

Minnesota Traffic Crashes in 2014

OVERVIEW

This edition of *Minnesota Motor Vehicle Crash Facts* summarizes the crashes, deaths and injuries that occurred on Minnesota roadways during 2014. The information provided in this book will assist you in traveling our roadways safely.

In 2014:

- 78,396 traffic crashes were reported to the Minnesota Department of Public Safety (DPS)
- 143,681 motor vehicles and 190,070 people were involved in these crashes
- 361 people died and 29,439 people were injured
- Estimated economic cost to Minnesota: \$1,604,051,900

On an average day in 2014:

- 215 crashes
- 1 death and 81 injuries
- Average daily cost to Minnesota: \$4,394,663

2014 known alcohol-related statistics:

- 3,453 crashes
- 111 deaths and 2,040 injuries
- Estimated economic cost to Minnesota: \$214,937,000

Highlights from the 2014 *Crash Facts* edition

- **Traffic fatalities decrease**
In 2014, Minnesota experienced a total of 361 traffic fatalities, a 6.7 percent decrease from the previous year. This percentage decrease is encouraging in light of the fact that traffic fatalities in Minnesota have decreased sharply during the past decade. However, it indicates that traffic fatalities in Minnesota remain at epidemic levels - serving as a call-to-action for all motorists to buckle up, drive at safe speeds, pay attention and never drive impaired.
- **Safety belt use in Minnesota is 95 percent**
An observational study in June, 2014 showed that belt use by front seat drivers and passengers was 95%. Seat belts save lives. All motor vehicle occupants are urged to buckle up, every seat and every ride.
- **The fatality rate in Minnesota per 100 million vehicle miles traveled (VMT) remains low**
The VMT-based fatality rate for 2014 is 0.63, one of the lowest in the nation. The VMT fatality rate has shown dramatic improvement in the last two decades (it was 1.48 in 1994).

CRASH FACTS ORGANIZATION

Crash Facts has a wealth of statistical information about traffic crashes in Minnesota. Follow this basic user's guide to navigate the book.

Introduction

Beginning on page 1, you will find introductory information including the history, societal costs and general cause of crashes. You can use this information to find:

- How crash costs are estimated
- Contributing factors in crashes
- Historical analysis of traffic deaths over the last 35 to 40 years
- Licensed drivers by age (Table 2)
- Registered motor vehicles by category (Table 3)

Section I: All Crashes

Beginning on page 7, you will find the aggregate of all traffic crashes that occurred in Minnesota in 2014. Information provided includes:

- Historical information dating back to 1965 (Table 1.01)
- Factors contributing to crashes (Tables 1.09, 1.10 and 1.17)
- Holiday crashes, deaths and injuries (Table 1.28)

Section II: Alcohol-Related Crashes

Beginning on page 38, you will find data about impaired driving and traffic crashes. This section focuses on crashes involving alcohol and spells out answers to commonly-raised questions, including:

- Historical overview since 1980 (Table 2.01)
- DWI arrest statistics (Tables 2.02, 2.03 and 2.04)
- Persons killed and injured in alcohol-related crashes by age (Table 2.05)

Section III: Safety Equipment Use by Vehicle Occupants in Crashes

Beginning on page 51, you will find information on belt use by people in cars and trucks.

- This section includes a table showing observational seat belt use rates since 1986 (Table 3.01)

Section IV: Motorcycle Crashes

Beginning on page 60, you will find information on crashes involving motorcycles.

- Crashes involving all-terrain vehicles or mopeds are not included in this section

Section V: Truck Crashes

Beginning on page 69, you will find information on crashes that involved a heavy commercial vehicle.

- Crashes involving pickup trucks are not included in this section

Section VI: Pedestrian Crashes

Beginning on page 77, you will find information on motor-vehicle/pedestrian crashes.

- Crashes involving a pedestrian/train or pedestrian/bicycle are not included in this section

Section VII: Bicycle Crashes

Beginning on page 87, you will find information on motor-vehicle/bicycle crashes.

- Bicycle crashes not on public highways and roadways are not included in this section
- Bicycle crashes not involving a motor vehicle are not included in this section

Section VIII: School Bus Crashes

Beginning on page 92, you will find information pertaining to school bus crashes.

- This section focuses on crashes that involved a school bus as a "contact vehicle"
- Crashes where a school bus was indirectly involved are not included in this section
(Note: this data collection began in 2003; please see narrative for discussion)

Section IX: Motor Vehicle/Train Crashes

Beginning on page 97, you will find information pertaining to train crashes.

- Crashes that do not involve a motor vehicle are not included in this section

Section X: Motor Vehicle Teen Crashes

Beginning on page 101, you will find information pertaining to teen-involved traffic crashes.

- This section focuses on drivers aged 15 through 19

Section XI: Motor Vehicle Senior Crashes

Beginning on page 106, you will find information pertaining to senior-involved traffic crashes.

- This section focuses on drivers aged 65 and older

TABLE OF CONTENTS

INTRODUCTION.....	1
FIGURE 1	
<i>VEHICLES, DRIVERS AND FATALITY RATE, 1970-2014</i>	<i>3</i>
TABLE 1	
<i>MINNESOTA TRAFFIC FATALITIES, 1910 – 2014.....</i>	<i>4</i>
FIGURE 2	
<i>MINNESOTA TRAFFIC FATALITIES, 1910-2014.....</i>	<i>4</i>
TABLE 2	
<i>DRIVER LICENSE SUMMARY BY AGE, 2009 - 2014.....</i>	<i>5</i>
TABLE 3	
<i>MOTOR VEHICLE REGISTRATIONS, 2009 - 2014.....</i>	<i>6</i>
I. ALL CRASHES	7
TABLE 1.01	
<i>TRAFFIC SAFETY STATISTICS SUMMARY, 1965 - 2014.....</i>	<i>9</i>
TABLE 1.02	
<i>TRAFFIC CRASH TRENDS 2009 - 2014.....</i>	<i>10</i>
TABLE 1.03	
<i>2014 FATALITIES BY TRAFFIC ROLE, GENDER and AGE.....</i>	<i>11</i>
TABLE 1.04	
<i>AGE AND GENDER OF PERSONS KILLED OR INJURED IN 2014 CRASHES.....</i>	<i>12</i>
TABLE 1.05	
<i>AGE AND GENDER OF DRIVERS IN 2014 CRASHES.....</i>	<i>13</i>
TABLE 1.06	
<i>LICENSED VS. CRASH-INVOLVED DRIVERS BY AGE, 2014.....</i>	<i>14</i>
FIGURE 1.01	
<i>AGE AND GENDER OF PERSONS KILLED OR INJURED, 2014</i>	<i>15</i>
FIGURE 1.02	
<i>LICENSED VS CRASH-INVOLVED DRIVERS BY AGE, 2014.....</i>	<i>15</i>
TABLE 1.07	
<i>PERCENTAGE OF DRIVERS IN 2014 CRASHES BY AGE AND FIRST HARMFUL EVENT</i>	<i>16</i>
TABLE 1.08	
<i>DRIVERS IN 2014 CRASHES BY PHYSICAL CONDITION</i>	<i>16</i>
TABLE 1.09	
<i>SINGLE-VEHICLE CRASHES: CONTRIBUTING FACTORS, BY PERCENT, WITHIN DRIVER</i>	
<i>AGE GROUPS, 2014</i>	<i>17</i>
TABLE 1.10	
<i>MULTIPLE-VEHICLE CRASHES: CONTRIBUTING FACTORS, BY PERCENT, WITHIN DRIVER</i>	
<i>AGE GROUPS, 2014</i>	<i>18</i>
TABLE 1.11	
<i>PERSONS INVOLVED IN CRASHES BY TYPE OF VEHICLE OCCUPIED AND INJURY</i>	
<i>SEVERITY, 2014.....</i>	<i>19</i>
TABLE 1.12	
<i>TYPES OF MOTOR VEHICLES IN 2014 CRASHES</i>	<i>20</i>
TABLE 1.13	
<i>2014 CRASHES BY FIRST HARMFUL EVENT.....</i>	<i>21</i>
TABLE 1.14	
<i>2014 "HIT-AND-RUN" CRASHES BY FIRST HARMFUL EVENT</i>	<i>21</i>
TABLE 1.15	
<i>2014 CRASHES BY TRAFFIC CONTROL DEVICE.....</i>	<i>22</i>
TABLE 1.16	
<i>2014 CRASHES BY WEATHER CONDITION</i>	<i>22</i>

TABLE 1.17	
<i>CONTRIBUTING FACTORS IN 2014 CRASHES</i>	23
TABLE 1.18	
<i>2014 CRASHES BY LIGHT CONDITION</i>	24
TABLE 1.19	
<i>2014 CRASHES BY ROAD SURFACE CONDITION</i>	24
TABLE 1.20	
<i>2014 CRASHES BY ROAD DESIGN</i>	24
TABLE 1.21	
<i>2014 CRASHES BY DIAGRAM</i>	25
TABLE 1.22	
<i>2014 CRASHES BY POPULATION OF AREA</i>	25
TABLE 1.23	
<i>2014 CRASHES BY TYPE OF ROADWAY</i>	26
TABLE 1.24	
<i>2014 COUNTY CRASH REPORT</i>	27
TABLE 1.25	
<i>2014 CRASHES IN CITIES OF 2,500 OR MORE POPULATION</i>	30
TABLE 1.26	
<i>2014 CRASHES BY TIME AND DAY</i>	35
FIGURE 1.03	
<i>TOTAL CRASHES VS FATAL CRASHES, BY TIME, 2014</i>	36
TABLE 1.27	
<i>2014 CRASHES, FATALITIESand INJURIES BY MONTH</i>	36
TABLE 1.28	
<i>HOLIDAY CRASH SUMMARY, 2009 - 2014</i>	37

II: ALCOHOL-RELATED CRASHES38

TABLE 2.01	
<i>ALCOHOL-RELATED FATAL CRASH SUMMARY, 1980 - 1989</i>	40
<i>ALCOHOL-RELATED FATAL CRASH SUMMARY, 1990 – 2014</i>	40
TABLE 2.02	
<i>IMPAIRED DRIVING INCIDENTS (“DWIs”) BY GENDER AND BY AREA OF STATE WHERE ARREST WAS MADE, 1996 - 2014</i>	41
TABLE 2.03	
<i>IMPAIRED DRIVING INCIDENTS (“DWIs”) FOR SELECTED AGE GROUPS, 1996 - 2014</i>	41
FIGURE 2.01	
<i>PERCENT OF IMPAIRED DRIVING INCIDENTS (“DWIs”) COMMITTED BY OFFENDERS IN FOUR AGE GROUPS, 1990-2014</i>	42
TABLE 2.04	
<i>IMPAIRED DRIVING INCIDENTS (“DWIs”) BY AGE-GROUP, 1996 - 2014</i>	42
TABLE 2.05	
<i>AGE OF PERSONS KILLED AND INJURED IN ALL CRASHES AND IN ALCOHOL-RELATED CRASHES, 2014</i>	43
TABLE 2.06	
<i>2014 ALCOHOL-RELATED FATALITIES' LEVEL OF ALCOHOL CONCENTRATION BY TRAFFIC ROLE</i>	44
TABLE 2.07	
<i>PERCENT OF DEATHS, INJURIESand PROPERTY DAMAGE CRASHES DETERMINED TO BE ALCOHOL-RELATED, 2005 - 2014</i>	44
TABLE 2.08	
<i>FIRST HARMFUL EVENT IN ALCOHOL-RELATED FATAL CRASHES AND ALL FATAL CRASHES, 2014</i>	44
TABLE 2.09	
<i>TEST RESULTS OF DRIVERS KILLED, 2005 - 2014</i>	45

TABLE 2.10	
<i>DRIVERS KILLED WHO TESTED .01 OR HIGHER, 2005 - 2014</i>	45
TABLE 2.11	
<i>DRIVERS KILLED WHO TESTED OVER THE LEGAL LIMIT, 2005 - 2014</i>	45
FIGURE 2.02	
<i>KILLED DRIVERS TESTED FOR ALCOHOL: 1980-2014</i>	46
FIGURE 2.03	
<i>PERCENT OF DRIVERS KILLED WHO HAD BEEN DRINKING, BY AGE, 2014</i>	46
TABLE 2.12	
<i>2014 DRIVER FATALITIES' LEVEL OF ALCOHOL CONCENTRATION BY AGE</i>	47
TABLE 2.13	
<i>2014 ALCOHOL-RELATED CRASHES BY MONTH</i>	48
TABLE 2.14	
<i>2014 ALCOHOL-RELATED CRASHES BY ROADWAY TYPE</i>	48
FIGURE 2.04	
<i>2014 ALCOHOL-RELATED CRASHES BY TIME OF DAY</i>	49
FIGURE 2.05	
<i>2014 ALCOHOL-RELATED CRASHES BY DAY OF WEEK</i>	49
TABLE 2.15	
<i>2014 ALCOHOL-RELATED CRASHES BY TIME OF DAY AND DAY OF WEEK</i>	50
III: SAFETY EQUIPMENT USE BY VEHICLE OCCUPANTS IN 2014 CRASHES	51
TABLE 3.01	
<i>PERCENT OF FRONT SEAT OCCUPANTS WEARING SAFETY BELTS, BY DATE OF OBSERVATION STUDY</i>	52
TABLE 3.02	
<i>MOTOR VEHICLE OCCUPANTS KILLED OR INJURED BY EJECTION STATUS AND INJURY SEVERITY, 2014</i>	53
TABLE 3.03	
<i>MOTOR VEHICLE OCCUPANTS KILLED OR INJURED, BY AGE AND INJURY SEVERITY, 2014</i>	53
FIGURE 3.01	
<i>SAFETY EQUIPMENT USE AMONG MOTOR VEHICLE OCCUPANTS KILLED OR INJURED, BY AGE, 2014</i>	54
TABLE 3.04	
<i>SAFETY EQUIPMENT USE BY VEHICLE OCCUPANTS, BY GENDER AND INJURY SEVERITY, 2014</i>	54
TABLE 3.05	
<i>SAFETY EQUIPMENT USE BY VEHICLE OCCUPANTS KILLED OR INJURED, BY AGE AND INJURY SEVERITY, 2014</i>	55
TABLE 3.06	
<i>PERCENT OF KILLED OR INJURED MOTOR VEHICLE OCCUPANTS WHO USED SAFETY EQUIPMENT, BY INJURY SEVERITY AND YEAR, 2005 - 2014</i>	57
TABLE 3.07	
<i>SAFETY EQUIPMENT USE BY MOTOR VEHICLE OCCUPANTS KILLED OR INJURED, BY ROADWAY TYPE, 2014</i>	57
TABLE 3.08	
<i>SAFETY EQUIPMENT USE BY MOTOR VEHICLE OCCUPANTS KILLED OR INJURED, BY REGION OF THE STATE, 2014</i>	58
TABLE 3.09	
<i>AIRBAG DEPLOYMENTS, 2007 - 2014</i>	59
IV: MOTORCYCLE CRASHES	60
TABLE 4.01	
<i>MOTORCYCLE CRASH SUMMARY, 1981 – 2014</i>	61
TABLE 4.02	
<i>2014 MOTORCYCLE CRASHES BY FIRST HARMFUL EVENT</i>	62

TABLE 4.03	
2014 MOTORCYCLE CRASHES BY POPULATION OF AREA	62
TABLE 4.04	
2014 MOTORCYCLE CRASHES BY MONTH.....	63
FIGURE 4.01	
2014 MOTORCYCLE CRASHES BY TIME OF DAY	63
TABLE 4.05	
2014 MOTORCYCLE CRASHES BY TIME AND DAY.....	64
TABLE 4.06	
MOTORCYCLISTS KILLED OR INJURED BY AGE AND GENDER, 2014.....	65
FIGURE 4.02	
MOTORCYCLISTS KILLED OR INJURED BY AGE AND GENDER, 2014.....	65
TABLE 4.07	
HELMET USE BY MOTORCYCLISTS KILLED OR INJURED, 2005 - 2014.....	66
TABLE 4.08	
ENDORSEMENT STATUS OF MOTORCYCLE OPERATORS INVOLVED IN FATAL CRASHES, 2005-2014.....	66
TABLE 4.09	
ALCOHOL USE BY KILLED MOTORCYCLE DRIVERS, 2005 – 2014	67
TABLE 4.10	
2014 MOTORCYCLE DRIVER FATALITIES' LEVEL OF ALCOHOL CONCENTRATION BY AGE	67
TABLE 4.11	
CONTRIBUTING FACTORS IN 2014 MOTORCYCLE CRASHES.....	68
V. TRUCK CRASHES	69
TABLE 5.01	
TRUCK CRASH SUMMARY, 2005 - 2014	70
TABLE 5.02	
PERSONS KILLED OR INJURED IN 2014 TRUCK CRASHES BY VEHICLE OCCUPIED.....	70
TABLE 5.03	
CONTRIBUTING FACTORS IN 2014 TRUCK CRASHES	71
TABLE 5.04	
AGE OF TRUCK DRIVERS IN 2014 CRASHES.....	72
TABLE 5.05	
DRIVERS IN 2014 TRUCK CRASHES BY PHYSICAL CONDITION	72
TABLE 5.06	
2014 TRUCK CRASHES BY FIRST HARMFUL EVENT	73
TABLE 5.07	
2014 TRUCK CRASHES BY MONTH.....	73
TABLE 5.08	
2014 TRUCK CRASHES BY TIME AND DAY	74
FIGURE 5.01	
2014 TRUCK CRASHES BY TIME OF DAY.....	74
TABLE 5.09	
2014 TRUCK CRASHES BY ROAD SURFACE CONDITION	75
TABLE 5.10	
2014 TRUCK CRASHES BY WEATHER CONDITION.....	75
TABLE 5.11	
2014 TRUCK CRASHES BY POPULATION OF AREA	76

TABLE 5.12	
2014 TRUCK CRASHES BY TYPE OF ROADWAY	76
VI: PEDESTRIAN CRASHES.....	77
TABLE 6.01	
PEDESTRIAN CRASH SUMMARY, 2005 - 2014	78
TABLE 6.02	
PEDESTRIAN CRASHES BY ROUTE SYSTEM, 2005 – 2014	78
TABLE 6.03	
PEDESTRIANS KILLED OR INJURED BY AGE AND GENDER, 2014	79
FIGURE 6.01	
PEDESTRIAN FATALITIES BY AGE GROUP, 2005-2014 COMBINED	80
FIGURE 6.02	
PEDESTRIANS KILLED OR INJURED BY AGE AND GENDER 2014	80
TABLE 6.04	
2014 PEDESTRIAN CRASHES BY MONTH	81
TABLE 6.05	
2014 PEDESTRIAN CRASHES BY POPULATION OF AREA	81
TABLE 6.06	
2014 PEDESTRIAN CRASHES BY TIME AND DAY	82
FIGURE 6.03	
2014 PEDESTRIAN CRASHES BY TIME OF DAY	82
TABLE 6.07	
PRIOR ACTION OF VEHICLES IN 2014 PEDESTRIAN CRASHES.....	83
TABLE 6.08	
PRIOR ACTION OF PEDESTRIANS KILLED OR INJURED IN 2014.....	83
TABLE 6.09	
CONTRIBUTING FACTORS IN 2014 PEDESTRIAN CRASHES	84
TABLE 6.10	
PEDESTRIAN FATALITIES' LEVEL OF ALCOHOL CONCENTRATION, 2004 - 2014	85
TABLE 6.11	
2014 PEDESTRIAN FATALITIES' LEVEL OF ALCOHOL CONCENTRATION BY AGE.....	85
TABLE 6.12	
2014 PEDESTRIAN FATALITIES' LEVEL OF ALCOHOL CONCENTRATION BY TIME OF DAY.....	86
VII: BICYCLE CRASHES.....	87
TABLE 7.01	
BICYCLE CRASH SUMMARY, 2005 - 2014	88
TABLE 7.02	
2014 BICYCLE CRASHES BY MONTH	88
FIGURE 7.01	
2014 BICYCLE CRASHES BY TIME OF DAY	88
TABLE 7.03	
2014 BICYCLE CRASHES BY TIME AND DAY.....	89
TABLE 7.04	
2014 BICYCLE CRASHES BY POPULATION OF AREA	89
FIGURE 7.02	
BICYCLISTS KILLED OR INJURED BY AGE AND GENDER 2014.....	89
TABLE 7.05	
BICYCLISTS KILLED OR INJURED BY AGE AND GENDER, 2014.....	90
TABLE 7.06	
PRIOR ACTION OF BICYCLISTS INVOLVED IN 2014 CRASHES	90
TABLE 7.07	
CONTRIBUTING FACTORS IN 2014 BICYCLE CRASHES.....	91

VIII: SCHOOL BUS CRASHES	92
TABLE 8.01	
SCHOOL BUS CRASH SUMMARY, 2005 - 2014.....	93
TABLE 8.02	
2014 SCHOOL BUS CRASHES BY TIME OF DAY	93
TABLE 8.03	
2014 SCHOOL BUS CRASHES BY MONTH.....	93
TABLE 8.04	
AGE AND GENDER OF PERSONS INJURED IN 2014 SCHOOL BUS CRASHES.....	94
TABLE 8.05	
PERSONS KILLED OR INJURED IN 2014 SCHOOL BUS CRASHES BY POPULATION OF AREA	94
TABLE 8.06	
2014 SCHOOL BUS CRASHES BY FIRST HARMFUL EVENT.....	95
TABLE 8.07	
2014 SCHOOL BUS CRASHES BY TRAFFIC CONTROL DEVICE.....	95
TABLE 8.08	
CONTRIBUTING FACTORS IN 2014 SCHOOL BUS CRASHES.....	96
IX: MOTOR VEHICLE/TRAIN CRASHES.....	97
TABLE 9.01	
MOTOR VEHICLE / TRAIN CRASH SUMMARY, 2005 – 2014.....	98
TABLE 9.02	
2014 MOTOR VEHICLE / TRAIN CRASHES BY MONTH	98
TABLE 9.03	
2014 MOTOR VEHICLE / TRAIN CRASHES BY TIME AND DAY.....	98
TABLE 9.04	
2014 MOTOR VEHICLE / TRAIN CRASHES BY TRAFFIC CONTROL DEVICE.....	99
TABLE 9.05	
2014 MOTOR VEHICLE / TRAIN CRASHES AGE OF PERSONS KILLED OR INJURED	99
TABLE 9.06	
2014 MOTOR VEHICLE / TRAIN CRASHES BY POPULATION OF AREA	100
TABLE 9.07	
2014 MOTOR VEHICLE / TRAIN CRASHES MOTOR VEHICLE DRIVER CONTRIBUTING FACTORS ..	100
X: CRASHES INVOLVING TEEN DRIVERS.....	101
TABLE 10.01	
TEEN CRASH SUMMARY, 2008 - 2014.....	102
TABLE 10.02	
TEEN 'MOTOR VEHICLE OCCUPANT' DRIVER CRASH INVOLVEMENT, 2008 - 2014	102
TABLE 10.03	
2014 TEEN-INVOLVED CRASHES BY MONTH	103
TABLE 10.04	
2014 TEEN-INVOLVED CRASHES BY DAY OF WEEK	103
TABLE 10.05	
2014 TEEN-INVOLVED CRASHES BY TIME OF DAY.....	104
FIGURE 10.01	
TOTAL TEEN-INVOLVED CRASHES, BY TIME, 2014.....	104
TABLE 10.06	
CONTRIBUTING FACTORS IN 2014 TEEN-INVOLVED CRASHES	105

XI: CRASHES INVOLVING SENIOR DRIVERS.....	106
TABLE 11.01	
<i>SENIOR CRASH SUMMARY, 2008 - 2014.....</i>	<i>107</i>
TABLE 11.02	
<i>SENIOR 'MOTOR VEHICLE OCCUPANT' DRIVER CRASH INVOLVEMENT, 2008 - 2014.....</i>	<i>107</i>
TABLE 11.03	
<i>2014 SENIOR-INVOLVED CRASHES BY MONTH.....</i>	<i>108</i>
TABLE 11.04	
<i>2014 SENIOR-INVOLVED CRASHES BY DAY OF WEEK.....</i>	<i>108</i>
TABLE 11.05	
<i>2014 SENIOR-INVOLVED CRASHES BY TIME OF DAY.....</i>	<i>109</i>
FIGURE 11.01	
<i>TOTAL SENIOR-INVOLVED CRASHES, BY TIME, 2014.....</i>	<i>109</i>
TABLE 11.06	
<i>CONTRIBUTING FACTORS IN 2014 SENIOR-INVOLVED CRASHES</i>	<i>110</i>
DEFINITIONS	111

Introduction

At the end of the 2014 calendar year, 4,166,528 people held Minnesota driver licenses and 5,141,765 motor vehicles were registered in the state. Vehicles traveled over 57 billion miles on public roadways. There were 78,396 traffic crashes; 361 people died and 29,439 people were injured in those crashes. This report provides a statistical summary of those crashes.

The purpose of *Crash Facts* is to provide summary statistical information about the crashes reported to the state each year. The term “crash” is used in preference to “accident.” The latter term suggests there is a random, unavoidable quality about the events in question. In fact, the experience of the last three decades strongly demonstrates that advances in engineering and technology, coupled with changes in public policy and individual human behavior, can dramatically reduce the number and severity of traffic crashes.

Cost of traffic crashes

The use of motor vehicles for getting from one place to another results in significant costs to society. The National Safety Council reports that crashes (from all causes) are the leading cause of death among persons aged 1 to 34, the leading cause of unintentional injury-related death for all ages combined and the fifth leading cause of death among all persons (*Injury Facts, 2014 Edition*, p. 12-13,16).

It is possible to estimate economic costs of traffic crashes, although the results can vary depending on definitions and estimating procedures. Many states use cost figures released by the National Safety Council, the most recent of which use 2013 data. Based upon those, the total economic loss from 2014 traffic crashes in Minnesota was \$1,604,051,900, a figure that is calculated as follows:

Cost of Motor Vehicle Crashes in 2014:

361	deaths	@	\$1,500,000	=	\$541,500,000
1,044	severe injuries	@	\$74,900	=	\$78,195,600
6,712	moderate injuries	@	\$24,000	=	\$161,088,000
21,683	minor injuries	@	\$13,600	=	\$294,888,800
56,815	PDO crashes	@	\$9,300	=	\$528,379,500
Total:					\$1,604,051,900

Factors affecting traffic crashes

A single crash may have many contributing factors. Cell phone use or playing with the radio may lead to driver distraction, which together with wet, slippery pavement and high traffic congestion at an intersection causes a traffic crash.

In general, a handful of factors affect the majority of traffic crashes. These can be organized into logical groups, such as human behavior factors or vehicle safety factors. The following paragraphs outline some of the factors most frequently thought to affect crash incidence and severity.

Vehicle Safety Factors: Engineering and design standards for vehicle performance can help prevent crashes from occurring. When there is a crash, vehicles designed for safety can increase survivability. For example, the design of windshield glass and the location and durability of gas tanks can increase safety. The “passenger packaging” inside a vehicle can reduce injury severity through means such as padded dashboards and collapsible steering wheel columns. Passenger protection systems in vehicles (airbags, safety belts, etc.), if used, can eliminate injuries or reduce their severity.

Behavior factors: For all crashes and fatal crashes, the driver behaviors police cite most often as contributing factors are, in order of frequency: driver inattention or distraction, failure to yield right of way and illegal or unsafe speed. Reducing these behaviors would reduce crashes. Further, when there is a crash, using seat belts will likely reduce a crash's severity.

Roadway characteristics: Limited access highways carry about a fifth of the traffic volume in Minnesota, yet account for only about a twelfth of fatal accidents. They are built to high roadway engineering standards and are very safe, relatively speaking. In general, roadway characteristics conducive to safety include wide lanes, clearly visible striping, flared guardrails, wide shoulders of good quality, shoulders and roadsides free of obstacles, well-located crash attenuation devices, well-planned use of traffic signals and effective communication to roadway users through clear and visible signage.

Environmental factors: Weather conditions affect crash incidence and severity. Clear dry roads are conducive to high speeds; consequently, fatal crashes have a pronounced seasonal variation, peaking in the warm summer months and falling in the winter months. The total number of crashes is driven by the incidence of the less serious property damage crashes, which tend to have the opposite seasonal variation, peaking in the winter months.

Volume of traffic, or vehicle miles traveled (VMT), is a predictor of crash incidence. All other things being equal, as VMT increases, so will traffic crashes. The relationship may not be simple, however; after a point, increasing congestion leads to reduced speeds, changing the proportion of crashes that occur at different severity levels.

The quality and availability of emergency medical services might be classified as an environmental factor. The first hour after a traumatic episode, such as a traffic crash, has been called the "golden hour". Victims who receive emergency services within that time have markedly improved chances of survival.

The age structure of the population has a strong effect on crash incidence, although it is not generally thought about since demographic changes are so gradual. In Minnesota, about one in 18 teenage drivers are involved in crashes each

year. The involvement rate drops off for successive age groups. For example, it is about 1 in 36 for drivers in their 40s. The aging of the 'baby boom' has reduced crash incidence, however, their children who are now driving may cause an increase.

Historical perspective

In 1966, there were 53,041 traffic fatalities in the country, or 5.7 for every hundred million miles of travel. In Minnesota in 1968, there were 1,060 traffic fatalities, or 5.3 per hundred million miles of travel. Those were the worst years. Since then, both the rate and the number of fatalities have declined in a fairly steady pattern. In 2014, there were about 32,719 traffic fatalities throughout the country and 361 in Minnesota. The respective fatality rates per hundred million miles of travel were 1.10 and 0.63. A dramatic benefit has been achieved.

The benefit is in large part the result of conscious decision-making on traffic safety issues. The National Highway Traffic Safety Administration (originally called the National Highway Safety Bureau) was established in the US Department of Transportation in 1967. Since then it has promoted and Congress has passed, legislation mandating the manufacture of safer cars. At the same time, the federal interstate highway system has expanded, contributing to a safer roadway environment.

Simultaneously there has been an effort to change human behavior factors. Minnesota was a leader among the states in the development of innovative drunk driving countermeasures. The Legislature made significant amendments to the DWI law in 1971, 1976, 1978 and in almost every year of the 1980s. It also passed the child passenger protection law in 1981 and the secondary seat belt law in 1986. It subsequently amended those laws, closing loopholes, broadening their scope and strengthening penalties. The benefits of action in these areas are clear. The graph shown in Figure 1 is one illustration. It shows a steady increase in the number of drivers and vehicles, but a steady decrease in the fatality rate per hundred million miles of travel.

Legislative requirement

Minnesota Motor Vehicle Crash Facts is produced annually by the Minnesota Department of Public Safety Office of Traffic Safety, in accordance with state law. Minnesota Statutes, Section 169.10,

requires that traffic crashes be reported to the Department. Section 169.10 then requires the Department to "...tabulate all crash reports and publish annually statistical information based thereon as to the number and circumstances of traffic crashes..."

Section 169.09 specifies that a driver involved in a crash that results in injury to or death of any person or total property damage of \$1,000 or more must submit a report within ten days of the crash. The law enforcement officer who investigates the crash must also submit a report within ten days. The minimum dollar amount for crashes involving only property damage has changed over the years. The first minimum was set at \$50 in 1939. It was raised to \$100 in 1965, to \$300 on August 1, 1977 and then to \$500 on August 1, 1981. The current minimum of \$1,000 took effect August 1, 1994.

Crash Facts is divided into eleven sections. The first section presents information on the aggregate of all crashes reported to the state during the preceding calendar year. The remaining ten sections focus on specific areas of interest to policy makers and the public. Section II deals with alcohol-related crashes. Section III is about the use of safety equipment by occupants of vehicles required to be equipped with passenger protection systems, including child safety seats and safety belts. The following six sections focus on crashes that involved motorcycles (section IV), trucks (section V), pedestrians (section VI), bicycles (section VII), school buses (section VIII) and trains (section IX). Sections X and XI summarize info on crashes involving teen and senior drivers.

FIGURE 1
VEHICLES, DRIVERS AND FATALITY RATE, 1970-2014

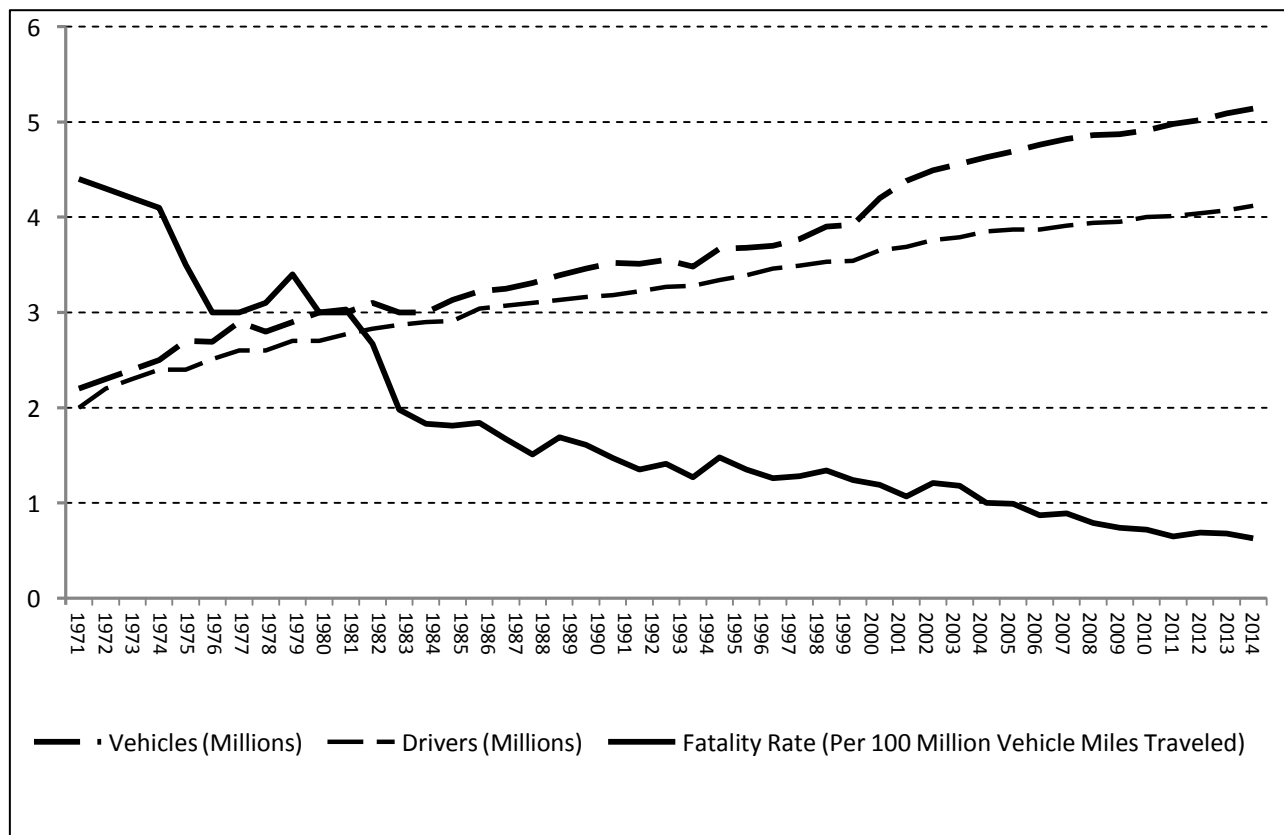


TABLE 1

MINNESOTA TRAFFIC FATALITIES, 1910 – 2014

Since 1961: Vehicle Miles Traveled (Billions) and Fatality Rates (Per 100 Million VMT)

YEAR (1)	Fatal- ities (2)	YEAR (3)	Fatal- ities (4)	YEAR (5)	Fatal- ities (6)	YEAR (7)	Fatal- ities (8)	Vehicle Miles (9)	Fatal Rate (10)	YEAR (11)	Fatal- ities (12)	Vehicle Miles (13)	Fatal Rate (14)	YEAR (15)	Fatal- ities (16)	Vehicle Miles (17)	Fatal Rate (18)
1910	23	1928	435	1946	536	1961	724	14.5	4.99	1979	881	29.0	3.04	1997	600	46.9	1.28
1911	26	1929	505	1947	572	1962	692	15.1	4.58	1980	863	28.5	3.03	1998	650	48.5	1.34
1912	39	1930	561	1948	552	1963	798	15.3	5.22	1981	763	28.6	2.67	1999	626	50.7	1.24
1913	46	1931	622	1949	540	1964	841	16.2	5.19	1982	581	29.2	1.98	2000	625	52.4	1.19
1914	88	1932	486	1950	532	1965	875	16.8	5.21	1983	558	30.5	1.83	2001	568	53.2	1.07
1915	85	1933	525	1951	610	1966	977	17.7	5.52	1984	584	32.2	1.81	2002	657	54.4	1.21
1916	143	1934	641	1952	534	1967	965	18.7	5.16	1985	610	33.1	1.84	2003	655	55.4	1.18
1917	161	1935	596	1953	637	1968	1,060	19.9	5.33	1986	572	34.2	1.67	2004	567	56.5	1.00
1918	183	1936	649	1954	639	1969	988	20.8	4.75	1987	530	35.1	1.51	2005	559	56.5	0.99
1919	171	1937	630	1955	577	1970	987	22.4	4.41	1988	615	36.4	1.69	2006	494	56.6	0.87
1920	178	1938	609	1956	637	1971	1,024	23.4	4.38	1989	605	37.6	1.61	2007	510	57.4	0.89
1921	216	1939	576	1957	684	1972	1,031	24.9	4.14	1990	568	38.8	1.47	2008	455	57.3	0.79
1922	260	1940	577	1958	708	1973	1,024	25.2	4.06	1991	531	39.3	1.35	2009	421	56.9	0.74
1923	328	1941	626	1959	662	1974	852	24.6	3.46	1992	581	41.3	1.41	2010	411	56.8	0.72
1924	366	1942	439	1960	724	1975	777	25.6	3.04	1993	538	42.3	1.27	2011	368	56.7	0.65
1925	361	1943	274			1976	809	27.0	3.00	1994	644	43.4	1.48	2012	395	57.0	0.69
1926	326	1944	356			1977	856	28.1	3.05	1995	597	44.1	1.35	2013	387	57.0	0.68
1927	369	1945	449			1978	980	28.8	3.40	1996	576	45.9	1.26	2014	361	57.0	0.63

FIGURE 2

MINNESOTA TRAFFIC FATALITIES, 1910-2014

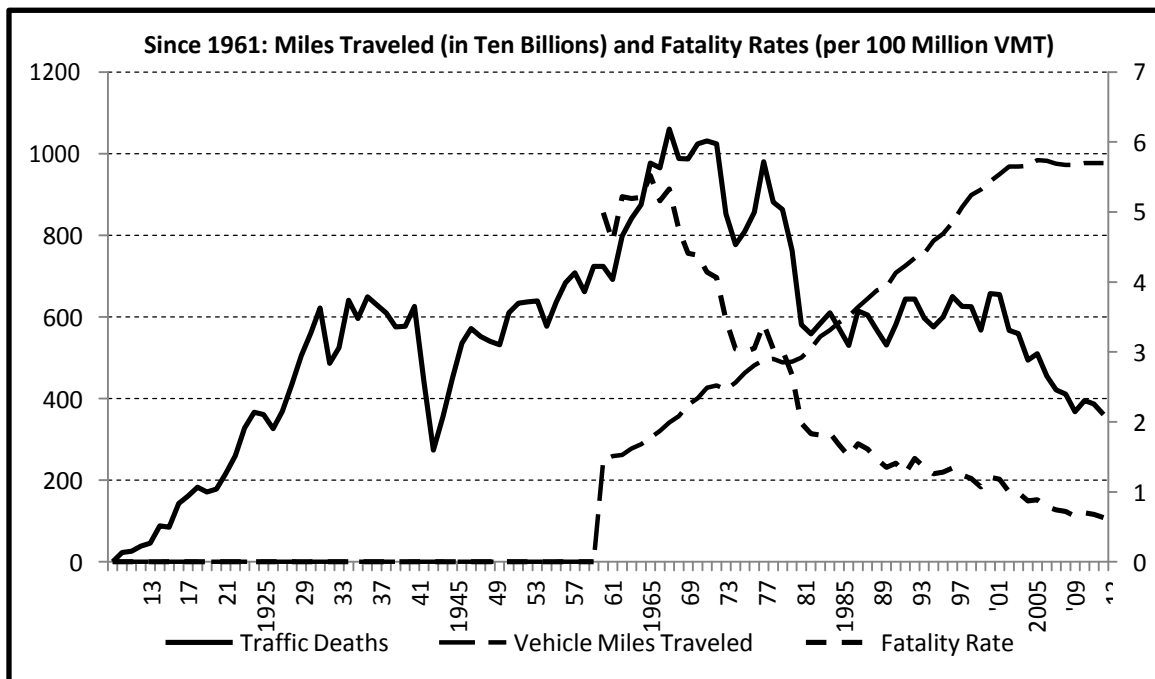


TABLE 2

DRIVER LICENSE* SUMMARY BY AGE, 2009 - 2014

Age	2009	2010	2011	2012	2013	2014
15	28,126	28,020	25,422	25,946	25,324	26,393
16	49,884	49,634	48,260	47,801	48,013	48,263
17	56,554	55,885	54,781	54,489	53,744	54,190
18	62,707	61,526	59,722	59,220	58,706	58,202
19	67,701	66,272	63,997	63,212	62,642	62,349
20	69,074	69,495	67,176	65,539	64,972	64,503
Under 21	334,046	330,832	319,358	316,207	313,401	313,900
15 – 19	264,972	261,337	252,182	250,668	248,429	249,397
20 – 24	347,193	348,937	343,942	341,891	340,074	338,753
25 – 29	364,228	366,813	358,738	356,653	358,005	362,329
30 – 34	330,073	342,756	351,489	359,718	365,101	370,093
35 – 39	319,456	311,858	306,985	312,377	320,919	331,734
40 – 44	339,999	340,906	336,514	330,720	331,868	315,800
45 – 49	391,392	380,685	365,193	351,004	340,791	335,127
50 – 54	382,435	389,685	392,410	392,344	390,177	383,567
55 – 59	332,705	343,840	350,359	358,458	365,577	373,526
60 – 64	265,450	282,820	293,833	301,734	311,683	321,611
65 – 69	193,513	198,777	213,587	226,107	237,444	252,369
70 – 74	143,738	149,002	155,347	164,699	172,320	178,905
75 – 79	113,517	114,320	116,871	119,643	123,927	127,476
80 – 84	87,672	88,821	90,620	90,268	90,333	91,175
85 & Older	71,997	74,678	79,683	82,434	82,608	84,666
Total	3,948,340	3,995,235	4,007,753	4,038,718	4,069,256	4,116,528

* This information is provided by the Department of Public Safety, Driver and Vehicle Services Division (DVS). Counts of licensed drivers include drivers who only hold learner's permits.

TABLE 3

MOTOR VEHICLE REGISTRATIONS, 2009 - 2014

Type of Vehicle*	2009	2010	2011	2012	2013	2014
Passenger Vehicles	3,478,218	3,527,503	3,579,033	3,621,291	3,630,245	3,595,037
Pickup Trucks	833,329	828,305	832,463	829,965	882,136	966,978
Commercial Trucks	213,489	214,680	216,532	220,623	225,201	229,580
Recreational Vehicles	35,042	34,797	33,070	32,511	31,349	30,763
Motorcycles	226,675	229,912	232,274	237,278	235,909	236,040
Motorized Bicycles	15,559	15,682	16,016	16,378	16,035	15,956
School Buses	6,810	6,940	6,951	7,120	7,220	7,463
Other Buses	4,996	5,067	5,161	5,105	5,188	5,281
Van Pool	165	174	226	210	159	159
Tax Exempt Vehicles	52,480	52,061	53,420	53,175	54,682	54,508
Motor Vehicle Subtotal	4,866,763	4,915,121	4,975,146	5,023,656	5,088,124	5,141,765
Other Registrations*						
Trailers	1,610,989	1,665,491	1,715,404	1,773,595	1,830,458	1,888,825
Classic Motor Vehicles	172,858	179,771	186,586	192,649	198,716	182,581
Classic Motorcycles	8,778	9,487	10,489	11,070	11,993	12,807
Other Subtotal	1,792,625	1,854,749	1,912,479	1,977,314	2,041,167	2,084,213
Total Registrations	6,659,388	6,769,870	6,887,625	7,000,970	7,129,291	7,225,978

* Information provided by Department of Public Safety, Driver and Vehicle Services Division.

Minnesota license plates on a vehicle signify that it has been registered with the state and that the owner has paid the registration fee. The vehicle classification used for registration purposes is similar, but not identical, to the vehicle classification (shown in Tables 1.11 and 1.12) police use in reporting accidents. Following are some notes on the registration categories shown above:

- Passenger Vehicles include cars, SUV's and Vans (except for a "Van Pool," which is a Van used exclusively for car pooling purposes).
- Pickup Trucks are rated three-fourths ton or less.
- Motorcycles have engines exceeding 50 cc; otherwise the vehicle is classified as a Motorized Bicycle (Moped).
- Tax exempt Vehicles are vehicles owned by city, county, or state offices. They have license plates but no registration fees are paid on them. (Police and fire department vehicles are tax exempt but are not included since they do not have state license plates and are not registered.)
- Trailers (such as utility trailers pulled by cars, or semi or twin trailers pulled by trucks) are pulled by motorized vehicles and do not themselves have motors.
- Classic Motor Vehicles and Classic Motorcycles must be at least 20 years old and cannot be used for normal transportation purposes. They can only be driven, for example, to car shows.

I. ALL CRASHES

Overview of Traffic Crashes in Minnesota

If a traffic crash in Minnesota meets certain criteria, the law states that data concerning that crash must be reported to the Department of Public Safety. In the recent past, about 70,000 traffic crashes each year have been reported. Preventing the number of traffic crashes remains a challenge each year for public safety officials. By the end of calendar year 2014:

- The population of Minnesota increased to 5.42 million
- Over 5 million motor vehicles were registered
- There were 4 million licensed drivers
- Over 57 billion miles were driven in Minnesota

As these numbers steadily increase, the citizens of Minnesota face an extreme challenge in reducing the number and severity of traffic crashes.

Crashes increase, fatalities decrease in 2014

There were 78,396 traffic crashes reported to Public Safety in 2014, an increase of less than 1% from 2013. However, despite the increase in crashes overall, our roads are safer than ever. There were 361 deaths on Minnesota roads, a 6.7% decrease from the previous year. In reality, traffic deaths in Minnesota have decreased dramatically in the past decade. There are many factors for the continued improvement in traffic safety, but much can be credited to strengthened traffic safety laws, enhanced enforcement, education and outreach, engineering and emergency trauma care. These elements are all part of the state's *Toward Zero Deaths (TZD)* initiative — a multidisciplinary program addressing traffic issues at the local level.

Traffic Crashes in 2014

The following facts give an overall picture of 2014 traffic crashes. In addition to the 361 killed:

- 29,439 people were injured
- 1,044 of these were severe injuries
- 6,712 of these were moderate injuries
- 21,683 of these were minor injuries
- 190,070 people were involved in crashes
- 143,681 motor vehicles were involved in crashes
- 773 crashes involved at least 1 bicyclist
- 806 crashes involved at least 1 pedestrian
- One-third of all crashes involved just one vehicle
- One in four of all fatalities were less than 25 years of age
- 3 of 4 fatalities occurred in rural areas (< 5,000 population)
- 7,078 crashes were classified as "hit-and-run"
- The economic loss to Minnesota was over \$1.6 billion

WHO was involved

Among drivers, young people and males are over-represented in traffic crashes in Minnesota. There are 4,116,528 licensed drivers in the state. People aged 15- 24 make up 14.3% of the licensed drivers, yet they accounted for 22.6% of the crash-involved drivers. Drivers aged 20-24 are the worst, from this perspective. In 2014, they represented just 8.2% of the licensed drivers, but 13.1% of all crash-involved drivers. By contrast drivers over 65 made up 17.8% of the driving population, but accounted for just 8.7% of the crash-involved drivers. Crash-involved drivers are also more likely to be males: 75.4% of drivers in fatal crashes were male; 55.0% of drivers in all crashes were male.

Traffic crashes are a leading cause of death in young people. In the state last year, 99 people under age 30 died in crashes, representing 27% of all traffic deaths. As noted, the National Safety Council reports that crashes (from all causes) are the leading cause of death among persons aged 1 to 34.

Among people injured, young people especially pay the price. There were 11,537 people under age 30 who were injured, representing 39% of the total number of people injured.

WHY they happened

An officer at the scene will list 0, 1, or 2 contributing factors for each 'vehicle' involved in a crash. The 'cause' of a crash is sometimes not entirely clear as vehicular factors in a crash may be listed alongside human factors. However, vehicular factors are not cited as often as human factors.

About one-third of all crashes involve only one vehicle and about two-thirds involve two or more vehicles. Single-vehicle and multiple-vehicle crashes have different characteristics. In single-vehicle crashes, illegal or unsafe speed is the contributing factor cited most often for all drivers. In multiple-vehicle crashes, for drivers through age 64, driver inattention or distraction is cited most often and failure to yield right of way is cited second most often. After age 65, the pattern reverses: failing to yield is most common and inattention or distraction is second most common.

WHAT the conditions were

Victims of traffic crashes are mostly car, pickup, sport utility vehicle (SUV) or van occupants. Of the 361 traffic fatalities, 226 (62%) were from these 4 vehicle types. There were also 17 pedestrians, 46 motorcyclists and 5 bicyclists who died in traffic crashes. There were 7 deaths to ATV riders, 1 death among farm equipment drivers and 4 fatalities involving snowmobiles.

A collision with another vehicle is the leading crash type. About 53% of the fatal crashes and 67% of all crashes involve one vehicle colliding with another vehicle. In fatal and injury crashes, collisions with fixed objects and overturns are also common. For property damage crashes, the other leading crash types are collision with fixed object and collision with a parked motor vehicle.

Most crashes occur in good driving conditions. Over half of fatal crashes and over two-thirds of nonfatal crashes occurred during daylight hours. A majority of crashes occur in good weather conditions. Over half of all crashes occur during “clear” weather. Road surface conditions where crashes occurred were usually good. For fatal crashes, 68% were on dry roads, 9% were on wet roads and 18% were on snowy or icy roads.

WHERE they happened

Fatal crashes tend to occur on roads in rural areas that permit high speeds and do not have interstate-type safety designs. Last year, 238 (74%) fatal crashes occurred in rural areas, which are defined as having a population of less than 5,000 people. Additionally, 101 (31%) of all fatal crashes occurred on county state aid highways and 76 of those were in rural areas. Injury and property damage crashes are more common in urban areas. Over three-fourths happened inside cities of 5,000 or more population. The seven county metro area, with over half the state's population, accounted for only 26% of the fatal crashes, but 61% of all crashes.

WHEN they occurred

A fatal traffic crash is most likely to occur during the morning and afternoon rush-hour time periods (6:00-9:00 a.m. and 3:00-6:00 p.m.). This has changed since the early 1990s when most fatal crashes occurred at night during the time period of 10:00 p.m.-2:00 a.m. This phenomenon may be explained by the smarter deployment of law enforcement, increased seat belt usage and the public's awareness of the dangers of drinking and driving. As for total crashes, the six hour time period of 12:00-6:00 p.m. had the most. In that time frame, 43% of all crashes occurred. This has not changed over the years. Indeed, Figure 1.03 shows that the afternoon time period is truly a dangerous time to be driving.

Fridays, Saturdays and Sundays accounted for 162 of the 324 fatal crashes (50%). Total crashes are more evenly distributed across days of the week, although Fridays had the most (17%) and Sundays had the least (10%).

As a general rule, harsh winter weather results in more traffic crashes. In other words, there are more ‘fender-benders’ during icy and snowy conditions. December of 2014 followed this axiom. Because of severe weather, January had the most crashes reported of any month (10,451). As a general rule, warmer weather produces more fatalities. July and August had the most both with 49 fatalities. As mentioned earlier, though, factors other than the weather are also involved. These include speeding, drinking and driving, not wearing a seat belt and not paying attention while driving.

Can traffic crashes be prevented?

On average over the past decade, about 500 people have been killed and 30,000 injured every year on our roadways. Minnesota is still experiencing a number of traffic crashes that is cause for concern. In a public health sense, epidemics that kill and injure fewer people are usually attacked vigorously until they are no longer a threat to public safety.

The Department of Public Safety (DPS) uses the term “crash” instead of “accident.” This is because a traffic crash can be prevented. Coupled with enforcement, education, engineering and emergency trauma solutions, changes in the behavior of all drivers will surely help attack the public threat of tragic roadway fatalities and injuries.

DPS implores the reader to spread the word: Driving is a privilege; aggressive driving is not. Buckle up. Drive at safe speeds. Pay attention. Never drive impaired.

TABLE 1.01

TRAFFIC SAFETY STATISTICS SUMMARY, 1965 - 2014

Year	Total Crashes	Persons Killed	Persons Injured	Licensed Drivers (million)	Motor Vehicles (MV) (million)	State Population (million)	Vehicle Miles Traveled (VMT) (billion)	Crash Rates Per 100,000 MV	Crash Rates	Crash Rates	Fatality Rates	Fatality Rates	
									Per 100,000 Population	Per 100 Mil VMT	Per 100,000 MV	Per 100,000 Population	Per 100 Mil VMT
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)
1965	83,329	875	50,847	1.85	1.86	3.57	16.8	4,480	2,334	496	47.0	24.5	5.20
1970	99,404	987	38,538	2.05	2.24	3.80	22.4	4,438	2,616	444	44.1	26.0	4.40
1975	123,206	777	41,931	2.51	2.69	3.92	25.6	4,580	3,143	481	28.9	19.8	3.00
1980	103,612	863	45,227	2.77	3.01	4.08	28.5	3,446	2,546	364	28.7	21.2	3.03
1981	97,879	763	43,739	2.83	3.09	4.10	28.6	3,163	2,387	342	24.7	18.6	2.67
1982	89,443	581	38,692	2.87	3.01	4.13	29.2	2,972	2,181	304	19.3	14.2	1.98
1983	97,371	558	41,086	2.90	3.03	4.15	30.5	3,214	2,356	319	18.4	13.5	1.83
1984	93,741	584	41,808	2.91	3.13	4.16	32.2	2,995	2,262	291	18.7	14.1	1.81
1985	99,168	610	44,316	3.04	3.22	4.19	33.1	3,080	2,380	300	18.9	14.7	1.84
1986	95,460	572	42,130	3.07	3.25	4.21	34.2	2,937	2,266	279	17.6	13.6	1.67
1987	94,095	530	42,091	3.10	3.31	4.25	35.1	2,840	2,233	268	16.0	12.6	1.51
1988	102,094	615	44,415	3.13	3.39	4.31	36.4	3,012	2,371	280	18.1	14.3	1.69
1989	105,996	605	45,404	3.16	3.46	4.35	37.6	3,060	2,435	282	17.5	13.9	1.61
1990	99,236	568	44,634	3.18	3.52	4.38	38.8	2,817	2,268	256	16.1	13.0	1.47
1991	101,419	531	42,748	3.22	3.51	4.43	39.3	2,890	2,288	258	15.1	12.0	1.35
1992	96,808	581	43,249	3.27	3.55	4.48	41.3	2,730	2,161	235	16.4	13.0	1.41
1993	100,907	538	44,987	3.28	3.48	4.52	42.3	2,899	2,234	239	15.5	11.9	1.27
1994	99,701	644	46,403	3.34	3.67	4.57	43.4	2,720	2,183	230	17.6	14.1	1.48
1995	96,022	597	47,161	3.39	3.68	4.61	44.1	2,606	2,083	218	16.2	13.0	1.35
1996	105,332	576	48,963	3.46	3.70	4.66	45.9	2,845	2,261	230	15.6	12.4	1.26
1997	98,625	600	46,064	3.49	3.77	4.69	46.9	2,065	2,105	210	12.6	12.8	1.28
1998	92,926	650	45,115	3.53	3.90	4.74	48.5	2,380	1,962	192	16.6	13.7	1.34
1999	96,813	626	44,538	3.54	3.92	4.78	50.7	2,470	2,027	191	16.0	13.1	1.24
2000	103,591	625	44,740	3.65	4.20	4.92	52.4	2,469	2,106	198	14.9	12.7	1.19
2001	98,984	568	42,223	3.69	4.38	4.97	53.2	2,262	1,991	186	13.0	11.4	1.07
2002	94,969	657	40,677	3.76	4.49	5.02	54.4	2,115	1,892	175	14.6	13.1	1.21
2003	N/A	655	N/A	3.79	4.56	5.09	55.4	N/A	N/A	N/A	14.4	12.9	1.18
2004	91,274	567	40,073	3.85	4.63	5.14	56.5	1,971	1,774	162	12.2	11.0	1.00
2005	87,813	559	37,686	3.87	4.69	5.21	56.5	1,873	1,687	155	11.9	10.7	0.99
2006	78,745	494	35,025	3.87	4.76	5.23	56.6	1,654	1,505	139	10.4	9.4	0.87
2007	81,505	510	35,318	3.91	4.82	5.26	57.4	1,691	1,548	142	10.6	9.7	0.89
2008	79,095	455	33,379	3.94	4.86	5.29	57.3	1,628	1,494	138	9.4	8.6	0.79
2009	73,498	421	31,074	3.95	4.87	5.30	57.0	1,510	1,387	129	8.7	7.9	0.74
2010	74,073	411	31,176	4.00	4.92	5.30	56.8	1,507	1,397	130	8.4	7.5	0.72
2011	72,117	368	30,295	4.01	4.98	5.33	56.7	1,450	1,352	127	7.4	6.9	0.65
2012	69,236	395	29,314	4.04	5.02	5.37	57.0	1,378	1,290	122	7.9	7.4	0.69
2013	77,707	387	30,653	4.07	5.09	5.40	57.0	1,527	1,439	136	7.6	7.2	0.68
2014	78,396	361	29,439	4.12	5.14	5.42	57.0	1,525	1,446	138	7.0	6.7	0.63

Note:

- (1) By State statute, information on traffic crashes must be reported to the Department of Public Safety if the crashes involve motor vehicles in transport on Minnesota roadways and have at least \$1,000 in property damage, or a motor vehicle occupant, pedestrian, or bicyclist is injured or killed.
- (2) The numbers shown for licensed drivers includes those who have only permits.
- (3) Vehicle miles traveled are provided by Minnesota Department of Transportation.
- (4) Numbers of licensed drivers and registered motor vehicles are provided by the Driver and Vehicle Services Division, Minnesota Department of Public Safety.

TABLE 1.02

**TRAFFIC CRASH TRENDS
2009 - 2014**

	2009	2010	2011	2012	2013	2014	Record High	
Fatal Crashes	371	364	334	349	357	324	878	(1973)
Injury Crashes	22,159	22,013	21,662	20,972	21,960	21,257	33,686	(1978)
Severe	1,036	974	954	1,044	981	862	5,109	(1984) ¹
Moderate	5,942	5,792	5,581	5,423	5,563	5,302	12,326	(1985) ¹
Minor	15,181	15,247	15,127	14,505	15,416	15,093	18,578	(1996) ¹
PDO Crashes	50,968	51,696	50,121	47,915	55,390	56,815	94,810	(1975)
Total Crashes	73,498	74,073	72,117	69,236	77,707	78,396	123,106	(1975)
Total Injuries	31,074	31,176	30,295	29,314	30,653	29,439	50,332	(1978)
Severe	1,271	1,191	1,159	1,268	1,216	1,044	6,573	(1984) ¹
Moderate	7,714	7,445	7,110	6,902	7,109	6,712	17,670	(1985) ¹
Minor	22,089	22,540	22,026	21,144	22,328	21,683	28,631	(1996) ¹
Total Fatalities	421	411	368	395	387	361	1,060	(1968)
Motor Vehicle Occupant	302	305	271	276	269	278	544	(2002) ¹
Motorcycle	53	45	42	55	60	46	121	(1980)
Pedestrian	41	36	40	40	35	17	157	(1971)
Bicycle	10	9	5	7	6	5	24	(1977)
All Terrain Vehicle	9	8	8	9	7	7	10	(2008)
Snowmobile	0	3	0	1	2	4	9	(1984)
Farm Equipment	3	2	2	2	5	1	N/A	N/A
Other Vehicle Type	3	3	0	5	3	3	N/A	N/A
Minnesota Fatality Rate³	0.74	0.72	0.65	0.69	0.68	0.63	23.6	(1934)
U.S. Fatality Rate³	1.15	1.11	1.10	1.14	1.11	1.10	18.0	(1925)
Minnesota Economic Loss (millions)	\$1,496	\$1,477	\$1,481	\$1,514	\$1,588	\$1,604	\$1,769	(2004) ⁴

¹ The available records on which these categories "record highs" are based only go back to 1984.

² Fatalities occurring in motor vehicle/train crashes are included in other categories as well.

³ Rate is based on 100 million vehicle miles of travel.

⁴ Economic cost estimates are based upon wage and productivity losses, medical expenses, administrative expenses, motor vehicle damage and employers' uninsured costs, among other factors.

TABLE 1.03

2014 FATALITIES BY TRAFFIC ROLE, GENDER and AGE

Type of Vehicle	Position in Vehicle	Gender	Age								Total
			0-9	10-19	20-29	30-39	40-49	50-59	60-69	70 and Older	
Car	Driver	Male	0	3	11	9	14	13	7	13	70
		Female	0	5	6	8	4	6	5	4	38
	Passenger	Male	1	6	8	4	1	0	0	5	25
		Female	1	1	4	1	1	3	1	7	19
Pickup	Driver	Male	0	2	10	2	3	6	2	6	31
		Female	0	0	2	1	0	1	0	1	5
	Passenger	Male	0	1	0	1	0	0	0	0	2
		Female	0	0	2	1	2	0	0	5	10
SUV	Driver	Male	0	1	3	3	2	7	1	2	19
		Female	0	0	0	2	0	3	2	2	9
	Passenger	Male	1	1	6	0	0	0	0	3	11
		Female	0	0	1	1	1	1	0	2	6
Van	Driver	Male	0	0	0	1	2	4	2	4	13
		Female	0	0	0	2	1	0	0	0	3
	Passenger	Male	0	0	2	3	0	0	0	1	6
		Female	1	0	0	0	0	0	1	3	5
Truck	Driver	Male	0	0	0	1	3	1	1	0	6
		Female	0	0	0	0	0	0	0	0	0
	Passenger	Male	0	0	0	0	0	0	0	0	0
		Female	0	0	0	0	0	0	0	0	0
Motorcycle	Driver	Male	0	0	4	8	9	13	3	0	37
		Female	0	0	1	1	1	1	0	0	4
	Passenger	Male	0	0	0	0	0	0	0	0	0
		Female	0	0	1	1	1	2	0	0	5
Other Motor Vehicle	Driver	Male	0	0	6	2	1	1	1	0	11
		Female	0	1	0	1	0	0	0	0	2
	Passenger	Male	0	0	0	0	0	1	0	0	1
		Female	0	0	0	0	0	0	0	1	1
Bicyclist		Male	1	0	1	0	0	0	0	0	2
		Female	1	0	0	2	0	0	0	0	3
Pedestrian		Male	0	1	1	0	0	3	2	6	13
		Female	0	0	2	0	0	1	0	1	4
Total Fatalities		Male	3	15	52	34	35	49	19	40	247
		Female	3	7	19	21	11	18	9	26	114
		Total	6	22	71	55	46	67	28	66	361

Note: The vehicle types for the eleven fatalities in the 'Other Motor Vehicle' category consisted of: seven ATVs, four snowmobiles, one farm equipment, one commercial bus and two unknown vehicle types.

TABLE 1.04

AGE AND GENDER OF PERSONS KILLED OR INJURED IN 2014 CRASHES

Age Group	Males Killed	Females Killed	Total Killed	Males Injured	Females Injured	Unknown Injured	Total Injured
00 - 03	0	0	0	172	145	6	323
04 - 10	3	3	6	413	407	10	830
11 - 14	1	0	1	285	351	9	645
Total < 15:	4	3	7	870	903	25	1,798
15	1	0	1	128	142	4	274
16	4	2	6	279	356	0	635
17	6	0	6	312	371	1	684
18	2	1	3	374	362	1	737
19	1	4	5	343	368	3	714
20	10	2	12	335	369	2	706
Total 15-20:	24	9	33	1,771	1,968	11	3,750
Total < 21:	31	12	40	2,641	2,871	36	4,302
00 - 04	0	0	0	223	191	7	421
05 - 09	3	3	6	289	297	8	594
10 - 14	1	0	1	358	415	10	783
15 - 19	14	7	21	1,436	1,599	9	3,044
20 - 24	33	11	44	1,696	1,850	10	3,556
25 - 29	19	8	27	1,508	1,624	7	3,139
30 - 34	22	11	33	1,260	1,438	9	2,707
35 - 39	12	10	22	1,008	1,144	3	2,155
40 - 44	14	5	19	939	1,125	6	2,070
45 - 49	21	6	27	986	1,089	3	2,078
50 - 54	27	9	36	1,036	1,113	5	2,154
55 - 59	22	9	31	896	974	0	1,870
60 - 64	8	4	12	698	787	3	1,488
65 - 69	11	5	16	486	499	2	987
70 - 74	9	7	16	309	332	1	642
75 - 79	9	5	14	220	289	1	510
80 - 84	8	7	15	141	173	0	314
85 +	14	7	21	107	137	1	245
Unknown	0	0	0	142	238	302	682
Total:	247	114	361	13,738	15,314	387	29,439

See Figure 1.01 on page 15 for a graphical depiction of how many persons were killed and injured by age and gender groups.

TABLE 1.05

AGE AND GENDER OF DRIVERS IN 2014 CRASHES

Age Group	Male Drivers in Fatal Crashes	Female Drivers in Fatal Crashes	Driver Gender Not Stated in Fatal Crashes	Total in Fatal Crashes	Male Drivers in All Crashes	Female Drivers in All Crashes	Driver Gender is Not Stated in All Crashes	Total in All Crashes
<15	0	0	0	0	26	6	2	34
15	1	1	0	2	95	87	2	184
16	4	2	0	6	1,408	1,269	2	2,679
17	6	2	0	8	1,655	1,679	4	3,338
18	2	3	0	5	1,895	1,512	10	3,417
19	3	5	0	8	1,892	1,558	13	3,463
20	7	2	0	9	1,990	1,629	12	3,631
All <21	23	15	0	38	8,961	7,740	45	16,746
00 - 04	0	0	0	0	3	0	0	3
05 - 09	0	0	0	0	3	0	0	3
10 - 14	0	0	0	0	20	6	2	28
15 - 19	16	13	0	29	6,945	6,105	31	13,081
20 - 24	38	11	0	49	9,610	8,229	62	17,901
25 - 29	40	10	0	50	8,774	7,028	75	15,877
30 - 34	34	16	0	50	7,966	5,976	64	14,006
35 - 39	29	13	0	42	6,559	4,838	56	11,453
40 - 44	34	6	0	40	6,093	4,404	34	10,531
45 - 49	42	9	0	51	5,941	4,283	32	10,256
50 - 54	44	10	0	54	6,273	4,236	45	10,554
55 - 59	41	10	0	51	5,483	3,587	36	9,106
60 - 64	15	7	0	22	4,161	2,828	16	7,005
65 - 69	22	6	0	28	2,805	1,822	18	4,645
70 - 74	9	3	0	12	1,700	1,156	16	2,872
75 - 79	10	2	0	12	1,160	854	4	2,018
80 - 84	12	6	0	18	775	551	5	1,331
85+	9	6	0	15	581	416	2	999
Unk	0	0	1	1	550	253	4,582	5,385
Total	395	128	1	524	75,402	56,572	5,080	137,054

Most crashes involve more than one driver, causing the total number of drivers to exceed the total number of crashes. (Pedestrians and bicyclists are not counted in this table.)

TABLE 1.06

LICENSED VERSUS CRASH-INVOLVED DRIVERS BY AGE, 2014

Age Group	Percentage of All Licensed Drivers	Percentage of Drivers in Fatal Crashes	Percentage of Drivers in Injury Crashes	Percentage of Drivers in Property Damage Crashes	Percentage of Drivers in All Crashes
14 & Younger	0.0%	0.0%	0.0%	0.0%	0.0%
15	0.6%	0.4%	0.1%	0.1%	0.1%
16	1.2%	1.1%	1.9%	2.0%	2.0%
17	1.3%	1.5%	2.3%	2.5%	2.4%
18	1.4%	1.0%	2.5%	2.5%	2.5%
19	1.5%	1.5%	2.5%	2.6%	2.5%
20	1.6%	1.7%	2.5%	2.7%	2.6%
Total < 21	7.6%	7.3%	11.8%	12.4%	12.2%
15 - 19	6.1%	5.5%	9.3%	9.7%	9.6%
20 - 24	8.2%	9.4%	12.6%	13.2%	13.1%
25 - 29	8.8%	9.5%	11.4%	11.7%	11.6%
30 - 34	9.0%	9.5%	10.3%	10.2%	10.2%
35 - 39	8.1%	8.0%	8.6%	8.2%	8.4%
40 - 44	7.7%	7.6%	8.0%	7.6%	7.7%
45 - 49	8.1%	9.7%	7.9%	7.3%	7.5%
50 - 54	9.3%	10.3%	8.0%	7.6%	7.7%
55 - 59	9.1%	9.7%	6.9%	6.5%	6.6%
60 - 64	7.8%	4.2%	5.4%	5.0%	5.1%
65 - 69	6.1%	5.3%	3.7%	3.3%	3.4%
70 - 74	4.3%	2.3%	2.2%	2.0%	2.1%
75 - 79	3.1%	2.3%	1.7%	1.4%	1.5%
80 - 84	2.2%	3.4%	1.0%	0.9%	1.0%
85 & Older	2.1%	2.9%	0.8%	0.7%	0.7%
Age Not Stated	0.0%	0.2%	2.1%	4.7%	3.9%
Total Percent	100%	100%	100%	100%	100%
Total Number	4,116,528				

See Figure 1.02 on page 15 for a graphical depiction of crash-involved drivers compared to licensed drivers by age group.

FIGURE 1.01
AGE AND GENDER OF PERSONS KILLED OR INJURED, 2014

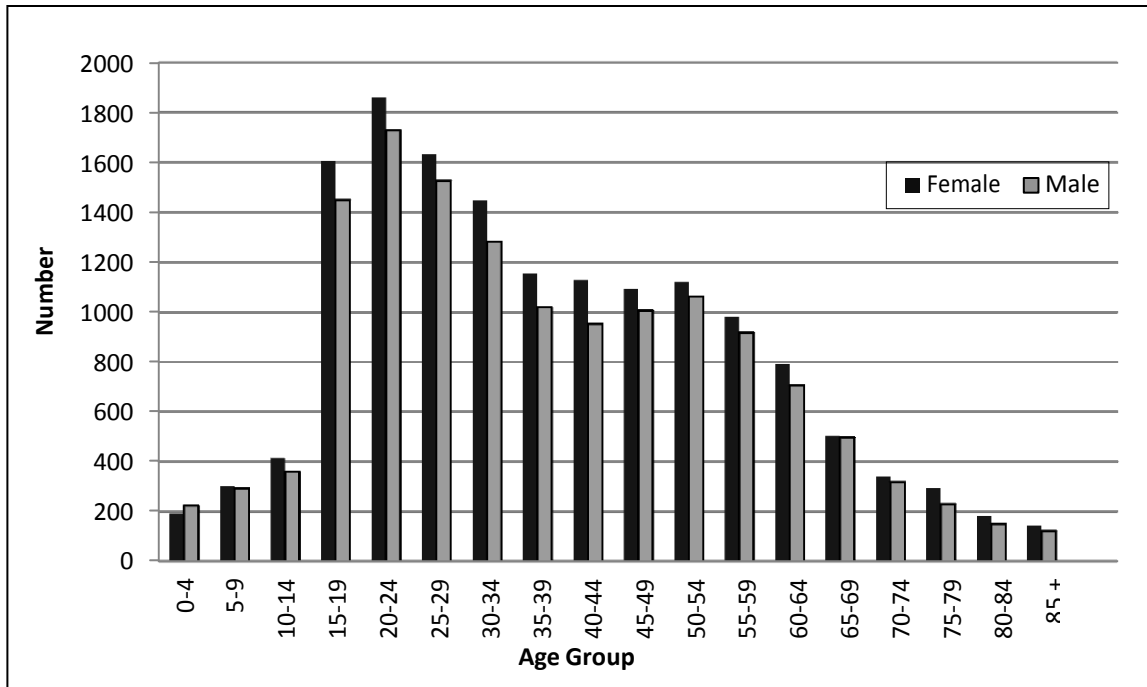


FIGURE 1.02
LICENSED VERSUS CRASH-INVOLVED DRIVERS BY AGE, 2014

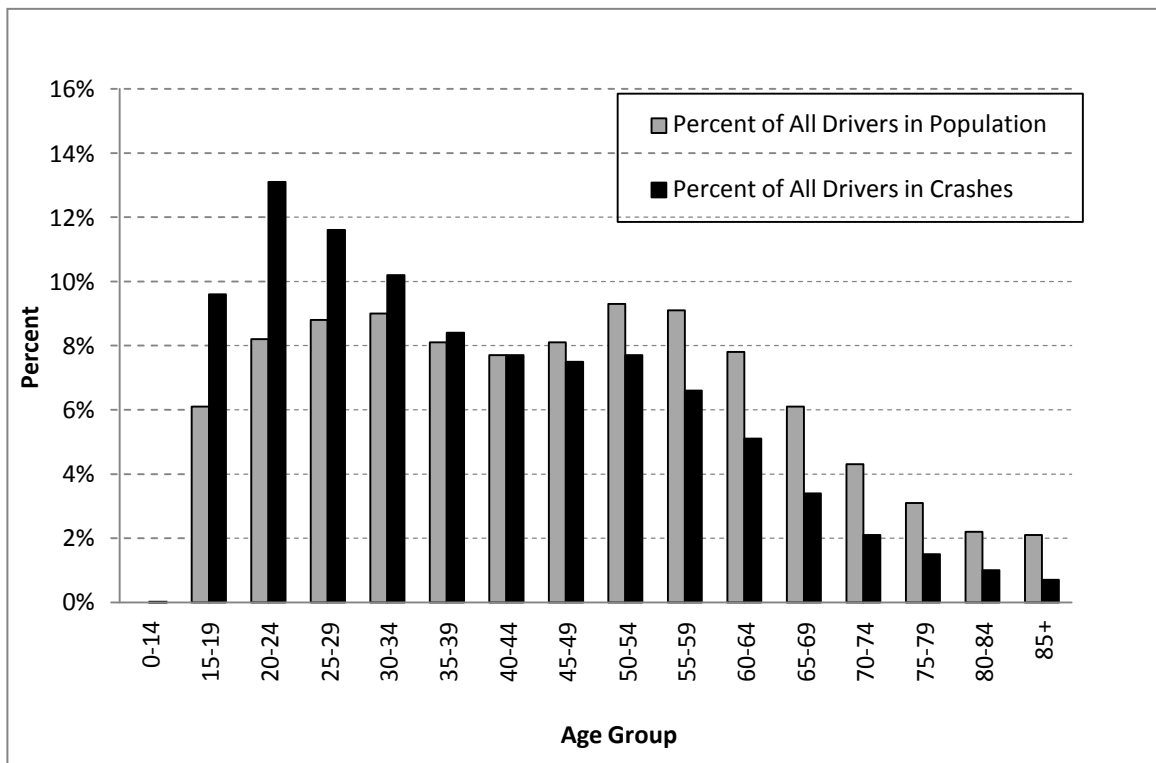


TABLE 1.07
**PERCENTAGE OF DRIVERS IN 2014 CRASHES
 BY AGE AND FIRST HARMFUL EVENT**

First Harmful Event	Age Group 15-19	Age Group 20-24	Age Group 25-29	Age Group 30-34	Age Group 35-64	Age Group 65-79	Age Group 80 +	All Ages
Collision With:								
Other Motor Vehicle	76.2%	77.7%	80.8%	81.7%	82.9%	82.8%	82.0%	54.1%
Parked Motor Vehicle	4.0%	3.6%	3.3%	3.3%	3.0%	3.2%	5.2%	32.3%
Bicycle	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.0%
Pedestrian	0.3%	0.3%	0.4%	0.5%	0.6%	0.9%	1.2%	1.4%
Deer	0.4%	0.4%	0.5%	0.5%	0.6%	0.7%	1.3%	2.1%
Other Animal	0.6%	1.0%	1.1%	1.3%	1.9%	1.7%	1.0%	0.1%
Railroad Train	0.1%	0.1%	0.1%	0.2%	0.2%	0.2%	0.0%	0.0%
Fixed Object	11.5%	11.2%	9.2%	8.5%	6.6%	6.4%	6.9%	7.9%
Other Object	5.6%	4.2%	3.2%	2.7%	2.6%	2.6%	1.3%	0.6%
Non-Collision:								
Overturn	0.3%	0.3%	0.3%	0.4%	0.5%	0.5%	0.1%	0.2%
Other Non-Collision	0.7%	0.8%	0.7%	0.8%	0.8%	0.7%	0.8%	1.0%
Other or Unknown								
Total Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total Drivers	13,081	17,901	15,877	14,006	58,905	9,535	2,335	137,054

Percentages are based on the number of crash-involved drivers in each age group (some driver ages are not available). Bicyclists and pedestrians are not counted as drivers in this table.

TABLE 1.08
DRIVERS IN 2014 CRASHES BY PHYSICAL CONDITION*

Physical Condition	Drivers in Fatal Crashes	Drivers in Injury Crashes	Drivers in Property Damage Crashes	Drivers in All Crashes
Normal	320	32,612	81,703	114,635
Under the Influence	22	1,009	1,481	2,512
Had Been Drinking	25	354	444	823
Commercial Driver .04+	0	4	3	7
Had Been Using Drugs	2	60	84	146
Aggressive	0	11	26	37
Fatigued/Asleep	4	178	274	456
Physical Disability	0	34	28	62
Ill	0	61	58	119
Other	4	160	112	276
Unknown	147	3,645	14,189	17,981
Total	524	38,128	98,402	137,054

* As noted by police officer on accident report. Note that in the absence of alcohol or drug test results (not usually available at the time the crash report is completed); officers are conservative in reporting impairment. Compare these figures with those from Section II. Pedestrians and bicyclists are excluded from this table.

TABLE 1.09

**SINGLE-VEHICLE CRASHES:
CONTRIBUTING FACTORS, BY PERCENT, WITHIN DRIVER AGE GROUPS, 2014**

Contributing Factor	Age Group 15-19	Age Group 20-24	Age Group 25-29	Age Group 30-34	Age Group 35-64	Age Group 65-79	Age Group 80+	All Ages
Human Factors								
Illegal/Unsafe Speed	24.9%	27.1%	26.9%	27.2%	24.9%	19.4%	12.8%	25.5%
Driver Inattention or Distraction	13.4%	13.0%	12.4%	10.4%	12.1%	16.5%	17.9%	12.6%
Overcorrecting	10.3%	8.0%	7.7%	7.3%	6.5%	6.0%	4.1%	7.5%
Chemical Impairment	2.4%	9.4%	9.6%	8.8%	6.9%	2.8%	0.5%	6.9%
Other Human Factor	3.5%	3.9%	3.6%	4.8%	5.1%	10.0%	13.3%	4.7%
Driver Inexperience	13.3%	4.0%	1.9%	2.1%	1.5%	0.5%	0.5%	3.9%
Improper Lane Use	1.9%	2.7%	3.3%	2.4%	2.8%	2.6%	4.6%	2.8%
Improper Turn	0.8%	0.6%	0.8%	0.7%	1.1%	2.0%	3.2%	1.0%
Disregard for Traffic Control Device	0.7%	0.6%	0.8%	0.4%	0.7%	0.8%	0.5%	0.7%
Following Too Closely	0.3%	0.4%	0.5%	0.8%	0.6%	0.2%	0.0%	0.5%
Vision Obscured	0.2%	0.4%	0.3%	0.5%	0.5%	1.0%	4.1%	0.5%
Driving Left of Center	0.3%	0.5%	0.5%	0.6%	0.3%	0.8%	1.4%	0.4%
Unsafe Backing	0.3%	0.2%	0.3%	0.5%	0.4%	0.4%	0.5%	0.3%
Failure to Yield Right of Way	0.2%	0.2%	0.1%	0.2%	0.4%	0.4%	1.8%	0.3%
Improper Passing/Overtaking	0.3%	0.2%	0.2%	0.3%	0.2%	0.1%	0.0%	0.2%
Driver on CB Radio/Cell	0.3%	0.2%	0.1%	0.2%	0.1%	0.0%	0.0%	0.2%
Improper Park/Stop/Start	0.1%	0.1%	0.2%	0.1%	0.1%	0.1%	0.9%	0.1%
Impeding Traffic	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Failure to Use Lights	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%
Improper No/Signal	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Vehicular Factors								
Skidding	8.3%	8.2%	8.0%	7.9%	9.4%	9.1%	9.6%	8.6%
Defective Breaks	1.0%	1.2%	1.6%	1.3%	1.7%	1.6%	0.9%	1.4%
Other Vehicle Factor	0.9%	0.8%	0.9%	1.3%	1.2%	0.9%	1.4%	1.0%
Miscellaneous Factors								
Weather	13.2%	14.1%	15.1%	16.4%	16.7%	17.2%	13.3%	15.3%
Other	3.4%	4.2%	5.2%	5.8%	6.9%	7.6%	8.7%	5.6%
Total Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total Contributing Factors Cited	3,258	3,918	2,652	2,053	7,359	1,092	218	20,769
Drivers for Whom There Was "No Clear Contributing Factor"	183	266	231	238	1,162	156	27	2,263
Total Number of Drivers	2,387	3,044	2,238	1,798	6,983	1,086	217	17,753

Percentages are based on all contributing factors cited within each age group (some driver ages are not available). Zero, one, or two contributing factors may be associated with each driver. The percentages may not sum to 100% due to rounding. Contributing factors for bicyclists and pedestrians are excluded.

For contributing factors in multiple-vehicle crashes, see Table 1.10. For contributing factors in crashes at different levels of severity, see Table 1.17.

TABLE 1.10

**MULTIPLE-VEHICLE CRASHES:
CONTRIBUTING FACTORS, BY PERCENT, WITHIN DRIVER AGE GROUPS, 2014**

Contributing Factor	Age Group 15-19	Age Group 20-24	Age Group 25-29	Age Group 30-34	Age Group 35-64	Age Group 65-79	Age Group 80 +	All Ages
Human Factors								
Driver Inattention or Distraction	2.9%	3.4%	2.5%	2.1%	7.3%	1.2%	0.4%	20.3%
Failure to Yield Right of Way	2.5%	2.4%	1.9%	1.5%	6.9%	1.9%	0.9%	18.6%
Improper or Unsafe Lane Use	0.4%	0.6%	0.6%	0.5%	2.0%	0.5%	0.1%	5.2%
Following Too Closely	1.6%	2.2%	1.8%	1.3%	4.6%	0.6%	0.1%	12.4%
Illegal or Unsafe Speed	1.0%	1.5%	1.1%	0.8%	2.6%	0.3%	0.1%	7.7%
Improper Passing or Overtaking	0.1%	0.2%	0.2%	0.1%	0.6%	0.1%	0.0%	1.5%
Disregard for Traffic Control Device	0.5%	0.7%	0.5%	0.5%	1.7%	0.4%	0.2%	4.5%
Improper Turn	0.2%	0.2%	0.2%	0.2%	0.8%	0.3%	0.1%	2.2%
Vision Obscured	0.3%	0.3%	0.2%	0.2%	0.7%	0.2%	0.1%	1.9%
Chemical Impairment	0.1%	0.3%	0.3%	0.2%	0.8%	0.0%	0.0%	1.7%
Unsafe Backing	0.2%	0.2%	0.2%	0.1%	0.7%	0.2%	0.0%	1.7%
Driver Inexperience	1.0%	0.3%	0.1%	0.1%	0.2%	0.0%	0.0%	1.7%
Improper Parking, Starting, Stopping	0.1%	0.2%	0.1%	0.1%	0.4%	0.1%	0.0%	1.2%
Overcorrecting	0.1%	0.2%	0.1%	0.1%	0.3%	0.0%	0.0%	0.8%
Driving Left of Center-Not Passing	0.1%	0.1%	0.1%	0.1%	0.3%	0.1%	0.0%	0.7%
Impeding Traffic	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.2%
Improper or No Signal	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.2%
Driver on Cell Phone or CB Radio	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Failure to Use Lights	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Other Human Factor	0.2%	0.3%	0.2%	0.2%	0.9%	0.2%	0.1%	2.2%
Vehicular Factors								
Skidding	0.6%	0.8%	0.5%	0.5%	1.7%	0.2%	0.0%	4.5%
Defective Equipment	0.1%	0.1%	0.1%	0.1%	0.3%	0.1%	0.0%	0.6%
Other Vehicular Factor	0.1%	0.1%	0.1%	0.1%	0.3%	0.1%	0.0%	0.6%
Miscellaneous Factors								
Weather	0.7%	1.0%	0.7%	0.7%	2.7%	0.3%	0.1%	6.2%
Other	0.3%	0.5%	0.4%	0.4%	1.5%	0.3%	0.1%	3.5%
Total Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total Contributing Factors Cited	9,637	11,353	8,782	7,192	27,246	5,037	1,693	73,335
Drivers for Whom There Was "No Clear Contributing Factor"	3,100	5,361	6,026	5,895	27,011	3,780	636	51,809
Total Number of Drivers	10,691	14,853	13,631	12,200	51,900	8,445	2,118	113,838

Percentages are based on all contributing factors cited within each age group (some driver ages are not available). Zero, one, or two contributing factors may be associated with each driver. The percentages may not sum to 100% due to rounding. Contributing factors for bicyclists and pedestrians are excluded.

For contributing factors in single-vehicle crashes, see Table 1.09. For contributing factors in crashes at different levels of severity, see Table 1.17.

TABLE 1.11

**PERSONS INVOLVED IN CRASHES BY TYPE OF
VEHICLE OCCUPIED AND INJURY SEVERITY, 2014**

Vehicle Type	Killed	Severely Injured	Moderately Injured	Minor Injured	Total Injured	Not Injured	Total Persons
Automobile	152	419	3,200	11,650	15,269	79,449	94,870
Pickup Truck	47	125	588	1,774	2,487	16,865	19,399
Sport Utility Vehicle	45	124	1,125	4,219	5,468	32,470	37,983
Van	27	53	448	1,884	2,385	13,257	15,669
Motor Home/Camper	0	1	1	1	3	103	106
Limousine	0	1	2	9	12	87	99
Taxi Cab	0	1	27	128	156	836	992
Police Vehicle	0	3	29	78	110	540	650
Fire Department Vehicle	0	0	0	1	1	61	62
School Bus	0	3	16	102	121	4,602	4,723
Other Bus	1	5	9	123	137	1,367	1,505
Ambulance	0	1	2	8	11	119	130
Military Vehicle	0	0	0	0	0	19	19
Snowmobile	4	2	9	4	15	21	40
All-Terrain Vehicle	7	5	19	13	37	18	62
Farm Tractor of Equipment	1	2	3	7	12	106	119
Motorcycle	43	147	507	405	1,059	176	1,278
Motor Scooter/Motorbike*	3	5	32	17	54	8	65
Motorized Bicycle (Moped)	0	4	19	21	44	5	49
Hit and Run Vehicle	1	0	24	66	90	2,729	2,820
Road Maintenance Vehicle	1	2	7	27	36	873	910
Other Public Owned Vehicle	0	0	4	15	19	186	205
Single Truck (2-axle, 6 tire)	0	4	18	46	68	901	969
Single Truck (3 or more axles)	2	2	19	22	43	390	435
Single Truck with Trailer	0	0	5	15	20	339	359
Truck Tractor with No Trailer	0	0	0	3	3	79	82
Truck Tractor with Semi Trailer	3	7	56	80	143	2,508	2,654
Truck Tractor with Double Trailers	0	0	1	1	2	29	31
Other or Unknown Truck Type	0	0	3	8	11	296	307
Other Vehicle Type	0	1	4	11	16	220	236
Unknown Vehicle Type	2	1	7	7	15	1,550	1,567
Bicycle	5	37	240	478	755	37	797
Pedestrian	17	89	288	460	837	24	878
Total	361	1,044	6,712	21,683	29,439	160,270	190,070

* On the accident report form, police may show that a vehicle is a "motorcycle," a "motor scooter/motorbike," or a "moped or motorized bicycle." Since 1986, however, the law recognizes just two categories. If the vehicle has an engine capacity of more than 50 cc, it is classified as a motorcycle; if it has 50 cc or smaller engine capacity, it is classified as a motorized bicycle. The term moped is short for motorized pedal cycle, which is the same as motorized bicycle. (Section 4 of this book now combines "motorcycle" and "motor scooter/motorbike").

TABLE 1.12
TYPES OF MOTOR VEHICLES IN 2014 CRASHES

Motor Vehicle Type*	Vehicles in Fatal Crashes	Vehicles in Injury Crashes	Vehicles in Property Damage Crashes	Vehicles in All Crashes
Automobile	197	20,650	54,779	75,626
Pickup Truck	94	4,041	11,428	15,563
Sport Utility Vehicle	73	7,547	20,138	27,758
Van	37	3,018	7,078	10,133
Motor Home/Camper	0	20	47	67
Limousine	1	15	47	63
Taxi Cab	0	212	496	708
Police Vehicle	1	140	471	612
Fire Department Vehicle	0	8	35	43
School Bus	1	119	700	820
Other Bus	1	151	508	660
Ambulance	1	13	44	58
Military Vehicle	0	0	14	14
Snowmobile	4	16	18	38
All-Terrain Vehicle*	7	29	8	44
Farm Tractor or Equipment	3	43	71	117
Motorcycle	44	975	147	1,166
Motor scooter/Motorbike**	4	53	8	65
Motorized Bicycle (Moped)	0	43	3	46
Hit and Run Vehicle	3	396	2,279	2,678
Road Maintenance Vehicle	1	123	758	882
Other Public Owned Vehicle	1	42	153	196
Single Truck (2-axle, 6-tire)	8	203	642	853
Single Truck (3 or more axles)	9	101	310	420
Single Truck with Trailer	4	67	258	329
Truck Tractor with No Trailer	1	10	70	81
Truck Tractor with Semi Trailer	31	541	1,970	2,542
Truck Tractor with Double Trailers	2	8	18	28
Other or Unknown Truck Type	2	49	237	288
Other Vehicle Type	1	34	194	229
Unknown Vehicle Type	2	136	1,416	1,554
Total***	533	38,803	104,345	143,681

* Snowmobiles and ATVs in crashes are not counted in this table unless the crash occurred on a public roadway.

** On the accident report form, police may show that a vehicle is a "motorcycle," a "motor scooter/motorbike," or a "moped or motorized bicycle." Since 1986, however, the law recognizes just two categories. If the vehicle has an engine capacity of more than 50 cc, it is classified as a motorcycle; if it has 50 cc or smaller engine capacity, it is classified as a motorized bicycle. The term moped is short for motorized pedal cycle, which is the same as motorized bicycle. (Section 4 of this book now combines "motorcycle" and "motor scooter/motorbike").

*** Most crashes involve more than one vehicle, causing total vehicles to exceed total crashes. Bicyclists and pedestrians are excluded from this table.

TABLE 1.13
2014 CRASHES BY FIRST HARMFUL EVENT

First Harmful Event	Fatal Crashes	Personal Injury Crashes	Property Damage Crashes	Total Crashes	Killed	Injured	Fatality Rate Per 1,000 Crashes
Collision With:							
Another Motor Vehicle	173	13,937	38,116	52,226	200	20,691	3.8
Parked Motor Vehicle	3	529	5,009	5,541	3	729	0.5
Bicycle	5	739	29	773	5	772	6.5
Pedestrian	16	778	12	806	16	851	19.9
Deer	1	247	1,664	1,912	1	297	0.5
Other Animal	2	42	149	193	2	49	10.4
Railroad Train	6	25	32	63	8	33	127.0
Fixed Object	54	2,621	8,434	11,109	59	3,115	5.3
Non-Fixed Object	1	53	260	314	1	71	3.2
Other Collision Type	1	144	246	391	2	180	5.1
Unk Collision Type	0	4	19	23	0	5	0.0
Non-Collision:							
Overturn	54	1,837	2,299	4,190	56	2,297	13.4
Submersion	0	12	44	56	0	15	0.0
Fire/Explosion	1	5	25	31	1	5	32.3
Other Non-Collision	1	143	258	402	1	159	2.5
Unknown Crash Type:	6	141	219	366	6	171	16.4
Total	324	21,257	56,815	78,396	361	29,439	4.6

TABLE 1.14
2014 "HIT-AND-RUN" CRASHES BY FIRST HARMFUL EVENT

First Harmful Event	Fatal Crashes	Personal Injury Crashes	Property Damage Crashes	Total Crashes	Killed	Injured
Collision With:						
Other Motor Vehicle	2	642	2,898	3,542	2	903
Parked Motor Vehicle	0	66	2,199	2,265	0	81
Bicycle	1	95	8	104	1	100
Pedestrian	4	147	4	155	4	151
Deer	0	1	2	3	0	1
Other Animal	0	1	1	2	0	1
Railroad Train	0	0	4	4	0	0
Fixed Object	1	110	763	875	1	132
Non-Fixed Object	0	5	23	28	0	6
Other Collision Type	0	9	23	32	0	10
Unk Collision Type	0	0	4	4	0	0
Non-Collision:						
Overturn	0	17	15	32	0	19
Submersion	0	1	1	2	0	1
Other Non-Collision	0	0	3	3	0	0
Unknown Crash Type	0	2	26	28	0	2
Total	8	1,096	5,972	7,078	8	1,407

TABLE 1.15

2014 CRASHES BY TRAFFIC CONTROL DEVICE

Traffic Control Device	Fatal Crashes	Personal Injury Crashes	Property Damage Crashes	Total Crashes	Killed	Injured
Traffic Signal	23	5,616	12,941	18,580	23	8,045
Overhead Flashers	0	21	34	55	0	28
Stop Sign-All Approaches	1	461	1,202	1,664	1	617
Other Stop Sign	57	3,111	6,950	10,118	62	4,596
Yield Sign	2	346	908	1,256	2	497
Flagman, Officer, School Patrol	0	18	31	49	0	24
School Bus Stop Arm	0	10	30	40	0	26
School Zone Sign	0	3	10	13	0	3
No Passing Zone	8	87	148	243	11	138
RR Crossing Gate	0	17	41	58	0	25
RR Flashing Lights	0	7	15	22	0	7
RR Crossing Stop Sign	2	3	8	13	3	4
RR Overhead Flashing Lights	0	0	1	1	0	0
RR Overhead Lights and Gate	0	10	40	50	0	11
RR Crossbuck	2	7	14	23	2	12
Other Device	4	202	627	833	4	286
Not Applicable	220	11,237	33,434	44,891	247	14,986
Unknown	5	101	381	487	6	134
Total	324	21,257	56,815	78,396	361	29,439

TABLE 1.16

2014 CRASHES BY WEATHER CONDITION

Weather Condition	Fatal Crashes	Personal Injury Crashes	Property Damage Crashes	Total Crashes	Killed	Injured
Clear	183	13,002	32,477	45,662	203	18,076
Cloudy	80	4,979	13,113	18,172	87	6,927
Rain	11	984	2,464	3,459	11	1,359
Snow	24	1,372	5,514	6,910	28	1,807
Sleet/Hail/Freezing Rain	7	262	786	1,055	7	355
Fog/Smog/Smoke	9	107	241	357	10	153
Blowing Sand/Dust/Snow	3	355	1,170	1,528	6	491
Severe Crosswinds	0	42	113	155	0	62
Other	1	41	161	203	2	57
Not Stated/Unknown	6	113	776	895	7	152
Total	324	21,257	56,815	78,396	361	29,439

TABLE 1.17
CONTRIBUTING FACTORS IN 2014 CRASHES

Contributing Factors	Percent of Factors Cited in Crashes by Severity of Crash			Number of Crashes in which the Factor was Cited			Number of People Affected	
	Fatal Crashes	Injury Crashes	Property Damage Crashes	Fatal Crashes	Injury Crashes	Property Damage Crashes	Killed	Injured
Human Factors								
Driver Inattention/Distracted	12.5%	19.4%	18.0%	57	5,367	12,118	61	7,373
Failure to Yield Right of Way	12.9%	16.7%	13.7%	59	4,611	9,207	67	6,659
Illegal/Unsafe Speed	17.7%	10.9%	11.7%	81	3,025	7,877	94	4,094
Following Too Closely	1.1%	8.8%	10.1%	5	2,449	6,778	5	3,031
Improper/Unsafe Lane Use	4.2%	3.3%	5.2%	19	924	3,499	21	1,264
Disregard Traffic Cntl Device	5.7%	5.4%	3.0%	26	1,500	2,009	27	2,292
Chemical Impairment	6.1%	4.0%	2.4%	28	1,119	1,583	28	1,535
Improper Turn	0.9%	1.3%	2.1%	4	369	1,420	6	518
Driver Inexperience	1.5%	2.1%	2.2%	7	585	1,453	7	814
Overcorrecting	3.9%	2.8%	2.0%	18	774	1,353	18	1,026
Unsafe Backing	0.2%	0.3%	1.8%	1	74	1,237	1	91
Vision Obscured	1.8%	1.5%	1.5%	8	424	1,037	6	509
Improper Passing/Overtaking	1.1%	0.8%	1.4%	5	209	953	6	306
Improper Park/Start/Stop	0.0%	0.7%	1.1%	0	198	740	0	294
Driving Left of Ctr (Not Passing)	7.9%	0.8%	0.5%	36	219	317	44	421
Impeding Traffic	0.2%	0.2%	0.2%	1	59	133	2	86
Improper/No Signal	0.0%	0.1%	0.1%	0	27	84	0	44
Driver on Phone/CB Radio	0.0%	0.2%	0.1%	0	51	82	0	73
Failure to Use Lights	0.7%	0.1%	0.1%	3	21	37	3	30
Non-Motorist Error	0.7%	0.7%	0.0%	3	195	10	3	195
Other Human Factor	4.8%	3.7%	2.4%	22	1,026	1,639	23	1,247
Vehicular Factors								
Skidding	5.5%	4.1%	5.9%	25	1,124	3,939	28	1,372
Defective Equipment	0.4%	0.8%	0.7%	2	215	466	2	284
Other Vehicular Factor	0.4%	0.7%	0.8%	2	201	548	2	258
Miscellaneous Factors								
Weather	4.8%	6.5%	8.9%	22	1,798	5,970	24	1,935
Other	5.0%	4.1%	4.2%	23	1,131	2,800	23	1,320
Total Percent	100.0%	100.0%	100.0%	457	27,695	67,289		
Total Contributing Factors	457	27,695	67,289					
Vehicles Where There Was "No Clear Contributing Factor"	219	17,137	41,690					
Total Number of Vehicles	558	40,396	104,417					

Zero, one, or two contributing factors may be associated with a vehicle, causing the number of factors cited to vary from the number of crashes, vehicles and persons affected by the factors. Note that in the absence of alcohol or drug test results (not usually available at the time the crash report is completed); officers are conservative in reporting impairment. Compare these figures with those from Section II. Bicyclists and pedestrians are considered as vehicles in this table and factors associated with them are included. For contributing factors by age of drivers, see tables 1.09 and 1.10.

TABLE 1.18
2014 CRASHES BY LIGHT CONDITION

Light Condition	Fatal Crashes	Personal Injury Crashes	Property Damage Crashes	Total Crashes	Killed	Injured
Daylight	191	15,214	39,632	55,037	214	21,165
Dawn (Morning)	10	451	1,371	1,832	11	549
Dusk (Evening)	10	561	1,497	2,068	11	803
Dark/Street Lights On	33	3,312	9,732	13,077	38	4,526
Dark/No Street Lights	75	1,635	3,942	5,652	81	2,275
Other/Unknown	5	84	641	730	6	121
Total	324	21,257	56,815	78,396	361	29,439

TABLE 1.19
2014 CRASHES BY ROAD SURFACE CONDITION

Road Surface Condition	Fatal Crashes	Personal Injury Crashes	Property Damage Crashes	Total Crashes	Killed	Injured
Dry	220	13,519	30,156	43,895	243	19,057
Wet	29	2,776	7,201	10,006	30	3,837
Snow/Slush	18	1,599	6,661	8,278	22	2,122
Ice or Packed Snow	40	3,105	12,006	15,151	48	4,073
Other	11	191	387	589	11	256
Not Stated/Unknown	6	67	404	477	7	94
Total	324	21,257	56,815	78,396	361	29,439

TABLE 1.20
2014 CRASHES BY ROAD DESIGN

Road Design	Fatal Crashes	Personal Injury Crashes	Property Damage Crashes	Total Crashes	Killed	Injured
Freeway (Including Ramps)	35	3,802	11,811	15,648	38	5,031
Other Divided Highway	39	3,109	6,802	9,950	43	4,575
One-Way Street	0	514	1,353	1,867	0	684
4-6 Lanes Undivided	18	4,010	10,015	14,043	18	5,622
3 Lanes Undivided	5	235	575	815	8	326
2 Lane—1 Each Way	212	7,738	19,650	27,600	237	10,761
Alley	0	61	268	329	0	68
Other Road Design	11	770	2,001	2,782	12	1,077
Not Stated/Unknown	4	1,018	4,340	5,362	5	1,295
Total	324	21,257	56,815	78,396	361	29,439

TABLE 1.21

2014 CRASHES BY DIAGRAM

Diagram	Fatal Crashes	Personal Injury Crashes	Property Damage Crashes	Total Crashes	Killed	Injured
Rear End	24	6,464	17,024	23,512	25	9,078
Sideswipe Passing	6	966	8,110	9,082	6	1,253
Left Turn – Oncoming Traffic	3	1,126	2,467	3,596	3	1,572
Ran Off Road – Left	43	1,694	4,246	5,983	45	2,078
Right Angle	86	4,499	8,913	13,498	101	6,787
Right Turn – Cross Street Traffic	2	255	757	1,014	2	310
Ran Off Road – Right	50	2,092	4,480	6,622	54	2,603
Head On	62	1,280	2,468	3,810	74	1,971
Sideswipe Opposing	5	419	1,478	1,902	5	596
Other Diagram	35	1,932	4,804	6,771	36	2,549
Not Applicable	2	402	1,231	1,635	2	485
Unknown / Incomplete	6	128	837	971	8	157
Total	324	21,257	56,815	78,396	361	29,439

Note: It is known that there is significant error in the “diagram” field on the Police Accident Report. Two specific types of error are most common: First, the field is often left blank. Second, a large proportion (estimated by some traffic engineers to be as high as one-half) of crashes coded as “right-angle” are not right angle crashes, but are some other type of crash--most frequently “left turn into oncoming traffic.”

TABLE 1.22

2014 CRASHES BY POPULATION OF AREA

Population of City or Township	Fatal Crashes	Personal Injury Crashes	Property Damage Crashes	Total Crashes	Killed	Injured
250,000 & Over	15	4,405	13,764	18,184	15	5,934
100,000-249,999	3	477	1,155	1,635	3	675
50,000 - 99,999	20	4,008	10,524	14,552	21	5,426
25,000 - 49,999	9	2,448	6,741	9,198	13	3,319
10,000 - 24,999	28	3,289	9,339	12,656	31	4,531
5,000 - 9,999	11	1,052	3,029	4,092	12	1,469
2,500 - 4,999	12	669	1,853	2,534	13	966
1,000 - 2,499	12	358	1,068	1,438	12	496
Under 1,000	214	4,551	9,342	14,107	241	6,623
Total	324	21,257	56,815	78,396	361	29,439

TABLE 1.23

2014 CRASHES BY TYPE OF ROADWAY

Type of Roadway	Fatal Crashes	Personal Injury Crashes	Property Damage Crashes	Total Crashes	Killed	Injured
Urban						
Interstate	14	2,355	7,324	9,693	16	3,110
US Trunk Hwy	12	1,222	3,514	4,748	13	1,671
MN Trunk Hwy	16	2,247	5,756	8,019	16	3,140
County State Aid Hwy	25	4,327	10,226	14,578	26	6,159
County Road	3	109	236	348	3	156
Township Road	0	0	1	1	0	0
Municipal State Aid Hwy	8	3,709	10,330	14,047	12	4,914
Municipal Street	8	1,655	6,902	8,565	9	2,131
Other Road	0	55	263	318	0	73
Urban Total	86	15,679	44,552	60,317	95	21,354
Rural						
Interstate	14	572	1,931	2,517	15	779
US Trunk Hwy	45	1,109	2,331	3,485	54	1,672
MN Trunk Hwy	68	1,393	2,734	4,195	75	2,081
County State Aid Hwy	76	1,655	2,991	4,722	84	2,375
County Road	12	232	399	643	12	339
Township Road	16	351	689	1,056	19	488
Municipal State Aid Hwy	0	4	12	16	0	4
Municipal Street	6	251	1,063	1,320	6	335
Other Road	1	11	113	125	1	12
Rural Total	238	5,578	12,263	18,079	266	8,085
All Roadways						
Interstate	28	2,927	9,255	12,210	31	3,889
US Trunk Hwy	57	2,331	5,845	8,233	67	3,343
MN Trunk Hwy	84	3,640	8,490	12,214	91	5,221
County State Aid Hwy	101	5,982	13,217	19,300	110	8,534
County Road	15	341	635	991	15	495
Township Road	16	351	690	1,057	19	488
Municipal State Aid Hwy	8	3,713	10,342	14,063	12	4,918
Municipal Street	14	1,906	7,965	9,885	15	2,466
Other Road	1	66	376	443	1	85
Total	324	21,257	56,815	78,396	361	29,439

("Urban" refers to an area having a population of 5,000 or more; "rural" refers to an area of less than 5,000.)

TABLE 1.24

2014 COUNTY CRASH REPORT

County	2014			2013		2014		2013	
	Crashes Fatal	Crashes Injury	Crashes Property Damage	Total Crashes	Total Crashes	Number Killed	Number Killed	Number Injured	Number Injured
Aitkin	4	51	115	170	168	4	2	86	96
Anoka	15	1,180	2,218	3,413	3,255	16	12	1,666	1,634
Becker	3	115	171	289	287	3	3	154	174
Beltrami	6	104	260	370	465	6	6	159	189
Benton	1	160	454	615	567	1	8	223	207
Big Stone	0	16	25	41	53	0	2	29	11
Blue Earth	3	289	877	1,169	1,076	3	4	394	395
Brown	4	68	188	260	296	7	2	96	117
Carlton	1	99	219	319	402	1	3	130	185
Carver	8	261	769	1,038	1,084	10	6	364	424
Cass	5	85	132	222	295	6	5	152	140
Chippewa	5	37	71	113	147	5	4	55	94
Chisago	8	200	419	627	606	8	6	284	357
Clay	4	206	497	707	840	4	6	282	247
Clearwater	1	8	32	41	60	1	1	11	33
Cook	1	13	41	55	59	1	1	17	38
Cottonwood	1	29	67	97	85	1	4	44	34
Crow Wing	10	272	524	806	804	10	9	393	401
Dakota	7	1,442	4,050	5,499	5,374	10	19	1,946	2,044
Dodge	3	39	167	209	199	3	0	53	72
Douglas	5	133	334	472	522	6	1	179	201
Faribault	2	50	75	127	136	2	3	75	45
Fillmore	2	54	143	199	195	2	1	67	89
Freeborn	2	134	376	512	483	3	2	193	182
Goodhue	8	192	650	850	727	10	7	265	271
Grant	3	25	45	73	77	3	0	31	30
Hennepin	31	6,413	16,631	23,075	22,334	34	42	8,675	8,735
Houston	0	39	133	172	220	0	2	46	62
Hubbard	3	58	96	157	208	4	4	83	104
Isanti	7	107	238	352	342	8	5	150	147
Itasca	2	144	383	529	573	2	6	190	271
Jackson	1	37	87	125	129	1	5	47	58
Kanabec	1	49	76	126	91	1	0	77	62
Kandiyohi	10	167	488	665	626	12	2	248	259

TABLE 1.24 CONTINUED

2014 COUNTY CRASH REPORT

County	2014			2014 Total Crashes	2013 Total Crashes	2014 Number Killed	2013 Number Killed	2014 Number Injured	2013 Number Injured
	Crashes Fatal	Crashes Injury	Crashes Property Damage						
Kittson	0	6	7	13	19	0	2	7	12
Koochiching	0	33	47	80	84	0	1	41	59
Lac qui Parle	1	19	24	44	55	1	0	27	27
Lake	0	32	76	108	130	0	4	49	52
Lake of the Woods	1	5	5	11	10	1	0	7	1
Le Sueur	1	119	215	335	337	1	6	168	146
Lincoln	1	15	54	70	56	1	2	21	13
Lyon	3	79	203	285	263	5	2	125	110
McLeod	2	139	338	479	418	2	4	224	194
Mahnomen	1	10	19	30	47	1	1	16	27
Marshall	1	13	14	28	29	1	1	20	20
Martin	0	65	169	234	254	0	3	97	106
Meeker	2	74	140	216	251	2	5	101	117
Mille Lacs	7	89	120	216	246	8	4	138	151
Morrison	8	94	167	269	289	8	5	138	135
Mower	1	120	349	470	447	1	3	172	189
Murray	1	23	40	64	63	2	0	39	27
Nicollet	3	108	294	405	417	6	2	143	162
Nobles	2	92	231	325	310	2	5	136	144
Norman	0	17	30	47	53	0	3	21	28
Olmsted	8	661	1,520	2,189	1,930	8	12	929	882
Otter Tail	3	190	449	642	689	3	8	267	272
Pennington	1	39	51	91	113	1	0	63	66
Pine	4	108	247	359	378	4	7	160	197
Pipestone	0	26	27	53	72	0	1	39	52
Polk	3	85	271	359	376	3	5	123	117
Pope	0	31	79	110	115	0	2	39	58
Ramsey	12	2,366	8,977	11,355	11,210	12	12	3,108	3,310
Red Lake	0	10	9	19	18	0	0	18	4
Redwood	1	42	84	127	121	1	3	64	73
Renville	3	46	108	157	146	4	4	77	74
Rice	5	184	399	588	642	6	5	253	281
Rock	5	43	103	151	126	5	1	57	52

TABLE 1.24 CONTINUED

2014 COUNTY CRASH REPORT

County	2014			2014 Total Crashes	2013 Total Crashes	2014 Number Killed	2013 Number Killed	2014 Number Injured	2013 Number Injured
	Crashes Fatal	Crashes Injury	Crashes Property Damage						
Roseau	4	22	54	80	78	6	1	38	49
St. Louis	8	699	2,570	3,277	3,485	8	19	928	1,091
Scott	4	404	847	1,255	1,276	5	11	584	624
Sherburne	2	263	809	1,074	1,182	2	4	388	482
Sibley	2	47	105	154	134	2	2	84	72
Stearns	9	690	1,941	2,640	2,570	9	6	985	1,104
Steele	6	118	437	561	465	6	1	173	185
Stevens	0	23	55	78	140	0	1	32	49
Swift	2	21	46	69	84	2	1	26	32
Todd	3	81	128	212	238	3	6	126	147
Traverse	0	6	13	19	26	0	1	7	10
Wabasha	4	72	151	227	211	4	4	106	80
Wadena	3	49	58	110	113	3	1	74	66
Waseca	2	48	147	197	175	2	2	68	59
Washington	8	811	1,958	2,777	2,770	8	10	1,153	1,145
Watonwan	1	26	73	100	93	1	1	38	61
Wilkin	0	26	89	115	144	0	0	36	40
Winona	3	164	386	553	632	6	2	221	245
Wright	15	407	967	1,389	1,312	16	16	589	503
Yellow Medicine	1	21	64	86	80	1	2	32	43
Minnesota Totals	324	21,257	56,815	78,396	77,707	361	387	29,439	30,653

TABLE 1.25

2014 CRASHES IN CITIES OF 2,500 OR MORE POPULATION

City	Fatal Crashes	Injury Crashes	PDO Crashes	Total Crashes	Persons Killed	Persons Injured
Afton	0	22	36	58	0	30
Albany	0	4	31	35	0	5
Albert Lea	0	50	191	241	0	80
Albertville	0	13	71	84	0	21
Alexandria	1	59	130	190	2	75
Andover	0	42	68	110	0	65
Annandale	0	3	8	11	0	4
Anoka	0	106	377	483	0	139
Apple Valley	0	176	438	614	0	242
Arden Hills	1	78	341	420	1	104
Austin	0	74	251	325	0	110
Barnesville	0	1	9	10	0	1
Baxter	0	57	96	153	0	90
Bayport	0	6	15	21	0	7
Becker	0	17	33	50	0	24
Belle Plaine	0	8	27	35	0	11
Bemidji	0	42	121	163	0	61
Benson	0	4	20	24	0	4
Big Lake	0	12	37	49	0	22
Blaine	3	197	300	500	3	282
Bloomington	5	556	1,202	1,763	5	736
Blue Earth	1	7	25	33	1	14
Brainerd	1	88	232	321	1	111
Breckenridge	0	3	32	35	0	4
Brooklyn Center	2	205	478	685	2	294
Brooklyn Park	2	245	493	740	2	333
Buffalo	0	41	98	139	0	55
Burnsville	1	307	759	1,067	1	415
Byron	0	12	21	33	0	14
Caledonia	0	5	14	19	0	5
Cambridge	0	34	90	124	0	43
Cannon Falls	1	18	51	70	2	28
Carver	0	1	3	4	0	1
Centerville	0	2	8	10	0	4
Champlin	0	43	92	135	0	56
Chanhassen	1	76	244	321	1	106
Chaska	0	59	154	213	0	79
Chatfield	0	3	17	20	0	3
Chisago City	1	18	36	55	1	24
Chisholm	1	9	34	44	1	13
Circle Pines	0	8	15	23	0	9
Cloquet	1	38	54	93	1	49
Cohasset	0	3	9	12	0	6
Cokato	0	4	6	10	0	6
Cold Spring	0	8	27	35	0	11
Columbia Heights	2	69	116	187	2	95
Columbus	0	22	52	74	0	28
Coon Rapids	2	311	588	901	2	423
Corcoran	0	18	56	74	0	25
Cottage Grove	0	76	266	342	0	103

TABLE 1.25 CONTINUED

2014 CRASHES IN CITIES OF 2,500 OR MORE POPULATION

City	Fatal Crashes	Injury Crashes	PDO Crashes	Total Crashes	Persons Killed	Persons Injured
Crookston	1	15	82	98	1	17
Crystal	0	85	181	266	0	116
Dayton	0	20	59	79	0	33
Deephaven	0	3	25	28	0	3
Delano	0	5	28	33	0	7
Detroit Lakes	0	33	60	93	0	39
Dilworth	0	8	16	24	0	12
Dodge Center	1	4	18	23	1	7
Duluth	1	344	1,634	1,979	1	438
Eagan	0	208	689	897	0	282
Eagle Lake	0	2	17	19	0	4
East Bethel	1	24	27	52	1	39
East Grand Forks	0	16	74	90	0	29
Eden Prairie	0	172	557	729	0	220
Edina	0	184	466	650	0	237
Elko/New Market	0	0	4	4	0	0
Elk River	1	91	321	413	1	137
Ely	0	6	12	18	0	10
Eveleth	0	7	36	43	0	9
Fairmont	0	25	104	129	0	39
Falcon Heights	0	17	47	64	0	19
Faribault	1	61	129	191	1	76
Farmington	0	41	84	125	0	51
Fergus Falls	0	42	134	176	0	64
Foley	0	3	4	7	0	3
Forest Lake	1	95	212	308	1	133
Fridley	2	142	220	364	3	210
Glencoe	0	14	27	41	0	19
Glenwood	0	3	19	22	0	4
Golden Valley	2	146	422	570	3	190
Goodview	0	5	23	28	0	8
Grand Rapids	0	34	212	246	0	43
Granite Falls	0	4	23	27	0	9
Grant	1	16	38	55	1	24
Greenfield	0	14	17	31	0	21
Ham Lake	1	38	29	68	1	52
Hanover	0	2	12	14	0	2
Hastings	0	44	171	215	0	58
Hermantown	0	38	65	103	0	49
Hibbing	0	48	204	252	0	67
Hopkins	0	59	211	270	0	73
Hugo	0	17	50	67	0	31
Hutchinson	1	53	163	217	1	81
Independence	0	15	40	55	0	20
International Falls	0	16	26	42	0	24
Inver Grove Heights	0	106	337	443	0	137
Isanti	0	11	39	50	0	16
Jackson	0	3	17	20	0	4
Jordan	0	19	48	67	0	26
Kasson	0	2	48	50	0	2

TABLE 1.25 CONTINUED

2014 CRASHES IN CITIES OF 2,500 OR MORE POPULATION

City	Fatal Crashes	Injury Crashes	PDO Crashes	Total Crashes	Persons Killed	Persons Injured
La Crescent	0	6	30	36	0	7
Lake City	0	12	48	60	0	19
Lake Crystal	0	2	8	10	0	5
Lake Elmo	0	53	60	113	0	83
Lakeville	0	166	461	627	0	230
Le Center	0	5	7	12	0	6
Le Sueur	0	9	24	33	0	9
Lindstrom	1	11	35	47	1	15
Lino Lakes	0	62	174	236	0	85
Litchfield	0	9	35	44	0	11
Little Canada	1	74	209	284	1	97
Little Falls	0	17	35	52	0	21
Long Prairie	0	8	14	22	0	14
Lonsdale	0	4	2	6	0	8
Luverne	1	10	33	44	1	12
Mahtomedi	0	12	17	29	0	16
Mankato	0	220	707	927	0	294
Maple Grove	2	255	735	992	3	347
Maplewood	0	207	552	759	0	283
Marshall	0	37	108	145	0	60
Medina	1	17	93	111	1	19
Melrose	0	8	27	35	0	9
Mendota Heights	1	68	174	243	1	82
Milaca	0	12	13	25	0	22
Minneapolis	7	3,095	8,016	11,118	7	4,225
Minnetonka	0	150	371	521	0	201
Minnetrissa	1	16	47	64	1	27
Montevideo	0	8	40	48	0	14
Montgomery	0	4	5	9	0	7
Monticello	0	63	160	223	0	87
Montrose	1	5	6	12	1	6
Moorhead	0	118	270	388	0	156
Moose Lake	0	4	4	8	0	6
Mora	0	16	27	43	0	29
Morris	0	9	38	47	0	11
Mound	0	15	42	57	0	19
Mounds View	0	33	107	140	0	43
Mountain Iron	0	16	42	58	0	24
New Brighton	0	69	226	295	0	95
New Hope	0	37	77	114	0	50
Newport	0	34	76	110	0	49
New Prague	0	13	18	31	0	18
New Ulm	2	34	108	144	2	50
North Branch	3	58	90	151	3	85
Northfield	0	35	61	96	0	48
North Mankato	0	31	95	126	0	39
North Oaks	0	3	11	14	0	4
North St. Paul	0	41	71	112	0	56
Norwood	0	8	19	27	0	12
Nowthen	0	11	6	17	0	12

TABLE 1.25 CONTINUED

2014 CRASHES IN CITIES OF 2,500 OR MORE POPULATION

City	Fatal Crashes	Injury Crashes	PDO Crashes	Total Crashes	Persons Killed	Persons Injured
Oakdale	0	82	239	321	0	117
Oak Grove	0	21	24	45	0	30
Oak Park Heights	1	27	96	124	1	43
Orono	1	28	62	91	2	40
Otsego	2	26	67	95	2	45
Owatonna	1	57	250	308	1	88
Park Rapids	0	10	12	22	0	14
Perham	0	4	15	19	0	7
Pine City	0	10	30	40	0	18
Pine Island	0	5	22	27	0	6
Pipestone	0	5	7	12	0	8
Plainview	0	4	11	15	0	6
Plymouth	0	221	588	809	0	301
Princeton	0	13	25	38	0	17
Prior Lake	0	47	27	74	0	72
Proctor	0	4	26	30	0	8
Ramsey	0	60	136	196	0	89
Red Wing	0	48	260	308	0	69
Redwood Falls	0	9	37	46	0	14
Richfield	0	227	517	744	0	315
Robbinsdale	1	56	160	217	1	81
Rochester	3	477	1,155	1,635	3	675
Rockford	0	8	14	22	0	9
Rogers	1	60	213	274	1	76
Roseau	0	5	12	17	0	5
Rosemount	0	66	159	225	0	94
Roseville	1	199	748	948	1	259
Rush City	0	5	10	15	0	8
St. Anthony	0	22	52	74	0	34
St. Augusta	1	14	26	41	1	18
St. Charles	0	1	24	25	0	1
St. Cloud	1	406	1,064	1,471	1	565
St. Francis	2	10	8	20	2	22
St. James	0	5	19	24	0	8
St. Joseph	0	7	41	48	0	13
St. Louis Park	2	253	725	980	2	314
St. Michael	2	39	112	153	2	51
St. Paul	8	1,310	5,748	7,066	8	1,709
St. Paul Park	0	7	28	35	0	9
St. Peter	1	27	80	108	2	35
Sandstone	0	2	14	16	0	5
Sartell	0	31	103	134	0	51
Sauk Center	0	12	43	55	0	14
Sauk Rapids	0	29	94	123	0	36
Savage	0	74	201	275	0	108

TABLE 1.25 CONTINUED

2014 CRASHES IN CITIES OF 2,500 OR MORE POPULATION

City	Fatal Crashes	Injury Crashes	PDO Crashes	Total Crashes	Persons Killed	Persons Injured
Scandia	1	10	27	38	1	11
Shakopee	0	122	364	486	0	172
Shoreview	0	63	196	259	0	79
Shorewood	0	20	81	101	0	25
Sleepy Eye	0	4	13	17	0	5
South St. Paul	0	71	235	306	0	88
Spring Lake Park	0	45	62	107	0	60
Staples	0	8	11	19	0	9
Stewartville	0	15	42	57	0	20
Stillwater	0	49	122	171	0	70
Thief River Falls	0	25	34	59	0	36
Two Harbors	0	6	25	31	0	9
Vadnais Heights	0	92	193	285	0	113
Victoria	0	13	53	66	0	17
Virginia	0	20	160	180	0	34
Wabasha	1	9	9	19	1	15
Waconia	0	18	73	91	0	26
Wadena	0	17	28	45	0	29
Waite Park	1	54	161	216	1	68
Waseca	0	20	58	78	0	29
Watertown	0	2	13	15	0	2
Wayzata	1	36	101	138	1	54
West St. Paul	0	82	205	287	0	104
White Bear Lake	0	147	414	561	0	209
Willmar	1	78	337	416	1	104
Windom	0	10	35	45	0	13
Winona	1	71	137	209	4	88
Woodbury	3	221	481	705	3	313
Worthington	0	35	147	182	0	50
Wyoming	0	28	83	111	0	40
Zimmerman	0	12	30	42	0	22
Zumbrota	0	9	20	29	0	10

TABLE 1.26

2014 CRASHES BY TIME AND DAY

Hour	All Days Total	All Days Fatal	Sun. Total	Sun. Fatal	Mon. Total	Mon. Fatal	Tues. Total	Tues. Fatal	Wed. Total	Wed. Fatal	Thurs. Total	Thurs. Fatal	Fri. Total	Fri. Fatal	Sat. Total	Sat. Fatal
Beginning																
Midnight	1,047	7	221	1	96	0	128	1	110	0	111	1	137	1	244	3
1 am	946	10	247	2	77	0	71	0	107	0	106	2	117	4	221	2
2 am	961	7	244	2	93	1	79	0	100	0	81	0	130	3	234	1
3 am	604	3	135	1	48	1	58	0	66	0	68	0	88	0	141	1
4 am	591	5	93	0	92	1	79	0	79	1	65	1	81	0	102	2
5 am	1,127	17	102	0	174	2	205	4	148	0	168	3	179	5	151	3
6 am	2,359	9	128	0	433	4	437	0	430	0	396	5	375	0	160	0
7 am	4,858	13	176	1	883	2	990	4	989	2	878	1	699	3	243	0
8 am	4,856	8	242	0	807	0	952	1	1,023	1	768	4	684	1	380	1
9 am	3,968	5	303	1	622	1	674	0	725	1	581	1	554	0	509	1
10 am	3,784	14	399	0	574	1	512	2	598	4	546	1	533	4	622	2
11 am	4,034	9	434	1	615	1	487	2	592	0	545	1	636	3	725	1
Noon	4,621	15	501	3	649	2	581	3	653	0	620	2	776	3	841	2
1 pm	4,579	21	532	4	648	3	558	2	611	0	688	1	751	3	791	8
2 pm	5,184	20	516	1	712	5	692	2	762	1	912	5	859	4	731	2
3 pm	6,295	27	546	4	897	3	957	5	993	2	1,042	2	1,166	4	694	7
4 pm	6,540	25	493	3	1,008	1	1,006	2	1,017	2	1,160	8	1,207	6	649	3
5 pm	6,731	20	492	6	1,044	4	1,148	1	1,186	5	1,181	2	1,079	1	601	1
6 pm	4,303	20	407	5	606	4	637	2	673	4	734	1	738	1	508	3
7 pm	2,933	22	381	1	406	1	383	2	403	0	428	6	509	4	423	8
8 pm	2,350	15	285	2	294	0	290	3	323	2	360	2	456	3	342	3
9 pm	2,304	17	242	2	276	3	308	6	281	1	355	1	502	1	340	3
10 pm	1,890	8	212	0	213	0	215	1	233	0	267	2	418	3	332	2
11 pm	1,326	7	145	2	134	0	157	1	142	0	178	0	314	1	256	3
Unk	205	0	12	0	37	0	25	0	39	0	35	0	25	0	32	0
Total	78,396	324	7,488	42	11,438	40	11,629	44	12,283	26	12,273	52	13,013	58	10,272	62

FIGURE 1.03

TOTAL CRASHES VS FATAL CRASHES, BY TIME, 2014

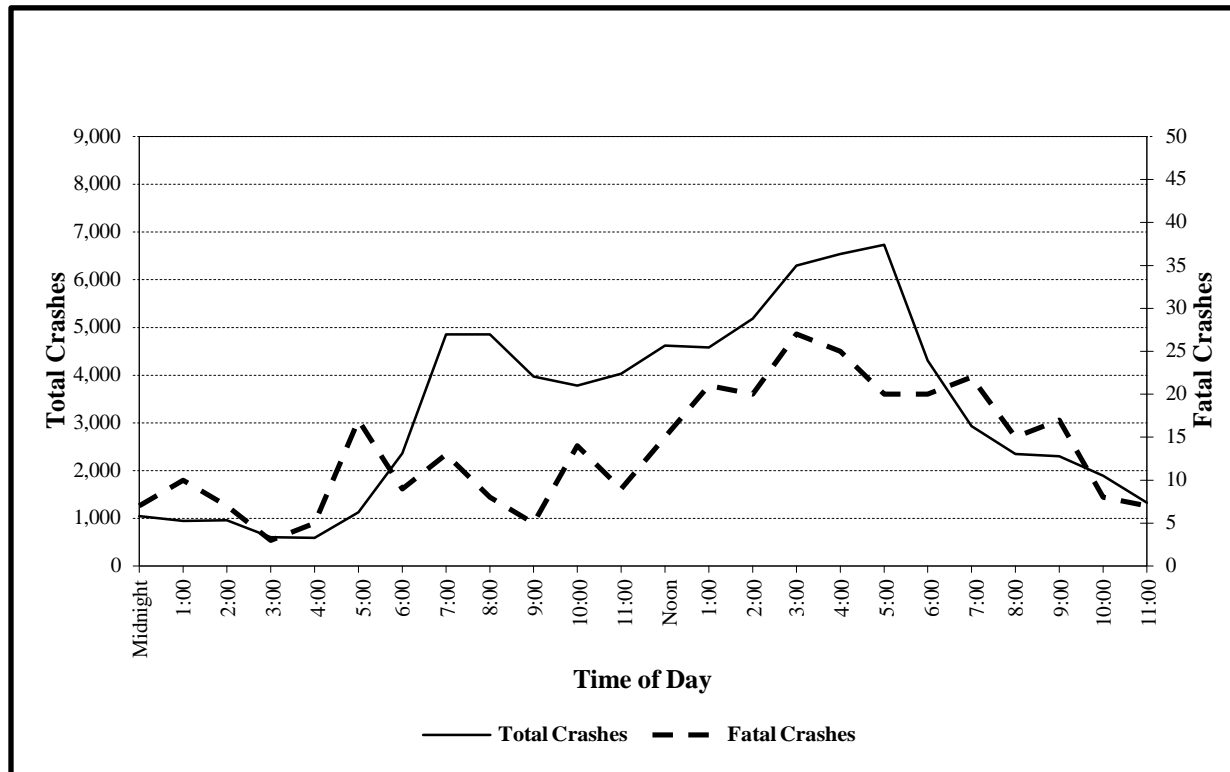


TABLE 1.27

2014 CRASHES, FATALITIES and INJURIES BY MONTH

Month	Fatal Crashes	Injury Crashes	Property Damage Crashes	Total Crashes	Killed	Injured
January	24	2,255	8,172	10,451	28	2,994
February	18	1,957	7,439	9,414	20	2,638
March	13	1,323	4,223	5,559	18	1,809
April	27	1,437	3,584	5,048	29	2,039
May	26	1,596	3,405	5,027	30	2,251
June	26	1,802	3,681	5,509	27	2,596
July	38	1,814	3,647	5,499	39	2,562
August	37	1,860	3,548	5,445	39	2,604
September	31	1,802	3,720	5,553	35	2,500
October	29	1,854	4,286	6,169	31	2,560
November	28	1,836	6,002	7,866	32	2,488
December	27	1,721	5,108	6,856	33	2,398
Total	324	21,257	56,815	78,396	361	29,439

TABLE 1.28
HOLIDAY CRASH SUMMARY, 2009 - 2014

Holiday Period	Year	Hours*	Fatal Crashes	Injury Crashes	PDO Crashes	Total Crashes	Killed	Injured
Memorial Day	2009	78	9	168	259	436	13	254
(In 2014, the holiday	2010	78	8	167	244	419	9	245
period was 6 pm Fri,	2011	78	0	130	258	388	0	189
May 23- midnight	2012	78	3	170	278	451	4	239
Monday, May 26)	2013	78	5	111	250	366	5	154
	2014	78	4	158	263	425	4	233
July 4th	2009	78	7	191	263	461	10	303
(In 2014, the holiday	2010	78	4	165	268	437	5	246
period was 6pm	2011	78	4	170	268	442	6	255
Wednesday,	2012	30	0	79	80	159	0	119
July 3-midnight	2013	102	6	222	334	562	7	332
Sunday, July 6)	2014	78	6	154	281	441	7	211
Labor Day	2009	78	2	150	218	370	3	197
(In 2014, the holiday	2010	78	5	143	265	413	5	228
period was 6 pm Fri,	2011	78	6	138	209	353	6	207
Aug 29-midnight	2012	78	5	145	241	391	6	221
Monday, Sept 1)	2013	78	4	159	248	411	4	231
	2014	78	3	142	253	398	3	193
Thanksgiving	2009	102	5	168	397	570	5	263
(In 2014, the holiday	2010	102	4	201	589	794	4	281
period was 6pm Wed	2011	102	2	161	334	497	2	232
Nov 26- midnight	2012	102	1	191	599	791	1	269
Sunday, Nov 30)	2013	102	3	195	366	564	3	297
	2014	102	3	198	658	859	3	293
Christmas	2009	78	1	168	669	838	1	261
(In 2014, the holiday	2010	78	0	135	555	690	0	197
period was	2011	78	3	125	206	334	3	186
6 pm Tue,	2012	102	1	115	436	552	1	180
Dec 24-midnight	2013	30	0	70	309	379	0	102
Wed, Dec 28)	2014	102	7	221	754	982	9	325
New Year's	2009/10	78	3	133	495	631	4	197
(In 2014, the	2010/11	78	1	221	671	893	1	308
holiday period was	2011/12	78	3	153	478	634	4	212
6 pm Tue, Dec 31 --	2012/13	102	5	165	489	549	7	240
Midnight Wed,	2013/14	30	0	61	179	240	0	76
January 4, 2014)	2014/15	102	3	165	573	741	3	242

* Holiday period hours vary depending on the day of the week on which the holiday falls.

II: ALCOHOL-RELATED CRASHES

BACKGROUND AND DEFINITIONS

1. Impaired driving incidents.

As used here, an “impaired driving incident” is one where there was an arrest for driving while under the influence of alcohol or drugs and a violation from that incident was subsequently entered on the person’s driving record. In prior years, tables in this section reported “DWI Arrests.” “DWI” is an older term that usually connotes intoxication by alcohol. “Impaired driving” is a broader and thus more descriptive term and it conforms better to current Minnesota law. Law enforcement agencies and courts report violations to Driver Licensing, making driver license records the most complete centralized source of data for statistics on impaired driving. Additionally, since it is almost impossible for a person, once arrested, to evade all of the criminal charges and administrative actions the law calls for, the number of impaired driving incidents on record is almost the same as the number of arrests.

(2) Alcohol-related crashes

While the term “impaired driving” covers many possible types of impairment, the term “alcohol-related” is restrictive: *only* alcohol-related crashes are counted. For example, if a driver tests positive for cocaine, but negative for alcohol, the crash will not be counted in this section. A crash is classified as “alcohol-related” if any driver, pedestrian, or bicyclist is shown by a chemical test to be positive for alcohol. Thus, alcohol at the .01-*or-higher* level makes the crash alcohol-related. In the absence of test data, if the officer reports that he or she believes the person had been drinking, or was under the influence, the crash is also classified as alcohol-related. Though rare, an officer sometimes reports he or she believed a person had been drinking or was under the influence, but the alcohol test is negative. In these cases, the test result takes priority over the officer’s perception and the crash is not classified as alcohol-related.

Alcohol-related fatalities and injuries

Once a crash is so classified, no matter whether it was a driver, pedestrian, or bicyclist that was drinking, then every fatality and injury in the crash is classified as alcohol-related.

Officers’ reported perceptions are conservative

Officers are conservative in reporting drinking and driving. Officers’ cautiousness is less a factor in fatal crashes, because every effort is made to obtain alcohol test results. For less severe crashes, though, the officer’s judgment is all that is available. Therefore, alcohol-related non-fatal crashes are almost certain to be considerably underestimated.

Important caveats to the definition

Not all alcohol-related traffic fatalities are due to driving while intoxicated. If a drinking pedestrian or bicyclist is in a crash and then he or she (or anyone in the crash) dies, the death is an alcohol-related traffic death. For example, in 2014, two drinking pedestrians in separate incidents died after colliding with a vehicle driven by a non-drinking driver. Additionally, the definition given above makes an assumption that the person drinking caused, or contributed significantly to the crash. Experts who study fatal traffic crashes in detail confirm that this is almost always true, but it is important to recognize that the assumption is not invariably true. There will be exceptions to the rule. Sometimes a crash is alcohol-related, but is not classified as such due to inadequate data. For example, a drunk driver may die in a fiery crash and the body may be incinerated. In this case, there may be no evidence remaining that the crash involved alcohol. Or a driver may die and lose all his or her blood from wounds received in the crash, which likewise prevents alcohol tests from being performed.

“Known” versus “estimated” alcohol-related deaths.

Testing drivers for alcohol is the key to accurately classifying crashes. Minnesota is much better at testing than most states. Because many drivers are still not tested, the National Highway Traffic Safety Administration (NHTSA) developed a sophisticated statistical procedure that estimates how many fatalities really were alcohol-related. The idea that a computerized statistical procedure can accurately make such estimates initially invites skepticism. However, NHTSA developed the procedure with the greatest care over many years. Tests of the procedure, performed by having it make estimates for datasets from which critical data was removed and then comparing the estimates against the true parameters (putting back in the data that has been removed), show that the procedure is accurate to within about plus or minus one percentage point. Tables 2.01 and 2.07 show alcohol-related fatalities for Minnesota using the two procedures (NHTSA’s estimating procedure and the state’s procedure based on known data). NHTSA’s estimate of the true percentage of alcohol-related fatalities is always higher than, but very close to, the state’s numbers. The reason the two numbers are so close is that Minnesota does a good job of collecting test results on drivers, pedestrians and bicyclists in fatal crashes.

Alcohol-related crashes in Minnesota 2014

Drinking and driving remains a serious problem in Minnesota and across the nation. Based on cost estimates of vehicle crashes from the National Safety Council. In 2014 the cost of alcohol-related crashes in Minnesota was \$214 million. Predictably, there is a strong positive relationship between alcohol use and crash severity. That is, as crash severity increases, alcohol is more likely to have been a factor in the crash. In 2014, 5% of minor injuries, 10% of moderate injuries, 20% of severe injuries and 31% of deaths were alcohol-related. In all, 111 known people died and 2,040 known people were injured in crashes classified as alcohol-related. (NHTSA estimates will be higher).

Impaired driving incidents (DWIs) decrease

In 2014, there were 25,258 impaired driving incidents in Minnesota. This number represents a nearly 2% decrease from the previous year. Anecdotal evidence suggests many enforcement agencies have had problems filling vacancies due to retirements. This could explain the decrease in arrests.

Males and young people

When gender is stated, males made up 67% of the DWI offenders last year, however, females are making up a growing percentage of arrests. In 2014, they accounted for 25% of the offenders. (10 years ago, they were 21% of the offenders.) Impaired driving is especially a problem among young adults. A person can legally buy alcohol at age 21 (raised from 19 in 1986) and drinking and driving too often follows that. Last year, 21-to-34 year-olds committed 52% of the incidents on record. Drivers under age 21 accounted for 5%.

Drinking drivers themselves pay the price

Young people may have better reflexes than their elders, but as drivers they take more risks and have less experience than older people. They pay a clear price for this. Drivers aged 15-34 accounted for 33% of all traffic deaths and for fully 35% of the alcohol-related deaths. It is also the drinkers themselves who are more likely to pay the price for their dangerous behavior. Last year, 80 (72%) of the 111 people who died in alcohol-related crashes were themselves the people whose drinking behavior was a main factor which led to the crash to be classified as alcohol-related. In short, drinking drivers, pedestrians and bicyclists mostly kill and injure themselves. The remaining 31 people who died in the alcohol crashes were non-drinking drivers, pedestrians, or bicyclists, or were drinking or non-drinking vehicle passengers.

When the crashes occur: weekends, late night

Most alcohol-related crashes occur on Fridays, Saturdays and Sundays. Combined, these three days accounted for 39% of all traffic crashes, but 60% of the alcohol-related crashes. The late night hours 9 p.m.-3 a.m. accounted for 11% of all crashes, but 47% of the alcohol-related crashes.

Fatal alcohol crashes usually involve just one vehicle

Of the 99 alcohol-related fatal crashes in 2014, 72 (65%) involved just one motor vehicle in transport. Of the 99 alcohol-related fatal crashes, 31 involved a single vehicle colliding with a fixed object and 21 involved a single vehicle losing control and overturning.

Test results for killed drivers

Minnesota is consistently at or near the top among the states in the proportion of drivers in fatal crashes who are tested for alcohol. Also, NHTSA developed a procedure (explained on page 38) that compensates for missing data. In 2014, there were 248 motor vehicle drivers who were killed. (Note that this total does not include pedestrians or bicyclists). Of the 248 killed drivers, the Department of Public Safety was able to get alcohol test results for 200 (81%). Of the 200 tested, 129 (65%) tested negative, 8 (4%) tested between .01 and .07, 3 (2%) tested between .08 and .09 and 60 (30%) tested .10 or greater.

Majority of alcohol-related fatalities test above the legal limit

The 111 alcohol-related fatalities in 2014 consisted of 62 car or truck drivers, 21 car or truck passengers, 10 motorcycle drivers, one motorcycle passenger, three snowmobile drivers, six ATV drivers, 6 pedestrians, one bicyclist and one other vehicle. Of the 111, the Department of Public Safety was able to get alcohol test results for 90. Of these, 72 (80%) had a result above the legal limit of .08.

Success story in Minnesota

In reality, the percentage of alcohol-related traffic fatalities in Minnesota has steadily decreased in the past half-century. In the 1960's, around 60% of all traffic deaths per year were alcohol-related. Today, this percentage hovers around 31%. This is a great success story for Minnesota and the nation as a whole. It is also proof that as drivers change their behavior less tragedy occurs on our roadways.

TABLE 2.01
ALCOHOL-RELATED FATAL CRASH SUMMARY, 1980 - 1989

Year	Alcohol Test Results on Killed Drivers										All Traffic Fatalities			
	Drivers Killed			Results on Drivers Tested							Alcohol-Related Fatalities			
	Tested for Alcohol			Negative for Alcohol		.01 to .09 Alcohol		.10 or Higher Alcohol			Known*		Estimated**	
	Total	N	% of Total	N	% of Tested	N	% of Tested	N	% of Tested	Total	N	% of Total	N	% of Total
1980	519	337	65	103	31	37	11	197	58	863				
1981	437	288	66	110	38	28	10	150	52	763				
1982	321	232	72	106	46	14	6	112	48	581			322	56
1983	345	258	75	113	44	28	11	117	45	558			314	56
1984	383	318	83	133	42	36	11	149	47	584	305	52	332	57
1985	372	295	79	156	53	31	10	108	37	610	261	43	287	47
1986	347	281	81	143	51	24	8	114	41	572	264	46	284	50
1987	297	265	89	132	50	18	7	115	43	530	224	42	248	47
1988	361	313	87	163	52	32	10	118	38	615	277	45	294	48
1989	368	313	85	158	51	26	8	129	41	605	275	45	289	48

ALCOHOL-RELATED FATAL CRASH SUMMARY, 1990 – 2014

Year	Alcohol Test Results on Killed Drivers												All Traffic Fatalities				
	Drivers Killed			Results on Drivers Tested									Alcohol-Related Fatalities				
	Tested for Alcohol			Negative for Alcohol		.01 to .07 Alcohol		.08 to .09 Alcohol		.10 or Higher Alcohol			Known*		Estimated**		
	Total	N	% of Total	N	% of Tested	N	% of Tested	N	% of Tested	N	% of Tested	Total	N	% of Total	N	% of Total	% of Total
1990	334	260	78	129	50	19	7	4	2	108	41	568	235	41	258	46	
1991	327	242	74	135	56	20	8	2	1	85	35	531	212	40	233	44	
1992	344	237	69	135	57	9	3	6	2	89	38	581	229	39	240	41	
1993	355	283	80	174	61	14	5	5	2	90	32	538	196	36	216	40	
1994	377	303	80	183	60	16	5	7	3	97	32	644	226	35	250	39	
1995	383	343	90	198	58	22	7	8	2	115	34	597	246	41	269	45	
1996	359	314	87	209	67	16	5	6	2	83	26	576	205	36	222	38	
1997	384	345	90	226	66	15	5	4	1	100	29	600	178	30	197	33	
1998	406	369	91	218	59	23	6	6	2	122	33	650	273	42	285	44	
1999	426	370	87	254	69	9	2	7	2	100	27	626	195	31	206	33	
2000	403	375	93	226	60	16	4	6	2	127	34	625	245	39	258	41	
2001	361	322	89	198	62	17	5	6	2	101	31	568	211	37	226	40	
2002	430	365	85	223	61	21	6	3	1	118	32	657	239	36	255	39	
2003	435	376	86	219	58	18	5	5	1	134	36	655	255	39	267	41	
2004	389	337	87	219	65	11	3	4	1	103	31	567	177	31	184	32	
2005	379	348	92	213	61	17	5	5	1	113	33	559	197	35	201	36	
2006	346	321	93	207	64	15	5	5	2	94	29	494	166	34	183	37	
2007	381	336	88	207	62	15	4	7	2	107	32	510	190	37	198	39	
2008	316	286	90	176	62	15	5	6	2	89	31	455	163	36	168	38	
2009	266	236	89	160	68	13	5	4	2	59	25	421	141	34	152	36	
2010	270	237	88	156	66	6	3	2	1	73	31	411	131	32	146	36	
2011	243	220	91	137	62	11	5	6	3	66	30	368	136	37	146	40	
2012	262	206	79	130	63	5	2	2	1	69	34	395	131	33	148	37	
2013	259	219	85	151	69	10	5	3	1	55	25	387	117	30	95	24	
2014	248	200	81	129	65	8	4	3	2	60	30	361	111	31	n/a	n/a	

* For explanation of the difference between “known” and “estimated” alcohol-related fatalities, see page 38.

** NHTSA recently improved its method of estimating the true percentage of alcohol-related fatalities for each year. The above table reflects these changes back to the year 1982. Starting in 2013, NHTSA began estimating the true percentage of based on impaired-related fatalities and excluding pedestrians and bicyclists.

TABLE 2.02
IMPAIRED DRIVING INCIDENTS (“DWIs”) BY GENDER
AND BY AREA OF STATE WHERE ARREST WAS MADE, 1996 - 2014

Year	Total	Male		Female		Not Stated		Area: Metro		Area: Non-Metro	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1995	30,415	23,434	77.0%	5,469	18.0%	1,512	5.0%	15,713	51.7%	14,702	48.3%
1996	30,929	23,981	77.5%	5,466	17.7%	1,482	4.8%	15,948	51.6%	14,981	48.4%
1997	31,386	24,111	76.8%	5,833	18.6%	1,442	4.5%	16,149	51.5%	15,237	48.6%
1998	32,431	24,644	76.0%	6,151	19.0%	1,636	5.0%	16,719	51.6%	15,712	48.5%
1999	34,572	26,112	75.5%	6,549	18.9%	1,911	5.5%	17,139	49.6%	17,433	50.4%
2000	35,023	26,069	74.4%	6,844	19.5%	2,110	6.0%	16,818	48.0%	18,205	52.0%
2001	33,549	24,840	74.0%	6,592	19.6%	2,117	6.3%	16,353	48.7%	17,196	51.3%
2002	33,163	24,276	73.2%	6,653	20.0%	2,234	6.7%	16,212	48.9%	16,951	51.1%
2003	32,356	23,455	72.5%	6,630	20.5%	2,271	7.0%	16,041	49.6%	16,315	50.4%
2004	34,369	24,676	71.8%	7,306	21.3%	2,387	6.9%	16,782	48.8%	17,587	51.2%
2005	37,084	26,337	71.0%	8,162	22.0%	2,585	7.0%	17,877	48.2%	19,207	51.8%
2006	42,016	29,355	69.9%	9,471	22.5%	3,190	7.6%	20,539	48.9%	21,477	51.1%
2007	38,769	26,861	69.2%	8,976	23.2%	2,932	7.6%	18,800	48.5%	19,969	51.5%
2008	35,871	24,610	68.6%	8,588	23.9%	2,673	7.5%	17,823	49.7%	18,048	50.3%
2009	32,998	22,582	68.4%	8,068	24.4%	2,348	7.1%	16,347	49.5%	16,651	50.5%
2010	30,012	20,305	67.7%	7,522	25.1%	2,185	7.3%	15,219	50.5%	14,893	49.5%
2011	29,525	20,278	68.7%	7,419	25.1%	1,828	6.2%	14,978	50.7%	14,547	49.3%
2012	28,666	19,368	67.6%	7,275	25.4%	2,023	7.1%	14,770	51.5%	13,896	48.5%
2013	26,012	17,425	67.0%	6,609	25.4%	1,978	7.6%	13,423	51.6%	12,589	48.4%
2014	25,258	16,908	66.9%	6,189	24.5%	2,161	8.6%	13,234	52.4%	12,024	47.6%

* Note: The table above creates the impression that the proportion of violators with gender “not stated” is increasing over time. This is *not* so. If a person arrested for impaired driving does not have a Minnesota driver’s license, then a record is created, but the new record does *not* show the person’s gender. As years pass, many of these violators do eventually get a Minnesota driver’s license, which does record gender. Thus, as time passes, the gender of more and more past violators becomes known. The table above merely uses current information that was not available at the time of the original violation.

TABLE 2.03
IMPAIRED DRIVING INCIDENTS (“DWIs”) FOR SELECTED AGE GROUPS, 1996 - 2014

Year	Total	Age 0-14	Age 15	Age 16	Age 17	Age 18	Age 19	Age 20	Total < 21	Age 21-34	Age 35-49	Age 50+
1995	30,415	1	20	115	242	521	725	819	2,443	16,467	9,336	2,169
1996	30,929	2	13	138	306	615	798	838	2,710	16,023	9,901	2,294
1997	31,386	4	18	106	278	639	768	896	2,709	15,733	10,441	2,503
1998	32,431	2	18	105	301	679	892	930	2,927	15,840	11,117	2,547
1999	34,572	4	18	116	290	744	1,003	1,047	3,222	17,116	11,490	2,754
2000	35,023	4	10	127	328	711	991	1,118	3,289	17,334	11,547	2,853
2001	33,549	1	16	123	277	645	925	1,045	3,032	16,892	10,825	2,800
2002	33,163	7	12	124	308	662	861	1,097	3,071	16,707	10,434	2,951
2003	32,356	3	21	118	281	697	920	1,079	3,119	16,602	9,765	2,870
2004	34,369	3	13	108	302	685	903	1,018	3,032	17,912	10,229	3,196
2005	37,084	5	16	122	344	710	1,036	1,238	3,471	19,626	10,609	3,378
2006	42,016	4	24	138	391	870	1,291	1,352	4,070	22,562	11,527	3,856
2007	38,769	4	11	126	327	721	1,067	1,218	3,474	20,590	10,771	3,934
2008	35,871	4	15	105	269	638	886	1,048	2,965	19,013	9,892	4,001
2009	32,998	4	7	75	197	536	805	911	2,535	17,301	9,250	3,911
2010	30,112	4	9	57	142	434	676	817	2,139	15,821	8,190	3,962
2011	29,525	2	6	56	160	379	591	757	1,951	15,620	7,903	4,051
2012	28,666	4	10	44	114	340	629	674	1,815	15,245	7,576	4,030
2013	26,012	1	10	42	101	288	444	617	1,503	13,799	6,869	3,841
2014	25,258	0	5	23	103	260	392	533	1,316	13,011	4,842	4,089

FIGURE 2.01

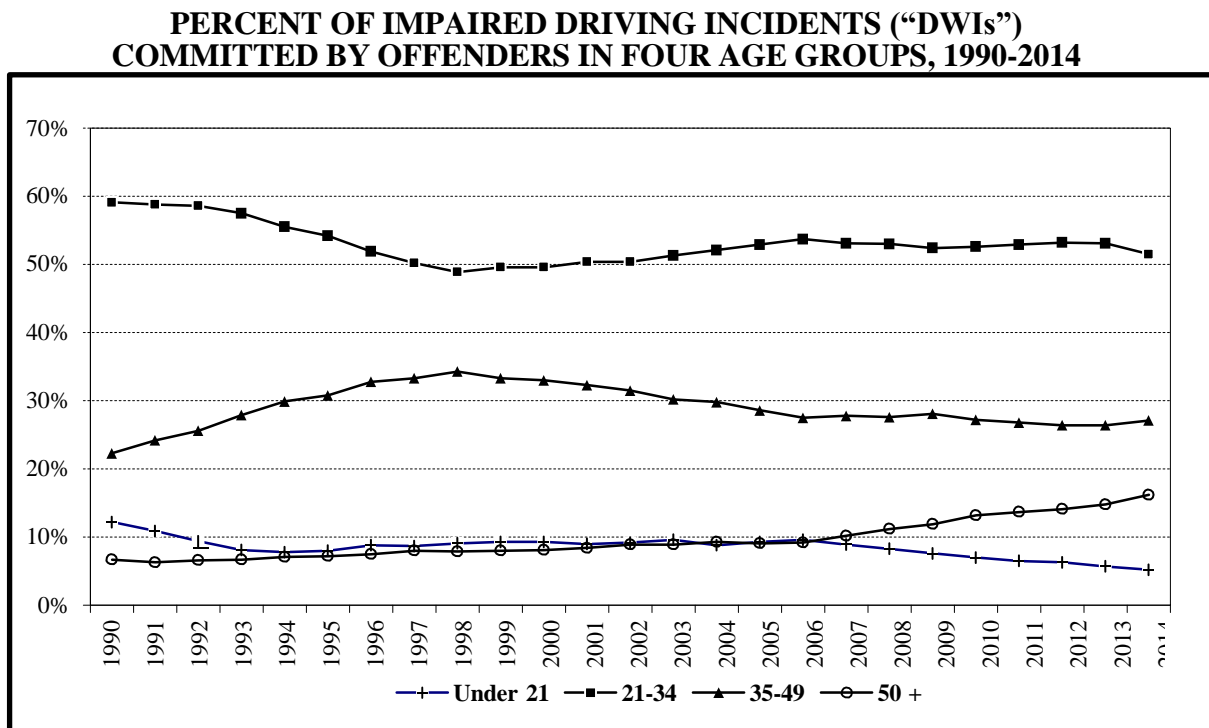


TABLE 2.04

IMPAIRED DRIVING INCIDENTS (“DWIs”) BY AGE-GROUP, 1996 - 2014

Year of Incident	Age 0-14	Age 15-19	Age 20-24	Age 25-29	Age 30-34	Age 35-39	Age 40-44	Age 45-49	Age 50-54	Age 55-59	Age 60-64	Age 65-69	Age 70-74	Age 75-79	Age 80-84	Age 85+	Total
1996	2	1,844	5,731	5,507	5,403	4,719	3,144	1,899	991	589	317	213	96	43	16	1	30,515
1997	5	1,770	5,733	5,651	4,997	4,888	3,295	2,100	1,154	615	335	204	96	46	14	2	30,905
1998	2	1,979	6,176	5,513	4,846	5,160	3,591	2,222	1,137	671	333	192	102	57	18	2	32,001
1999	4	2,161	7,389	5,843	4,900	5,267	3,844	2,368	1,330	670	405	190	98	45	12	3	34,529
2000	5	2,139	7,725	5,819	4,805	5,071	3,922	2,479	1,396	692	368	191	118	55	18	0	34,803
2001	2	1,956	7,839	5,437	4,545	4,408	3,887	2,445	1,450	649	333	194	99	43	14	4	33,305
2002	6	1,937	8,080	5,255	4,345	4,030	3,849	2,500	1,451	754	355	198	105	60	18	5	32,948
2003	3	2,010	8,195	5,394	3,993	3,621	3,646	2,465	1,380	753	381	188	97	47	19	1	32,193
2004	3	1,986	8,689	5,895	4,260	3,660	3,817	2,708	1,641	789	425	166	93	38	26	3	34,199
2005	5	2,202	9,594	6,790	4,360	3,778	3,850	2,929	1,664	920	410	213	92	48	10	5	36,870
2006	6	2,681	11,021	8,043	4,749	4,134	4,011	3,342	1,985	1,030	447	225	107	39	18	4	41,842
2007	4	2,238	9,856	7,398	4,473	3,948	3,624	3,171	1,911	1,100	491	262	93	50	13	2	38,635
2008	6	1,899	8,609	6,868	4,502	3,579	3,278	2,994	1,937	1,114	554	229	101	47	13	6	35,736
2009	6	1,603	7,570	6,394	4,097	3,386	2,937	2,873	1,893	1,055	541	225	119	37	12	7	32,756
2010	4	1,294	6,821	5,776	3,934	2,918	2,671	2,565	1,914	1,086	543	234	98	41	17	2	29,918
2011	1	1,154	6,505	5,837	3,895	2,778	2,671	2,393	1,904	1,084	608	231	120	46	22	5	29,257
2012	4	1,117	6,413	5,421	3,950	2,627	2,665	2,212	1,839	1,090	613	271	135	39	16	6	28,418
2013	1	868	5,478	5,023	3,766	2,596	2,236	1,950	1,779	1,041	557	245	110	42	23	4	25,719
2014	0	783	5,110	4,842	3,592	2,711	2,267	1,864	1,799	1,175	611	318	115	53	15	3	25,258

TABLE 2.05

**AGE OF PERSONS KILLED AND INJURED IN ALL CRASHES
AND IN ALCOHOL-RELATED CRASHES, 2014**

Age Group	Killed	Alcohol Related¹	Severe Injuries	Alcohol Related²	Moderate Injuries	Alcohol Related²	Minor Injuries	Alcohol Related²	Total Injured	Alcohol Related²
00 - 04	0	0	14	0	56	2	351	16	421	18
05 - 09	6	1	24	3	91	4	479	15	594	22
10 - 14	1	0	26	3	153	10	604	22	783	35
15	1	0	8	0	66	5	200	6	274	11
16	6	1	19	4	136	8	480	17	635	29
17	6	0	21	2	167	13	496	17	684	32
18	3	1	22	5	181	14	534	17	737	36
19	5	1	21	3	155	14	538	27	714	44
20	12	6	31	9	166	19	509	34	706	62
< 21:	40	10	186	29	1,171	89	4,191	171	5,548	289
00 - 14	7	1	64	6	300	16	1434	53	1798	75
15 - 19	21	3	91	14	705	54	2,248	84	3,044	152
20 - 24	44	17	150	52	853	127	2,553	242	3,556	421
25 - 29	27	15	108	37	733	128	2,298	179	3,139	344
30 - 34	33	11	79	11	616	88	2,012	114	2,707	213
35 - 39	22	9	81	24	482	52	1,592	79	2,155	155
40 - 44	19	5	68	11	447	45	1,555	90	2,070	146
45 - 49	27	14	67	17	483	45	1,528	74	2,078	136
50 - 54	36	13	75	13	525	56	1,554	61	2,154	130
55 - 59	31	10	78	13	437	37	1,355	58	1,870	108
60 - 64	12	2	42	6	371	22	1,075	31	1,488	59
65 - 69	16	5	46	2	238	13	703	22	987	37
70 - 74	16	4	24	1	159	9	459	12	642	22
75 - 79	14	1	25	0	130	3	355	2	510	5
80 - 84	15	1	15	0	73	3	226	2	314	5
85 +	21	0	19	0	69	0	157	2	245	2
Unk	0	0	12	3	91	2	579	25	682	30
Total	361	111	1,044	210	6,712	700	21,683	1,130	29,439	2,040

¹ Based on alcohol test results plus officer's perception of possible alcohol involvement as noted on crash report.

² Based only on officer's perception of possible alcohol involvement as noted on crash report.

* As shown, there were 111 alcohol-related traffic fatalities in the year 2014. Six of those deaths were to pedestrians and all of them were drinking. In the six fatal crashes involving the six drinking pedestrians who were killed, two of the motor vehicle drivers involved was drinking. One bicyclist was also among the alcohol related fatalities in 2014. The bicyclist had not been drinking.

TABLE 2.06
2014 ALCOHOL-RELATED FATALITIES'
LEVEL OF ALCOHOL CONCENTRATION BY TRAFFIC ROLE

Traffic Role	Killed	Tested	.00	.01 - .07	.08 - .09	.10 +
Car or Truck Driver	62	60	5	5	3	47
Car or Truck Passenger	21	7	2	1	1	3
Motorcycle Driver	10	10	0	3	0	7
Motorcycle Passenger	1	1	0	0	0	1
ATV Driver	6	5	1	0	0	4
Snowmobile Driver	3	2	0	0	0	2
Pedestrian	6	4	0	0	0	4
Bicyclist	1	1	1	0	0	0
Other Vehicle	1	0	0	0	0	0
Total	111	90	9	9	4	68

TABLE 2.07
PERCENT OF DEATHS, INJURIES and PROPERTY DAMAGE CRASHES
DETERMINED TO BE ALCOHOL-RELATED, 2005 - 2014

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Deaths* (Known)	35%	34%	37%	36%	34%	32%	37%	33%	30%	31%
(Estimated)*	36%	37%	39%	38%	36%	36%	40%	37%	24%	n/a
Injuries**	9%	10%	9%	9%	8%	8%	8%	9%	8%	7%
PDO Crashes***	4%	4%	4%	4%	4%	4%	4%	4%	4%	3%

** Beginning in 2013, estimations are based on impaired-related fatalities and excluding pedestrians and bicyclists.

** Based on alcohol test results plus officer's perception of possible alcohol involvement as noted on crash report.

*** Based only on police officer's perception of possible alcohol involvement. (PDO = Property Damage Only).

TABLE 2.08
FIRST HARMFUL EVENT IN ALCOHOL-RELATED
FATAL CRASHES AND ALL FATAL CRASHES, 2014

First Harmful Event	Number of All Fatal Crashes	% of Fatal Crashes	Number of Alcohol-Related Fatal Crashes	% of Alcohol-Related Fatal Crashes
Collision with:				
Another Motor Vehicle	173	53.4%	33	33.3%
Fixed Object	54	16.7%	31	31.3%
Pedestrian	16	4.9%	6	6.0%
Train	6	1.9%	2	2.0%
Bicyclist	5	1.5%	1	1.0%
Parked Motor Vehicle	3	0.9%	1	1.0%
Deer/Other Animal	3	0.9%	1	1.0%
Non-Fixed Object	1	0.3%	0	0.0%
Other Collision Type	1	0.3%	1	1.0%
Non-Collision:				
Overturn	54	16.7%	21	21.2%
Fire/Explosion	1	0.3%	0	0.0%
Other Type Non-Collision	5	1.5%	2	2.0%
Unknown	2	0.6%	0	0.0%
Total	324	100.0%	99	100.0%

* Based on alcohol test results plus officer's perception of possible alcohol involvement as noted on crash report.

TABLE 2.09
TEST RESULTS OF DRIVERS KILLED, 2005 - 2014

Year	Killed	Tested	.00	.01 - .07	.08 - .09	.10 +
2005	379	348	213 (61%)	17 (5%)	5 (1%)	113 (33%)
2006	346	321	207 (64%)	15 (5%)	5 (2%)	94 (29%)
2007	381	336	207 (62%)	15 (4%)	7 (2%)	107 (32%)
2008	316	286	176 (62%)	15 (5%)	6 (2%)	89 (31%)
2009	266	236	160 (68%)	13 (5%)	4 (2%)	59 (25%)
2010	270	237	156 (66%)	6 (3%)	2 (1%)	73 (31%)
2011	243	220	137 (62%)	11 (5%)	6 (3%)	66 (30%)
2012	262	206	130 (63%)	5 (2%)	2 (1%)	69 (34%)
2013	259	219	151 (69%)	10 (5%)	3 (1%)	55 (25%)
2014	248	200	129 (65%)	8 (4%)	3(2%)	60 (30%)

* Percents based on drivers tested.

TABLE 2.10
DRIVERS KILLED WHO TESTED .01 OR HIGHER, 2005 - 2014
("Any Alcohol")

Year	Total	Male	Occurred B Midnight -		Under Legal Age
2005	135	120 (89%)	15 (11%)	34 (25%)	11 (8%)
2006	114	95 (83%)	19 (17%)	34 (30%)	14 (12%)
2007	129	110 (85%)	19 (15%)	28 (22%)	11 (9%)
2008	110	91 (83%)	19 (17%)	31 (28%)	9 (8%)
2009	76	63 (83%)	13 (17%)	12 (16%)	7 (9%)
2010	81	63 (78%)	18 (22%)	12 (15%)	7 (9%)
2011	83	70 (84%)	13 (16%)	24 (29%)	9 (11%)
2012	76	66 (87%)	10 (13%)	13 (17%)	6 (8%)
2013	68	59 (87%)	9 (13%)	20 (29%)	3 (4%)
2014	71	63 (89%)	8 (11%)	15 (21%)	3 (4%)

TABLE 2.11
DRIVERS KILLED WHO TESTED OVER THE LEGAL LIMIT, 2005 - 2014
(The legal limit in Minnesota was lowered to .08 in mid-2005)

Year	Total	Male	Occurred B Midnight -		Under Legal Age
2005	118	105 (89%)	13 (11%)	33 (28%)	9 (8%)
2006	99	84 (85%)	15 (15%)	32 (32%)	13 (13%)
2007	114	98 (86%)	16 (14%)	27 (24%)	10 (9%)
2008	95	81 (85%)	14 (15%)	31 (33%)	8 (8%)
2009	63	53 (84%)	10 (16%)	11 (17%)	6 (10%)
2010	75	58 (77%)	17 (23%)	12 (16%)	6 (8%)
2011	72	62 (86%)	10 (14%)	21 (29%)	8 (11%)
2012	71	62 (87%)	9 (13%)	12 (29%)	8 (11%)
2013	58	49 (85%)	9 (16%)	18 (31%)	2 (4%)
2014	63	56 (89%)	7 (11%)	14 (22%)	2 (3%)

FIGURE 2.02

KILLED DRIVERS TESTED FOR ALCOHOL: 1980-2014
Percent Over .01 Alcohol Level and Percent Over Legal Limit
 (The legal limit in Minnesota was lowered to .08 in 2005)

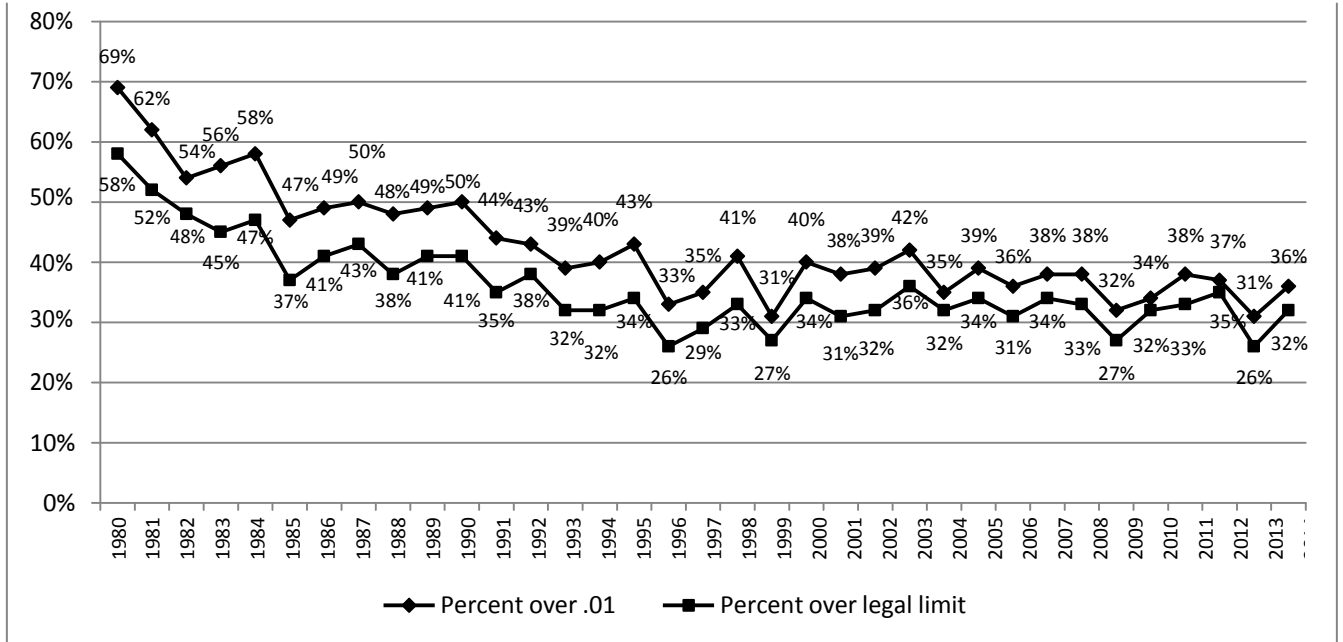


FIGURE 2.03

PERCENT OF DRIVERS KILLED WHO HAD BEEN DRINKING, BY AGE, 2014

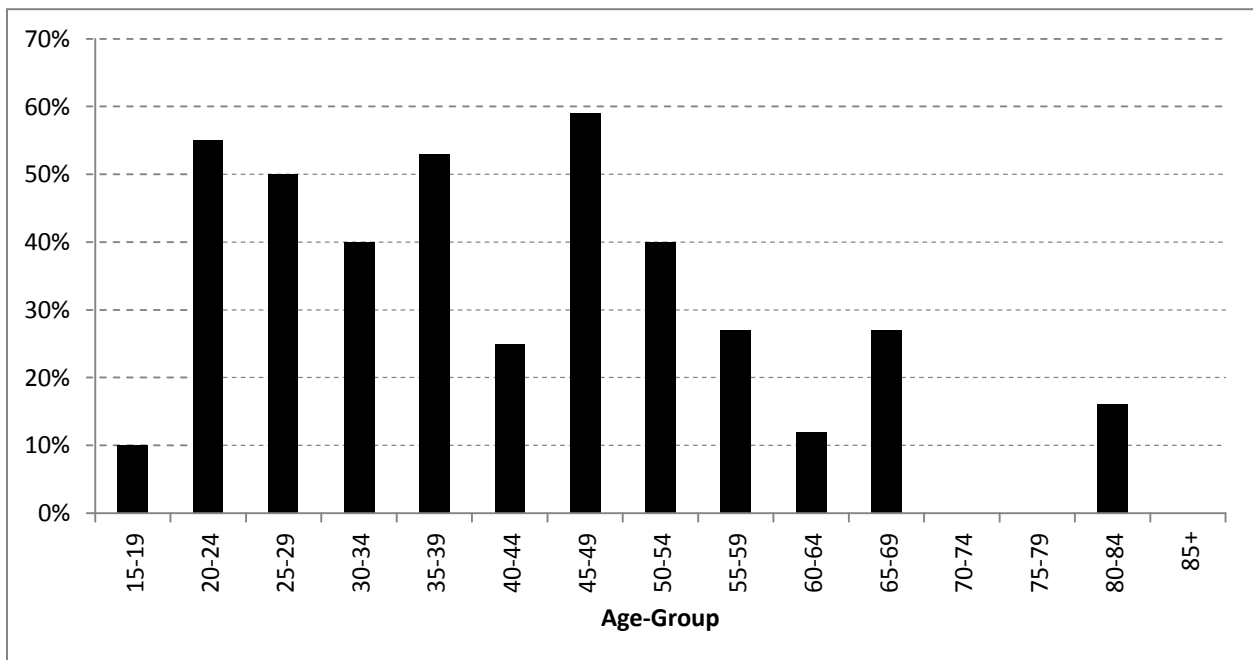


TABLE 2.12

2014 DRIVER FATALITIES' LEVEL OF ALCOHOL CONCENTRATION BY AGE

Age	Killed	Tested	Alcohol Concentration								Alcohol Concentration						
			.00		.01 - .07		.08 - .09		.10+								
			num- ber	per- cent	num- ber	per- cent	num- ber	per- cent	num- ber	per- cent	.00	.01- .04	.05- .09	.10- .14	.15- .19	.20- .24	.25+
00 - 14	0	0	0	0%	0	0%	0	0%	0	0%	0	0	0	0	0	0	0
15	1	1	1	10%	0	0%	0	0%	0	0%	1	0	0	0	0	0	0
16	4	3	3	30%	0	0%	0	0%	0	0%	3	0	0	0	0	0	0
17	2	2	2	20%	0	0%	0	0%	0	0%	2	0	0	0	0	0	0
18	1	1	1	10%	0	0%	0	0%	0	0%	1	0	0	0	0	0	0
19	4	3	2	20%	0	0%	0	0%	1	50%	2	0	0	0	1	0	0
20	4	3	1	10%	1	100%	0	0%	1	50%	1	1	0	0	1	0	0
< 21	16	13	10	100%	1	100%	0	0%	2	100%	10	1	0	0	2	0	0
00 - 14	0	0	0	0%	0	0%	0	0%	0	0%	0	0	0	0	0	0	0
15 - 19	12	10	9	7%	0	0%	0	0%	1	2%	9	0	0	0	1	1	0
20 - 24	25	20	9	7%	3	38%	1	33%	7	12%	9	3	1	3	3	3	0
25 - 29	18	14	7	5%	0	0%	0	0%	7	12%	7	0	0	1	1	1	2
30 - 34	26	22	13	10%	1	13%	1	33%	7	12%	13	1	1	0	4	2	2
35 - 39	15	15	7	5%	0	0%	0	0%	8	13%	7	0	0	2	2	0	2
40 - 44	17	16	12	9%	1	13%	0	0%	3	5%	12	1	0	1	1	1	1
45 - 49	23	17	7	5%	1	13%	0	0%	9	15%	7	0	1	3	2	2	3
50 - 54	31	25	15	12%	1	13%	0	0%	9	15%	15	1	0	3	3	2	1
55 - 59	25	22	16	12%	0	0%	0	0%	6	10%	16	0	0	1	1	0	2
60 - 64	11	8	7	5%	0	0%	0	0%	1	3%	7	0	0	0	1	0	0
65 - 69	13	11	8	6%	0	0%	1	33%	2	3%	8	0	1	2	0	0	0
70 - 74	5	4	4	3%	0	0%	0	0%	0	0%	4	0	0	0	0	0	0
75 - 79	7	5	5	4%	0	0%	0	0%	0	0%	5	0	0	0	0	0	0
80 - 84	10	6	5	4%	1	13%	0	0%	0	0%	5	1	1	0	0	0	0
85+	10	5	5	4%	0	0%	0	0%	0	0%	5	0	0	0	0	0	0
Unk Age	0	0	0	0%	0	0%	0	0%	0	0%	0	0	0	0	0	0	0
Total	248	200	129	100%	8	100%	3	100%	60	100%	129	6	5	16	19	12	13

* Percents, based on drivers tested, may not add to 100.0% due to rounding.

TABLE 2.13

2014 ALCOHOL-RELATED CRASHES BY MONTH

Month	Fatal Crashes	Injury Crashes	Property Damage	Total Crashes	Killed	Injured
January	11	88	194	293	14	134
February	3	86	164	253	3	115
March	4	107	152	263	4	151
April	7	117	144	268	7	172
May	7	135	160	302	10	187
June	7	139	131	277	7	185
July	11	127	158	296	11	178
August	12	136	149	297	13	189
September	11	117	155	283	13	169
October	10	125	166	301	10	171
November	7	115	183	305	7	168
December	9	143	163	315	12	221
Total	99	1,435	1,919	3,453	111	2,040

TABLE 2.14

2014 ALCOHOL-RELATED CRASHES BY ROADWAY TYPE

Roadway Type	Fatal Crashes	Injury Crashes	Property Damage Crashes	Total Crashes	Killed	Injured
Urban Interstate	4	130	274	408	4	176
Rural Interstate	1	19	53	73	2	34
Urban US Trunk Hwy	4	67	86	157	4	105
Rural US Trunk Hwy	5	81	61	147	5	116
Urban MN Trunk Hwy	4	109	167	280	4	155
Rural MN Trunk Hwy	13	110	104	227	14	155
County State Aid Hwy	43	437	424	904	48	647
County Road	7	52	27	86	7	75
Township Road	11	55	44	110	12	75
Mun State Aid Hwy	3	204	338	545	7	283
Municipal Street	4	164	327	495	4	210
Other	0	7	14	21	0	9
Total	99	1,435	1,919	3,453	111	2,040

FIGURE 2.04

2014 ALCOHOL-RELATED CRASHES BY TIME OF DAY

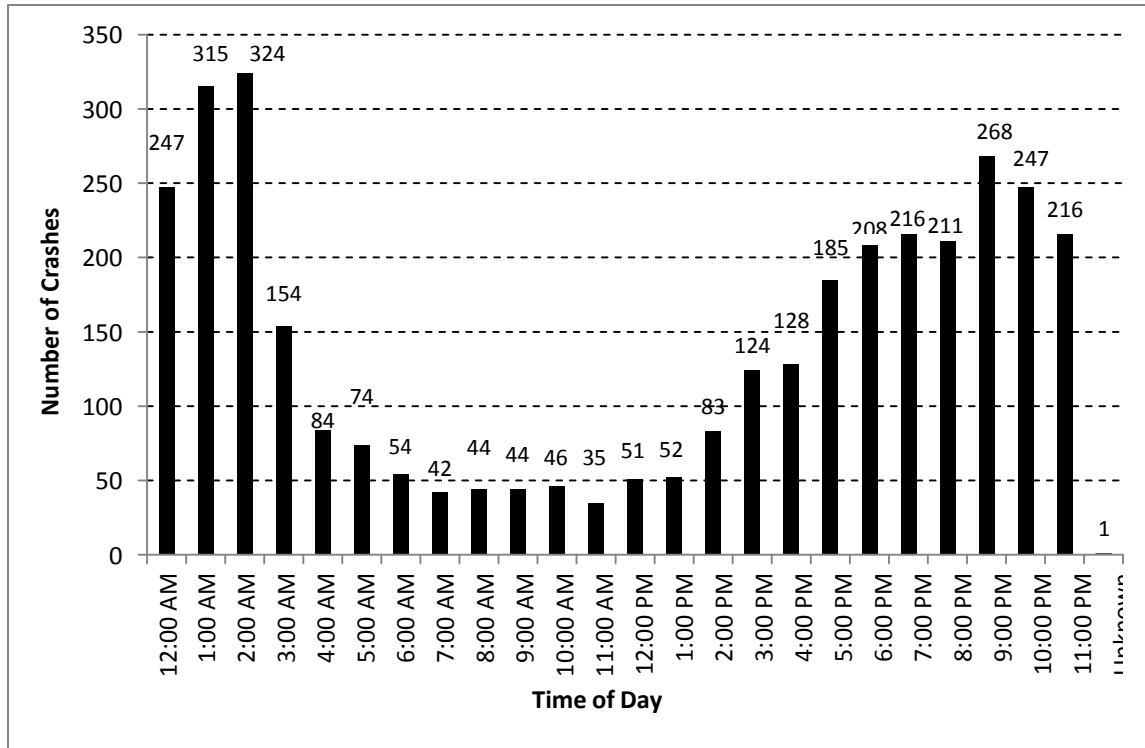


FIGURE 2.05

2014 ALCOHOL-RELATED CRASHES BY DAY OF WEEK

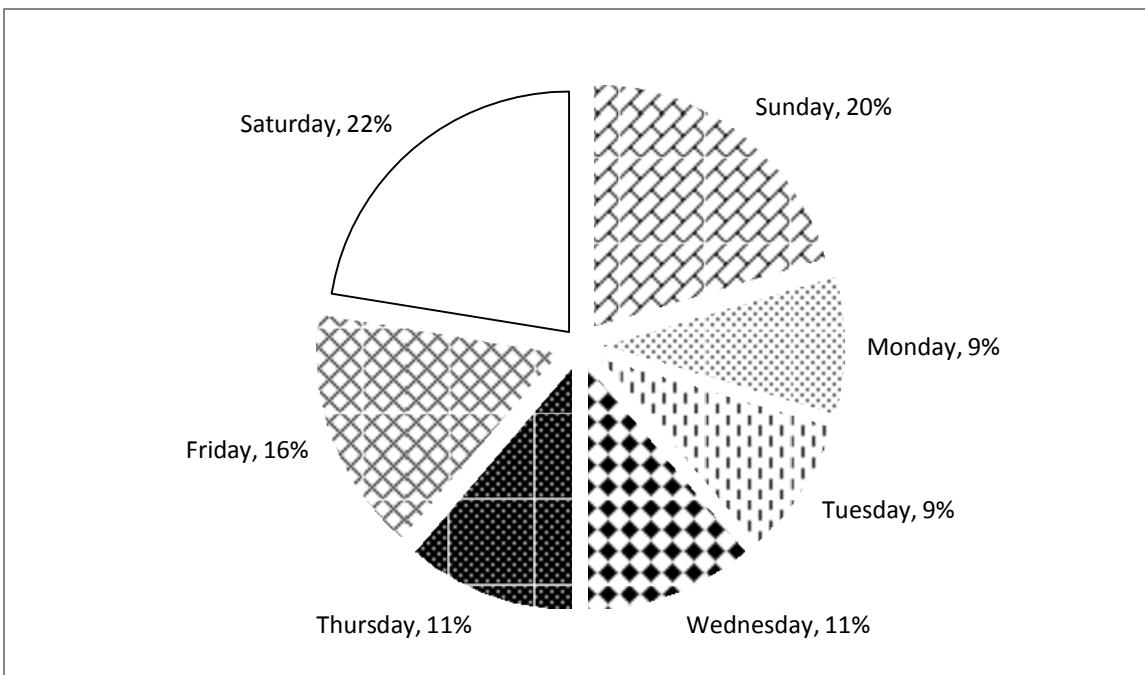


TABLE 2.15

2014 ALCOHOL-RELATED CRASHES BY TIME OF DAY AND DAY OF WEEK

Hour Beginning	Sunday	Monday	Tuesday	Wednes- day	Thurs- day	Friday	Saturday	Total Crashes	Total Killed	Total Injured
Midnight	60	11	25	29	25	30	67	247	7	147
1:00 AM	105	17	18	33	33	41	68	315	9	139
2:00 AM	90	30	22	36	20	39	87	324	6	183
3:00 AM	49	11	11	13	12	21	37	154	3	95
4:00 AM	28	5	6	7	5	8	25	84	1	59
5:00 AM	24	3	1	5	6	9	26	74	4	32
6:00 AM	19	2	2	7	4	8	12	54	1	27
7:00 AM	14	6	1	6	5	2	8	42	4	22
8:00 AM	7	6	7	1	6	8	9	44	1	28
9:00 AM	9	8	8	4	6	4	5	44	0	18
10:00 AM	9	6	4	12	2	6	7	46	0	22
11:00 AM	8	2	2	3	4	5	11	35	1	22
Noon	11	1	10	2	9	10	8	51	2	29
1:00 PM	8	4	5	5	8	10	12	52	2	48
2:00 PM	14	12	10	4	12	12	19	83	3	71
3:00 PM	21	17	11	12	12	20	31	124	10	81
4:00 PM	18	8	9	19	25	25	24	128	5	84
5:00 PM	22	22	26	26	35	17	37	185	7	114
6:00 PM	32	31	19	31	24	34	37	208	8	146
7:00 PM	36	29	21	20	22	46	42	216	11	127
8:00 PM	37	19	20	16	32	41	46	211	7	121
9:00 PM	34	32	36	31	30	57	48	268	12	159
10:00 PM	32	23	17	33	28	54	60	247	2	135
11:00 PM	17	18	18	23	25	60	55	216	5	130
Unknown	0	0	0	0	0	0	1	1	0	1
Total	704	323	309	378	390	567	782	3,453	111	2,040

III: SAFETY EQUIPMENT USE BY VEHICLE OCCUPANTS IN 2014 CRASHES

A brief history of restraint legislation

Studies estimate that using safety restraint devices reduces the risk of death and serious injury by 40% to 60%. In view of this, the Minnesota Legislature enacted laws mandating safety equipment use. The Child Passenger Protection Act took effect in 1982 and was amended in 1983 and 1987. It requires children under the age of four to be properly restrained in a federally approved child car seat. The state's safety belt law went into effect in 1986 and was amended in 1988 and 1991. The law requires all front seat occupants (and children ages four through ten, regardless of seating position) to be restrained. The 1986 belt law was 'Secondary' in nature. Thus, an officer could not issue a citation for non-belt use unless there was another moving violation. In 2009 the law was updated to 'Primary'. In addition, children aged 4 through 7 must now be properly restrained in a 'booster seat'.

Tables in this section focus on restraint use by people in crashes who were occupants of motor vehicles normally equipped with seat belts. The data pose one problem in that restraint use was reported as "unknown" for 7.2% of the persons killed and 10.3% of the persons injured in 2014.

Restraint use responds to legislation

Observational surveys of safety belt use conducted annually at random sites around Minnesota show that legislation affects safety belt wearing behavior, thus, saving lives and preventing injuries. In June 1986, before the first safety belt law took effect, 20% of front seat vehicle occupants used belts. The usage rate jumped to 33% after the 1986 law took effect; to 47% after a \$10 fine was added in 1988; and to 55% after the fine was increased to \$25 in 1991. In 1993 the fine for a child safety seat violation was raised to \$50 which also helped increase the overall seat belt usage rate. Minnesota's 'Primary' seat belt law took effect on June 9th, 2009. In June 2014, the observational seat belt study revealed a 94.7% usage rate.

Occupant fatalities in 2014

In 2014, 278 motor vehicle occupants were killed in traffic crashes which represents a 3% increase from the previous year. However, the number of vehicle occupants injured (26,317) decreased slightly (4%) from 2013. These figures actually reveal a beneficial trend that started in the mid-1980s. Specifically, fatalities and severe injuries have been "trading off" with moderate and minor injuries. They are steadily declining due to the seat belt legislation of the mid-1980s. In 1987, 4,176 motor vehicle occupants suffered severe injuries. In 2014, that number decreased to 741. This is encouraging news. By definition, minor (or "possible") and moderate (or "non-incapacitating") injuries do not produce long-term and severe suffering, while severe injuries often cause such suffering, including consequences such as permanent brain damage and dismemberment.

Northwest region/Township roads

Among the motor vehicle occupants that were killed or injured in the Northwest region of Minnesota, only 72% were known to be using a restraint. This is the lowest rate of use of any region. The Southwest region was the second lowest: 80%. Concerning types of roadway, 'Township Roads' had the lowest percentage of seat belt use (68%).

Ejection update: always wear your seat belt

Of the 278 occupants killed in 2014, almost one in five were ejected or partially ejected from the vehicles they were riding in. And, 94% of these ejected fatalities were not wearing a seat belt.

Airbag deployment update

In 2014, airbag deployment was reported 16,614 times when the occupant was also wearing a seat belt. Fifty-six percent of these incidents resulted in no apparent injury. Airbags deployed 768 times when occupants were not wearing seat belts. Only 34% of these cases resulted in no apparent injury. The message is clear, always wear your seat belt.

TABLE 3.01

**PERCENT OF FRONT SEAT OCCUPANTS WEARING SAFETY BELTS,
BY DATE OF OBSERVATION STUDY**

Date of Survey	Area of State			Class of Roadway	
	Overall	Metro	Non-Metro	Major Roads	Local Roads
August 1986	33%	43%	26%	35%	31%
August 1987	32%	40%	28%	35%	29%
August 1988	47%	51%	45%	48%	46%
August 1989	44%	52%	40%	44%	45%
August 1990	47%	54%	42%	49%	46%
August 1991	53%	62%	47%	53%	52%
August 1992	51%	62%	46%	55%	48%
August 1993	55%	59%	52%	57%	53%
August 1994*	57%	58%	54%	65%	54%
August 1995	65%	68%	56%	68%	64%
August 1996	64%	67%	58%	68%	62%
August 1997	65%	67%	59%	69%	63%
August 1998	64%	67%	56%	68%	63%
August 1999	72%	73%	68%	72%	68%
August 2000	73%	74%	69%	75%	71%
August 2001	74%	75%	72%	75%	69%
August 2002	80%	83%	72%	81%	76%

Date of Survey	Vehicle Type					Gender	
	Overall	Car	SUV	Van	Pickup	Male	Female
August 2003	79.4%	82%	79%	83%	69%	76%	83%
August 2004	82.1%	83%	87%	87%	71%	78%	88%
August 2005	83.9%	86%	87%	83%	75%	80%	89%
August 2006	83.3%	83%	87%	88%	76%	79%	88%
August 2007**	87.8%	89%	90%	90%	81%	84%	92%
August 2008	86.7%	88%	92%	88%	76%	83%	92%
August 2009	90.2%	91%	91%	95%	84%	89%	92%
August 2010	92.3%	94%	94%	95%	83%	89%	96%
August 2011	92.7%	94%	92%	96%	88%	90%	95%
August 2012	93.6%	94%	96%	93%	87%	92%	96%
August 2013	94.8%	96%	97%	97%	87%	93%	98%
August 2014	94.7%	97%	97%	97%	85%	93%	97%

* A new survey design was initiated in August 1994. In 2003 the survey was completely redesigned and collected more information on vehicle occupants.

** The 2007 observational study was conducted after the 35W bridge crash

TABLE 3.02

**MOTOR VEHICLE OCCUPANTS KILLED OR INJURED
BY EJECTION STATUS AND INJURY SEVERITY, 2014**

Ejection Status	Killed		Severe Injury		Moderate Injury		Minor Injury		Total Killed or Injured	
	Number	Row %	Number	Row %	Number	Row %	Number	Row %	Number	Total %
Not Ejected	223	0.9%	646	2.6%	5,304	21.0%	19,130	75.6%	25,303	100%
Partly Ejected	7	13.5%	17	32.7%	20	38.5%	8	15.4%	52	100%
Ejected	44	17.7%	49	19.8%	75	30.2%	80	32.3%	248	100%
Not Stated	4	0.4%	30	3.0%	151	15.2%	807	81.4%	992	100%
Total	278	1.1%	742	2.8%	5,550	20.9%	20,025	75.3%	26,595	100%

TABLE 3.03

**MOTOR VEHICLE OCCUPANTS KILLED OR INJURED,
BY AGE AND INJURY SEVERITY, 2014**

Age Group	Killed	Severe Injury	Moderate Injury	Minor Injury	Total Injuries
00 - 04	0	10	45	329	384
05 - 09	4	16	64	426	510
10 - 14	0	13	96	480	589
15 - 19	20	75	583	2,059	2,737
20 - 24	33	114	721	2,350	3,218
25 - 29	22	82	611	2,121	2,836
30 - 34	23	46	513	1,887	2,469
35 - 39	17	62	404	1,497	1,980
40 - 44	15	43	380	1,464	1,902
45 - 49	19	47	403	1,415	1,884
50 - 54	27	46	408	1,427	1,908
55 - 59	18	51	352	1,227	1,648
60 - 64	8	28	305	1,002	1,343
65 - 69	14	31	196	668	909
70 - 74	12	15	143	436	606
75 - 79	13	25	119	343	500
80 - 84	14	15	68	219	316
85 & Older	19	15	67	155	256
Not Stated	0	8	72	520	600
Total	278	742	5,550	20,025	26,595

FIGURE 3.01

**SAFETY EQUIPMENT USE AMONG MOTOR VEHICLE
OCCUPANTS KILLED OR INJURED, BY AGE, 2014**

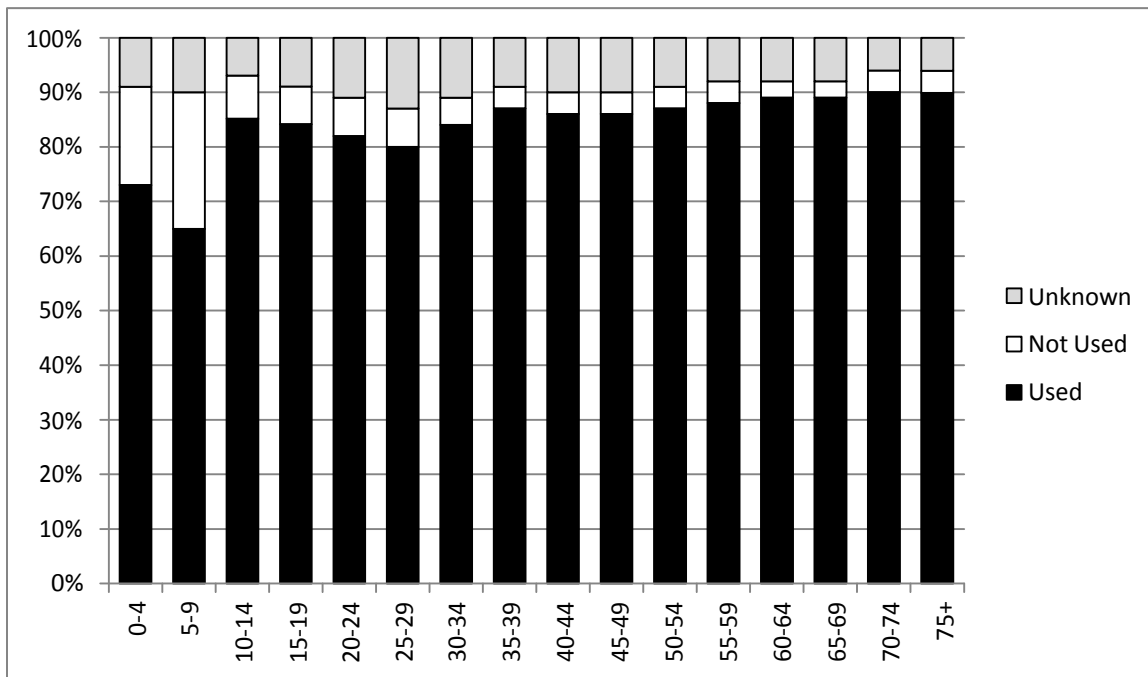


TABLE 3.04

**SAFETY EQUIPMENT USE BY VEHICLE OCCUPANTS,
BY GENDER AND INJURY SEVERITY, 2014**

	Females Killed	Males Killed	Total Killed	Females Severely Injured	Males Severely Injured	Females Moderately Injured	Males Moderately Injured	Females- Minor Injuries	Males- Minor Injuries	Total Injuries
Used	60	92	152	208	243	2,447	2,067	9,947	7,110	22,198
Not Used	27	79	106	49	111	177	279	343	442	1,417
Unknown	8	12	20	40	90	217	324	958	993	2,702
Total	95	183	278	297	444	2,841	2,670	11,248	8,485	26,317

Note: Gender was not reported for 332 persons injured (mostly those with minor injuries), causing the “Total” to be 332 greater than the sum of the “severe,” “moderate,” and “minor” injury columns.

TABLE 3.05

SAFETY EQUIPMENT USE BY VEHICLE OCCUPANTS KILLED OR INJURED, BY AGE AND INJURY SEVERITY, 2014

Age Group	Restraint Use	Killed		Severe Injuries		Moderate Injuries		Minor Injuries		Total Injured	
		N	%	N	%	N	%	N	%	N	%
00 - 03 Years	Used	0	0	4	66.7%	16	51.6%	206	78.6%	226	75.6%
	Not Used	0	0	2	33.3%	11	35.5%	38	14.5%	51	17.1%
	Unknown	0	0	0	0	4	12.9%	18	6.9%	22	7.4%
	Subtotal	0	100.0%	6	100.0%	31	100.0%	262	100.0%	299	100.0%
04 - 07 Years	Used	2	66.7%	4	33.3%	21	41.2%	185	57.8%	210	54.9%
	Not Used	0	0	4	33.3%	28	54.9%	105	32.8%	137	35.6%
	Unknown	1	33.3%	4	33.3%	2	3.9%	30	9.4%	36	9.4%
	Subtotal	3	100.0%	12	100.0%	51	100.0%	320	100.0%	383	100.0%
Total 00 - 07 Years	Used	2	67%	8	44.4%	37	45.1%	391	67.1%	436	63.9%
	Not Used	0	0	6	33.3%	39	47.6%	143	24.6%	188	27.6%
	Unknown	1	33%	4	22.2%	6	7.3%	48	8.3%	58	8.5%
	Subtotal	3	100.0%	18	100.0%	82	100.0%	582	100.0%	682	100.0%
00 - 04 Years	Used	0	0	5	50.0%	22	48.9%	253	77.0%	280	72.9%
	Not Used	0	0	3	30.0%	17	37.8%	50	15.2%	70	18.2%
	Unknown	0	0	2	20.0%	6	13.3%	26	7.9%	34	8.9%
	Subtotal	0	100.0%	10	100.0%	45	100.0%	329	100.0%	384	100.0%
05 - 09 Years	Used	3	75.0%	9	56.3%	37	57.8%	281	66.0%	327	64.6%
	Not Used	0	0	3	18.8%	24	37.5%	103	24.1%	130	25.7%
	Unknown	1	25.0%	4	25.0%	3	4.7%	42	9.9%	49	9.7%
	Subtotal	4	100.0%	16	100.0%	64	100.0%	426	100.0%	506	100.0%
10 - 14 Years	Used	0	0	8	61.5%	72	75.0%	426	88.8%	506	85.9%
	Not Used	0	0	2	15.4%	15	15.6%	27	5.6%	44	7.5%
	Unknown	0	0	3	23.1%	9	9.4%	27	5.6%	39	6.6%
	Subtotal	0	100.0%	13	100.0%	96	100.0%	480	100.0%	589	100.0%
15 - 19 Years	Used	9	45.0%	41	54.7%	482	82.7%	1,784	86.6%	2,307	84.9%
	Not Used	9	45.0%	19	25.3%	61	10.5%	98	4.8%	178	6.6%
	Unknown	2	10.0%	15	20.0%	40	6.9%	177	8.6%	232	8.5%
	Subtotal	20	100.0%	75	100.0%	583	100.0%	2,059	100.0%	2,717	100.0%
20 - 24 Years	Used	13	39.4%	66	57.9%	575	79.8%	1,972	83.9%	2,613	82.0%
	Not Used	19	57.6%	25	21.9%	65	9.0%	123	5.2%	213	6.7%
	Unknown	1	3.0%	23	20.2%	81	11.2%	255	10.9%	359	11.3%
	Subtotal	33	100.0%	114	100.0%	721	100.0%	2,350	100.0%	3,185	100.0%
25 - 29 Years	Used	15	68.2%	40	48.8%	472	77.3%	1,751	82.6%	2,263	80.4%
	Not Used	6	27.3%	27	32.9%	69	11.3%	92	4.3%	188	6.7%
	Unknown	1	4.6%	15	18.3%	70	11.5%	278	13.1%	363	12.9%
	Subtotal	22	100.0%	82	100.0%	611	100.0%	2,121	100.0%	2,814	100.0%
30 - 34 Years	Used	9	39.1%	30	65.2%	403	78.6%	1,627	86.2%	2,060	84.2%
	Not Used	12	52.2%	10	21.7%	47	9.2%	60	3.2%	117	4.8%
	Unknown	2	8.7%	6	13.0%	63	12.3%	2	8.7%	269	11.0%
	Subtotal	23	100.0%	46	100.0%	513	100.0%	1,887	100.0%	2,446	100.0%
35 - 39 Years	Used	9	52.9%	36	58.1%	333	82.4%	1,339	89.5%	1,708	87.0%
	Not Used	7	41.2%	12	19.4%	27	6.7%	33	2.2%	72	3.7%
	Unknown	1	5.9%	14	22.6%	44	10.9%	125	8.4%	183	9.3%
	Subtotal	17	100.0%	62	100.0%	404	100.0%	1,497	100.0%	1,963	100.0%

TABLE 3.05 CONTINUED

SAFETY EQUIPMENT USE BY VEHICLE OCCUPANTS KILLED OR INJURED, BY AGE AND INJURY SEVERITY, 2014

Age Group	Restraint Use	Killed		Severe Injuries		Moderate Injuries		Minor Injuries		Total Injured	
		N	%	N	%	N	%	N	%	N	%
40 - 44 Years	Used	8	53.3%	29	67.4%	309	81.3%	1,282	87.6%	1,620	85.6%
	Not Used	7	46.7%	8	18.6%	32	8.4%	39	2.7%	79	4.2%
	Unknown	0	0%	6	14.0%	39	10.3%	143	9.8%	188	10.0%
	Subtotal	15	100.0%	43	100.0%	380	100.0%	1,464	100.0%	1,887	100.0%
45 - 49 Years	Used	9	47.4%	26	55.3%	337	83.6%	1,242	87.8%	1,605	86.1%
	Not Used	9	47.4%	10	21.3%	22	5.5%	41	2.9%	73	3.9%
	Unknown	1	5.3%	11	23.4%	44	10.9%	132	9.3%	187	10.0%
	Subtotal	19	100.0%	47	100.0%	403	100.0%	1,415	100.0%	1,865	100.0%
50 - 54 Years	Used	13	48.2%	30	65.2%	344	84.3%	1,279	89.6%	1,653	87.9%
	Not Used	13	48.2%	10	21.7%	18	4.4%	27	1.9%	55	2.9%
	Unknown	1	3.7%	6	13.0%	46	11.3%	121	8.5%	173	9.2%
	Subtotal	27	100.0%	46	100.0%	408	100.0%	1,427	100.0%	1,881	100.0%
55 - 59 Years	Used	8	44.4%	32	62.8%	309	87.8%	1,100	89.7%	1,441	88.4%
	Not Used	6	33.3%	10	19.6%	18	5.1%	28	2.3%	56	3.4%
	Unknown	4	22.2%	9	17.7%	25	7.1%	99	8.1%	133	8.2%
	Subtotal	18	100.0%	51	100.0%	352	100.0%	1,227	100.0%	1,630	100.0%
60 - 64 Years	Used	3	37.5%	20	71.4%	268	87.9%	903	90.1%	1,191	89.2%
	Not Used	3	37.5%	3	10.7%	12	3.9%	21	2.1%	36	2.7%
	Unknown	2	25.0%	5	17.9%	25	8.2%	78	7.8%	108	8.1%
	Subtotal	8	100.0%	28	100.0%	305	100.0%	1,002	100.0%	1,335	100.0%
65 - 69 Years	Used	11	78.6%	24	77.4%	174	88.8%	599	89.7%	797	89.1%
	Not Used	2	14.3%	3	9.7%	7	3.6%	14	2.1%	24	2.7%
	Unknown	1	7.1%	4	12.9%	15	7.7%	55	8.2%	74	8.3%
	Subtotal	14	100.0%	31	100.0%	196	100.0%	668	100.0%	895	100.0%
70 - 74 Years	Used	9	75.0%	13	86.7%	129	90.2%	394	90.4%	536	90.2%
	Not Used	3	25.0%	2	13.3%	9	6.3%	8	1.8%	19	3.2%
	Unknown	0	0%	0	0%	2	3.5%	34	7.8%	39	6.6%
	Subtotal	12	100.0%	15	100.0%	143	100.0%	436	100.0%	594	100.0%
75 & Older	Used	33	71.7%	38	69.1%	226	89.0%	658	91.8%	922	89.9%
	Not Used	10	21.7%	12	21.8%	13	5.1%	13	1.8%	38	3.7%
	Unknown	3	6.5%	5	9.1%	15	5.9%	46	6.4%	66	6.4%
	Subtotal	46	100.0%	55	100.0%	254	100.0%	717	100.0%	1,026	100.0%
Age Not Stated	Used	0	0%	4	50.0%	41	56.9%	324	62.3%	369	61.5%
	Not Used	0	0%	1	12.5%	3	4.2%	21	4.0%	25	4.1%
	Unknown	0	0%	3	37.5%	28	38.9%	175	33.7%	206	34.3%
	Subtotal	0	100.0%	8	100.0%	72	100.0%	520	100.0%	600	100.0%
All Ages	Used	152	54.7%	451	60.8%	4,533	81.7%	17,214	86.0%	22,198	84.3%
	Not Used	106	38.1%	160	21.6%	459	8.3%	798	4.0%	1,417	5.4%
	Unknown	20	7.2%	131	17.7%	558	10.0%	2,013	10.0%	2,702	10.3%
	Subtotal	278	100.0%	742	100.0%	5,550	100.0%	20,025	100.0%	26,317	100.0%

Percentages may not sum to 100.0% due to rounding. Persons aged 0 through 3 and 4 through 7 years old are categorized separately because Minnesota law makes special provisions for these age groups.

TABLE 3.06

**PERCENT OF KILLED OR INJURED MOTOR VEHICLE OCCUPANTS WHO
USED SAFETY EQUIPMENT, BY INJURY SEVERITY AND YEAR, 2005 - 2014**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Killed										
Used	40.2%	40.0%	41.4%	45.2%	42.4%	48.5%	46.5%	46.7%	53.9%	54.7%
Not Used	51.2%	52.0%	48.9%	46.2%	43.7%	41.0%	44.3%	42.0%	34.9%	38.1%
Unknown	8.6%	8.0%	9.8%	8.6%	13.9%	10.5%	9.2%	11.2%	11.2%	7.2%
Injured										
Severe Injuries										
Used	49.6%	49.9%	52.2%	51.4%	55.2%	58.3%	59.2%	57.8%	57.2%	60.8%
Not Used	30.8%	32.8%	31.6%	29.8%	27.9%	27.2%	29.0%	25.8%	28.0%	21.6%
Unknown	19.6%	17.3%	16.2%	18.8%	16.9%	14.5%	11.8%	16.3%	14.8%	17.7%
Moderate Injuries										
Used	70.9%	69.0%	71.6%	72.4%	74.6%	79.1%	79.1%	79.4%	81.0%	81.7%
Not Used	15.9%	16.8%	15.4%	14.8%	12.8%	10.8%	10.4%	10.1%	9.7%	8.3%
Unknown	13.2%	14.2%	13.0%	12.8%	12.6%	10.1%	10.5%	10.6%	9.3%	10.0%
Minor Injuries										
Used	80.6%	80.2%	81.6%	81.8%	83.0%	84.7%	85.4%	85.1%	85.8%	86.0%
Not Used	8.8%	8.6%	7.6%	7.4%	6.5%	5.5%	5.1%	5.1%	4.1%	4.0%
Unknown	10.6%	11.3%	10.8%	10.8%	10.4%	9.8%	9.5%	9.9%	10.1%	10.0%
Total Injured										
Used	76.6%	76.1%	78.0%	78.5%	80.1%	82.7%	83.3%	82.9%	83.9%	84.3%
Not Used	11.7%	11.6%	10.4%	10.0%	8.7%	7.3%	7.0%	6.8%	6.1%	5.4%
Unknown	11.7%	12.3%	11.6%	11.6%	11.2%	10.0%	9.7%	10.2%	10.0%	10.3%

TABLE 3.07

**SAFETY EQUIPMENT USE BY MOTOR VEHICLE OCCUPANTS
KILLED OR INJURED, BY ROADWAY TYPE, 2014**

Roadway Type	Used		Not Used		Unknown		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Interstate	3,471	91.9%	139	3.6%	167	4.4%	3,777	100.0%
US Trunk Hwy	2,864	88.6%	195	6.0%	173	5.4%	3,232	100.0%
MN Trunk Hwy	4,295	87.9%	288	5.9%	303	6.2%	4,886	100.0%
CSAH	6,127	80.8%	479	6.3%	973	12.8%	7,579	100.0%
County Road	318	70.7%	63	14%	69	15.3%	450	100.0%
Township Road	310	68.3%	75	16.5%	69	15.2%	454	100.0%
MSAH	3,385	81.7%	158	3.8%	600	14.5%	4,143	100.0%
Municipal Street	1,542	76.4%	123	6.1%	353	17.5%	2,018	100.0%
Other Road	38	67.9%	3	5.4%	15	26.8%	56	100.0%
Total	22,350	84.0%	1,523	5.7%	2,722	10.2%	26,595	100.0%

CSAH = County State Aid Highway. MSAH = Municipal State Aid Highway

TABLE 3.08

**SAFETY EQUIPMENT USE BY MOTOR VEHICLE OCCUPANTS
KILLED OR INJURED, BY REGION OF THE STATE, 2014**

EMS Region	Percent Used	Percent Not Used	Percent Unknown	Number of People
Metropolitan	84.3%	3.8%	11.8%	15,475
Central	86.5%	6.8%	6.7%	3,614
Northeast	80.9%	6.7%	12.4%	1,327
Northwest	71.7%	17.9%	10.4%	541
South Central	81.8%	9.3%	8.9%	1,087
Southeast	87.2%	6.8%	6.0%	2,280
Southwest	79.8%	11.0%	9.1%	1,314
West Central	81.5%	10.7%	7.8%	957
Statewide	84.0%	5.7%	10.2%	26,595

*The regions of the state are shown in the map below.

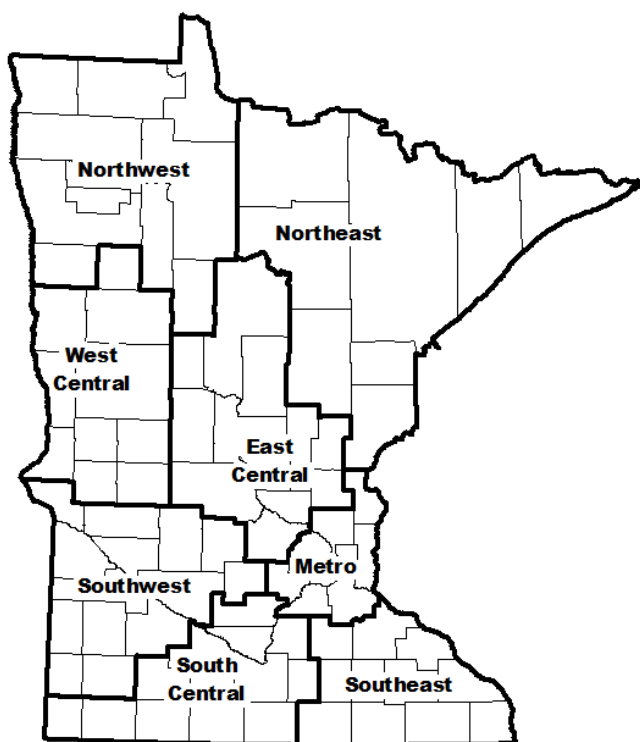


TABLE 3.09
AIRBAG DEPLOYMENTS, 2007 - 2014

Year	Injury Severity	Airbag Deployed Belt Used	Airbag Deployed Belt Not Used	Deployment Not Indicated Belt Used	Deployment Not Indicated Belt Not Used	Belt Use Unknown	Total
2007	Killed	89	76	76	119	39	399
	Severe Injury	294	152	350	237	200	1,233
	Moderate Injury	2,044	338	3,489	850	1,009	7,730
	Minor Injury	4,336	365	13,941	1,334	2,417	22,393
	No Apparent Injury	7,535	361	104,297	3,783	43,270	159,246
	Total	14,298	1,292	122,153	6,323	46,935	191,001
2008	Killed	81	46	66	104	28	325
	Severe Injury	278	113	290	216	207	1,104
	Moderate Injury	1,851	297	3,128	718	879	6,873
	Minor Injury	4,233	341	13,504	1,267	2,345	21,690
	No Apparent Injury	7,594	323	102,417	3,345	36,239	149,918
	Total	14,037	1,120	119,405	5,650	39,698	179,910
2009	Killed	73	57	55	75	42	302
	Severe Injury	251	96	255	160	155	917
	Moderate Injury	1,767	271	3,023	553	809	6,423
	Minor Injury	4,076	272	12,702	1,045	2,111	20,206
	No Apparent Injury	7,318	270	98,055	3,308	31,781	140,732
	Total	13,485	966	114,090	5,141	34,898	168,580
2010	Killed	95	46	53	79	32	305
	Severe Injury	248	76	240	152	121	837
	Moderate Injury	1,807	176	3,096	492	624	6,195
	Minor Injury	4,241	226	13,347	917	2,027	20,758
	No Apparent Injury	7,620	210	101,735	3,055	30,979	143,599
	Total	14,011	734	118,471	4,695	33,783	171,694
2011	Killed	83	51	43	69	25	271
	Severe Injury	268	100	203	131	94	796
	Moderate Injury	1,763	190	2,855	416	613	5,837
	Minor Injury	4,332	234	12,978	799	1,915	20,258
	No Apparent Injury	7,860	243	99,608	2,716	28,078	138,505
	Total	14,306	818	115,687	4,131	30,725	165,667
2012	Killed	80	50	49	66	31	276
	Severe Injury	297	91	202	132	141	863
	Moderate Injury	1,869	201	2,581	364	592	5,607
	Minor Injury	4,637	256	11,761	721	1,904	19,279
	No Apparent Injury	8,093	229	94,519	2,390	27,092	132,323
	Total	14,976	827	109,112	3,673	29,760	158,348
2013	Killed	92	39	53	55	30	269
	Severe Injury	287	100	213	145	129	874
	Moderate Injury	2,003	189	2,774	382	548	5,896
	Minor Injury	4,988	228	12,680	624	2,072	20,592
	No Apparent Injury	9,075	226	106,392	2,586	30,084	148,363
	Total	16,445	782	122,112	3,792	32,863	175,994
2014	Killed	109	48	43	58	20	278
	Severe Injury	261	77	190	83	131	742
	Moderate Injury	1,958	161	2,575	298	558	5,550
	Minor Injury	4,935	219	12,279	579	2,013	20,025
	No Apparent Injury	9,351	263	108,546	2,507	30,738	151,405
	Total	16,614	768	123,633	3,525	33,460	178,000

Note: "Belt use" is used as a shorthand term for safety restraint use. Safety restraint devices are normally lap and shoulder belts, but they can also be child safety seats or booster seats.

IV: MOTORCYCLE CRASHES

2014 motorcycle crash summary

In the past decade many older people have returned to motorcycling. By the end of the calendar year 2014, the number of licensed motorcycle operators in Minnesota had reached the highest level in history. As a result, motorcyclist crash involvement remains very worrisome to traffic safety officials. However, in 2014 there were 1,201 crashes that involved at least one motorcycle. This represents a 5% decrease from the previous year.

Motorcyclist fatalities in 2014 decreased 23% from 2013 (from 60 to 46). Of the 46 killed, 41 were drivers and 5 were passengers. Injuries to motorcyclists decreased 23% as well (from 1,454 to 1,117). Sixty-five percent of all motorcyclists killed or injured in 2014 were people aged 40 and over.

Alcohol use among drivers remains high

State law requires that drivers who die in traffic crashes be tested for blood alcohol level. In 2014, 41 motorcycle drivers were killed and 35 of them were tested. Ten (29%) of the 35 drivers tested positive for alcohol and seven of the 35 (20%) tested at .08 or greater.

Greater crash severity

When a motorcycle is involved in a traffic crash, the chances for a fatality are greatly increased. In fact, 3.7 out of every 100 motorcycle crashes in 2014 was a fatal crash. For all crashes in Minnesota, only 0.4 out of every 100 crashes is a fatal crash.

Helmet use

Currently, Minnesota does not have a mandatory helmet use law for motorcyclists 18 or older. Laws may be debated, but the benefits helmets offer are clear, they protect the head in the event of a crash. In 2014, only nine (20%) of the 46 motorcycle riders killed were known to be wearing a helmet. Of the 1,117 motorcyclists injured, only 423 (38%) were known to be wearing a helmet.

Operator training is essential

In addition to the newly endorsed younger drivers each year, a large number of middle-aged people are returning to motorcycling. Motorcycle and motorized bicycle registrations have increased four percent since 2009. The crash data indicates the importance proper operator training. In 2014, one out of six motorcycle operators that were involved in a fatal crash did not have a valid endorsement to drive a motorcycle. These facts surely indicate that further training is needed for a large segment of the motorcycle driver population.

Males are most often victims

The motorcycle crash experience in Minnesota remains largely a male one. In 2014, 37 of the 46 motorcyclists killed and 929 of the 1,117 injured, were male. Males account for 83% of all motorcyclists killed or injured.

Contributing factors for motorcyclists

In 2014, two in five (36%) of motorcycle crashes were single-vehicle crashes. In these crashes, the factors that reporting officers list most often are illegal or unsafe speed (19%), driver inexperience (11%) and driver inattention or distraction (11%). In crashes that involve another motor vehicle, the reporting officers list following too closely (20%) and driver inattention or distraction most often for the motorcyclists (14%).

Contributing factors for the other drivers

In motorcycle crashes that involve another vehicle, the reporting officers more often associate contributing factors with the other driver than with the motorcyclist. For the other drivers, failure to yield right of way (40%) and driver inattention or distraction (19%) are listed most frequently. This demonstrates the need for programming to help motor vehicle drivers and motorcyclists share the road safely.

TABLE 4.01

MOTORCYCLE CRASH SUMMARY, 1981 – 2014

	Motorcycle Crashes				Killed		Injured				Mcy Deaths per 10,000	Fatal Crash Rate Per 100 Crashes	
Year	Fatal	Injury	PDO*	Total	Mcy	Other	Mcy	Other	Licensed Operators	Registered Motorcycles	Reg. Mcy	For Mcy	For All Crashes
1981	92	2,516	455	3,063	96	0	2,874	196	238,926	166,151	5.8	3.0	0.7
1982	72	2,115	331	2,518	70	6	2,381	189	264,134	159,345	4.4	2.9	0.6
1983	70	2,377	364	2,811	73	0	2,678	191	252,808	155,502	4.7	2.5	0.5
1984	59	2,302	407	2,768	62	1	2,590	207	256,836	153,851	4.0	2.2	0.5
1985	75	2,238	435	2,748	77	1	2,500	204	272,317	151,449	5.1	2.7	0.5
1986	63	1,891	364	2,318	66	0	2,152	142	282,087	141,261	4.7	2.7	0.5
1987	51	1,692	378	2,121	51	3	1,853	145	288,424	134,590	3.8	2.4	0.5
1988	57	1,628	284	1,969	58	4	1,817	126	293,347	128,956	4.5	2.9	0.5
1989	37	1,463	248	1,748	37	0	1,617	104	290,000	123,308	3.0	2.1	0.5
1990	46	1,446	243	1,735	50	2	1,605	126	292,074	120,081	4.2	2.7	0.5
1991	38	1,198	225	1,461	40	0	1,357	104	296,624	117,492	3.4	2.6	0.5
1992	29	1,133	199	1,361	28	3	1,288	60	290,722	116,124	2.4	2.1	0.5
1993	33	1,022	190	1,245	34	3	1,151	104	291,756	114,548	3.0	2.7	0.5
1994	41	1,151	189	1,381	43	0	1,324	66	293,164	113,337	3.8	3.0	0.6
1995	32	941	153	1,126	35	2	1,063	76	295,849	113,981	3.1	2.8	0.5
1996	39	934	158	1,131	42	0	1,046	71	297,102	112,551	3.7	3.4	0.5
1997	23	821	127	971	24	1	916	65	298,863	113,443	2.1	2.4	0.5
1998	41	883	141	1,065	40	1	987	69	301,992	118,275	3.4	3.8	0.6
1999	30	867	127	1,024	29	2	991	64	307,009	122,676	2.4	2.9	0.6
2000	34	935	166	1,135	35	1	1,039	45	311,825	132,352	2.6	3.0	0.5
2001	41	997	175	1,213	42	1	1,094	54	317,421	142,882	2.9	3.4	0.5
2002	47	943	178	1,168	47	0	1,071	46	327,604	149,360	3.1	4.0	0.6
2003	58	NA	NA	NA	62	1	NA	NA	335,862	161,793	3.8	NA	NA
2004	50	1,112	182	1,344	50	1	1,251	67	346,169	174,195	2.9	3.7	0.6
2005	61	1,201	169	1,431	59	4	1,319	72	353,460	185,087	3.2	4.3	0.6
2006	70	1,279	147	1,496	70	0	1,413	79	360,143	197,735	3.5	4.7	0.6
2007	60	1,368	195	1,623	61	0	1,498	67	369,623	209,591	2.9	3.7	0.6
2008	71	1,350	212	1,633	72	0	1,505	62	380,232	224,625	3.2	4.3	0.5
2009	47	1,089	193	1,329	53	0	1,200	53	387,159	226,675	2.3	3.5	0.5
2010	44	1,168	165	1,377	45	2	1,296	58	394,083	229,912	2.0	3.2	0.5
2011	43	1,130	136	1,309	42	2	1,248	45	398,092	232,274	1.8	3.3	0.5
2012	51	1,320	192	1,563	55	0	1,454	68	404,967	237,278	2.3	3.3	0.5
2013	59	1,047	160	1,266	60	2	1,143	52	409,943	235,909	2.5	4.7	0.5
2014	44	1,005	152	1,201	46	1	1,117	44	414,346	236,040	1.9	3.7	0.4
Record High*	112	2,728	537	3,308	121	9	3,359	207	414,346	237,278	7.7	3.7	0.8
(year)	(1980)	(1980)	(1976)	(1980)	(1980)	(1975)	(1980)	(1984)	(2014)	(2012)	(1980)	(2013)	(1970)

* Notes: The abbreviation PDO stands for “property damage only” — a crash in which no one is killed or injured. The abbreviation Mcy stands for “motorcyclists” or for “motorcycle.” The record high shown is for the period of time back to year 1970. For registered classic motorcycles, see Table 3 on page 6.

TABLE 4.02

2014 MOTORCYCLE CRASHES BY FIRST HARMFUL EVENT

First Harmful Event	Fatal Crashes	Injury Crashes	Property Damage Crashes	Total Crashes	Motor-cyclists Killed	Motor-cyclists Injured
Collision With:						
Other Motor Vehicle	23	440	98	561	23	486
Parked Vehicle	0	12	22	34	0	12
Bicyclist	0	5	0	5	0	3
Deer	1	83	3	87	1	103
Other Animal	1	4	1	6	1	5
Fixed Object	7	122	7	136	8	135
Non-Collision:						
Overturn/Rollover	6	158	9	173	6	170
Fire/Explosion	0	0	1	1	0	0
Other / Unknown	6	181	11	198	7	203
Total	44	1,005	152	1,201	46	1,117

TABLE 4.03

2014 MOTORCYCLE CRASHES BY POPULATION OF AREA

Population of City or Township	Fatal Crashes	Injury Crashes	Property Damage Crashes	Total Crashes	Motor-cyclists Killed	Motor-cyclists Injured
250,000 and Over	4	155	41	200	4	162
100,000 - 249,999	0	16	1	17	0	17
50,000 - 99,999	4	159	16	179	4	168
25,000 - 49,999	2	113	16	131	1	119
10,000 - 24,999	6	147	26	179	8	163
5,000 - 9,999	5	61	12	78	5	72
2,500 - 4,999	1	40	3	44	1	46
1,000 - 2,499	0	17	5	22	0	18
Under 1,000	22	297	32	351	23	352
Total	44	1,005	152	1,201	46	1,117

TABLE 4.04

2014 MOTORCYCLE CRASHES BY MONTH

Month	Fatal Crashes	Injury Crashes	Property Damage Crashes	Total Crashes	Motor- cyclists Killed	Motor- cyclists Injured
January	0	0	0	0	0	0
February	0	0	0	0	0	0
March	1	5	1	7	1	5
April	0	52	10	62	0	55
May	6	144	24	174	8	161
June	11	179	24	214	10	201
July	7	195	28	230	7	217
August	8	172	17	197	8	195
September	5	162	23	190	6	181
October	5	92	20	117	5	98
November	1	3	5	9	1	3
December	0	1	0	1	0	1
Total	44	1,005	152	1,201	46	1,117

FIGURE 4.01

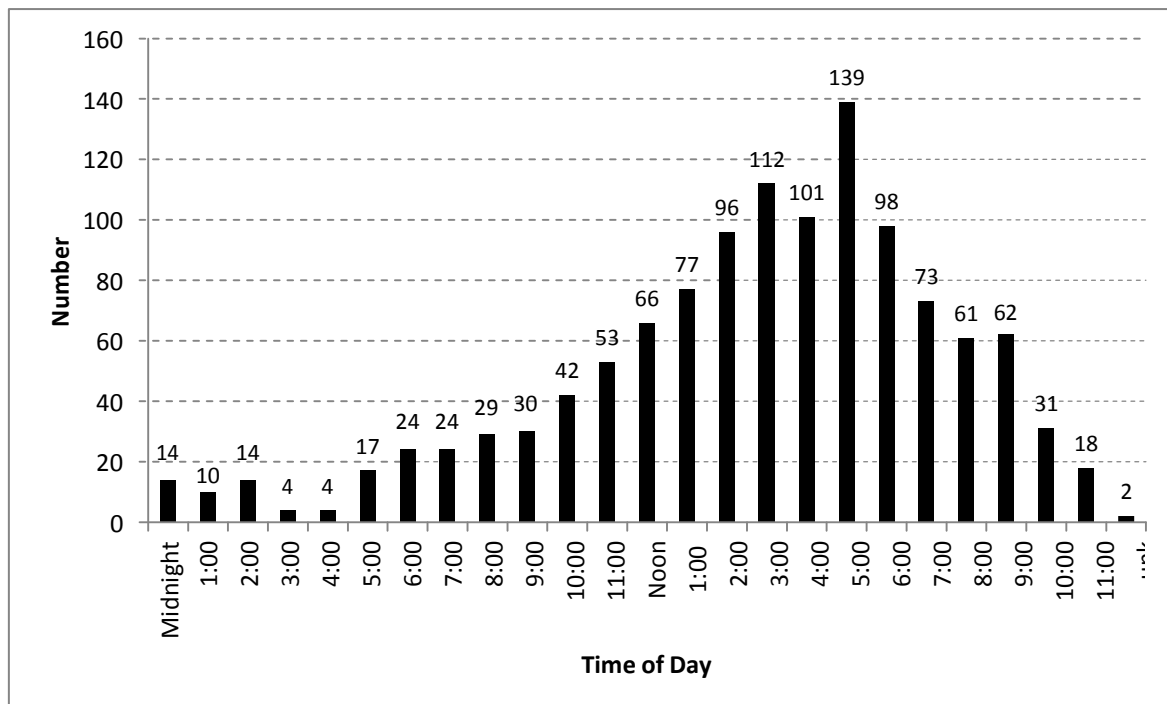
2014 MOTORCYCLE CRASHES BY TIME OF DAY

TABLE 4.05

2014 MOTORCYCLE CRASHES BY TIME AND DAY

Hour Beginning	Crashes		y		Monday		Tuesday		Wednesday		Thursday	Friday		Saturday	
	Total	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	All	Fatal	All	Fatal
12 am	14	0	5	0	0	0	0	0	1	0	1	0			
1:00	10	0	2	0	1	0	1	0	1	0	0	0			
2:00	14	2	5	0	3	1	1	0	0	0	2	0			
3:00	4	0	1	0	0	0	0	0	0	0	1	0			
4:00	4	0	0	0	0	0	1	0	1	0	0	0			
5:00	17	2	1	0	3	0	1	0	4	0	6	2			
6:00	24	0	3	0	3	0	7	0	1	0	4	0			
7:00	24	1	0	0	2	0	4	0	5	0	7	0			
8:00	29	2	2	0	3	0	2	0	8	0	5	2			
9:00	30	1	2	0	2	0	10	0	1	0	4	1			
10:00	42	1	7	0	3	0	7	1	4	0	7	0			
11:00	53	1	9	0	5	0	6	0	10	0	3	0			
Noon	66	1	10	0	8	0	3	0	8	0	8	0			
1:00	77	3	15	1	7	0	9	0	8	0	8	0			
2:00	96	2	24	0	13	1	9	0	9	0	6	0			
3:00	112	3	19	1	16	0	14	1	7	0	17	0			
4:00	101	6	16	3	14	0	14	1	11	1	11	0			
5:00	139	3	27	3	10	0	22	0	26	0	18	0			
6:00	98	3	18	1	5	0	17	0	12	1	13	0			
7:00	73	6	19	1	10	1	8	0	7	0	9	2			
8:00	61	1	16	0	6	0	4	0	11	0	7	0			
9:00	62	5	10	1	6	0	10	1	6	0	7	1			
10:00	31	0	5	0	4	0	5	0	5	0	3	0			
11:00	18	1	1	0	1	0	3	0	4	0	2	0			
Unk	2	0	0	0	0	0	0	0	0	0	0	0			
Total	1,201	44	217	11	125	3	158	4	150	2	149	8			

TABLE 4.06

MOTORCYCLISTS KILLED OR INJURED BY AGE AND GENDER, 2014

Age Group	Killed			Injured									Total Injured		
				Severe			Moderate			Minor					
	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total
00 - 04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05 - 09	0	0	0	1	0	1	0	0	0	0	1	1	1	1	2
10 - 14	0	0	0	2	0	2	4	1	5	0	2	2	6	3	9
15 - 19	0	0	0	3	0	3	19	3	22	10	1	11	32	4	36
20 - 24	4	1	5	17	3	20	49	8	57	57	10	67	123	21	144
25 - 29	0	1	1	10	1	11	54	9	63	48	10	58	112	20	132
30 - 34	7	0	7	16	2	18	54	5	59	32	3	35	102	10	112
35 - 39	1	2	3	9	4	13	35	9	44	27	5	32	71	18	89
40 - 44	2	1	3	16	0	16	37	7	44	21	7	28	74	14	88
45 - 49	7	1	8	9	4	13	36	7	43	25	9	34	70	20	90
50 - 54	7	0	7	16	0	16	56	20	76	32	15	47	104	35	139
55 - 59	6	3	9	12	0	12	42	13	55	45	11	56	99	24	123
60 - 64	2	0	2	8	2	10	36	4	40	24	3	27	68	9	77
65 - 69	1	0	1	7	3	10	20	2	22	11	0	11	38	5	43
70 & Older	0	0	0	5	1	6	10	1	11	9	0	9	24	2	26
Not Stated	0	0	0	0	1	1	1	0	1	4	1	5	5	2	7
Total	37	9	46	131	21	152	453	89	542	345	78	423	929	188	1,117

FIGURE 4.02

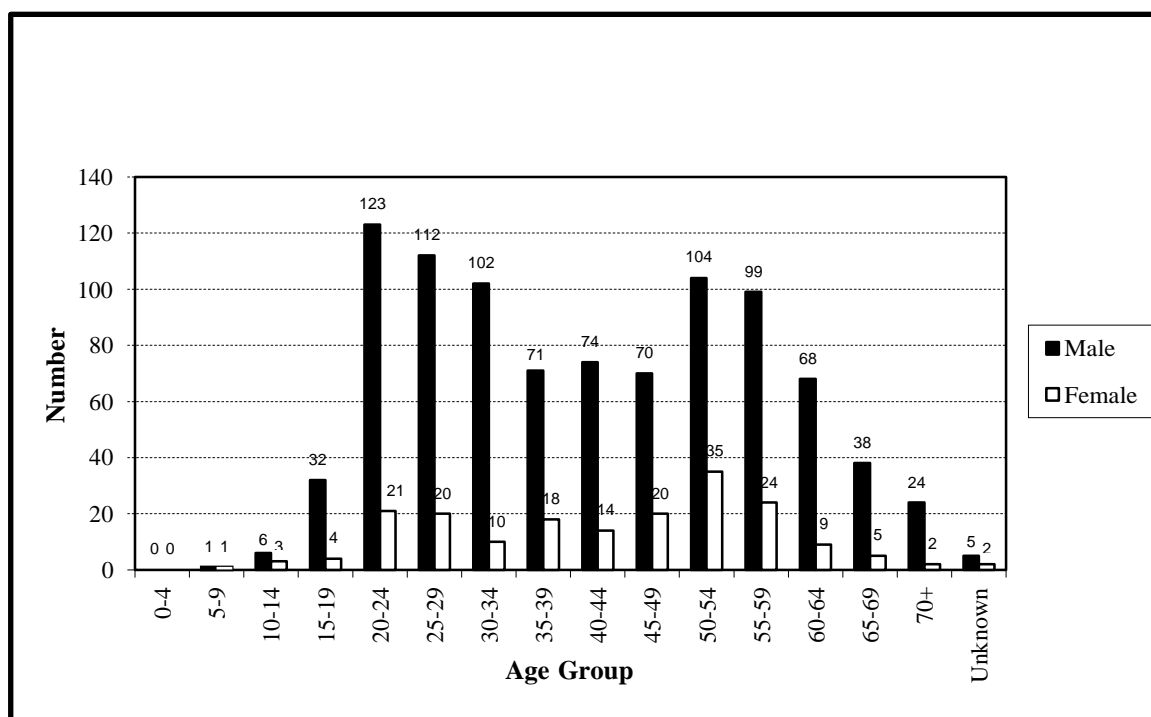
MOTORCYCLISTS KILLED OR INJURED BY AGE AND GENDER, 2014

TABLE 4.07
HELMET USE BY MOTORCYCLISTS KILLED OR INJURED, 2005 - 2014

	Year	Helmet Used		Helmet Not Used		Unknown Helmet Use		Total	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
Killed	2005	18	30.5%	34	57.6%	7	11.9%	59	100.0%
	2006	15	21.4%	53	75.7%	2	2.9%	70	100.0%
	2007	11	18.0%	45	73.8%	5	8.2%	61	100.0%
	2008	12	16.7%	53	73.6%	7	9.7%	72	100.0%
	2009	11	20.8%	37	69.8%	5	9.4%	53	100.0%
	2010	12	26.7%	26	57.8%	7	15.6%	45	100.0%
	2011	13	31.0%	23	54.8%	6	14.3%	42	100.0%
	2012	11	20.0%	38	69.1%	6	10.9%	55	100.0%
	2013	14	23.3%	34	56.7%	12	20.0%	60	100.0%
	2014	9	19.6%	28	60.9%	9	19.6%	46	100.0%

	Year	Helmet Used		Helmet Not Used		Unknown Helmet Use		Total	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
Injured	2005	412	31.2%	530	40.2%	377	28.6%	1,319	100.0%
	2006	481	34.0%	544	38.5%	388	27.5%	1,413	100.0%
	2007	554	37.0%	520	34.7%	424	28.3%	1,498	100.0%
	2008	539	35.8%	569	37.8%	397	26.4%	1,505	100.0%
	2009	452	37.7%	432	36.0%	316	26.3%	1,200	100.0%
	2010	483	37.3%	468	36.1%	345	26.6%	1,296	100.0%
	2011	488	39.1%	447	35.8%	313	25.1%	1,248	100.0%
	2012	523	36.0%	549	37.8%	382	26.3%	1,454	100.0%
	2013	389	34.0%	424	37.1%	330	28.9%	1,143	100.0%
	2014	423	37.9%	369	33.0%	325	29.1%	1,117	100.0%

TABLE 4.08
ENDORSEMENT STATUS OF MOTORCYCLE OPERATORS
INVOLVED IN FATAL CRASHES, 2005 - 2014

Year	Valid Endorsement		Permit Only		Canceled, Suspended, Revoked		No Endorsement*		Total** for Year	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
2005	51	81.0%	2	3.2%	5	7.9%	4	6.3%	63	100.0%
2006	59	83.1%	1	1.4%	3	4.2%	4	5.6%	71	100.0%
2007	49	81.7%	0	0.0%	4	6.7%	5	8.3%	60	100.0%
2008	57	79.2%	0	0.0%	5	6.9%	8	11.1%	72	100.0%
2009	39	29.6%	0	0.0%	1	2.0%	8	16.3%	49	100.0%
2010	38	77.6%	0	0.0%	5	10.2%	5	10.2%	49	100.0%
2011	38	84.4%	0	0.0%	3	6.7%	4	8.9%	45	100.0%
2012	41	78.8%	0	0.0%	0	0.0%	10	19.2%	52	100.0%
2013	41	69.5%	0	0.0%	0	0.0%	10	16.9%	59	100.0%
2014	37	77.1%	2	4.2%	1	2.1%	5	10.4%	45	100.0%

* A valid endorsement means that the driver's license has been "endorsed" to permit operation of a motorcycle.

** Rows may not add to total due to the unknown status of some motorcycle operators.

TABLE 4.09

ALCOHOL USE BY KILLED MOTORCYCLE DRIVERS, 2005 – 2014

Year	Killed	Tested	Alcohol Concentration			
			(.00)		.09)	(.10 or more)
2005	55	51	28 (55%)	8 (16%)	1 (2%)	14
2006	66	61	42 (69%)	1 (2%)	1 (2%)	17
2007	58	52	34 (65%)	3 (6%)	1 (2%)	14
2008	65	59	31 (53%)	3 (5%)	2 (3%)	23
2009	45	42	25 (60%)	6 (14%)	2 (5%)	
2010	42	40	25 (63%)	1 (2%)	1 (2%)	13
2011	34	29	21 (72%)	2 (7%)	1 (3%)	
2012	47	38	26 (68%)	2 (5%)	1 (3%)	
2013	53	43	27 (63%)	2 (5%)	2 (5%)	12
2014	41	35	25 (71%)	3 (9%)	0 (0%)	

Percentages are based on those motorcycle drivers tested.

TABLE 4.10

**2014 MOTORCYCLE DRIVER FATALITIES'
LEVEL OF ALCOHOL CONCENTRATION BY AGE**

Age	Killed	Tested	Alcohol Concentration									
			.01-.07	.08-.09	.10+	.00	.01-.04	.05-.09	.10-.14	.15-.19	.20-.24	.25 and Over
14 & Younger	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0
Under 21	0	0	0	0	0	0	0	0	0	0	0	0
14 & Younger	0	0	0	0	0	0	0	0	0	0	0	0
15 – 19	0	0	0	0	0	0	0	0	0	0	0	0
20 – 24	4	3	0	0	0	3	0	0	0	0	0	0
25 – 29	1	1	0	0	0	1	0	0	0	0	0	0
30 – 34	7	5	1	0	3	1	1	0	0	2	0	1
35 – 39	2	2	0	0	1	1	0	0	0	1	0	0
40 – 44	2	2	0	0	0	2	0	0	0	0	0	0
45 – 49	8	6	1	0	2	3	0	1	0	1	0	1
50 – 54	7	7	1	0	0	6	1	0	0	0	0	0
55 – 59	7	6	0	0	1	5	0	0	1	0	0	0
60 & Older	3	3	0	0	0	3	0	0	0	0	0	0
Total	41	35	3	0	7	25	2	1	1	4	0	2

TABLE 4.11
CONTRIBUTING FACTORS IN 2014 MOTORCYCLE CRASHES

Contributing Factors	<i>Single Vehicle Crashes</i>		<i>Multi-Vehicle Crashes</i>			
	Attributed to Motorcycle Drivers		Attributed to Motorcycle Drivers		Attributed to Other Drivers	
	Number	Percent	Number	Percent	Number	Percent
Human Factors:						
Illegal / Unsafe Speed	105	19.2%	34	10.5%	5	1.1%
Driver Inattention/Distracted	61	11.2%	44	13.6%	86	19.0%
Driver Inexperience	61	11.2%	17	5.2%	6	1.3%
Chemical Impairment	46	8.4%	10	3.1%	7	1.5%
Overcorrecting	25	4.6%	5	1.5%	1	0.2%
Following Too Closely	16	2.9%	66	20.4%	24	5.3%
Improper Lane Use	14	2.6%	13	4.0%	26	5.7%
Improper Passing/Overtaking	6	1.1%	15	4.6%	11	2.4%
Improper Turn	6	1.1%	3	0.9%	23	5.1%
Improper Park/Stop/Start	5	0.9%	3	0.9%	8	1.8%
Disregard for Traffic Control Device	4	0.7%	16	4.9%	12	2.6%
Other Vision Related Factor	2	0.4%	6	1.9%	10	2.2%
Failure to Yield Right of Way	1	0.2%	34	10.5%	182	40.2%
Driving Left of Center	1	0.2%	3	0.9%	3	0.7%
Non-Motorist Error	1	0.2%	0	0.0%	2	0.4%
Unsafe Backing	0	0.0%	1	0.3%	4	0.9%
Improper/No Signal	0	0.0%	0	0.0%	2	0.4%
Impeding Traffic	0	0.0%	2	0.6%	1	0.2%
Failure to Use Lights	0	0.0%	3	0.9%	1	0.2%
Driver on C/B Radio/Cell	0	0.0%	0	0.0%	1	0.2%
Vision Obscured-Windshield	0	0.0%	1	0.0%	1	0.2%
Vision Obscured-Sunlight	0	0.0%	0	0.0%	8	1.8%
Other Human Factor	24	4.4%	14	4.3%	11	2.4%
Vehicular Factors:						
Skidding	51	9.3%	10	3.1%	0	0.0%
Defective/Failed Tire	11	2.0%	1	0.3%	1	0.2%
Defective Breaks	9	1.6%	2	0.6%	3	0.7%
Oversize/Overweight	1	0.2%	0	0.0%	0	0.0%
Other Vehicular Factor	13	2.4%	0	0.0%	2	0.4%
Defective Lights	0	0.0%	0	0.0%	1	0.2%
Miscellaneous Factors:						
Weather	13	2.4%	6	1.9%	1	0.2%
Other Factor	71	13.0%	15	4.6%	10	2.2%
Total	547	100.0%	324	100.0%	453	100.0%
Vehicles for Which There Was "No Clear Cont. Factor"	198		315		201	
Total Number of Drivers	651		587		570	

Zero, one, or two contributing factors may be attributed to a single driver. This may cause the sum of the factors cited to differ from the number of drivers. Percentages are based on all contributing factors cited. They may not sum to 100 due to rounding.

V. TRUCK CRASHES

This section summarizes data on crashes involving trucks, also known as commercial motor vehicles (CMVs). On the crash report form, commercial motor vehicles are identified as any of the following eight types of trucks: (1) two-axle, six-tire single unit truck or stepvan, (2) three-or-more-axle single unit truck, (3) single-unit truck with trailer, (4) truck tractor with no trailer, (5) truck tractor with semi-trailer, (6) truck tractor with double trailers, (7) truck tractor with triple trailers, (8) heavy truck of other or unknown type. A crash involving any of these vehicles is classified as a truck crash. Pickup trucks and vans are not counted as trucks in this section.

Truck crashes increase

In 2014, there were 5,023 truck-involved traffic crashes reported to the Department of Public Safety. This represents a 6% increase from the previous year. There were 57 fatal truck crashes, killing a total of 63 people. In addition, there were 1,387 people injured in truck-related crashes.

Fatalities and injuries are mostly in other vehicles

In two-vehicle collisions, heavier vehicles have the clear safety advantage. Only 5 of the 63 people killed in truck-involved crashes were in trucks. The other 58 deaths included three pedestrians, one motorcyclist, one occupant of a roadway maintenance vehicle and 53 persons in cars, SUVs, pickups, or vans. Of the 1,387 people injured, only 290 (21%) were truck occupants.

Contributing factors in truck crashes

Table 5.03 in this Section reveals that contributing factors listed by officers are very similar for truck and non-truck drivers. For example, driver inattention or distraction was most frequently cited for truck

drivers (17% of the time) as well as for non-truck drivers (16% of the time). However, non-truck drivers drive too fast and fail to yield more often than truck drivers. Illegal or unsafe speed was reported for 14% of the other vehicles but only 10% of the trucks. And, failure to yield was reported for 14% of the other vehicles but only 7% of the trucks. For the other motorists and even more so for the truck drivers, it is quite rare that officers report the presence of any type of chemical impairment such as the use of alcohol or drugs. Less than 1% of the truckers and 1.6% of the drivers of other vehicles were reported as having some such impairment.

Truck crashes are workday occurrences

Truck crashes are strongly tied to the workday. In 2014, only 521 (10%) of truck crashes occurred on either a Saturday or Sunday. And, Figure 5.01 in this Section reveals that a vast majority of truck crashes occur during daytime work hours.

Driving conditions

Driving conditions can vary from day to day in Minnesota, but most truck crashes occurred on dry roads in clear weather. However, 23% of the fatal crashes and 35% of the injury crashes occurred on road surfaces reported to be wet, or to be covered with snow or slush, or with ice or packed snow.

Crash severity increases in rural areas.

For this report, “rural” is defined as an area that has a population of less than 5,000. Probably because high speeds are more often possible in the rural open countryside, crashes there are more severe. 88% of fatal and 44% of truck-related injury crashes occurred in the rural areas of Minnesota.

TABLE 5.01

TRUCK CRASH SUMMARY, 2005 - 2014

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Total Crashes	5,313	4,558	4,631	4,344	3,653	4,181	4,025	3,789	4,741	5,023
Fatal Crashes	66	62	71	64	47	77	48	50	62	57
Persons Killed	78	65	90	74	58	93	51	56	67	63
Injury Crashes	1,315	1,156	1,144	1,056	889	1,005	916	870	1,042	1,047
Severe	96	89	83	72	68	71	59	70	55	61
Moderate	377	323	334	295	288	270	265	273	315	321
Minor	842	744	727	689	533	664	592	527	672	665
Persons Injured	1,753	1,544	1,745	1,425	1,162	1,385	1,219	1,178	1,425	1,387
Severe	116	104	130	89	88	90	70	86	80	76
Moderate	481	415	508	388	359	358	323	355	419	409
Minor	1,156	1,025	1,107	948	715	937	826	737	926	902
PDO Crashes	3,932	3,340	3,416	3,224	2,717	3,099	3,061	2,869	3,637	3,919

TABLE 5.02

**PERSONS KILLED OR INJURED IN 2014 TRUCK CRASHES
BY VEHICLE OCCUPIED**

Vehicle Type	Killed	Severely Injured	Moderately Injured	Minor Injuries	Total Injured
Automobile	29	28	167	406	601
Pickup Truck	13	9	42	66	117
SUV	9	9	53	129	191
Van	2	8	23	56	87
Pedestrian	3	1	1	6	8
Bicycle	0	0	3	3	6
Motorcycle	1	1	4	3	8
Motorscooter/Motorbike	0	0	0	1	1
Snowmobile	0	1	0	0	1
ATV	0	0	1	0	1
Ambulance	0	0	0	3	3
Police/Fire Vehicle	0	0	1	6	7
Roadway Maintenance Vehicle	1	2	5	13	20
Other Public Owned Vehicle	0	0	0	6	6
Farm Equipment	0	0	0	1	1
Motorhome/Camper	0	1	0	0	1
Taxicab	0	0	4	3	7
School Bus	0	1	0	16	17
Bus-Non School	0	2	2	4	8
Hit and Run	0	0	0	2	2
Limousine	0	0	1	1	2
Two-Axle, Six-Tire, Single Unit Truck	0	4	18	46	68
Three or More Axle Single Unit Truck	2	2	19	22	43
Single Unit Truck with Trailer	0	0	5	15	20
Truck Tractor with No Trailer	0	0	0	3	3
Truck Tractor with Semi Trailer	3	7	56	80	143
Truck Tractor with Twin Trailers	0	0	1	1	2
Heavy Truck—Other or Unknown Type	0	0	3	8	11
Other or Unknown Vehicle Type	0	0	0	2	2
Total	63	76	409	902	1,387

TABLE 5.03

CONTRIBUTING FACTORS IN 2014 TRUCK CRASHES

Contributing Factors	Attributed to Truck Vehicles		Attributed to Non-Truck Vehicles	
	Number	Percent	Number	Percent
Human Factors				
Driver Inattention/Distracted	601	17.0%	500	15.6%
Illegal/Unsafe Speed	361	10.2%	446	13.9%
Improper or Unsafe Lane Use	325	9.2%	296	9.2%
Following Too Closely	279	7.9%	233	7.3%
Failure to Yield Right of Way	256	7.3%	437	13.6%
Improper Turn	184	5.2%	46	1.4%
Unsafe Backing	169	4.8%	25	0.8%
Disregarding Traffic Control Device	68	1.9%	83	2.6%
Improper Passing or Overtaking	60	1.7%	130	4.1%
Vision Obscured-Windshield	57	1.6%	51	1.6%
Overcorrecting	51	1.4%	53	1.7%
Improper Parking, Starting, or Stopping	38	1.1%	28	0.9%
Driver Inexperience	34	1.0%	64	2.0%
Driving Left of Center	27	0.8%	48	1.5%
Impeding Traffic	9	0.3%	10	0.3%
Improper/No Signal	9	0.3%	6	0.2%
Chemical Impairment	8	0.2%	52	1.6%
Driver on Phone/CB/2-Way Radio	2	0.1%	3	0.1%
Failure to Use Lights	1	0.0%	3	0.1%
Non-Motorist Error	0	0.0%	1	0.0%
Other Human Factors	112	3.2%	71	2.2%
Vehicular Factors				
Skidding	145	4.1%	169	5.3%
Defective Brakes	48	1.4%	20	0.6%
Oversize/Overweight Vehicle	45	1.3%	2	0.1%
Other Vehicular Factor	71	2.0%	26	0.8%
Miscellaneous Factors				
Weather	345	9.8%	290	9.0%
Other	222	6.3%	116	3.6%
Total Contributing Factors Cited	3,527	100.0%	3,209	100.0%
Vehicles for Which There Was "No Clear Contributing Factor"	2,287		1,807	
Total Number of Vehicles	5,255		4,342	

Zero, one, or two contributing factors may be associated with each vehicle. This may result in the sum of the factors cited to differ from the number of vehicles. Percentages are based on all contributing factors cited. They may not sum to 100 due to rounding. Bicyclists and pedestrians are included in the "non-truck vehicles" columns in this table.

TABLE 5.04

AGE OF TRUCK DRIVERS IN 2014 CRASHES

Driver Age	Truck or Tractor	Truck with Semi- Trailer	Truck with Twin Trailer	Truck with Other Trailer	Total
05 - 09	0	0	0	0	0
10 - 14	0	0	0	0	0
15 - 19	13	5	1	4	23
20 - 24	131	101	1	21	254
25 - 29	217	191	0	35	443
30 - 34	269	236	3	34	542
35 - 39	233	266	8	31	538
40 - 44	238	278	1	37	554
45 - 49	266	312	7	42	627
50 - 54	301	353	3	39	696
55 - 59	232	362	4	49	647
60 - 64	124	232	0	17	373
65 & Older	68	168	1	22	259
Not Stated	58	84	1	11	154
Total*	2,150	2,588	30	342	5,110

* There were 5,255 trucks involved in 2014 crashes. Table 5.04 tabulates the ages of drivers for the remaining 5,110 trucks where it was possible to identify a driver.

TABLE 5.05

DRIVERS IN 2014 TRUCK CRASHES BY PHYSICAL CONDITION*

Physical Condition	Truck Drivers		Other Drivers	
	Number	Percent	Number	Percent
Normal	4,764	93.2%	3,724	92.2%
Under the Influence	5	0.1%	49	1.2%
Had Been Drinking	2	0.0%	18	0.5%
Commercial Driver > .04 BAC	2	0.0%	0	0.0%
Aggressive	2	0.0%	1	0.0%
Had Been Using Drugs	0	0.0%	2	0.1%
Fatigued/Asleep	17	0.3%	18	0.5%
Physical Disability	1	0.0%	0	0.0%
Ill	4	0.1%	2	0.1%
Other	6	0.1%	7	0.2%
Unknown	307	6.0%	217	5.4%
Total **	5,110	100.0%	4,038	100.0%

* As noted by police officer on accident report.

** There were 5,225 trucks involved in 2014 crashes. This table tabulates the apparent physical condition of drivers for the remaining 5,110 trucks where it was possible to identify a driver. Similarly, there were 4,323 non-truck motor vehicles involved in 2014 truck crashes. The condition of the identifiable 4,038 non-truck drivers is presented here.

TABLE 5.06

2014 TRUCK CRASHES BY FIRST HARMFUL EVENT

First Harmful Event	Fatal Crashes	Injury Crashes	Property Damage Crashes	Total Crashes	Killed	Injured
Collision With:						
Other Motor Vehicle	48	827	2,751	3,626	54	1,149
Parked Motor Vehicle	2	31	326	359	2	42
Train	1	3	6	10	1	3
Bicycle	0	6	0	6	0	6
Pedestrian	3	7	1	11	3	7
Deer	0	0	6	6	0	0
Other Animal	0	2	14	16	0	2
Fixed Object	1	55	468	524	1	58
Non-Collision:						
Overturn	2	89	140	231	2	92
Submersion	0	0	1	1	0	0
Fire or Explosion	0	0	3	3	0	0
Jackknife	0	13	113	126	0	13
Other Non-Collision	0	1	21	22	0	1
Other/Unknown	0	13	69	82	0	14
Total	57	1,047	3,919	5,023	63	1,387

TABLE 5.07

2014 TRUCK CRASHES BY MONTH

Month	Fatal Crashes	Injury Crashes	Property Damage Crashes	Total Crashes	Killed	Injured
January	3	119	514	636	3	148
February	3	97	531	631	5	122
March	2	63	316	381	2	81
April	10	76	269	355	11	114
May	3	71	255	329	4	102
June	4	84	275	363	4	105
July	5	98	290	393	5	139
August	7	90	261	358	8	124
September	7	88	263	358	7	122
October	6	106	290	402	7	133
November	3	91	382	476	3	112
December	4	64	273	341	4	85
Total	57	1,047	3,919	5,023	63	1,387

TABLE 5.08

2014 TRUCK CRASHES BY TIME AND DAY

Time of Day	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total
Midnight - 2:59 AM	11	11	18	13	10	23	28	114
3:00 - 5:59 AM	10	25	39	28	34	42	22	200
6:00 - 8:59 AM	22	160	216	194	136	159	53	940
9:00 - 11:59 AM	24	229	198	224	197	213	77	1,162
Noon - 2:59 PM	39	225	185	206	239	200	70	1,164
3:00 - 5:59 PM	45	166	132	183	185	153	39	903
6:00 - 8:59 PM	23	67	52	50	79	42	27	340
9:00 - 11:59 PM	19	33	28	32	37	34	12	195
Unknown	0	1	1	2	1	0	0	5
Total	193	917	869	932	918	866	328	5,023

FIGURE 5.01

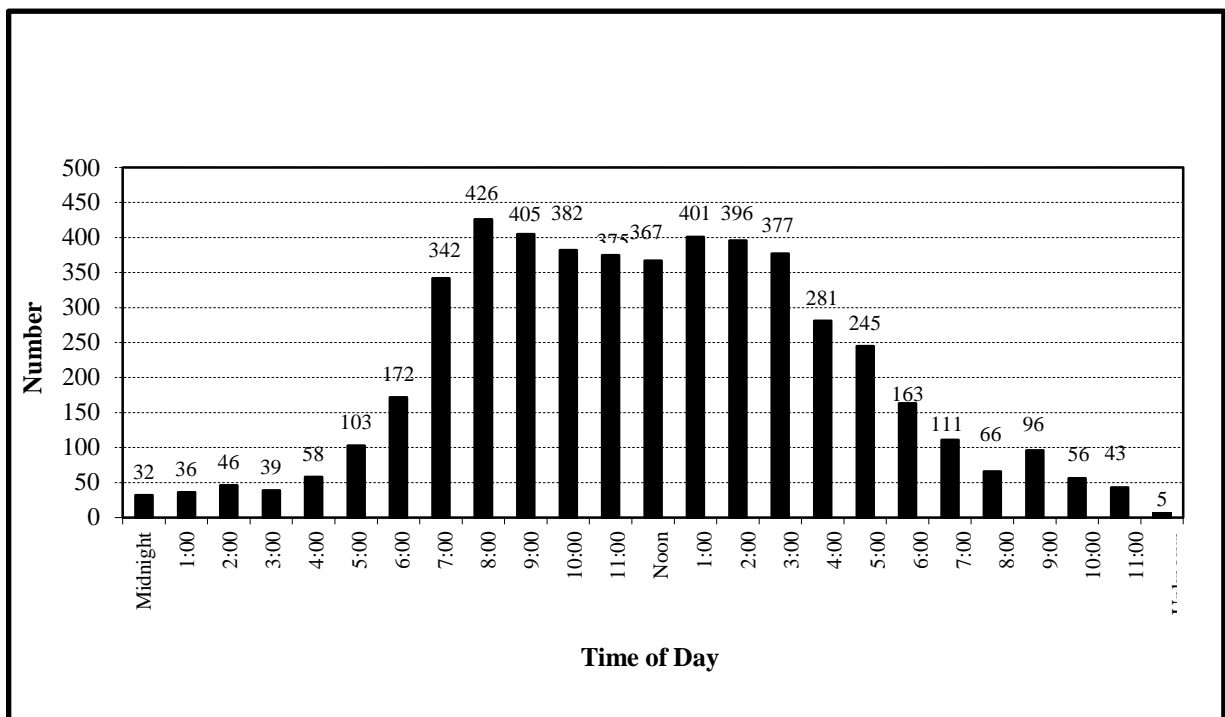
2014 TRUCK CRASHES BY TIME OF DAY

TABLE 5.09

2014 TRUCK CRASHES BY ROAD SURFACE CONDITION

Road Surface Condition	Fatal Crashes	Injury Crashes	Property Damage Crashes	Total Crashes	Killed	Injured
Dry	43	669	2,134	2,846	47	902
Wet	5	112	451	568	5	146
Snow	2	71	421	494	4	89
Slush	1	11	47	59	1	14
Ice or Packed Snow	5	168	833	1,006	5	211
Water Standing/Moving	0	1	1	2	0	1
Muddy	0	1	1	2	0	1
Other	1	14	19	34	1	23
Unknown	0	0	12	12	0	0
Total	57	1,047	3,919	5,023	63	1,387

TABLE 5.10

2014 TRUCK CRASHES BY WEATHER CONDITION

Weather Condition	Fatal Crashes	Injury Crashes	Property Damage Crashes	Total Crashes	Killed	Injured
Clear	27	604	2,096	2,727	31	782
Cloudy	17	264	943	1,224	17	364
Rain	2	30	167	199	2	37
Snow	6	92	451	549	8	120
Sleet/Hail/Freezing Rain	1	17	69	87	1	20
Fog/Smog/Smoke	4	4	13	21	4	9
Blowing Sand/Dust/Snow	0	29	137	166	0	46
Severe Cross Winds	0	6	27	33	0	7
Other	0	1	2	3	0	2
Unknown	0	0	14	14	0	0
Total	57	1,047	3,919	5,023	63	1,387

TABLE 5.11

2014 TRUCK CRASHES BY POPULATION OF AREA

Population of City or Township	Fatal Crashes	Injury Crashes	Property Damage Crashes	Total Crashes	Killed	Injured
250,000 & Over	1	145	833	979	1	185
100,000 – 249,999	0	12	56	68	0	13
50,000 - 99,999	1	143	638	782	1	188
25,000 - 49,999	1	115	364	480	2	145
10,000 - 24,999	3	117	567	687	3	143
5,000 - 9,999	1	52	173	226	1	73
2,500 - 4,999	2	49	154	205	2	60
1,000 - 2,499	2	24	104	130	2	33
Under 1,000	46	390	1,030	1,466	51	547
Total	57	1,047	3,919	5,023	63	1,387

TABLE 5.12

2014 TRUCK CRASHES BY TYPE OF ROADWAY

Roadway Type	Fatal Crashes	Injury Crashes	Property Damage Crashes	Total Crashes	Killed	Injured
Interstate Highway	5	286	1,084	1,375	7	357
US Trunk Highway	13	188	488	689	14	273
State Trunk Highway	22	213	679	914	25	282
County State-Aid Highway	10	209	642	861	10	283
County Road	3	14	39	56	3	26
Township Road	1	14	53	68	1	15
Local Street	3	120	904	1,027	3	147
Other Road	0	3	30	33	0	4
Total	57	1,047	3,919	5,023	63	1,387

VI: PEDESTRIAN CRASHES

This section deals with motor vehicle crashes that injure or kill pedestrians. Prior to 1984, a crash was defined as a pedestrian crash only if the pedestrian was the first "object" struck by a motor vehicle. Since 1984, a pedestrian crash is defined as any crash where a pedestrian is struck and injured or killed.

Overall, pedestrian crashes decrease

In 2014, there were 818 crashes in which at least one pedestrian was injured or killed by a motor vehicle. This represents a 5.8 percent decrease from the previous year.

Deaths and injuries decrease

In 2014, 17 pedestrians were killed, 18 fewer than in 2013. In addition, 837 pedestrians were injured, a 3.4 percent decrease from the previous year. Two percent of all pedestrian crashes resulted in a death, compared to one-half of 1% of all traffic crashes resulting in a death.

Males at greater risk

In 2014, persons less than 25 years of age accounted for 18% of the pedestrians killed and 40% of pedestrians injured. Male pedestrians were more likely than females to be killed or injured: males accounted for 76% of all pedestrian fatalities and 52% of all pedestrian injuries.

Urban/rural areas and time of day

In 2014, 92% of pedestrian crashes occurred in urban areas (defined as areas with populations over 5,000). About one-third (30%) of pedestrian crashes occurred during the weekday rush hour driving time periods - the rush hour driving time period is defined as Monday through Friday 6:00-9:00 a.m. and 3:00-6:00 p.m. One out of every four (24%) pedestrian fatal crashes occurred during the evening hours 9:00 p.m.-3:00 a.m.

Prior actions of vehicles

Nearly half (48%) of all motor vehicles involved in pedestrian injury crashes and over half (53%) involved in fatal pedestrian crashes in 2014 were going straight ahead on the roadway prior to the crash. One-third (31%) of all motor vehicles involved in pedestrian crashes were making a right or left turn.

Prior actions of pedestrians

Eighteen percent of pedestrians killed and 24% of pedestrians injured were trying to cross a road at an area with no crosswalk and no signal. However, 15% of pedestrians injured were crossing the road at a signaled intersection and were crossing with the signal.

Contributing factors

For 36% of all motor vehicle drivers in all pedestrian crashes, the reporting officer indicated that driver failure to yield right of way was a contributing factor. The second most cited contributing factor was driver inattention or distraction (21%). Obscured vision was a factor in 9% of all pedestrian crashes.

Drinking pedestrian fatalities

Of the 17 pedestrians killed, 10 were tested for the presence of alcohol in their blood system. Of those tested, 40% tested positive for alcohol. Half of killed pedestrians with BACs .10 or higher were 55 years old or above. Three (75%) out of the 4 pedestrians killed with BACs of .10 or higher were killed from 9:00pm-6:00am.

TABLE 6.01

PEDESTRIAN CRASH SUMMARY, 2005 - 2014

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Pedestrian Crashes	938	915	957	860	883	808	857	878	868	818
Pedestrians Killed	44	38	33	25	41	36	40	40	35	17
Pedestrians Injured	936	906	975	867	880	824	859	874	867	837

TABLE 6.02

PEDESTRIAN CRASHES BY ROUTE SYSTEM, 2005 – 2014

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Interstate	19	14	7	7	12	8	19	10	10	12
US Trunk	44	47	51	52	35	35	36	42	41	34
Washington Trunk	88	99	92	92	101	82	75	82	87	79
CSAH	291	273	294	259	272	253	278	280	267	260
County Road	9	5	11	4	4	8	5	4	6	2
Township Road	7	8	8	5	1	1	4	4	3	6
Local Road	466	456	470	437	441	413	423	447	443	411
Other	10	9	22	4	13	4	15	6	11	12
Unknown	4	4	2	0	4	4	2	3	0	2
Total	938	915	957	860	883	808	857	878	868	818

TABLE 6.03

PEDESTRIANS KILLED OR INJURED BY AGE AND GENDER, 2014

Age Group	Killed			Severe Injuries			Moderate Injuries			Minor Injuries			Total Injuries		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total*
00 - 04	0	0	0	2	1	3	5	5	10	9	8	17	16	14	30
05 - 09	0	0	0	3	3	6	11	5	16	12	12	24	26	20	46
10 - 14	1	0	1	3	2	5	9	12	21	20	15	35	32	29	61
15 - 19	0	0	0	4	2	6	20	14	35	33	27	60	57	43	101
20 - 24	1	1	2	9	6	15	15	21	36	22	23	45	46	50	96
25 - 29	0	1	1	6	4	10	11	13	24	16	23	39	33	40	73
30 - 34	0	0	0	7	3	10	14	13	27	17	20	37	38	36	74
35 - 39	0	0	0	0	0	0	10	7	17	10	12	22	20	19	39
40 - 44	0	0	0	1	4	5	2	5	7	14	13	27	17	22	39
45 - 49	0	0	0	4	2	6	10	7	17	14	12	26	28	21	49
50 - 54	1	1	2	4	1	5	7	7	14	21	11	33	32	19	52
55 - 59	2	0	2	7	2	9	8	8	16	16	14	30	31	24	55
60 - 64	1	0	1	1	0	1	7	6	13	12	12	24	20	18	38
65 - 69	1	0	1	1	1	2	7	3	10	10	3	13	18	7	25
70 - 74	4	0	4	0	2	2	2	5	7	5	3	8	7	10	17
75 - 79	1	0	1	0	0	0	4	3	7	5	2	7	9	5	14
80 - 84	1	0	1	0	0	0	1	2	3	2	2	4	3	4	7
85 & Older	0	1	1	1	1	2	0	0	0	0	1	1	1	2	3
Not Stated	0	0	0	0	0	2	3	2	8	0	2	8	3	4	18
Total	13	4	17	53	34	89	146	138	288	238	215	460	437	387	837

* Within column categories, where rows do not add across, gender was not stated on crash report.

FIGURE 6.01
PEDESTRIAN FATALITIES BY AGE GROUP, 2005-2014 COMBINED

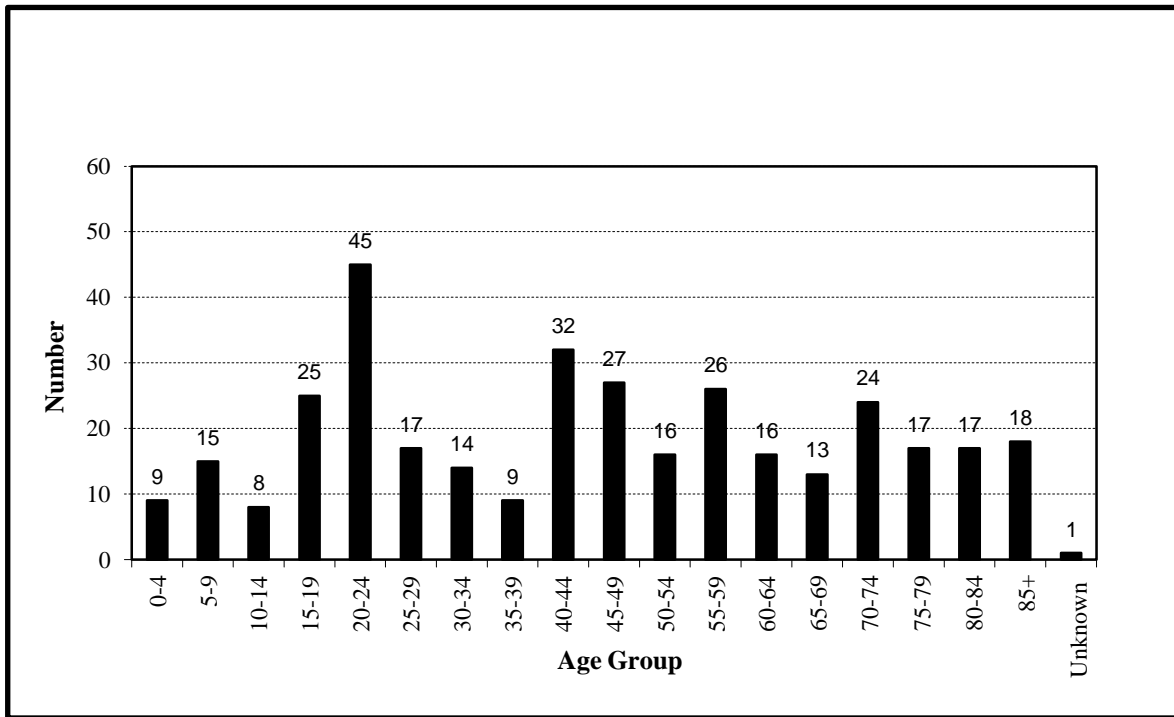


FIGURE 6.02
PEDESTRIANS KILLED OR INJURED BY AGE AND GENDER 2014

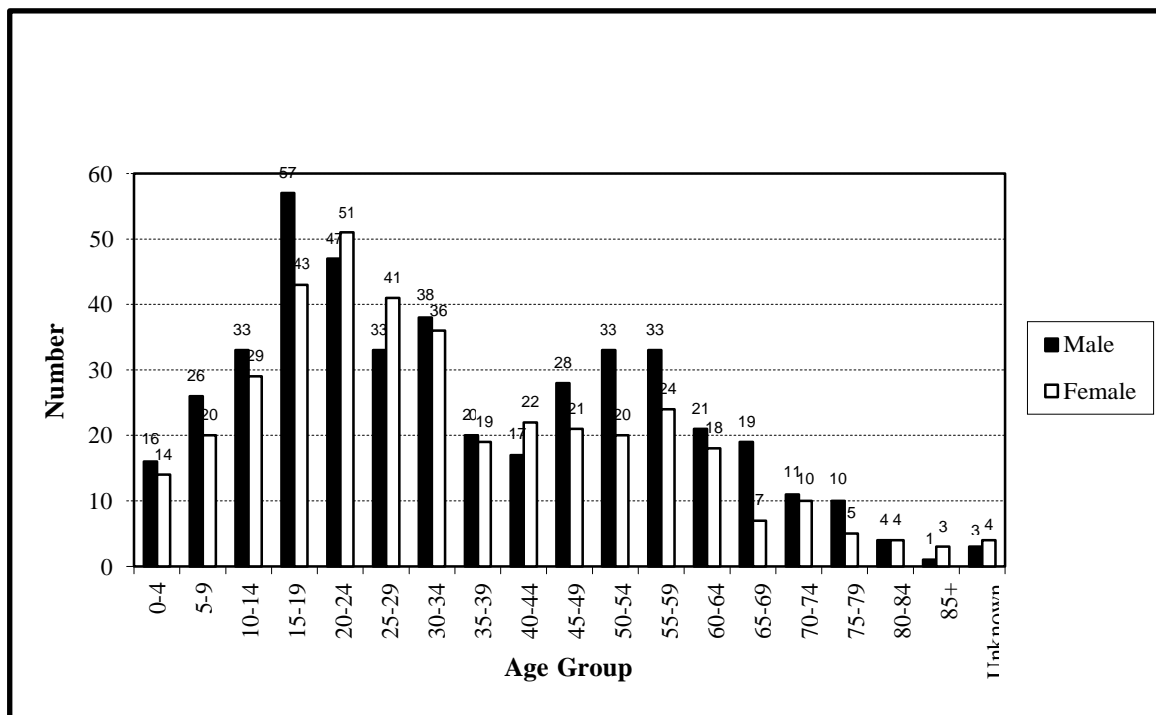


TABLE 6.04

2014 PEDESTRIAN CRASHES BY MONTH

Month	Fatal Crashes	Injury Crashes	Total Crashes	Killed	Injured
January	1	55	56	1	57
February	1	42	43	1	43
March	0	50	50	0	54
April	2	64	66	2	70
May	1	63	64	1	67
June	2	67	69	2	69
July	2	73	75	2	74
August	3	60	63	3	63
September	1	71	72	1	73
October	2	87	89	2	92
November	2	72	74	2	77
December	0	97	97	0	98
Total	17	801	818	17	837

TABLE 6.05

2014 PEDESTRIAN CRASHES BY POPULATION OF AREA

Population of City or Township	Fatal Crashes	Injury Crashes	Total Crashes	Pedestrians Killed	Pedestrians Injured
250,000 and Over	2	424	426	2	443
100,000 - 249,999	1	21	22	1	21
50,000 - 99,999	3	109	112	3	110
25,000 - 49,999	3	67	70	3	70
10,000 - 24,999	3	86	89	3	89
5,000 - 9,999	0	30	30	0	32
2,500 - 4,999	2	18	20	2	20
1,000 - 2,499	1	12	13	1	14
Under 1,000	2	34	36	2	38
Total	17	801	818	17	837

TABLE 6.06

2014 PEDESTRIAN CRASHES BY TIME AND DAY

Time of Day	Fatal Crashes	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total
Mid - 2:59 AM	2	11	3	3	2	6	3	10	38
3:00 - 5:59 AM	1	3	2	1	5	2	2	3	18
6:00 - 8:59 AM	1	3	15	20	20	19	10	1	88
9:00 - 11:59 AM	0	9	12	12	11	12	14	8	78
Noon - 2:59 PM	2	15	19	15	18	22	24	15	128
3:00 - 5:59 PM	3	15	39	31	21	39	33	23	201
6:00 - 8:59 PM	6	22	25	23	30	28	30	20	178
9:00 - 11:59 PM	2	13	10	6	12	14	15	18	88
Unknown	0	0	0	0	0	1	0	0	1
Total	17	91	125	111	119	143	131	98	818

FIGURE 6.03

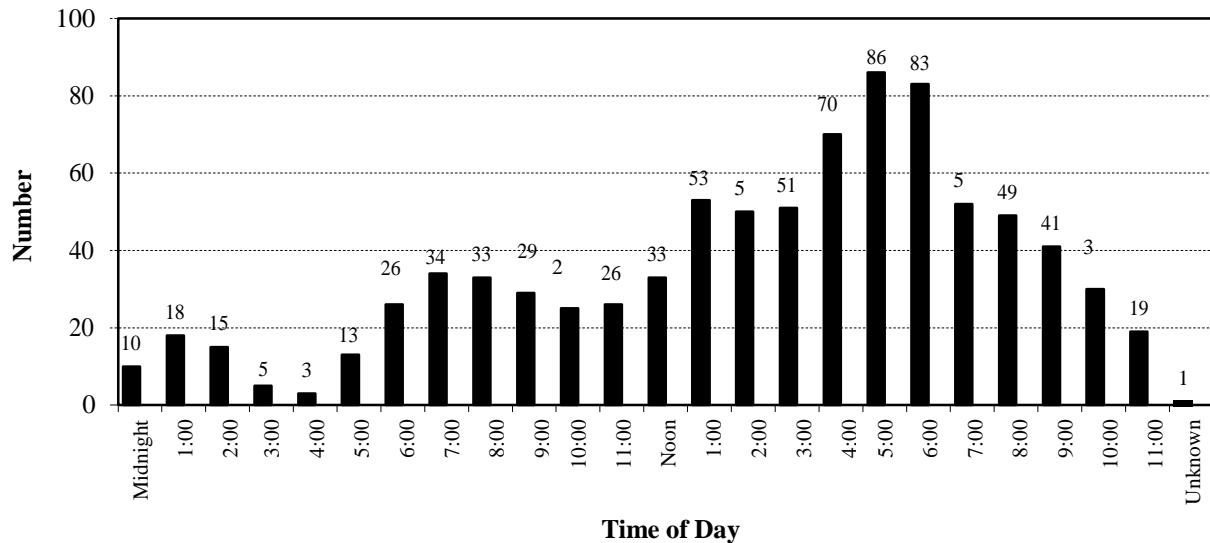
2014 PEDESTRIAN CRASHES BY TIME OF DAY

TABLE 6.07

PRIOR ACTION OF VEHICLES IN 2014 PEDESTRIAN CRASHES

Action	Vehicles in Fatal Crashes	Vehicles in Injury Crashes	Vehicles in All Crashes
Going Straight	10	400	410
Wrong Way Opposing Traffic	2	2	4
Turning Right on Red	0	22	22
Turning Left on Red	0	5	5
Turning Right	2	63	65
Turning Left	1	198	199
Making U Turn	0	1	1
Starting From Parked	0	13	13
Starting in Traffic	0	10	10
Slowing in Traffic	0	4	4
Parking	0	1	1
Avoiding Object in Road	1	6	7
Changing Lanes	0	1	1
Passing	0	2	2
Backing	1	26	27
All Others	2	65	67
Unknown	0	21	21
Total	19	840	859

* The number of vehicles in total crashes exceeds the number of crashes because some crashes involved more than one vehicle.

TABLE 6.08

PRIOR ACTION OF PEDESTRIANS KILLED OR INJURED IN 2014

Action	Number Pedestrians Killed	Percent Pedestrians Killed	Number Pedestrians Injured	Percent Pedestrians Injured
Crossing Road (No Crosswalk and No Signal)	3	17.6%	198	23.7%
Crossing Against Signal	1	5.9%	32	3.8%
Crossing With Signal	1	5.9%	126	15.1%
Crossing In Crosswalk (No Signal)	4	23.5%	148	17.7%
Walking In Road With Traffic	0	0.0%	50	6.0%
Walking In Road Against Traffic	0	0.0%	26	3.1%
Standing In Road	2	11.8%	22	2.6%
Emerging Front/Behind Parked Vehicle	1	5.9%	3	0.4%
Child Getting On/Off School Bus	0	0.0%	4	0.5%
Pushing/Working on Vehicle	0	0.0%	1	0.1%
Working In Road	0	0.0%	5	0.6%
Getting On/Off Vehicle	0	0.0%	6	0.7%
Playing In Road	0	0.0%	3	0.4%
Not In Road	1	5.9%	17	2.0%
Other Pedestrian Action	0	0.0%	50	6.0%
Unknown	4	23.5%	146	17.4%
Total*	17	100.0%	837	100.0%

* Percent totals may not sum to 100% due to rounding.

TABLE 6.09

CONTRIBUTING FACTORS IN 2014 PEDESTRIAN CRASHES

Contributing Factors	Number Attributed to Motor Vehicle Drivers	Percent Attributed to Motor Vehicle Drivers
Human Factors		
Failure to Yield Right of Way	216	35.7%
Driver Inattention / Distraction	127	21.0%
Vision Obscured	53	8.8%
Chemical Impairment	21	3.5%
Illegal or Unsafe Speed	20	3.3%
Unsafe Backing	19	3.1%
Disregard of Traffic Control	12	2.0%
Improper Parking/Starting/Stopping	8	1.3%
Driver Inexperience	7	1.2%
Improper / Unsafe Lane Use	6	1.0%
Improper Passing / Overtaking	6	1.0%
Improper Turn	3	0.5%
Driver on Phone/CB/Radio	2	0.3%
Following Too Closely	2	0.3%
Driving Left of Center	2	0.3%
Overcorrecting	2	0.3%
Failure to Use Lights	2	0.3%
Other Human Factors	32	5.3%
Vehicular Factors		
Skidding	11	1.8%
Defective Brakes	3	0.5%
Other Vehicular Factors	1	0.2%
Miscellaneous Factors		
Weather Conditions	16	2.6%
Other/Unknown	36	6.0%
Total Contributing Factors Cited	607	100.0%
Vehicles for Which There Was "No Clear Contributing Factor"	23	
Total Number of Drivers	858	

Zero, one, or two contributing factors may be attributed to a single driver. This may cause the sum of the factors cited to differ from the number of drivers. Percentages are based on all contributing factors cited. They may not sum to 100 due to rounding.

TABLE 6.10

**PEDESTRIAN FATALITIES'
LEVEL OF ALCOHOL CONCENTRATION, 2004 - 2014**

Year	Killed	Tested	Alcohol Concentration*			
			(.00)	.7)	(.08 -	(.10 or more)
2004	37	35	23 (66%)	0 (0%)	2 (6%)	10
2005	44	34	18 (53%)	1 (3%)	2 (6%)	13
2006	38	31	22 (71%)	1 (3%)	0 (0%)	
2007	33	18	9 (50%)	1 (6%)	0 (0%)	
2008	25	20	11 (55%)	0 (0%)	0 (0%)	
2009	41	33	22 (67%)	0 (0%)	1 (3%)	10
2010	36	29	19 (66%)	0 (0%)	0 (0%)	10
2011	40	33	21 (64%)	3 (9%)	0 (0%)	
2012	40	22	16 (73%)	0 (0%)	0 (0%)	
2013	35	31	15 (48%)	3 (10%)	0 (0%)	13
2014	17	10	6 (60%)	0 (0%)	0 (0%)	

* The percentage figures shown are based on the number of fatally injured pedestrians who were tested for alcohol concentration. (The law requires testing of all drivers and pedestrians, 16 years of age or older, who die within four hours as a result of a motor vehicle crash.)

TABLE 6.11

**2014 PEDESTRIAN FATALITIES'
LEVEL OF ALCOHOL CONCENTRATION BY AGE**

Age Group	Killed	Tested	Alcohol Concentration			
			(.00)	(.01 - .07)	(.08 - .09)	(.10 or more)
< 15	1	0	0	0	0	0
15 – 19	0	0	0	0	0	0
20 – 24	2	2	0	0	0	2
25 – 29	1	1	1	0	0	0
30 – 34	0	0	0	0	0	0
35 – 39	0	0	0	0	0	0
40 – 44	0	0	0	0	0	0
45 – 49	0	0	0	0	0	0
50 – 54	2	0	0	0	0	0
55 – 59	2	1	0	0	0	1
60 – 64	1	1	1	0	0	0
65 – 69	1	1	1	0	0	0
70 – 74	4	1	0	0	0	1
75 – 79	1	1	1	0	0	0
80 – 84	1	1	1	0	0	0
85 & Older	1	1	1	0	0	0
Total	17	10	6	0	0	4

TABLE 6.12

**2014 PEDESTRIAN FATALITIES' LEVEL OF ALCOHOL
CONCENTRATION BY TIME OF DAY**

Time of Day	Killed	Tested	Alcohol Concentration			
			(.00)	(.01 - .07)	(.08 - .09)	(.10 or more)
Mid-2:59 AM	2	2	0	0	0	2
3:00-5:59 AM	1	1	1	0	0	0
6:00-8:59 AM	1	0	0	0	0	0
9:00-11:59 AM	0	0	0	0	0	0
Noon-2:59 PM	2	1	1	0	0	0
3:00-5:59 PM	3	2	1	0	0	1
6:00-8:59 PM	6	2	2	0	0	0
9:00-11:59 PM	2	2	1	0	0	1
Total	17	10	6	0	0	4

VII: BICYCLE CRASHES

Bicycles are subject to the same traffic laws as motor vehicles, but bicycle crashes are reported to the Minnesota Department of Public Safety only if they involve collision with a motor vehicle. Therefore, this section represents only a portion of the total number of bicycle crashes.

Bicycle crashes decrease

In 2014, there was a 10.0% decrease in bicycle crashes from the previous year - there were 776 bicycle crashes in 2014, compared to 862 bicycle crashes in 2013.

Fatalities and Injuries decrease

In 2014, 755 bicyclists were injured compared to 822 injured bicyclists in 2013, an 8.2% decrease. There were five bicyclist fatalities in 2014 compared to six fatalities in 2013, a 16.7% decrease.

Warm weather

Bicycle crashes are mostly a warm weather occurrence. In 2014, four of the five fatalities (80.0%) and 610 of the 755 injuries (80.8%) occurred during the six-month period April-September.

Time of day

One-third (32.3%) of all weekday bicycle crashes occurred during the afternoon rush hours 3:00-6:00pm. About one out of five (24.4%) weekend bicycle crashes occurred during the same period.

Big cities

Generally, traffic crashes involving a bicycle and a motor vehicle tend to occur in areas with larger populations. Over nine out of ten (94.8%) bicycle crashes and 40.0% of fatal bicycle crashes occurred in cities where the population was over 5,000 people.

Males injured most often

Males were nearly three times more likely than females to be injured in a bicycle crash. In 2014, 545 male bicyclists (72.2%) were injured compared to 202 female bicyclists (26.8%).

Age

Of the 755 bicyclists injured in 2014, nearly half (48.5%) were less than 25 years of age.

Prior action of bicyclists

Over two in five (42.3%) bicyclists in all crashes were riding with traffic. Only 6.3% of all crash involved bicyclists were riding against traffic.

Contributing factors

Failure to yield the right of way was listed most often by officers for both the bicyclists and other motor vehicle drivers. Failure to yield right of way was attributed to (29.0%) of the bicyclists and (42.4%) of the other drivers. For bicyclists, non-motorist error (a violation committed by the bicyclist separate from those listed) and disregard for traffic control device and were listed the next most often. Driver inattention or distraction was the second contributing factor cited most often for other drivers.

TABLE 7.01
BICYCLE CRASH SUMMARY, 2005 - 2014

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Bicycle Crashes	965	944	1,020	981	957	898	963	920	862	776
Bicyclists Killed	7	8	4	13	10	9	5	7	6	5
Bicyclists Injured	952	908	979	942	963	882	937	875	822	755

TABLE 7.02
2014 BICYCLE CRASHES BY MONTH

Month	Fatal Crashes	Injury Crashes	Property Damage Crashes	Total Crashes	Killed	Injured
January	0	1	0	1	0	1
February	1	2	0	3	1	2
March	0	4	0	14	0	14
April	0	27	2	29	0	29
May	0	89	1	90	0	91
June	1	116	5	122	1	119
July	1	124	7	132	1	126
August	2	121	6	129	2	125
September	0	121	7	128	0	120
October	0	85	2	87	0	86
November	0	26	0	26	0	27
December	0	15	0	15	0	15
Total	5	741	30	776	5	755

FIGURE 7.01
2014 BICYCLE CRASHES BY TIME OF DAY

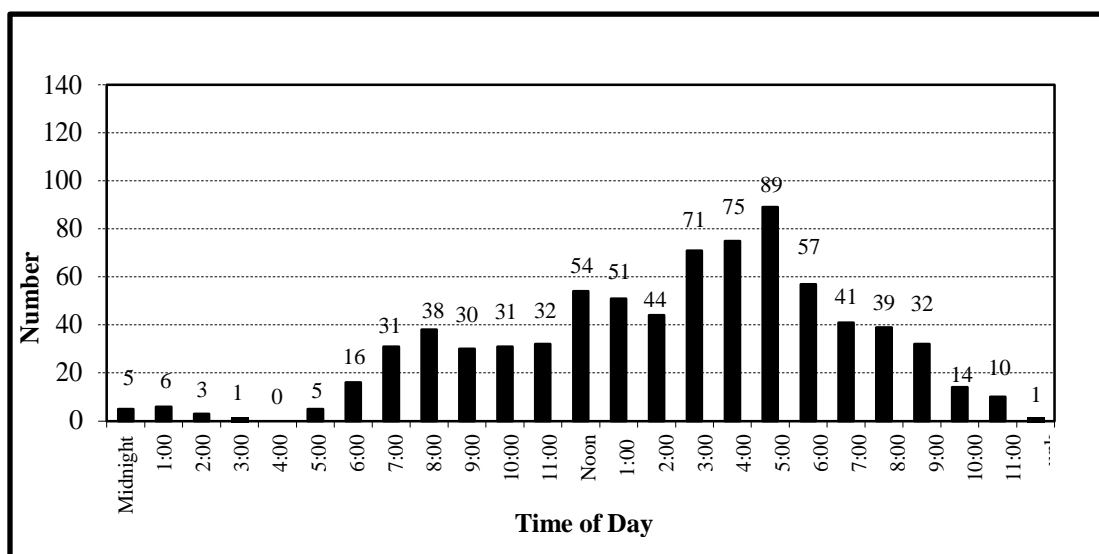


TABLE 7.03
2014 BICYCLE CRASHES BY TIME AND DAY

Time of Day	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total
Mid - 2:59 AM	3	1	2	2	0	4	2	14
3:00 - 5:59 AM	1	0	0	3	2	0	0	6
6:00 - 8:59 AM	3	11	19	14	18	15	5	85
9:00 - 11:59 AM	14	14	15	11	11	11	17	93
Noon - 2:59 PM	22	24	15	17	21	23	27	149
3:00 - 5:59 PM	23	39	49	44	31	24	25	235
6:00 - 8:59 PM	16	22	17	25	25	14	18	137
9:00 - 11:59 PM	13	10	4	4	10	7	8	56
Unknown	0	0	0	1	0	0	0	1
Total	95	121	121	121	118	98	102	776

TABLE 7.04
2014 BICYCLE CRASHES BY POPULATION OF AREA

Population of City or Township	Fatal Crashes	Injury Crashes	Property Damage Crashes	Total Crashes	Bicyclists Killed	Bicyclists Injured
250,000 and Over	1	319	21	341	1	326
100,000 - 249,999	0	9	0	9	0	9
50,000 - 99,999	1	146	4	151	1	150
25,000 - 49,999	0	79	3	82	0	79
10,000 - 24,999	0	121	2	123	0	122
5,000 - 9,999	0	30	0	30	0	30
2,500 - 4,999	1	14	0	15	1	15
1,000 - 2,499	0	8	0	8	0	8
Under 1,000	2	15	0	17	2	16
Total	5	741	30	776	5	755

FIGURE 7.02
BICYCLISTS KILLED OR INJURED BY AGE AND GENDER 2014

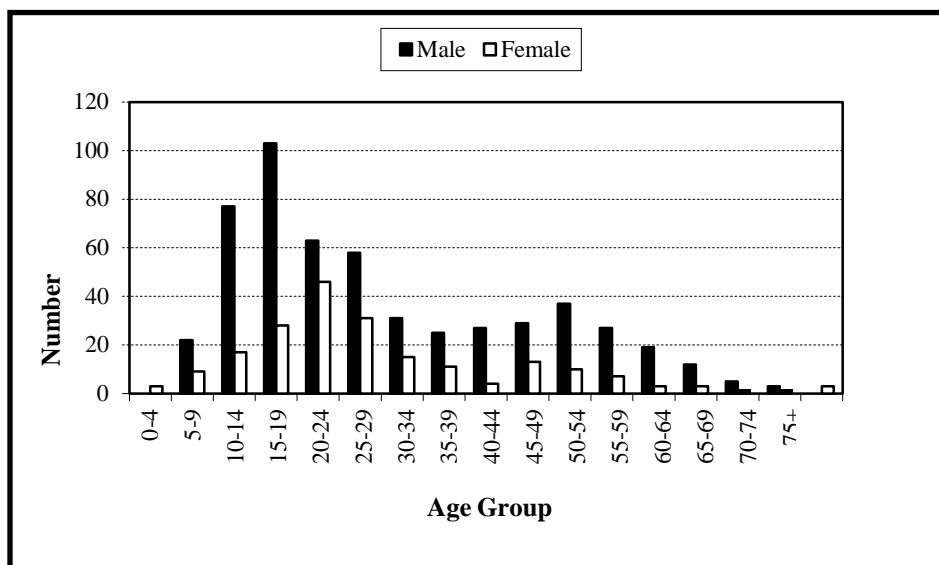


TABLE 7.05

BICYCLISTS KILLED OR INJURED BY AGE AND GENDER, 2014

Age Group	Killed			Severe Injuries			Moderate Injuries			Minor Injuries			Total Injuries		
	M	F	Total*	M	F	Total*	M	F	Total*	M	F	Total*	M	F	Total*
00 – 04	0	0	0	0	1	1	0	0	0	0	2	2	0	3	3
05 – 09	1	1	2	0	0	0	4	3	7	17	5	22	21	8	29
10 – 14	0	0	0	4	0	4	22	6	28	51	11	62	77	17	94
15 – 19	0	0	0	5	1	6	41	9	50	57	18	75	103	28	131
20 – 24	0	0	0	1	0	1	17	15	32	45	31	76	63	46	109
25 – 29	1	0	1	4	1	5	13	13	26	40	17	57	57	31	88
30 – 34	0	1	1	0	2	2	9	3	13	22	9	31	31	14	46
35 – 39	0	1	1	2	1	3	7	1	8	16	8	24	25	10	35
40 – 44	0	0	0	3	1	4	8	1	9	16	2	18	27	4	31
45 – 49	0	0	0	0	0	0	9	5	14	20	8	28	29	13	42
50 – 54	0	0	0	4	1	5	13	5	18	20	4	24	37	10	47
55 – 59	0	0	0	3	1	4	5	2	7	19	4	23	27	7	34
60 – 64	0	0	0	1	0	1	10	1	11	8	2	10	19	3	22
65 – 69	0	0	0	1	0	1	6	1	7	5	2	7	12	3	15
70 – 74	0	0	0	0	0	0	2	0	2	3	1	4	5	1	6
75 & Older	0	0	0	0	0	0	1	0	1	2	1	3	3	1	4
Not Stated	0	0	0	0	0	0	4	1	7	5	2	12	9	3	19
Total	2	3	5	28	9	37	171	66	240	346	127	478	545	202	755

* Within columns, where numbers do not add across to total, gender was not stated on the accident report.

TABLE 7.06

PRIOR ACTION OF BICYCLISTS INVOLVED IN 2014 CRASHES

Prior Action	Bicyclists in Fatal Crashes	Bicyclists in Injury Crashes	Bicyclists in Property Damage Crashes	Bicyclists in All Crashes*
Riding With Traffic	2	316	19	337
Riding Against Traffic	1	46	3	50
Making Right Turn	0	12	0	12
Making Left Turn	0	19	3	22
Making U Turn	0	1	0	1
Riding Across Road	0	67	1	68
Slowing/Stopping/Starting	0	11	0	11
Other/Unknown	2	283	11	296
Total	5	755	37	797

* The total number of bicyclist actions may exceed the number of bicycle crashes because some crashes involved more than one bicycle.

TABLE 7.07

CONTRIBUTING FACTORS IN 2014 BICYCLE CRASHES

Contributing Factors	Number Attributed to Bicyclists	Percent Attributed to Bicyclists	Number Attributed to Motor Vehicle Drivers	Percent Attributed to Motor Vehicle Drivers
Human Factors				
Failure to Yield Right of Way	122	29.0%	198	42.4%
Non-Motorist Error	71	16.9%	0	0.0%
Disregard Traffic Control Device	65	15.4%	19	4.1%
Improper/Unsafe Lane Use	36	8.6%	12	2.6%
Driver Inattention/Distracted	17	4.0%	100	21.4%
Failure to Use Lights	9	2.1%	0	0.0%
Vision Obscured	7	1.7%	31	6.6%
Illegal/Unsafe Speed	7	1.7%	9	1.9%
Chemical Impairment	4	1.0%	5	1.1%
Impeding Traffic	3	0.7%	0	0.0%
Driving Left of Center	3	0.7%	1	0.2%
Driver Inexperience	3	0.7%	8	1.7%
Improper Turn	2	0.5%	12	2.6%
Improper Passing/Overtaking	1	0.2%	6	1.3%
Improper Park/Start/Stop	1	0.2%	6	1.3%
Following Too Closely	1	0.2%	3	0.6%
Unsafe Backing	0	0.0%	2	0.4%
Improper/No Signal	0	0.0%	1	0.2%
Other Human Factors	14	3.3%	13	2.8%
Vehicular Factors				
Defective Brakes	3	0.7%	1	0.2%
Skidding	1	0.2%	2	0.4%
Other Vehicular Factor	2	0.5%	1	0.2%
Miscellaneous Factors				
Weather Conditions	4	1.0%	5	1.1%
Other	45	10.7%	32	6.9%
Total	421	100.0%	467	100.0%
Vehicles for Which There Was "No Clear Contributing Factor"	369		332	
Total Number of Bicyclists/Drivers	788		783	

Zero, one, or two contributing factors may be attributed to a single driver or bicyclist. This may cause the sum of the factors cited to differ from the number of drivers or bicyclists. Percentages are based on all contributing factors cited. They may not sum to 100 due to rounding.

VIII: SCHOOL BUS CRASHES

As a general rule, school bus travel is very safe. The school bus is a large and heavy vehicle that provides good protection for its occupants. However, since buses can carry many passengers, serious crashes could potentially cause many injuries.

Crashes included in this section are those in which at least one school bus was physically involved. Note that in some cases, a crash could be seen as involving a school bus (albeit indirectly), yet not be counted as a school bus crash. For example, one such case would be a crash in which a person gets off the bus, crosses a street and is struck by another vehicle. Such a case could be called an indirect school bus crash.

Indirect bus crashes

Changes in the crash reporting system in 2003 now make it possible to identify crashes in which a school bus was indirectly involved. In 2014, there were 179 crashes resulting in 86 injuries in which a school bus was indirectly involved.

Number of crashes increase

In 2014, school bus crashes increased by 10%. There were 806 traffic crashes directly involving at least one school bus, compared to 732 crashes in 2013.

One death in 2014

In 2014, there was one fatal school bus crash resulting in one death. This fatality was a driver from the other motor vehicle.

Morning and afternoon rush hours

Seven in ten (70%) school bus crashes and school bus crash injuries (74%) in 2014 occurred during the time periods of 6-9 a.m. and 3-6 p.m. Over nine out of ten (94%) of school bus crashes occurred during school year months September through May.

School bus stop arm

Less than 2% of all school bus crashes occurred when the school bus stop arm was deployed. Only 17 injuries occurred in school bus crashes where the school bus stop arm was in use.

Contributing factors

In 2014, there were 806 traffic crashes where at least one school bus was involved. In all there were 824 school buses directly involved in these crashes. For 52% of the school bus drivers, officer reports showed there was “no clear contributing factor.” The two contributing factors cited most often were failure to yield right of way (19%) or driver inattention or distraction (14%). The third most frequently cited contributing factor was improper turn (12%). The most commonly cited contributing factors attributed to drivers of other vehicles in school bus crashes were driver inattention or distraction (16%), weather (14%) and skidding (13%).

TABLE 8.01

SCHOOL BUS CRASH SUMMARY, 2005 - 2014

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Total Crashes	717	625	680	663	670	611	615	553	732	806
Fatal Crashes	7	1	7	1	4	4	1	4	3	1
Persons Killed	7	1	8	4	4	4	1	7	3	1
Injury Crashes	140	137	126	107	144	116	112	113	132	117
Persons Injured	250	241	243	188	233	215	214	211	237	238
Property Damage Crashes	570	487	547	555	522	491	502	436	597	688
School Buses Directly Involved	724	631	690	670	675	615	621	554	736	820

TABLE 8.02

2014 SCHOOL BUS CRASHES BY TIME OF DAY

Time of Day	Fatal Crashes	Injury Crashes	Property Damage Crashes	Total Crashes	Killed	Injured
Midnight-2:59 AM	0	0	1	1	0	0
3:00 - 5:59 AM	0	0	1	1	0	0
6:00 - 8:59 AM	1	49	268	318	1	83
9:00 - 11:59 AM	0	12	88	100	0	24
Noon - 2:59 PM	0	15	99	114	0	39
3:00 - 5:59 PM	0	38	212	250	0	89
6:00 - 8:59 PM	0	3	10	13	0	3
9:00 - 11:59 PM	0	0	5	5	0	0
Unknown	0	0	4	4	0	0
Total	1	117	688	806	1	238

TABLE 8.03

2014 SCHOOL BUS CRASHES BY MONTH

Month	Fatal Crashes	Injury Crashes	Property Damage Crashes	Total Crashes	Killed	Injured
January	0	11	103	114	0	12
February	0	20	149	169	0	37
March	0	13	70	83	0	41
April	0	10	46	56	0	20
May	1	13	34	48	1	35
June	0	1	20	21	0	1
July	0	1	13	14	0	1
August	0	0	13	13	0	0
September	0	21	53	74	0	45
October	0	8	61	69	0	16
November	0	11	78	89	0	19
December	0	8	48	56	0	11
Total	1	117	688	806	1	238

TABLE 8.04

**AGE AND GENDER OF PERSONS INJURED
IN 2014 SCHOOL BUS CRASHES**

Age Group	In Bus	Pedestrian	In Other Vehicle	Male	Female	Total*
00 - 04	0	2	3	2	3	5
05 - 09	7	4	3	5	8	14
10 - 14	19	1	4	11	11	24
15 - 19	30	1	10	22	19	41
20 - 24	3	0	8	6	5	11
25 - 29	5	0	10	5	10	15
30 - 34	3	1	14	6	12	18
35 - 39	2	1	12	8	7	15
40 - 44	4	0	5	4	5	9
45 - 49	5	1	11	6	11	17
50 - 54	3	1	3	5	2	7
55 - 59	5	0	9	8	6	14
60 - 64	4	1	4	4	5	9
65 & Older	6	0	8	4	10	14
Unknown	25	0	0	11	7	25
Total	121	13	104	107	121	238

*There were ten cases where the gender of the person was not recorded on the crash form.

TABLE 8.05

**PERSONS KILLED OR INJURED
IN 2014 SCHOOL BUS CRASHES BY POPULATION OF AREA**

Population of City or Township	Killed	Severely Injured	Moderately Injured	Minor Injuries	Total
250,000 and Over	0	2	8	48	58
100,000 - 249,999	0	0	0	0	0
50,000 - 99,999	0	4	2	22	28
25,000 - 49,999	0	1	12	16	29
10,000 - 24,999	0	1	5	24	30
5,000 - 9,999	0	0	3	5	8
2,500 - 4,999	0	0	1	5	6
1,000 - 2,499	0	0	0	3	3
Under 1,000	1	2	20	54	76
Total	1	10	51	177	238

TABLE 8.06

2014 SCHOOL BUS CRASHES BY FIRST HARMFUL EVENT

First Harmful Event	Fatal Crashes	Injury Crashes	Property Damage Crashes	Total Crashes	Killed	Injured
Collision With:						
Other Motor Vehicle	1	94	555	650	1	175
Parked Motor Vehicle	0	3	110	113	0	18
Bicycle	0	2	0	2	0	2
Pedestrian	0	11	0	11	0	14
Deer	0	0	2	2	0	0
Fixed Object	0	5	14	19	0	22
Other/Unknown	0	2	7	9	0	7
Total	1	117	688	806	1	238

TABLE 8.07

2014 SCHOOL BUS CRASHES BY TRAFFIC CONTROL DEVICE

Traffic Control Device	Fatal Crashes	Injury Crashes	Property Damage Crashes	Total Crashes	Killed	Injured
Traffic Signal	0	30	151	181	0	57
Overhead Flashers	0	0	1	1	0	0
Stop Sign—All Approaches	0	4	28	32	0	5
Stop Sign—Not All Approaches	0	33	172	205	0	57
Yield Sign	0	4	9	13	0	8
School Bus Stop Arm	0	3	6	9	0	17
No Passing Zone	0	0	1	1	0	0
Railroad Crossing Stop Sign	0	1	16	17	0	1
Other	0	1	11	12	0	1
Not Applicable	0	40	289	329	0	90
Unknown	1	1	4	6	1	2
Total	1	117	688	806	1	238

TABLE 8.08

CONTRIBUTING FACTORS IN 2014 SCHOOL BUS CRASHES

Contributing Factors	Number Attributed to School Bus Drivers	Percent Attributed to School Bus Drivers	Number Attributed to Drivers of Other Vehicles	Percent Attributed to Drivers of Other Vehicles
Human Factors				
Failure to Yield Right of Way	69	18.6%	62	11.0%
Driver Inattention/Distracted	50	13.5%	91	16.2%
Improper Turn	43	11.6%	4	0.7%
Improper/Unsafe Lane Use	24	6.5%	17	3.0%
Following Too Closely	17	4.6%	53	9.4%
Unsafe Backing	15	4.0%	7	1.2%
Vision Obscured	13	3.5%	10	1.8%
Disregard of Traffic Control Device	8	2.2%	31	5.5%
Driving Left of Center	7	1.9%	3	0.5%
Illegal/Unsafe Speed	6	1.6%	49	8.7%
Driver Inexperience	6	1.6%	14	2.5%
Improper Park/Start/Stop	6	1.6%	8	1.4%
Improper Passing/Overtaking	4	1.1%	11	2.0%
Impeding Traffic	2	0.5%	1	0.2%
Chemical Impairment	2	0.5%	6	1.1%
Failure to Use Lights	2	0.5%	1	0.2%
Improper/No Signal	1	0.3%	1	0.2%
Overcorrecting	0	0.0%	5	0.9%
Non-Motorist Error	0	0.0%	1	0.2%
Driver on Phone/CB Radio	0	0.0%	1	0.2%
Other Human Factors	11	3.0%	8	1.4%
Vehicular Factors				
Skidding	24	6.5%	70	12.5%
Defective Brakes	5	1.3%	4	0.7%
Other Vehicular Factors	0	0.0%	3	0.5%
Miscellaneous Factors				
Weather Conditions	30	8.1%	77	13.7%
Other	26	7.0%	24	4.3%
Total	371	100.0%	562	100.0%
Vehicles for Which There Was "No Clear Contributing Factor"	427		303	
Total Number of Drivers	824		821	

Zero, one, or two contributing factors may be attributed to a single driver. This may cause the sum of the factors cited to differ from the number of drivers. Percentages are based on all contributing factors cited. They may not sum to 100 due to rounding. Bicyclists and pedestrians are included as other drivers in this table.

IX: MOTOR VEHICLE/TRAIN CRASHES

Each crash reported in this section involves a motor vehicle and a train. Train collisions with pedestrians or bicyclists are not counted as traffic crashes in this publication.

Statewide, slightly more than one-half of one percent of all motor vehicle crashes result in a fatality. Generally, motor-vehicle/train crashes are few in number, but they are more likely to be serious. In 2014, there were six motor vehicle/train crashes that resulted in a fatality, representing 10% of all motor-vehicle/train crashes in Minnesota.

Number of train crashes jump in 2014

In the past decade, the number of motor-vehicle/train crashes in Minnesota has been declining. However, vehicle/train crashes have seen an increase in recent years. In 2014, there were 63 vehicle/train crashes, 12 more crashes than were reported in the previous year.

Fatalities and Injuries increase

Both fatalities and injuries in motor vehicle/train crashes increased. Eight people were killed in 2014 compared to five in 2013. Twenty-five people were injured in 2014 compared to 17 in 2013.

Railroad crossings with flashing lights or gates

Railroad crossings without some type of flashing lights or gates are very dangerous. Seven fatalities occurred at a railroad crossing without flashing lights or gates. Only 13 crashes occurred where there was a railroad crossing gate present.

Most crashes occurred in rural areas

Motor vehicle crashes involving a train are a predominantly rural phenomenon, defined as an area with a population of less than 5,000. In 2014, 28 of the 63 total crashes and all eight of the fatalities occurred in rural areas.

Contributing factors

For motor vehicle drivers involved in train crashes, failure to yield right of way, disregard of traffic control device, improper turn and driver inattention or distraction were the four contributing factors listed most often by officers.

TABLE 9.01

MOTOR VEHICLE / TRAIN CRASH SUMMARY, 2005 – 2014

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Total Crashes	52	51	56	40	37	33	48	25	51	63
Fatal Crashes	5	8	2	3	4	1	4	3	5	6
Persons Killed	6	9	2	4	5	1	4	3	5	8
Injury Crashes	22	10	16	17	11	17	16	12	17	25
Persons Injured	29	15	20	20	15	21	18	15	20	33
Property Damage Crashes	25	33	38	20	22	15	28	10	29	32

TABLE 9.02

2014 MOTOR VEHICLE / TRAIN CRASHES BY MONTH

Month	Fatal Crashes	Injury Crashes	PDO Crashes	Total	Killed	Injured
January	1	3	1	5	1	3
February	1	1	4	6	1	2
March	0	4	1	5	0	8
April	0	2	1	3	0	2
May	0	0	2	2	0	0
June	0	2	4	6	0	2
July	0	1	2	3	0	1
August	0	2	2	4	0	2
September	1	2	4	7	1	4
October	0	4	6	10	0	5
November	1	1	3	5	2	1
December	2	3	2	7	3	3
Total	6	25	32	63	8	33

TABLE 9.03

2014 MOTOR VEHICLE / TRAIN CRASHES BY TIME AND DAY

Time of Day	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total
Midnight-2:59 AM	0	0	1	0	0	2	0	3
3:00 - 5:59 AM	0	1	0	0	0	0	0	1
6:00 - 8:59 AM	1	1	1	1	0	1	1	6
9:00 - 11:59 AM	1	1	1	2	2	2	3	12
Noon - 2:59 PM	4	5	1	0	1	1	3	15
3:00 - 5:59 PM	2	1	2	3	1	3	2	14
6:00 - 8:59 PM	1	1	1	0	2	0	0	5
9:00 - 11:59 PM	2	0	0	2	1	1	1	7
Total	11	10	7	8	7	10	10	63

TABLE 9.04

**2014 MOTOR VEHICLE / TRAIN CRASHES
BY TRAFFIC CONTROL DEVICE**

Traffic Control Device	Fatal Crashes	Injury Crashes	Property Damage Crashes	Total Crashes	Killed	Injured
Stop Sign All Approaches	1	4	4	9	2	4
RR Crossing Gate	0	3	2	5	0	7
RR Crossing Flashing Lights	0	1	0	1	0	1
RR Crossing Stop Sign	2	2	3	7	3	3
RR Overhead Lights/Gate	0	1	7	8	0	1
RR Crossbuck	2	2	1	5	2	3
Other Device	0	11	14	25	0	13
Not Applicable	0	1	1	2	0	1
Unknown	1	0	0	1	1	0
Total	6	25	32	63	8	33

TABLE 9.05

**2014 MOTOR VEHICLE / TRAIN CRASHES
AGE OF PERSONS KILLED OR INJURED**

Age Group	Killed	Severe Injuries	Moderate Injuries	Minor Injuries	Total Injuries
00 - 04	0	0	0	0	0
05 - 09	0	0	0	0	0
10 - 14	0	0	0	0	0
15 - 19	0	0	2	1	3
20 - 24	1	4	1	2	7
25 - 29	0	1	1	2	4
30 - 34	1	1	1	0	2
35 - 39	1	0	1	1	2
40 - 44	0	0	1	0	1
45 - 49	2	2	3	1	6
50 - 54	1	0	0	1	1
55 - 59	1	1	0	0	1
60 - 64	0	0	1	0	1
65 - 69	0	0	1	1	2
70 - 74	0	0	0	0	0
75 - 79	0	0	1	0	1
80 & Older	1	1	1	0	2
Total	8	10	14	9	33

TABLE 9.06

2014 MOTOR VEHICLE / TRAIN CRASHES BY POPULATION OF AREA

Population of City or Township	Fatal Crashes	Injury Crashes	Property Damage Crashes	Total Crashes	Killed	Injured
250,000 and Over	0	7	13	20	0	9
100,000 - 249,999	0	0	0	0	0	0
50,000 - 99,999	0	3	4	7	0	3
25,000 - 49,999	0	2	1	3	0	6
10,000 - 24,999	0	1	3	4	0	1
5,000 - 9,999	0	0	1	1	0	0
2,500 - 4,999	1	0	0	1	1	1
1,000 - 2,499	0	0	1	1	0	0
Under 1,000	5	12	9	26	7	13
Total	6	25	32	63	8	33

TABLE 9.07

**2014 MOTOR VEHICLE / TRAIN CRASHES
MOTOR VEHICLE DRIVER CONTRIBUTING FACTORS**

Contributing Factor	Number	Percent
Human Factors		
Failure to Yield Right of Way	23	25.6%
Disregard of Traffic Control	15	16.7%
Driver Inattention/Distracted	12	13.3%
Improper Turn	12	13.3%
Illegal/Unsafe Speed	3	3.3%
Chemical Impairment	2	2.2%
Improper Parking/Starting/Stopping	2	2.2%
Improper/Unsafe Lane Use	2	2.2%
Vision Obscured	1	1.1%
Overcorrecting	1	1.1%
Unsafe Backing	1	1.1%
Other Human Factor	2	2.2%
Vehicular Factors		
Skidding	4	4.4%
Other		
Weather	3	3.3%
Other Contributing Factor	7	7.8%
Total	90	100.0%
Vehicles for Which There Was "No Clear Contributing Factor"	2	
Number of Drivers	64	

Zero, one, or two contributing factors may be attributed to a single driver. This may cause the sum of the factors cited to differ from the number of drivers. Percentages are based on all contributing factors cited. They may not sum to 100 due to rounding. No contributing factors are cited for train operators.

X: CRASHES INVOLVING TEEN DRIVERS

Minnesota teen drivers continue to be overrepresented in traffic crashes due to driver inexperience, distractions, speeding/risk-taking and seat belt non-use. The greatest crash risk occurs during the first months of independent driving. The good news is that progress has been made. Laws such as no cell phone use, no texting, primary seat belt and nighttime and passenger limitations have helped reduce teen traffic deaths and injuries.

Parents play a vital role in developing safe teen drivers. Teens need to gain experience in a variety of road types and environments — day, night, city, rural, rain, snow — while supervised by an experienced licensed driver. Even after a teen is licensed, they continue to need training and monitoring. Programming is available through driver educators to assist parents in learning more about graduated driver licensing, as well as tips for helping their teens become safer drivers.

Teen involvement in traffic crashes

This Section provides a short summary regarding teen drivers (ages 15-19) who were involved in crashes. However, more information concerning teens can be found in other Sections of this Crash Facts report:

- Table 1.04: Age/Gender of teens killed or injured
- Table 1.05: Age/Gender of teen drivers involved
- Table 1.06: Licensed vs. Crash involved drivers
- Table 1.07: Teen driver crash type
- Table 1.09: Single-vehicle crash contributing factors
- Table 1.10: Multi-vehicle crash contributing factors
- Table 2.03: DWI's issued to underage drivers
- Table 2.05: Alcohol related teens killed or injured
- Table 2.12: Teen driver alcohol concentration
- Table 3.03: Teen vehicle occupants killed or injured
- Table 3.05: Teen occupant seat belt use
- Table 4.06: Teen motorcyclists killed or injured
- Table 6.03: Teen pedestrians killed or injured
- Table 7.05: Teen bicyclists killed or injured
- Table 8.04: Teen school bus riders killed or injured

Improvement seen in the past decade

Table 10.01 indicates that the numbers of teen-involved traffic crashes have been decreasing. The definition of a teen-involved crash used here is any crash with at least one teen driver (ages 15-19) of any motor vehicle involved (no teen pedestrians or bicyclists used). In 2005, 21.9% of all traffic crashes

in Minnesota were teen-related. In 2014, that percentage has dropped to 15.6%.

Teen (ages 13-19) fatalities and injuries have also decreased. In 2005, 12.9% of all traffic fatalities in Minnesota were teens. In 2014, that percentage has dropped to 5.8%. In 2005, 17.1% of all traffic injuries in Minnesota were teens. In 2014, that percentage has dropped to 11.6%.

Rate per licensed teen driver decreasing

Table 10.02 indicates that the number of teen motor vehicle occupant (MVO) drivers (ages 15-19) who were involved in crashes has also been decreasing. That is, only teens that were driving vehicles normally equipped with seat belts are counted in this table. In 2008, 62.4 teen MVO drivers were involved in crashes for every 1,000 licensed teen drivers. In 2014, that rate has dropped to 52.

Colder weather

Teen involved crashes are rather evenly distributed throughout the year; however, there is an uptick during the colder months. In 2014, one out of every four (22%) teen-involved crashes occurred during the months of January and December.

Afternoons are dangerous

As can be seen from Table 10.05 and Figure 10.01, a large number of teen-involved crashes happen during the afternoon period of 2:00 – 6:00 p.m. During that four-hour time period in 2014, 42% of all teen-involved crashes occurred. On the other hand, only 4% of all teen involved crashes occurred during the five-hour nighttime period of 12:00 a.m. – 5:00 a.m.

Contributing factors

For teen drivers of any vehicle who were involved in crashes, driver distraction was listed most often (20%) by officers at the scene. Next was failure to yield the right of way (15%) and then illegal or unsafe speed (12%). For the 'other' motor vehicle drivers involved, failure to yield the right of way was listed most often (25%), next was driver distraction (17%) and following too closely (13%). Only 6% of the 'other' drivers were listed as illegal or unsafe speed.

TABLE 10.01

TEEN CRASH SUMMARY, 2008 - 2014

Category	2008	2009	2010	2011	2012	2013	2014
Crashes with at least one Teen (15-19) Driver*	15,475	14,142	13,611	12,139	11,804	12,384	12,247
All Traffic Crashes in Minnesota	79,095	73,498	74,073	72,117	69,236	77,707	78,396
-Teen (15-19) Driver* Crash %	19.6%	19.2%	18.4%	16.8%	17.0%	15.9%	15.6%
Teen (13-19) Traffic Fatalities	37	40	47	39	40	33	21
All Traffic Fatalities in Minnesota	455	421	411	368	395	387	361
-Teen (13-19) Fatality %	8.1%	9.5%	11.4%	10.6%	10.1%	8.5%	5.8%
Teen (13-19) Traffic Injuries	5,079	4,648	4,391	3,921	3,844	3,662	3,417
All Traffic Injuries in Minnesota	33,379	31,074	31,176	30,295	29,314	30,653	29,439
-Teen (13-19) Injury %	15.2%	15.0%	14.1%	12.9%	13.1%	11.9%	11.6%

*Driver of any motor vehicle.

TABLE 10.02

TEEN 'MOTOR VEHICLE OCCUPANT' DRIVER CRASH INVOLVEMENT, 2008 - 2014

Age of Teen MVO* Driver	2008	2009	2010	2011	2012	2013	2014
Age 15 MVO* Drivers involved in Crashes	195	159	187	181	156	152	172
Age 15 Licensed Drivers**	26,141	28,126	28,020	25,422	25,946	25,324	26,393
-Rate per 1,000 Licensed Drivers:	7.5	5.7	6.7	7.1	6.0	6.0	6.5
Age 16 MVO* Drivers involved in Crashes	3,496	3,160	2,897	2,567	2,645	2,772	2,669
Age 16 Licensed Drivers**	49,801	49,884	49,634	48,260	47,801	48,013	48,263
-Rate per 1,000 Licensed Drivers:	70.2	63.3	58.4	53.2	55.3	57.7	55.3
Age 17 MVO* Drivers involved in Crashes	4,227	3,888	3,580	3,251	3,205	3,268	3,327
Age 17 Licensed Drivers**	57,875	56,554	55,885	54,781	54,489	53,744	54,190
-Rate per 1,000 Licensed Drivers:	73.0	68.7	64.1	59.3	58.8	60.8	61.4
Age 18 MVO* Drivers involved in Crashes	4,527	4,024	4,014	3,504	3,364	3,430	3,389
Age 18 Licensed Drivers**	64,337	62,707	61,526	59,722	59,220	58,706	58,202
-Rate per 1,000 Licensed Drivers:	70.4	64.2	65.2	58.7	56.8	58.4	58.2
Age 19 MVO* Drivers involved in Crashes	4,153	3,971	3,900	3,450	3,261	3,532	3,424
Age 19 Licensed Drivers**	68,050	67,701	66,272	63,997	63,212	62,642	62,349
-Rate per 1,000 Licensed Drivers:	61.0	58.7	58.8	53.9	51.6	56.4	54.9
All 15-19 MVO* Drivers involved in Crashes	16,598	15,202	14,578	12,953	12,631	13,154	12,981
All 15-19 Licensed Drivers**	266,204	264,972	261,337	252,182	250,668	248,429	249,397
-Rate per 1,000 Licensed Drivers:	62.4	57.4	55.8	51.4	50.4	52.9	52.0

*MVO = Motor Vehicle Occupant. Only teen drivers in vehicles equipped with Seat-Belts are included in Table 10.02.

**Licensed Driver totals include Permits.

TABLE 10.03

2014 TEEN-INVOLVED CRASHES* BY MONTH
 (*Crashes involving at least one Teen Driver (15-19) of any vehicle)

Month	Fatal Crashes	A-Injury Crashes	B-Injury Crashes	C-Injury Crashes	PDO Crashes	Total Crashes
January	1	11	56	235	1,222	1,525
February	2	8	70	221	1,030	1,331
March	3	6	49	139	591	788
April	2	10	41	142	519	714
May	3	11	61	219	543	837
June	1	13	74	231	651	970
July	2	21	81	201	650	955
August	5	16	71	227	629	948
September	1	8	71	188	612	880
October	3	7	71	228	687	996
November	3	6	44	210	902	1,165
December	2	6	70	188	872	1,138
Total	28	123	759	2,429	8,908	12,247

TABLE 10.04

2014 TEEN-INVOLVED CRASHES BY DAY OF WEEK
 (*Crashes involving at least one Teen Driver (15-19) of any vehicle)

Day	Fatal Crashes	A-Injury Crashes	B-Injury Crashes	C-Injury Crashes	PDO Crashes	Total Crashes
Sunday	4	16	89	253	851	1,213
Monday	3	14	112	356	1,250	1,735
Tuesday	5	15	102	336	1,261	1,719
Wednesday	3	21	120	350	1,417	1,911
Thursday	5	17	109	404	1,373	1,908
Friday	5	17	117	419	1,564	2,122
Saturday	3	23	110	311	1,192	1,639
Total	28	123	759	2,429	8,908	12,247

TABLE 10.05
2014 TEEN-INVOLVED CRASHES BY TIME OF DAY
 (*Crashes involving at least one Teen Driver (15-19) of any vehicle)

Hour	Fatal Crashes	A-Injury Crashes	B-Injury Crashes	C-Injury Crashes	PDO Crashes	Total Crashes
Midnight	0	3	13	36	100	152
1:00	0	1	7	16	78	102
2:00	2	1	7	22	51	83
3:00	0	0	10	10	39	59
4:00	0	1	3	7	32	43
5:00	0	2	5	15	55	77
6:00	0	4	12	31	127	174
7:00	1	4	44	151	674	874
8:00	1	10	27	121	487	646
9:00	2	1	21	73	347	444
10:00	0	4	24	81	321	430
11:00	0	5	31	94	404	534
Noon	0	5	34	126	474	639
1:00	0	4	36	163	451	654
2:00	4	11	47	161	661	884
3:00	0	9	89	271	936	1,305
4:00	2	12	85	257	835	1,191
5:00	2	5	68	220	833	1,128
6:00	3	11	51	149	576	790
7:00	2	6	35	105	366	514
8:00	3	6	36	94	299	438
9:00	2	9	34	89	347	481
10:00	3	5	19	79	248	354
11:00	1	4	19	56	149	229
Unknown	0	0	2	2	18	22
Total	28	123	759	2,429	8,908	12,247

FIGURE 10.01
TOTAL TEEN-INVOLVED CRASHES, BY TIME, 2014

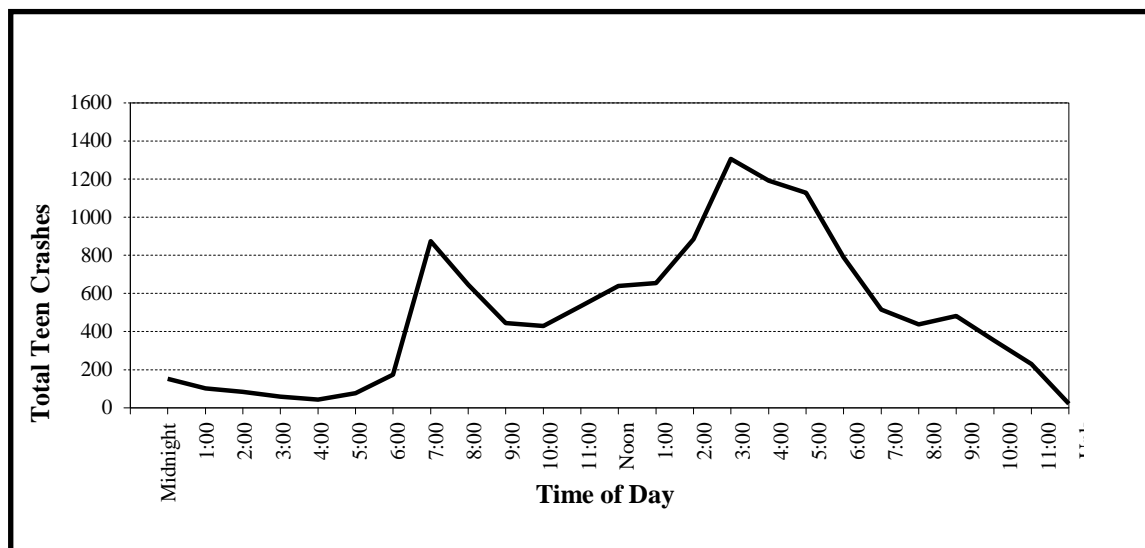


TABLE 10.06
CONTRIBUTING FACTORS IN 2014 TEEN-INVOLVED CRASHES

Contributing Factors	Number Attributed to Teen Drivers*	Percent Attributed to Teen Drivers*	Number Attributed to Other Vehicle Drivers*	Percent Attributed to Other Vehicle Drivers*
Human Factors				
Driver Inattention/Distracted	2,576	20.0%	659	17.0%
Failure to Yield Right of Way	1,867	14.5%	964	24.9%
Illegal/Unsafe Speed	1,547	12.0%	224	5.8%
Following Too Closely	1,203	9.3%	491	12.7%
Driver Inexperience	1,188	9.2%	22	0.6%
Overcorrecting	401	3.1%	13	0.3%
Disregard Traffic Control Device	376	2.9%	158	4.1%
Improper/Unsafe Lane Use	355	2.8%	147	3.8%
Vision Obscured	196	1.5%	98	2.5%
Improper Turn	182	1.4%	77	2.0%
Chemical Impairment	129	1.0%	63	1.6%
Unsafe Backing	128	1.0%	42	1.1%
Improper Passing/Overtaking	112	0.9%	52	1.3%
Improper Park/Start/Stop	83	0.6%	30	0.8%
Driving Left of Center	54	0.4%	35	0.9%
Driver On Phone/CB	34	0.3%	4	0.1%
Improper/No Signal	16	0.1%	9	0.2%
Impeding Traffic	14	0.1%	16	0.4%
Failure to Use Lights	7	0.1%	7	0.2%
Non-Motorist Error	0	0.0%	14	0.4%
Other Human Factor	266	2.1%	90	2.3%
Vehicular Factors				
Skidding	697	5.4%	154	4.0%
Defective Brakes	110	0.9%	16	0.4%
Oversize/Overweight Vehicle	2	0.0%	0	0.0%
Other Vehicular Factor	72	0.6%	29	0.7%
Miscellaneous Factors				
Weather Conditions	946	7.3%	280	7.2%
Other	335	2.6%	182	4.7%
Total Contributing Factors	12,986	100.0%	3,876	100.0%
Vehicles for Which There Was “No Clear Contributing Factor”	3,285		6,311	
Total Number of Drivers	13,081		9,999	

*The term ‘Drivers’ refers to a driver of any motor vehicle. Contributing factor data for the ‘Other Vehicle Drivers’ includes pedestrians and bicyclists. Pedestrians and bicyclists are not included in the ‘Teen Driver’ data.

Zero, one, or two contributing factors may be attributed to each vehicle, pedestrian, or bicyclist involved in a crash. This may cause the sum of the factors cited to differ from the number of drivers, pedestrians, or bicyclists. Percentages are based on all contributing factors listed. They may not sum to 100 due to rounding.

XI: CRASHES INVOLVING SENIOR DRIVERS

Between 2000 and 2030, the population of Minnesotans aged 65 and older will increase to over 24 percent of the total population. Age alone does not determine a person's ability to drive safely; each of us ages differently. There are safe and unsafe drivers at every age. National research suggests that crash rates for older drivers are actually decreasing due to better health, vehicles with helpful technologies, more driving experience and safer roadways. As people get older, their driving schedules change due to retirement, different activities and fewer required trips. Older drivers generally drive fewer miles than younger ones. In addition, many older drivers self-regulate by avoiding driving at night or on particularly challenging roadways. While the average driver is older than in the past, this has not caused the large increase in crashes and deaths on our roadways that was initially predicted.

Senior involvement in traffic crashes

This Section provides a short summary regarding senior drivers (ages 65 and above) who were involved in crashes. However, more information concerning seniors can be found in other Sections of this Crash Facts report:

- Table 1.04: Age/Gender of seniors killed or injured
- Table 1.05: Age/Gender of senior drivers involved
- Table 1.06: Licensed vs. Crash involved drivers
- Table 1.07: Senior driver crash type
- Table 1.09: Single-vehicle crash contributing factors
- Table 1.10: Multi-vehicle crash contributing factors
- Table 2.05: Alcohol related seniors killed or injured
- Table 2.12: Senior driver alcohol concentration
- Table 3.03: Senior vehicle occupants killed or injured
- Table 3.05: Senior occupant seat belt use
- Table 4.06: Senior motorcyclists killed or injured
- Table 6.03: Senior pedestrians killed or injured
- Table 7.05: Senior bicyclists killed or injured

Senior crash involvement remains steady

Table 11.01 indicates that the number of senior-involved traffic crashes is increasing. The definition of a senior-involved crash used here is any crash with at least one senior driver (ages 65 and above) of any motor vehicle (no senior pedestrians or bicyclists used). In 2008, 12.2% of all traffic crashes in Minnesota were senior-related. In 2014, that percentage has risen to 14.2%. As the senior

population in Minnesota increases, senior traffic fatalities are expected to increase. In 2008, 19.1% of all traffic fatalities in Minnesota were seniors. In 2014, that percentage has risen to 22.7%.

Senior (ages 65 and older) injuries have also increased. In 2008, 7.5% of all traffic injuries in Minnesota were seniors. In 2014, that percentage has risen to 9.1%.

MVO rate per licensed senior driver also steady

Table 11.02 indicates that the number of senior motor vehicle occupant (MVO) drivers who were involved in crashes has decreased slightly. That is, only seniors that were driving vehicles normally equipped with seat belts are counted in this table. In 2008, 16.4 senior MVO drivers were involved in crashes for every 1,000 licensed senior drivers. In 2014, that rate has dropped to 15.7.

Colder weather

Senior-involved crashes are rather evenly distributed throughout the year; however, there is an uptick during the colder months. In 2014, one out of every five (20.5%) senior involved crashes occurred during the months of January and December.

Afternoons are dangerous

As can be seen from Table 11.05 and Figure 11.01, a large number of senior involved crashes happen during the afternoon period of noon – 5:00 p.m. During that five-hour time-period in 2014, 45% of all senior involved crashes occurred. On the other hand, 1% of all senior involved crashes occurred during the five-hour nighttime period of 12:00 a.m. – 5:00 a.m.

Contributing factors

For senior drivers of any vehicle who were involved in crashes, failure to yield right of way was listed most often (26%) by officers at the scene. Next was driver inattention/distraction (17%). For the other motor vehicle drivers involved, driver inattention/distraction was listed most often (21%), next was failure to yield right of way (19%) and following too closely (13%).

TABLE 11.01

SENIOR CRASH SUMMARY, 2008 - 2014

Category	2008	2009	2010	2011	2012	2013	2014
Crashes with at least one Senior (65+) Driver*	9,646	9,453	9,657	9,511	9,687	10,630	11,162
All Traffic Crashes in Minnesota	79,095	73,498	74,073	72,117	69,236	77,707	78,396
-Senior (65+) Driver* Crash %	12.2%	12.9%	13.0%	13.2%	14.0%	13.7%	14.2%
Senior (65+) Traffic Fatalities	87	84	72	76	81	86	82
All Traffic Fatalities in Minnesota	455	421	411	368	395	387	361
-Senior (65+) Fatality %	19.1%	20.0%	17.5%	20.7%	20.5%	22.2%	22.7%
Senior (65+) Traffic Injuries	2,503	2,477	2,523	2,496	2,654	2,712	2,698
All Traffic Injuries in Minnesota	33,379	31,074	31,176	30,295	29,314	30,653	29,439
-Senior (65+) Injury %	7.5%	8.0%	8.1%	8.2%	9.1%	8.8%	9.1%

*Driver of any motor vehicle.

TABLE 11.02

SENIOR 'MOTOR VEHICLE OCCUPANT' DRIVER CRASH INVOLVEMENT, 2008 - 2014

Age of Senior MVO* Driver	2008	2009	2010	2011	2012	2013	2014
Age 65-69 MVO* Drivers involved in Crashes	3,388	3,345	3,511	3,451	3,630	3,980	4,447
Age 65-69 Licensed Drivers	187,347	193,513	198,777	213,587	226,107	237,444	252,369
-Rate per 1,000 Licensed Drivers:	18.1	17.3	17.7	16.2	16.1	16.8	17.6
Age 70-74 MVO* Drivers involved in Crashes	2,215	2,210	2,326	2,332	2,311	2,616	2,777
Age 70-74 Licensed Drivers	140,879	143,738	149,002	155,347	164,699	172,320	178,905
-Rate per 1,000 Licensed Drivers:	15.7	15.4	15.6	15.0	14.0	15.2	15.5
Age 75-79 MVO* Drivers involved in Crashes	1,929	1,828	1,791	1,743	1,744	1,912	1,972
Age 75-79 Licensed Drivers	113,740	113,517	114,320	116,871	119,643	123,927	127,476
-Rate per 1,000 Licensed Drivers:	17.0	16.1	15.7	14.9	14.6	15.4	15.5
Age 80-84 MVO* Drivers involved in Crashes	1,475	1,389	1,382	1,327	1,392	1,382	1,320
Age 80-84 Licensed Drivers	89,045	87,672	88,821	90,620	90,268	90,333	91,175
-Rate per 1,000 Licensed Drivers:	16.6	15.8	15.6	14.6	15.4	15.3	14.5
Age 85+ MVO* Drivers involved in Crashes	889	931	967	955	955	1,069	997
Age 85+ Licensed Drivers	73,502	71,997	74,678	79,683	82,434	82,608	84,666
-Rate per 1,000 Licensed Drivers:	12.1	12.9	12.9	12.0	11.6	12.9	11.8
All 65+ MVO* Drivers involved in Crashes	9,896	9,703	9,977	9,808	10,032	10,959	11,513
All 65+ Licensed Drivers	604,513	610,437	625,598	656,108	683,151	706,632	734,591
-Rate per 1,000 Licensed Drivers:	16.4	15.9	15.9	14.9	14.7	15.5	15.7

*MVO = Motor Vehicle Occupant.

Only senior drivers in vehicles equipped with Seat-Belts are included in Table 11.02.

TABLE 11.03

2014 SENIOR-INVOLVED CRASHES* BY MONTH(*Crashes involving at least one Senior Driver (65+) of any vehicle)

Month	Fatal Crashes	A-Injury Crashes	B-Injury Crashes	C-Injury Crashes	PDO Crashes	Total Crashes
January	2	14	57	237	948	1,258
February	6	7	49	192	817	1,071
March	3	7	45	148	519	722
April	9	8	55	162	487	721
May	8	11	77	196	556	848
June	8	16	81	205	557	867
July	10	20	88	195	559	872
August	9	17	76	212	554	868
September	3	18	82	201	587	891
October	8	14	87	240	624	973
November	5	8	59	197	773	1,042
December	9	13	72	210	725	1,029
Total	80	153	828	2,395	7,706	11,162

TABLE 11.04

2014 SENIOR-INVOLVED CRASHES BY DAY OF WEEK(*Crashes involving at least one Senior (65+) of any vehicle)

Day	Fatal Crashes	A-Injury Crashes	B-Injury Crashes	C-Injury Crashes	PDO Crashes	Total Crashes
Sunday	7	15	85	218	648	973
Monday	13	17	111	329	1,133	1,603
Tuesday	11	26	111	381	1,207	1,736
Wednesday	10	23	137	402	1,300	1,872
Thursday	17	29	132	380	1,286	1,844
Friday	16	24	136	389	1,248	1,813
Saturday	6	19	116	296	884	1,321
Total	80	153	828	2,395	7,706	11,162

TABLE 11.05
2014 SENIOR-INVOLVED CRASHES BY TIME OF DAY
 (*Crashes involving at least one Senior Driver (65+) of any vehicle)

Hour	Fatal Crashes	A-Injury Crashes	B-Injury Crashes	C-Injury Crashes	PDO Crashes	Total Crashes
Midnight	0	0	2	3	15	20
1:00	0	0	1	4	21	26
2:00	0	0	1	8	11	20
3:00	0	0	0	2	14	16
4:00	0	0	2	4	10	16
5:00	1	0	4	6	41	52
6:00	1	2	10	43	101	157
7:00	3	3	27	85	289	407
8:00	3	9	35	94	406	547
9:00	1	5	36	162	542	746
10:00	10	13	46	168	577	814
11:00	4	8	70	207	634	923
Noon	9	13	74	226	652	974
1:00	7	13	68	245	658	991
2:00	9	12	90	198	736	1,045
3:00	9	20	71	229	782	1,111
4:00	10	17	79	213	672	991
5:00	5	14	78	188	576	861
6:00	3	9	46	127	346	531
7:00	1	2	27	82	220	332
8:00	2	5	22	33	143	205
9:00	2	6	22	33	117	180
10:00	0	1	12	20	78	111
11:00	0	1	3	9	36	49
Unknown	0	0	2	6	29	37
Total	80	153	828	2,395	7,706	11,162

FIGURE 11.01
TOTAL SENIOR-INVOLVED CRASHES, BY TIME, 2014

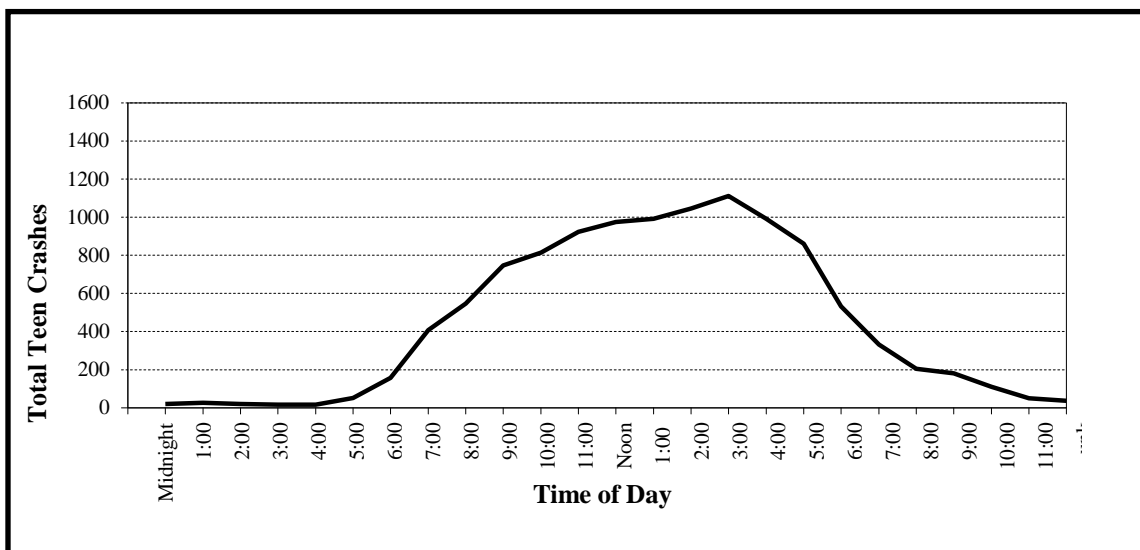


TABLE 11.06
CONTRIBUTING FACTORS IN 2014 SENIOR-INVOLVED CRASHES

Contributing Factors	Number Attributed to Senior Drivers*	Percent Attributed to Senior Drivers*	Number Attributed to Other Vehicle Drivers*	Percent Attributed to Other Vehicle Drivers*
Human Factors				
Failure to Yield Right of Way	2,053	25.5%	1,035	18.9%
Driver Inattention/Distracted	1,398	17.4%	1,169	21.3%
Illegal/Unsafe Speed	520	6.5%	397	7.2%
Following Too Closely	488	6.1%	711	13.0%
Improper/Unsafe Lane Use	468	5.8%	216	3.9%
Disregard Traffic Control Device	402	5.0%	317	5.8%
Improper Turn	272	3.4%	88	1.6%
Vision Obscured	201	2.5%	106	1.9%
Unsafe Backing	150	1.9%	83	1.5%
Overcorrecting	106	1.3%	33	0.6%
Improper Park/Start/Stop	104	1.3%	50	0.9%
Improper Passing/Overtaking	98	1.2%	72	1.3%
Driving Left of Center	75	0.9%	37	0.7%
Chemical Impairment	64	0.8%	72	1.3%
Impeding Traffic	21	0.3%	15	0.3%
Improper/No Signal	12	0.1%	7	0.1%
Driver Inexperience	11	0.1%	99	1.8%
Failure to Use Lights	5	0.1%	4	0.1%
Driver On Phone/CB	3	0.0%	9	0.2%
Non-Motorist Error	0	0.0%	36	0.7%
Other Human Factor	381	4.7%	141	2.6%
Vehicular Factors				
Skidding	325	4.0%	224	4.1%
Defective Brakes	45	0.6%	33	0.6%
Oversize/Overweight Vehicle	4	0.0%	3	0.1%
Other Vehicular Factor	54	0.7%	44	0.8%
Miscellaneous Factors				
Weather Conditions	463	5.8%	301	5.5%
Other	320	4.0%	182	3.3%
Total Contributing Factors	8,043	100.0%	5,484	100.0%
Vehicles for Which There Was “No Clear Contributing Factor”	4,601		4,985	
Total Number of Drivers	11,870		10,055	

*The term ‘Drivers’ refers to a driver of any motor vehicle.

Contributing factor data for the ‘Other Vehicle Drivers’ includes pedestrians and bicyclists. Pedestrians and bicyclists are not included in the ‘Senior Driver’ data.

Zero, one, or two contributing factors may be attributed to each vehicle, pedestrian, or bicyclist involved in a crash. This may cause the sum of the factors cited to differ from the number of drivers, pedestrians, or bicyclists. Percentages are based on all contributing factors listed. They may not sum to 100 due to rounding.

DEFINITIONS

Accident — See motor vehicle crash.

Alcohol Concentration — The level of alcohol in a person's body as measured by blood, breath, or urine.

Alcohol-Related Fatal Crash — A crash that results in one or more deaths and in which the investigating officer suspected alcohol involvement or in which the results of an alcohol concentration test were positive for any driver, pedestrian, or bicyclist involved in the crash.

Alcohol-Related Fatality — A death resulting from an alcohol-related crash.

Alcohol-Related Injury Crash — A non-fatal crash in which one or more persons are injured and in which the investigating officer suspected alcohol involvement for any driver, pedestrian, or bicyclist involved in the crash. (Since only the officer's perception is used in this definition, alcohol-related injury crashes and injuries are probably underestimated.)

Alcohol-Related Injury — A non-fatal injury resulting from an alcohol-related crash.

Alcohol-Related Property Damage Crash — A crash in which no one is killed or injured and the investigating officer suspected alcohol involvement for any driver, pedestrian, or bicyclist involved in the crash.

Bicycle Crash — A motor vehicle crash involving one or more bicycles.

Child Safety Seats — Safety devices designed to fit in motor vehicles that keep children securely in place. The seats are required by law for children less than four years of age.

Crash — See motor vehicle crash.

Driver — The occupant of a motor vehicle who is in actual physical control of the vehicle in transit or, for an out-of-control vehicle, the occupant who was in control before control was lost.

Economic Loss — An approximation of the costs associated with crashes, based upon current National Safety Council estimates of the loss to society for each fatality, injury and property damage crash.

Fatal Crash — A motor vehicle crash on a public traffic-way in which at least one person dies unintentionally as a result of the crash. The death must occur within 30 days of the crash.

First Harmful Event — The first event during a crash that caused injury or property damage.

Injury Severity

Fatal Injury — An injury that results in an unintentional death within 30 days of the crash.

Severe or Incapacitating Injury — An injury (other than fatal) that prevents the injured person from walking, driving or normally continuing the activities he or she was capable of performing before the injury occurred. Includes severe lacerations, broken or distorted limbs, skull fracture, crushed chest, internal injuries, unconsciousness, etc. Hospitalization is usually required.

Moderate/Non-Incapacitating injury — An injury (other than fatal or severe) that is evident to the officer at the scene of the crash. Includes abrasions, minor lacerations, bleeding, etc. May require medical treatment, but hospitalization is usually not required.

Minor or Possible Injury — An injury (other than fatal, severe, or moderate) that is reported by a person involved in the crash. Includes complaint of physical pain when no cause is evident, momentary unconsciousness, limping, nausea, hysteria, etc.

Motorcycle — A two-wheeled or three-wheeled motor vehicle having one or more riding saddles and having an engine of more than 50 cc. If it has a 50 cc or smaller engine, it is classified as a motorized bicycle or motor scooter/motorbike.

Motorcycle Crash — A motor vehicle crash involving one or more motorcycles.

Motor Vehicle — A self-propelled vehicle, including attached trailers and semi trailers designed for use with such vehicles.

Motor Vehicle Crash — A crash that involves a motor vehicle in transport on a public traffic-way in Minnesota and results in injury, death, or at least \$1,000.00 in property damage.

Occupant — Any person who is in or on a vehicle, including the driver, passenger and persons riding on the outside of the vehicle.

Occupant Restraints — Protective devices used in motor vehicles to keep the driver and passengers in their seats and prevent them from being ejected from the motor vehicle in a crash. Restraint devices include lap belts, lap/shoulder harness combinations, air bags and child safety seats.

Passenger — Any occupant of a motor vehicle other than the driver.

Pedestrian — Any person not in or on a motor vehicle or other vehicle (e.g., a bicycle).

Pedestrian Crash — A motor vehicle crash involving one or more pedestrians.

Restraint Usage — An occupant's use of available vehicle restraints including lap belt, lap/shoulder combination harness, or child safety seats.

Rural — Having a population of fewer than 5,000.

School Bus Crash — A crash involving one or more school buses. The school bus must collide with another vehicle, or pedestrian, or object, for the crash to be classified as a school bus crash.

Trafficway — Any land way open to the public as a matter of right or custom for moving persons or property from one place to another.

Train/Motor Vehicle Crash — A motor vehicle crash involving a motor vehicle in transport and a railway train. Presently, the only crashes classified as train crashes are those in which the first harmful event is collision with a train.

Truck Crash — A motor vehicle crash involving one or more vehicles of the following types: (1) 2-axle, 6-tire single unit truck or step van, (2) 3-or-more-axle single unit truck, (3) single-unit truck with trailer, (4) truck tractor with no trailer, (5) truck tractor with semi-trailer, (6) truck tractor with double trailers, (7) truck tractor with triple trailers, (8) heavy truck of other or unknown type. Pickup trucks and vans are not counted as trucks.

Urban — Having a population of 5,000 or more.