	8	19	38	23	47	**50**	**100**
AZ	359	71	32	6	118	23	149	29	**508**	**100**
AR	290	74	19	5	83	21	102	26	**392**	**100**
CA	1,275	64	108	5	600	30	708	36	**1,983**	**100**
CO	260	67	22	6	108	28	130	33	**390**	**100**
CT	107	56	20	10	66	34	86	44	**193**	**100**
DE	41	59	4	6	24	35	28	41	**69**	**100**
DC	8	51	1	6	7	43	8	49	**16**	**100**
FL	1,215	67	89	5	514	28	603	33	**1,818**	**100**
GA	757	73	33	3	250	24	284	27	**1,040**	**100**
HI	46	67	2	3	21	30	23	33	**69**	**100**
ID	111	66	6	4	51	30	57	34	**168**	**100**
IL	473	67	38	5	191	27	229	33	**702**	**100**
IN	397	71	17	3	146	26	163	29	**560**	**100**
IA	192	71	11	4	68	25	79	29	**271**	**100**
KS	239	77	9	3	63	20	72	23	**311**	**100**
KY	428	74	28	5	124	21	152	26	**580**	**100**
LA	294	62	23	5	155	33	178	38	**471**	**100**
ME	70	62	7	6	36	32	43	38	**113**	**100**
MD	206	67	17	5	85	28	102	33	**308**	**100**
MA	147	63	29	12	59	25	87	37	**234**	**100**
MI	481	74	29	4	142	22	171	26	**652**	**100**
MN	185	70	12	5	66	25	78	30	**263**	**100**
MS	392	78	22	4	86	17	108	22	**500**	**100**
MO	467	70	39	6	158	24	196	30	**663**	**100**
MT	64	49	2	1	65	50	67	51	**131**	**100**
NE	105	66	9	5	45	29	54	34	**159**	**100**
NV	129	69	9	5	49	26	59	31	**187**	**100**
NH	62	66	6	7	26	27	32	34	**94**	**100**

Table 119

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

State	Blood Alcohol Concentration of Driver*								Total Drivers* Killed	
	BAC = .00		BAC = .01-.07		BAC = .08+		BAC = .01+			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
NJ	222	67	23	7	86	26	109	33	**331**	**100**
NM	145	67	16	7	57	26	73	33	**218**	**100**
NY	378	71	21	4	136	25	157	29	**535**	**100**
NC	676	70	78	8	218	22	296	30	**972**	**100**
ND	40	51	6	7	33	42	38	49	**78**	**100**
OH	501	66	39	5	222	29	260	34	**761**	**100**
OK	328	71	10	2	124	27	135	29	**463**	**100**
OR	213	66	11	3	98	30	108	34	**321**	**100**
PA	548	70	25	3	206	26	230	30	**778**	**100**
RI	15	54	1	4	12	43	13	46	**27**	**100**
SC	405	60	48	7	221	33	269	40	**674**	**100**
SD	50	58	3	4	33	38	36	42	**86**	**100**
TN	541	75	31	4	154	21	185	25	**726**	**100**
TX	1,380	61	119	5	775	34	894	39	**2,274**	**100**
UT	133	79	3	2	32	19	35	21	**167**	**100**
VT	25	57	1	3	17	40	18	43	**43**	**100**
VA	338	67	22	4	147	29	169	33	**507**	**100**
WA	215	66	12	4	99	30	112	34	**326**	**100**
WV	139	71	6	3	50	26	56	29	**195**	**100**
WI	251	61	30	7	131	32	161	39	**412**	**100**
WY	46	63	2	3	24	33	27	37	**73**	**100**
USA	**15,901**	**67**	**1,181**	**5**	**6,479**	**27**	**7,659**	**33**	**23,560**	**100**
PR	73	48	17	11	64	41	81	52	**154**	**100**

*Includes motorcycle riders.

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

Table 120

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

State	Blood Alcohol Concentration of Driver*								Total Surviving Drivers* in Fatal Crashes	
	BAC = .00		BAC = .01-.07		BAC = .08+		BAC = .01+			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
AL	560	86	15	2	79	12	94	14	**654**	**100**
AK	46	79	2	4	10	17	12	21	**58**	**100**
AZ	688	86	19	2	92	12	111	14	**799**	**100**
AR	315	88	14	4	27	8	41	12	**356**	**100**
CA	2,556	84	91	3	390	13	481	16	**3,037**	**100**
CO	438	89	11	2	42	8	52	11	**490**	**100**
CT	192	82	7	3	36	15	43	18	**235**	**100**
DE	84	83	4	4	13	12	17	17	**101**	**100**
DC	16	72	3	12	4	16	6	28	**22**	**100**
FL	2,432	88	60	2	270	10	330	12	**2,762**	**100**
GA	988	89	30	3	93	8	122	11	**1,110**	**100**
HI	67	80	4	5	13	16	17	20	**84**	**100**
ID	130	85	4	2	19	13	23	15	**153**	**100**
IL	734	85	27	3	104	12	130	15	**864**	**100**
IN	568	90	14	2	50	8	64	10	**631**	**100**
IA	236	87	9	3	27	10	35	13	**271**	**100**
KS	219	89	5	2	22	9	27	11	**245**	**100**
KY	543	91	9	1	44	7	53	9	**595**	**100**
LA	518	87	23	4	55	9	78	13	**596**	**100**
ME	73	78	5	6	15	16	20	22	**93**	**100**
MD	381	88	11	3	41	10	52	12	**433**	**100**
MA	209	78	10	4	48	18	58	22	**267**	**100**
MI	758	87	30	3	83	10	113	13	**871**	**100**
MN	270	89	9	3	23	8	32	11	**302**	**100**
MS	382	90	13	3	28	7	41	10	**423**	**100**
MO	537	86	19	3	69	11	88	14	**625**	**100**
MT	65	80	5	6	11	13	16	20	**81**	**100**
NE	120	84	7	5	16	11	23	16	**143**	**100**
NV	222	81	6	2	47	17	53	19	**275**	**100**
NH	64	81	2	2	14	17	15	19	**79**	**100**

Table 120

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

State	Blood Alcohol Concentration of Driver*								Total Surviving Drivers* in Fatal Crashes	
	BAC = .00		BAC = .01-.07		BAC = .08+		BAC = .01+			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
NJ	434	88	13	3	49	10	62	12	**495**	**100**
NM	225	79	12	4	46	16	58	21	**283**	**100**
NY	666	80	30	4	137	16	167	20	**833**	**100**
NC	886	85	44	4	110	11	154	15	**1,040**	**100**
ND	48	81	1	1	11	19	12	20	**60**	**100**
OH	757	87	30	3	87	10	117	13	**873**	**100**
OK	406	88	8	2	50	11	58	12	**464**	**100**
OR	295	86	7	2	40	12	48	14	**343**	**100**
PA	794	88	19	2	95	10	113	12	**907**	**100**
RI	29	75	3	7	7	18	10	25	**39**	**100**
SC	620	86	17	2	86	12	103	14	**723**	**100**
SD	40	78	4	8	8	15	12	23	**52**	**100**
TN	656	89	23	3	55	8	78	11	**734**	**100**
TX	2,204	74	141	5	638	21	779	26	**2,983**	**100**
UT	216	92	4	1	15	7	19	8	**235**	**100**
VT	25	75	2	6	7	19	9	25	**34**	**100**
VA	459	86	11	2	66	12	77	14	**536**	**100**
WA	372	85	12	3	55	12	67	15	**439**	**100**
WV	146	89	4	2	14	8	18	11	**163**	**100**
WI	326	85	13	3	46	12	59	15	**385**	**100**
WY	73	93	0	1	5	6	5	7	**78**	**100**
USA	**24,084**	**85**	**863**	**3**	**3,407**	**12**	**4,270**	**15**	**28,354**	**100**
PR	153	80	11	6	29	15	39	20	**192**	**100**

*Includes motorcycle riders.

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

Table 121
Speeding-Related Traffic Fatalities, by State and Roadway Function Class

State	Total Traffic Fatalities	Speeding-Related Fatalities by Roadway Function Class							
			Interstate		Non-Interstate				
		Total	Rural	Urban	Freeway and Expressway	Other Principal Arterial	Minor Arterial	Collector	Local
AL	1,038	**317**	13	15	0	67	68	83	58
AK	84	**36**	4	2	0	6	7	10	7
AZ	962	**311**	41	16	30	72	54	47	51
AR	545	**117**	1	7	0	30	25	26	28
CA	3,623	**1,056**	49	116	205	254	188	152	54
CO	608	**211**	14	18	5	64	47	42	21
CT	293	**79**	1	9	4	15	23	13	13
DE	119	**39**	0	1	0	11	4	18	5
DC	27	**16**	0	2	0	0	0	0	14
FL	3,174	**310**	3	11	11	132	34	78	38
GA	1,554	**266**	9	24	6	51	71	50	55
HI	120	**54**	0	3	0	38	12	1	0
ID	253	**54**	13	3	1	11	5	11	6
IL	1,082	**418**	26	51	4	101	86	76	74
IN	821	**213**	12	18	4	39	41	63	36
IA	404	**95**	12	6	0	23	27	15	12
KS	429	**106**	9	5	2	36	14	8	32
KY	834	**138**	4	7	3	25	15	57	27
LA	757	**173**	13	13	0	29	27	57	33
ME	161	**56**	0	0	0	9	12	17	18
MD	505	**127**	5	21	7	35	18	19	22
MA	389	**105**	1	20	7	25	33	4	15
MI	1,064	**245**	8	29	12	43	50	53	48
MN	392	**92**	1	6	5	23	22	19	16
MS	690	**81**	7	0	0	13	13	36	12
MO	945	**328**	7	16	12	64	64	82	83
MT	190	**61**	7	0	0	18	4	18	14
NE	218	**36**	2	2	0	8	8	1	15
NV	328	**125**	12	5	6	31	27	25	14
NH	136	**77**	5	7	0	21	12	16	16

Table 121
Speeding-Related Traffic Fatalities, by State and Roadway Function Class (Continued)

State	Total Traffic Fatalities	Speeding-Related Fatalities by Roadway Function Class							
			Interstate		Non-Interstate				
		Total	Rural	Urban	Freeway and Expressway	Other Principal Arterial	Minor Arterial	Collector	Local
NJ	601	**130**	0	3	19	36	32	16	23
NM	402	**145**	11	9	3	53	20	25	23
NY	1,025	**314**	21	12	17	87	36	30	111
NC	1,450	**566**	23	40	4	316	28	35	120
ND	113	**25**	1	0	0	11	2	1	10
OH	1,132	**257**	7	27	8	29	53	81	50
OK	683	**183**	8	14	10	40	21	53	37
OR	495	**142**	5	7	0	46	25	45	14
PA	1,188	**505**	30	27	11	115	105	102	107
RI	51	**23**	0	4	3	9	0	2	5
SC	1,015	**381**	40	16	10	80	157	28	50
SD	116	**37**	3	1	0	5	5	18	5
TN	1,041	**183**	12	17	1	37	42	43	31
TX	3,776	**1,069**	47	124	69	199	133	167	0
UT	281	**72**	8	10	0	17	11	12	13
VT	62	**29**	2	0	0	4	6	9	8
VA	760	**257**	19	29	8	36	50	66	30
WA	537	**154**	8	7	8	27	31	47	22
WV	269	**60**	5	6	1	13	11	18	5
WI	607	**212**	9	2	4	51	48	51	46
WY	112	**25**	6	1	0	8	3	2	5
USA	**37,461**	***10,111**	**544**	**789**	**500**	**2,513**	**1,830**	**1,948**	**1,552**
PR	279	**97**	12	5	0	29	24	22	5

*Includes 435 speeding-related fatalities that occurred on roadways for which the function class was unknown.

Table 122

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

State	Average Response Time (Minutes)*								Total Fatal Crashes
	Time of Crash to EMS Notification		EMS Notification to EMS Arrival at Crash Scene		EMS Arrival at Crash Scene to Hospital Arrival		Time of Crash to Hospital Arrival		
	Average	Percent Unknown	Average	Percent Unknown	Average	Percent Unknown	Average	Percent Unknown	
AL	9.82	62.1	13.70	56.3	35.99	75.1	57.66	75.6	**570**
AK	2.91	51.1	13.16	34.0	39.33	61.7	48.59	63.8	**47**
AZ	3.91	28.7	17.12	19.0	56.99	65.2	72.37	69.2	**279**
AR	6.10	19.9	13.43	15.3	NA	NA	NA	NA	**321**
CA	1.33	99.8	NA	NA	NA	NA	NA	NA	**1,369**
CO	7.33	65.7	11.80	66.5	36.68	88.1	48.96	88.6	**236**
CT	2.17	35.1	9.47	18.9	39.67	59.5	48.60	59.5	**37**
DE	3.04	16.4	7.81	4.5	39.39	34.3	47.95	35.8	**67**
DC	NA	NA	NA	NA	NA	NA	NA	NA	**0**
FL	7.04	97.9	8.96	97.9	NA	NA	NA	NA	**1,267**
GA	5.85	70.9	11.75	60.6	43.72	65.7	58.80	66.7	**543**
HI	3.00	17.4	14.45	13.0	34.86	39.1	48.79	39.1	**23**
ID	5.40	14.6	13.32	4.5	NA	NA	NA	NA	**178**
IL	3.40	4.3	7.20	98.7	53.00	99.7	57.00	99.7	**393**
IN	NA	NA	NA	NA	NA	NA	NA	NA	**501**
IA	6.21	63.7	12.17	56.9	31.91	67.2	50.12	67.6	**262**
KS	7.79	17.8	12.31	10.3	33.72	45.5	50.98	47.4	**253**
KY	4.20	21.1	11.58	7.7	37.56	42.2	49.51	43.7	**545**
LA	5.08	17.5	13.81	10.2	45.46	46.1	63.10	48.2	**332**
ME	8.00	22.1	10.41	9.0	34.47	42.6	46.00	47.5	**122**
MD	NA	NA	NA	NA	NA	NA	NA	NA	**97**
MA	3.80	66.7	7.38	46.7	30.33	80.0	35.67	80.0	**15**
MI	2.67	42.6	10.41	41.3	NA	NA	NA	NA	**380**
MN	2.70	8.7	11.58	7.3	38.62	43.2	49.44	44.7	**206**
MS	4.40	64.2	10.73	64.2	28.83	77.6	44.08	77.6	**615**
MO	9.10	48.9	15.06	41.0	45.38	56.6	65.38	59.2	**505**
MT	9.23	17.6	15.55	7.8	42.33	54.2	59.38	56.9	**153**
NE	4.57	57.0	10.76	50.7	28.63	60.6	43.10	64.1	**142**
NV	5.57	58.8	22.44	57.6	54.82	80.0	66.54	84.7	**85**
NH	1.27	0.0	12.45	0.0	31.13	32.4	45.58	32.4	**71**

Table 122

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	4.23	53.9	13.05	47.4	33.75	68.4	53.84	67.1	**76**
NM	6.11	51.3	16.50	17.6	47.43	56.8	54.79	61.8	**199**
NY	3.19	16.1	10.90	16.8	42.74	59.6	52.48	59.8	**423**
NC	5.62	82.2	10.37	20.4	40.64	58.5	47.77	59.1	**837**
ND	7.33	30.5	14.49	21.1	41.05	61.1	59.76	56.8	**95**
OH	6.97	20.8	11.47	3.9	39.37	36.1	54.37	38.4	**466**
OK	8.50	56.5	16.85	30.6	50.48	57.6	68.31	61.0	**382**
OR	4.56	19.4	12.93	11.7	41.22	80.6	55.70	81.9	**299**
PA	5.74	65.0	10.88	42.9	41.72	71.3	52.10	71.6	**592**
RI	4.50	40.0	8.30	0.0	36.50	20.0	46.88	20.0	**10**
SC	NA	NA	NA	NA	NA	NA	NA	NA	**558**
SD	7.63	31.1	15.16	32.2	33.66	57.8	52.16	57.8	**90**
TN	11.89	76.9	13.55	51.4	48.67	77.1	60.87	78.5	**432**
TX	10.82	69.1	16.27	64.7	43.41	66.5	63.74	68.4	**1,245**
UT	5.44	19.6	19.48	14.0	40.13	63.6	56.19	65.4	**107**
VT	4.06	25.5	10.68	12.8	40.90	55.3	50.05	55.3	**47**
VA	8.44	53.9	12.70	45.9	43.09	74.5	60.04	72.5	**447**
WA	NA	NA	17.00	99.5	NA	NA	NA	NA	**218**
WV	9.12	62.9	16.16	60.4	39.61	79.2	55.00	80.5	**159**
WI	3.65	37.0	11.21	40.9	38.97	80.2	51.03	80.8	**359**
WY	8.03	9.9	20.36	4.9	46.89	44.4	64.60	50.6	**81**
USA	**5.97**	**59.4**	**12.92**	**52.5**	**41.02**	**74.7**	**55.58**	**75.6**	**16,736**
PR	5.13	81.1	9.15	79.9	NA	NA	NA	NA	**169**

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

Table 123

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

State	Average Response Time (Minutes)*								Total Fatal Crashes
	Time of Crash to EMS Notification		EMS Notification to EMS Arrival at Crash Scene		EMS Arrival at Crash Scene to Hospital Arrival		Time of Crash to Hospital Arrival		
	Average	Percent Unknown	Average	Percent Unknown	Average	Percent Unknown	Average	Percent Unknown	
AL	6.31	58.7	7.63	51.5	28.38	77.4	43.41	77.4	**305**
AK	0.84	16.7	6.18	6.7	22.00	40.0	28.83	40.0	**30**
AZ	1.65	37.1	6.12	32.8	25.21	53.3	32.05	54.0	**580**
AR	2.96	18.0	6.72	15.6	NA	NA	NA	NA	**167**
CA	5.40	99.5	4.50	99.6	21.67	99.8	38.14	99.6	**1,884**
CO	1.33	24.8	5.07	27.6	22.23	57.5	28.16	57.1	**322**
CT	2.33	29.7	6.51	24.3	26.75	48.5	34.99	49.0	**239**
DE	2.06	32.7	4.33	20.4	20.32	49.0	26.92	51.0	**49**
DC	1.95	12.0	3.65	32.0	13.00	92.0	48.67	88.0	**25**
FL	5.75	99.5	7.40	99.4	NA	NA	35.00	99.9	**1,641**
GA	4.56	53.5	8.34	43.9	33.43	55.2	43.24	56.1	**879**
HI	3.13	5.9	7.51	4.7	27.54	34.1	36.38	34.1	**85**
ID	2.23	11.4	6.07	4.5	NA	NA	NA	NA	**44**
IL	1.69	4.3	5.90	98.4	NA	NA	NA	NA	**608**
IN	NA	NA	NA	NA	NA	NA	NA	NA	**266**
IA	3.84	45.7	6.24	41.5	19.53	50.0	27.96	52.1	**94**
KS	4.34	9.5	6.49	5.6	23.70	38.9	33.88	39.7	**126**
KY	2.48	25.3	6.98	19.8	26.82	41.0	35.57	41.5	**217**
LA	4.25	24.5	8.04	16.8	32.47	44.0	43.51	43.8	**368**
ME	8.23	3.7	7.15	0.0	24.71	37.0	34.88	37.0	**27**
MD	NA	NA	NA	NA	NA	NA	NA	NA	**369**
MA	4.40	57.0	6.10	43.3	30.24	59.9	37.67	61.3	**344**
MI	2.01	53.5	5.44	49.8	NA	NA	NA	NA	**594**
MN	1.23	11.3	6.28	12.0	27.84	46.7	35.51	47.3	**150**
MS	5.00	46.2	6.86	46.2	36.33	53.8	48.67	53.8	**13**
MO	4.81	51.5	7.99	40.5	25.44	46.6	36.63	47.4	**363**
MT	2.19	5.9	6.65	0.0	31.00	35.3	30.30	41.2	**17**
NE	2.61	36.5	4.66	32.7	20.84	40.4	28.10	40.4	**52**
NV	1.98	35.8	6.27	34.4	22.19	49.3	29.92	49.3	**215**
NH	0.71	1.7	10.44	0.0	24.05	33.9	35.05	33.9	**59**

Table 123

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	5.12	61.3	7.87	57.5	32.12	73.0	43.66	73.8	**489**
NM	4.33	21.3	5.80	7.1	24.41	44.5	33.44	48.4	**155**
NY	2.09	45.2	5.82	49.6	25.94	67.0	33.25	66.6	**542**
NC	3.32	42.1	7.92	15.8	28.60	52.6	36.72	53.8	**506**
ND	13.50	14.3	5.14	0.0	25.43	0.0	28.33	14.3	**7**
OH	4.69	14.2	6.64	2.4	25.61	30.3	36.05	31.9	**577**
OK	4.23	41.5	7.37	19.9	31.05	42.3	37.85	44.4	**241**
OR	1.08	27.9	6.74	26.5	28.68	66.0	37.27	66.7	**147**
PA	2.70	52.4	6.84	34.9	28.62	53.8	36.36	54.6	**496**
RI	2.64	26.3	5.18	0.0	25.10	21.1	31.10	21.1	**38**
SC	NA	NA	NA	NA	NA	NA	NA	NA	**378**
SD	7.18	15.4	11.91	15.4	22.25	69.2	30.75	69.2	**13**
TN	5.54	74.0	7.95	61.9	33.02	76.8	39.50	77.5	**530**
TX	4.81	63.9	8.37	60.0	27.67	61.6	39.40	62.3	**1,299**
UT	3.46	19.7	6.64	14.5	25.78	67.1	36.35	67.8	**152**
VT	7.11	10.0	9.10	0.0	35.60	50.0	35.25	60.0	**10**
VA	5.69	52.0	7.93	44.0	29.76	63.0	39.96	63.0	**273**
WA	NA	NA	NA	NA	NA	NA	NA	NA	**285**
WV	5.36	56.7	10.22	54.4	29.23	66.7	42.48	67.8	**90**
WI	3.62	39.1	5.99	46.9	31.85	74.3	39.80	74.3	**179**
WY	2.41	10.5	6.65	10.5	22.92	31.6	32.46	31.6	**19**
USA	**3.37**	**58.8**	**7.03**	**57.3**	**27.82**	**72.5**	**37.02**	**73.0**	**16,558**
PR	4.44	82.0	10.47	81.0	NA	NA	NA	NA	**100**

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

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

City	State	Fatalities			Population	Fatality Rate per 100,000 Population	
		Total Killed	Pedestrians Killed				
			Number	Percent of Total Killed		Total	Pedestrian
New York	NY	230	137	59.6	8,537,673	2.69	1.60
Los Angeles	CA	315	130	41.3	3,976,322	7.92	3.27
Chicago	IL	123	41	33.3	2,704,958	4.55	1.52
Houston	TX	248	79	31.9	2,303,482	10.77	3.43
Phoenix	AZ	225	90	40.0	1,615,017	13.93	5.57
Philadelphia	PA	101	43	42.6	1,567,872	6.44	2.74
San Antonio	TX	194	64	33.0	1,492,510	13.00	4.29
San Diego	CA	96	42	43.8	1,406,630	6.82	2.99
Dallas	TX	190	57	30.0	1,317,929	14.42	4.32
San Jose	CA	60	21	35.0	1,025,350	5.85	2.05
Austin	TX	86	30	34.9	947,890	9.07	3.16
Jacksonville	FL	149	35	23.5	880,619	16.92	3.97
San Francisco	CA	28	14	50.0	870,887	3.22	1.61
Columbus	OH	53	16	30.2	860,090	6.16	1.86
Indianapolis	IN	96	20	20.8	855,164	11.23	2.34
Fort Worth	TX	84	29	34.5	854,113	9.83	3.40
Charlotte	NC	93	22	23.7	842,051	11.04	2.61
Seattle	WA	27	6	22.2	704,352	3.83	0.85
Denver	CO	54	19	35.2	693,060	7.79	2.74
El Paso	TX	67	23	34.3	683,080	9.81	3.37
Washington	DC	27	8	29.6	681,170	3.96	1.17
Boston	MA	27	13	48.1	673,184	4.01	1.93
Detroit	MI	118	29	24.6	672,795	17.54	4.31
Nashville-Davidson	TN	65	16	24.6	660,388	9.84	2.42
Memphis	TN	120	28	23.3	652,717	18.38	4.29
Portland	OR	43	14	32.6	639,863	6.72	2.19
Oklahoma City	OK	87	28	32.2	638,367	13.63	4.39
Las Vegas	NV	58	13	22.4	632,912	9.16	2.05
Louisville-Jefferson Co.	KY	87	17	19.5	616,261	14.12	2.76
Baltimore	MD	41	15	36.6	614,664	6.67	2.44
Milwaukee	WI	59	13	22.0	595,047	9.92	2.18
Albuquerque	NM	94	31	33.0	559,277	16.81	5.54
Tucson	AZ	59	16	27.1	530,706	11.12	3.01
Fresno	CA	13	6	46.2	522,053	2.49	1.15
Sacramento	CA	49	15	30.6	495,234	9.89	3.03
Mesa	AZ	45	10	22.2	484,587	9.29	2.06
Kansas City	MO	66	10	15.2	481,420	13.71	2.08
Atlanta	GA	66	21	31.8	472,522	13.97	4.44
Long Beach	CA	34	14	41.2	470,130	7.23	2.98
Colorado Springs	CO	31	5	16.1	465,101	6.67	1.08
Raleigh	NC	32	7	21.9	458,880	6.97	1.53
Miami	FL	46	19	41.3	453,579	10.14	4.19
Virginia Beach	VA	19	2	10.5	452,602	4.20	0.44
Omaha	NE	28	4	14.3	446,970	6.26	0.89
Oakland	CA	23	9	39.1	420,005	5.48	2.14

Source: Population—U.S. Bureau of the Census.

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

City	State	Fatalities			Population	Fatality Rate per 100,000 Population	
		Total Killed	Pedestrians Killed				
			Number	Percent of Total Killed		Total	Pedestrian
Minneapolis	MN	19	8	42.1	413,651	4.59	1.93
Tulsa	OK	52	15	28.8	403,090	12.90	3.72
Arlington	TX	26	7	26.9	392,772	6.62	1.78
New Orleans	LA	55	14	25.5	391,495	14.05	3.58
Wichita	KS	36	6	16.7	389,902	9.23	1.54
Cleveland	OH	49	11	22.4	385,809	12.70	2.85
Tampa	FL	52	18	34.6	377,165	13.79	4.77
Bakersfield	CA	44	15	34.1	376,380	11.69	3.99
Aurora	CO	31	9	29.0	361,710	8.57	2.49
Honolulu	HI	22	7	31.8	351,792	6.25	1.99
Anaheim	CA	28	8	28.6	351,043	7.98	2.28
Santa Ana	CA	23	12	52.2	334,217	6.88	3.59
Corpus Christi	TX	30	12	40.0	325,733	9.21	3.68
Riverside	CA	22	3	13.6	324,722	6.78	0.92
Lexington-Fayette	KY	50	10	20.0	318,449	15.70	3.14
St. Louis	MO	62	18	29.0	311,404	19.91	5.78
Stockton	CA	38	7	18.4	307,072	12.37	2.28
Pittsburgh	PA	22	6	27.3	303,625	7.25	1.98
St. Paul	MN	11	4	36.4	302,398	3.64	1.32
Cincinnati	OH	31	6	19.4	298,800	10.37	2.01
Anchorage	AK	18	8	44.4	298,192	6.04	2.68
Henderson	NV	13	4	30.8	292,969	4.44	1.37
Greensboro	NC	23	6	26.1	287,027	8.01	2.09
Plano	TX	12	0	0.0	286,057	4.19	0.00
Newark	NJ	28	16	57.1	281,764	9.94	5.68
Lincoln	NE	7	1	14.3	280,364	2.50	0.36
Toledo	OH	23	8	34.8	278,508	8.26	2.87
Orlando	FL	35	15	42.9	277,173	12.63	5.41
Chula Vista	CA	12	4	33.3	267,172	4.49	1.50
Irvine	CA	6	0	0.0	266,122	2.25	0.00
Fort Wayne	IN	28	3	10.7	264,488	10.59	1.13
Jersey City	NJ	7	2	28.6	264,152	2.65	0.76
Durham	NC	15	4	26.7	263,016	5.70	1.52
St. Petersburg	FL	33	12	36.4	260,999	12.64	4.60
Laredo	TX	24	6	25.0	257,156	9.33	2.33
Buffalo	NY	15	3	20.0	256,902	5.84	1.17
Madison	WI	9	5	55.6	252,551	3.56	1.98
Lubbock	TX	28	6	21.4	252,506	11.09	2.38
Chandler	AZ	17	3	17.6	247,477	6.87	1.21
Scottsdale	AZ	16	6	37.5	246,645	6.49	2.43
Glendale	AZ	32	7	21.9	245,895	13.01	2.85
Reno	NV	29	12	41.4	245,255	11.82	4.89
Norfolk	VA	18	6	33.3	245,115	7.34	2.45
Winston-Salem	NC	23	5	21.7	242,203	9.50	2.06
North Las Vegas	NV	22	8	36.4	238,702	9.22	3.35

Source: Population—U.S. Bureau of the Census.

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

City	State	Fatalities			Population	Fatality Rate per 100,000 Population	
		Total Killed	Pedestrians Killed				
			Number	Percent of Total Killed		Total	Pedestrian
Irving	TX	29	4	13.8	238,289	12.17	1.68
Chesapeake	VA	19	2	10.5	237,940	7.99	0.84
Gilbert	AZ	9	0	0.0	237,133	3.80	0.00
Hialeah	FL	17	2	11.8	236,387	7.19	0.85
Garland	TX	33	11	33.3	234,943	14.05	4.68
Fremont	CA	7	3	42.9	233,136	3.00	1.29
Baton Rouge	LA	44	12	27.3	227,715	19.32	5.27
Richmond	VA	16	5	31.3	223,170	7.17	2.24
Boise City	ID	12	3	25.0	223,154	5.38	1.34
San Bernardino	CA	27	11	40.7	216,239	12.49	5.09
Spokane	WA	7	0	0.0	215,973	3.24	0.00
Des Moines	IA	22	5	22.7	215,472	10.21	2.32
Modesto	CA	19	6	31.6	212,175	8.95	2.83
Birmingham	AL	39	9	23.1	212,157	18.38	4.24
Tacoma	WA	24	7	29.2	211,277	11.36	3.31
Fontana	CA	14	3	21.4	209,665	6.68	1.43
Rochester	NY	16	10	62.5	208,880	7.66	4.79
Oxnard	CA	0	0	0.0	207,906	0.00	0.00
Moreno Valley	CA	5	1	20.0	205,499	2.43	0.49
Fayetteville	NC	20	7	35.0	204,759	9.77	3.42
Aurora	IL	8	2	25.0	201,110	3.98	0.99
Glendale	CA	8	2	25.0	200,831	3.98	1.00
Yonkers	NY	2	0	0.0	200,807	1.00	0.00
Huntington Beach	CA	13	3	23.1	200,652	6.48	1.50
Montgomery	AL	23	4	17.4	200,022	11.50	2.00
Amarillo	TX	26	5	19.2	199,582	13.03	2.51
Little Rock	AR	15	3	20.0	198,541	7.56	1.51
Akron	OH	18	4	22.2	197,633	9.11	2.02
Columbus	GA	27	5	18.5	197,485	13.67	2.53
Augusta-Richmond Co.	GA	17	2	11.8	197,081	8.63	1.01
Grand Rapids	MI	11	2	18.2	196,445	5.60	1.02
Shreveport	LA	21	5	23.8	194,920	10.77	2.57
Salt Lake City	UT	17	5	29.4	193,744	8.77	2.58
Huntsville	AL	21	5	23.8	193,079	10.88	2.59
Mobile	AL	34	9	26.5	192,904	17.63	4.67
Tallahassee	FL	17	3	17.6	190,894	8.91	1.57
Grand Prairie	TX	13	1	7.7	190,682	6.82	0.52
Overland Park	KS	7	1	14.3	188,966	3.70	0.53
Knoxville	TN	30	4	13.3	186,239	16.11	2.15
Port St. Lucie	FL	13	6	46.2	185,132	7.02	3.24
Worcester	MA	9	3	33.3	184,508	4.88	1.63
Brownsville	TX	14	1	7.1	183,823	7.62	0.54
Tempe	AZ	24	3	12.5	182,498	13.15	1.64
Santa Clarita	CA	17	7	41.2	181,972	9.34	3.85
Newport News	VA	17	5	29.4	181,825	9.35	2.75

Source: Population—U.S. Bureau of the Census.

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

City	State	Fatalities			Population	Fatality Rate per 100,000 Population	
		Total Killed	Pedestrians Killed				
			Number	Percent of Total Killed		Total	Pedestrian
Cape Coral	FL	10	0	0.0	179,804	5.56	0.00
Providence	RI	9	4	44.4	179,219	5.02	2.23
Fort Lauderdale	FL	31	12	38.7	178,752	17.34	6.71
Chattanooga	TN	28	1	3.6	177,571	15.77	0.56
Rancho Cucamonga	CA	13	2	15.4	176,534	7.36	1.13
Oceanside	CA	14	4	28.6	175,464	7.98	2.28
Santa Rosa	CA	11	5	45.5	175,155	6.28	2.85
Garden Grove	CA	13	7	53.8	174,858	7.43	4.00
Vancouver	WA	7	3	42.9	174,826	4.00	1.72
Sioux Falls	SD	4	1	25.0	174,360	2.29	0.57
Ontario	CA	13	3	23.1	173,212	7.51	1.73
McKinney	TX	8	1	12.5	172,298	4.64	0.58
Elk Grove	CA	7	0	0.0	169,743	4.12	0.00
Jackson	MS	22	8	36.4	169,148	13.01	4.73
Pembroke Pines	FL	8	3	37.5	168,587	4.75	1.78
Salem	OR	7	3	42.9	167,419	4.18	1.79
Springfield	MO	19	3	15.8	167,319	11.36	1.79
Corona	CA	9	1	11.1	166,785	5.40	0.60
Eugene	OR	8	2	25.0	166,575	4.80	1.20
Fort Collins	CO	8	2	25.0	164,207	4.87	1.22
Peoria	AZ	12	2	16.7	164,173	7.31	1.22
Frisco	TX	1	0	0.0	163,656	0.61	0.00
Cary	NC	3	1	33.3	162,320	1.85	0.62
Lancaster	CA	26	8	30.8	160,106	16.24	5.00
Hayward	CA	9	2	22.2	158,937	5.66	1.26
Palmdale	CA	17	3	17.6	157,356	10.80	1.91
Salinas	CA	12	7	58.3	157,218	7.63	4.45
Alexandria	VA	4	2	50.0	155,810	2.57	1.28
Lakewood	CO	13	1	7.7	154,393	8.42	0.65
Springfield	MA	12	3	25.0	154,074	7.79	1.95
Pasadena	TX	12	3	25.0	153,351	7.83	1.96
Sunnyvale	CA	9	4	44.4	152,771	5.89	2.62
Macon-Bibb Co.	GA	26	8	30.8	152,555	17.04	5.24
Pomona	CA	19	8	42.1	152,494	12.46	5.25
Hollywood	FL	24	5	20.8	151,998	15.79	3.29
Kansas City	KS	19	2	10.5	151,709	12.52	1.32
Escondido	CA	11	3	27.3	151,613	7.26	1.98
Clarksville	TN	23	3	13.0	150,287	15.30	2.00

Source: Population—U.S. Bureau of the Census.

Table 125
Fatalities and Fatality Rates by State, 1975-2016

State	Fatalities								Fatality Rate per 100 Million Vehicle Miles Traveled							
	1975	1985	1995	2000	2005	2010	2016	Difference, 1975-2016	1975	1985	1995	2000	2005	2010	2016	Difference, 1975-2016
AL	902	882	1,114	996	1,148	862	1,038	**+15%**	3.63	2.51	2.20	1.76	1.92	1.34	1.50	**-59%**
AK	112	127	87	106	73	56	84	**-25%**	4.38	3.17	2.11	2.30	1.45	1.17	1.60	**-63%**
AZ	670	893	1,035	1,036	1,179	759	962	**+44%**	4.19	4.14	2.61	2.11	1.97	1.27	1.46	**-65%**
AR	559	534	631	652	654	571	545	**-3%**	4.01	3.12	2.37	2.24	2.05	1.70	1.52	**-62%**
CA	4,092	4,960	4,192	3,753	4,333	2,720	3,623	**-11%**	3.09	2.39	1.52	1.22	1.32	0.84	1.07	**-65%**
CO	581	579	645	681	606	450	608	**+5%**	3.50	2.21	1.84	1.63	1.26	0.96	1.17	**-67%**
CT	389	448	317	341	278	320	293	**-25%**	2.13	2.00	1.13	1.11	0.88	1.02	0.93	**-56%**
DE	122	104	121	123	133	101	119	**-2%**	3.37	1.94	1.61	1.49	1.40	1.13	1.17	**-65%**
DC	70	60	58	48	48	24	27	**-61%**	2.27	1.86	1.67	1.37	1.29	0.67	0.75	**-67%**
FL	1,998	2,832	2,805	2,999	3,518	2,444	3,174	**+59%**	3.24	3.22	2.19	1.99	1.75	1.25	1.47	**-55%**
GA	1,360	1,361	1,488	1,541	1,729	1,247	1,554	**+14%**	3.46	2.53	1.74	1.47	1.52	1.12	1.27	**-63%**
HI	144	126	130	132	140	113	120	**-17%**	3.47	1.86	1.64	1.55	1.39	1.13	1.13	**-67%**
ID	281	255	262	276	275	209	253	**-10%**	4.78	3.31	2.13	2.04	1.85	1.32	1.47	**-69%**
IL	2,041	1,534	1,586	1,418	1,363	927	1,082	**-47%**	3.56	2.17	1.68	1.38	1.27	0.88	1.01	**-72%**
IN	1,128	974	960	886	938	754	821	**-27%**	3.02	2.39	1.49	1.25	1.31	1.00	0.99	**-67%**
IA	670	474	527	445	450	390	404	**-40%**	3.75	2.35	2.03	1.51	1.45	1.24	1.21	**-68%**
KS	509	486	442	461	428	431	429	**-16%**	3.29	2.52	1.76	1.64	1.44	1.44	1.34	**-59%**
KY	863	712	849	820	985	760	834	**-3%**	3.50	2.50	2.07	1.75	2.08	1.58	1.69	**-52%**
LA	934	931	894	938	963	721	757	**-19%**	4.60	2.79	2.31	2.30	2.14	1.59	1.54	**-67%**
ME	223	206	187	169	169	161	161	**-28%**	3.14	2.22	1.49	1.19	1.13	1.11	1.09	**-65%**
MD	670	729	671	588	614	496	505	**-25%**	2.66	2.19	1.50	1.17	1.09	0.88	0.85	**-68%**
MA	864	742	444	433	441	347	389	**-55%**	2.75	1.87	0.92	0.82	0.80	0.64	0.63	**-77%**
MI	1,779	1,545	1,530	1,382	1,129	942	1,064	**-40%**	3.06	2.29	1.79	1.41	1.09	0.97	1.07	**-65%**
MN	754	608	597	625	559	411	392	**-48%**	2.94	1.86	1.35	1.19	0.98	0.73	0.66	**-78%**
MS	546	662	868	949	931	641	690	**+26%**	3.80	3.45	2.94	2.67	2.32	1.61	1.69	**-56%**
MO	1,045	931	1,109	1,157	1,257	821	945	**-10%**	3.41	2.37	1.87	1.72	1.83	1.16	1.28	**-62%**
MT	291	223	215	237	251	189	190	**-35%**	5.08	3.03	2.28	2.40	2.26	1.69	1.51	**-70%**
NE	369	237	254	276	276	190	218	**-41%**	3.29	1.97	1.61	1.53	1.43	0.98	1.05	**-68%**
NV	218	259	313	323	427	257	328	**+50%**	4.74	3.42	2.24	1.83	2.06	1.16	1.22	**-74%**
NH	151	191	118	126	166	128	136	**-10%**	2.85	2.53	1.11	1.05	1.24	0.98	1.01	**-65%**

Table 125
Fatalities and Fatality Rates by State, 1975-2016 (Continued)

State	Fatalities								Fatality Rate per 100 Million Vehicle Miles Traveled							
	1975	1985	1995	2000	2005	2010	2016	Difference, 1975-2016	1975	1985	1995	2000	2005	2010	2016	Difference, 1975-2016
NJ	1,043	964	774	731	747	556	601	**-42%**	2.15	1.83	1.27	1.08	1.01	0.76	0.78	**-64%**
NM	555	535	485	432	488	349	402	**-28%**	5.59	4.03	2.29	1.90	2.04	1.38	1.44	**-74%**
NY	2,366	2,006	1,679	1,460	1,434	1,201	1,025	**-57%**	3.63	2.22	1.46	1.13	1.03	0.92	0.83	**-77%**
NC	1,506	1,482	1,448	1,557	1,547	1,320	1,450	**-4%**	4.14	2.97	1.90	1.74	1.53	1.29	1.24	**-70%**
ND	167	90	74	86	123	105	113	**-32%**	3.71	1.61	1.13	1.19	1.62	1.27	1.16	**-69%**
OH	1,766	1,646	1,360	1,366	1,321	1,080	1,132	**-36%**	2.75	2.18	1.35	1.29	1.20	0.97	0.95	**-65%**
OK	757	744	669	650	803	668	683	**-10%**	3.33	2.39	1.74	1.50	1.71	1.40	1.39	**-58%**
OR	562	559	574	451	487	317	495	**-12%**	3.53	2.61	1.91	1.33	1.38	0.94	1.35	**-62%**
PA	2,078	1,771	1,480	1,520	1,616	1,324	1,188	**-43%**	3.26	2.35	1.57	1.49	1.50	1.32	1.17	**-64%**
RI	110	109	69	80	87	67	51	**-54%**	1.94	1.87	1.00	0.96	1.05	0.81	0.64	**-67%**
SC	820	951	881	1,065	1,094	809	1,015	**+24%**	3.98	3.56	2.28	2.34	2.21	1.65	1.86	**-53%**
SD	195	130	158	173	186	140	116	**-41%**	3.76	2.07	2.06	2.05	2.22	1.58	1.22	**-68%**
TN	1,126	1,101	1,259	1,307	1,270	1,032	1,041	**-8%**	3.42	3.03	2.24	1.99	1.79	1.47	1.35	**-61%**
TX	3,372	3,678	3,183	3,779	3,536	3,023	3,776	**+12%**	3.99	2.57	1.76	1.72	1.50	1.29	1.39	**-65%**
UT	272	303	325	373	282	253	281	**+3%**	3.42	2.52	1.73	1.65	1.12	0.95	0.89	**-74%**
VT	143	115	106	76	73	71	62	**-57%**	4.32	2.45	1.71	1.12	0.95	0.98	0.84	**-81%**
VA	993	976	900	929	947	740	760	**-23%**	2.87	2.04	1.29	1.24	1.18	0.90	0.90	**-69%**
WA	758	744	653	631	649	460	537	**-29%**	3.16	2.16	1.33	1.18	1.17	0.80	0.88	**-72%**
WV	461	420	376	411	374	315	269	**-42%**	4.36	3.32	2.16	2.14	1.82	1.64	1.38	**-68%**
WI	930	744	745	799	815	572	607	**-35%**	3.25	2.03	1.45	1.40	1.36	0.96	0.95	**-71%**
WY	210	152	170	152	170	155	112	**-47%**	5.36	2.81	2.41	1.88	1.88	1.66	1.20	**-78%**
USA	**44,525**	**43,825**	**41,817**	**41,945**	**43,510**	**32,999**	**37,461**	**-16%**	**3.35**	**2.47**	**1.73**	**1.53**	**1.46**	**1.11**	**1.18**	**-65%**
PR	496	600	595	568	457	340	279	**-44%**	7.27	5.74	3.83	3.23	2.35	1.83	1.92	**-74%**

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

Chapter 5 ■ States

Restraint Use and Motorcycle Helmet Use Laws

Restraint Use Laws

The first mandatory belt use law was enacted in the State of New York in 1984. Adult belt use laws are now in effect in 49 States, the District of Columbia, and Puerto Rico. The laws differ from State to State, according to the type and age of the vehicle, occupant age and seating position, etc. The goal of these laws is to promote belt use and thereby reduce deaths and injuries in motor vehicle crashes.

In 2016, 34 States, the District of Columbia, and Puerto Rico had primary seat belt laws in effect, enabling law enforcement officers to stop vehicles and write citations when they observed violations of the seat belt law. In 15 States, the laws specified secondary enforcement, meaning that law enforcement officers were permitted to write citations only after a vehicle was stopped for some other traffic infraction. New Hampshire is the only State without a seat belt law for adults, although it does have a primary child passenger safety law that covers all drivers and passengers under the age of 18.

The first mandatory child restraint use law was implemented in the State of Tennessee in 1978. Since 1985, all 50 States and the District of Columbia have had child restraint use laws in effect. Child restraint use laws differ from State to State, in terms of the ages of children covered and in other important ways, including height and weight limits, seating position requirements, and various exemptions and exceptions.

The most current information on seat belt laws and child passenger safety laws is available on the Web site of the Governors Highway Safety Association (GHSA) at www.ghsa.org:

- Seat belt laws — www.ghsa.org/html/stateinfo/laws/seatbelt_laws.html
- Child passenger safety laws — www.ghsa.org/html/stateinfo/laws/childsafety_laws.html.

In 2016, seat belt use rates in the United States ranged from 70.2 percent in New Hampshire to 97.2 percent in Georgia. Nineteen States, the District of Columbia, and Puerto Rico achieved belt use rates of 90 percent or higher. These results are from probability-based observational surveys conducted by 50 States, the District of Columbia, and U.S. Territories. The nationwide seat belt use rate in 2016 was 90.1 percent, as measured by NHTSA's National Occupant Protection Use Survey (NOPUS). NOPUS is a national probability-based survey, which is independent from State belt use surveys. Observed seat belt use rates for the States and the Nation in 2016 can be found in *Seat Belt Use in 2016—Use Rates in the States and Territories*, DOT HS 812 417, https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812417.

Motorcycle Helmet Use Laws

In 2016, 19 States, the District of Columbia, and Puerto Rico required helmet use by all motorcyclists. In 28 States, helmet use was required for only a subset of motorcyclists (typically, motorcyclists under age 18), and 3 States (Illinois, Iowa, and New Hampshire) do not require helmet use for motorcyclists of any age. The most current information on helmet use laws is available on the GHSA Web site at www.ghsa.org/html/stateinfo/laws/helmet_laws.html.

According to results from NOPUS, the overall rate of DOT-compliant motorcycle helmet use in the United States was 65.3 percent in 2016. Helmet use continued to be significantly higher in States that required all motorcyclists to be helmeted than in other States. Information on motorcycle helmet use in 2016 can be found in Motorcycle Helmet Use in 2016—Overall Results, DOT HS 812 378, https://crashstats.nhtsa.dot.gov/APi/Public/ViewPublication/812378.

APPENDIXES

APPENDIX A ■ FARS DATA ELEMENTS

2016 Fatality Analysis Reporting System Data Elements

Crash Level

Arrival Time EMS
Atmospheric Conditions
City
County
Crash Date
Crash Events
Crash Time
EMS Time at Hospital
First Harmful Event
Global Position
Light Condition
Manner of Collision
Milepoint
National Highway System
Notification Time EMS
Number of Forms Submitted for Persons Not in Motor Vehicles
Number of Motor Vehicle Occupant Forms Submitted
Number of Vehicle Forms Submitted
Rail Grade Crossing Identifier
Related Factors—Crash Level
Relation to Junction
Roadway Function Class
Route Signing
School Bus Related
Special Jurisdiction
State
Trafficway Identifier
Work Zone

Vehicle Level

Areas of Impact
Attempted Avoidance Maneuver
Body Type
Bus Use
Cargo Body Type
Contributing Circumstance, Motor Vehicle
Crash Type
Critical Event—Precrash (Category)
Critical Event—Precrash (Event)
Device Functioning
Emergency Use
Extent of Damage
Fire Occurrence
Gross Vehicle Weight Rating/ Gross Combination Weight Rating
Hazardous Material Involvement/Placard
Hit-and-Run
Jackknife
Location of Rollover
Model Year
Most Harmful Event
Motor Carrier Identification Number
Number of Occupants
Pre-Event Movement (Prior to Recognition of Critical Event)
Pre-Impact Location
Pre-Impact Stability
Registered Vehicle Owner
Registration State
Related Factors—Vehicle Level
Roadway Alignment
Roadway Grade
Roadway Surface Conditions
Roadway Surface Type
Rollover
Sequence of Events
Special Use
Speed Limit
Total Lanes in Roadway
Traffic Control Device
Trafficway Description
Travel Speed
Underride/Override
Unit Type
Vehicle Configuration
Vehicle Identification Number
Vehicle Make
Vehicle Model
Vehicle Number
Vehicle Removal
Vehicle Trailing

Appendix A ■ FARS Data Elements

2016 Fatality Analysis Reporting System Data Elements (Continued)

Driver Level

Commercial Motor Vehicle License Status
Compliance with Commercial Drivers License (CDL) Endorsements
Compliance with License Restrictions
Condition (Impairment) at Time of Crash
Date of First Crash, Suspension, Conviction
Date of Last Crash, Suspension, Conviction
Driver Distracted By
Driver Height
Driver Maneuvered to Avoid
Driver Presence
Driver Weight
Driver's License State
Driver's Vision Obscured By
Driver's Zip Code
License Compliance with Class of Vehicle
Non-CDL License Type Status
Previous DWI Convictions
Previous Other Harmful Motor Vehicle Convictions
Previous Recorded Crashes
Previous Recorded Suspensions and Revocations
Previous Speeding Convictions
Related Factors – Driver Level
Speed Related
Vehicle Number
Violations Charged

Person (Motor Vehicle Occupant) Level

Age
Air Bag Deployed
Alcohol Test
Any Indication of Misuse—Restraint System/Helmet Use
Death Date
Death Time
Died at Scene/En Route
Drug Test
Ejection
Ejection Path
Extrication
Fatal Injury at Work
Injury Severity
Method of Alcohol Determination by Police
Method of Drug Determination by Police
Number
Person Number
Person Type
Police-Reported Alcohol Involvement
Police-Reported Drug Involvement
Race/Hispanic Origin
Related Factors—Person (Motor Vehicle Occupant) Level
Restraint System/Helmet Use
Seating Position
Sex
Transported to Medical Facility By

Person (Not Motor Vehicle Occupant) Level

Age
Alcohol Test
Condition (Impairment) at Time of Crash
Death Date
Death Time
Died at Scene/En Route
Drug Test
Fatal Injury at Work
Injury Severity
Method of Alcohol Determination by Police
Method of Drug Determination by Police
Nonmotorist Action/Circumstances at Time of Crash
Nonmotorist Action/Circumstances Prior to Crash
Nonmotorist Location at Time of Crash
Nonmotorist Safety Equipment
Number of Motor Vehicle Striking Nonoccupant
Pedestrian/Bike Typing
Person Number
Person Type
Police-Reported Alcohol Involvement
Police-Reported Drug Involvement
Race/Hispanic Origin
Related Factors—Person (Not a Motor Vehicle Occupant) Level
Transported to Medical Facility By

APPENDIX B ■ GES DATA ELEMENTS

2016 General Estimates System Data Elements

Crash Level

Atmospheric Conditions
Crash Date
Crash Events
Crash Time
First Harmful Event
Global Position
Interstate Highway
Light Condition
Manner of Collision
Number of In-Transport Motor Vehicles
Number of Nonmotorists
Number of Parked/Working Vehicles
Relation to Junction
(Non-Interchange vs. Interchange)
Relation to Junction (Specific Location)
Relation to Trafficway
School Bus Related
Type of Intersection
Work Zone

Vehicle Level

Accident Type
Area of Impact
Area of Impact—Most Damaged
Body Type
Bus Use
Cargo Body Type
Contributing Circumstances, Motor Vehicle
Corrective Action Attempted
Critical Event
Device Functioning
Emergency Use
Extent of Damage
Fire Occurrence
Hazardous Material Class Number
Hazardous Material Involvement/Placard
Hazardous Materials Release
Hit-and-Run
Jackknife
Location of Rollover
Model Year
Most Harmful Event
Motor Carrier Identification Number
Movement Prior to Critical Event
Number of Occupants
Number of Occupants Coded
Pre-Crash Location
Pre-Crash Vehicle Control
Roadway Alignment
Roadway Grade
Roadway Surface Condition
Rollover
Special Use
Speed Limit
Total Lanes in Roadway
Traffic Control Device
Trafficway Description
Travel Speed
Vehicle Configuration
Vehicle Identification Number
Vehicle Make
Vehicle Model
Vehicle Number
Vehicle Removal
Vehicle Trailing

Appendix B ■ GES Data Elements

2016 General Estimates System Data Elements (Continued)

Driver Level

Condition (Impairment) at Time of Crash
Driver Distracted By
Driver Maneuvered to Avoid
Driver Presence
Driver's Vision Obscured By
Driver's Zip Code
Speed Related
Vehicle Number
Violations Charged

Person (Motor Vehicle Occupant) Level

Age
Air Bag Deployed
Alcohol Test
Any Indication of Misuse—Restraint System/ Helmet Use
Drug Test
Ejection
Injury Severity
Person Number
Person Type
Police-Reported Alcohol Involvement
Police-Reported Drug Involvement
Restraint System/Helmet Use
Seating Position
Sex
Taken to Hospital or Treatment Facility
Vehicle Number

Person (Not Motor Vehicle Occupant) Level

Age
Alcohol Test
Condition (Impairment) at Time of Crash
Drug Test
Injury Severity
Nonmotorist Action/Circumstances at Time of Crash
Nonmotorist Action/Circumstances Prior to Crash
Nonmotorist Location at Time of Crash
Nonmotorist Safety Equipment
Pedestrian/Bike Typing
Person Number
Person Type
Police-Reported Alcohol Involvement
Police-Reported Drug Involvement
Sex
Taken to Hospital or Treatment Facility

APPENDIX C ■ GES TECHNICAL NOTES

Standard Errors

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

In a report of this size, it is impractical to provide standard errors for each estimate. Instead, generalized standard errors for estimates of totals are provided in the following table. Generalized errors were calculated separately for the crash, vehicle, and people characteristics. The values for the GES estimates and an estimate of one standard error are given in Table C1 on the following page. By adding and subtracting two standard errors, a 95 percent confidence interval can be created for the GES estimates in this report. For example, the estimated number of persons injured in 2015 is given in Table 2 as 2,443,000. To calculate one standard error for this persons injured estimate, use Table C1. Since 2,443,000 does not appear in the Person Estimate column of Table C1, use linear interpolation from the standard error values for 2,000,000 (151,500) and 3,000,000 (234,800). One standard error would be approximately 188,000. The 95 percent confidence interval for this estimate would be 2,443,000 ± 2 × 188,000 or 2,067,000 to 2,819,000.

Appendix C ■ GES Technical Notes

Table C1
2015 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	500	1,000	400
5,000	900	5,000	1,200	5,000	1,000
6,000	1,000	10,000	1,900	10,000	1,500
7,000	1,100	20,000	3,000	20,000	2,400
8,000	1,200	30,000	4,100	30,000	3,300
9,000	1,300	40,000	5,200	40,000	4,100
10,000	1,400	50,000	6,200	50,000	4,900
20,000	2,400	60,000	7,100	60,000	5,700
30,000	3,200	70,000	8,100	70,000	6,400
40,000	4,000	80,000	9,100	80,000	7,200
50,000	4,800	90,000	10,000	90,000	7,900
60,000	5,500	100,000	11,000	100,000	8,600
70,000	6,300	200,000	20,200	200,000	15,800
80,000	7,000	300,000	29,400	300,000	22,900
90,000	7,800	400,000	38,700	400,000	30,000
100,000	8,500	500,000	48,000	500,000	37,100
200,000	15,800	600,000	57,400	600,000	44,300
300,000	22,900	700,000	67,000	700,000	51,500
400,000	30,200	800,000	76,600	800,000	58,800
500,000	37,500	900,000	86,400	900,000	66,200
600,000	44,900	1,000,000	96,300	1,000,000	73,700
700,000	52,400	2,000,000	200,000	2,000,000	151,500
800,000	60,000	3,000,000	312,000	3,000,000	234,800
900,000	67,600	4,000,000	430,900	4,000,000	322,800
1,000,000	75,300	5,000,000	555,900	5,000,000	414,900
2,000,000	156,900	6,000,000	686,300	6,000,000	510,800
3,000,000	245,100	7,000,000	821,800	7,000,000	610,100
4,000,000	338,800	8,000,000	962,000	8,000,000	712,500
5,000,000	437,400	9,000,000	1,106,600	9,000,000	818,000
6,000,000	540,300	10,000,000	1,255,300	10,000,000	926,300
6,500,000	593,400	11,000,000	1,408,100	11,000,000	1,037,300
7,000,000	647,400	12,000,000	1,564,600	12,000,000	1,150,900
* $SE = e^{a + b\ (\ln x)^2}$, *where* a = 4.097120 b = 0.037370		** $SE = e^{a + b\ (\ln x)^2}$, *where* a = 4.363020 b = 0.037260		*** $SE = e^{a + b\ (\ln x)^2}$, *where* a = 4.196760 b = 0.036730	

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 provided complete information, data can be missing. Prior to 2010 data, two different statistical procedures were 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). Imputation by sequential regression was instituted in 2010, using a software package called IVEware that was developed at the University of Michigan. In this method, covariates are selected automatically using stepwise regression. Because it can be done in an automated fashion, this method replaced both univariate and hotdeck imputation in 2010. The only exception was body type, which was imputed in a univariate method. Table C2 below gives the reader the proportions of unknown values prior to imputation for variables with imputed values for 2015.

Table C2

Percent of Unknowns for 2015 GES Data Elements

Crash Level			
Atmospheric Condition	1.2%	Light Condition	0.7%
Crash Severity	2.8%	Manner of Collision	0.2%
Day of Week	0.0%	Minute of Crash	0.4%
First Harmful Event	0.1%	Relation to Junction—Specific Location	0.6%
Hour of Crash	0.4%	Relation to Trafficway	<0.1%
Vehicle/Driver Level			
Initial Point of Impact	1.8%	Speed Limit*	14.4%
Most Harmful Event	0.1%	Traffic Control Device*	1.9%
Roadway Surface Condition*	0.9%	Vehicle Type	2.1%
Person Level			
Age	12.8%	Seating Position	1.7%
Injury Severity	4.5%	Sex	4.9%

*Roadway Surface Condition, Speed Limit, and Traffic Control Device elements were moved from the Crash level to the Vehicle level in 2010.

Note: For some data elements, counts for the GES category "Not Reported On" were combined with counts for "Unknown" in the frequencies above.

GLOSSARY

Alcohol Involvement

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

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

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

Alcohol-Impaired Driving Crashes

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

Alcohol-Impaired Driving Fatalities

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

Blood Alcohol Concentration

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

Body Type

Detailed type of motor vehicle within a vehicle type.

Bus

Any motor vehicle designed primarily to transport large groups of passengers (nine or more persons, including the driver). Includes 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.

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.

Glossary

Fixed Object

Stationary structures or substantial vegetation attached to the terrain.

Gross Vehicle Weight Rating (GVWR)

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

Initial Impact Point

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

Injury Severity

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

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

Jackknife

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

Junction

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

Land Use

The crash location (urban or rural).

Large Trucks

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

Light Trucks

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

Manner of Collision

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

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

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

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

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

Most Harmful Event

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

Motor Vehicle in Transport

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

Motorcycle

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

Motorcycle Rider

The operator (driver) of a motorcycle.

Motorcyclist

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

Night

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

Noncollision

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

Nonoccupant

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

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

Nonoccupant Location

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

Objects Not Fixed

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

Occupant

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

Other Vehicle

Consists of the following types of vehicles:

1. Large limousine (more than four side doors or stretched chassis)
2. Three-wheel automobile or automobile derivative
3. Van-based motorhome
4. Light-truck-based motorhome (chassis mounted)
5. Large-truck-based motorhome
6. ATV (all terrain vehicle, including dune/swamp buggy) and ATC (all terrain cycle)
7. Snowmobile
8. Farm equipment other than trucks
9. Construction equipment other than trucks (includes graders)
10. Other type vehicle (includes go-cart, fork lift, city streetsweeper).

Passenger

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

Passenger Car

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

Pedalcyclist

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

Pedestrian

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

Restraint Use

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

Roadway

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

Roadway Function Class

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

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

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

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

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

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

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

Glossary

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

A

Age
- Alcohol 48-50, 51, 112-115, 117-118
- Crash Type 114, 115
- Day of Week 114, 115
- Occupant 107
- Person Type 107, 111, 113, 127, 131
- Rates 26-27, 38-39, 96, 101, 127, 131
- Restraint Use 119
- School Bus Related 126
- Sex 96, 101, 102, 107, 127, 131
- State 150-151
- Time of Day 114, 115

Airbag 121

Alcohol
- Age 48-50, 51, 111, 112, 113, 114, 115, 117
- Crash Type 66, 67, 92, 114, 115
- Day of Week 114, 115
- Driver Survival Status 52, 166-167
- Holiday 42-43
- Pedestrian 53, 118
- Person Type 111
- Sex 45
- State 160-161, 162-163, 164-165, 166-167
- Time of Day 44, 66, 67, 114, 115
- Vehicle Type 46, 47, 116
- Year 40, 41, 42-43, 44, 45, 46, 47, 48-50, 51, 52, 53

Ambulance 112

B

Body Type 75, 110

Bus 21-22, 66, 73, 73, 75, 77, 89, 90, 104, 106, 107, 108, 109, 110, 116, 118

C

City 174-177

Crash Type
- Alcohol 66, 67, 97, 114
- Day of Week 114, 115
- Driver Age 114, 115
- Emergency Vehicle 99
- Hazardous Cargo 78
- Impact Point 82, 84, 88
- Large Truck 36-37
- Relation to Roadway 64
- Roadway Function Class 78
- Speed Limit 72, 105
- Time of Day 66, 97, 114, 115
- Vehicle Type 80, 99, 122

D

Day of Week 62, 114, 115, 123, 124, 128, 129, 132

Driver
- Age 48-50, 51, 101, 102, 107, 112, 113, 114, 115
- Alcohol 40, 41, 42-43, 44, 45, 52, 66, 67, 97, 98, 103, 111, 112, 113, 114, 115, 116, 117, 118, 160-161, 162-163, 164-165, 166-167
- License Compliance 102, 125
- Previous Driving Record 102
- Related Factors 103
- Restraint Use 54-55, 118
- Sex 23-24, 25, 45, 101, 102
- State 146-147, 162-163, 164-165, 166-167

E

Ejection 109

Emergency Medical Services 64, 170-171, 172-173

Emergency Vehicle 99

F

Fire 77

Fire Truck 99

First Harmful Event 65, 100, 140-141

H

Hazardous Cargo 78

Helmet Use 125, 137, 202

Holiday 42-43

Index

I

Impact Point 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 108, 128, 132

Intersection 72, 127, 131

J

Jackknife 87

L

Land Use 64, 72, 105, 106

Large Truck
- Alcohol 46, 116
- Crash Type 36-37, 86
- Ejection 109
- Fire 77
- Impact Point 86, 108, 128, 132
- Jackknife 87
- Most Harmful Event 85, 108
- Number of Trailers 87
- Occupant 21-22, 32, 33, 36-37
- Rates 19-20, 32, 33
- Restraint Use 118
- Rollover 76, 87
- State 152-153
- Year 19-20, 32, 33, 36-37, 46

License Compliance 102, 125

Licensed Drivers 16-17, 23-24, 25, 101, 102, 146-147

Light Condition 63, 97

Light Truck
- Alcohol 46, 47, 116
- Crash Type 80
- Ejection 109
- Fire 77
- Impact Point 80, 83, 84, 108, 128, 132
- Most Harmful Event 79, 83, 108
- Occupant 30, 31, 106, 107, 108, 109, 110, 120, 121, 122, 152-153, 156-157
- Rates 19-20, 30, 31
- Restraint Use 118, 120, 121
- Rollover 58, 76, 122, 156-157
- Seating Position 120
- State 152-153, 156-157
- Year 19-20, 21-22, 30, 31, 46, 47, 58

Location 64, 127, 131

M

Manner of Collision 65, 100

Month 62

Most Harmful Event 79, 81, 83, 85, 87, 89, 108

Motorcycle
- Age 107
- Alcohol 116
- Crash Type 66, 88, 109
- Day of Week 123, 124
- Fire 77
- Helmet Use 125
- Helmet Use Requirements 180
- Impact Point 88, 108
- License Compliance 125
- Most Harmful Event 87, 108
- Occupant 34, 35, 104, 106, 107, 108, 109, 110, 152-153
- Rates 34, 35, 37
- State 148-149, 180
- Time of Day 123, 124
- Year 19-20, 21-22, 34, 35, 36-37

N

Number of Lanes 73

O

Occupant
- Age 26-27, 107, 119
- Body Type 110
- Ejection 109
- Restraint Laws 180
- Restraint Use 56-57, 119, 120, 121, 176-177
- Sex 106, 107
- Vehicle Type 21-22, 28, 29, 30, 31, 32, 33, 34, 35, 36-37, 104, 106, 107, 108, 109, 110, 116, 118, 121, 122, 128, 152-153
- Year 26-27, 28, 29, 30, 31, 32, 33, 34, 35, 36-37, 56-57, 58

P

Passenger 94, 99, 104, 111, 125, 126, 148-149

Passenger Car
- Alcohol 46, 47, 116
- Crash Type 82, 122
- Ejection 109
- Fire 77
- Impact Point 80, 81, 82, 128, 132
- Most Harmful Event 89, 91, 124
- Occupant 21-22, 28, 29, 58, 104, 106, 107, 108, 109, 110, 111, 118, 119, 120, 121, 122
- Rates 19-20, 28, 29
- Restraint Use 118, 119, 120, 121
- Rollover 58, 76, 85, 122, 156-157
- Seating Position 120
- State 152-153, 154-155, 156-157
- Wheelbase Size 111
- Year 19-20, 21-22, 28, 29, 46, 47, 58

Pedalcyclist
- Age 131
- Alcohol 111
- Day of Week 132
- Impact Point on Striking Vehicle 132
- Location 131
- Rates 131
- Related Factors 133
- Sex 131
- State 148-149
- Time of Day 132
- Year 21-22

Pedestrian
- Age 126, 127
- Alcohol 53, 117, 118
- City 174-177
- Day of Week 128, 129
- Impact Point on Striking Vehicle 128
- Location 127
- Rates 127, 158-159
- Related Factors 130
- School Bus Related 126
- Sex 127
- State 138, 138, 140-141
- Striking Vehicle Type 126
- Time of Day 128, 129
- Year 21-22, 53

Police Vehicle 99

Population
- Age 26-27, 38-39, 96, 127, 131
- City 174-177
- Rates 16-17, 26-27, 38-39, 96, 127, 131, 146-147, 158-159, 174-177
- Sex 96, 148, 153
- State 146-147
- Year 16-17, 26-27, 38-38

Previous Driving Record 102

R

Rates: Licensed Drivers
- Age 101, 102
- Sex 23-24, 25, 102, 102
- State 146-147
- Year 16-17, 23-24, 25

Rates: Population
- Age 26-27, 38-39, 96, 127, 131
- City 174-177
- Pedestrian 127, 158-159
- Sex 96, 127, 131
- State 146-147, 158-159
- Year 16-17

Rates: Registered Vehicles
- State 146-147
- Vehicle Type 19-20, 28, 30, 32, 34
- Year 16-17, 19-20, 28, 30, 32, 34

Rates: Vehicle Miles of Travel
- Month 62
- State 178-179
- Vehicle Type 19-20, 28, 29, 30, 31, 32, 33, 34, 35
- Year 16-17, 18, 19-20, 28, 29, 30, 31, 32, 33, 34, 35

Registered Vehicles 16-17, 19-20, 28, 30, 32, 34, 146-147

Relation to Junction 72

Relation to Roadway 64

Index

Restraint Use
Age 119
Child Passenger Protection Laws 180
Driver 54-55, 118
Restraint Type 121
Seat Belt Use Laws 180
Seat Belt Use Rates 180
Seating Position 120
State 176-177, 180
Vehicle Type 118
Year 54-55, 56-57

Roadway Function Class 78, 99, 142-143, 144-145, 168-169

Rollover 58, 76, 87, 122, 156-157

S

School Bus Related 126

Seating Position 120

Sex
Age 96, 101, 102, 107, 127, 131
Alcohol 45
Person Type 123
Rates 25-26, 27, 108, 109, 115, 148, 153
Vehicle Type 121

Speed Limit 72, 105, 106

Speeding 168-169

T

Time of Day 44, 62, 63, 66, 67, 97, 98, 101, 114, 115, 123, 124, 128, 129, 132

Traffic Control Device 72

Trafficway Flow 73

V

Vehicle Maneuver 77

Vehicle Miles of Travel 16-17, 18, 19-20, 28, 29, 30, 31, 32, 33, 34, 35

Vehicle Type
Alcohol 46, 47, 116
Body Type 75, 110
Crash Severity 19-20
Ejection 109
Emergency Vehicles 99
Fire 77
Impact Point 80, 108, 128, 132
Most Harmful Event 79, 108
Occupant Age 107
Occupant Sex 106, 107
Restraint Use 118, 121
Rollover 58, 76, 122, 156-157
State 152-153, 156-157
Two-Vehicle Crashes 66, 109
Year 19-20, 21-22, 46, 47, 58

W

Weather Condition 63, 97

Work Zone 99

Motor Vehicle Traffic Fatalities and Fatality Rates, 1899-2016

Year	Total Fatalities	Million Vehicle Miles Traveled	Fatality Rate per 100 Million Vehicle Miles Traveled	Year	Total Fatalities	Million Vehicle Miles Traveled	Fatality Rate per 100 Million Vehicle Miles Traveled
1899	26	—	—	1958	35,331	664,653	5.32
1900	36	—	—	1959	36,223	700,480	5.17
1901	54	—	—	1960	36,399	718,762	5.06
1902	79	—	—	1961	36,285	737,421	4.92
1903	117	—	—	1962	38,980	766,734	5.08
1904	172	—	—	1963	41,723	805,249	5.18
1905	252	—	—	1964	45,645	846,298	5.39
1906	338	—	—	1965	47,089	887,812	5.30
1907	581	—	—	1966	50,894	925,899	5.50
1908	751	—	—	1967	50,724	964,005	5.26
1909	1,174	—	—	1968	52,725	1,015,869	5.19
1910	1,599	—	—	1969	53,543	1,061,791	5.04
1911	2,043	—	—	1970	52,627	1,109,724	4.74
1912	2,968	—	—	1971	52,542	1,178,811	4.46
1913	4,079	—	—	1972	54,589	1,259,786	4.33
1914	4,468	—	—	1973	54,052	1,313,110	4.12
1915	6,779	—	—	1974	45,196	1,280,544	3.53
1916	7,766	—	—	1975	44,525	1,327,664	3.35
1917	9,630	—	—	1976	45,523	1,402,380	3.25
1918	10,390	—	—	1977	47,878	1,467,027	3.26
1919	10,896	—	—	1978	50,331	1,544,704	3.26
1920	12,155	—	—	1979	51,093	1,529,133	3.34
1921	13,253	55,027	24.08	1980	51,091	1,527,295	3.35
1922	14,859	67,697	21.95	1981	49,301	1,555,308	3.17
1923	17,870	84,995	21.02	1982	43,945	1,595,010	2.76
1924	18,400	104,838	17.55	1983	42,589	1,652,788	2.58
1925	20,771	122,346	16.98	1984	44,257	1,720,269	2.57
1926	22,194	140,735	15.77	1985	43,825	1,774,826	2.47
1927	24,470	158,453	15.44	1986	46,087	1,834,872	2.51
1928	26,557	172,856	15.36	1987	46,390	1,921,204	2.41
1929	29,592	197,720	14.97	1988	47,087	2,025,962	2.32
1930	31,204	206,320	15.12	1989	45,582	2,096,487	2.17
1931	31,963	216,151	14.79	1990	44,599	2,144,362	2.08
1932	27,979	200,517	13.95	1991	41,508	2,172,050	1.91
1933	29,746	200,642	14.83	1992	39,250	2,247,151	1.75
1934	34,240	215,563	15.88	1993	40,150	2,296,378	1.75
1935	34,494	228,568	15.09	1994	40,716	2,357,588	1.73
1936	36,126	252,128	14.33	1995	41,817	2,422,823	1.73
1937	37,819	270,110	14.00	1996	42,065	2,484,080	1.69
1938	31,083	271,177	11.46	1997	42,013	2,552,233	1.65
1939	30,895	285,402	10.83	1998	41,501	2,628,148	1.58
1940	32,914	302,188	10.89	1999	41,717	2,690,241	1.55
1941	38,142	333,612	11.43	2000	41,945	2,746,925	1.53
1942	27,007	268,224	10.07	2001	42,196	2,795,610	1.51
1943	22,727	208,192	10.92	2002	43,005	2,855,508	1.51
1944	23,165	212,713	10.89	2003	42,884	2,890,221	1.48
1945	26,785	250,173	10.71	2004	42,836	2,964,788	1.44
1946	31,874	340,880	9.35	2005	43,510	2,989,430	1.46
1947	31,193	370,894	8.41	2006	42,708	3,014,371	1.42
1948	30,775	397,957	7.73	2007	41,259	3,031,124	1.36
1949	30,246	424,461	7.13	2008	37,423	2,976,528	1.26
1950	33,186	458,246	7.24	2009	33,883	2,956,764	1.15
1951	35,309	491,093	7.19	2010	32,999	2,967,266	1.11
1952	36,088	513,581	7.03	2011	32,479	2,950,402	1.10
1953	36,190	544,433	6.65	2012	33,782	2,969,433	1.14
1954	33,890	561,963	6.03	2013	32,893	2,988,280	1.10
1955	36,688	605,646	6.06	2014	32,744	3,025,656	1.08
1956	37,965	627,843	6.05	2015	35,485	3,095,373	1.15
1957	36,932	647,004	5.71	2016	37,461	3,174,408	1.18
Total Traffic Fatalities (1899-2016): 3,719,843							

Notes: A traffic fatality is defined as a death that occurs within 30 days after a traffic crash.
Sources: **Traffic fatalities, 1899-1974:** National Center for Health Statistics, *HEW and State Accident Summaries* (adjusted to 30-Day Traffic Deaths by NHTSA); **1975-2016:** NHTSA, Fatality Analysis Reporting System (FARS). Vehicle Miles Traveled (VMT): Federal Highway Administration (FHWA); not available for years 1899-1920.

Lives Saved by Restraint Use and 21-Year-Old Minimum Legal Drinking Age Laws, and Additional Lives That Would Have Been Saved at 100-Percent Seat Belt and Motorcycle Helmet Use, 1975-2016

Year	Lives Saved, Age 4 and Younger	Lives Saved, Age 5 and Older	Lives Saved, Age 13 and Older	Lives Saved, All Ages	Lives Saved	Additional Lives That Would Have Been Saved at 100 Percent Use	
	Child Restraints	Seat Belts	Frontal Air Bags	Motorcycle Helmets	Minimum Drinking Age Law*	Seat Belts	Motorcycle Helmets
1975	36	978	0	823	412	13,301	1,164
1976	20	796	0	788	436	13,851	1,189
1977	35	682	0	970	474	14,460	1,472
1978	25	679	0	900	509	15,541	1,588
1979	49	594	0	885	575	15,726	1,676
1980	49	575	0	871	595	15,730	1,744
1981	69	548	0	843	633	15,222	1,667
1982	75	678	0	816	578	13,250	1,528
1983	105	809	0	735	609	12,913	1,450
1984	126	1,197	0	813	709	13,227	759
1985	153	2,435	0	788	701	12,508	764
1986	166	4,094	0	807	840	12,728	751
1987	213	5,141	2	667	1,071	12,678	697
1988	248	5,959	5	622	1,148	12,674	644
1989	238	6,333	8	561	1,093	12,256	553
1990	222	6,592	37	655	1,033	11,761	541
1991	253	6,838	71	595	941	10,812	467
1992	292	7,020	108	641	795	10,195	323
1993	313	7,773	190	671	816	10,212	336
1994	420	9,219	309	625	848	9,507	339
1995	408	9,882	536	624	851	9,781	326
1996	480	10,710	783	617	846	9,459	324
1997	444	11,259	973	627	846	9,096	315
1998	438	11,680	1,208	660	861	8,690	369
1999	447	11,941	1,491	745	901	8,809	396
2000	479	12,882	1,716	872	922	8,245	478
2001	388	13,295	1,978	947	927	8,016	558
2002	383	14,264	2,324	992	922	6,837	576
2003	447	15,095	2,519	1,173	918	6,151	651
2004	455	15,548	2,660	1,324	927	5,874	673
2005	424	15,688	2,752	1,554	882	5,667	731
2006	427	15,458	2,824	1,667	888	5,468	756
2007	388	15,223	2,800	1,788	831	5,048	805
2008	286	13,312	2,557	1,836	716	4,171	827
2009	307	12,757	2,481	1,486	636	3,690	733
2010	303	12,670	2,403	1,551	560	3,356	711
2011	262	12,071	2,341	1,622	543	3,396	707
2012	285	12,386	2,422	1,715	537	3,051	782
2013	263	12,644	2,398	1,640	507	2,812	717
2014	253	12,801	2,400	1,673	486	2,815	661
2015	272	14,067	2,596	1,800	542	2,716	742
2016	328	14,668	2,756	1,859	552	2,456	902
Total	**11,274**	**359,241**	**47,648**	**43,848**	**31,417**	**384,156**	**33,292**

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

The table above presents estimates of the lives saved in 2016 and previous years by various protective devices or laws. The estimates were obtained by combining information from fatal traffic crashes with estimates of the effectiveness of each device or law in saving lives. For seat belts and motorcycle helmets, the table also estimates the numbers of additional lives that could have been saved if the devices had been used by more people.

Introduction
FARS Operations
GES Operations
About This Report
Data Availability
Chapter 1 ■ Trends
Chapter 2 ■ Crashes
Chapter 3 ■ Vehicles
Chapter 4 ■ People
Chapter 5 ■ States
FARS Data Elements
GES Data Elements
GES Technical Notes
Glossary
Index

U.S. Department of Transportation
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DOT HS 812 554