Suggestions for Using *Crash Facts*

Crash Facts is designed to meet the needs of different audiences. If you are unfamiliar with this report, here are some suggestions that may make it easier for you to find the information you are seeking.

Legislators:
Section II though IX focus on particular traffic safety sub-areas (alcohol, seat belts, crashes involving motorcycles, pedestrians, and so on). Each section begins with a narrative that provides background, mentions highlights for the years, and discusses some legislative history (where appropriate). The first table in each section gives a ten-year history outlining key parameters of the problem.

Students studying traffic safety issues:
Of all age groups, teenagers and young adults pay the heaviest price in traffic safety (in terms of deaths and injuries). Each section contains tables focusing on age of drivers and victims in crashes.

Law enforcement community:
There are over 500 city, county, and state law enforcement agencies in Minnesota. Each agency has access to its own reports on traffic crashes, but the data are brought together here. Table 1.24 shows statistical information arranged by county. Table 1.25 reports on the traffic crash experience of almost 200 cities with populations over 2,500.

Public health:
Traffic crashes cause deaths and injuries; they are the leading cause of death to people from age 1 to 34 (people generally thought of as "too young to die"). *Crash Facts* contains many tables that show age and gender of drivers and victims, and many tables focus on the contributing factors in crashes. Section II contains tables relevant to chemical dependency issues, in particular, alcohol use and crash involvement.

City and county government agencies:
Information about your county will be found in Tables 1.24; your city's statistics may be listed in Table 1.25. The Office of Traffic Safety can provide additional information on traffic crashes in your county or city; just contact us at the address shown below.

Data availability:
This report presents a wide spectrum of information in more than 100 tables and figures, but it may not answer every question. You may request additional data. Each response usually requires from one day to two weeks, depending on the complexity of the request.

Such requests should be directed to:

Department of Public Safety
Office of Traffic Safety
444 Cedar Street, Suite 150
St. Paul, MN 55101-5150
(651) 201-7076

MINNESOTA MOTOR VEHICLE

CRASH FACTS

2012

A summary of crashes occurring on Minnesota roadways based on crash reports submitted to the Minnesota Department of Public Safety by investigating police officers and drivers.

Produced by:
Minnesota Department of Public Safety
444 Cedar Street, Suite 150
St. Paul, MN 55101-5150
(651) 201-7076
[TTY (651) 282-6555]
dps.mn.gov

© 2013, Office of Traffic Safety

For additional copies contact:
Office of Communications
Phone (651) 201-7575

Acknowledgements:
Many thanks to the Crash Records Section of the Driver and Vehicle Services Division at the Department of Public Safety for their excellent data quality control work. Thanks also to the State Patrol, the Bureau of Criminal Apprehension, Sheriffs, Police Chiefs, and Medical Examiners for their assistance regarding alcohol-related crashes. And many thanks to all of the Minnesota officers and troopers who were on the scene of these traffic crashes. Their hard work and data reporting make this book a valuable document to traffic safety researchers, legislators, the media, and the public.

Note:
The Minnesota Department of Public Safety is working to create an accessible electronic version of this document that meets the State of Minnesota Accessibility Standard and Minnesota State Statutes Section 16E.03. The most up-to-date version of this document will be posted on the Minnesota Department of Public Safety Website:
https://dps.mn.gov/divisions/ots/
Click on the "Reports and Statistics" tab.
This site also includes yearly archived Crash Facts reports.

Office of the Commissioner

445 Minnesota Street • Suite 1000 • Saint Paul, Minnesota 55101-5100
Phone: 651.201.7160 • Fax: 651.297.5728 • TTY: 651.282.6555
www.dps.mn.gov

Alcohol and Gambling Enforcement

Bureau of Criminal Apprehension

Driver and Vehicle Services

Emergency Communication Networks

Homeland Security and Emergency Management

Minnesota State Patrol

Office of Communications

Office of Justice Programs

Office of Traffic Safety

State Fire Marshal

June 2013

We have made great progress to reduce fatalities by 40 percent in the last decade but unfortunately, our roads are still far too deadly.

Last year, 395 people lost their lives on Minnesota roads, a slight increase from 368 deaths in 2011. Of those killed in 2012, 116 were not buckled up and 104 of the deaths were due to drunk driving.

This report, *Minnesota Motor Vehicle Crash Facts,* takes a detailed look at crashes on our roads and describes how and why these crashes happened, where they occurred and who was involved.

This data will help the Minnesota Department of Public Safety (DPS) determine future traffic safety initiatives that will lead to safer roads and smarter, more efficient programs to advance road safety.

But it's the people behind these numbers that motivate everyone in DPS and our traffic safety partners to do more. Behind every statistic listed here are stories of people. People who are no longer with us, who died in horrific and violent crashes. And, there are people whose lives are forever changed due to a crash — and now they suffer from paralysis, brain injury, or other life-changing ailments.

When you look through this report, please remember that with each number is a face, a life, a story. These numbers — these people — are the reasons and reminders for all of us to make safe, smart decisions behind the wheel.

On the road, we share a common goal: To get where we are going safely. And to do so, we all need to do our part: Drive at safe speeds, be courteous and patient, pay attention, and of course be buckled up and sober behind the wheel.

These tragedies on our roads are preventable. It's up to each of us to do the preventing.

Sincerely,

Ramona L Dohman

Mona Dohman
Commissioner, Department of Public Safety

Minnesota Traffic Crashes in 2012

OVERVIEW

This edition of *Minnesota Motor Vehicle Crash Facts* summarizes the crashes, deaths, and injuries that occurred on Minnesota roadways during 2012. The information provided in this book will assist you in traveling our roadways safely.

In 2012:

- 69,236 traffic crashes were reported to the Minnesota Department of Public Safety (DPS)
- 125,746 motor vehicles and 168,674 people were involved in these crashes
- 395 people died and 29,314 people were injured
- Estimated economic cost to Minnesota: $1,513,639,100

On an average day in 2012:

- 189 crashes
- 1 death and 80 injuries
- Average daily cost: $4,135,626

2012 crashes that were known to be alcohol-related:

- 3,837 crashes
- 131 deaths and 2,644 injuries
- Estimated economic cost: $262,906,600

Highlights from the 2012 *Crash Facts* edition

- **Traffic fatalities increase.**
  In 2012, Minnesota experienced an increase in traffic fatalities of 7.3 percent from the previous year. This is disappointing considering the fact that traffic fatalities in Minnesota have decreased sharply during the past decade. Also, 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 94 percent.**
  An observational study in August, 2012 showed that belt use by front seat drivers and passengers was 94%. It is a known fact that 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 2012 is 0.69, one of the lowest in the nation. The VMT fatality rate has shown dramatic improvement in the last five decades (it was 5.52 in 1966).

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 2012. Information provided includes:

- Historical information dating back to 1965 (Table 1.01)
- Contributing factors 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 86, 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 91, 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 96, 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 100, you will find information pertaining to teen involved traffic crashes.

- This section focuses of teen drivers aged 15 through 19.

TABLE OF CONTENTS

INTRODUCTION **1**

FIGURE 1
VEHICLES, DRIVERS AND FATALITY RATE, 1966-2012 ..... *3*
TABLE 1
MINNESOTA TRAFFIC FATALITIES, 1910 – 2012 ..... *4*
FIGURE 2
MINNESOTA TRAFFIC FATALITIES, 1910-2012 ..... *4*
TABLE 2
DRIVER LICENSE SUMMARY BY AGE, 2007 - 2012* *5*
TABLE 3
MOTOR VEHICLE REGISTRATIONS, 2007 - 2012 ..... *6*

I. ALL CRASHES **7**

TABLE 1.01
TRAFFIC SAFETY STATISTICS SUMMARY, 1965 - 2012 ..... *9*
TABLE 1.02
TRAFFIC CRASH TRENDS 2007 - 2012 ..... *10*
TABLE 1.03
2012 FATALITIES BY TRAFFIC ROLE, GENDER, AND AGE *11*
TABLE 1.04
AGE AND GENDER OF PERSONS KILLED OR INJURED IN 2012 CRASHES *12*
TABLE 1.05
AGE AND GENDER OF DRIVERS IN 2012 CRASHES *13*
TABLE 1.06
LICENSED VS. CRASH-INVOLVED DRIVERS BY AGE, 2012 ..... *14*
FIGURE 1.01
AGE AND GENDER OF PERSONS KILLED OR INJURED, 2012 ..... *15*
FIGURE 1.02
LICENSED VS CRASH-INVOLVED DRIVERS BY AGE, 2012 ..... *15*
TABLE 1.07
PERCENTAGE OF DRIVERS IN 2012 CRASHES BY AGE AND FIRST HARMFUL EVENT *16*
TABLE 1.08
*DRIVERS IN 2012 CRASHES BY PHYSICAL CONDITION** *16*
TABLE 1.09
SINGLE-VEHICLE CRASHES: CONTRIBUTING FACTORS, BY PERCENT, WITHIN DRIVER AGE GROUPS, 2012 ..... *17*
TABLE 1.10
MULTIPLE-VEHICLE CRASHES: CONTRIBUTING FACTORS, BY PERCENT, WITHIN DRIVER AGE GROUPS, 2012 ..... *18*
TABLE 1.11
PERSONS INVOLVED IN CRASHES BY TYPE OF VEHICLE OCCUPIED AND INJURY SEVERITY, 2012 ..... *19*
TABLE 1.12
TYPES OF MOTOR VEHICLES IN 2012 CRASHES *20*
TABLE 1.13
2012 CRASHES BY FIRST HARMFUL EVENT *21*
TABLE 1.14
2012 "HIT-AND-RUN" CRASHES BY FIRST HARMFUL EVENT *21*
TABLE 1.15

2012 CRASHES BY TRAFFIC CONTROL DEVICE *22*
TABLE 1.16
2012 CRASHES BY WEATHER CONDITION *22*
TABLE 1.17
CONTRIBUTING FACTORS IN 2012 CRASHES *23*
TABLE 1.18
2012 CRASHES BY LIGHT CONDITION *24*
TABLE 1.19
2012 CRASHES BY ROAD SURFACE CONDITION *24*
TABLE 1.20
2012 CRASHES BY ROAD DESIGN *24*
TABLE 1.21
2012 CRASHES BY DIAGRAM *25*
TABLE 1.22
2012 CRASHES BY POPULATION OF AREA *25*
TABLE 1.23
2012 CRASHES BY TYPE OF ROADWAY *26*
TABLE 1.24
2012 COUNTY CRASH REPORT *27*
TABLE 1.24 CONTINUED
2012 COUNTY CRASH REPORT *28*
TABLE 1.24 CONTINUED
2012 COUNTY CRASH REPORT *29*
TABLE 1.25
2012 CRASHES IN CITIES OF 2,500 OR MORE POPULATION *30*
TABLE 1.25 CONTINUED
2012 CRASHES IN CITIES OF 2,500 OR MORE POPULATION *31*
TABLE 1.25 CONTINUED
2012 CRASHES IN CITIES OF 2,500 OR MORE POPULATION *32*
TABLE 1.25 CONTINUED
2012 CRASHES IN CITIES OF 2,500 OR MORE POPULATION *33*
TABLE 1.25 CONTINUED
2012 CRASHES IN CITIES OF 2,500 OR MORE POPULATION *34*
TABLE 1.26
2012 CRASHES BY TIME AND DAY *35*
FIGURE 1.03
TOTAL CRASHES VS FATAL CRASHES, BY TIME, 2012 ..... *36*
TABLE 1.27
2012 CRASHES, FATALITIES, AND INJURIES BY MONTH *36*
TABLE 1.28
HOLIDAY CRASH SUMMARY, 2007 - 2012 ..... *37*

II: ALCOHOL - RELATED CRASHES 38

TABLE 2.01
ALCOHOL-RELATED FATAL CRASH SUMMARY, 1980 - 1989 ..... *40*
ALCOHOL-RELATED FATAL CRASH SUMMARY, 1990 – 2012 ..... *40*

TABLE 2.02
IMPAIRED DRIVING INCIDENTS ("DWIs") BY GENDER AND BY AREA OF STATE WHERE ARREST WAS MADE, 1996 - 2012 ..... *41*
TABLE 2.03
IMPAIRED DRIVING INCIDENTS ("DWIs") FOR SELECTED AGE GROUPS, 1996 - 2012 .... *41*
FIGURE 2.01
PERCENT OF IMPAIRED DRIVING INCIDENTS ("DWIs") COMMITTED BY OFFENDERS IN FOUR AGE GROUPS, 1990-2012 ..... *42*
TABLE 2.04
IMPAIRED DRIVING INCIDENTS ("DWIs") BY AGE, 1996 - 2012 ..... *42*
TABLE 2.05
AGE OF PERSONS KILLED AND INJURED IN ALL CRASHES AND IN ALCOHOL - RELATED CRASHES, 2012 ..... *43*
TABLE 2.06
2012 ALCOHOL - RELATED FATALITIES' LEVEL OF ALCOHOL CONCENTRATION BY TRAFFIC ROLE *44*
TABLE 2.07
PERCENT OF DEATHS, INJURIES, AND PROPERTY DAMAGE CRASHES DETERMINED TO BE ALCOHOL - RELATED, 2003 - 2012 ..... *44*
TABLE 2.08
FIRST HARMFUL EVENT IN ALCOHOL-RELATED FATAL CRASHES AND ALL FATAL CRASHES, 2012 ..... *44*
TABLE 2.09
TEST RESULTS OF DRIVERS KILLED, 2003 - 2012 ..... *45*
TABLE 2.10
DRIVERS KILLED WHO TESTED .01 OR HIGHER, 2003 - 2012 ..... *45*
TABLE 2.11
DRIVERS KILLED WHO TESTED OVER THE LEGAL LIMIT, 2003 - 2012 ..... *45*
FIGURE 2.02
KILLED DRIVERS TESTED FOR ALCOHOL: 1980-2012 ..... *46*
FIGURE 2.03
PERCENT OF DRIVERS KILLED WHO HAD BEEN DRINKING, BY AGE, 2012 ..... *46*
TABLE 2.12
2012 DRIVER FATALITIES' LEVEL OF ALCOHOL CONCENTRATION BY AGE *47*
TABLE 2.13
2012 ALCOHOL - RELATED CRASHES BY MONTH *48*
TABLE 2.14
2012 ALCOHOL - RELATED CRASHES BY ROADWAY TYPE *48*
FIGURE 2.04
2012 ALCOHOL-RELATED CRASHES BY TIME OF DAY *49*
FIGURE 2.05
2012 ALCOHOL-RELATED CRASHES BY DAY OF WEEK *49*
TABLE 2.15
2012 ALCOHOL-RELATED CRASHES BY TIME OF DAY AND DAY OF WEEK *50*

III: SAFETY EQUIPMENT USE BY 51

VEHICLE OCCUPANTS IN 2012 CRASHES 51

TABLE 3.01
PERCENT OF FRONT SEAT OCCUPANTS WEARING SAFETY BELTS, BY DATE OF OBSERVATION STUDY *52*

TABLE 3.02
MOTOR VEHICLE OCCUPANTS KILLED OR INJURED BY EJECTION STATUS AND INJURY SEVERITY, 2012 ..... *53*
TABLE 3.03
MOTOR VEHICLE OCCUPANTS KILLED/INJURED, BY AGE & INJURY SEVERITY, 2012 .... *53*
FIGURE 3.01
SAFETY EQUIPMENT USE AMONG MOTOR VEHICLE OCCUPANTS KILLED OR INJURED, BY AGE, 2012 ..... *54*
TABLE 3.04
SAFETY EQUIP.USE BY VEHICLE OCCUPANTS, BY GENDER & INJURY SEVERITY, 2012 . *54*
TABLE 3.05
SAFETY EQUIPMENT USE BY VEHICLE OCCUPANTS KILLED OR INJURED, BY AGE AND INJURY SEVERITY, 2012 ..... *55*
TABLE 3.05 CONTINUED
SAFETY EQUIPMENT USE BY VEHICLE OCCUPANTS KILLED OR INJURED, BY AGE AND INJURY SEVERITY, 2012 ..... *56*
TABLE 3.06
PERCENT OF KILLED OR INJURED MOTOR VEHICLE OCCUPANTS WHO USED SAFETY EQUIPMENT, BY INJURY SEVERITY AND YEAR, 2003 - 2012 ..... *57*
TABLE 3.07
SAFETY EQUIPMENT USE BY MOTOR VEHICLE OCCUPANTS KILLED OR INJURED, BY ROADWAY TYPE, 2012 ..... *57*
TABLE 3.08
SAFETY EQUIPMENT USE BY MOTOR VEHICLE OCCUPANTS KILLED OR INJURED, BY REGION OF THE STATE, 2012 ..... *58*
TABLE 3.09
AIRBAG DEPLOYMENTS, 2005 - 2012 ..... *59*

IV: MOTORCYCLE CRASHES 60

TABLE 4.01
MOTORCYCLE CRASH SUMMARY, 1981 – 2012 ..... *61*
TABLE 4.02
2012 MOTORCYCLE CRASHES BY FIRST HARMFUL EVENT *62*
TABLE 4.03
2012 MOTORCYCLE CRASHES BY POPULATION OF AREA *62*
TABLE 4.04
2012 MOTORCYCLE CRASHES BY MONTH *63*
FIGURE 4.01
2012 MOTORCYCLE CRASHES BY TIME OF DAY *63*
TABLE 4.05
2012 MOTORCYCLE CRASHES BY TIME AND DAY *64*
TABLE 4.06
MOTORCYCLISTS KILLED OR INJURED BY AGE AND GENDER, 2012 ..... *65*
FIGURE 4.02
MOTORCYCLISTS KILLED OR INJURED BY AGE AND GENDER, 2012 ..... *65*
TABLE 4.07
HELMET USE BY MOTORCYCLISTS KILLED OR INJURED, 2003 - 2012 ..... *66*
TABLE 4.08
ENDORSEMENT STATUS OF MOTORCYCLE OPERATORS INVOLVED IN FATAL CRASHES, 2003 - 2012 ..... *66*

TABLE 4.09
ALCOHOL USE BY KILLED MOTORCYCLE DRIVERS, 2003 – 2012 ..... *67*
TABLE 4.10
2012 MOTORCYCLE DRIVER FATALITIES LVL OF ALCOHOL CONCENTRATION BY AGE. *67*
TABLE 4.11
CONTRIBUTING FACTORS IN 2012 MOTORCYCLE CRASHES *68*

V. TRUCK CRASHES 69

TABLE 5.01
TRUCK CRASH SUMMARY, 2003 - 2012 ..... *70*
TABLE 5.02
PERSONS KILLED OR INJURED IN 2012 TRUCK CRASHES BY VEHICLE OCCUPIED *70*
TABLE 5.03
CONTRIBUTING FACTORS IN 2012 TRUCK CRASHES *71*
TABLE 5.04
AGE OF TRUCK DRIVERS IN 2012 CRASHES *72*
TABLE 5.05
*DRIVERS IN 2012 TRUCK CRASHES BY PHYSICAL CONDITION** *72*
TABLE 5.06
2012 TRUCK CRASHES BY FIRST HARMFUL EVENT *73*
TABLE 5.07
2012 TRUCK CRASHES BY MONTH *73*
TABLE 5.08
2012 TRUCK CRASHES BY TIME AND DAY *74*
FIGURE 5.01
2012 TRUCK CRASHES BY TIME OF DAY *74*
TABLE 5.09
2012 TRUCK CRASHES BY ROAD SURFACE CONDITION *75*
TABLE 5.10
2012 TRUCK CRASHES BY WEATHER CONDITION *75*
TABLE 5.11
2012 TRUCK CRASHES BY POPULATION OF AREA *76*
TABLE 5.12
2012 TRUCK CRASHES BY TYPE OF ROADWAY *76*

VI: PEDESTRIAN CRASHES 77

TABLE 6.01
PEDESTRIAN CRASH SUMMARY, 2003 - 2012 ..... *78*
TABLE 6.02
PEDESTRIANS KILLED OR INJURED BY AGE AND GENDER, 2012 ..... *78*
FIGURE 6.01
PEDESTRIAN FATALITIES BY AGE GROUP, 2003-2012 COMBINED *79*
FIGURE 6.02
PEDESTRIANS KILLED OR INJURED BY AGE AND GENDER 2012 ..... *79*
TABLE 6.03
2012 PEDESTRIAN CRASHES BY MONTH *80*
TABLE 6.04
2012 PEDESTRIAN CRASHES BY POPULATION OF AREA *80*
TABLE 6.05
2012 PEDESTRIAN CRASHES BY TIME AND DAY *81*

FIGURE 6.03
2012 PEDESTRIAN CRASHES BY TIME OF DAY *81*
TABLE 6.06
PRIOR ACTION OF VEHICLES IN 2012 PEDESTRIAN CRASHES *82*
TABLE 6.07
PRIOR ACTION OF PEDESTRIANS KILLED OR INJURED IN 2012 ..... *82*
TABLE 6.08
CONTRIBUTING FACTORS IN 2012 PEDESTRIAN CRASHES *83*
TABLE 6.09
PEDESTRIAN FATALITIES' LEVEL OF ALCOHOL CONCENTRATION, 2003 - 2012 ..... *84*
TABLE 6.10
2012 PEDESTRIAN FATALITIES' LEVEL OF ALCOHOL CONCENTRATION BY AGE *84*
TABLE 6.11
2012 PEDESTRIAN FATALITIES LVL OF ALCOHOL CONCENTRATION BY TIME OF DAY .. *85*

VII: BICYCLE CRASHES 86

TABLE 7.01
BICYCLE CRASH SUMMARY, 2003- 2012 ..... *87*
TABLE 7.02
2012 BICYCLE CRASHES BY MONTH *87*
FIGURE 7.01
2012 BICYCLE CRASHES BY TIME OF DAY *87*
TABLE 7.03
2012 BICYCLE CRASHES BY TIME AND DAY *88*
TABLE 7.04
2012 BICYCLE CRASHES BY POPULATION OF AREA *88*
FIGURE 7.02
BICYCLISTS KILLED OR INJURED BY AGE AND GENDER 2012 ..... *88*
TABLE 7.05
BICYCLISTS KILLED OR INJURED BY AGE AND GENDER, 2012 ..... *89*
TABLE 7.06
PRIOR ACTION OF BICYCLISTS INVOLVED IN 2012 CRASHES *89*
TABLE 7.07
CONTRIBUTING FACTORS IN 2012 BICYCLE CRASHES *90*

VIII: SCHOOL BUS CRASHES 91

TABLE 8.01
SCHOOL BUS CRASH SUMMARY, 2003 - 2012 ..... *92*
TABLE 8.02
2012 SCHOOL BUS CRASHES BY TIME OF DAY *92*
TABLE 8.03
2012 SCHOOL BUS CRASHES BY MONTH *92*
TABLE 8.04
AGE AND GENDER OF PERSONS INJURED IN 2012 SCHOOL BUS CRASHES *93*
TABLE 8.05
PERSONS KILLED/INJURED IN 2012 SCHOOL BUS CRASHES BY POPULATION OF AREA *93*
TABLE 8.06
2012 SCHOOL BUS CRASHES BY FIRST HARMFUL EVENT *94*
TABLE 8.07
2012 SCHOOL BUS CRASHES BY TRAFFIC CONTROL DEVICE *94*

TABLE 8.08
CONTRIBUTING FACTORS IN 2012 SCHOOL BUS CRASHES *95*

IX: MOTOR VEHICLE/TRAIN CRASHES 96

TABLE 9.01
MOTOR VEHICLE / TRAIN CRASH SUMMARY, 2003 – 2012 ..... *97*
TABLE 9.02
2012 MOTOR VEHICLE / TRAIN CRASHES BY MONTH *97*
TABLE 9.03
2012 MOTOR VEHICLE / TRAIN CRASHES BY TIME AND DAY *97*
TABLE 9.04
2012 MOTOR VEHICLE / TRAIN CRASHES BY TRAFFIC CONTROL DEVICE *98*
TABLE 9.05
2012 MOTOR VEHICLE / TRAIN CRASHES AGE OF PERSONS KILLED OR INJURED *98*
TABLE 9.06
2012 MOTOR VEHICLE / TRAIN CRASHES BY POPULATION OF AREA *99*
TABLE 9.07
2012 MOTOR VEHICLE / TRAIN CRASHES MOTOR VEHICLE DRIVER CONTRIBUTING FACTORS *99*

X: CRASHES INVOLVING TEEN DRIVERS 100

TABLE 10.01
TEEN CRASH SUMMARY, 2006 - 2012 ..... *101*
TABLE 10.02
TEEN 'MOTOR VEHICLE OCCUPANT' DRIVER CRASH INVOLVEMENT, 2006 - 2012 ..... *101*
TABLE 10.03
2012 TEEN INVOLVED CRASHES BY MONTH* *102*
TABLE 10.04
2012 TEEN INVOLVED CRASHES BY DAY OF WEEK *102*
TABLE 10.05
2012 TEEN INVOLVED CRASHES BY TIME OF DAY *103*
FIGURE 10.01
TOTAL TEEN INVOLVED CRASHES, BY TIME, 2012 ..... *103*
TABLE 10.06
CONTRIBUTING FACTORS IN 2012 TEEN INVOLVED CRASHES *104*

DEFINITIONS 105

Introduction

At the end of the 2012 calendar year, 4,038,718 people held Minnesota driver licenses and 5,023,656 motor vehicles were registered in the state. Vehicles traveled almost 57 billion miles on public roadways. There were 69,236 traffic crashes; 395 people died and 29,314 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 necessity of getting from one place to another and the efficiency of motor vehicles for this purpose result 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 and the fifth leading cause of death among all persons (*Injury Facts, 2005-2006 Edition,* p. 10-11).

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 2011 data. Based upon those, the total economic loss from 2012 traffic crashes in Minnesota was $1,513,639,100, a figure that is calculated as follows:

Cost of Motor Vehicle Crashes in 2012:

395	deaths	@	$1,420,000	=	$560,900,000
1,268	severe injuries	@	$70,500	=	$ 89,394,000
6,902	moderate injuries	@	$22,700	=	$156,675,400
21,144	minor injuries	@	$12,800	=	$270,643,200
47,915	PDO crashes	@	$9,100	=	$436,026,500
		Total			=$1,513,639,100

Factors affecting traffic crashes

Many factors may contribute to even a single crash. 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. Public policy cannot address the infinite number of individual causes imaginable.

There are a more limited number of factors that significantly affect the aggregate 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, 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. In fatal crashes, illegal or unsafe speed is cited most often, followed by driver inattention or distraction. Reducing these behaviors would reduce crashes. Further, when there is a crash, using safety equipment will reduce severity. Motorcyclists and bicyclists should wear helmets. Vehicle occupants should use safety belts. Infants and toddlers should always be placed in child safety seats, and booster seats should be used for older children.

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 signing.

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 a reverse 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 2012, there were approximately 34,000 traffic fatalities throughout the country and 395 in Minnesota. The respective fatality rates per hundred million miles of travel were 1.08 and 0.69. 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 ten sections. The first present's information on the aggregate of all crashes reported to the state during the preceding calendar year. The remaining eight 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), and school buses (section VIII), trains (section IX). The final section (X) summarizes information on teen driver involved crashes.

FIGURE 1

VEHICLES, DRIVERS AND FATALITY RATE, 1966-2012

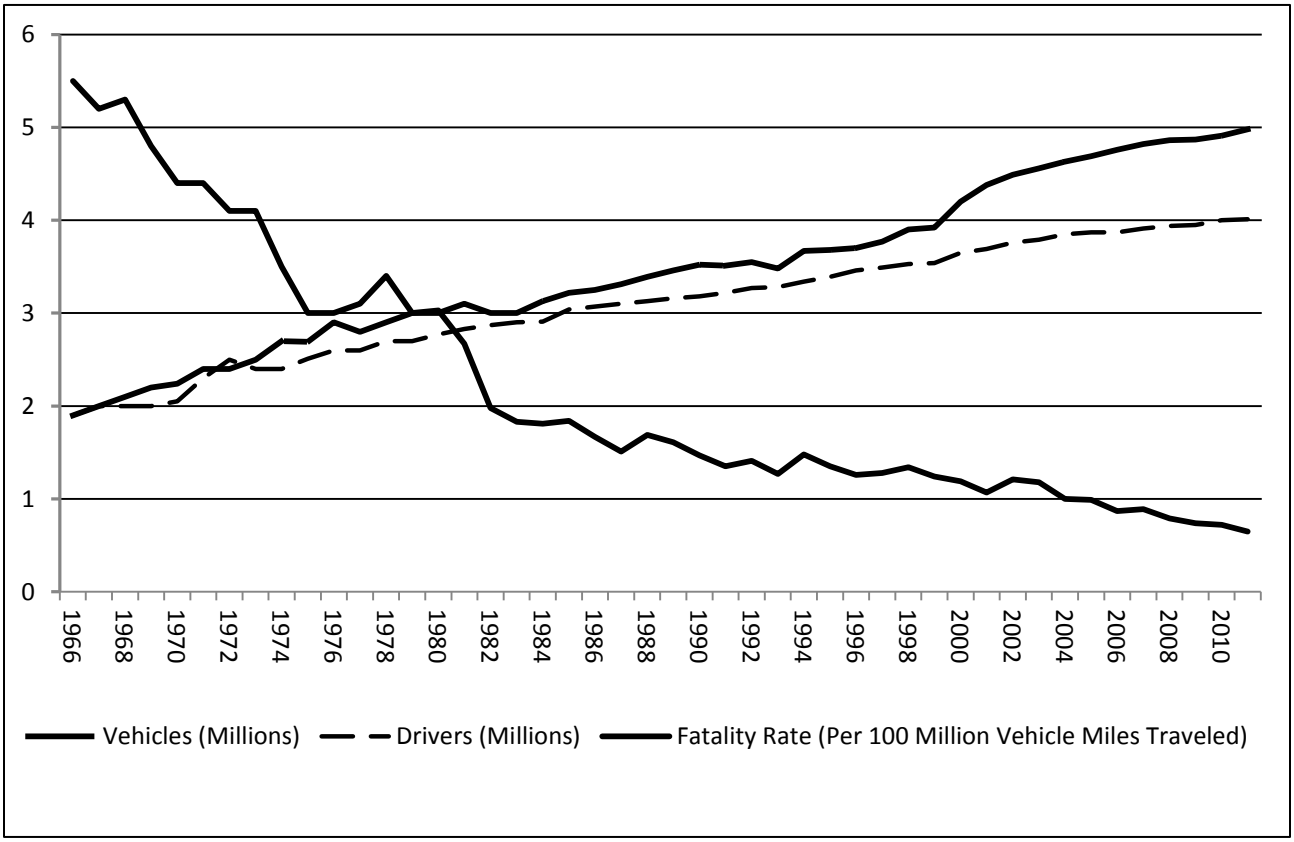

TABLE 1

MINNESOTA TRAFFIC FATALITIES, 1910 – 2012

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

FIGURE 2

MINNESOTA TRAFFIC FATALITIES, 1910-2012

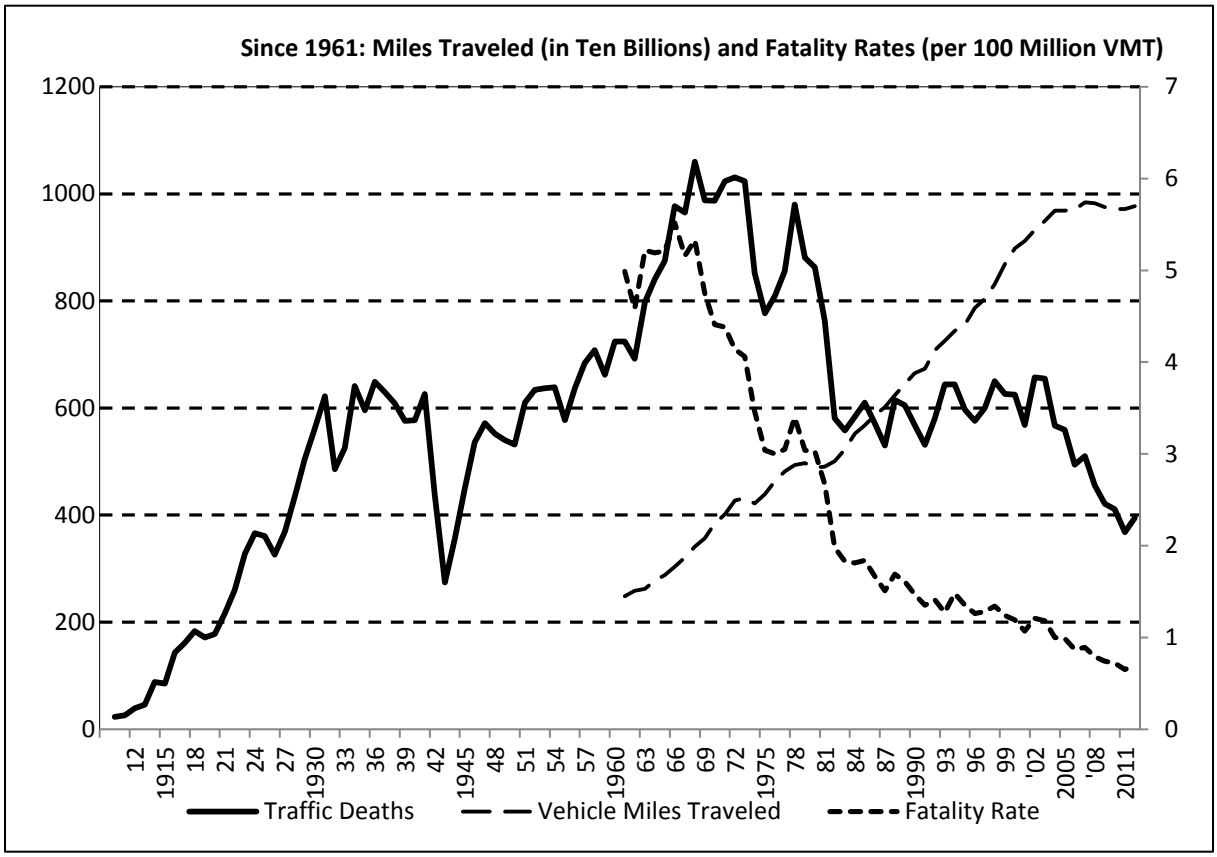

TABLE 2

DRIVER LICENSE* SUMMARY BY AGE, 2007 - 2012

Age	2007	2008	2009	2010	2011	2012
15	26,029	26,141	28,126	28,020	25,422	25,946
16	51,499	49,801	49,884	49,634	48,260	47,801
17	59,766	57,875	56,554	55,885	54,781	54,489
18	64,910	64,337	62,707	61,526	59,722	59,220
19	67,664	68,050	67,701	66,272	63,997	63,212
20	69,091	68,920	69,074	69,495	67,176	65,539
Under 21	338,959	335,124	334,046	330,832	319,358	316,207
15 – 19	269,868	266,204	264,972	261,337	252,182	250,668
20 – 24	351,877	350,535	347,193	348,937	343,942	341,891
25 – 29	360,944	365,501	364,228	366,813	358,738	356,653
30 – 34	316,410	324,694	330,073	342,756	351,489	359,718
35 – 39	336,604	327,911	319,456	311,858	306,985	312,377
40 – 44	358,091	347,387	339,999	340,906	336,514	330,720
45 – 49	401,496	399,215	391,392	380,685	365,193	351,004
50 – 54	369,195	376,096	382,435	389,685	392,410	392,344
55 – 59	314,238	324,589	332,705	343,840	350,359	358,458
60 – 64	239,650	251,756	265,450	282,820	293,833	301,734
65 – 69	178,918	187,347	193,513	198,777	213,587	226,107
70 – 74	136,026	140,879	143,738	149,002	155,347	164,699
75 – 79	114,678	113,740	113,517	114,320	116,871	119,643
80 – 84	88,606	89,045	87,672	88,821	90,620	90,268
85 & Older	71,373	73,502	71,997	74,678	79,683	82,434
Total	3,907,974	3,938,401	3,948,340	3,995,235	4,007,753	4,038,718

* 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, 2007 - 2012

Type of Vehicle*	2007	2008	2009	2010	2011	2012
Passenger Vehicles	3,406,848	3,455,451	3,478,218	3,527,503	3,579,033	3,621,291
Pickup Trucks	872,057	849,627	833,329	828,305	832,463	829,965
Commercial Trucks	217,059	215,107	213,489	214,680	216,532	220,623
Recreational Vehicles	37,399	34,998	35,042	34,797	33,070	32,511
Motorcycles	209,591	224,625	226,675	229,912	232,274	237,278
Motorized Bicycles	12,343	15,601	15,559	15,682	16,016	16,378
School Buses	6,399	6,766	6,810	6,940	6,951	7,120
Other Buses	5,312	5,076	4,996	5,067	5,161	5,105
Van Pool	199	205	165	174	226	210
Tax Exempt Vehicles	51,483	51,045	52,480	52,061	53,420	53,175
Motor Vehicle Subtotal	4,818,690	4,858,501	4,866,763	4,915,121	4,975,146	5,023,656
Other Registrations*						
Trailers	1,508,157	1,564,054	1,610,989	1,665,491	1,715,404	1,773,595
Classic Motor Vehicles	160,195	166,472	172,858	179,771	186,586	192,649
Classic Motorcycles	7,511	8,124	8,778	9,487	10,489	11,070
Other Subtotal	1,675,863	1,738,650	1,792,625	1,854,749	1,912,479	1,977,314
Total Registrations	6,494,553	6,597,151	6,659,388	6,769,870	6,887,625	7,000,970

* 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 "Van Pools"). A Van Pool 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. This is a very large number that is commensurate with the critical dependence we have placed upon motor vehicles for all sorts of transportation needs. Preventing the number of traffic crashes remains a challenge each year for public safety officials because; by the end of the calendar year 2012:

- The population of Minnesota increased to 5.35 million.
- Over 5 million motor vehicles were registered.
- There were 4 million licensed drivers.
- Almost 57 *billion* miles were driven in Minnesota.

These numbers increase steadily. And, as more and more roads are constructed, the citizens of Minnesota face an extreme challenge in reducing this dependence on the motor vehicle, and with it, the high number and severity of traffic crashes.

Crashes decrease, fatalities increase in 2012

There were 69,236 traffic crashes reported to Public Safety in 2012, a decrease of 4.0% from 2011. However, there were 395 deaths on Minnesota roads, a 7.3% increase from the previous year. This was the first increase since 2007. 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 2012

The following facts give an overall picture of 2012 traffic crashes; In addition to the 395 killed…

- 29,314 were injured.
- 1,268 of these were severe injuries.
- 6,902 of these were moderate injuries.
- 21,144 of these were minor injuries.

- In all crashes, 168,674 people were involved.
- In all crashes, 125,746 motor vehicles were involved.
- There were 920 crashes that involved at least 1 bicyclist.
- There were 878 crashes that involved at least 1 pedestrian.

- One-third of all crashes involved just one vehicle.
- One-fourth of all fatalities were less than 25 years of age.
- 2 of 3 fatalities occurred in rural areas (< 5,000 pop.).
- In all, 6,309 crashes were "hit-and-run".
- The economic loss to Minnesota was over $1.5 billion.

WHO was involved?

Among drivers, young people and males are over represented in traffic crashes in Minnesota. There are 4,038,718 licensed drivers in the state. People aged 15- 24 make up 14.7% of the licensed drivers, yet they accounted for 24.3% of the crash-involved drivers. Drivers aged 20-24 are the worst, from this perspective. In 2012, they represented just 8.5% of the licensed drivers, but 13.7% of all crash-involved drivers. By contrast drivers over 65 made up 16.9% of the driving population, but accounted for just 8.6% of the crash-involved drivers. Crash-involved drivers are also more likely to be males: 73.1% of drivers in fatal crashes were male; 55.8% of drivers in all crashes were male.

Traffic crashes are the leading cause of death to young people. In the state last year, 138 people under age 30 died in crashes, representing 35% of all traffic deaths. As mentioned previously, people over 65 are safe drivers as a general rule, but are more likely to be killed if they are involved in a traffic crash. Senior citizen drivers were involved in only 8.6% of all traffic crashes in 2012 but accounted for 21% of the traffic fatalities.

Among people injured, young people especially pay the price. There were 12,244 people under age 30 who were injured, representing 42% of the total number of people injured. People aged 65 and over accounted for just 9% of all traffic injuries.

WHY they happened

Because defective equipment (such as a flat tire) may be a contributing factor in a particular traffic crash, an officer at the scene will list 0, 1, or 2 contributing factors for each 'vehicle' involved. Thus, the 'cause' of a crash is sometimes not entirely clear as multiple vehicular factors in a crash may be listed alongside multiple human factors. However, vehicular factors are not cited as often as human factors. Human behavior factors usually give us a clear indication of why a traffic crash occurs.

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 less than 65 years old. For them, driver inattention or distraction is the most cited factor. 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 395 traffic fatalities, 267 (68%) were from these 4 vehicle types. There were also 40 pedestrians, 55 motorcyclists, and 7 bicyclists who died in traffic crashes. There were 9 deaths to ATV riders, and 5 fatalities among commercial truck occupants.

A collision with another vehicle is the leading crash type. About 40% of the fatal crashes and almost two-thirds (65%) 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 two-thirds of nonfatal crashes occurred during daylight hours. A majority of crashes occur also 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, 80% were on dry roads, 9% were on wet roads, and 6% 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, 231 (66%) of all fatal crashes occurred in rural areas, which are defined as having a population of less than 5,000 people. And, 130 (37%) of all fatal crashes occurred on county state aid highways, and 89 of those were in rural areas. Injury and property damage crashes are more common in urban areas. Over two-thirds of them happened inside cities of 5,000 or more population. The seven county metro area, with over half the state's population, accounted for only 28% 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 observable fact has changed since the early 1990's when most fatal crashes occurred during the time period of 10:00 p.m.-2:00 a.m. at night. 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, 44% of all crashes occurred. This event has not changed over the years. Indeed, Figure 1.03 on page 36 shows that the afternoon time period is truly a dangerous time to be driving.

Fridays, Saturdays, and Sundays accounted for 158 of the 349 total fatal crashes (45%). Total crashes are more evenly distributed across days of the week, although Fridays had the most (18%) and Sundays had the least (11%).

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 2012 followed this axiom. Because of severe weather, December had the most crashes reported of any month (8,099). As a general rule, warmer weather produces more fatalities. September and August had the most with 48 and 42 respectively. As mentioned earlier, though, other factors are involved than strictly the weather. These include speeding, drinking and driving, not wearing a seat belt, and not paying attention while driving.

Can traffic crashes be prevented?
Each year over the past decade, about 450 people were killed and 30,000 people were injured on our roadways. We must acknowledge the fact that Minnesota is still experiencing an "epidemic" concerning traffic crashes. 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 and never drive impaired.

TABLE 1.01

TRAFFIC SAFETY STATISTICS SUMMARY, 1965 - 2012

Year (a)	Total Crashes (b)	Persons Killed (c)	Persons Injured (d)	Licensed Drivers (million) (e)	Motor Vehicles (MV) (million) (f)	State Popu-lation (million) (g)	Vehicle Miles Traveled (VMT) (billion) (h)	Crash Rates Per 100,000 MV (i)	Crash Rates Per 100,000 Popu-lation (j)	Crash Rates Per 100 Mil VMT (k)	Fatality Rates Per 100,000 MV (l)	Fatality Rates Per 100,000 Popu-lation (m)	Fatality Rates Per100 Mil VMT (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	5.35	57.0	1,378	1,293	122	7.9	7.4	0.69

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
2007 - 2012

	2007	2008	2009	2010	2011	2012	Record High	
Fatal Crashes	**463**	**420**	**371**	**364**	**334**	**349**	**878**	**(1973)**
Injury Crashes	**24,978**	**23,914**	**22,159**	**22,013**	**21,662**	**20,972**	**33,686**	**(1978)**
Severe	1,441	1,248	1,036	974	954	1,044	5,109	(1984)[1]
Moderate	7,099	6,493	5,942	5,792	5,581	5,423	12,326	(1985)[1]
Minor	16,438	16,173	15,181	15,247	15,127	14,505	18,578	(1996)[1]
PDO Crashes	**56,064**	**54,761**	**50,968**	**51,696**	**50,121**	**47,915**	**94,810**	**(1975)**
Total Crashes	**81,505**	**79,095**	**73,498**	**74,073**	**72,117**	**69,236**	**123,106**	**(1975)**
Total Injuries	**35,318**	**33,379**	**31,074**	**31,176**	**30,295**	**29,314**	**50,332**	**(1978)**
Severe	1,736	1,553	1,271	1,191	1,159	1,268	6,573	(1984)[1]
Moderate	9,365	8,334	7,714	7,445	7,110	6,902	17,670	(1985)[1]
Minor	24,217	23,492	22,089	22,540	22,026	21,144	28,631	(1996)[1]
Total Fatalities	**510**	**455**	**421**	**411**	**368**	**395**	**1,060**	**(1968)**
Motor Vehicle Occupant	399	325	302	305	271	276	544	(2002)[1]
Motorcycle	61	72	53	45	42	55	121	(1980)
Pedestrian	33	25	41	36	40	40	157	(1971)
Bicycle	4	13	10	9	5	7	24	(1977)
All Terrain Vehicle	4	10	9	8	8	9	10	(2008)
Snowmobile	3	1	0	3	0	1	9	(1984)
Farm Equipment	3	0	3	2	2	2	N/A	N/A
Other Vehicle Type	3	9	3	3	0	5	N/A	N/A
Minnesota Fatality Rate[3]	0.89	0.79	0.74	0.72	0.65	0.69	23.6	(1934)
U.S. Fatality Rate[3]	1.36	1.26	1.15	1.11	1.09	1.08	18.0	(1925)
Minnesota Economic Loss (millions)	$1,654	$1,480	$1,496	$1,477	$1,481	$1,514	$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

2012 FATALITIES BY TRAFFIC ROLE, GENDER, AND AGE

Type of Vehicle	Position in Vehicle	Gender	Age 0-9	Age 10-19	Age 20-29	Age 30-39	Age 40-49	Age 50-59	Age 60-69	Age 70 and Older	Total
Car	Driver	Male	0	4	30	12	8	6	5	7	72
		Female	0	6	7	8	3	5	6	10	45
	Passenger	Male	1	3	2	3	2	2	0	3	16
		Female	0	10	3	0	0	2	1	7	23
Pickup	Driver	Male	0	1	8	5	2	4	3	3	26
		Female	0	0	0	0	0	1	0	0	1
	Passenger	Male	0	2	5	0	0	1	1	0	9
		Female	0	2	2	0	2	2	1	1	10
SUV	Driver	Male	0	0	4	5	7	2	2	0	20
		Female	0	0	2	0	3	3	3	2	13
	Passenger	Male	1	1	0	0	1	0	1	1	5
		Female	0	1	0	0	0	0	0	1	2
Van	Driver	Male	0	0	2	2	0	0	5	4	13
		Female	0	1	1	1	1	0	1	0	5
	Passenger	Male	0	0	1	0	0	0	1	0	2
		Female	1	1	0	0	2	0	1	3	8
Truck	Driver	Male	0	0	0	1	2	2	1	0	6
	Passenger	Female	0	0	0	0	0	0	0	0	0
Motorcycle	Driver	Male	0	0	6	7	6	16	8	1	45
		Female	0	0	1	1	0	0	0	0	2
	Passenger	Male	0	0	0	0	0	0	0	0	0
		Female	0	0	2	3	2	1	0	0	8
Other Motor Vehicle	Driver	Male	0	2	1	2	2	3	1	2	13
		Female	0	1	0	0	0	0	0	0	1
	Passenger	Male	0	0	0	0	0	0	0	1	1
		Female	0	0	1	0	0	0	0	1	2
Bicyclist		Male	0	2	1	1	2	1	0	0	7
		Female	0	0	0	0	0	0	0	0	0
Pedestrian		Male	2	1	9	1	1	2	0	5	21
		Female	0	6	1	1	3	2	0	6	19
Total Fatalities		Male	4	16	69	39	33	39	28	27	256
		Female	1	28	20	14	16	16	13	31	139
		Total	5	44	89	53	49	55	41	58	395

Note: The vehicle types for the 17 fatalities in the 'Other Motor Vehicle' category consisted of: Nine ATV, 2 farm equipment, 2 commercial bus, 1 snowmobile, and 3 unknown.

TABLE 1.04

AGE AND GENDER OF PERSONS KILLED OR INJURED IN 2012 CRASHES

Age Group	Males Killed	Females Killed	Total Killed	Males Injured	Females Injured	Unknown Injured	Total Injured
00 - 03	1	0	1	142	171	2	315
04 - 10	4	1	5	470	435	11	916
11 - 14	1	7	8	340	352	3	695
Total < 15:	6	8	14	952	958	16	1,926
15	1	1	2	124	166	1	291
16	1	5	6	341	379	4	724
17	2	7	9	357	421	5	783
18	6	5	11	392	423	1	816
19	4	3	7	382	431	1	814
20	11	1	12	392	421	2	815
Total 15-20:	25	22	47	1,988	2,241	14	4,243
Total < 21:	31	30	61	2,940	3,199	30	6,169
00 – 04	3	0	3	196	224	4	424
05 – 09	1	1	2	342	293	9	644
10 – 14	2	7	9	414	441	3	858
15 – 19	14	21	35	1,596	1,820	12	3,428
20 – 24	38	11	49	1,961	1,912	8	3,881
25 – 29	31	9	40	1,491	1,511	7	3,009
30 – 34	21	7	28	1,150	1,319	6	2,475
35 – 39	18	7	25	951	1,029	5	1,985
40 – 44	14	9	23	971	1,051	3	2,025
45 – 49	19	7	26	989	1,073	4	2,066
50 – 54	20	10	30	1,032	1,086	4	2,122
55 – 59	19	6	25	883	864	3	1,750
60 – 64	15	3	18	658	705	1	1,364
65 – 69	13	10	23	459	444	0	903
70 – 74	7	6	13	282	351	1	634
75 – 79	5	3	8	232	240	0	472
80 – 84	4	4	8	146	222	1	369
85 & Older	11	18	29	125	151	0	276
Not Stated	1	0	1	153	220	256	629
Total:	256	139	395	14,031	14,956	327	29,314

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 2012 CRASHES

Age Group	Male Drivers in Fatal Crashes	Female Drivers in Fatal Crashes	Drivers Gender Not Stated in Fatal Crashes	Total in Fatal Crashes	Male Drivers in All Crashes	Female Drivers in All Crashes	All Crashes Where Drivers Gender is Not Stated	Total in All Crashes
<15	0	0	0	0	24	16	0	40
15	0	0	0	0	92	72	0	164
16	4	4	0	8	1,392	1,257	1	2,650
17	2	6	0	8	1,652	1,569	2	3,223
18	4	2	0	6	1,874	1,515	5	3,394
19	11	3	0	14	1,766	1,526	12	3,304
20	12	3	0	15	1,777	1,600	9	3,386
All <21	33	18	0	51	8,577	7,555	29	16,161
00 – 04	0	0	0	0	2	1	0	3
05 – 09	0	0	0	0	1	0	0	1
10 – 14	0	0	0	0	21	15	0	36
15 – 19	21	15	0	36	6,776	5,939	20	12,735
20 – 24	47	14	0	61	8,712	7,709	53	16,474
25 – 29	44	16	0	60	7,380	6,094	102	13,576
30 – 34	31	13	0	44	6,318	5,122	54	11,494
35 – 39	37	8	0	45	5,250	4,145	44	9,439
40 – 44	24	11	0	35	5,277	4,127	36	9,440
45 – 49	35	6	0	41	5,420	4,001	27	9,448
50 – 54	35	14	0	49	5,236	3,830	28	9,094
55 – 59	35	14	0	49	4,474	3,110	23	7,607
60 – 64	37	6	0	43	3,381	2,361	15	5,757
65 – 69	16	10	0	26	2,234	1,535	9	3,778
70 – 74	8	5	0	13	1,310	1,058	7	2,375
75 – 79	7	3	0	10	1,045	733	3	1,781
80 – 84	7	3	0	10	744	649	6	1,399
85+	12	8	0	20	518	435	4	957
Unk	1	0	1	2	508	263	4,119	4,890
Total	397	146	1	544	64,607	51,127	4,550	120,284

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 VS. CRASH-INVOLVED DRIVERS BY AGE, 2012

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	0.0	0.2	0.1	0.1
16	1.2	1.5	2.1	2.2	2.2
17	1.3	1.5	2.7	2.7	2.7
18	1.5	1.1	2.8	2.8	2.8
19	1.6	2.6	2.8	2.7	2.7
20	1.6	2.8	2.8	2.8	2.8
Total < 21	7.8%	9.4%	13.4%	13.5%	13.4%
15 - 19	6.2%	6.6%	10.6%	10.6%	10.6%
20 - 24	8.5	11.2	13.5	13.8	13.7
25 - 29	8.8	11.0	11.2	11.3	11.3
30 - 34	8.9	8.1	9.7	9.5	9.6
35 - 39	7.7	8.3	7.9	7.8	7.8
40 - 44	8.2	6.4	8.0	7.8	7.8
45 - 49	8.7	7.5	8.3	7.6	7.9
50 - 54	9.7	9.0	7.8	7.4	7.6
55 - 59	8.9	9.0	6.5	6.2	6.3
60 - 64	7.5	7.9	4.8	4.8	4.8
65 - 69	5.6	4.8	3.4	3.0	3.1
70 - 74	4.1	2.4	2.2	1.9	2.0
75 - 79	3.0	1.8	1.6	1.4	1.5
80 - 84	2.2	1.8	1.3	1.1	1.2
85 & Older	2.0	3.7	0.9	0.7	0.8
Age Not Stated	0.0	0.4	2.1	4.9	4.1
Total Percent	100.0%	100.0%	100.0%	100.0%	100.0%
Total Number	4,038,718				

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, 2012

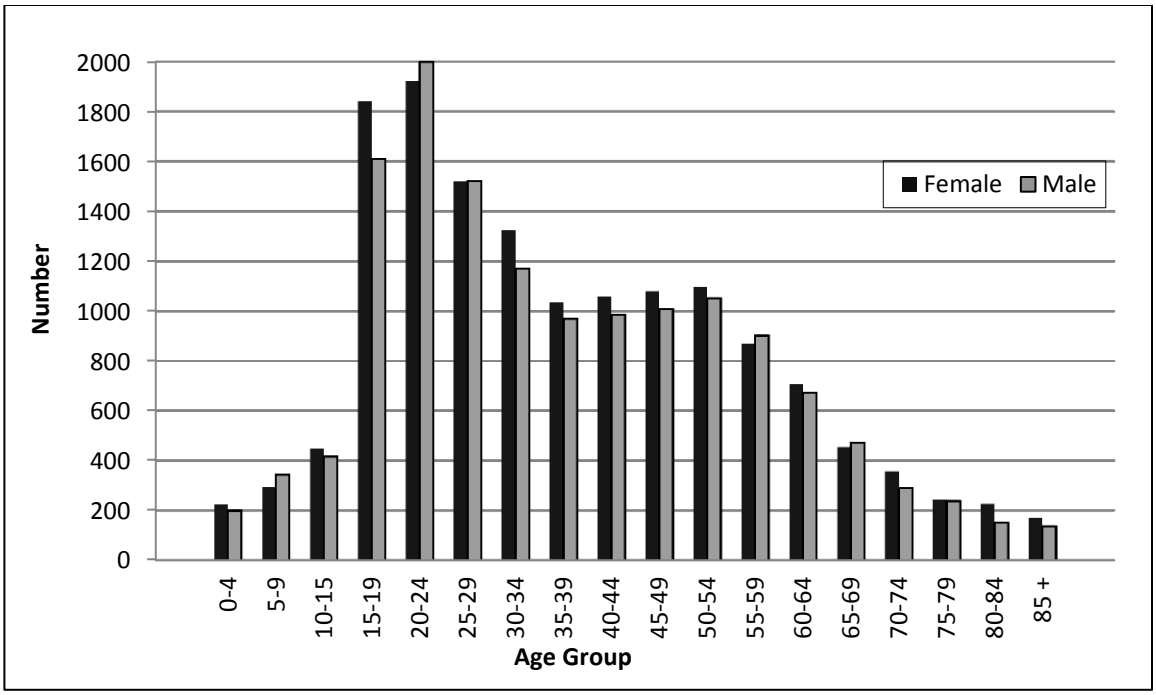

FIGURE 1.02

LICENSED VS CRASH-INVOLVED DRIVERS BY AGE, 2012

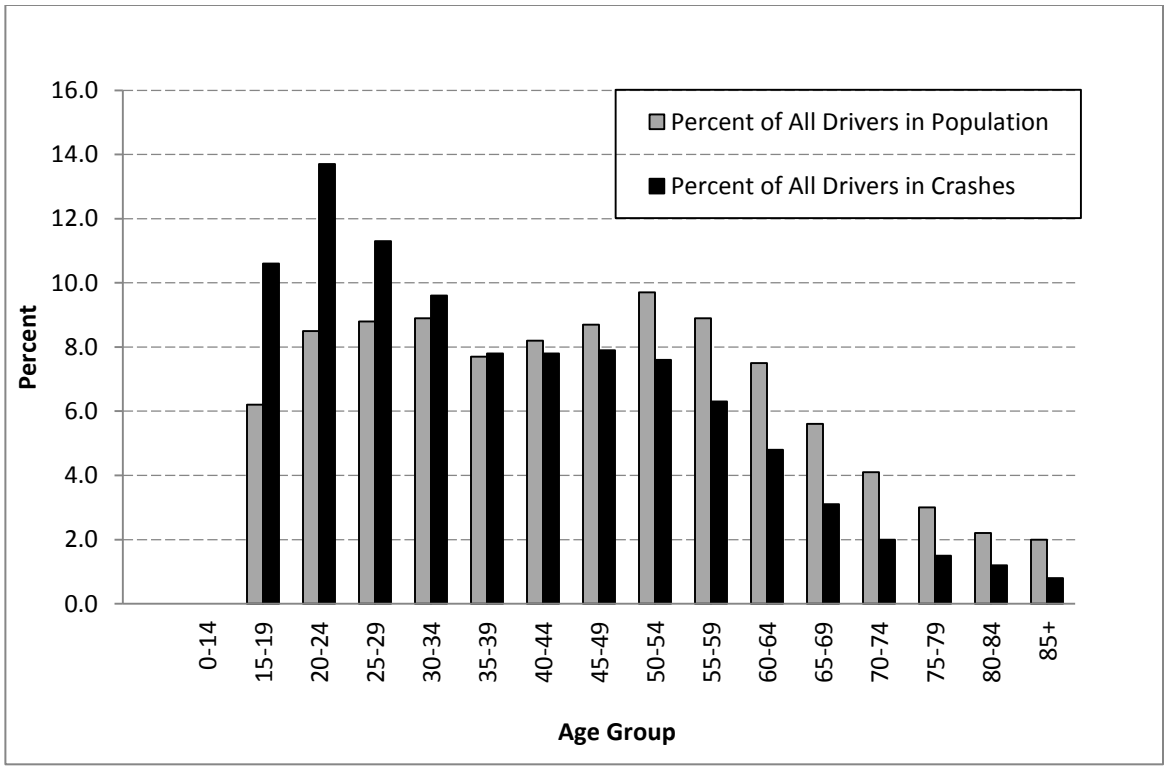

TABLE 1.07

PERCENTAGE OF DRIVERS IN 2012 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	74.4%	77.0%	80.5%	81.2%	81.9%	81.5%	81.4%	79.0%
Parked Motor Vehicle	3.8	3.3	3.1	3.2	2.8	3.4	5.5	4.3
Bicycle	0.4	0.6	0.6	0.6	0.8	1.0	1.3	0.7
Pedestrian	0.4	0.6	0.6	0.8	0.7	0.8	0.8	0.7
Deer	1.0	1.3	1.7	2.3	2.8	2.5	1.0	2.1
Other Animal	0.1	0.2	0.2	0.2	0.2	0.2	0.0	0.2
Railroad Train	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Fixed Object	13.6	12.5	9.7	8.5	7.0	7.4	7.6	9.1
Other Object	0.3	0.2	0.2	0.3	0.3	0.3	0.4	0.3
Non-Collision:								
Overturn	4.9	3.0	2.4	1.8	2.1	1.3	0.6	2.4
Other Non-Collision	0.3	0.3	0.4	0.3	0.4	0.5	0.2	0.4
Other or Unknown	0.8	0.9	0.7	0.8	0.9	0.8	1.0	0.8
Total Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total Drivers	12,735	16,474	13,576	11,494	50,785	7,934	2,364	120,284

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 2012 CRASHES BY PHYSICAL CONDITION*

Physical Condition	Drivers in Fatal Crashes	Drivers in Injury Crashes	Drivers in Property Damage Crashes	Drivers in All Crashes
Normal	296	31,039	68,052	99,387
Under the Influence	39	1,276	1,404	2,719
Had Been Drinking	28	487	477	992
Commercial Driver .04+	0	1	3	4
Had Been Using Drugs	5	98	56	159
Aggressive	0	9	39	48
Fatigued/Asleep	3	202	238	443
Physical Disability	2	37	37	76
Ill	1	82	58	141
Other	6	178	144	328
Unknown	164	3,402	12,421	15,987
Total	544	36,811	82,929	120,284

* 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, 2012

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	22.7%	24.9%	23.0%	24.2%	18.8%	13.4%	6.7%	21.6%
Driver Inattention/Distraction	13.8	13.8	12.9	12.7	14.3	18.2	24.0	14.1
Chemical Impairment	3.9	13.1	12.4	10.7	8.6	3.7	2.0	8.8
Overcorrecting	10.8	8.1	7.6	7.0	6.7	6.8	6.3	7.8
Driver Inexperience	15.4	3.4	2.6	1.9	1.9	1.0	0.4	4.8
Improper/Unsafe Lane Use	2.1	3.0	3.1	3.2	3.0	3.9	3.5	3.0
Improper Turn	0.8	0.8	0.6	1.0	1.4	1.7	2.0	1.1
Disregard for Traffic Control Device	0.4	0.7	0.7	0.6	0.8	1.2	3.9	0.8
Following Too Closely	0.3	0.5	0.6	1.0	0.6	0.4	0.0	0.6
Driving Left of Center-Not Passing	0.4	0.4	0.8	0.7	0.6	0.4	0.4	0.6
Vision Obscured	0.3	0.3	0.4	0.4	0.7	1.4	4.3	0.6
Unsafe Backing	0.3	0.2	0.2	0.1	0.4	0.5	1.6	0.4
Improper Passing/Overtaking	0.3	0.4	0.1	0.2	0.3	0.2	0.0	0.3
Failure to Yield Right of Way	0.2	0.1	0.2	0.1	0.4	0.7	0.0	0.3
Driver on Cell Phone or CB Radio	0.3	0.3	0.1	0.6	0.2	0.0	0.0	0.2
Improper Parking, Starting, Stopping	0.1	0.2	0.3	0.1	0.2	0.8	1.2	0.2
Other Human Factor	4.3	4.1	4.8	4.2	7.3	12.9	16.9	5.8
Vehicular Factors								
Skidding	8.0	7.2	7.4	7.5	8.4	9.0	4.7	7.8
Defective Equipment	1.2	1.9	1.7	1.7	2.0	1.6	0.8	1.7
Other Vehicular Factor	0.9	0.9	1.4	1.2	1.3	1.7	2.0	1.2
Miscellaneous Factors								
Weather	10.3	10.8	13.4	14.0	13.2	12.3	10.2	12.1
Other	3.1	4.9	5.7	6.9	8.9	8.2	9.1	6.3
Total Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total Contributing Factors Cited	3,524	3,592	2,301	1,619	6,068	869	254	18,502
Drivers for Whom There Was "No Clear Contributing Factor"	218	289	256	257	1,287	155	23	2,514
Total Number of Drivers	2,569	2,861	1,933	1,500	6,356	940	235	17,208

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, 2012

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	26.2%	26.2%	25.1%	24.9%	23.7%	20.7%	19.8%	24.1%
Failure to Yield Right of Way	19.7	16.9	16.8	16.7	19.2	29.9	36.9	19.5
Following Too Closely	13.8	15.4	15.3	15.0	12.7	7.5	5.4	13.2
Illegal or Unsafe Speed	6.4	8.6	7.9	7.3	5.3	2.7	1.7	6.3
Improper or Unsafe Lane Use	3.7	4.6	5.0	5.7	6.2	6.3	6.6	5.7
Disregard for Traffic Control Device	4.0	4.6	5.5	4.2	5.1	6.3	7.0	5.0
Improper turn	1.9	1.9	2.0	1.8	2.7	3.0	3.5	2.4
Chemical Impairment	0.7	2.6	3.0	3.1	2.2	0.8	0.1	2.0
Vision Obscured	1.8	1.5	1.6	1.8	1.9	2.4	2.7	1.8
Unsafe Backing	1.2	1.0	1.1	1.5	2.0	2.6	1.9	1.7
Driver Inexperience	6.6	1.3	0.8	0.6	0.4	0.2	0.1	1.5
Improper Passing or Overtaking	1.2	1.3	1.3	1.3	1.5	1.5	1.5	1.5
Improper Parking, Starting, Stopping	1.0	1.0	1.1	1.2	1.2	1.8	2.2	1.2
Driving Left of Center-Not Passing	0.5	0.5	0.6	1.0	0.7	1.0	0.8	0.7
Overcorrecting	0.5	0.7	0.4	0.7	0.6	0.4	0.1	0.6
Impeding Traffic	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2
Improper or No Signal	0.2	0.1	0.2	0.1	0.3	0.5	0.1	0.2
Driver on Cell Phone or CB Radio	0.2	0.2	0.2	0.1	0.1	0.0	0.0	0.1
Failure to Use Lights	0.0	0.1	0.1	0.0	0.1	0.0	0.1	0.1
Other Human Factor	1.4	1.7	1.8	1.9	2.4	3.3	4.4	2.1
Vehicular Factors								
Skidding	2.4	2.2	2.1	2.0	2.1	1.6	0.6	2.1
Defective Equipment	0.8	0.8	0.8	0.8	0.7	0.5	0.2	0.7
Other Vehicular Factor	0.4	0.4	0.5	0.7	0.6	0.5	0.4	0.5
Miscellaneous Factors								
Weather	3.7	3.4	3.8	4.0	4.1	2.6	1.5	3.6
Other	1.5	2.6	2.8	3.2	3.8	3.6	2.3	3.0
Total Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total Contributing Factors Cited	9,284	10,395	7,325	5,654	23,194	4,185	1,768	63,991
Drivers for Whom There Was "No Clear Contributing Factor"	2,919	4,998	5,259	4,974	23,433	3,207	612	45,839
Total Number of Drivers	10,164	13,612	11,640	9,986	44,414	6,994	2,128	103,432

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, 2012

Vehicle Type	Killed	Severely Injured	Moderately Injured	Minor Injuries	Total Injured	Not Injured	Total Persons
Automobile	155	483	3,330	11,616	15,429	71,941	87,525
Pickup Truck	44	137	579	1,658	2,374	13,993	16,411
Sport Utility Vehicle	40	141	1,013	3,647	4,801	26,627	31,468
Van	28	73	493	1,924	2,490	12,845	15,363
Motor Home/Camper	0	0	8	10	18	79	97
Limousine	0	0	13	17	30	75	105
Taxi Cab	1	4	31	100	135	642	778
Police Vehicle	0	5	19	57	81	371	452
Fire Department Vehicle	0	0	0	1	1	34	35
School bus	0	1	4	80	85	3,370	3,455
Other Bus	2	1	6	119	126	989	1,117
Ambulance	0	0	1	2	3	62	65
Military Vehicle	0	1	0	2	3	11	14
Snowmobile	1	2	1	2	5	5	11
All-Terrain Vehicle	9	8	17	8	33	13	55
Farm Tractor of Equipment	2	0	6	9	15	106	123
Motorcycle	54	220	648	503	1,371	242	1,667
Motor Scooter/Motorbike*	1	10	28	36	74	13	88
Motorized Bicycle (Moped)	0	3	20	30	53	7	60
Hit and Run Vehicle	0	0	25	62	87	2,084	2,171
Road Maintenance Vehicle	0	2	7	20	29	518	547
Other Public Owned Vehicle	3	0	7	18	25	151	179
Single Truck (2-axle, 6 tire)	1	5	14	31	50	677	728
Single Truck (3 or more axles)	1	1	9	18	28	320	349
Single Truck with Trailer	0	0	3	7	10	251	261
Truck Tractor with No Trailer	0	0	1	2	3	73	76
Truck Tractor with Semi Trailer	3	10	57	93	160	1,878	2,041
Truck Tractor with Double Trailers	0	0	0	0	0	30	30
Other or Unknown Truck Type	0	1	3	5	9	213	222
Other Vehicle Type	0	4	11	11	26	160	186
Unknown Vehicle Type	3	1	2	10	13	1,125	1,141
Bicycle	7	47	261	566	874	54	935
Pedestrian	40	108	285	480	873	6	919
Total	395	1,268	6,902	21,144	29,314	138,965	168,674

* 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 2012 CRASHES

Motor Vehicle Type*	Vehicles in Fatal Crashes	Vehicles in Injury Crashes	Vehicles in Property Damage Crashes	Vehicles in All Crashes
Automobile	208	20,333	47,952	68,493
Pickup Truck	77	3,832	9,241	13,150
Sport Utility Vehicle	88	6,805	15,938	22,831
Van	46	3,008	6,663	9,717
Motor Home/Camper	0	15	48	63
Limousine	0	14	40	54
Taxi Cab	2	194	347	543
Police Vehicle	1	116	332	449
Fire Department Vehicle	0	6	15	21
School Bus	4	113	437	554
Other Bus	2	124	369	495
Ambulance	0	5	25	30
Military Vehicle	0	3	8	11
Snowmobile	1	5	5	11
All-Terrain Vehicle*	9	25	8	42
Farm Tractor or Equipment	3	44	75	122
Motorcycle	51	1,268	182	1,501
Motor scooter/Motorbike**	1	73	9	83
Motorized Bicycle (Moped)	0	52	6	58
Hit and Run Vehicle	1	329	1,738	2,068
Road Maintenance Vehicle	3	90	420	513
Other Public Owned Vehicle	3	44	104	151
Single Truck (2-axle, 6-tire)	5	163	481	649
Single Truck (3 or more axles)	6	79	254	339
Single Truck with Trailer	1	42	195	238
Truck Tractor with No Trailer	1	18	57	76
Truck Tractor with Semi Trailer	34	483	1,451	1,968
Truck Tractor with Double Trailers	0	4	21	25
Other or Unknown Truck Type	0	43	161	204
Other Vehicle Type	0	50	129	179
Unknown Vehicle Type	3	131	974	1,108
Total* **	550	37,511	87,685	125,746

* Snowmobiles and ATV's 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

2012 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	154	13,167	31,748	45,069	187	19,963	4.1
Parked Motor Vehicle	3	483	4,184	4,670	3	613	0.6
Bicycle	7	862	46	915	7	884	7.7
Pedestrian	38	826	0	864	40	882	46.3
Deer	5	281	2,202	2,488	5	342	2.0
Other Animal	3	44	183	230	3	52	13.0
Railroad Train	3	12	10	25	3	15	120.0
Fixed Object	60	3,094	7,588	10,742	65	3,742	6.1
Non-Fixed Object	1	67	196	264	1	82	3.8
Other Collision Type	4	144	201	349	4	183	11.5
Unk Collision Type	0	6	17	23	0	7	0.0
Non-Collision:							
Overturn	60	1,637	1,124	2,821	65	2,145	23.0
Submersion	0	12	31	43	0	12	0.0
Fire/Explosion	4	7	36	47	5	7	106.4
Other Non-Collision	2	150	157	309	2	169	6.5
Unknown Crash Type:	5	180	192	377	5	216	13.3
Total	349	20,972	47,915	69,236	395	29,314	5.7

TABLE 1.14

2012 "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	1	613	2,379	2,993	1	858
Parked Motor Vehicle	0	77	1,888	1,965	0	99
Bicycle	0	93	8	101	0	95
Pedestrian	1	146	0	147	1	148
Deer	0	0	1	1	0	0
Other Animal	0	0	3	3	0	0
Railroad Train	0	0	0	0	0	0
Fixed Object	0	148	821	969	0	168
Non-Fixed Object	0	1	18	19	0	1
Other Collision Type	0	7	18	25	0	7
Unk Collision Type	0	1	3	4	0	2
Non-Collision:						
Overturn	0	24	19	43	0	31
Other Non-Collision	0	6	2	8	0	7
Unknown Crash Type	0	10	21	31	0	10
Total	2	1,126	5,181	6,309	2	1,426

TABLE 1.15

2012 CRASHES BY TRAFFIC CONTROL DEVICE

Traffic Control Device	Fatal Crashes	Personal Injury Crashes	Property Damage Crashes	Total Crashes	Killed	Injured
Traffic Signal	28	5,446	11,281	16,755	30	7,742
Overhead Flashers	0	27	40	67	0	30
Stop Sign-All Approaches	7	425	988	1,420	7	551
Other Stop Sign	50	3,131	5,796	8,977	54	4,664
Yield Sign	0	364	749	1,113	0	560
Flagman, Officer, School Patrol	0	20	38	58	0	33
School Bus Stop Arm	1	12	27	40	1	28
School Zone Sign	0	6	13	19	0	6
No Passing Zone	6	119	123	248	7	202
RR Crossing Gate	0	7	35	42	0	10
RR Flashing Lights	1	5	17	23	1	5
RR Crossing Stop Sign	1	2	6	9	1	2
RR Overhead Flashing Lights	0	1	4	5	0	1
RR Overhead Lights and Gate	0	6	28	34	0	10
RR Crossbuck	1	5	11	17	1	7
Other Device	5	196	565	766	5	279
Not Applicable	238	11,128	27,818	39,184	277	15,084
Unknown	11	72	376	459	11	100
Total	349	20,972	47,915	69,236	395	29,314

TABLE 1.16

2012 CRASHES BY WEATHER CONDITION

Weather Condition	Fatal Crashes	Personal Injury Crashes	Property Damage Crashes	Total Crashes	Killed	Injured
Clear	222	13,861	29,126	43,209	248	19,362
Cloudy	83	4,599	10,849	15,531	97	6,498
Rain	10	875	2,018	2,903	13	1,228
Snow	12	1,101	4,127	5,240	15	1,508
Sleet/Hail/Freezing Rain	2	173	530	705	2	243
Fog/Smog/Smoke	7	129	245	381	7	185
Blowing Sand/Dust/Snow	1	69	223	293	1	82
Severe Crosswinds	1	17	30	48	1	22
Other	1	28	91	120	1	37
Not Stated/Unknown	10	120	676	806	10	149
Total	349	20,972	47,915	69,236	395	29,314

TABLE 1.17

CONTRIBUTING FACTORS IN 2012 CRASHES

Contributing Factors	Percent of Factors Cited in Crashes by Severity of Crash: Fatal Crashes	Injury Crashes	Property Damage Crashes	Number of Crashes in which the Factor was Cited: Fatal Crashes	Injury Crashes	Property Damage Crashes	Number of People Affected: Killed	Injured
Human Factors								
Driver Inattention/Distraction	9.6%	21.4%	21.6%	46	5,753	11,557	51	8,304
Failure to Yield Right of Way	11.2	17.2	14.3	55	4,524	7,479	62	6,854
Following Too Closely	1.0	8.5	11.1	4	2,145	5,736	5	3,025
Illegal/Unsafe Speed	13.4	9.8	9.5	66	2,626	5,147	74	3,822
Improper/Unsafe Lane Use	6.4	3.2	6.0	32	864	3,187	36	1,221
Disregard Traffic Cntl Device	5.0	5.5	3.4	23	1,486	1,835	26	2,406
Chemical Impairment	10.6	5.0	2.7	51	1,370	1,476	57	1,950
Improper Turn	1.4	1.4	2.4	7	375	1,293	8	521
Driver Inexperience	1.0	2.4	2.2	5	649	1,192	5	927
Unsafe Backing	0.4	0.3	2.0	1	71	1,029	1	88
Overcorrecting	4.6	2.8	1.8	23	779	983	24	1,064
Vision Obscured	1.0	1.7	1.4	5	436	724	5	592
Improper Passing/Overtaking	1.2	0.9	1.4	6	234	747	8	354
Improper Park/Start/Stop	0.2	0.8	1.2	1	214	654	1	297
Driving Left of Ctr(Not Passing)	9.0	0.8	0.5	43	226	274	57	419
Improper/No Signal	0.0	0.1	0.2	0	34	97	0	52
Impeding Traffic	0.2	0.2	0.2	1	64	117	1	89
Non-Motorist Error	3.6	1.1	0.2	15	261	113	15	292
Driver on Phone/CB Radio	0.0	0.2	0.1	0	59	77	0	79
Failure to Use Lights	0.0	0.1	0.0	0	33	20	0	46
Other Human Factor	4.2	3.9	2.6	21	1,021	1,346	23	1,370
Vehicular Factors								
Skidding	4.6	2.8	3.5	23	759	1,852	26	981
Defective Equipment	0.4	0.9	0.8	2	230	455	2	337
Other Vehicular Factor	1.2	0.7	0.8	6	169	439	6	236
Miscellaneous Factors								
Weather	2.6	4.0	6.2	13	993	3,034	17	1,333
Other	6.8	4.3	3.8	31	1,042	1,753	32	1,354
Total Percent	100.0%	100.0%	100.0%					
Total Contributing Factors	498	27,811	55,816					
Vehicles Where There Was "No Clear Contributing Factor"	234	16,521	35,619					
Total Number of Vehicles	599	39,258	87,738					

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

2012 CRASHES BY LIGHT CONDITION

Light Condition	Fatal Crashes	Personal Injury Crashes	Property Damage Crashes	Total Crashes	Killed	Injured
Daylight	194	14,796	32,886	47,876	226	20,798
Dawn (Morning)	11	431	1,054	1,496	11	535
Dusk (Evening)	9	515	1,181	1,705	13	726
Dark/Street Lights On	33	3,348	8,428	11,809	34	4,655
Dark/No Street Lights	95	1,811	3,794	5,700	104	2,506
Other/Unknown	7	71	572	650	7	94
Total	349	20,972	47,915	69,236	395	29,314

TABLE 1.19

2012 CRASHES BY ROAD SURFACE CONDITION

Road Surface Condition	Fatal Crashes	Personal Injury Crashes	Property Damage Crashes	Total Crashes	Killed	Injured
Dry	280	16,138	33,596	50,014	313	22,697
Wet	32	2,272	5,284	7,588	39	3,182
Snow/Slush	14	1,037	3,960	5,011	18	1,437
Ice or Packed Snow	8	1,267	4,402	5,677	10	1,672
Other	2	193	302	497	2	247
Not Stated/Unknown	13	65	371	449	13	79
Total	349	20,972	47,915	69,236	395	29,314

TABLE 1.20

2012 CRASHES BY ROAD DESIGN

Road Design	Fatal Crashes	Personal Injury Crashes	Property Damage Crashes	Total Crashes	Killed	Injured
Freeway (Including Ramps)	23	3,155	8,775	11,953	28	4,310
Other Divided Highway	43	2,966	5,778	8,787	44	4,421
One-Way Street	2	507	1,251	1,760	2	706
4-6 Lanes Undivided	30	3,985	8,544	12,559	34	5,593
3 Lanes Undivided	4	245	498	747	4	352
2 Lane—1 Each Way	227	8,323	16,999	25,549	260	11,604
Alley	2	62	235	299	2	66
Other Road Design	10	829	1,781	2,620	13	1,105
Not Stated/Unknown	8	900	4,054	4,962	8	1,157
Total	349	20,972	47,915	69,236	395	29,314

TABLE 1.21

2012 CRASHES BY DIAGRAM

Diagram	Fatal Crashes	Personal Injury Crashes	Property Damage Crashes	Total Crashes	Killed	Injured
Rear End	20	6,229	14,868	21,117	21	8,863
Sideswipe Passing	5	920	6,623	7,548	6	1,200
Left Turn – Oncoming Traffic	9	1,136	2,150	3,295	9	1,661
Ran Off Road – Left	61	1,685	3,070	4,816	67	2,117
Right Angle	62	4,440	7,602	12,104	68	6,685
Right Turn – Cross Street Traffic	1	251	606	858	1	315
Ran Off Road – Right	52	2,240	3,641	5,933	60	2,777
Head On	66	1,233	2,400	3,699	84	1,927
Sideswipe Opposing	8	332	1,059	1,399	8	507
Other Diagram	47	1,895	3,927	5,869	53	2,488
Not Applicable	6	474	1,141	1,621	6	582
Unknown / Incomplete	12	137	828	977	12	192
Total	349	20,972	47,915	69,236	395	29,314

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

2012 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	17	4,127	11,553	15,697	19	5,638
100,000-249,999	1	405	901	1,307	1	545
50,000 - 99,999	29	3,523	8,194	11,746	31	4,838
25,000 - 49,999	25	2,683	5,962	8,670	28	3,669
10,000 - 24,999	31	3,323	7,847	11,201	36	4,586
5,000 - 9,999	15	1,049	2,653	3,717	15	1,503
2,500 - 4,999	6	710	1,655	2,371	6	988
1,000 - 2,499	2	376	955	1,333	2	543
Under 1,000	223	4,776	8,195	13,194	257	7,004
Total	349	20,972	47,915	69,236	395	29,314

TABLE 1.23

2012 CRASHES BY TYPE OF ROADWAY

Type of Roadway	Fatal Crashes	Personal Injury Crashes	Property Damage Crashes	Total Crashes	Killed	Injured
Urban						
Interstate	10	2,048	5,764	7,822	11	2,787
US Trunk Hwy	11	1,259	2,980	4,250	12	1,772
MN Trunk Hwy	20	2,203	5,137	7,360	20	3,108
County State Aid Hwy	41	4,380	9,114	13,535	46	6,166
County Road	1	89	208	298	3	134
Township Road	0	3	2	5	0	3
Municipal State Aid Hwy	27	3,560	8,364	11,951	29	4,749
Municipal Street	7	1,537	5,207	6,751	8	2,027
Other Road	1	31	334	366	1	33
Urban Total	118	15,110	37,110	52,338	130	20,779
Rural						
Interstate	6	424	1,181	1,611	10	606
US Trunk Hwy	44	1,052	2,026	3,122	53	1,646
MN Trunk Hwy	54	1,472	2,448	3,974	62	2,182
County State Aid Hwy	89	1,901	2,976	4,966	101	2,723
County Road	10	294	417	721	10	382
Township Road	21	444	598	1,063	22	618
Municipal State Aid Hwy	0	10	20	30	0	10
Municipal Street	3	241	842	1,086	3	319
Other Road	4	24	297	325	4	49
Rural Total	231	5,862	10,805	16,898	265	8,535
All Roadways						
Interstate	16	2,472	6,945	9,433	21	3,393
US Trunk Hwy	55	2,311	5,006	7,372	65	3,418
MN Trunk Hwy	74	3,675	7,585	11,334	82	5,290
County State Aid Hwy	130	6,281	12,090	18,501	147	8,889
County Road	11	383	625	1,019	13	516
Township Road	21	447	600	1,068	22	621
Municipal State Aid Hwy	27	3,570	8,384	11,981	29	4,759
Municipal Street	10	1,778	6,049	7,837	11	2,346
Other Road	5	55	631	691	5	82
Total	349	20,972	47,915	69,236	395	29,314

("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

2012 COUNTY CRASH REPORT

County	2012 Crashes Fatal	2012 Crashes Injury	2012 Crashes Property Damage	2012 Crashes Total	Total Crashes 2011	Number Killed 2012	Number Killed 2011	Number Injured 2012	Number Injured 2011
Aitkin	3	69	117	189	162	3	2	90	85
Anoka	23	1,072	1,779	2,874	3,032	25	11	1,536	1,508
Becker	4	107	172	283	279	4	4	166	167
Beltrami	7	140	296	443	473	7	4	199	260
Benton	6	157	360	523	544	8	4	207	256
Big Stone	1	25	38	64	59	1	0	32	31
Blue Earth	5	303	706	1,014	1,186	5	8	408	477
Brown	1	76	167	244	329	1	6	106	138
Carlton	3	108	193	304	381	4	6	170	159
Carver	1	260	672	933	881	1	6	352	330
Cass	6	103	147	256	271	6	5	166	161
Chippewa	4	41	69	114	122	4	3	72	50
Chisago	6	197	281	484	586	6	5	308	347
Clay	4	199	439	642	834	4	2	282	273
Clearwater	0	31	38	69	47	0	2	47	19
Cook	0	27	33	60	49	0	1	42	33
Cottonwood	2	38	53	93	129	2	3	72	57
Crow Wing	10	285	453	748	672	10	7	427	361
Dakota	14	1,349	3,128	4,491	4,661	19	16	1,877	2,029
Dodge	3	70	115	188	191	5	2	102	68
Douglas	5	185	335	525	610	8	1	262	273
Faribault	3	39	86	128	157	4	4	55	91
Fillmore	2	59	107	168	199	2	3	90	92
Freeborn	3	132	271	406	459	3	2	190	205
Goodhue	6	186	457	649	757	7	5	278	284
Grant	1	21	42	64	69	1	1	28	34
Hennepin	32	6,018	13,766	19,816	19,881	33	45	8,205	8,338
Houston	1	56	171	228	228	1	1	69	55
Hubbard	1	74	65	140	155	1	4	112	83
Isanti	2	104	200	306	325	2	2	162	171
Itasca	6	175	355	536	523	8	5	255	238
Jackson	2	46	76	124	135	3	1	60	57
Kanabec	0	42	73	115	146	0	2	58	73
Kandiyohi	8	193	345	546	641	11	6	285	291

TABLE 1.24 CONTINUED

2012 COUNTY CRASH REPORT

County	2012 Crashes Fatal	2012 Crashes Injury	2012 Crashes Property Damage	2012 Crashes Total	Total Crashes 2011	Number Killed 2012	Number Killed 2011	Number Injured 2012	Number Injured 2011
Kittson	1	3	6	10	16	1	1	5	10
Koochiching	2	26	56	84	125	2	0	38	55
Lac Qui Parle	0	14	23	37	45	0	2	24	19
Lake	1	35	56	92	109	1	7	61	68
Lake of the Woods	0	8	13	21	31	0	0	9	23
Le Sueur	2	95	220	317	311	2	3	139	127
Lincoln	2	18	61	81	74	2	1	25	16
Lyon	4	79	201	284	356	4	0	108	126
McLeod	4	123	304	431	429	6	1	167	162
Mahnomen	2	16	27	45	44	2	0	29	33
Marshall	2	28	29	59	43	2	1	50	34
Martin	1	61	142	204	245	1	0	97	119
Meeker	2	74	133	209	221	2	7	104	122
Mille Lacs	2	115	114	231	228	3	7	183	151
Morrison	5	106	173	284	333	5	8	162	161
Mower	4	96	253	353	442	6	2	121	160
Murray	2	36	38	76	85	2	1	60	39
Nicollet	3	94	261	358	430	3	5	132	184
Nobles	6	78	259	343	431	7	3	114	210
Norman	0	21	30	51	60	0	4	28	27
Olmsted	2	547	1,215	1,764	1,780	2	9	757	827
Otter Tail	8	207	424	639	684	10	11	294	324
Pennington	2	54	58	114	124	2	1	81	71
Pine	9	128	224	361	381	14	6	189	219
Pipestone	2	29	56	87	91	2	2	48	37
Polk	7	90	227	324	271	7	7	131	106
Pope	3	37	56	96	92	3	1	73	40
Ramsey	18	2,475	7,926	10,419	10,391	19	14	3,363	3,293
Red Lake	1	7	14	22	21	1	2	9	6
Redwood	5	48	81	134	169	6	4	71	80
Renville	1	48	90	139	152	1	2	63	57
Rice	4	219	404	627	652	4	2	302	318
Rock	4	29	77	110	160	4	3	43	88

TABLE 1.24 CONTINUED

2012 COUNTY CRASH REPORT

County	2012 Crashes Fatal	2012 Crashes Injury	2012 Crashes Property Damage	2012 Crashes Total	Total Crashes 2011	Number Killed 2012	Number Killed 2011	Number Injured 2012	Number Injured 2011
Roseau	2	29	50	81	80	2	2	44	56
St. Louis	9	740	2,149	2,898	3,101	11	12	979	1,100
Scott	4	381	694	1,079	1,120	4	9	554	559
Sherburne	7	258	746	1,011	1,089	8	3	371	456
Sibley	2	43	79	124	150	2	0	52	70
Stearns	7	653	1,582	2,242	2,536	7	13	922	966
Steele	2	129	282	413	485	2	2	178	197
Stevens	1	23	56	80	98	1	1	32	25
Swift	0	29	49	78	67	0	0	35	32
Todd	1	82	120	203	214	1	1	112	105
Traverse	0	9	6	15	28	0	0	13	14
Wabasha	2	63	119	184	186	2	7	90	98
Wadena	1	39	60	100	113	1	0	53	66
Waseca	3	66	116	185	178	3	2	85	75
Washington	7	767	1,594	2,368	2,343	8	6	1,062	1,079
Watonwan	0	26	59	85	134	0	1	35	49
Wilkin	0	26	73	99	104	0	0	38	31
Winona	5	184	392	581	640	5	6	257	311
Wright	9	371	768	1,148	1,145	12	6	513	547
Yellow Medicine	1	23	62	86	107	1	1	39	53
Unknown	0	0	3	3	0	0	0	0	0
Minnesota Totals	349	20,972	47,915	69,236	72,117	395	368	29,314	30,295

TABLE 1.25

2012 CRASHES IN CITIES OF 2,500 OR MORE POPULATION

City	Fatal Crashes	Injury Crashes	PDO Crashes	Total Crashes	Persons Killed	Persons Injured
Afton	0	13	24	37	0	15
Albert Lea	0	65	172	237	0	95
Albertville	0	22	63	85	0	26
Alexandria	0	75	149	224	0	104
Andover	1	50	46	97	1	82
Annandale	0	6	5	11	0	10
Anoka	1	93	284	378	1	123
Apple Valley	2	178	331	511	2	260
Arden Hills	0	89	334	423	0	116
Austin	0	58	194	252	0	71
Baxter	2	48	81	131	2	77
Bayport	0	8	14	22	0	8
Becker	0	13	37	50	0	20
Belle Plaine	0	10	33	43	0	13
Bemidji	0	60	149	209	0	78
Benson	0	3	23	26	0	3
Big Lake	0	11	37	48	0	15
Blaine	5	176	212	393	5	270
Bloomington	5	530	1,101	1,636	5	725
Blue Earth	0	11	31	42	0	12
Brainerd	1	71	196	268	1	97
Breckenridge	0	6	29	35	0	7
Brooklyn Center	0	216	420	636	0	298
Brooklyn Park	0	291	503	794	0	428
Buffalo	0	50	89	139	0	65
Burnsville	1	286	680	967	2	406
Byron	0	8	15	23	0	9
Caledonia	0	1	20	21	0	1
Cambridge	0	29	65	94	0	38
Cannon Falls	0	16	24	40	0	24
Carver	0	5	7	12	0	9
Centerville	1	1	5	7	1	2
Champlin	0	35	48	83	0	50
Chanhassen	0	88	219	307	0	122
Chaska	0	49	112	161	0	59
Chatfield	0	2	11	13	0	4
Chisago City	0	15	16	31	0	29
Chisholm	0	10	32	42	0	11
Circle Pines	0	10	15	25	0	12
Cloquet	0	36	69	105	0	60
Cohasset	0	3	12	15	0	4
Cokato	0	5	9	14	0	6
Cold Spring	0	5	25	30	0	6
Columbia Heights	1	55	91	147	1	76
Columbus	0	20	33	53	0	27
Coon Rapids	0	281	548	829	0	363
Corcoran	1	12	55	68	1	15
Cottage Grove	0	82	189	271	0	109

TABLE 1.25 CONTINUED

2012 CRASHES IN CITIES OF 2,500 OR MORE POPULATION

City	Fatal Crashes	Injury Crashes	PDO Crashes	Total Crashes	Persons Killed	Persons Injured
Crookston	0	17	65	82	0	25
Crystal	0	65	139	204	0	91
Dayton	0	15	45	60	0	20
Deephaven	0	2	16	18	0	3
Delano	0	9	14	23	0	10
Detroit Lakes	0	29	43	72	0	50
Dilworth	0	6	24	30	0	6
Dodge Center	0	2	9	11	0	4
Duluth	1	333	1,339	1,673	1	439
Eagan	2	212	551	765	3	286
East Bethel	5	31	18	54	6	49
East Grand Forks	0	18	80	98	0	20
Eden Prairie	1	148	427	576	1	187
Edina	1	166	463	630	1	205
Elko/New Market	0	2	6	8	0	3
Elk River	0	99	229	328	0	148
Ely	0	3	15	18	0	6
Eveleth	1	5	15	21	1	8
Fairmont	0	23	97	120	0	33
Falcon Heights	0	16	39	55	0	24
Faribault	0	83	137	220	0	115
Farmington	0	27	65	92	0	41
Fergus Falls	0	43	131	174	0	59
Foley	0	6	18	24	0	8
Forest Lake	3	85	143	231	4	118
Fridley	2	127	161	290	2	171
Glencoe	1	15	21	37	1	20
Glenwood	0	5	13	18	0	7
Golden Valley	1	153	343	497	1	213
Goodview	0	5	14	19	0	5
Grand Rapids	0	62	195	257	0	94
Granite Falls	0	1	20	21	0	1
Grant	0	17	38	55	0	30
Greenfield	1	10	17	28	1	15
Ham Lake	1	43	31	75	1	62
Hanover	0	3	6	9	0	3
Hastings	0	60	175	235	0	80
Hermantown	1	33	46	80	1	46
Hibbing	0	86	185	271	0	118
Hopkins	0	77	158	235	0	102
Hugo	0	33	29	62	0	45
Hutchinson	0	40	149	189	0	52
Independence	1	30	31	62	1	43
International Falls	1	12	27	40	1	14
Inver Grove Heights	3	98	236	337	6	126
Isanti	0	13	26	39	0	27
Jackson	0	11	14	25	0	15
Jordan	0	6	23	29	0	7

TABLE 1.25 CONTINUED

2012 CRASHES IN CITIES OF 2,500 OR MORE POPULATION

City	Fatal Crashes	Injury Crashes	PDO Crashes	Total Crashes	Persons Killed	Persons Injured
Kasson	0	8	30	38	0	13
La Crescent	0	11	29	40	0	12
Lake City	0	13	40	53	0	17
Lake Crystal	0	6	12	18	0	7
Lake Elmo	2	39	76	117	2	58
Lakeville	1	96	121	218	1	139
Le Sueur	0	6	23	29	0	9
Lindstrom	0	13	23	36	0	19
Lino Lakes	1	51	158	210	1	75
Litchfield	0	14	46	60	0	17
Little Canada	0	70	201	271	0	97
Little Falls	1	17	46	64	1	26
Long Prairie	0	3	17	20	0	3
Lonsdale	0	1	6	7	0	1
Luverne	0	2	20	22	0	2
Mahtomedi	1	9	14	24	1	12
Mankato	4	220	506	730	4	301
Maple Grove	2	216	486	704	2	304
Maplewood	2	226	521	749	2	310
Marshall	0	39	130	169	0	48
Medina	0	25	43	68	0	37
Melrose	0	9	27	36	0	10
Mendota Heights	1	52	145	198	1	68
Milaca	0	8	12	20	0	11
Minneapolis	9	2,792	6,528	9,329	10	3,825
Minnetonka	2	146	323	471	2	185
Minnetrista	0	17	51	68	0	22
Montevideo	0	13	39	52	0	18
Montgomery	0	6	2	8	0	8
Monticello	0	39	126	165	0	54
Montrose	0	11	7	18	0	16
Moorhead	0	121	257	378	0	179
Mora	0	10	30	40	0	13
Morris	0	9	30	39	0	12
Mound	0	13	37	50	0	22
Mounds View	1	35	90	126	1	51
Mountain Iron	0	15	24	39	0	21
New Brighton	0	85	229	314	0	104
New Hope	0	53	84	137	0	60
Newport	0	30	58	88	0	36
New Prague	0	8	30	38	0	10
New Ulm	0	41	91	132	0	58
North Branch	0	34	65	99	0	49
Northfield	0	40	48	88	0	56
North Mankato	1	24	97	122	1	31
North Oaks	0	7	8	15	0	9
North St. Paul	0	67	97	164	0	90
Norwood	0	5	16	21	0	6

TABLE 1.25 CONTINUED

2012 CRASHES IN CITIES OF 2,500 OR MORE POPULATION

City	Fatal Crashes	Injury Crashes	PDO Crashes	Total Crashes	Persons Killed	Persons Injured
Nowthen	0	14	8	22	0	27
Oakdale	0	90	237	327	0	133
Oak Grove	1	23	8	32	1	37
Oak Park Heights	0	27	56	83	0	31
Orono	1	37	69	107	1	48
Otsego	1	20	52	73	1	25
Owatonna	0	77	176	253	0	102
Park Rapids	0	9	8	17	0	11
Perham	1	4	11	16	1	8
Pine City	0	12	31	43	0	17
Pine Island	0	3	12	15	0	6
Pipestone	0	9	11	20	0	13
Plainview	0	4	7	11	0	4
Plymouth	3	193	479	675	3	257
Princeton	0	12	27	39	0	15
Prior Lake	1	52	16	69	1	92
Proctor	0	7	15	22	0	8
Ramsey	4	41	113	158	5	74
Red Wing	1	67	219	287	1	93
Redwood Falls	0	14	38	52	0	20
Richfield	1	221	439	661	1	292
Robbinsdale	0	59	118	177	0	84
Rochester	1	405	901	1,307	1	545
Rockford	0	1	19	20	0	1
Rogers	0	53	183	236	0	73
Roseau	1	5	6	12	1	9
Rosemount	0	58	157	215	0	75
Roseville	2	193	555	750	2	273
Rush City	0	8	12	20	0	10
St. Anthony	0	18	47	65	0	23
St. Augusta	0	5	11	16	0	6
St. Charles	0	3	21	24	0	5
St. Cloud	3	360	841	1,204	3	498
St. Francis	0	19	5	24	0	28
St. James	0	5	21	26	0	5
St. Joseph	0	16	34	50	0	24
St. Louis Park	2	241	600	843	2	324
St. Michael	1	34	89	124	2	53
St. Paul	8	1,335	5,025	6,368	9	1,813
St. Paul Park	0	9	19	28	0	13
St. Peter	0	16	66	82	0	20
Sandstone	0	2	11	13	0	4
Sartell	1	34	77	112	1	44
Sauk Center	0	9	44	53	0	10
Sauk Rapids	1	31	59	91	2	36
Savage	1	79	196	276	1	113

TABLE 1.25 CONTINUED

2012 CRASHES IN CITIES OF 2,500 OR MORE POPULATION

City	Fatal Crashes	Personal Injury Crashes	Property Damage Crashes	Total Crashes	Persons Killed	Persons Injured
Scandia	0	17	15	32	0	28
Shakopee	1	128	271	400	1	163
Shoreview	2	72	175	249	2	91
Shorewood	0	15	61	76	0	30
Sleepy Eye	0	6	21	27	0	8
South St. Paul	0	68	183	251	0	94
Spring Lake Park	0	32	32	64	0	50
Staples	0	7	16	23	0	9
Stewartville	0	13	22	35	0	21
Stillwater	0	38	112	150	0	55
Thief River Falls	1	32	40	73	1	49
Two Harbors	0	6	18	24	0	8
Vadnais Heights	3	86	171	260	3	116
Victoria	0	9	58	67	0	13
Virginia	0	27	115	142	0	34
Wabasha	0	6	7	13	0	12
Waconia	0	18	61	79	0	33
Wadena	0	14	28	42	0	19
Waite Park	1	60	138	199	1	89
Waseca	0	19	34	53	0	26
Watertown	0	3	19	22	0	3
Wayzata	0	35	82	117	0	44
West St. Paul	0	99	207	306	0	119
White Bear Lake	0	147	347	494	0	203
Willmar	1	104	234	339	1	143
Windom	0	15	27	42	0	38
Winona	1	98	183	282	1	137
Woodbury	1	187	392	580	1	258
Worthington	0	35	173	208	0	48
Wyoming	1	33	52	86	1	55
Zimmerman	0	12	43	55	0	18
Zumbrota	0	2	18	20	0	2

TABLE 1.26

2012 CRASHES BY TIME AND DAY

Hour Beginning	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
Midnight	1,050	9	262	2	96	0	105	1	117	0	114	1	127	3	229	2
1 am	934	9	251	2	69	1	87	0	93	1	95	2	129	2	210	1
2 am	989	12	285	2	76	0	66	1	91	0	91	0	145	3	235	6
3 am	645	6	181	2	49	0	53	0	54	1	69	0	81	1	158	2
4 am	524	8	114	1	57	0	59	1	61	1	52	1	79	2	102	2
5 am	883	7	121	2	139	2	140	0	100	0	122	0	147	0	114	3
6 am	1,872	14	132	2	313	0	353	2	298	2	313	3	308	3	155	2
7 am	3,902	13	159	2	643	0	788	1	717	3	712	3	660	2	223	2
8 am	3,712	17	217	1	651	2	693	2	628	4	596	2	616	3	311	3
9 am	3,066	12	278	1	473	3	479	3	467	1	435	4	544	0	390	0
10 am	3,072	7	366	1	471	2	405	2	400	1	421	1	512	0	497	0
11 am	3,576	11	453	1	523	1	478	1	469	2	439	2	626	2	588	2
Noon	4,114	13	552	1	571	3	566	1	465	1	588	1	759	4	613	2
1 pm	4,042	15	505	2	591	3	511	3	510	2	521	4	772	1	632	0
2 pm	4,607	25	530	3	675	1	640	4	648	2	629	5	911	5	574	5
3 pm	5,604	26	490	1	876	5	872	6	839	3	846	2	1,028	2	653	7
4 pm	5,818	24	471	3	950	6	938	4	919	7	931	3	1,068	0	541	1
5 pm	6,359	26	461	2	1,027	3	1,056	3	1,079	6	1,093	6	1,120	4	523	2
6 pm	4,169	20	426	2	556	3	614	2	666	1	646	3	796	4	465	5
7 pm	2,678	14	339	2	383	4	374	1	323	0	372	1	503	2	384	4
8 pm	2,276	14	302	2	344	2	303	3	304	3	340	2	351	2	332	0
9 pm	2,131	21	225	0	296	1	281	4	264	3	280	0	429	8	356	5
10 pm	1,731	13	203	1	220	4	193	2	217	2	250	1	332	1	316	2
11 pm	1,283	13	138	0	135	2	126	1	136	0	176	2	258	6	314	2
Unk	199	0	20	0	33	0	31	0	28	0	23	0	26	0	38	0
Total	69,236	349	7,481	38	10,217	48	10,211	48	9,893	46	10,154	49	12,327	60	8,953	60

FIGURE 1.03

TOTAL CRASHES VS FATAL CRASHES, BY TIME, 2012

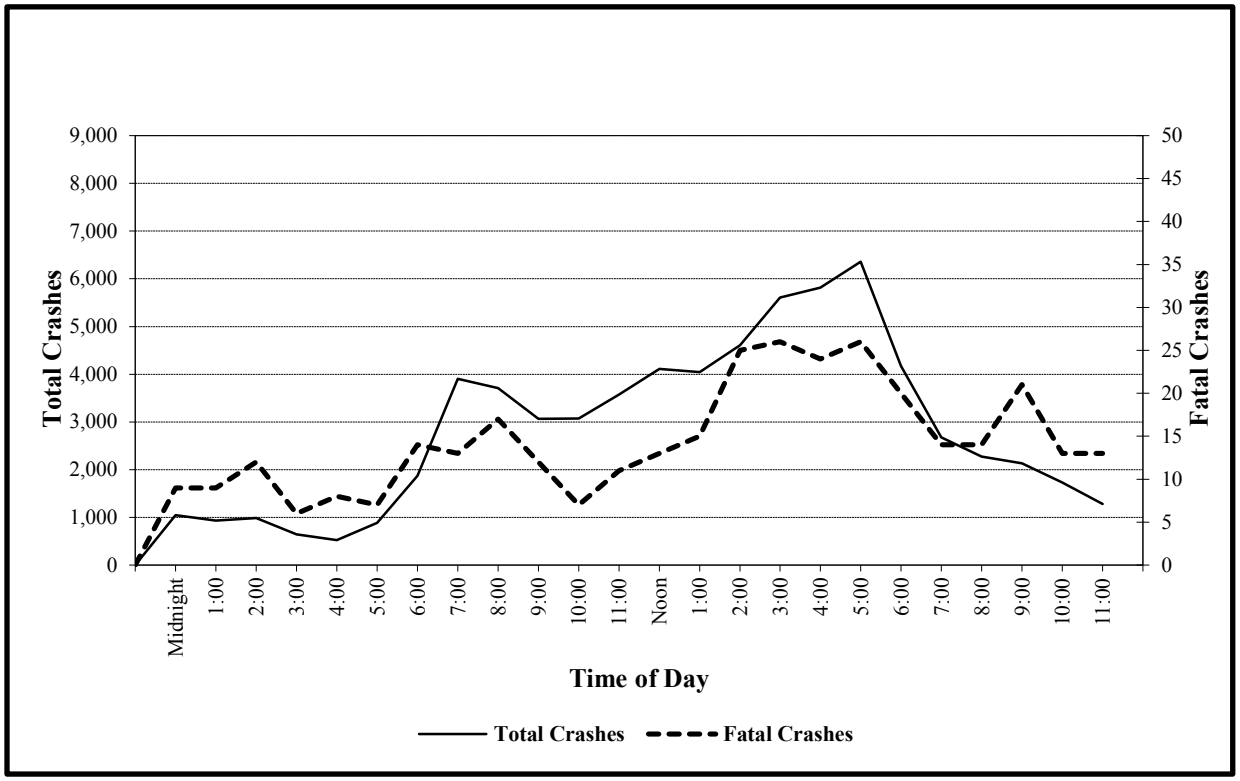

TABLE 1.27

2012 CRASHES, FATALITIES, AND INJURIES BY MONTH

Month	Fatal Crashes	Injury Crashes	Property Damage Crashes	Total Crashes	Killed	Injured
January	18	1,832	5,275	7,125	20	2,498
February	25	1,346	3,724	5,095	30	1,871
March	23	1,403	3,123	4,549	25	1,941
April	19	1,476	3,096	4,591	21	2,074
May	24	1,808	3,664	5,496	26	2,550
June	37	1,939	3,757	5,733	39	2,670
July	34	1,926	3,432	5,392	38	2,762
August	38	1,949	3,673	5,660	42	2,817
September	41	1,851	3,618	5,510	48	2,582
October	37	1,836	4,192	6,065	40	2,496
November	23	1,699	4,199	5,921	29	2,370
December	30	1,907	6,162	8,099	37	2,683
Total	349	20,972	47,915	69,236	395	29,314

TABLE 1.28

HOLIDAY CRASH SUMMARY, 2007 - 2012

Holiday Period	Year	Hours*	Fatal Crashes	Injury Crashes	PDO Crashes	Total Crashes	Killed	Injured
Memorial Day	2007	78	5	167	259	431	5	243
(In 2012, the holiday	2008	78	2	168	275	445	2	243
period was 6 pm Fri,	2009	78	9	168	259	436	13	254
May 25- midnight	2010	78	8	167	244	419	9	245
Monday, May 28)	2011	78	0	130	258	388	0	189
	2012	78	3	170	278	451	4	239
July 4th	2007	30	0	73	134	207	0	103
(In 2012, the holiday	2008	78	8	188	247	443	8	290
period was 6pm Tue,	2009	78	7	191	263	461	10	303
July 3-midnight	2010	78	4	165	268	437	5	246
Wednesday, July 4)	2011	78	4	170	268	442	6	255
	2012	30	0	79	80	159	0	119
Labor Day	2007	78	6	204	320	530	6	300
(In 2012, the holiday	2008	78	4	197	252	453	4	286
period was 6 pm Fri,	2009	78	2	150	218	370	3	197
Aug 31-midnight	2010	78	5	143	265	413	5	228
Monday, Sept 3)	2011	78	6	138	209	353	6	207
	2012	78	5	145	241	391	6	221
Thanksgiving	2007	102	4	203	561	768	4	298
(In 2012, the holiday	2008	102	7	251	700	958	7	400
period was 6pm Wed	2009	102	5	168	397	570	5	263
Nov 21- midnight	2010	102	4	201	589	794	4	281
Sunday, Nov 25)	2011	102	2	161	334	497	2	232
	2012	102	1	191	599	791	1	269
Christmas	2007	102	10	456	1,480	1,946	11	682
(In 2012, the holiday	2008	102	3	197	485	685	3	279
period was 6 pm Fri,	2009	78	1	168	669	838	1	261
Dec 21-midnight	2010	78	0	135	555	690	0	197
Tuesday, Dec 25)	2011	78	3	125	206	334	3	186
	2012	102	1	115	436	552	1	180
New Year's	2007/08	102	4	174	525	703	4	263
(In 2012, the	2008/09	102	3	305	989	1,297	3	467
holiday period was	2009/10	78	3	133	495	631	4	197
6 pm Fri, Dec 28 --	2010/11	78	1	221	671	893	1	308
Midnight Tuesday,	2011/12	78	3	153	478	634	4	212
January 1, 2013)	2012/13	102	5	165	489	659	7	240

* 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 or higher 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. However, 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 2012, ten drinking pedestrians 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. (This procedure was once again improved in 2002). 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 2012
Drinking and driving remains a serious problem in Minnesota and across the nation. For 2012, the National Safety Council has made a conservative estimate of $262 million as the cost of alcohol-related crashes in Minnesota. 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. Last year, 7% of minor injuries, 13% of moderate injuries, 23% of severe injuries, and 33% of deaths were alcohol-related. In all, 131 known people died and 2,644 known people were injured in crashes classified as alcohol-related. (NHTSA estimates will be higher).

Impaired driving incidents (DWIs) decrease
In 2012, there were 28,418 impaired driving incidents in Minnesota. This number represents a 3% decrease from the previous year. There would surely be more impaired driving arrests each year if staffing levels of state troopers and police officers in Minnesota had not remained static over the past 30 years. These low staffing levels are inconsistent with the fact that the population and the number of roads continue to rise, and the fact that the number of licensed drivers in Minnesota is now over 4 million people.

Males and young people
When gender is stated, males made up 67% of the DWI offenders last year, however, females are getting arrested more often. In 2012, they accounted for 25% of the incidents. (10 years ago, they were 20% 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 fully 53% of the incidents on record. Drivers under age 21 accounted for 6%.

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. Motorists aged 15-34 accounted for 38% of all traffic deaths, and for fully 45% 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, 107 (82%) of the 131 people who died in alcohol-related crashes were themselves the people whose drinking behavior was a main factor which lead to the crash to be classified as alcohol-related. In short, drinking drivers, pedestrians, and bicyclists mostly kill and injure themselves. The remaining 24 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 42% of all traffic crashes, but 61% of the alcohol-related crashes. The late night hours 9 p.m.-3 a.m. accounted for 12% of all crashes, but 47% of the alcohol-related crashes.

Fatal alcohol crashes usually involve just one vehicle
Of the 118 alcohol-related fatal crashes in 2012, 84 (71%) involved just one motor vehicle in transport. Of the 84 single vehicle alcohol-related fatal crashes, 28 involved a single vehicle colliding with a fixed object, and 31 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 2012, there were 262 motor vehicle drivers who were killed. (Note that this total does not include pedestrians or bicyclists). Of the 262 killed drivers, the Department of Public Safety was able to get alcohol test results for 206 (79%). Of the 206 tested, 130 (63%) tested negative, 5 (2%) tested between .01 and .07, 2 (1%) tested between .08 and .09, and 69 (34%) tested .10 or greater.

Majority of alcohol-related fatalities test above the legal limit
The 131 alcohol-related fatalities in 2012 consisted of 74 car or truck drivers, 19 car or truck passengers, 14 motorcycle drivers, one motorcycle passenger, one snowmobile driver, four ATV drivers, 14 pedestrians, and three bicyclists. Of the 131, the Department of Public Safety was able to get alcohol test results for 108. Of these, 88 (81%) 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 35% per year. 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 a & b

a: 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

b: ALCOHOL-RELATED FATAL CRASH SUMMARY, 1990 – 2012

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
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	171	38
2009	266	236	89	160	68	13	5	4	2	59	25	421	141	34	150	36
2010	270	237	88	156	66	6	3	2	1	73	31	411	131	32	140	34
2011	243	220	91	137	62	11	5	6	3	66	30	368	136	37	141	38
2012	262	206	79	130	63	5	2	2	1	69	34	395	131	33	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.

TABLE 2.02

IMPAIRED DRIVING INCIDENTS ("DWIs") BY GENDER AND BY AREA OF STATE WHERE ARREST WAS MADE, 1996 - 2012

Year	Total	Male	Male %	Female	Female %	Not Stated	Not Stated %	Area: Metro	Area: Metro %	Area: Non-Metro %	Area: Non-Metro %
1996	30,515	23,588	77.3	5,371	17.6	1,556	5.1	15,774	51.7	14,741	48.3
1997	30,905	23,636	76.5	5,733	18.6	1,536	5.0	15,954	51.6	14,951	48.4
1998	32,001	24,193	75.6	6,048	18.9	1,760	5.5	16,537	51.7	15,464	48.3
1999	34,529	25,938	75.1	6,505	18.8	2,086	6.0	17,126	49.6	17,403	50.4
2000	34,803	27,741	74.0	6,755	19.4	2,307	6.6	16,739	48.1	18,064	51.9
2001	33,305	24,479	73.5	6,494	19.5	2,331	7.0	16,284	48.9	17,021	51.1
2002	32,948	23,887	72.5	6,557	19.9	2,504	7.6	16,147	49.0	16,801	51.0
2003	32,193	23,082	71.7	6,535	20.3	2,575	8.0	15,972	49.6	16,221	50.4
2004	34,199	24,199	70.8	7,165	21.0	2,835	8.3	16,762	49.0	17,437	51.0
2005	36,870	25,712	69.7	7,989	21.7	3,169	8.6	17,837	48.4	19,033	51.6
2006	41,842	28,665	68.6	9,293	22.2	3,884	9.3	20,496	49.0	21,346	51.0
2007	38,635	26,365	68.2	8,809	22.8	3,461	9.0	18,764	48.6	19,871	51.4
2008	35,736	24,142	67.6	8,444	23.6	3,150	8.8	17,781	49.8	17,995	50.2
2009	32,756	22,078	67.4	7,906	24.1	2,772	8.5	16,253	49.6	16,503	50.4
2010	29,918	19,982	66.8	7,410	24.8	2,526	8.4	15,146	50.6	14,772	49.4
2011	29,257	19,851	67.8	7,280	24.9	2,126	7.3	14,888	50.9	14,369	49.1
2012	28,418	19,035	67.0	7,156	25.2	2,227	7.8	14,660	51.6	13,758	48.4

* 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 - 2012

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+
1996	30,515	2	10	135	300	608	791	826	2,672	15,815	9,762	2,266
1997	30,905	5	17	102	273	627	751	886	2,661	15,495	10,283	2,466
1998	32,001	2	17	102	297	675	888	911	2,892	15,624	10,973	2,512
1999	34,529	4	18	114	285	740	1,004	1,032	3,197	17,100	11,479	2,753
2000	34,803	5	10	124	330	691	984	1,104	3,248	17,245	11,472	2,838
2001	33,305	2	14	118	277	636	911	1,030	2,988	16,791	10,740	2,786
2002	32,948	6	13	122	298	655	849	1,086	3,029	16,594	10,379	2,946
2003	32,193	3	21	117	279	689	904	1,064	3,077	16,518	9,732	2,866
2004	34,199	3	13	105	300	679	889	1,012	3,001	17,382	10,185	3,181
2005	36,870	5	16	118	335	705	1,028	1,236	3,443	19,505	10,557	3,365
2006	41,842	6	24	135	394	854	1,274	1,346	4,035	22,465	11,487	3,855
2007	38,635	4	11	126	325	712	1,064	1,209	3,451	20,518	10,743	3,922
2008	35,736	6	14	102	266	630	887	1,046	2,951	18,933	9,851	4,001
2009	32,756	6	6	75	197	524	801	896	2,505	17,165	9,196	3,889
2010	29,918	4	9	54	139	425	667	804	2,102	15,727	8,154	3,935
2011	29,257	1	5	55	154	362	578	748	1,903	15,489	7,842	4,020
2012	28,418	4	10	42	112	332	621	662	1,783	15,122	7,504	4,009

FIGURE 2.01

PERCENT OF IMPAIRED DRIVING INCIDENTS ("DWIs") COMMITTED BY OFFENDERS IN FOUR AGE GROUPS, 1990-2012

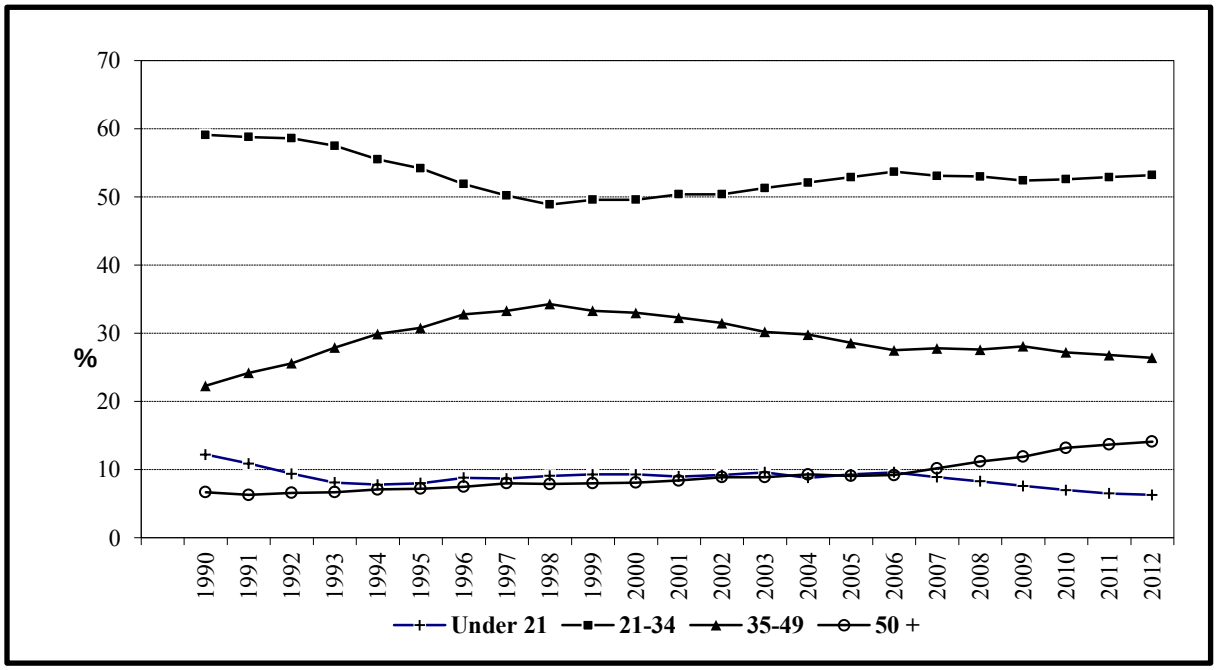

TABLE 2.04

IMPAIRED DRIVING INCIDENTS ("DWIs") BY AGE, 1996 - 2012

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

TABLE 2.05

AGE OF PERSONS KILLED AND INJURED IN ALL CRASHES AND IN ALCOHOL - RELATED CRASHES, 2012

Age Group	Killed	Alcohol Related[1]	Severe Injuries	Alcohol Related[2]	Moderate Injuries	Alcohol Related[2]	Minor Injuries	Alcohol Related[2]	Total Injured	Alcohol Related[2]
00 - 04	3	1	11	0	58	6	355	19	424	25
05 - 09	2	1	18	2	113	7	513	23	644	32
10 - 14	9	0	24	4	176	14	658	31	858	49
15	2	0	12	2	64	4	215	6	291	12
16	6	0	26	1	151	6	547	12	724	19
17	9	2	31	2	186	18	566	28	783	48
18	11	0	29	7	215	24	572	39	816	70
19	7	2	35	8	204	32	575	45	814	85
20	12	6	40	10	201	31	574	51	815	92
< 21:	61	12	226	36	1,368	142	4,575	254	6,169	432
00 - 14	14	2	53	6	347	27	1,526	73	1,926	106
15 - 19	35	4	133	20	820	84	2,475	130	3,428	234
20 - 24	49	20	189	66	970	206	2,722	340	3,881	612
25 - 29	40	17	127	44	715	132	2,167	228	3,009	404
30 - 34	28	18	106	29	531	89	1,838	164	2,475	282
35 - 39	25	11	103	34	476	82	1,406	92	1,985	208
40 - 44	23	9	80	25	467	67	1,478	93	2,025	185
45 - 49	26	10	87	20	482	60	1,497	79	2,066	159
50 - 54	30	13	115	23	510	55	1,497	80	2,122	158
55 - 59	25	9	87	12	427	38	1,236	55	1,750	105
60 - 64	18	5	61	9	369	28	934	47	1,364	84
65 - 69	23	7	36	4	214	15	653	18	903	37
70 - 74	13	1	28	1	161	8	445	15	634	24
75 - 79	8	2	22	2	132	6	318	7	472	15
80 - 84	8	1	16	0	113	2	240	5	369	7
85 +	29	1	16	1	74	0	186	4	276	5
Unk	1	1	9	0	94	2	526	17	629	19
Total	395	131*	1,268	296	6,902	901	21,144	1,447	29,314	2,644

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 131 alcohol-related traffic deaths in the year 2012. Fourteen of those deaths were to pedestrians, and 10 of them were drinking. In the 10 fatal crashes involving a drinking pedestrian, none of the motor vehicle drivers involved were drinking. Note: Seven bicyclists were killed in 2012. Three of the 7 were alcohol-related.

TABLE 2.06

2012 ALCOHOL - RELATED FATALITIES' LEVEL OF ALCOHOL CONCENTRATION BY TRAFFIC ROLE

Traffic Role	Killed	Tested	.00	.01 - .07	.08 - .09	.10 +
Car or Truck Driver	74	68	7	3	1	57
Car or Truck Passenger	19	12	2	2	0	8
Motorcycle Driver	14	13	1	2	1	9
Motorcycle Passenger	1	1	0	1	0	0
ATV Driver	4	2	0	0	0	2
Snowmobile	1	1	0	0	0	1
Pedestrian	14	8	2	0	0	6
Bicyclist	3	3	0	0	0	3
Other Vehicle	1	0	0	0	0	0
Total	131	108	12	8	2	86

TABLE 2.07

PERCENT OF DEATHS, INJURIES, AND PROPERTY DAMAGE CRASHES DETERMINED TO BE ALCOHOL - RELATED, 2003 - 2012

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Deaths* (Known)	39%	31%	35%	34%	37%	36%	34%	32%	37%	33%
(Estimated)	41%	32%	36%	37%	39%	38%	36%	34%	38%	n/a
Injuries**	NA	9%	9%	10%	9%	9%	8%	8%	8%	9%
PDO Crashes**	NA	3%	4%	4%	4%	4%	4%	4%	4%	4%

* 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, 2012

First Harmful Event	Number of Fatal Crashes	% of Fatal Crashes	Number of Alcohol Related Fatal Crashes	% of Alcohol Related Fatal Crashes
Collision with:				
Another Motor Vehicle	154	44.1%	34	28.8%
Parked Motor Vehicle	3	0.9	0	0.0
Train	3	0.9	0	0.0
Bicyclist	7	2.0	3	2.5
Pedestrian	38	10.9	14	11.9
Deer/Other Animal	8	2.3	2	1.7
Fixed Object	60	17.2	28	23.8
Other Collision Type	7	2.0	3	2.5
Non-Collision:				
Overturn	60	17.2	31	26.3
Fire/Explosion	4	1.2	1	0.8
Other Type Non-Collision	2	0.6	1	0.8
Unknown	3	0.9	1	0.8
Total	349	100.0%	118	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, 2003 - 2012

Year	Killed	Tested	.00	.01 - .07	.08 - .09	.10 +
2003	435	376	219 (58%)	18 (5%)	5 (1%)	134 (36%)
2004	389	337	219 (65%)	11 (3%)	4 (1%)	103 (31%)
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%)

* Percent's based on drivers tested.

TABLE 2.10

DRIVERS KILLED WHO TESTED .01 OR HIGHER, 2003 - 2012
("Any Alcohol")

Year	Total	Male		Female		Occurred Between Midnight - 3 AM		Under Legal Age	
2003	157	135	(86%)	22	(14%)	42	(27%)	14	(9%)
2004	118	101	(86%)	17	(14%)	35	(30%)	19	(16%)
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%)

TABLE 2.11

DRIVERS KILLED WHO TESTED OVER THE LEGAL LIMIT, 2003 - 2012
(The legal limit in Minnesota was lowered to .08 in mid-2005)

Year	Total	Male		Female		Occurred Between Midnight - 3 AM		Under Legal Age	
2003	134	115	(86%)	19	(14%)	39	(29%)	9	(7%)
2004	103	90	(87%)	13	(13%)	34	(33%)	16	(16%)
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%)

FIGURE 2.02

KILLED DRIVERS TESTED FOR ALCOHOL: 1980-2012
Percent Over .01 Alcohol Level and Percent Over Legal Limit
(The legal limit in Minnesota was lowered to .08 in 2005)

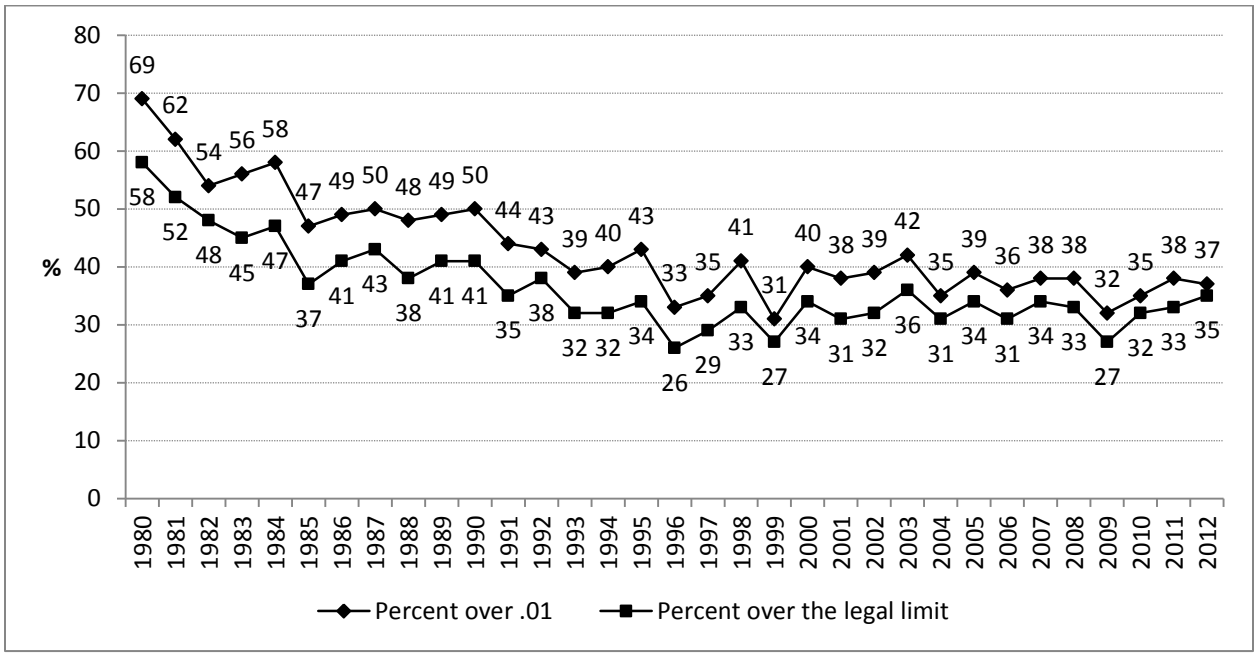

FIGURE 2.03

PERCENT OF DRIVERS KILLED WHO HAD BEEN DRINKING, BY AGE, 2012

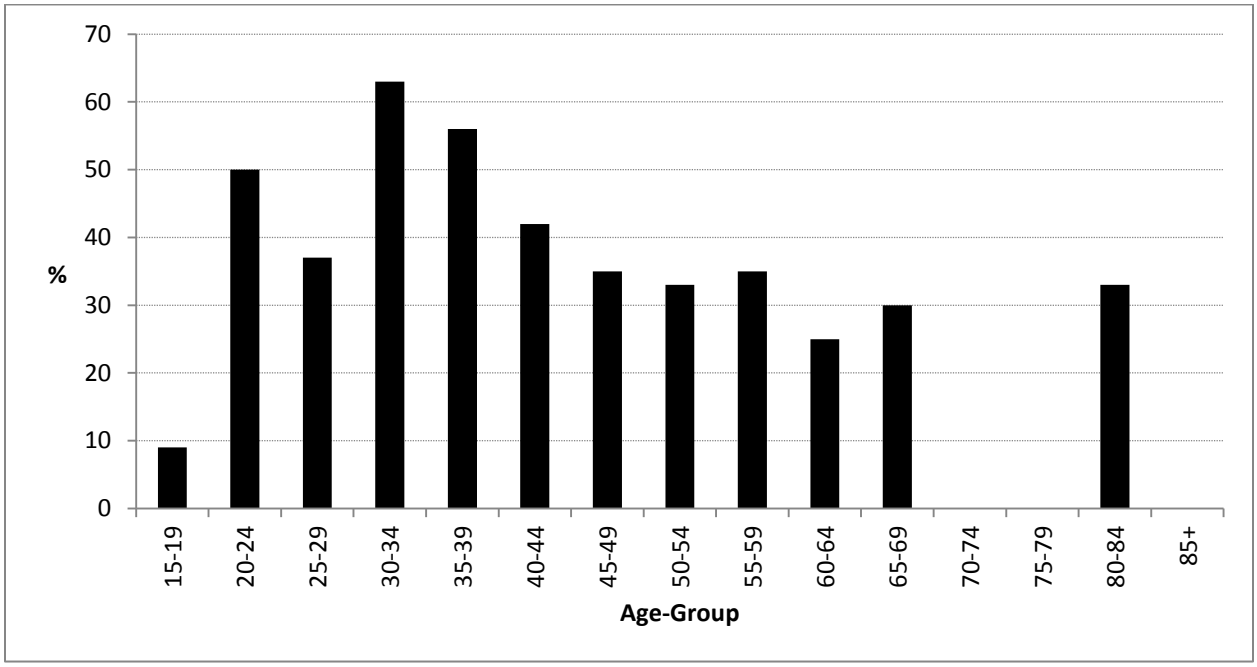

TABLE 2.12

2012 DRIVER FATALITIES' LEVEL OF ALCOHOL CONCENTRATION BY AGE

			Alcohol Concentration														
			.00		.01 - .07		.08 - .09		.10 +		Alcohol Concentration						
Age	**Killed**	**Tested**	**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
15	0	0	0		0		0		0		0	0	0	0	0	0	0
16	3	2	2		0		0		0		2	0	0	0	0	0	0
17	4	4	3		0		0		1		3	0	0	1	0	0	0
18	4	3	3		0		0		0		3	0	0	0	0	0	0
19	4	2	2		0		0		0		2	0	0	0	0	0	0
20	9	9	4		0		0		5		4	0	0	0	2	3	0
< 21	24	20	14		0		0		6		14	0	0	1	2	3	0
00 - 14	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0	0	0	0	0
15 - 19	15	11	10	90.9	0	0.0	0	0.0	1	9.1	10	0	0	1	0	0	0
20 - 24	30	24	12	50.0	0	0.0	0	0.0	12	50.0	12	0	0	2	5	3	2
25 - 29	32	27	17	63.0	0	0.0	0	0.0	10	37.0	17	0	0	1	3	3	3
30 - 34	23	19	7	36.8	1	5.3	1	5.3	10	52.6	7	1	1	2	4	1	3
35 - 39	21	18	8	44.4	0	0.0	0	0.0	10	55.6	8	0	0	1	3	3	3
40 - 44	15	12	7	58.3	0	0.0	0	0.0	5	41.7	7	0	0	0	4	1	0
45 - 49	19	17	11	64.7	0	0.0	0	0.0	6	35.3	11	0	0	0	3	3	0
50 - 54	22	18	12	66.7	1	5.6	1	5.6	4	22.2	12	0	2	0	2	1	1
55 - 59	20	17	11	64.7	0	0.0	0	0.0	6	35.3	11	0	0	2	2	1	1
60 - 64	16	12	9	75.0	2	16.7	0	0.0	1	8.3	9	1	1	0	0	1	0
65 - 69	19	10	7	70.0	0	0.0	0	0.0	3	30.0	7	0	0	0	2	0	1
70 - 74	6	3	3	100.0	0	0.0	0	0.0	0	0.0	3	0	0	0	0	0	0
75 - 79	3	2	2	100.0	0	0.0	0	0.0	0	0.0	2	0	0	0	0	0	0
80 - 84	5	3	2	66.7	1	33.3	0	0.0	0	0.0	2	0	1	0	0	0	0
85+	15	12	12	100.0	0	0.0	0	0.0	0	0.0	12	0	0	0	0	0	0
Unk Age	1	1	0	0.0	0	0.0	0	0.0	1	100.0	0	0	0	1	0	0	0
Total	262	206	130	63.1	5	2.4	2	1.0	69	33.5	130	2	5	10	28	17	14

* Percent's, based on drivers tested, may not add to 100.0% due to rounding.

TABLE 2.13

2012 ALCOHOL - RELATED CRASHES BY MONTH

Month	Fatal Crashes	Injury Crashes	Property Damage	Total Crashes	Killed	Injured
January	7	156	163	326	7	223
February	10	127	149	286	11	178
March	11	132	163	306	12	180
April	4	153	136	293	4	218
May	7	162	133	302	7	251
June	13	162	156	331	14	216
July	11	184	143	338	12	297
August	19	155	176	350	21	224
September	10	151	149	310	11	212
October	11	191	143	345	14	255
November	7	147	154	308	9	198
December	8	126	208	342	9	192
Total	118	1,846	1,873	3,837	131	2,644

TABLE 2.14

2012 ALCOHOL - RELATED CRASHES BY ROADWAY TYPE

Roadway Type	Fatal Crashes	Injury Crashes	Property Damage Crashes	Total Crashes	Killed	Injured
Urban Interstate	1	160	251	412	1	209
Rural Interstate	0	20	30	50	0	26
Urban US Trunk Hwy	5	69	92	166	5	89
Rural US Trunk Hwy	11	94	87	192	15	150
Urban MN Trunk Hwy	5	143	159	307	5	218
Rural MN Trunk Hwy	17	168	99	284	20	249
County State Aid Hwy	50	570	415	1,035	54	855
County Road	4	73	33	110	4	89
Township Road	13	83	38	134	14	115
Mun State Aid Hwy	7	265	311	583	8	367
Municipal Street	3	192	317	512	3	263
Other	2	9	41	52	2	14
Total	118	1,846	1,873	3,837	131	2,644

FIGURE 2.04

2012 ALCOHOL-RELATED CRASHES BY TIME OF DAY

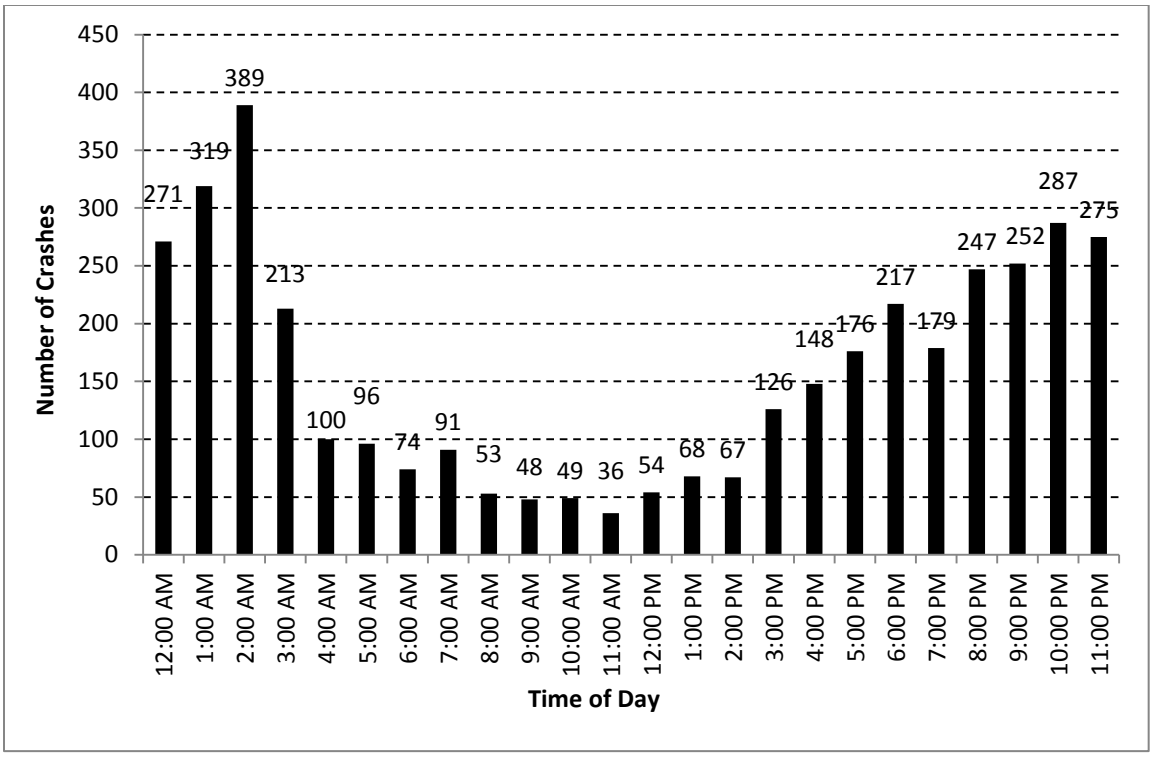

FIGURE 2.05

2012 ALCOHOL-RELATED CRASHES BY DAY OF WEEK

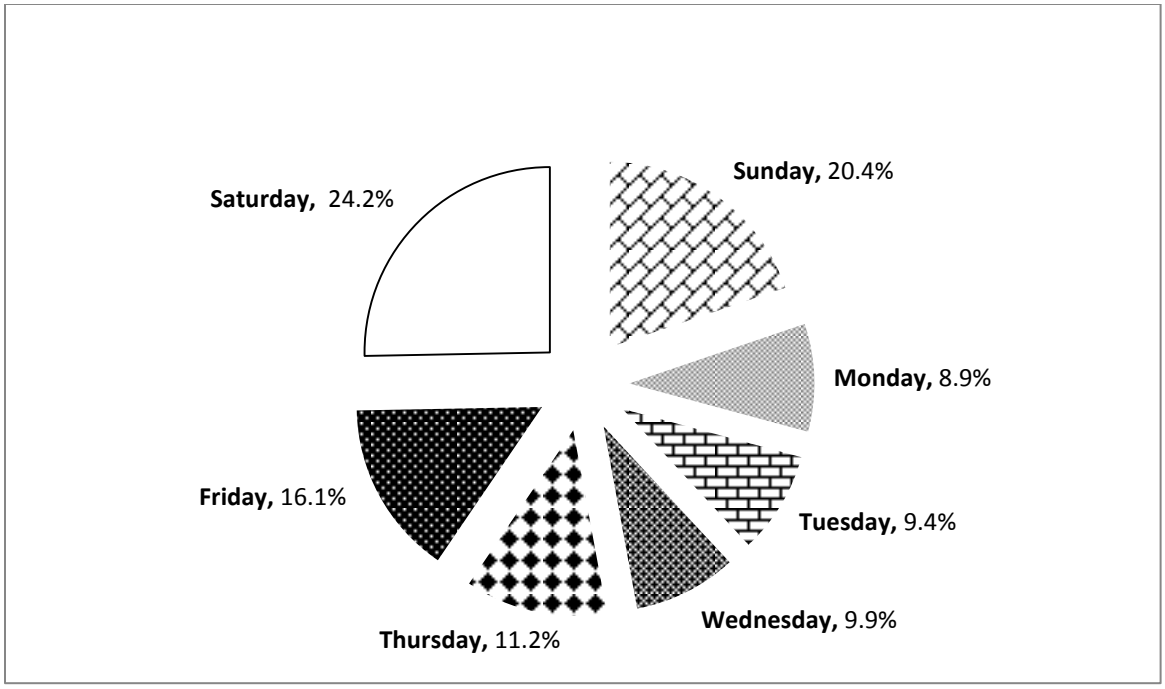

TABLE 2.15

2012 ALCOHOL-RELATED CRASHES BY TIME OF DAY AND DAY OF WEEK

Hour Beginning	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total Crashes	Total Killed	Total Injured
Midnight	57	21	26	32	32	40	63	271	5	179
1:00 AM	98	18	21	23	28	52	79	319	8	198
2:00 AM	119	26	15	31	29	59	110	389	11	269
3:00 AM	74	9	10	12	23	21	64	213	4	133
4:00 AM	34	2	5	8	3	12	36	100	5	62
5:00 AM	27	7	4	7	10	11	30	96	4	63
6:00 AM	20	9	7	4	6	7	21	74	4	51
7:00 AM	29	7	6	8	7	11	23	91	7	52
8:00 AM	12	4	5	3	9	10	10	53	5	43
9:00 AM	15	3	6	5	4	4	11	48	4	32
10:00 AM	7	5	6	6	8	6	11	49	1	42
11:00 AM	6	1	4	1	3	10	11	36	1	19
Noon	8	4	8	8	7	11	8	54	2	49
1:00 PM	11	5	7	11	6	12	16	68	2	68
2:00 PM	9	8	11	12	6	11	10	67	3	44
3:00 PM	18	18	19	14	21	14	22	126	2	89
4:00 PM	28	24	13	19	18	19	27	148	1	87
5:00 PM	27	24	24	24	22	22	33	176	8	145
6:00 PM	37	21	23	20	19	50	47	217	7	163
7:00 PM	26	19	26	13	24	32	39	179	6	126
8:00 PM	37	30	29	24	30	42	55	247	8	173
9:00 PM	22	31	31	36	34	46	52	252	16	186
10:00 PM	30	22	35	31	48	55	66	287	9	197
11:00 PM	30	22	20	29	33	59	82	275	8	172
Unknown	0	0	1	0	0	0	1	2	0	2
Total	781	340	362	381	430	616	927	3,837	131	2,644

III: SAFETY EQUIPMENT USE BY VEHICLE OCCUPANTS IN 2012 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 11.2% of the persons killed and 10.2% of the persons injured in 2012.

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 August, 2012, the observational seat belt study revealed a 93.6% usage rate.

Occupant fatalities in 2012
In 2012, 276 motor vehicle occupants were killed in traffic crashes which represents a 2% increase from the previous year. And, vehicle occupants injured (25,749) decreased slightly (4%) from 2011. However, these figures also 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 2012, that number decreased to 863. 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 67% were known to be using a restraint. This is the lowest rate of use of any region. The Southwest region was second lowest: 76%. Concerning types of roadway, 'Township Roads' had the lowest percentage of seat belt use (64%).

Ejection update: always wear your seat belt
Of the 276 occupants killed in 2012, almost one-fourth were ejected or partially ejected from the vehicles they were riding in. And, 95% of these ejected fatalities were not wearing a seat belt.

Airbag update: always wear your seat belt
In 2012, airbag deployment was reported 14,976 times when the occupant was also wearing a seat belt. Fifty-four percent of these incidents resulted in no apparent injury. Airbags deployed 827 times when occupants were not wearing seat belts. Only 28% of these cases resulted in no apparent injury.

TABLE 3.01

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

	Area of State			Class of Roadway	
Date of Survey	**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

		Vehicle Type				Gender	
Date of Survey	**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

*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, 2012

Ejection Status	Killed	%	Severe Injury	%	Moderate Injury	%	Minor Injury	%	Total Killed or Injured	%
Not Ejected	201	0.8	724	2.9	5,326	21.6	18,410	74.6	24,661	100%
Partly Ejected	9	17.6	21	41.2	14	27.4	7	13.7	51	100%
Ejected	57	20.1	75	26.5	70	24.7	81	28.6	283	100%
Not Stated	9	0.9	43	4.2	197	19.1	781	75.8	1,030	100%
Total	276	1.1%	863	3.3%	5,607	21.5%	19,279	74.1%	26,025	100%

TABLE 3.03

MOTOR VEHICLE OCCUPANTS KILLED OR INJURED, BY AGE AND INJURY SEVERITY, 2012

Age Group	Killed	Severe Injury	Moderate Injury	Minor Injury	Total Injuries
00 - 04	2	5	51	337	393
05 - 09	1	9	87	437	533
10 - 14	6	13	117	491	621
15 - 19	26	102	718	2,291	3,111
20 - 24	35	138	806	2,482	3,426
25 - 29	32	90	577	1,980	2,647
30 - 34	21	80	442	1,724	2,246
35 - 39	16	73	381	1,287	1,741
40 - 44	18	50	379	1,360	1,789
45 - 49	15	44	367	1,376	1,787
50 - 54	14	71	376	1,338	1,785
55 - 59	16	56	318	1,100	1,474
60 - 64	13	37	298	848	1,183
65 - 69	19	26	172	605	803
70 - 74	7	20	143	428	591
75 - 79	6	19	121	304	444
80 - 84	7	14	103	234	351
85 & Older	22	11	69	181	261
Not Stated	0	5	82	476	563
Total	276	863	5,607	19,279	25,749

FIGURE 3.01

SAFETY EQUIPMENT USE AMONG MOTOR VEHICLE OCCUPANTS KILLED OR INJURED, BY AGE, 2012

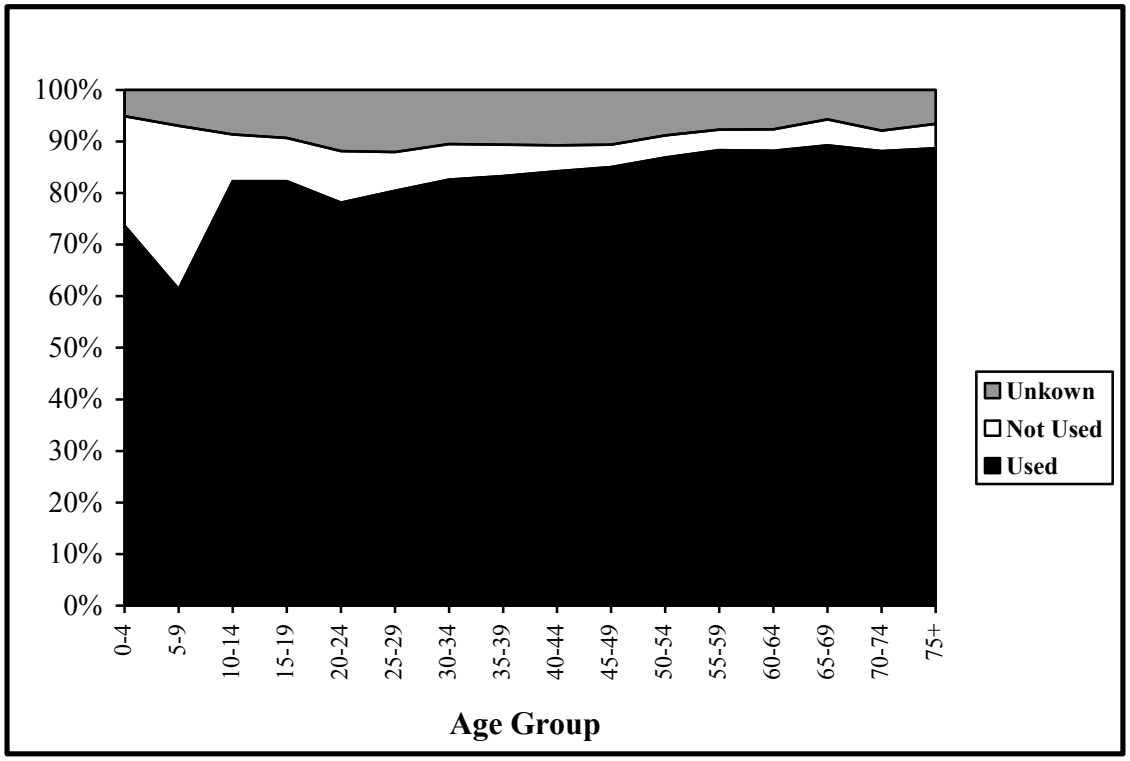

TABLE 3.04

SAFETY EQUIPMENT USE BY VEHICLE OCCUPANTS, BY GENDER AND INJURY SEVERITY, 2012

	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	67	62	129	246	253	2,497	1,933	9,383	6,895	21,347
Not Used	29	87	116	80	141	203	360	442	526	1,765
Unknown	11	20	31	43	97	247	326	834	952	2,637
Total	107	169	276	369	491	2,947	2,619	10,659	8,373	25,749

Note: Gender was not reported for 291 persons injured (mostly those with minor injuries), causing the "Total" to be 291 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, 2012

Age Group	Restraint Use	Killed	%	Severe Injuries	%	Moderate Injuries	%	Minor Injuries	%	Total Injured	%
00 - 03	Used	1	100.0	3	75.0	22	59.5	201	78.8	226	76.4
Years	Not Used	0	0.0	1	25.0	11	29.7	43	16.9	55	18.6
	Unknown	0	0.0	0	0.0	4	10.8	11	4.3	15	5.1
	Subtotal	1	100.0	4	100.0	37	100.0	255	100.0	296	100.0
04 – 07	Used	0	0.0	1	14.3	28	43.8	190	53.7	219	51.5
Years	Not Used	0	0.0	5	71.4	32	50.0	142	40.1	179	42.1
	Unknown	1	100.0	1	14.3	4	6.2	22	6.2	27	6.4
	Subtotal	1	100.0	7	100.0	64	100.0	354	100.0	425	100.0
Total	Used	1	50.0	4	36.4	50	49.5	391	64.2	445	61.7
00 - 07	Not Used	0	0.0	6	54.6	43	42.6	185	30.4	234	32.4
Years	Unknown	1	50.0	1	9.1	8	7.9	33	5.4	42	5.8
	Subtotal	2	100.0	11	100.0	101	100.0	609	100.0	721	100.0
00 - 04	Used	1	50.0	4	80.0	32	62.8	254	75.4	290	73.8
Years	Not Used	0	0.0	1	20.0	15	29.4	68	20.2	84	21.4
	Unknown	1	50.0	0	0.0	4	7.8	15	4.4	19	4.8
	Subtotal	2	100.0	5	100.0	51	100.0	337	100.0	393	100.0
05 - 09	Used	1	100.0	0	0.0	44	50.6	283	64.8	327	61.4
Years	Not Used	0	0.0	6	66.7	35	40.2	128	29.3	169	31.7
	Unknown	0	0.0	3	33.3	8	9.2	26	6.0	37	6.9
	Subtotal	1	100.0	9	100.0	87	100.0	437	100.0	533	100.0
10 - 14	Used	4	66.7	9	69.2	91	77.8	412	83.9	512	82.4
Years	Not Used	1	16.7	1	7.7	15	12.8	40	8.2	56	9.0
	Unknown	1	16.7	3	23.1	11	9.4	39	7.9	53	8.5
	Subtotal	6	100.0	13	100.0	117	100.0	491	100.0	621	100.0
15 - 19	Used	13	50.0	61	59.8	554	77.2	1,953	85.2	2,568	82.6
Years	Not Used	10	38.5	28	27.4	87	12.1	138	6.0	253	8.1
	Unknown	3	11.5	13	12.8	77	10.7	200	8.7	290	9.3
	Subtotal	26	100.0	102	100.0	718	100.0	2,291	100.0	3,111	100.0
20 - 24	Used	13	37.1	66	47.8	588	73.0	2,038	82.1	2,692	78.6
Years	Not Used	18	51.4	43	31.2	124	15.4	161	6.5	328	9.6
	Unknown	4	11.4	29	21.0	94	11.7	283	11.4	406	11.8
	Subtotal	35	100.0	138	100.0	806	100.0	2,482	100.0	3,426	100.0
25 - 29	Used	13	40.6	44	48.9	435	75.4	1,663	84.0	2,142	80.9
Years	Not Used	17	53.1	25	27.8	63	10.9	96	4.8	184	7.0
	Unknown	2	6.2	21	23.3	79	13.7	221	11.2	321	12.1
	Subtotal	32	100.0	90	100.0	577	100.0	1,980	100.0	2,647	100.0
30 - 34	Used	10	47.6	44	55.0	338	76.5	1,481	85.9	1,863	83.0
Years	Not Used	10	47.6	23	28.8	48	10.9	75	4.4	146	6.5
	Unknown	1	4.8	13	16.2	56	12.7	168	9.7	237	10.6
	Subtotal	21	100.0	80	100.0	442	100.0	1,724	100.0	2,246	100.0
35 - 39	Used	6	37.5	39	53.4	310	81.4	1,109	86.2	1,458	83.7
Years	Not Used	9	56.2	20	27.4	33	8.7	45	3.5	98	5.6
	Unknown	1	6.2	14	19.2	38	10.0	133	10.3	185	10.6
	Subtotal	16	100.0	73	100.0	381	100.0	1,287	100.0	1,741	100.0

TABLE 3.05 CONTINUED

SAFETY EQUIPMENT USE BY VEHICLE OCCUPANTS KILLED OR INJURED, BY AGE AND INJURY SEVERITY, 2012

Age Group	Restraint Use	Killed	%	Severe Injuries	%	Moderate Injuries	%	Minor Injuries	%	Total Injured	%
40 - 44	Used	6	33.3	30	60.0	314	82.8	1,172	86.2	1,516	84.7
Years	Not Used	9	50.0	17	34.0	24	6.3	41	3.0	82	4.6
	Unknown	3	16.7	3	6.0	41	10.8	147	10.8	191	10.7
	Subtotal	18	100.0	50	100.0	379	100.0	1,360	100.0	2,647	100.0
45 - 49	Used	3	20.0	30	68.2	302	82.3	1,197	87.0	1,529	85.6
Years	Not Used	12	80.0	5	11.4	26	7.1	36	2.6	67	3.8
	Unknown	0	0.0	9	20.4	39	10.6	143	10.4	191	10.7
	Subtotal	15	100.0	44	100.0	367	100.0	1,376	100.0	1,787	100.0
50 - 54	Used	6	42.9	43	60.6	313	83.2	1,201	89.8	1,557	87.2
Years	Not Used	7	50.0	18	25.4	21	5.6	31	2.3	70	3.9
	Unknown	1	7.1	10	14.1	42	11.2	106	7.9	158	8.8
	Subtotal	14	100.0	71	100.0	376	100.0	1,338	100.0	1,785	100.0
55 - 59	Used	6	37.5	40	71.4	284	89.3	986	89.6	1,310	88.9
Years	Not Used	7	43.8	10	17.9	11	3.5	31	2.8	52	3.5
	Unknown	3	18.8	6	10.7	23	7.2	83	7.6	112	7.6
	Subtotal	16	100.0	56	100.0	318	100.0	1,100	100.0	1,474	100.0
60 - 64	Used	9	69.2	23	62.2	262	87.9	761	89.7	1,046	88.4
Years	Not Used	4	30.8	8	21.6	15	5.0	23	2.7	46	3.9
	Unknown	0	0.0	6	16.2	21	7.0	64	7.6	91	7.7
	Subtotal	13	100.0	37	100.0	298	100.0	848	100.0	1,183	100.0
65 - 69	Used	9	47.4	19	73.1	153	89.0	553	91.4	725	90.3
Years	Not Used	7	36.8	4	15.4	12	7.0	18	3.0	34	4.2
	Unknown	3	15.8	3	11.5	7	4.1	34	5.6	44	5.5
	Subtotal	19	100.0	26	100.0	172	100.0	605	100.0	803	100.0
70 - 74	Used	1	14.3	13	65.0	128	89.5	385	90.0	526	89.0
Years	Not Used	2	28.6	6	30.0	8	5.6	8	1.9	22	3.7
	Unknown	4	57.1	1	5.0	7	4.9	35	8.2	43	7.3
	Subtotal	7	100.0	20	100.0	143	100.0	428	100.0	591	100.0
75 &	Used	28	80.0	32	72.7	256	87.4	652	90.7	940	89.0
Older	Not Used	3	8.6	7	15.9	19	6.5	22	3.1	48	4.6
	Unknown	4	11.4	5	11.4	18	6.1	45	6.3	68	6.4
	Subtotal	35	100.0	44	100.0	293	100.0	719	100.0	1,056	100.0
Age	Used	0	0.0	2	40.0	46	56.1	298	62.6	346	61.5
Not	Not Used	0	0.0	1	20.0	9	11.0	16	3.4	26	4.6
Stated	Unknown	0	0.0	2	40.0	27	32.9	162	34.0	191	33.9
	Subtotal	0	0.0	5	100.0	82	100.0	476	100.0	563	100.0
All	**Used**	129	46.7	499	57.8	4,450	79.4	16,398	85.1	21,347	82.9
Ages	**Not Used**	116	42.0	223	25.8	565	10.1	977	5.1	1,765	6.8
	Unknown	31	11.2	141	16.3	592	10.6	1,904	9.9	2,637	10.2
	Subtotal	276	100.0	863	100.0	5,607	100.0	19,279	100.0	25,749	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, 2003 - 2012

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Killed										
Used	39.4	39.5	40.2	40.0	41.4	45.2	42.4	48.5	46.5	46.7
Not Used	48.9	51.8	51.2	52.0	48.9	46.2	43.7	41.0	44.3	42.0
Unknown	11.8	8.7	8.6	8.0	9.8	8.6	13.9	10.5	9.2	11.2
Injured										
Severe Injuries										
Used	n/a	49.3	49.6	49.9	52.2	51.4	55.2	58.3	59.2	57.8
Not Used	n/a	32.8	30.8	32.8	31.6	29.8	27.9	27.2	29.0	25.8
Unknown	n/a	17.9	19.6	17.3	16.2	18.8	16.9	14.5	11.8	16.3
Moderate Injuries										
Used	n/a	70.3	70.9	69.0	71.6	72.4	74.6	79.1	79.1	79.4
Not Used	n/a	17.4	15.9	16.8	15.4	14.8	12.8	10.8	10.4	10.1
Unknown	n/a	12.4	13.2	14.2	13.0	12.8	12.6	10.1	10.5	10.6
Minor Injuries										
Used	n/a	78.8	80.6	80.2	81.6	81.8	83.0	84.7	85.4	85.1
Not Used	n/a	9.7	8.8	8.6	7.6	7.4	6.5	5.5	5.1	5.1
Unknown	n/a	11.4	10.6	11.3	10.8	10.8	10.4	9.8	9.5	9.9
Total Injured										
Used	n/a	74.8	76.6	76.1	78.0	78.5	80.1	82.7	83.3	82.9
Not Used	n/a	13.2	11.7	11.6	10.4	10.0	8.7	7.3	7.0	6.8
Unknown	n/a	12.0	11.7	12.3	11.6	11.6	11.2	10.0	9.7	10.2

TABLE 3.07

SAFETY EQUIPMENT USE BY MOTOR VEHICLE OCCUPANTS KILLED OR INJURED, BY ROADWAY TYPE, 2012

Roadway Type	Used	%	Not Used	%	Unknown	%	Total	%
Interstate	2,976	92.1	144	4.5	112	3.5	3,232	100.0%
US Trunk Hwy	2,830	87.6	224	6.9	178	5.5	3,232	100.0%
MN Trunk Hwy	4,176	86.5	325	6.7	326	6.8	4,827	100.0%
CSAH	6,227	79.4	618	7.9	999	12.7	7,844	100.0%
County Road	352	75.2	56	12.0	60	12.8	468	100.0%
Township Road	385	64.0	128	21.3	89	14.8	602	100.0%
MSAH	3,158	81.0	217	5.6	525	13.5	3,900	100.0%
Municipal Street	1,345	72.2	156	8.4	361	19.4	1,862	100.0%
Other Road	27	46.6	13	22.4	18	31.0	58	100.0%
Total	21,476	82.5	1,881	7.2	2,668	10.2	26,025	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, 2012

EMS Region	Percent Used	Percent Not Used	Percent Unknown	Number of People
Metropolitan	83.8	4.8	11.3	14,726
Central	83.5	8.2	8.3	3,531
Northeast	81.0	9.5	9.5	1,482
Northwest	67.3	18.4	14.3	706
South Central	81.6	9.0	9.4	994
Southeast	83.9	9.0	7.1	2,156
Southwest	75.8	14.2	10.0	1,311
West Central	80.2	12.2	7.7	1,119
Statewide	82.5	7.2	10.2	26,025

*The regions of the state are shown in the map at right.

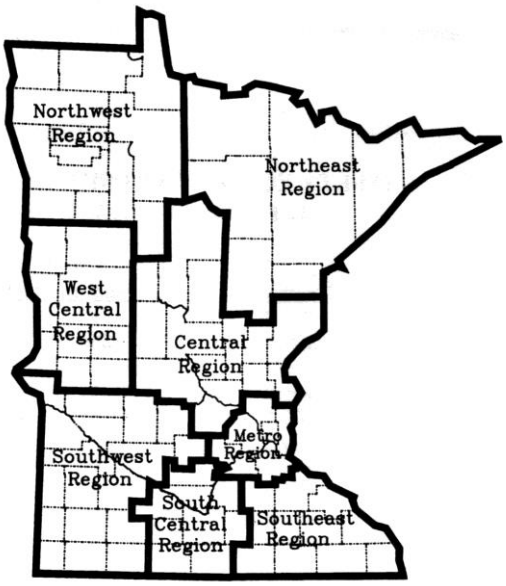

TABLE 3.09

AIRBAG DEPLOYMENTS, 2005 - 2012

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
2005	Killed	74	75	103	150	38	440
	Severe Injury	308	147	457	328	302	1,542
	Moderate Injury	2,172	367	4,117	1,045	1,174	8,875
	Minor Injury	4,195	375	14,846	1,706	2,504	23,626
	No Apparent Injury	7,529	390	109,215	4,714	50,655	172,503
	Total	14,278	1,354	128,738	7,943	54,673	206,986
2006	Killed	80	63	69	131	30	373
	Severe Injury	265	142	398	293	230	1,328
	Moderate Injury	1,917	323	3,491	993	1,114	7,838
	Minor Injury	4,067	351	13,747	1,552	2,504	22,221
	No Apparent Injury	7,130	375	96,018	3,779	44,881	152,183
	Total	13,459	1,254	113,723	6,748	48,759	183,943
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

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

2012 motorcycle crash summary
In the past decade many older people have returned to motorcycling. By the end of the calendar year 2012, the numbers of licensed motorcycle operators and the numbers of registered motorcycles in Minnesota had reached their highest levels in history. As a result, the numbers of overall motorcyclist crashes, fatalities, and injuries have remained high in Minnesota. In 2012 there were 1,563 crashes that involved at least one motorcycle. This represents a 19% increase from the previous year.

Motorcyclist fatalities in 2012 increased 31% (from 42 to 55). Of the 55 killed, 47 were drivers and 8 were passengers. Injuries to motorcyclists increased 17% (from 1,248 to 1,454). Almost 57% of all motorcyclists killed or injured in 2012 were to people aged 40 and over.

Alcohol use among drivers remains worrisome
State law requires that drivers who die in traffic crashes be tested for blood alcohol level. In 2012, 47 motorcycle drivers were killed and 38 of them were tested. Twelve (32%) of the 38 drivers tested positive for alcohol, and 10 of the 38 (27%) 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, 3.3 out of every 100 motorcycle crashes in 2012 was a fatal crash. For all crashes in Minnesota, only 0.5 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 2012, only 11 (20%) of the 55 motorcycle riders killed were known to be wearing a helmet. Of the 1,454 motorcyclists injured, only 523 (36%) 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. The crash data indicates that proper operator training is a must. In 2012, 57% of all motorcycle crashes were single vehicle crashes. A majority of these single vehicle crashes were collisions with fixed objects or simply the motorcycle overturning. In addition, 2012 data indicate that one out of every five 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 2012, 45 of the 55 motorcyclists killed, and 1,206 of the 1,454 injured, were male. Males account for 83% of all motorcyclists killed or injured.

Contributing factors for motorcyclists
As noted, over half of motorcycle crashes are single-vehicle crashes. In these crashes, the factors that reporting officers list most often are illegal or unsafe speed (17%), driver inexperience (12%), and driver inattention or distraction (9%). In crashes that involve another motor vehicle, the reporting officers list driver inattention or distraction most often for the motorcyclists (20%), and then following too closely (17%).

Contributing factors for the other drivers
In motorcycle crashes that do 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 (46%), and driver inattention or distraction (20%) are listed most frequently. This clearly indicates that motor vehicle drivers tend to ignore motorcyclists.

TABLE 4.01

MOTORCYCLE CRASH SUMMARY, 1981 – 2012

Year	Motorcycle Crashes				Killed		Injured		Licensed Operators	Registered Motorcycles	Mcy Deaths per 10,000 Reg. Mcy	Fatal Crash Rate Per 100 Crashes	
	Fatal	Injury	PDO*	Total	Mcy	Other	Mcy	Other				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
Record High*	112	2,728	537	3,308	121	9	3,359	207	404,967	237,278	7.7	4.7	0.8
(year)	(1980)	(1980)	(1976)	(1980)	(1980)	(1975)	(1980)	(1984)	(2012)	(2012)	(1980)	(2006)	(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

2012 MOTORCYCLE CRASHES BY FIRST HARMFUL EVENT

First Harmful Event	Fatal Crashes	Injury Crashes	Property Damage Crashes	Total Crashes	Motorcyclists Killed	Motorcyclists Injured
Collision With:						
Other Motor Vehicle	25	528	121	674	28	586
Parked Vehicle	0	4	27	31	0	5
Bicyclist	0	9	0	9	0	7
Pedestrian	0	10	0	10	0	5
Deer	5	93	12	110	5	116
Other Animal	2	8	1	11	2	9
Fixed Object	7	196	16	219	8	212
Non-Collision:						
Overturn/Rollover	8	217	5	230	8	240
Other / Unknown	4	255	10	269	4	274
Total	51	1,320	192	1,563	55	1,454

TABLE 4.03

2012 MOTORCYCLE CRASHES BY POPULATION OF AREA

Population of City or Township	Fatal Crashes	Injury Crashes	Property Damage Crashes	Total Crashes	Motorcyclists Killed	Motorcyclists Injured
250,000 and Over	4	180	47	231	4	181
100,000 - 249,999	0	30	2	32	0	33
50,000 - 99,999	4	195	26	225	4	200
25,000 - 49,999	6	157	21	184	6	178
10,000 - 24,999	4	209	38	251	5	227
5,000 - 9,999	4	60	7	71	4	66
2,500 - 4,999	0	51	13	64	0	54
1,000 - 2,499	0	28	4	32	0	30
Under 1,000	29	410	34	473	32	485
Total	51	1,320	192	1,563	55	1,454

TABLE 4.04

2012 MOTORCYCLE CRASHES BY MONTH

Month	Fatal Crashes	Injury Crashes	Property Damage Crashes	Total Crashes	Motorcyclists Killed	Motorcyclists Injured
January	0	1	1	2	0	1
February	0	4	0	4	0	4
March	2	83	13	98	2	91
April	4	89	12	105	5	95
May	7	142	19	168	8	149
June	8	240	35	283	8	273
July	9	247	33	289	9	274
August	9	210	36	255	10	232
September	9	213	25	247	10	238
October	3	66	9	78	3	69
November	0	25	8	33	0	28
December	0	0	1	1	0	0
Total	51	1,320	192	1,563	55	1,454

FIGURE 4.01

2012 MOTORCYCLE CRASHES BY TIME OF DAY

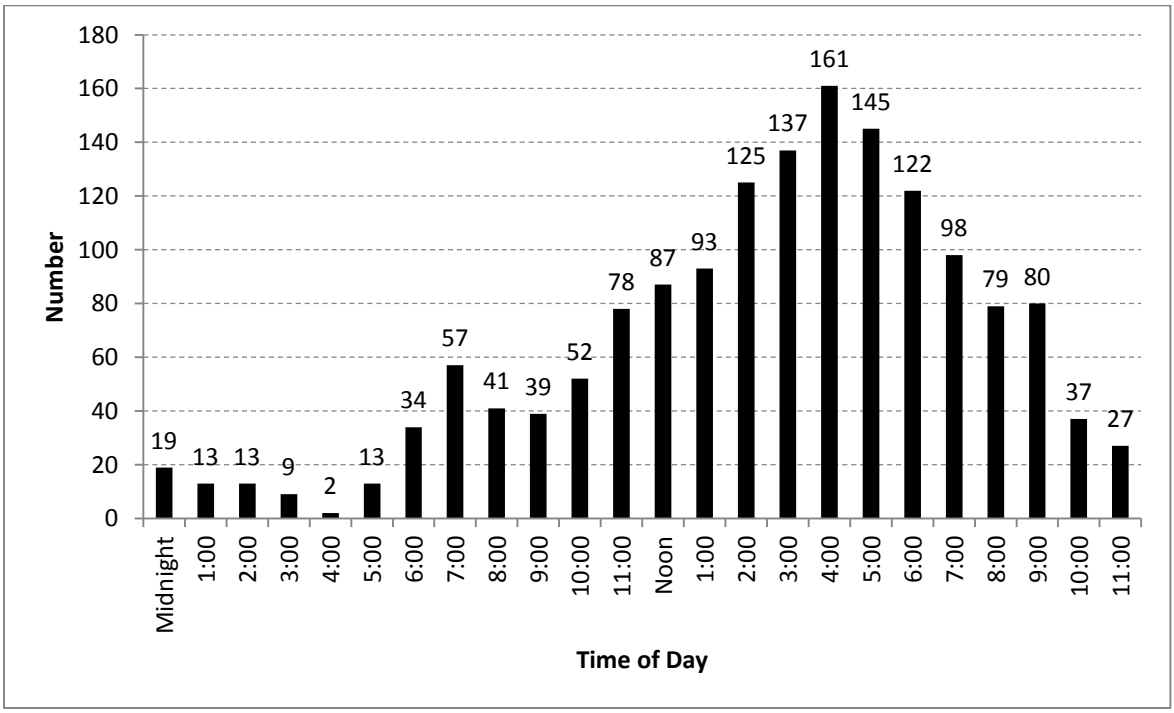

TABLE 4.05

2012 MOTORCYCLE CRASHES BY TIME AND DAY

Hour Begin-ing	Total Crashes	Fatal Crashes	Sun. All	Sun. Fatal	Mon. All	Mon. Fatal	Tues. All	Tues. Fatal	Wed. All	Wed. Fatal	Thur. All	Thur. Fatal	Fri. All	Fri. Fatal	Sat. All	Sat. Fatal
12 am	19	2	4	0	1	0	1	0	2	0	4	1	3	0	4	1
1:00	13	1	5	0	2	1	1	0	0	0	1	0	3	0	1	0
2:00	13	1	4	0	3	0	1	1	0	0	0	0	1	0	4	0
3:00	9	0	3	0	0	0	0	0	2	0	0	0	1	0	3	0
4:00	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00	13	1	3	1	2	0	1	0	2	0	2	0	2	0	1	0
6:00	34	0	1	0	4	0	10	0	5	0	8	0	3	0	3	0
7:00	57	1	3	0	14	0	13	1	9	0	7	0	8	0	3	0
8:00	41	2	4	0	3	0	7	1	6	0	4	0	5	0	12	1
9:00	39	0	11	0	5	0	3	0	7	0	2	0	3	0	8	0
10:00	52	1	7	1	6	0	9	0	9	0	3	0	7	0	11	0
11:00	78	1	18	0	6	0	8	0	8	0	3	1	9	0	26	0
Noon	87	1	11	0	11	0	8	0	11	0	8	0	19	0	19	1
1:00	93	4	16	2	13	1	10	0	11	0	11	1	10	0	22	0
2:00	125	6	24	1	17	0	9	0	13	1	15	0	17	1	30	3
3:00	137	9	22	0	14	1	22	3	19	0	15	0	18	0	27	5
4:00	161	4	30	1	19	0	19	0	21	1	22	1	25	0	25	1
5:00	145	4	15	0	20	0	22	1	26	0	18	1	16	0	28	2
6:00	122	2	23	0	10	0	24	0	16	0	10	0	19	1	20	1
7:00	98	4	20	2	13	0	8	0	5	0	15	0	19	1	18	1
8:00	79	1	9	0	9	0	13	0	14	1	10	0	11	0	13	0
9:00	80	5	6	0	9	1	9	1	10	1	11	0	17	1	18	1
10:00	37	0	6	0	3	0	2	0	5	0	2	0	10	0	9	0
11:00	27	1	4	0	0	0	4	0	0	0	4	0	8	1	7	0
Unk	2	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
Total	1,563	51	251	8	184	4	205	8	201	4	175	5	234	5	313	17

TABLE 4.06

MOTORCYCLISTS KILLED OR INJURED BY AGE AND GENDER, 2012

	Killed			Injured									Total Injured		
				Severe			Moderate			Minor					
Age Group	**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	1	1	0	1	1
05 – 09	0	0	0	0	0	0	1	0	1	1	0	1	2	0	2
10 – 14	0	0	0	0	0	0	2	1	3	5	1	6	7	2	9
15 – 19	0	0	0	7	2	9	21	1	22	21	2	23	49	5	54
20 – 24	3	2	5	18	8	26	74	12	86	57	7	64	149	27	176
25 – 29	3	1	4	21	4	25	63	10	73	49	11	60	133	25	158
30 – 34	3	0	3	14	1	15	44	4	48	39	6	45	97	11	108
35 – 39	4	4	8	16	3	19	47	13	60	37	5	42	100	21	121
40 – 44	1	1	2	18	2	20	52	14	66	38	8	46	108	24	132
45 – 49	5	1	6	27	7	34	64	22	86	38	12	50	129	41	170
50 – 54	9	1	10	29	5	34	69	19	88	51	19	70	149	43	192
55 – 59	7	0	7	18	1	19	61	8	69	51	14	65	130	23	153
60 – 64	4	0	4	15	1	16	41	6	47	26	7	33	82	14	96
65 – 69	4	0	4	6	0	6	19	2	21	20	0	20	45	2	47
70 & Older	1	0	1	3	2	5	7	0	7	9	2	11	19	4	23
Not Stated	1	0	1	0	2	2	1	2	3	6	1	7	7	5	12
Total	45	10	55	192	38	230	566	114	680	448	96	544	1,206	248	1,454

FIGURE 4.02

MOTORCYCLISTS KILLED OR INJURED BY AGE AND GENDER, 2012

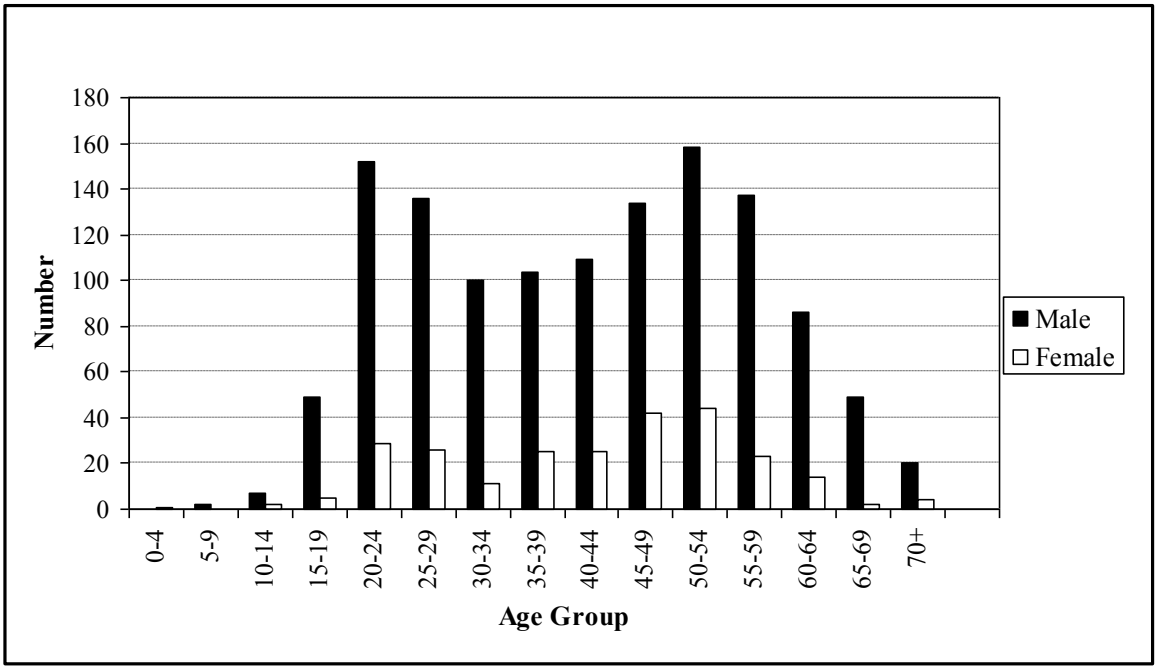

TABLE 4.07

HELMET USE BY MOTORCYCLISTS KILLED OR INJURED, 2003 - 2012

	Year	Helmet Used	%	Helmet Not Used	%	Unknown Helmet Use	%	Total	%
Killed	2003	18	29.0	36	58.1	8	12.9	62	100.0
	2004	14	28.0	29	58.0	7	14.0	50	100.0
	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

	Year	Helmet Used	%	Helmet Not Used	%	Unknown Helmet Use	%	Total	%
Injured	2003	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	2004	418	33.4	477	38.1	356	28.5	1,251	100.0
	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

TABLE 4.08

ENDORSEMENT STATUS OF MOTORCYCLE OPERATORS INVOLVED IN FATAL CRASHES, 2003 - 2012

	Valid Endorsement		Permit Only		Canceled, Suspended, Revoked		No Endorsement		Total** for Year	
Year	N	%	N	%	N	%	N	%	N	%
2003	45	73.8	2	3.3	5	8.2	9	14.8	61	100.0
2004	45	83.3	1	1.9	0	0.0	8	14.8	54	100.0
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	79.6	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

* 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, 2003 – 2012

Year	Killed	Tested	Alcohol Concentration* (.00)	Alcohol Concentration* (.01 - .07)	Alcohol Concentration* (.08 – 09)	Alcohol Concentration * (.10 or more)
2003	53	46	27 (59%)	4 (9%)	2 (4%)	13 (28%)
2004	46	37	27 (73%)	3 (8%)	0 (0%)	7 (19%)
2005	55	51	28 (55%)	8 (16%)	1 (2%)	14 (27%)
2006	66	61	42 (69%)	1 (2%)	1 (2%)	17 (28%)
2007	58	52	34 (65%)	3 (6%)	1 (2%)	14 (27%)
2008	65	59	31 (53%)	3 (5%)	2 (3%)	23 (39%)
2009	45	42	25 (60%)	6 (14%)	2 (5%)	9 (21%)
2010	42	40	25 (63%)	1 (2%)	1 (2%)	13 (32%)
2011	34	29	21 (72%)	2 (7%)	1 (3%)	5 (17%)
2012	47	38	26 (68%)	2 (5%)	1 (3%)	9 (24%)

*Percentages are based on those motorcycle drivers tested.

TABLE 4.10

2012 MOTORCYCLE DRIVER FATALITIES' LEVEL OF ALCOHOL CONCENTRATION BY AGE

			Alcohol Concentration									
Age	Killed	Tested	.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	2	2	0	0	0	2	0	0	0	0	0	0
Under 21	2	2	0	0	0	2	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	2	0	0	0	2	0	0	0	0	0	0
25 – 29	3	3	0	0	2	1	0	0	0	0	1	1
30 – 34	3	2	0	0	0	2	0	0	0	0	0	0
35 – 39	5	5	0	0	1	4	0	0	0	1	0	0
40 – 44	1	0	0	0	0	0	0	0	0	0	0	0
45 – 49	5	5	0	0	2	3	0	0	0	1	1	0
50 – 54	9	7	1	1	1	4	0	2	0	0	1	0
55 – 59	7	5	0	0	2	3	0	0	1	0	0	1
60 & Older	9	8	1	0	0	7	0	1	0	0	0	0
Unk Age	1	1	0	0	1	0	0	0	1	0	0	0
Total	47	38	2	1	9	26	0	3	2	2	3	2

TABLE 4.11

CONTRIBUTING FACTORS IN 2012 MOTORCYCLE CRASHES

	Single Vehicle Crashes		*Multi-Vehicle Crashes*			
	Attributed to Motorcycle Drivers		**Attributed to Motorcycle Drivers**		**Attributed to Other Drivers**	
Contributing Factors	**N**	**%**	**N**	**%**	**N**	**%**
Human Factors:						
Illegal/Unsafe Speed	146	17.7%	49	12.8%	10	1.9%
Driver Inexperience	102	12.4	16	4.2	7	1.3
Driver Inattention/Distraction	71	8.6	78	20.3	104	19.9
Chemical Impairment	56	6.8	14	3.6	10	1.9
Overcorrecting	42	5.1	6	1.6	0	0.0
Improper/Unsafe Lane Use	32	3.9	24	6.3	32	6.1
Following Too Closely	31	3.8	65	16.9	31	5.9
Failure To Yield Right of Way	10	1.2	47	12.2	242	46.3
Non-Motorist Error	10	1.2	2	0.5	0	0.0
Vision Obscured	8	1.0	4	1.1	9	1.7
Improper Passing/Overtaking	7	0.8	17	4.4	9	1.7
Improper Park/Start/Stop	6	0.7	6	1.6	7	1.3
Improper Turn	6	0.7	5	1.3	19	3.6
Disregard Traf Control Device	4	0.5	9	2.3	14	2.7
Driving Left of Center	2	0.2	5	1.3	4	0.8
Impeding Traffic	2	0.2	0	0.0	2	0.4
Driver on Phone/CB/Radio	0	0.0	0	0.0	0	0.0
Improper/No Signal	0	0.0	0	0.0	2	0.4
Unsafe Backing	0	0.0	0	0.0	3	0.6
Failure To Use Lights	0	0.0	1	0.3	0	0.0
Other Human Factor	41	5.0	12	3.1	1	0.2
Vehicular Factors:						
Skidding	76	9.2	5	1.3	1	0.2
Defective Tires	10	1.2	0	0.0	1	0.2
Defective Brakes	6	0.7	0	0.0	1	0.2
Other Vehicular Factors	19	2.3	5	1.3	2	0.4
Miscellaneous Factors:						
Weather Conditions	20	2.4	2	0.5	1	0.2
Other	118	14.3	12	3.1	11	2.1
Total	825	100.0%	384	100.0%	523	100.0%
Vehicles for Which There Was "No Clear Cont. Factor"	261		386		275	
Total Number of Drivers	897		700		698	

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 decrease
In 2012, there were 3,789 truck-involved traffic crashes reported to the Department of Public Safety. This represents a 6% decrease from the previous year. There were 50 fatal truck crashes, killing a total of 56 people. In addition, there were 1,178 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 five of the 56 people killed in truck-involved crashes were in trucks. The other 51 deaths included two pedestrians, four motorcyclists, three bicyclists, one person riding an ATV, and 39 persons in cars, SUVs, pickups, or vans. Of the 1,178 people injured, only 260 (22%) 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 (20% of the time) as well as for non-truck drivers (21% 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 10% of the other vehicles but only 7% of the trucks. And, failure to yield was reported for 15% of the other vehicles but only 9% 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 2% 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 2012, only 389 (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. Only 16% of the fatal crashes and 24% 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 less than 5,000 population. Probably because high speeds are more often possible in the rural open countryside, crashes there are more severe. 78% of fatal and 48% of truck-related injury crashes occurred in the rural areas of Minnesota.

TABLE 5.01

TRUCK CRASH SUMMARY, 2003 - 2012

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total Crashes	**NA**	**5,521**	**5,313**	**4,558**	**4,631**	**4,344**	**3,653**	**4,181**	**4,025**	**3,789**
Fatal Crashes	71	70	66	62	71	64	47	77	48	50
Persons Killed	78	79	78	65	90	74	58	93	51	56
Injury Crashes	NA	1,401	1,315	1,156	1,144	1,056	889	1,005	916	870
Severe	NA	107	96	89	83	72	68	71	59	70
Moderate	NA	443	377	323	334	295	288	270	265	273
Minor	NA	851	842	744	727	689	533	664	592	527
Persons Injured	NA	1,935	1,753	1,544	1,745	1,425	1,162	1,385	1,219	1,178
Severe	NA	131	116	104	130	89	88	90	70	86
Moderate	NA	585	481	415	508	388	359	358	323	355
Minor	NA	1,219	1,156	1,025	1,107	948	715	937	826	737
PDO Crashes	NA	4,050	3,932	3,340	3,416	3,224	2,717	3,099	3,061	2,869

TABLE 5.02

PERSONS KILLED OR INJURED IN 2012 TRUCK CRASHES BY VEHICLE OCCUPIED

Vehicle Type	Killed	Severely Injured	Moderately Injured	Minor Injuries	Total Injured
Automobile	20	33	124	336	493
Pickup Truck	8	10	33	66	109
SUV	3	12	54	96	162
Van	8	3	28	53	84
Pedestrian	2	1	5	5	11
Bicycle	3	1	1	3	5
Motorcycle	4	5	6	2	13
Snowmobile	0	0	0	1	1
Ambulance	0	0	0	2	2
Police/Fire Vehicle	0	0	2	1	3
Roadway Maintenance Vehicle	0	2	4	6	12
Farm Equipment	0	0	3	0	3
Taxicab	1	0	4	3	7
School Bus	0	0	0	2	2
Bus-Non School	0	0	1	2	3
Two-Axle, Six-Tire, Single Unit Truck	1	5	14	31	50
Three or More Axle Single Unit Truck	1	1	9	18	28
Single Unit Truck with Trailer	0	0	3	7	10
Truck Tractor with No Trailer	0	0	1	2	3
Truck Tractor with Semi Trailer	3	10	57	93	160
Truck Tractor with Twin Trailers	0	0	0	0	0
Heavy Truck--Other or Unknown Type	0	1	3	5	9
Other or Unknown Vehicle Type	2	2	3	3	8
Total	56	86	355	737	1,178

TABLE 5.03

CONTRIBUTING FACTORS IN 2012 TRUCK CRASHES

Contributing Factors	Number Attributed to Truck Vehicles	Percent Attributed to Truck Vehicles	Number Attributed to Non-Truck Vehicles	Percent Attributed to Non-Truck Vehicles
Human Factors				
Driver Inattention/Distraction	533	20.0%	487	20.7%
Improper or Unsafe Lane Use	258	9.7	268	11.4
Failure to Yield Right of Way	252	9.5	361	15.4
Following Too Closely	217	8.2	166	7.1
Illegal/Unsafe Speed	181	6.8	230	9.8
Improper Turn	179	6.7	51	2.2
Unsafe Backing	128	4.8	11	0.5
Disregarding Traffic Control Device	66	2.5	83	3.5
Vision Obscured-Windshield	63	2.4	43	1.8
Improper Passing or Overtaking	42	1.6	90	3.8
Driver Inexperience	31	1.2	26	1.1
Improper Parking, Starting, or Stopping	28	1.1	20	0.9
Overcorrecting	28	1.1	28	1.2
Driving Left of Center	16	0.6	45	1.9
Improper/No Signal	8	0.3	5	0.2
Chemical Impairment	7	0.3	43	1.8
Impeding Traffic	5	0.2	6	0.3
Driver on Phone/CB/2-Way Radio	2	0.1	4	0.2
Failure to Use Lights	2	0.1	3	0.1
Non-Motorist Error	0	0.0	1	0.0
Other Human Factors	95	3.6	55	2.3
Vehicular Factors				
Skidding	41	1.5	81	3.4
Defective Brakes	46	1.7	23	0.1
Oversize/Overweight Vehicle	52	2.0	1	0.0
Other Vehicular Factor	51	1.9	16	0.7
Miscellaneous Factors				
Weather	121	4.6	120	5.1
Other	207	7.8	82	3.5
Total Contributing Factors Cited	2,659	100.0%	2,349	100.0%
Vehicles for Which There Was "No Clear Contributing Factor"	1,664		1,504	
Total Number of Vehicles	3,928		3,359	

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. Human factors with a frequency of less than one-tenth of one percent are merged into the category "other human factors."

TABLE 5.04

AGE OF TRUCK DRIVERS IN 2012 CRASHES

Driver Age	Truck or Truck Tractor	Truck with Semi-Trailer	Truck with Twin Trailer	Truck with Other Trailer	Total
10 – 14	0	0	0	0	0
15 – 19	21	6	0	4	31
20 – 24	115	69	1	11	196
25 - 29	147	142	1	17	307
30 - 34	168	147	1	26	342
35 - 39	185	176	1	27	389
40 - 44	170	231	2	27	430
45 - 49	189	263	6	29	487
50 - 54	203	336	10	28	577
55 - 59	158	250	1	27	436
60 - 64	93	151	4	20	268
65 & Older	57	148	0	17	222
Not Stated	27	86	0	10	123
Total*	1,533	2,005	27	243	3,808

* There were 3,928 trucks involved in 2012 crashes. Table 5.04 tabulates the ages of drivers for the remaining 3,808 trucks where it was possible to identify a driver.

TABLE 5.05

DRIVERS IN 2012 TRUCK CRASHES BY PHYSICAL CONDITION*

Physical Condition	Truck Drivers	Percent of Truck Drivers	Number of Other Drivers	Percent of Other Drivers
Normal	3,523	92.5%	2,894	91.8%
Fatigued/Asleep	16	0.4	18	0.6
Under the Influence	5	0.1	40	1.3
Had Been Drinking	1	0.0	11	0.4
Commercial Driver > .04 BAC	2	0.0	0	0.0
Ill	7	0.2	2	0.1
Had Been Using Drugs	0	0.0	6	0.2
Physical Disability	0	0.0	1	0.0
Aggressive	1	0.0	0	0.0
Other	5	0.1	10	0.3
Unknown	248	6.5	171	4.9
Total **	3,808	100.0%	3,153	100.0%

* As noted by police officer on accident report.

** There were 3,928 trucks involved in 2012 crashes. This table tabulates the apparent physical condition of drivers for the remaining 3,808 trucks where it was possible to identify a driver. Similarly, there were 3,336 non-truck motor vehicles involved in 2012 truck crashes. The condition of the identifiable 3,153 non-truck drivers is presented here.

TABLE 5.06

2012 TRUCK CRASHES BY FIRST HARMFUL EVENT

First Harmful Event Collision With:	Fatal Crashes	Injury Crashes	Property Damage Crashes	Total Crashes	Killed	Injured
Other Motor Vehicle	39	675	2,044	2,758	45	969
Parked Motor Vehicle	2	26	216	244	2	33
Train	0	5	2	7	0	5
Bicycle	3	5	0	8	3	5
Pedestrian	2	8	0	10	2	10
Deer	0	1	15	16	0	1
Other Animal	0	1	11	12	0	1
Fixed Object	0	37	365	402	0	39
Non-Collision:						
Overturn	3	95	89	187	3	96
Fire or Explosion	0	0	7	7	0	0
Jackknife	0	4	38	42	0	4
Submersion	0	1	2	3	0	1
Other Non-Collision	0	3	21	24	0	3
Other/Unknown	1	9	59	69	1	11
Total	50	870	2,869	3,789	56	1,178

TABLE 5.07

2012 TRUCK CRASHES BY MONTH

Month	Fatal Crashes	Injury Crashes	Property Damage Crashes	Total Crashes	Killed	Injured
January	3	88	280	371	3	113
February	5	55	201	261	5	79
March	1	42	152	195	1	52
April	1	50	156	207	1	61
May	2	77	209	288	2	109
June	8	71	253	332	8	105
July	4	85	212	301	4	119
August	3	80	288	371	3	104
September	8	82	258	348	11	112
October	6	80	275	361	6	105
November	3	63	228	294	3	81
December	6	97	357	460	9	138
Total	50	870	2,869	3,789	56	1,178

TABLE 5.08

2012 TRUCK CRASHES BY TIME AND DAY

Time of Day	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total
Midnight - 2:59 AM	9	10	11	11	11	13	18	83
3:00 - 5:59 AM	6	22	25	14	19	28	13	127
6:00 - 8:59 AM	14	127	132	113	121	125	24	656
9:00 - 11:59 AM	35	162	159	161	151	175	65	908
Noon - 2:59 PM	34	172	153	156	155	173	43	886
3:00 - 5:59 PM	35	132	127	132	127	144	29	726
6:00 - 8:59 PM	23	49	41	41	60	42	13	269
9:00 - 11:59 PM	11	32	25	18	14	16	16	132
Unknown	1	0	0	0	0	1	0	2
Total	168	706	673	646	658	717	221	3,789

FIGURE 5.01

2012 TRUCK CRASHES BY TIME OF DAY

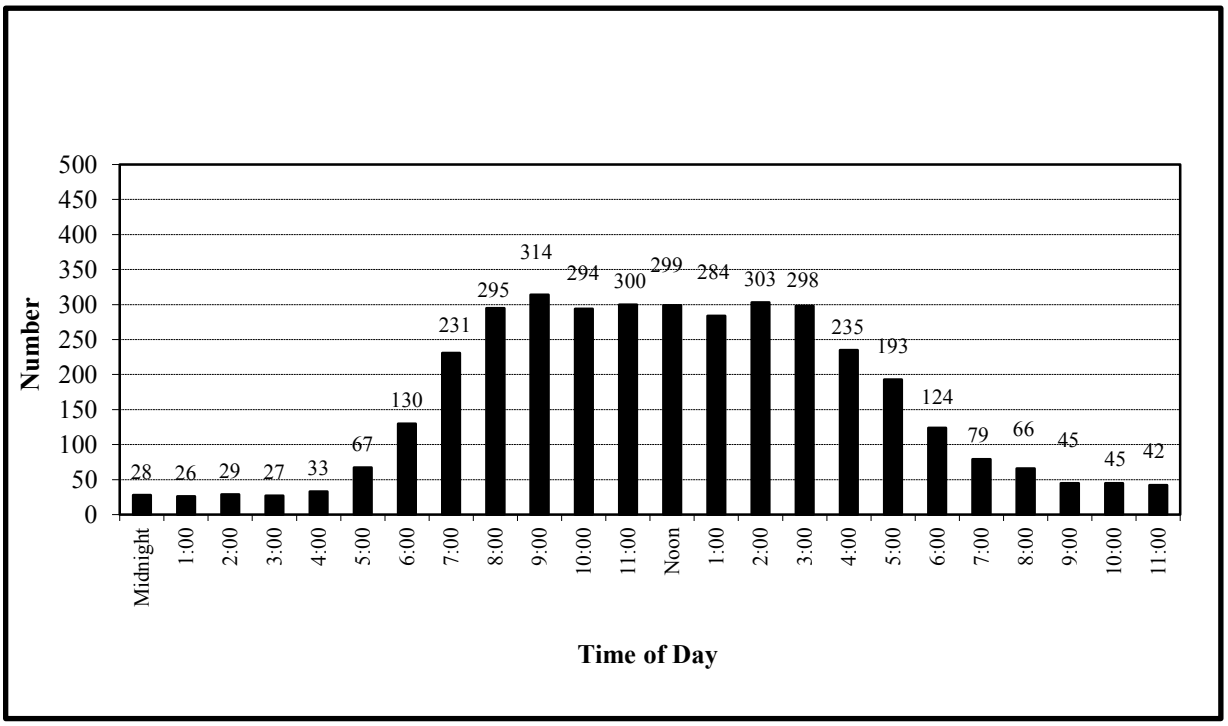

TABLE 5.09

2012 TRUCK CRASHES BY ROAD SURFACE CONDITION

Road Surface Condition	Fatal Crashes	Injury Crashes	Property Damage Crashes	Total Crashes	Killed	Injured
Dry	42	659	2,081	2,782	47	903
Wet	4	93	295	392	5	113
Snow	1	36	157	194	1	55
Slush	2	8	52	62	2	12
Ice or Packed Snow	1	70	252	323	1	91
Water Standing/Moving	0	0	3	3	0	0
Debris	0	0	2	2	0	0
Other	0	3	14	17	0	3
Unknown	0	1	13	14	0	1
Total	50	870	2,869	3,789	56	1,178

TABLE 5.10

2012 TRUCK CRASHES BY WEATHER CONDITION

Weather Condition	Fatal Crashes	Injury Crashes	Property Damage Crashes	Total Crashes	Killed	Injured
Clear	28	564	1,723	2,315	32	748
Cloudy	17	193	738	948	19	274
Rain	0	26	97	123	0	31
Snow	1	61	235	297	1	90
Sleet/Hail/Freezing Rain	0	8	21	29	0	11
Fog/Smog/Smoke	2	10	11	23	2	14
Blowing Sand/Dust/Snow	1	4	22	27	1	5
Severe Cross Winds	0	3	6	9	0	3
Other	1	1	4	6	1	2
Unknown	0	0	12	12	0	0
Total	50	870	2,869	3,789	56	1,178

TABLE 5.11

2012 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	97	624	722	2	134
100,000 – 249,999	1	6	32	39	1	9
50,000 - 99,999	1	117	447	565	1	152
25,000 - 49,999	3	83	293	379	3	112
10,000 - 24,999	1	112	407	520	1	147
5,000 - 9,999	4	36	172	212	4	52
2,500 - 4,999	1	30	112	143	1	35
1,000 - 2,499	0	26	99	125	0	35
Under 1,000	38	363	683	1084	43	502
Total	50	870	2,869	3,789	56	1,178

TABLE 5.12

2012 TRUCK CRASHES BY TYPE OF ROADWAY

Roadway Type	Fatal Crashes	Injury Crashes	Property Damage Crashes	Total Crashes	Killed	Injured
Interstate Highway	3	195	706	904	3	262
US Trunk Highway	18	175	394	587	19	249
State Trunk Highway	13	201	504	718	14	270
County State-Aid Highway	12	179	535	726	16	240
County Road	0	14	36	50	0	18
Township Road	2	15	33	50	2	19
Local Street	2	90	624	716	2	119
Other Road	0	1	37	38	0	1
Total	50	870	2,869	3,789	56	1,178

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 increase
In 2012, there were 878 crashes in which at least one pedestrian was injured or killed by a motor vehicle. This represents a 2.5 percent increase from the previous year.

Deaths hold steady, injuries increase
In 2012 forty pedestrians were killed, the same total as 2011. However, 874 pedestrians were injured in 2012, a 1.8 percent increase from the previous year. Four 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 2012, persons less than 25 years of age accounted for 45% of the pedestrians killed and 39% of pedestrians injured. Male pedestrians were more likely than females to be killed or injured: males accounted for 53% of all pedestrian fatalities and 57% of all pedestrian injuries.

Urban/rural areas and time of day
In 2012, 91% of pedestrian crashes occurred in urban areas (defined as areas with populations over 5,000). Three out of ten (30%) 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 five (20%) pedestrian crashes occurred during the evening hours 9:00-6:00am.

Prior actions of vehicles
Nearly half (48%) of all motor vehicles involved in pedestrian crashes and over three out of four (72%) involved in fatal pedestrian crashes in 2012 were going straight ahead on the roadway prior to the crash. Three out of ten (30%) of all motor vehicles involved in pedestrian crashes were making a right or left turn.

Prior actions of pedestrians
Thirty-two percent of pedestrians killed and 28% of pedestrians injured were trying to cross a road at an area with no crosswalk and no signal. However, 14% of pedestrians injured were crossing the road at a signaled intersection and were crossing with the signal.

Contributing factors
For 35% 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 (22%). Obscured vision was a factor in 11% of all pedestrian crashes.

Drinking pedestrian fatalities
Of the 40 pedestrians killed, 22 were tested for the presence of alcohol in their blood system. Of those tested, over one out of four (27%) had blood alcohol concentrations (BACs) of .10 or higher. Fifty percent of killed pedestrians with BACs .10 or higher were 20–24-years-old. Three (50%) out of the 6 pedestrians killed with BACs of .10 or higher were killed from 12:00am-3:00am.

TABLE 6.01

PEDESTRIAN CRASH SUMMARY, 2003 - 2012

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Pedestrian Crashes	NA	963	938	915	957	860	883	808	857	878
Pedestrians Killed	52	37	44	38	33	25	41	36	40	40
Pedestrians Injured	NA	976	936	906	975	867	880	824	859	874

TABLE 6.02

PEDESTRIANS KILLED OR INJURED BY AGE AND GENDER, 2012

	Killed			Severe Injuries			Moderate Injuries			Minor Injuries			Total Injuries		
Age Group	**M**	**F**	**Total**	**M**	**F**	**Total**	**M**	**F**	**Total**	**M**	**F**	**Total**	**M**	**F**	**Total***
00 - 04	1	0	1	3	3	6	3	2	5	6	5	11	12	10	22
05 - 09	1	0	1	4	1	5	7	4	11	18	9	28	29	14	44
10 - 14	0	2	2	1	3	4	4	12	16	25	14	39	30	29	59
15 - 19	1	4	5	8	4	12	19	15	34	35	30	65	62	49	111
20 - 24	8	1	9	8	6	14	20	17	37	31	20	52	59	43	103
25 - 29	1	0	1	5	3	8	18	9	27	27	19	46	50	31	81
30 - 34	1	1	2	3	1	4	9	9	18	13	10	23	25	20	45
35 - 39	0	0	0	4	6	10	12	5	17	13	13	26	29	24	53
40 - 44	0	1	1	6	1	7	8	7	15	14	11	25	28	19	47
45 - 49	1	2	3	2	1	3	9	4	13	10	12	22	21	17	38
50 - 54	1	2	3	5	2	7	10	10	20	21	15	36	36	27	63
55 - 59	1	0	1	5	4	9	11	9	20	17	13	30	33	26	59
60 - 64	0	0	0	2	2	4	7	7	14	17	13	30	26	22	48
65 - 69	0	0	0	2	1	3	5	7	12	11	4	15	18	12	30
70 - 74	2	3	5	3	1	4	4	2	6	2	3	5	9	6	15
75 - 79	2	0	2	0	2	2	4	2	6	5	3	8	9	7	16
80 - 84	1	0	1	2	0	2	3	5	8	2	1	3	7	6	13
85 & Older	0	3	3	1	1	2	1	2	3	1	3	4	3	6	9
Not Stated	0	0	0	1	0	2	2	0	3	4	2	13	7	2	18
Total	21	19	40	65	42	108	156	128	285	272	200	481	493	370	874

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

FIGURE 6.01

PEDESTRIAN FATALITIES BY AGE GROUP, 2003-2012 COMBINED

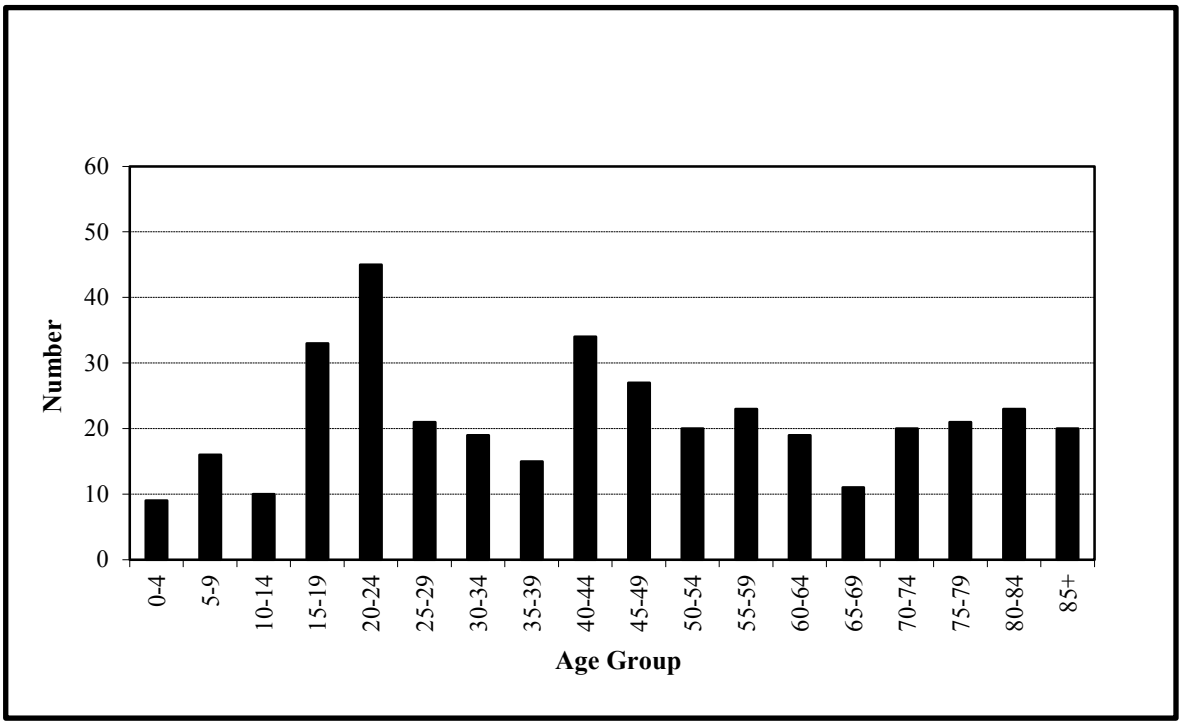

FIGURE 6.02

PEDESTRIANS KILLED OR INJURED BY AGE AND GENDER 2012

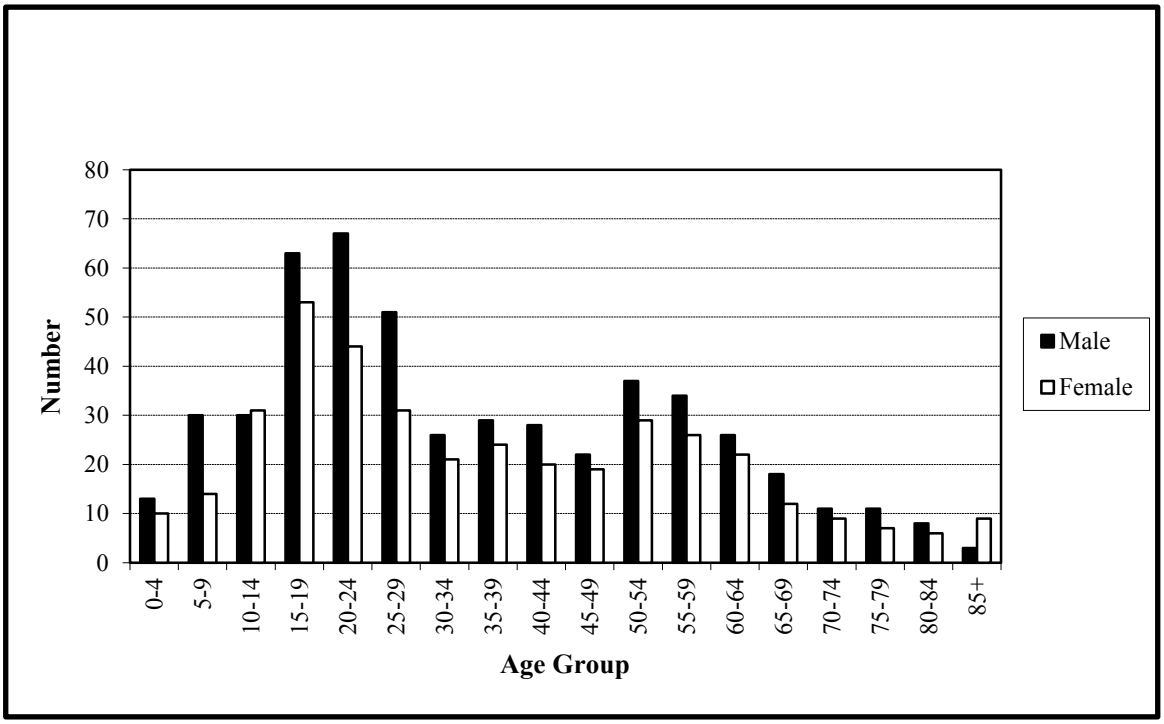

TABLE 6.03

2012 PEDESTRIAN CRASHES BY MONTH

Month	Fatal Crashes	Injury Crashes	Total Crashes	Killed	Injured
January	2	81	83	2	85
February	3	65	68	3	65
March	4	61	65	4	62
April	0	53	53	0	54
May	2	80	82	2	84
June	1	68	69	1	70
July	3	51	54	3	52
August	6	73	79	6	74
September	4	66	70	5	72
October	3	82	85	3	89
November	5	88	93	5	92
December	6	71	77	6	75
Total	39	839	878	40	874

TABLE 6.04

2012 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	7	418	425	7	435
100,000 - 249,999	1	16	17	1	16
50,000 - 99,999	7	109	116	7	113
25,000 - 49,999	5	80	85	5	82
10,000 - 24,999	5	118	123	6	124
5,000 - 9,999	1	36	37	1	39
2,500 - 4,999	2	15	17	2	16
1,000 - 2,499	0	16	16	0	16
Under 1,000	11	31	42	11	33
Total	39	839	878	40	874

TABLE 6.05

2012 PEDESTRIAN CRASHES BY TIME AND DAY

Time of Day	Fatal Crashes	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total
Mid - 2:59 AM	5	25	3	4	1	4	6	13	56
3:00 - 5:59 AM	2	7	0	3	1	4	2	6	23
6:00 - 8:59 AM	5	2	19	20	21	21	22	3	108
9:00 - 11:59 AM	2	9	19	12	17	17	20	10	104
Noon - 2:59 PM	5	4	15	12	20	18	21	20	110
3:00 - 5:59 PM	4	19	26	45	34	29	24	17	194
6:00 - 8:59 PM	9	19	28	29	25	29	33	22	185
9:00 - 11:59 PM	7	15	8	9	17	9	25	15	98
Total	39	100	118	134	136	131	153	106	878

FIGURE 6.03

2012 PEDESTRIAN CRASHES BY TIME OF DAY

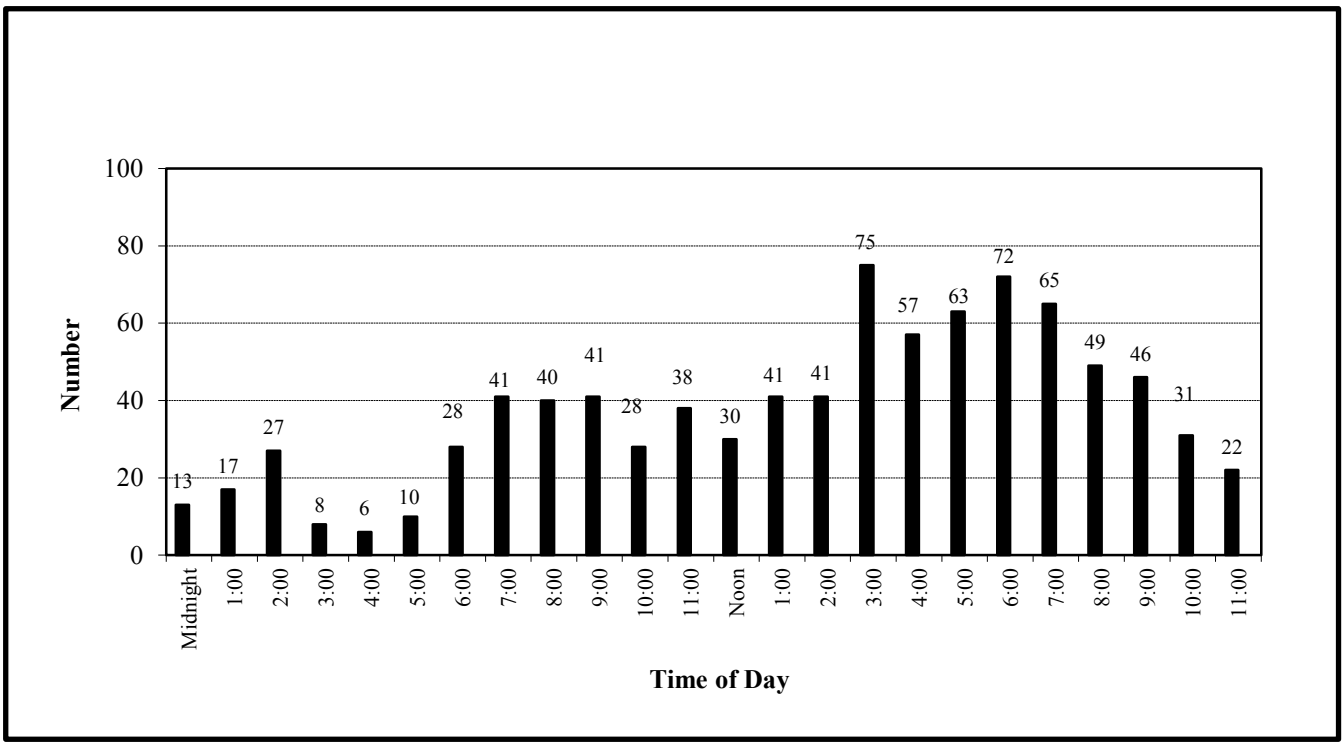

TABLE 6.06

PRIOR ACTION OF VEHICLES IN 2012 PEDESTRIAN CRASHES

Action	Vehicles in Fatal Crashes	Vehicles in Injury Crashes	Vehicles in All Crashes
Going Straight	33	406	439
Wrong Way Opposing Traffic	1	2	3
Turning Right on Red	0	30	30
Turning Left on Red	0	4	4
Turning Right	1	72	73
Turning Left	3	202	205
Making U Turn	1	1	2
Starting From Parked	0	12	12
Starting in Traffic	0	9	9
Slowing in Traffic	0	8	8
Parking	0	1	1
Avoiding Object in Road	1	5	6
Changing Lanes	0	1	1
Passing	0	4	4
Backing	1	25	26
All Others	5	66	71
Unknown	0	24	24
Total	46	872	918

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

TABLE 6.07

PRIOR ACTION OF PEDESTRIANS KILLED OR INJURED IN 2012

Action	Number Pedestrians Killed	Percent Pedestrians Killed	Number Pedestrians Injured	Percent Pedestrians Injured
Crossing Road (No Crosswalk and No Signal)	13	32.5%	246	28.1%
Crossing Against Signal	2	5.0	46	5.3
Crossing With Signal	1	2.5	119	13.6
Crossing In Crosswalk (No Signal)	2	5.0	135	15.4
Walking In Road With Traffic	3	7.5	53	6.1
Walking In Road Against Traffic	2	5.0	18	2.1
Standing In Road	4	10.0	30	3.4
Emerging Front/Behind Parked Vehicle	0	0.0	5	0.6
Child Getting On/Off School Bus	0	0.0	1	0.1
Pushing/Working on Vehicle	0	0.0	1	0.1
Working In Road	0	0.0	4	0.5
Getting On/Off Vehicle	0	0.0	5	0.6
Playing In Road	0	0.0	4	0.5
Not In Road	2	5.0	23	2.6
Other Pedestrian Action	2	5.0	46	5.3
Unknown	9	22.5	138	15.8
Total*	40	100.0%	874	100.0%

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

TABLE 6.08

CONTRIBUTING FACTORS IN 2012 PEDESTRIAN CRASHES

Contributing Factors	Number Attributed to Motor Vehicle Drivers	Percent Attributed to Motor Vehicle Drivers
Human Factors		
Failure to Yield Right of Way	234	34.9%
Driver Inattention / Distraction	144	21.5
Vision Obscured	76	11.3
Chemical Impairment	29	4.3
llegal or Unsafe Speed	16	2.4
Disregard of Traffic Control	15	2.2
Unsafe Backing	15	2.2
Improper / Unsafe Lane Use	14	2.1
Improper Turn	13	1.9
Driver Inexperience	6	0.9
Improper Passing / Overtaking	4	0.6
Following Too Closely	3	0.4
Impeding Traffic	2	0.3
Improper Parking/Starting/Stopping	1	0.1
Failure to Use Lights	1	0.1
Driver on Phone/CB/Radio	1	0.1
Other Human Factors	31	4.6
Vehicular Factors		
Skidding	6	0.9
Defective Brakes	1	0.1
Other Vehicular Factors	1	0.1
Miscellaneous Factors		
Weather Conditions	22	3.3
Other	36	5.4
Total Contributing Factors Cited	671	100.0%
Vehicles for Which There Was "No Clear Contributing Factor"	37	
Total Number of Drivers	918	

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 6.09

PEDESTRIAN FATALITIES' LEVEL OF ALCOHOL CONCENTRATION, 2003 - 2012

Year	Killed	Tested	Alcohol Concentration* (.00)	Alcohol Concentration* (.01 - .07)	Alcohol Concentration* (.08 - .09)	Alcohol Concentration* (.10 or more)
2003	52	36	23 (64%)	0 (0%)	0 (0%)	10 (28%)
2004	37	35	23 (66%)	0 (0%)	2 (6%)	10 (28%)
2005	44	34	18 (53%)	1 (3%)	2 (6%)	13 (38%)
2006	38	31	22 (71%)	1 (3%)	0 (0%)	8 (26%)
2007	33	18	9 (50%)	1 (6%)	0 (0%)	8 (44%)
2008	25	20	11 (55%)	0 (0%)	0 (0%)	9 (45%)
2009	41	33	22 (67%)	0 (0%)	1 (3%)	10 (30%)
2010	36	29	19 (66%)	0 (0%)	0 (0%)	10 (34%)
2011	40	33	21 (64%)	3 (9%)	0 (0%)	9 (27%)
2012	40	22	16 (73%)	0 (0%)	0 (0%)	6 (27%)

* 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 6.10

2012 PEDESTRIAN FATALITIES' LEVEL OF ALCOHOL CONCENTRATION BY AGE

Age Group	Killed	Tested	Alcohol Concentration* (.00)	Alcohol Concentration* (.01 - .07)	Alcohol Concentration* (.08 - .09)	Alcohol Concentration* (.10 or more)
< 15	4	3	3	0	0	0
15 – 19	5	1	1	0	0	0
20 – 24	9	5	2	0	0	3
25 – 29	1	0	0	0	0	0
30 – 34	2	0	0	0	0	0
35 – 39	0	0	0	0	0	0
40 – 44	1	1	0	0	0	1
45 – 49	3	1	1	0	0	0
50 – 54	3	3	2	0	0	1
55 – 59	1	1	0	0	0	1
60 – 64	0	0	0	0	0	0
65 – 69	0	0	0	0	0	0
70 – 74	5	4	4	0	0	0
75 – 79	2	2	2	0	0	0
80 – 84	1	0	0	0	0	0
85 & Older	3	1	1	0	0	0
Total	40	22	16	0	0	6

TABLE 6.11

2012 PEDESTRIAN FATALITIES' LEVEL OF ALCOHOL CONCENTRATION BY TIME OF DAY

Time of Day	Killed	Tested	Alcohol Concentration * (.00)	Alcohol Concentration* (.01 - .07)	Alcohol Concentration* (.08 - .09)	Alcohol Concentration* (.10 or more)
Mid-2:59 AM	5	3	1	0	0	2
3:00-5:59 AM	2	1	0	0	0	1
6:00-8:59 AM	5	2	2	0	0	0
9:00-11:59 AM	2	1	1	0	0	0
Noon-2:59 PM	5	2	2	0	0	0
3:00-5:59 PM	4	3	3	0	0	0
6:00-8:59 PM	9	7	4	0	0	3
9:00-11:59 PM	8	3	3	0	0	0
Total	40	22	16	0	0	6

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 2012, there was a 4.5% decrease in bicycle crashes from the previous year - there were 920 bicycle crashes in 2012, compared to 963 bicycle crashes in 2011.

Fatalities increase but Injuries decrease
In 2012, 875 bicyclists were injured compared to 937 injured bicyclists in 2011, a 6.6% decrease. However, there were seven bicyclist fatalities in 2021 compared to five fatalities in 2011, a 40.0% increase.

Warm weather
Bicycle crashes are mostly a warm weather occurrence. In 2012, five of the seven fatalities (71.4%), and 680 of the 875 injuries (77.7%) occurred during the six-month period April-September.

Time and day
One-third (32.3%) of all weekday bicycle crashes occurred during the afternoon rush hours 3:00-6:00pm. Almost one out of four (23.0%) of 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 (93.6%) bicycle crashes and five out of the seven (71.4%) fatal bicycle crashes occurred in cities where the population was over 5,000 people.

Males are killed and injured more often
In 2012, all seven of the killed bicyclists were male. And, males were nearly three times more likely than females to be injured in a bicycle crash. In 2012, 630 male bicyclists (73.4%) were injured compared to 228 female bicyclists (26.6%).

Age and injury severity
Of the 875 bicyclists injured in 2012, nearly half (49.7%) were less than 25 years of age.

Prior action of bicyclists
Almost half (46.3%) of all 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 (29.9%) of the bicyclists and (44.3%) 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, 2003- 2012

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Bicycle Crashes	NA	985	965	944	1,020	981	957	898	963	920
Bicyclists Killed	6	10	7	8	4	13	10	9	5	7
Bicyclists Injured	NA	937	952	908	979	942	963	882	937	875

TABLE 7.02

2012 BICYCLE CRASHES BY MONTH

Month	Fatal Crashes	Injury Crashes	Property Damage Crashes	Total Crashes	Killed	Injured
January	1	15	2	18	1	15
February	0	12	0	12	0	12
March	0	43	2	45	0	43
April	2	69	3	74	2	69
May	1	98	3	102	1	99
June	0	110	6	116	0	112
July	1	140	9	150	1	144
August	0	140	9	149	0	140
September	1	116	7	124	1	116
October	1	76	1	78	1	76
November	0	33	2	35	0	33
December	0	15	2	17	0	16
Total	7	867	46	920	7	875

FIGURE 7.01

2012 BICYCLE CRASHES BY TIME OF DAY

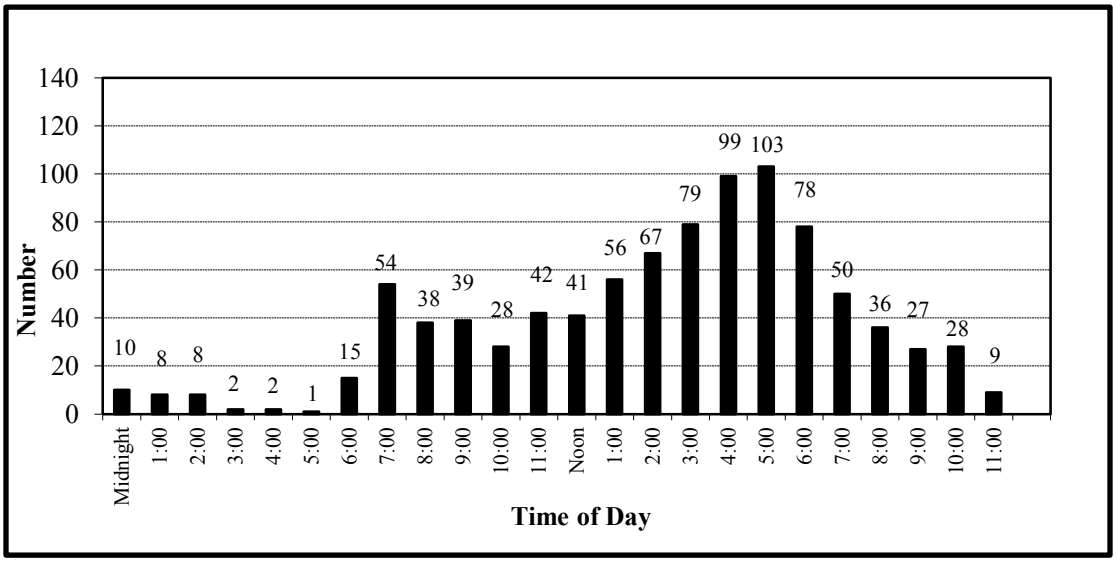

TABLE 7.03

2012 BICYCLE CRASHES BY TIME AND DAY

Time of Day	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total
Mid - 2:59 AM	8	3	1	2	3	4	5	26
3:00 - 5:59 AM	2	1	1	1	0	0	0	5
6:00 - 8:59 AM	7	18	22	27	17	12	4	107
9:00 - 11:59 AM	12	15	19	14	21	17	11	109
Noon - 2:59 PM	20	18	25	25	20	30	26	164
3:00 - 5:59 PM	17	48	55	47	37	54	23	281
6:00 - 8:59 PM	11	36	29	25	20	27	16	164
9:00 - 11:59 PM	3	4	7	13	14	13	10	64
Total	80	143	159	154	132	157	95	920

TABLE 7.04

2012 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	0	398	34	432	0	403
100,000 - 249,999	0	19	0	19	0	20
50,000 - 99,999	1	127	3	131	1	128
25,000 - 49,999	2	104	2	108	2	104
10,000 - 24,999	1	129	6	136	1	130
5,000 - 9,999	1	33	1	35	1	33
2,500 - 4,999	0	19	0	19	0	19
1,000 - 2,499	0	14	0	14	0	14
Under 1,000	2	24	0	26	2	24
Total	7	867	46	920	7	875

FIGURE 7.02

BICYCLISTS KILLED OR INJURED BY AGE AND GENDER 2012

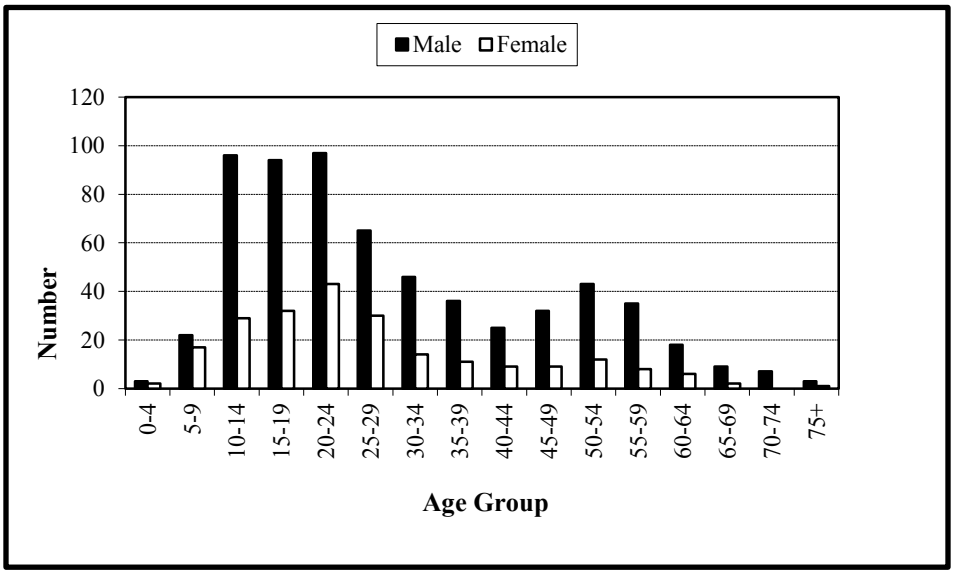

TABLE 7.05

BICYCLISTS KILLED OR INJURED BY AGE AND GENDER, 2012

	Killed			Severe Injuries			Moderate Injuries			Minor Injuries			Total Injuries		
Age Group	**M**	**F**	**Total**	**M**	**F**	**Total***	**M**	**F**	**Total***	**M**	**F**	**Total***	**M**	**F**	**Total***
00 – 04	0	0	0	0	0	0	1	0	1	2	2	4	3	2	5
05 – 09	0	0	0	4	0	4	7	4	12	11	13	24	22	17	40
10 – 14	1	0	1	6	0	6	24	9	33	65	20	85	95	29	124
15 – 19	1	0	1	5	1	6	31	8	39	57	23	80	93	32	125
20 – 24	0	0	0	7	2	9	24	10	34	66	31	98	97	43	141
25 – 29	1	0	1	1	1	2	22	8	30	41	21	62	64	30	94
30 – 34	0	0	0	4	2	6	14	4	18	28	8	36	46	14	60
35 – 39	1	0	1	1	0	1	11	3	14	23	8	32	35	11	47
40 – 44	1	0	1	1	0	1	5	1	6	18	8	26	24	9	33
45 – 49	1	0	1	3	1	4	10	3	13	18	5	23	31	9	40
50 – 54	1	0	1	2	0	2	15	5	20	25	7	33	42	12	55
55 – 59	0	0	0	2	0	2	12	5	17	21	3	24	35	8	43
60 – 64	0	0	0	2	1	3	4	3	7	12	2	14	18	6	24
65 – 69	0	0	0	0	0	0	3	1	4	6	1	7	9	2	11
70 – 74	0	0	0	0	0	0	5	0	5	2	0	2	7	0	7
75 & Older	0	0	0	1	0	1	1	1	2	1	0	1	3	1	4
Not Stated	0	0	0	0	0	0	0	0	6	6	3	16	6	3	22
Total	7	0	7	39	8	47	189	65	261	402	155	567	630	228	875

* 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 2012 CRASHES

Prior Action	Bicyclists in Fatal Crashes	Bicyclists in Injury Crashes	Bicyclists in Property Damage Crashes	Bicyclists in All Crashes
Riding With Traffic	1	411	22	434
Riding Against Traffic	0	54	5	59
Making Right Turn	0	7	3	10
Making Left Turn	0	24	3	27
Making U Turn	0	1	0	1
Riding Across Road	2	36	1	39
Slowing/Stopping/Starting	0	8	3	11
Other/Unknown	4	334	19	357
Total	7	875	56	938

* 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 2012 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	163	29.9%	243	44.3%
Non-Motorist Error	100	18.3	0	0.0
Disregard Traffic Control Device	69	12.7	26	4.7
Driver Inattention/Distraction	33	6.1	130	23.7
Improper/Unsafe Lane Use	31	5.7	6	1.1
Vision Obscured	15	2.8	57	10.4
Chemical Impairment	10	1.8	5	0.9
Failure to Use Lights	10	1.8	1	0.2
Driver Inexperience	6	1.1	2	0.4
Driving Left of Center	6	1.1	2	0.4
Improper Passing/Overtaking	6	1.1	5	0.9
Illegal/Unsafe Speed	4	0.7	5	0.9
Improper Turn	4	0.7	9	1.6
Following Too Closely	2	0.4	4	0.7
Impeding Traffic	2	0.4	1	0.2
Improper Park/Start/Stop	1	0.2	8	1.5
Driver On Phone/CB	0	0.0	2	0.4
Unsafe Backing	0	0.0	5	0.9
Improper/No Signal	0	0.0	2	0.4
Other Human Factors	12	2.2	13	2.4
Vehicular Factors				
Defective Brakes	11	2.0	1	0.2
Skidding	0	0.0	0	0.0
Other Vehicular Factor	3	0.6	1	0.2
Miscellaneous Factors				
Weather Conditions	3	0.6	2	0.4
Other	54	9.9	18	3.3
Total	545	100.0%	548	100.0%
Vehicles for Which There Was "No Clear Contributing Factor"	413		397	
Total Number of Bicyclists/Drivers	926		921	

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 2012, there were 143 crashes resulting in 69 injuries in which a school bus was indirectly involved.

Number of crashes decrease
In 2012, school bus crashes decreased by 10%. There were 553 traffic crashes directly involving at least one school bus, compared to 615 crashes in 2011.

Seven deaths in 2012
In 2012, there were four fatal school bus crashes resulting in seven deaths. None of the fatalities were people riding in the school buses. Three drivers and four passengers from the other motor vehicles were killed.

Morning and afternoon rush hours
Two out of three (68%) school bus crashes and three out of four school bus crash injuries (69%) in 2012 occurred during the time periods of 6-9 a.m. and 3-6 p.m. Over nine out of ten (92%) of school bus crashes occurred during school year months September through May.

School bus stop arm
Less than 3% of all school bus crashes occurred when the school bus stop arm was deployed. Only fifteen injuries occurred in school bus crashes where the school bus stop arm was in use.

Contributing factors
Although there were 553 school bus crashes in 2012, one crash involved two school buses. In all there were 554 school buses in crashes. For 55% 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 (22%) and driver inattention or distraction (20%),. The third most frequently cited contributing factor was improper turn (11%). The most commonly cited contributing factors attributed to drivers of other vehicles in school bus crashes were driver inattention or distraction (23%), failure to yield right of way (16%), and following too closely (11%).

TABLE 8.01

SCHOOL BUS CRASH SUMMARY, 2003 - 2012

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total Crashes	NA	702	717	625	680	663	670	611	615	553
Fatal Crashes	3	3	7	1	7	1	4	4	1	4
Persons Killed	3	3	7	1	8	4	4	4	1	7
Injury Crashes	NA	150	140	137	126	107	144	116	112	113
Persons Injured	NA	266	250	241	243	188	233	215	214	211
Property Damage Crashes	NA	549	570	487	547	555	522	491	502	436
School Buses Directly Involved	NA	708	724	631	690	670	675	615	621	554

TABLE 8.02

2012 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	2	2	0	0
3:00 - 5:59 AM	0	0	0	0	0	0
6:00 - 8:59 AM	1	38	152	191	1	58
9:00 - 11:59 AM	1	10	53	64	2	19
Noon - 2:59 PM	0	22	72	94	0	42
3:00 - 5:59 PM	2	40	144	186	4	88
6:00 - 8:59 PM	0	2	9	11	0	3
9:00 - 11:59 PM	0	1	3	4	0	1
Unknown	0	0	1	1	0	0
Total	4	113	436	553	7	211

TABLE 8.03

2012 SCHOOL BUS CRASHES BY MONTH

Month	Fatal Crashes	Injury Crashes	Property Damage Crashes	Total Crashes	Killed	Injured
January	0	14	62	76	0	27
February	0	19	50	69	0	35
March	0	8	34	42	0	25
April	0	9	37	46	0	13
May	1	13	31	45	2	34
June	1	4	14	19	1	7
July	0	3	11	14	0	4
August	0	1	9	10	0	1
September	1	14	39	54	1	23
October	0	10	42	52	0	21
November	1	13	41	55	3	15
December	0	5	66	71	0	6
Total	4	113	436	553	7	211

TABLE 8.04

AGE AND GENDER OF PERSONS INJURED IN 2012 SCHOOL BUS CRASHES

Age Group	In Bus	Pedestrian	In Other Vehicle	Male	Female	Total*
00 - 04	1	0	0	0	1	1
05 - 09	19	0	3	15	7	22
10 - 14	33	0	7	24	16	40
15 - 19	7	1	19	10	17	27
20 - 24	0	1	9	5	5	10
25 - 29	2	1	8	4	7	11
30 - 34	1	0	7	5	3	8
35 - 39	4	0	11	8	7	15
40 - 44	2	0	8	1	9	10
45 - 49	5	0	7	2	10	12
50 - 54	2	1	9	5	6	12
55 - 59	2	0	6	4	4	8
60 - 64	0	0	7	5	2	7
65 & Older	2	2	13	8	9	17
Unknown	5	0	6	5	3	11
Total	85	6	120	101	106	211

TABLE 8.05

PERSONS KILLED OR INJURED IN 2012 SCHOOL BUS CRASHES BY POPULATION OF AREA

Population of City or Township	Killed	Severely Injured	Moderately Injured	Minor Injuries	Total
250,000 and Over	2	2	10	36	48
100,000 - 249,999	0	0	3	2	5
50,000 - 99,999	0	2	4	22	28
25,000 - 49,999	4	0	2	16	18
10,000 - 24,999	0	1	7	19	27
5,000 - 9,999	0	1	4	6	11
2,500 - 4,999	0	0	5	10	15
1,000 - 2,499	0	0	1	1	2
Under 1,000	1	1	4	52	57
Total	7	7	40	164	211

TABLE 8.06

2012 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	3	92	352	447	6	179
Parked Motor Vehicle	1	3	68	72	1	7
Bicycle	0	5	0	5	0	5
Pedestrian	0	6	0	6	0	7
Deer	0	0	3	3	0	0
Other Animal	0	0	2	2	0	0
Fixed Object	0	4	6	10	0	7
Overturn	0	1	0	1	0	4
Other/Unknown	0	2	5	7	0	2
Total	4	113	436	553	7	211

TABLE 8.07

2012 SCHOOL BUS CRASHES BY TRAFFIC CONTROL DEVICE

Traffic Control Device	Fatal Crashes	Injury Crashes	Property Damage Crashes†	Total Crashes*	Killed	Injured
Traffic Signal	0	22	101	123	0	28
Overhead Flashers	0	0	2	2	0	0
Stop Sign--All Approaches	0	3	13	16	0	7
Stop Sign--Not All Approaches	0	34	87	121	0	65
Yield Sign	0	1	9	10	0	1
Officer/Flag Person	0	0	1	1	0	0
School Bus Stop Arm	1	5	9	15	1	15
School Zone Sign	0	0	2	2	0	0
No Passing Zone	0	0	1	1	0	0
Railroad Crossing Stop Sign	0	3	16	19	0	4
Other	0	2	6	8	0	3
Not Applicable	3	43	184	230	6	88
Unknown	0	0	5	5	0	0
Total	4	113	436	553	7	211

TABLE 8.08

CONTRIBUTING FACTORS IN 2012 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	55	21.6%	65	16.1%
Driver Inattention/Distraction	50	19.6	93	23.0
Improper Turn	27	10.6	11	2.7
Improper/Unsafe Lane Use	17	6.7	20	5.0
Following Too Closely	17	6.7	45	11.1
Unsafe Backing	9	3.5	3	0.7
Improper Passing/Overtaking	8	3.1	4	1.0
Vision Obscured	7	2.7	7	1.7
Improper Park/Start/Stop	6	2.4	9	2.2
Disregard of Traffic Control Device	6	2.4	16	4.0
Driver Inexperience	5	2.0	14	3.5
Illegal/Unsafe Speed	4	1.6	32	7.9
Overcorrecting	2	0.8	3	0.7
Chemical Impairment	1	0.4	5	1.2
Driving Left of Center	1	0.4	3	0.7
Impeding Traffic	0	0.0	1	0.2
Improper/No Signal	0	0.0	2	0.5
Driver on Phone/CB Radio	0	0.0	2	0.5
Other Human Factors	6	2.4	10	2.5
Vehicular Factors				
Skidding	4	1.6	13	3.2
Defective Brakes	1	0.4	4	1.0
Other Vehicular Factors	2	0.8	1	0.2
Miscellaneous Factors				
Weather Conditions	11	4.3	27	6.7
Other	16	6.3	14	3.5
Total	255	100.0%	404	100.0%
Vehicles for Which There Was "No Clear Contributing Factor"	303		209	
Total Number of Drivers	554		564	

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 2012, there were three motor vehicle/train crashes that resulted in a fatality, representing 12% of all motor-vehicle/train crashes in Minnesota.

Number of train crashes decrease
In the past decade, the number of motor-vehicle/train crashes in Minnesota has been declining. In 2012 that trend continued. There were 25 vehicle/train crashes, 23 less crashes than were reported in the previous year.

Fatalities and Injuries decrease
Both fatalities and injuries in motor vehicle/train crashes decreased. Three people were killed in 2012 compared to four in 2011. Fifteen people were injured in 2012 compared to eighteen in 2011.

Railroad crossings with flashing lights or gates
Railroad crossings without some type of flashing lights or gates are very dangerous. All three fatalities occurred at a railroad crossing without flashing lights or gates. Only four 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 less than 5,000 population. In 2012, 19 of the 25 total crashes and all three 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, and driver inattention or distraction were the three contributing factors listed most often by officers.

TABLE 9.01

MOTOR VEHICLE / TRAIN CRASH SUMMARY, 2003 – 2012

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total Crashes	NA	72	52	51	56	40	37	33	48	25
Fatal Crashes	5	12	5	8	2	3	4	1	4	3
Persons Killed	8	13	6	9	2	4	5	1	4	3
Injury Crashes	NA	21	22	10	16	17	11	17	16	12
Persons Injured	NA	27	29	15	20	20	15	21	18	15
Property Damage Crashes	NA	39	25	33	38	20	22	15	28	10

TABLE 9.02

2012 MOTOR VEHICLE / TRAIN CRASHES BY MONTH

Month	Fatal Crashes	Injury Crashes	PDO Crashes	Total	Killed	Injured
January	0	3	1	4	0	3
February	1	0	0	1	1	1
March	0	0	0	0	0	0
April	0	0	1	1	0	0
May	0	0	0	0	0	0
June	0	2	0	2	0	2
July	0	0	1	1	0	0
August	1	1	0	2	1	1
September	0	3	0	3	0	3
October	1	1	2	4	1	1
November	0	0	1	1	0	0
December	0	2	4	6	0	4
Total	3	12	10	25	3	15

TABLE 9.03

2012 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	1	0	0	0	2
3:00 - 5:59 AM	3	0	0	0	0	2	0	5
6:00 - 8:59 AM	0	0	2	2	0	0	0	4
9:00 - 11:59 AM	0	2	1	2	0	1	0	6
Noon - 2:59 PM	1	1	0	0	0	2	1	5
3:00 - 5:59 PM	0	0	0	0	0	0	0	0
6:00 - 8:59 PM	0	0	1	0	1	0	1	3
9:00 - 11:59 PM	0	0	0	0	0	0	0	0
Total	4	3	5	5	1	5	2	25

TABLE 9.04

2012 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	2	2	5	1	3
RR Crossing Gate	0	1	3	4	0	1
RR Crossing Flashing Lights	0	1	0	1	0	1
RR Crossing Stop Sign	1	2	2	5	1	2
RR Overhead Flashing Lights	0	0	0	0	0	0
RR Overhead Lights/Gate	0	2	0	2	0	4
RR Crossbuck	1	1	1	3	1	1
Other Device	0	2	0	2	0	2
Unknown	0	1	2	3	0	1
Total	3	12	10	25	3	15

TABLE 9.05

2012 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	1	1
10 - 14	0	0	0	1	1
15 - 19	0	0	0	1	1
20 - 24	0	0	0	0	0
25 - 29	0	1	0	0	1
30 - 34	0	0	0	1	1
35 - 39	0	0	0	0	0
40 - 44	1	0	3	0	3
45 - 49	0	0	0	2	2
50 - 54	0	0	1	0	1
55 - 59	0	1	0	0	1
60 - 64	0	0	0	0	0
65 - 69	1	1	1	0	2
70 - 74	0	0	0	0	0
75 - 79	0	0	0	0	0
80 & Older	1	0	0	1	1
Not Stated	0	0	0	0	0
Total	3	3	5	7	15

TABLE 9.06

2012 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	0	0	0	0	0
100,000 - 249,999	0	0	1	1	0	0
50,000 - 99,999	0	1	0	1	0	3
25,000 - 49,999	0	0	0	0	0	0
10,000 - 24,999	0	1	2	3	0	1
5,000 - 9,999	0	1	0	1	0	1
2,500 - 4,999	0	1	0	1	0	1
1,000 - 2,499	0	0	0	0	0	0
Under 1,000	3	8	7	18	3	9
Total	3	12	10	25	3	15

TABLE 9.07

2012 MOTOR VEHICLE / TRAIN CRASHES MOTOR VEHICLE DRIVER CONTRIBUTING FACTORS

Contributing Factor	Number	Percent
Human Factors		
Failure to Yield Right of Way	10	27.8%
Disregard of Traffic Control	8	22.2
Driver Inattention/Distraction	8	22.2
Chemical Impairment	4	11.1
Improper Turn	2	5.6
Improper Parking/Starting/Stopping	1	2.8
Vehicular Factors		
Skidding	1	2.8
Other		
Other Contributing Factor	2	5.6
Total	36	100.0%
Vehicles for Which There Was"No Clear Contributing Factor"	2	
Number of Drivers	27	

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. Parents should establish clear, sensible rules to reduce their teen driver's exposure to high-risk situations. Making decisions, with safety as a priority over convenience, are essential to protecting our most vulnerable drivers - teens.

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 6.02: 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 2004, 22.7% of all traffic crashes in Minnesota were teen related. In 2012, that percentage has dropped to 17.0%.

Teen (ages 13-19) fatalities have also decreased. In 2004, 15.5% of all traffic fatalities in Minnesota were teens. In 2012, that percentage has dropped to 10.1%.

Teen (ages 13-19) injuries have also decreased. In 2004, 17.6% of all traffic injuries in Minnesota were teens. In 2012, that percentage has dropped to 13.1%.

Rate per licensed teen driver decreasing
Table 10.02 indicates that the number of teen MVO drivers (ages 15-19) who were involved in crashes has also been decreasing. MVO stands for 'motor vehicle occupant'. That is, only teens that were driving vehicles normally equipped with seat belts are counted in this table. In 2004, 79 teen MVO drivers were involved in crashes for every 1,000 licensed teen drivers. In 2012, that rate has dropped to 50.

Colder weather
Teen involved crashes are rather evenly distributed throughout the year; however, there is an uptick during the colder months. In 2012, 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 2012, 38% 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 (23%) by officers at the scene. Next was failure to yield the right of way (14%), and then illegal or unsafe speed (11%). For the 'other' motor vehicle drivers involved, failure to yield the right of way was listed most often (24%), next was driver distraction (20%). Only 5% of the 'other' drivers were listed as illegal or unsafe speed.

TABLE 10.01

TEEN CRASH SUMMARY, 2006 - 2012

Category	2006	2007	2008	2009	2010	2011	2012
Crashes with at least one Teen (15-19) Driver*	16,951	17,011	15,475	14,142	13,611	12,139	11,804
All Traffic Crashes in Minnesota	78,745	81,505	79,095	73,498	74,073	72,117	69,236
-Teen (15-19) Driver* Crash %	21.5%	20.9%	19.6%	19.2%	18.4%	16.8%	17.0%
Teen (13-19) Traffic Fatalities	75	53	37	40	47	39	40
All Traffic Fatalities in Minnesota	494	510	455	421	411	368	395
-Teen (13-19) Fatality %	15.2%	10.4%	8.1%	9.5%	11.4%	10.6%	10.1%
Teen (13-19) Traffic Injuries	6,054	5,723	5,079	4,648	4,391	3,921	3,844
All Traffic Injuries in Minnesota	35,025	35,318	33,379	31,074	31,176	30,295	29,314
-Teen (13-19) Injury %	17.3%	16.2%	15.2%	15.0%	14.1%	12.9%	13.1%

*Driver of <u>any</u> motor vehicle.

TABLE 10.02

TEEN 'MOTOR VEHICLE OCCUPANT' DRIVER CRASH INVOLVEMENT, 2006 - 2012

Age of Teen MVO* Driver	2006	2007	2008	2009	2010	2011	2012
Age 15 MVO* Drivers involved in Crashes	249	236	195	159	187	181	156
Age 15 Licensed Drivers**	26,360	26,029	26,141	28,126	28,020	25,422	25,946
-Rate per 1,000 Licensed Drivers:	9.4	9.1	7.5	5.7	6.7	7.1	6.0
Age 16 MVO* Drivers involved in Crashes	4,364	3,889	3,496	3,160	2,897	2,567	2,645
Age 16 Licensed Drivers**	53,520	51,499	49,801	49,884	49,634	48,260	47,801
-Rate per 1,000 Licensed Drivers:	81.5	75.5	70.2	63.3	58.4	53.2	55.3
Age 17 MVO* Drivers involved in Crashes	4,830	4,793	4,227	3,888	3,580	3,251	3,205
Age 17 Licensed Drivers**	60,695	59,766	57,875	56,554	55,885	54,781	54,489
-Rate per 1,000 Licensed Drivers:	79.6	80.2	73.0	68.7	64.1	59.3	58.8
Age 18 MVO* Drivers involved in Crashes	4,669	4,780	4,527	4,024	4,014	3,504	3,364
Age 18 Licensed Drivers**	64,617	64,910	64,337	62,707	61,526	59,722	59,220
-Rate per 1,000 Licensed Drivers:	72.3	73.6	70.4	64.2	65.2	58.7	56.8
Age 19 MVO* Drivers involved in Crashes	4,265	4,581	4,153	3,971	3,900	3,450	3,261
Age 19 Licensed Drivers**	67,917	67,664	68,050	67,701	66,272	63,997	63,212
-Rate per 1,000 Licensed Drivers:	62.8	67.7	61.0	58.7	58.8	53.9	51.6
All 15-19 MVO* Drivers involved in Crashes	18,377	18,279	16,598	15,202	14,578	12,953	12,631
All 15-19 Licensed Drivers**	273,109	269,868	266,204	264,972	261,337	252,182	250,668
-Rate per 1,000 Licensed Drivers:	67.3	67.7	62.4	57.4	55.8	51.4	50.4

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

**Licensed Driver totals include <u>Permits</u>.

TABLE 10.03

2012 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	3	8	70	237	922	1,240
February	3	4	51	187	574	819
March	4	7	64	198	512	785
April	5	9	60	184	523	781
May	0	10	71	233	649	963
June	3	12	89	265	01	1,070
July	3	13	93	216	603	928
August	5	17	78	251	648	999
September	3	10	93	225	614	945
October	3	12	56	237	688	996
November	2	12	59	201	647	921
December	0	9	69	238	1,041	1,357
Total	34	123	853	2,672	8,122	11,804

TABLE 10.04

2012 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	3	19	117	306	848	1,293
Monday	4	18	111	367	1,186	1,686
Tuesday	4	21	106	427	1,148	1,706
Wednesday	5	12	126	360	1,132	1,635
Thursday	6	18	140	391	1,154	1,709
Friday	4	16	126	451	1,584	2,181
Saturday	8	19	127	370	1,070	1,594
Total	34	123	853	2,672	8,122	11,804

TABLE 10.05

2012 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	1	4	14	42	104	165
1:00	0	3	9	24	69	105
2:00	2	3	11	16	59	91
3:00	0	1	11	15	42	69
4:00	2	1	3	12	49	67
5:00	0	0	5	14	43	62
6:00	1	3	13	44	88	149
7:00	2	7	41	172	530	752
8:00	2	2	34	95	369	502
9:00	0	5	25	69	262	361
10:00	2	4	33	73	253	365
11:00	1	4	31	109	326	471
Noon	2	9	50	158	402	621
1:00	0	3	42	137	393	575
2:00	3	8	46	209	621	887
3:00	6	11	71	291	909	1,288
4:00	0	8	94	280	753	1,135
5:00	3	8	75	249	880	1,215
6:00	2	10	65	195	527	799
7:00	2	8	47	133	361	551
8:00	0	7	31	118	306	462
9:00	3	6	30	114	332	485
10:00	0	5	46	59	251	361
11:00	0	3	23	41	172	239
Unknown	0	0	3	3	21	27
Total	34	123	853	2,672	8,122	11,804

FIGURE 10.01

TOTAL TEEN INVOLVED CRASHES, BY TIME, 2012

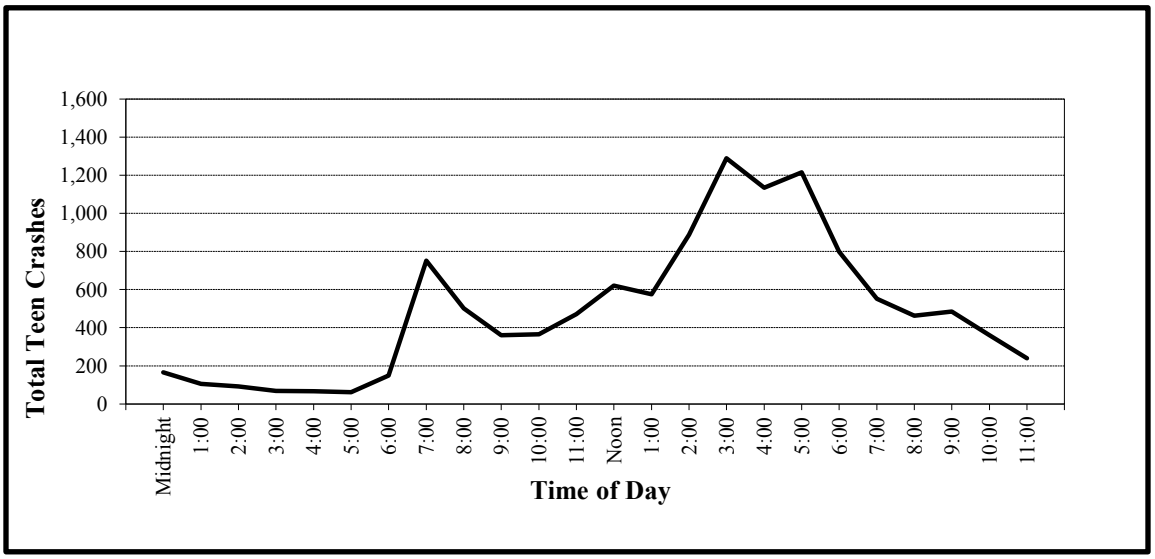

TABLE 10.06

CONTRIBUTING FACTORS IN 2012 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/Distraction	2,917	22.8%	681	20.1%
Failure to Yield Right of Way	1,835	14.3	801	23.7
Illegal/Unsafe Speed	1,395	10.9	170	5.0
Following Too Closely	1,296	10.1	500	14.8
Driver Inexperience	1,156	9.0	20	0.6
Overcorrecting	430	3.4	20	0.6
Improper/Unsafe Lane Use	413	3.2	150	4.4
Disregard Traffic Control Device	389	3.0	151	4.5
Other Human Factor	282	2.2	57	1.7
Improper Turn	206	1.6	78	2.3
Chemical Impairment	204	1.6	67	2.0
Vision Obscured	172	1.3	73	2.2
Improper Passing/Overtaking	125	1.0	45	1.3
Unsafe Backing	121	0.9	36	1.1
Improper Park/Start/Stop	95	0.7	31	0.9
Driving Left of Center	64	0.5	20	0.6
Driver On Phone/CB	27	0.2	3	0.1
Impeding Traffic	21	0.2	17	0.5
Improper/No Signal	14	0.1	14	0.4
Failure to Use Lights	5	0.0	3	0.1
Non-Motorist Error	0	0.0	30	0.9
Vehicular Factors				
Skidding	504	3.9	87	2.6
Defective Brakes	110	0.9	10	0.3
Oversize/Overweight Vehicle	2	0.0	1	0.0
Other Vehicular Factor	67	0.5	157	4.6
Miscellaneous Factors				
Weather Conditions	709	5.5	157	4.6
Other	249	1.9	140	4.1
Total Contributing Factors	12,808	100.0%	3,386	100.0%
Vehicles for Which There Was "No Clear Contributing Factor"	3,139		5,932	
Total Number of Drivers	12,735		9,227	

*The term 'Drivers' refers to a driver of <u>any</u> motor vehicle.
Contributing factor data for the 'Other Vehicle Drivers' includes pedestrians and bicyclists. Pedestrians and bicyclists are <u>not</u> 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.

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.