2004 South Dakota Motor Vehicle Traffic Crash Summary





Prepared By
Department of Public Safety
Office of Highway Safety/Accident Records

M. Michael Rounds
Governor

May 2005

Dear Readers:

I have made the safety of South Dakotans one of my top priorities. The South Dakota Highway Patrol and law enforcement agencies across the state are working together to reduce traffic crashes by conducting sobriety checks, saturation patrols and educating the public about the dangers of unsafe driving. But it's not enough.

Every year, motor vehicle crashes rob our state of one of our most valuable resources...our citizens. The 2004 South Dakota Motor Vehicle Traffic Crash Summary contains valuable information that will enhance public awareness of the human and financial costs of motor vehicle crashes, identify traffic safety problems, and determine effective countermeasures to address those problems.

Highway safety is a complex issue dealing with years of behavioral trends that are magnified by the growing number of drivers on our roadways and the increased demand on our time and energy. Reducing the number of motor vehicle fatalities and injuries is not dependent upon the work of one agency, but upon the collaborative and ongoing efforts of a multitude of public and private entities.

We can make a difference. We can change these statistics by making safety a priority every time we operate a motor vehicle. Slow down, use safety belts, child safety seats, and if you choose to consume alcohol, do not drive.

Together, we can make South Dakota a safer place to live, work, visit and raise a family.

Sincerely,

M. Michael Rounds

TABLE OF CONTENTS

| | | PAGE |
|------|---|---------------------|
| l. | INTRODUCTION | 1 |
| | South Dakota Statistical Summary | 2 |
| II. | HISTORICAL TRENDS | 3 |
| | Motor Vehicle Crashes Alcohol Involvement Restraint Usage Cycle and Pedestrian Crashes Holiday Counts Severity of Injuries Sex of Drivers | 6 10 13 15 |
| III. | MOTOR VEHICLE CRASH PROFILE | 20 |
| | Introduction | |
| | First Harmful Event | |
| | Manner of Collision | |
| | Highway System | |
| | County Summary | |
| | City Summary | |
| | Roadway Surface Conditions Contributing Circumstances | |
| | Crashes by Time of Day, Month, and Day of Week | |
| | Drivers | |
| | Motorcycles | |
| | Pedestrians | |
| | Bicycles | 51 |
| IV. | IMPORTANT EVENTS AND DATES | 52 |
| V | GLOSSARY OF TERMS | 53 |

LIST OF TABLES

| <u>TABLE</u> | | <u>PAGE</u> |
|--------------------|--|-------------|
| 2-1 | Fatality Rate Comparison | 3 |
| 2-2 | South Dakota Yearly Comparison of Motor Vehicle Traffic | |
| | Fatalities, Injuries, Crashes, Miles Traveled, and | |
| | Registered Motor Vehicles | |
| 2-3 | Alcohol Involved Crashes as Percent of All Crashes | |
| 2-3A | Persons Killed in Alcohol Involved Crashes by Age | |
| 2-4 | Crash and Arrest Activity | |
| 2-5 | Safety Restraint Usage Killed Occupants | |
| 2-5A | Safety Restraint Usage Injured Occupants | |
| 2-5B | Fatalities by Ejection Status for Motor Vehicle Occupants | 10 |
| 2-6 | Fatalities and Injuries to Motor Vehicle Occupants Under Five Years of Age | 10 |
| 2-6A | Safety Restraint Usage Under 5 Years of Age | ∠ا12 12 |
| 2-7 | Motorcycle Crashes | |
| 2-8 | Pedestrian Fatalities and Injuries | |
| 2-9 | Bicycle Fatalities and Injuries | |
| 2-10 | Crashes During Holidays | |
| 2-11 | Fatalities and Injuries of Total Persons | |
| 2-12 | Fatalities and Injuries of Total Drivers | |
| 2-13 | Fatalities and Injuries of Total Passengers | |
| 2-14 | Fatalities and Injuries of Total Bicycle Drivers | 18 |
| 2-15 | Fatalities and Injuries of Total Pedestrians | 18 |
| 2-16 | Sex of Drivers | 19 |
| 3-1 | Fatalities and Severity of Injuries of Drivers, Passengers, | |
| | Pedestrians, and Bicyclists | |
| 3-2 | Fatalities and Injuries by Mode of Transportation | |
| 3-3 | Vehicle Types Involved in Crashes | |
| 3-4 | Fatalities and Injuries by Age Group | |
| 3-5 | First Harmful Event | 25 |
| 3-6 | Manner of Collision for Crashes Involving a Collision Between Two or More Motor Vehicles | 26 |
| 3-7 | Crashes by Type of Highway | |
| 3- <i>1</i> 3-8 | Reported Traffic Crashes - South Dakota Counties | |
| 3-8A | Reported Alcohol Traffic Crashes - South Dakota Counties | |
| 3-9 | Counties Having More Than Two Percent of the Rural Fatal and | |
| 0 0 | Injury Crashes | 32 |
| 3-10 | Traffic Crashes - South Dakota Cities Population 2500 and | _ |
| | Over | 34 |
| 3-11 | Roadway Surface Conditions | |
| 3-12 | Crashes by Time of Day | |
| 3-13 | Crashes by Month | 37 |
| 3-14 | Crashes by Day of Week | 37 |
| 3-15 | Age of Drivers in Crashes | |
| 3-16 | Age of Drinking Drivers in Crashes | 40 |
| 3-17 | Licensed Drivers and Fatal and Injury Crash-Involved Drivers | |
| 2.40 | by Age | |
| 3-18 | Motor Vehicle Driver Contributing Circumstances | |
| 3-19 | Motorcyclists by Age Group | |
| 3-20 | Helmet Use by Motorcycle Drivers in Crashes | |
| 3-21 3-22 | Age of Pedestrians in Traffic Crashes | |
| 3-22 | Rural vs. City Pedestrian Crashes | |
| 3-23 | Age of Bicycle Drivers in Traffic Crashes | |

LIST OF FIGURES

| <u>FIGU</u> | <u>RE</u> | AGE |
|-------------|--|-----|
| 2-1 | Fatality Rate Comparison | 4 |
| 2-2 | Traffic Fatalities - Alcohol Related vs. Nonalcohol Related | 7 |
| 2-3 | Traffic Injuries - Alcohol Related vs. Nonalcohol Related | 7 |
| 2-4 | Fatal and Injury Crashes and DWIs | 9 |
| 2-5 | Fatal Crashes | 9 |
| 2-6 | Safety Equipment Usage Killed Occupants | 11 |
| 2-7 | Safety Equipment Usage Injured Occupants | 11 |
| 3-1 | Fatalities by Travel Mode | 22 |
| 3-2 | Injuries by Travel Mode | 22 |
| 3-3 | Traffic Crashes by Highway System Type | 28 |
| 3-4 | Fatal Traffic Crashes by Highway System Type | 28 |
| 3-5 | Rural Fatal and Injury Crashes/Vehicle Miles Traveled | 33 |
| 3-6 | Crashes by Time of Day | 38 |
| 3-7 | Crashes by Month | 38 |
| 3-8 | Crashes by Day of Week | 38 |
| 3-9 | Drivers by Age Group - Fatal and Injury Crash-Involved Drivers | 42 |
| 3-10 | Young Drivers - Fatal and Injury Crash-Involved Drivers | 43 |
| 3-11 | Motorcyclists - Crash-Involved Motorcycle and Moped Drivers | 47 |

I. INTRODUCTION

The South Dakota Motor Vehicle Traffic Crash Summary was developed to provide an overview of the South Dakota traffic crash picture, as well as make frequently requested information available. Beginning in 2004, South Dakota developed its Crash Data System to conform to the standards established by the Model Minimum Uniform Crash Criteria (MMUCC) guidelines. The purpose of MMUCC is to provide a minimum, standardized data set for describing crashes of motor vehicles that will generate the information necessary to improve highway safety within each state and nationally.

Data recorded on crash reports are computerized and merged into a central, electronic crash data file at the state level. The state motor vehicle crash database provides the basic information necessary for developing effective highway and traffic safety programs. Data from the crash data system is used by local, state and federal agencies to:

- Identify highway and traffic safety problem areas.
- Initiate and evaluate the effectiveness of laws and policies intended to reduce deaths, injuries, injury severity and costs.
- Assess the relationship between vehicle and highway characteristics, crash propensity, and injury severity to support either the development of countermeasures or their evaluation.

By promoting MMUCC, the highway safety community is making an explicit statement that comparable data from all states are crucial to our ability to identify problems and make improvements. The MMUCC data elements, along with the state-specific data elements and the officer's narratives and diagrams, provide critical highway safety information. Information technology is capable of capturing this data electronically, regardless of whether the data is in graphic or coded formats.

The Motor Vehicle Traffic Crash Summary is divided into two main sections, Historical Trends and 2004 Motor Vehicle Traffic Crash Profile. The Historical Trend section provides information on alcohol involvement in motor vehicle crashes, severity of injury by record type and sex of drivers involved in crashes. This section also provides data on restraint usage and crash trends. The 2004 Traffic Crash Profile section details the crash picture for 2004 as well as a glossary of terms.

The majority of the information in this book is provided by the Accident Records Section within the Department of Public Safety. Current state law requires an accident report be filed for each motor vehicle traffic accident resulting in the **death or injury of a person, or property damage to an apparent extent of one thousand dollars or more to any one person's property or two thousand dollars accumulated damage per accident.** (The reporting threshold for property damage only accidents increased from \$500 to \$1,000 on July 1, 2000). Law enforcement agencies provide the accident reports to Accident Records. These reports are available to the public for a search fee of four dollars.

For additional information:

Accident Records Section 118 W Capitol Ave Pierre, SD 57501-2000 Phone: (605) 773-4156 FAX: (605) 773-6893

E-mail: ARInfo@state.sd.us

SOUTH DAKOTA TRAFFIC STATISTICAL SUMMARY 2004

ON THE AVERAGE ONE TRAFFIC CRASH OCCURRED EVERY 31 MINUTES, AN INJURY WAS SUSTAINED EVERY HOUR AND A DEATH OCCURRED EVERY 44 HOURS.

NUMBER OF REPORTED MOTOR VEHICLE TRAFFIC CRASHES: 17,163

AMOUNT OF MOTOR VEHICLE TRAFFIC CRASH PROPERTY DAMAGE: \$77 MILLION

NUMBER OF MOTOR VEHICLE TRAFFIC CRASH INJURIES: 6,535

NUMBER OF MOTOR VEHICLE TRAFFIC CRASH FATALITIES: 197

FATALITY RATE PER 100.000.000 MILES OF TRAVEL: 2.32

PERCENT OF DRIVERS IN FATAL CRASHES WHO HAD BEEN DRINKING: 26.2%

NUMBER KILLED IN ALCOHOL-RELATED CRASHES: 78

NUMBER INJURED IN ALCOHOL-RELATED CRASHES: 936

NUMBER OF PEDESTRIANS KILLED: 9

NUMBER OF MOTORCYCLISTS KILLED: 26

NUMBER OF BICYCLISTS KILLED: 1

PERCENT OF LICENSED DRIVERS UNDER 25: 18%

PERCENT OF CRASH-INVOLVED SPEEDING DRIVERS IN FATAL & INJURY ACCIDENTS UNDER 25: 57.2%

PERCENT OF CRASH-INVOLVED DRINKING DRIVERS UNDER 25: 44%

NUMBER OF OCCUPANTS KILLED IN MOTOR VEHICLES: 159, 42 WERE WEARING A SAFETY RESTRAINT (EXCLUDES MOPED, MOTORCYCLE & SNOWMOBILE OCCUPANTS)

NUMBER OF DWI CONVICTIONS: 6,117 (Source: Dept. of Public Safety-Driver Licensing Program)

NUMBER OF UNRESTRAINED OCCUPANTS UNDER 5 YEARS OF AGE KILLED IN MOTOR VEHICLE CRASHES 3; NUMBER INJURED 15 AND 2 WERE INJURED WITH CHILD RESTRAINT NOT USED **PROPERLY**

ECONOMIC LOSS FROM MOTOR VEHICLE TRAFFIC CRASHES: \$408 MILLION

II. HISTORICAL TRENDS

Motor Vehicle Crashes

The preliminary death rates per 100 million vehicle miles traveled from 1995-2004 for South Dakota, states surrounding South Dakota and the nation are shown in TABLE 2-1. FIGURE 2-1 compares South Dakota with the national rate and two comparable rural states, North Dakota and Wyoming.

TABLE 2-1 FATALITY RATE COMPARISON 1995-2004

| <u>State</u> | <u>1995</u> | <u>1996</u> | <u>1997</u> | <u>1998</u> | <u>1999</u> | <u>2000</u> | <u>2001</u> | <u>2002</u> | <u>2003</u> | <u>2004</u> |
|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| South Dakota | 2.1 | 2.2 | 1.9 | 2.1 | 1.8 | 2.1 | 2.0 | 2.2 | 2.4 | 2.3 |
| lowa | 2.0 | 1.7 | 1.7 | 1.5 | 1.6 | 1.5 | 1.5 | 1.3 | 1.4 | 1.2 |
| Minnesota | 1.4 | 1.3 | 1.3 | 1.3 | 1.3 | 1.2 | 1.1 | 1.2 | 1.2 | 1.0 |
| Montana | 2.3 | 2.1 | 2.8 | 2.5 | 2.3 | 2.4 | 2.3 | 2.6 | 2.4 | 2.1 |
| Nebraska | 1.6 | 1.8 | 1.8 | 1.8 | 1.7 | 1.6 | 1.8 | 1.8 | 1.6 | 1.4 |
| North Dakota | 1.1 | 1.3 | 1.5 | 1.1 | 1.6 | 1.2 | 1.5 | 1.4 | 1.4 | 1.3 |
| Wyoming | 2.4 | 2.0 | 1.9 | 1.9 | 2.4 | 1.9 | 2.3 | 2.2 | 1.8 | 1.8 |
| National | 1.7 | 1.7 | 1.7 | 1.6 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |

Note: Death Rate is the number of traffic fatalities per 100 million vehicle miles traveled.

Source: SD Department of Public Safety: Accident Records

TABLE 2-2 provides a yearly comparison of South Dakota's motor vehicle traffic crashes from 1973 through 2004. Any comparison of motor vehicle crashes must be made with caution due to the changes in the definition of a reportable crash. For example, in the late 1970's the definition of a fatality caused by a motor vehicle crash was changed from the death occurring up to one year after the crash to death occurring within 30 days after the crash. Using vehicle miles of travel, the 2004 death rate decreased to 2.32, a 4.1% decrease from the 2003 death rate of 2.41. The 6,535 people injured is a 5.9% decrease from the 6,944 for 2003 (see TABLE 2-2).

FIGURE 2-1 FATALITY RATE COMPARISON

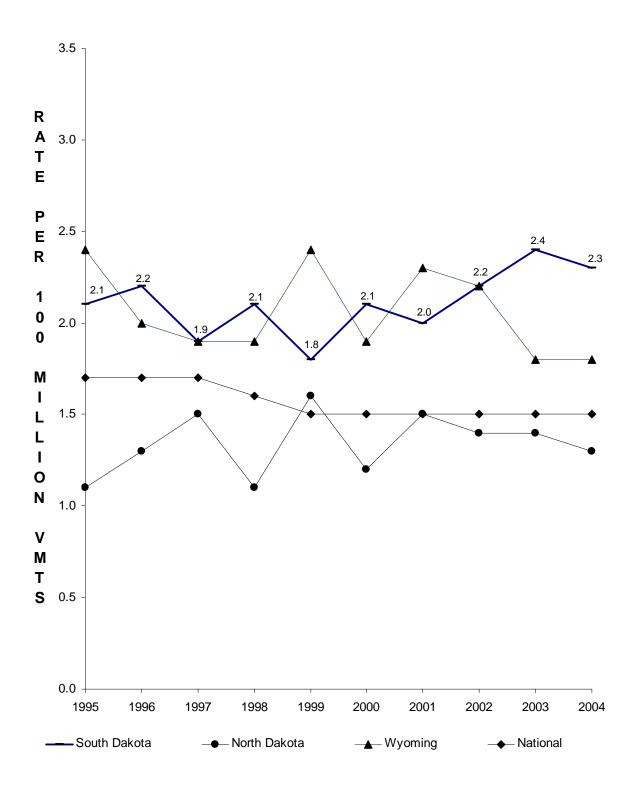


TABLE 2-2 SOUTH DAKOTA YEARLY COMPARISON OF MOTOR VEHICLE TRAFFIC FATALITIES, INJURIES, CRASHES, MILES TRAVELED, & REGISTERED MOTOR VEHICLES

| | | | | | | | | | | Registered |
|-------------|---------------|-------------------|-----------------|----------------|-------------------------|----------------|----------------|---------------------|--------------------|---------------|
| | | | | | Total | | | | Miles ³ | Motor |
| | | Death | | Total | Crashes | Fatal | Injury | PDO^2 | Traveled | Vehicles |
| <u>Year</u> | <u>Deaths</u> | Rate ¹ | <u>Injuries</u> | <u>Crashes</u> | <u>Rate⁴</u> | <u>Crashes</u> | <u>Crashes</u> | <u>Crashes</u> | +(000,000) | <u>+(000)</u> |
| 1973 | 286 | 5.57 | 6,774 | 14,985 | 291.76 | 228 | 4,321 | 10,436 ² | 5,136 | 494 |
| 1974 | 229 | 4.47 | 6,211 | 11,727 | 228.77 | 203 | 4,077 | 7,447 | 5,126 | 519 |
| 1975 | 198 | 3.82 | 6,769 | 15,146 | 292.06 | 163 | 4,398 | 10,585 ² | 5,186 | 533 |
| 1976 | 224 | 4.07 | 7,423 | 15,755 | 286.30 | 188 | 4,840 | 10,727 | 5,503 | 554 |
| 1977 | 211 | 3.67 | 7,603 | 18,020 | 313.17 | 180 | 5,013 | 12,827 | 5,754 | 575 |
| 1978 | 194 | 3.33 | 7,861 | 18,085 | 310.21 | 168 | 5,263 | 12,654 ² | 5,830 | 599 |
| 1979 | 211 | 3.76 | 7,189 | 16,059 | 286.05 | 169 | 4,826 | 11,064 | 5,614 | 616 |
| 1980 | 228 | 3.69 | 7,147 | 14,845 | 240.25 | 188 | 4,770 | 9,887 | 6,179 ³ | 622 |
| 1981 | 177 | 2.86 | 6,771 | 14,375 | 232.38 | 162 | 4,614 | 9,599 | 6,186 | 637 |
| 1982 | 148 | 2.33 | 6,174 | 14,605 | 229.57 | 129 | 4,192 | 10,284 | 6,362 | 640 |
| 1983 | 175 | 2.77 | 6,287 | 14,971 | 237.07 | 147 | 4,175 | 10,649 | 6,315 | 655 |
| 1984 | 143 | 2.24 | 6,158 | 15,093 | 236.42 | 132 | 4,297 | 10,664 | 6,384 | 669 |
| 1985 | 130 | 2.07 | 6,240 | 15,435 | 245.94 | 109 | 4,229 | 11,097 | 6,276 | 674 |
| 1986 | 134 | 2.15 | 6,008 | 13,714 | 219.85 | 118 | 4,105 | 9,491 ² | 6,238 | 686 |
| 1987 | 134 | 2.09 | 6,221 | 13,083 | 203.59 | 107 | 4,173 | 8,803 | 6,426 | 711 |
| 1988 | 147 | 2.22 | 6,579 | 14,821 | 224.02 | 127 | 4,455 | 10,239 | 6,616 | 709 |
| 1989 | 152 | 2.27 | 6,828 | 15,005 | 223.79 | 134 | 4,605 | 10,266 | 6,705 | 719 |
| 1990 | 153 | 2.19 | 7,261 | 15,073 | 215.67 | 139 | 4,820 | 10,114 | 6,989 | 698 |
| 1991 | 143 | 2.10 | 7,310 | 16,009 | 235.32 | 130 | 4,830 | 11,049 | 6,803 | 710 |
| 1992 | 161 | 2.24 | 7,813 | 17,170 | 238.51 | 141 | 5,112 | 11,917 | 7,199 | 722 |
| 1993 | 140 | 1.89 | 8,410 | 18,664 | 251.74 | 118 | 5,525 | 13,021 | 7,414 | 749 |
| 1994 | 154 | 2.02 | 8,540 | 19,408 | 254.30 | 141 | 5,711 | 13,556 | 7,632 | 805 |
| 1995 | 158 | 2.06 | 8,323 | 19,362 | 252.41 | 140 | 5,543 | 13,679 | 7,671 | 812 |
| 1996 | 175 | 2.24 | 8,490 | 21,653 | 277.57 | 142 | 5,653 | 15,858 | 7,801 | 815 |
| 1997 | 148 | 1.88 | 8,161 | 20,899 | 264.81 | 128 | 5,478 | 15,293 | 7,892 | 827 |
| 1998 | 165 | 2.05 | 7,723 | 19,735 | 245.49 | 149 | 5,112 | 14,474 | 8,039 | 837 |
| 1999 | 150 | 1.84 | 7,574 | 20,019 | 245.00 | 136 | 5,032 | 14,851 | 8,171 | 841 |
| 2000 | 173 | 2.08 | 7,888 | 19,475 | 234.13 | 150 | 5,252 | 14,073 ² | 8,318 | 862 |
| 2001 | 171 | 2.04 | 7,118 | 17,699 | 211.43 | 154 | 4,888 | 12,657 | 8,371 | 872 |
| 2002 | 180 | 2.15 | 6,997 | 17,335 | 206.74 | 159 | 4,702 | 12,474 | 8,385 | 890 |
| 2003 | 203 | 2.41 | 6,944 | 18,018 | 213.74 | 173 | 4,781 | 13,064 | 8,430 | 909 |
| 2004 | 197 | 2.32 | 6,535 | 17,163 | 201.75 | 166 | 4,581 | 12,416 | 8,507 | 927 |

¹Number of deaths per 100 million vehicle miles traveled.

²Prior to July 1, 1973 the threshold for a reportable property damage only (PDO) crash was \$100 to one person's property. July 1, 1973 the PDO amount was increased to \$250.

January 1, 1975 the PDO threshold definition changed to accumulated property damage of \$250 or more. July 1, 1978 the PDO threshold was increased to \$400 accumulated property damage.

July 1, 1986 the PDO threshold definition changed to \$500 damage to any one person's property or \$1000 accumulated property damage per crash. July 1, 2000 the PDO threshold definition changed to \$1,000 to any one person's property or \$2,000 accumulated property damage per crash.

³ Miles traveled from years 1980 through 1991 have been revised to agree with the Highway Performance Monitoring System's (HPMS) miles traveled. The revised travel was provided by Data Inventory of the SD Department of Transportation.

⁴Number of crashes per 100 million vehicle miles traveled.

Alcohol Involvement

When comparing records dating back to 1979, 36.7% alcohol involved fatal crashes for 2004 is the lowest. Of the 197 traffic fatalities during 2004, 78 or 39.6% were alcohol related (see Table 2-3). Alcohol statistics dating back to the 1970's show 1993 to have the lowest number of fatalities for any one year period (55). The highest number is 138 for the year of 1973.

TABLE 2-3 ALCOHOL INVOLVED CRASHES AS PERCENT OF ALL CRASHES 1998-2004

| Total Crashes | <u>1998</u> | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
|----------------|-------------|--------|--------|--------|--------|--------|--------|
| | 7.1 | 6.4 | 6.8 | 6.4 | 7.3 | 7.0 | 6.7 |
| | (1393) | (1290) | (1331) | (1137) | (1265) | (1261) | (1153) |
| Fatal Crashes | 40.3 | 42.6 | 43.3 | 42.2 | 47.8 | 45.1 | 36.7 |
| | (60) | (58) | (65) | (65) | (76) | (78) | (61) |
| Injury Crashes | 12.9 | 12.6 | 12.3 | 11.5 | 13.5 | 13.2 | 13.3 |
| | (662) | (634) | (648) | (563) | (635) | (630) | (607) |
| PDO Crashes | 4.6 | 4.0 | 4.4 | 4.0 | 4.4 | 4.2 | 3.9 |
| | (671) | (598) | (618) | (509) | (554) | (553) | (485) |
| Fatalities | 39.4 | 41.3 | 44.5 | 43.9 | 50.6 | 46.3 | 39.6 |
| | (65) | (62) | (77) | (75) | (91) | (94) | (78) |
| Injuries | 13.9 | 13.6 | 13.7 | 12.0 | 14.2 | 14.4 | 14.3 |
| | (1074) | (1027) | (1078) | (851) | (991) | (1000) | (936) |

NOTE: Alcohol involvement for Fatal Crashes is based upon a positive BAC result and/or Indication of alcohol use by at least one driver, pedestrian or bicycle driver as reported by the investigating officer.

For Injury and Property Damage Crashes - It is based upon indication of alcohol use by at least one driver, pedestrian or bicycle driver as reported by the investigating officer.

TABLE 2-3A
PERSONS KILLED IN ALCOHOL INVOLVED CRASHES BY AGE
1998- 2004

| AGE | <u>1998</u> | <u> 1999</u> | 2000 | 2001 | 2002 | 2003 | 2004 |
|--------------------|-------------|--------------|------|------|------|------|------|
| 0 - 5 | 1 | 0 | 0 | 0 | 0 | 3 | 3 |
| 6 - 12 | 0 | 1 | 1 | 2 | 2 | 1 | 1 |
| 13 - 19 | 15 | 11 | 11 | 9 | 15 | 18 | 11 |
| 20 | 2 | 2 | 1 | 2 | 3 | 0 | 3 |
| 21 - 29 | 19 | 16 | 25 | 23 | 19 | 24 | 26 |
| 30 - 39 | 14 | 10 | 21 | 16 | 18 | 22 | 15 |
| 40 - 49 | 9 | 11 | 9 | 10 | 17 | 10 | 11 |
| 50 - 59 | 4 | 6 | 4 | 4 | 9 | 11 | 4 |
| 60 & OLDER | 1 | 5 | 5 | 8 | 8 | 5 | 4 |
| Unknown/Not Stated | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| TOTAL | 65 | 62 | 77 | 75 | 91 | 94 | 78 |

FIGURE 2-2 2004 CRASH FATALITIES Alcohol Related vs Non Alcohol Related

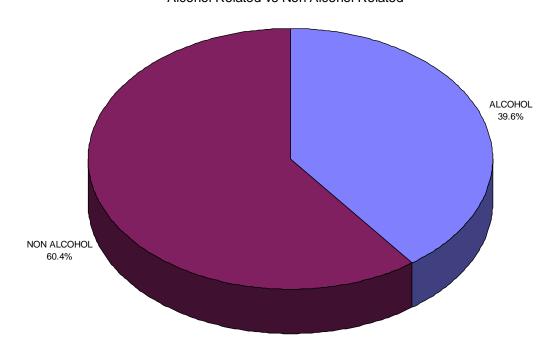
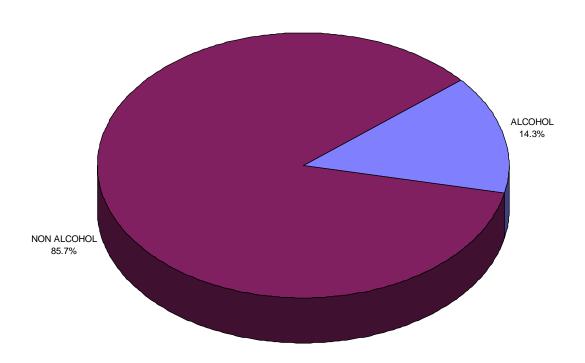


FIGURE 2-3 2004 CRASH INJURIES Alcohol Related vs Non Alcohol Related



The following crash and arrest data is presented to monitor changes in alcohol-related fatal and injury crashes and to compare changes with nonalcohol-related crash experiences (see TABLE 2-4). Alcohol-related fatal and injury crashes decreased by 5.6% while nonalcohol-related fatal and injury crashes decreased by 3.9% from the 2003 totals. The number of DWI arrests increased by 0.4% from 2003.

TABLE 2-4 CRASH AND ARREST ACTIVITY 1995 - 2004

| | FATAL | CRASHES | FATAL & INJ | | |
|------|---------|------------|-------------|----------------|----------|
| | ALCOHOL | NONALCOHOL | ALCOHOL | NONALCOHOL | DWI |
| | RELATED | RELATED | RELATED | <u>RELATED</u> | ARRESTS* |
| 1995 | 60 | 80 | 795 | 4,888 | 8,923 |
| 1996 | 54 | 88 | 776 | 5,019 | 9,712 |
| 1997 | 50 | 78 | 706 | 4,900 | 8,757 |
| 1998 | 60 | 89 | 722 | 4,539 | 8,630 |
| 1999 | 58 | 78 | 692 | 4,476 | 9,383 |
| 2000 | 65 | 85 | 713 | 4,689 | 9,430 |
| 2001 | 65 | 89 | 628 | 4,414 | 8,956 |
| 2002 | 76 | 83 | 711 | 4,150 | 8,272 |
| 2003 | 78 | 95 | 708 | 4,246 | 9,011 |
| 2004 | 61 | 105 | 668 | 4,079 | 9,049 |

*Source: South Dakota Courts - The State of the Judiciary and 2004 Annual Report of the S. D. Unified Judicial System - January 2005

Based on Fiscal Year statistics

FIGURE 2-4 presents the annual counts of DWI arrests, alcohol-related fatal and injury crashes, and nonalcohol-related fatal and injury crashes from 1995 through 2004. FIGURE 2-5 presents the alcohol-related and nonalcohol-related fatal crash experience for the years of 1995 through 2004.

There were 61 alcohol-related fatal crashes during 2004, which compares to 78 in 2003. The previous three-year average was 73 for the years of 2001-2003.

There were 668 alcohol-related fatal and injury crashes during 2004, which compares to 708 in 2003. The previous three-year average was 682 or a 2.1 percent decrease in 2004. Nonalcohol-related fatal and injury crashes in 2004 decreased (3.9%) when compared to 2003 and decreased 4.5 percent from the previous three-year average (01-03).

There were 9,049 DWI arrests in fiscal year 2004. This level has gone up 3.5% from the previous three-year average (01-03).

Source: SD of Public Safety: Accident Records

FIGURE 2-4 FATAL & INJURY CRASHES AND DWIS

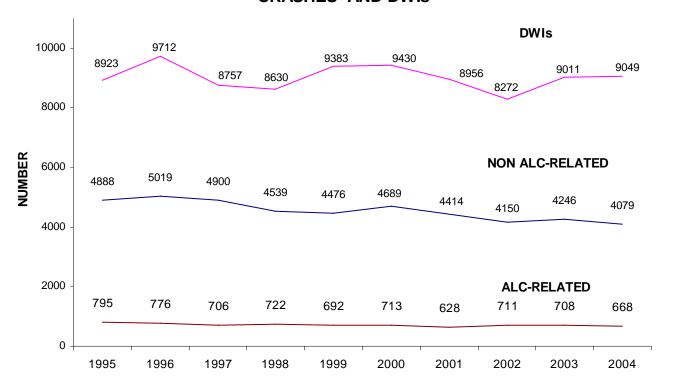
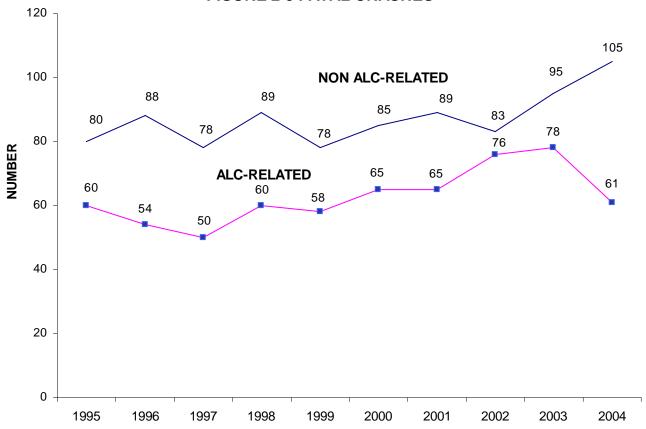


FIGURE 2-5 FATAL CRASHES



SAFETY RESTRAINT USAGE, EJECTION AND CHILD INJURIES

On January 1, 1995 the statute took effect requiring front seat occupants to be fastened by a safety belt system. The use of safety equipment is reported for all motor vehicle drivers and only those passengers that are injured. One hundred occupants were killed while not wearing any safety restraint, while thirty-nine occupants killed were wearing lap and shoulder harness, one was wearing a lap belt only, and two wore a shoulder harness only. (See TABLE 2-5)

Seventy-one (44.7%) of the 159 killed occupants were either partially or totally ejected from the vehicle. (See TABLE 2-5B)

| | TAE | BLE 2-5 | | | | |
|-----------------------------------|------------------------|-------------|-------------|-------|-------------|-------------|
| | SAFETY RESTRAINT USAGE | | | | | |
| | KILLED C | CCUPAN | ΓS | | | |
| | <u>1999</u> | <u>2000</u> | <u>2001</u> | 2002 | 2003 | <u>2004</u> |
| No Safety Equipment | 86 | 103 | 86 | 103 | 123 | 103 |
| Lap Belt Only | 1 | 3 | 2 | 1 | 4 | 1 |
| Shoulder Harness Only | 0 | 0 | 1 | 2 | 2 | 2 |
| Lap Belt & Shoulder Harness | 21 | 19 | 32 | 32 | 26 | 39 |
| Child Restraint Used Properly | 1 | 0 | 0 | 0 | 0 | 0 |
| Child Restraint Not Properly Used | 0 | 1 | 1 | 0 | 1 | 0 |
| Other, Not Stated or Unknown | 19 | 11 | 11 | 13 | 15 | 14 |
| | | | | | | |
| Total | 128 | 137 | 133 | 151 | 171 | 159 |
| | TAB | LE 2-5A | | | | |
| | SAFETY RES | TRAINT U | SAGE | | | |
| | INJURED (| OCCUPAN | ITS | | | |
| | <u>1999</u> | 2000 | <u>2001</u> | 2002 | <u>2003</u> | <u>2004</u> |
| | | | | | | |
| No Safety Equipment | 2,324 | 2,357 | 1,895 | 1,739 | 1,552 | 1,361 |
| Lap Belt Only | 150 | 151 | 139 | 129 | 92 | 81 |
| Shoulder Harness Only | 56 | 48 | 30 | 38 | 34 | 32 |
| Lap Belt & Shoulder Harness | 3,947 | 4,114 | 3,945 | 3,955 | 3,991 | 3,847 |
| Child Restraint Used Properly | 50 | 35 | 57 | 67 | 58 | 60 |
| Child Restraint Not Properly Used | 4 | 8 | 11 | 8 | 5 | 2 |
| Other, Not Stated or Unknown | 401 | 419 | 392 | 443 | 442 | 428 |
| Total | 6,932 | 7,132 | 6,469 | 6,379 | 6,174 | 5,811 |

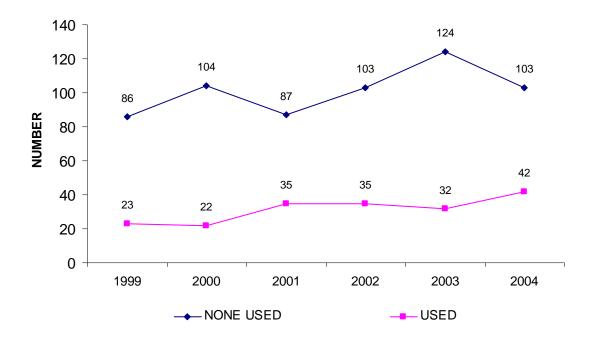
Note: Motor vehicle drivers and passengers are considered occupants. Motorcycle, moped and snowmobile drivers and motorcycle, moped and snowmobile passengers are not counted in the above tables.

TABLE 2-5B
FATALITIES BY EJECTION STATUS FOR MOTOR VEHICLE OCCUPANTS (Excludes Motorcycle, Mopeds and Snowmobiles)

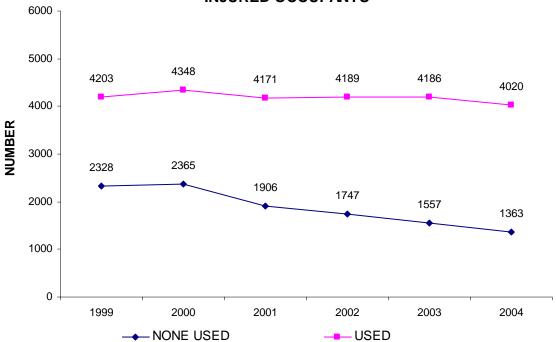
2004

| | <u>Killed</u> | <u>Injured</u> |
|------------------|---------------|----------------|
| Not Ejected | 81 | 5,130 |
| Partial Ejection | 14 | 20 |
| Total Ejection | 57 | 148 |
| Unknown Ejection | 7 | 505 |
| Not Applicable | 0 | 8 |
| | | |
| Total | 159 | 5,811 |

FIGURE 2-6 SAFETY EQUIPMENT USAGE KILLED OCCUPANTS







The Child Passenger Restraint System (SDCL 32-37) law took effect on July 1, 1984 -- since that time there have been 48 deaths to occupants of this age group. Only four have been restrained by a child safety restraint properly used, two were restrained by a lap belt only. No deaths have been reported where a lap and shoulder harness was used to restrain the child.

There were three fatalities to motor vehicle occupants from birth through four years of age during 2004, which compares to five during 2003 (see TABLE 2-6).

There were 101 children (birth through 4 years old) injured in 2004, which compares to 105 for 2003 and the three-year average of 111. Eighty-two of the 101 injured children were restrained by a lap belt, a shoulder harness, a lap and shoulder harness or a child safety restraint used properly (see TABLE 2-6A).

TABLE 2-6
FATALITIES & INJURIES TO MOTOR VEHICLE OCCUPANTS
UNDER 5 YEARS OF AGE

| | | | TOTAL |
|-------------------|--|---|--|
| | SERIOUS | SLIGHT | NONFATAL |
| <u>FATALITIES</u> | <u>INJURY</u> | <u>INJURY</u> | <u>INJURIES</u> |
| 1 | 78 | 54 | 132 |
| 2 | 77 | 59 | 136 |
| 2 | 78 | 68 | 146 |
| 2 | 78 | 46 | 124 |
| 6 | 70 | 48 | 118 |
| 1 | 76 | 54 | 130 |
| 1 | 45 | 55 | 100 |
| 1 | 61 | 52 | 113 |
| 2 | 56 | 60 | 116 |
| 5 | 53 | 52 | 105 |
| 3 | 44 | 57 | 101 |
| | 1 2 2 2 6 1 1 1 2 5 | FATALITIES INJURY 1 78 2 77 2 78 2 78 6 70 1 76 1 45 1 61 2 56 5 53 | FATALITIES INJURY INJURY 1 78 54 2 77 59 2 78 68 2 78 46 6 70 48 1 76 54 1 45 55 1 61 52 2 56 60 5 53 52 |

NOTE: Table includes passengers of Motor vehicles normally equipped with safety restraints.

TABLE 2-6A
FATALITIES & INJURIES TO MOTOR VEHICLE OCCUPANTS UNDER 5 YEARS OLD
BY SAFETY EQUIPMENT USAGE
2004

| | <u>Fatalities</u> | <u>Injuries</u> |
|-----------------------------------|-------------------|-----------------|
| No Safety Equipment Used | 3 | 15 |
| Lap Belt Only | 0 | 0 |
| Shoulder Harness Only | 0 | 0 |
| Lap Belt & Shoulder Harness | 0 | 26 |
| Child Restraint Used Properly | 0 | 56 |
| Child Restraint Not Used Properly | 0 | 2 |
| Other | 0 | 0 |
| Not Stated or Unknown | 0 | 2 |
| TOTAL | 3 | 101 |

Cycle and Pedestrian Crashes

The following tables provide a yearly comparison of South Dakota's motorcycle, pedestrian, and bicycle crashes, injuries, and fatalities. During the last 10 years the average number of motorcycle involved crashes is 407 and 16 deaths per year. Licensed motorcyclists increased 4.7 percent during 2004 while fatalities increased by five to 26 (see Table 2-7). Moped crashes are included with motorcycle crashes. There were no moped fatalities during 2004. Over the years there have been two moped fatalities and the number of injuries is small. See pages 46-51 for additional motorcycle, pedestrian, and bicycle crash information.

TABLE 2-7 MOTORCYCLE CRASHES 1981 - 2004

| | Moto | orcycle C | rashes | Motorcyclists | | Registered | Licensed |
|-------------|-------|-----------|---------------|-------------------|-----------------|-------------|----------------------|
| <u>Year</u> | Total | Fatal | <u>Injury</u> | <u>Fatalities</u> | <u>Injuries</u> | Motorcycles | <u>Motorcyclists</u> |
| | | | | | | | |
| 1981 | 697 | 15 | 598 | 15 | 729 | 38,265 | 43,170 |
| 1982 | 548 | 12 | 473 | 13 | 581 | 38,418 | Not Available |
| 1983 | 573 | 12 | 489 | 12 | 591 | 39,255 | 45,544 |
| 1984 | 564 | 10 | 488 | 10 | 567 | 38,956 | 45,763 |
| 1985 | 551 | 14 | 469 | 15 | 569 | 37,905 | 45,805 |
| 1986 | 475 | 10 | 405 | 10 | 492 | 36,036 | 45,210 |
| 1987 | 399 | 13 | 347 | 14 | 417 | 33,800 | 44,956 |
| 1988 | 424 | 13 | 371 | 13 | 441 | 31,421 | 44,058 |
| 1989 | 377 | 14 | 329 | 14 | 394 | 29,942 | 45,844 |
| 1990 | 492 | 20 | 432 | 23 | 555 | 23,719 | 46,184 |
| 1991 | 407 | 9 | 359 | 10 | 420 | 24,133 | 46,986 |
| 1992 | 383 | 10 | 317 | 11 | 388 | 23,389 | 47,906 |
| 1993 | 320 | 10 | 267 | 12 | 324 | 26,173 | 48,822 |
| 1994 | 387 | 19 | 326 | 20 | 415 | 25,822 | 49,492 |
| 1995 | 375 | 14 | 320 | 14 | 407 | 25,155 | 49,932 |
| 1996 | 309 | 10 | 264 | 11 | 342 | 24,704 | 50,013 |
| 1997 | 316 | 9 | 261 | 9 | 334 | 24,561 | 50,205 |
| 1998 | 358 | 9 | 307 | 9 | 373 | 25,188 | 51,307 |
| 1999 | 381 | 10 | 326 | 10 | 406 | 25,735 | 52,641 |
| 2000 | 473 | 21 | 404 | 22 | 520 | 29,175 | 54,066 |
| 2001 | 395 | 19 | 336 | 19 | 418 | 31,493 | 55,658 |
| 2002 | 427 | 18 | 353 | 20 | 426 | 33,906 | 57,471 |
| 2003 | 515 | 21 | 448 | 21 | 568 | 37,528 | 59,971 |
| 2004 | 517 | 24 | 435 | 26 | 536 | 41,579 | 62,805 |
| | | | | | | • | • |

TABLE 2-8
PEDESTRIAN FATALITIES AND INJURIES
1984 - 2004

| <u>Year</u> | <u>Fatalities</u> | <u>Injuries</u> |
|-------------|-------------------|-----------------|
| 1984 | 14 | 139 |
| 1985 | 8 | 136 |
| 1986 | 15 | 165 |
| 1987 | 7 | 126 |
| 1988 | 14 | 149 |
| 1989 | 10 | 125 |
| 1990 | 15 | 138 |
| 1991 | 11 | 165 |
| 1992 | 7 | 192 |
| 1993 | 18 | 163 |
| 1994 | 23 | 176 |
| 1995 | 14 | 148 |
| 1996 | 11 | 141 |
| 1997 | 6 | 124 |
| 1998 | 7 | 137 |
| 1999 | 11 | 131 |
| 2000 | 13 | 115 |
| 2001 | 15 | 111 |
| 2002 | 8 | 104 |
| 2003 | 10 | 91 |
| 2004 | 9 | 95 |

TABLE 2-9 BICYCLE FATALITIES AND INJURIES 1984 - 2004

| <u>Year</u> | <u>Fatalities</u> | <u>Injuries</u> |
|-------------|-------------------|-----------------|
| 1984 | 4 | 95 |
| 1985 | 3 | 119 |
| 1986 | 1 | 115 |
| 1987 | 1 | 157 |
| 1988 | 2 | 137 |
| 1989 | 2 | 144 |
| 1990 | 3 | 135 |
| 1991 | 4 | 147 |
| 1992 | 1 | 161 |
| 1993 | 0 | 179 |
| 1994 | 0 | 156 |
| 1995 | 1 | 122 |
| 1996 | 2 | 139 |
| 1997 | 1 | 115 |
| 1998 | 2 | 133 |
| 1999 | 0 | 102 |
| 2000 | 1 | 120 |
| 2001 | 1 | 105 |
| 2002 | 1 | 87 |
| 2003 | 1 | 109 |
| 2004 | 1 | 77 |
| | | |

Holiday Counts

TABLE 2-10 provides a yearly comparison of South Dakota motor vehicle crash experience during major holiday observances. These counts are nationally observed and frequently requested.

TABLE 2-10 CRASHES DURING HOLIDAYS 1992- 2004

| <u>Holiday</u> | Total <u>Hours</u> | Total <u>Crashes</u> | Fatal <u>Crashes</u> | Injury <u>Crashes</u> | <u>Fatalities</u> | <u>Injuries</u> |
|---|--|--|---|--|---|---|
| MEMORIAL DAY 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 | 78 78 78 78 78 78 78 78 78 78 78 | 120 160 141 155 139 130 149 155 159 133 155 151 | 2 3 1 1 0 0 1 0 0 1 2 1 | 35 60 43 49 33 35 44 39 33 28 27 27 | 2 4 1 1 0 0 1 0 0 1 2 1 | 57 89 67 84 61 48 68 74 67 49 43 50 45 |
| FOURTH OF JULY 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 | 78 78 78 102 102 78 78 78 102 30 102 78 78 | 159 150 152 226 208 139 181 143 213 52 189 146 114 | 0 2 2 3 7 1 3 2 5 4 3 1 4 | 56 60 59 69 59 53 57 37 67 15 64 57 27 | 0 2 3 3 9 1 3 2 7 4 3 2 5 | 102 117 110 112 93 99 81 66 110 27 95 82 40 |
| LABOR DAY 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 | 78 78 78 78 78 78 78 78 78 78 78 | 117 151 141 150 159 137 139 134 144 132 123 129 | 1 4 0 1 1 4 2 2 3 4 3 1 0 | 38 49 56 45 51 37 35 38 45 42 38 39 | 1 5 0 1 3 4 2 2 4 5 3 1 0 | 68 87 90 74 102 62 66 59 69 64 55 62 51 |

| <u>Holiday</u> | Total <u>Hours</u> | Total <u>Crashes</u> | Fatal <u>Crashes</u> | Injury <u>Crashes</u> | <u>Fatalities</u> | <u>Injuries</u> |
|---|---|---|--|--|--|--|
| THANKSGIVING 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 | 102 102 102 102 102 102 102 102 102 102 | 244 342 297 319 384 225 309 323 210 260 259 222 274 | 1 0 0 4 2 1 1 4 2 0 2 | 55 58 58 68 75 41 53 45 36 49 48 42 53 | 1 0 0 4 2 2 1 4 2 0 2 | 82 98 85 115 127 68 82 67 54 71 83 54 69 |
| CHRISTMAS 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 | 102 78 78 78 30 102 78 78 78 102 30 102 102 | 193 178 131 151 101 130 182 137 126 160 31 195 85 | 1 1 1 1 0 1 1 0 0 3 0 3 | 36 35 26 38 20 26 41 20 25 33 7 46 9 | 1 1 1 2 0 1 1 0 0 3 0 3 | 59 51 47 62 35 36 70 31 39 61 8 66 19 |
| NEW YEARS 1992-93 1993-94 1994-95 1995-96 1996-97 1997-98 1998-99 1999-00 2000-01 2001-02 2002-03 2003-04 2004-05 | 102 78 78 78 30 102 78 78 78 102 30 102 102 | 261 172 121 234 90 169 207 141 152 166 113 173 | 0 0 2 3 1 1 1 3 2 1 2 0 | 52 43 34 60 21 37 37 34 38 34 26 39 30 | 0 0 2 3 2 1 1 3 2 1 2 0 | 85 62 62 91 33 54 57 51 54 51 39 53 49 |

SEVERITY OF INJURIES BY PERSON TYPE

The following tables provide a yearly comparison of South Dakota's total injuries, driver's injuries, passenger's injuries, bicyclist's injuries and pedestrian's injuries from 1995 through 2004. The percentages are row percentages.

Note: For definition of class of injury see page 20.

TABLE 2-11 FATALITIES AND SEVERITY OF INJURIES OF TOTAL PERSONS

| | Incapac Injuries | itating | Non- Incapac Injuries | citating | Possible Injuries | е | Total | Total |
|-------------|---------------------|----------|-----------------------------|----------|----------------------|----------|-----------------|---------------|
| <u>Year</u> | No. | <u>%</u> | No. | % | No. | <u>%</u> | <u>Injuries</u> | <u>Killed</u> |
| 1995 | 1734 | 20.8 | 3163 | 38.0 | 3426 | 41.2 | 8323 | 158 |
| 1996 | 1883 | 22.2 | 3052 | 35.9 | 3555 | 41.9 | 8490 | 175 |
| 1997 | 1655 | 20.3 | 3156 | 38.7 | 3350 | 41.0 | 8161 | 148 |
| 1998 | 1579 | 20.4 | 3026 | 39.2 | 3118 | 40.4 | 7723 | 165 |
| 1999 | 1638 | 21.6 | 2874 | 37.9 | 3062 | 40.4 | 7574 | 150 |
| 2000 | 1603 | 20.3 | 2975 | 37.7 | 3310 | 42.0 | 7888 | 173 |
| 2001 | 1434 | 20.1 | 2693 | 37.8 | 2991 | 42.0 | 7118 | 171 |
| 2002 | 1466 | 21.0 | 2710 | 38.7 | 2821 | 40.3 | 6997 | 180 |
| 2003 | 1450 | 20.9 | 2688 | 38.7 | 2806 | 40.4 | 6944 | 203 |
| 2004 | 1232 | 18.9 | 2366 | 36.2 | 2937 | 44.9 | 6535 | 197 |

TABLE 2-12 FATALITIES AND SEVERITY OF INJURIES OF TOTAL DRIVERS

| | Incapaci Injuries | Ū | Non- Incapac Injuries | · · | Possible Injuries | | Total | Total |
|--|--|--|--|--|--|--|--|---|
| <u>Year</u> | No. | <u>%</u> | No. | <u>%</u> | No. | <u>%</u> | <u>Injuries</u> | <u>Killed</u> |
| 1995 1996 1997 1998 1999 2000 2001 2002 2003 | 1030 1114 1014 954 1018 1012 929 946 930 | 19.0 20.4 19.2 19.2 20.3 19.3 19.3 20.3 19.6 | 1955 1938 1962 1896 1836 1949 1786 1761 1807 | 36.2 35.5 37.1 38.1 36.6 37.3 37.0 37.8 38.0 | 2422 2413 2308 2123 2157 2269 2109 1957 2018 | 44.8 44.2 43.7 42.7 43.0 43.4 43.7 42.0 42.4 | 5407 5465 5284 4973 5011 5230 4824 4664 4755 | 98 98 94 105 92 97 104 119 |
| 2004 | 844 | 18.3 | 1586 | 34.4 | 2177 | 47.3 | 4607 | 129 |

TABLE 2-13
FATALITIES AND SEVERITY OF INJURIES OF TOTAL PASSENGERS

| | | | Non- | | | | | |
|-------------|----------|----------------|----------|---------|----------|------|-----------------|--------|
| | Incapad | Incapacitating | | itating | Possible |) | | |
| | Injuries | | Injuries | | Injuries | | Total | Total |
| <u>Year</u> | No. | % | No. | % | No. | % | <u>Injuries</u> | Killed |
| 1995 | 612 | 23.1 | 1084 | 41.0 | 948 | 35.9 | 2644 | 45 |
| 1996 | 679 | 24.7 | 985 | 35.9 | 1083 | 39.4 | 2747 | 64 |
| 1997 | 572 | 21.7 | 1079 | 40.9 | 987 | 37.4 | 2638 | 47 |
| 1998 | 537 | 21.6 | 1007 | 40.6 | 937 | 37.8 | 2481 | 51 |
| 1999 | 555 | 23.8 | 921 | 39.5 | 853 | 36.6 | 2329 | 47 |
| 2000 | 519 | 21.4 | 922 | 38.1 | 982 | 40.5 | 2423 | 62 |
| 2001 | 442 | 21.3 | 802 | 38.6 | 834 | 40.1 | 2078 | 51 |
| 2002 | 468 | 21.8 | 861 | 40.2 | 814 | 38.0 | 2143 | 52 |
| 2003 | 470 | 23.6 | 783 | 39.3 | 738 | 37.1 | 1991 | 68 |
| 2004 | 346 | 19.7 | 691 | 39.4 | 715 | 40.8 | 1752 | 58 |
| | | | | | | | | |

TABLE 2-14
FATALITIES AND SEVERITY OF INJURIES OF TOTAL BICYCLE DRIVERS

| | | | Non- | | | | | |
|-------------|----------------|------|----------|---------|---------|------|-----------------|---------------|
| | Incapacitating | | Incapad | itating | Possib | ole | | |
| | Injuries | 3 | Injuries | | Injurie | S | Total | Total |
| <u>Year</u> | No. | % | No. | % | No. | % | <u>Injuries</u> | <u>Killed</u> |
| 1995 | 27 | 22.1 | 68 | 55.7 | 27 | 22.1 | 122 | 1 |
| 1996 | 31 | 22.6 | 80 | 58.4 | 26 | 19.0 | 137 | 2 |
| 1997 | 29 | 25.2 | 63 | 54.8 | 23 | 20.0 | 115 | 1 |
| 1998 | 34 | 25.8 | 63 | 47.7 | 35 | 26.5 | 132 | 2 |
| 1999 | 14 | 13.7 | 61 | 59.8 | 27 | 26.5 | 102 | 0 |
| 2000 | 29 | 24.4 | 56 | 47.1 | 34 | 28.6 | 119 | 1 |
| 2001 | 23 | 21.9 | 55 | 52.4 | 27 | 25.7 | 105 | 1 |
| 2002 | 10 | 11.8 | 49 | 57.6 | 26 | 30.6 | 85 | 1 |
| 2003 | 17 | 15.9 | 59 | 55.1 | 31 | 29.0 | 107 | 1 |
| 2004 | 12 | 15.6 | 41 | 53.2 | 24 | 31.2 | 77 | 1 |

TABLE 2-15
FATALITIES AND SEVERITY OF INJURIES OF TOTAL PEDESTRIANS

| | | | INOH- | | | | | |
|-------------|----------|----------|-----------|-------|----------|------|-----------------|---------------|
| | Incapad | citating | Incapacit | ating | Possible | | | |
| | Injuries | | Injuries | | Injuries | | Total | Total |
| <u>Year</u> | No. | % | No. | % | No. | % | <u>Injuries</u> | <u>Killed</u> |
| 1995 | 64 | 43.2 | 55 | 37.2 | 29 | 19.6 | 148 | 14 |
| 1996 | 59 | 41.8 | 49 | 34.8 | 33 | 23.4 | 141 | 11 |
| 1997 | 40 | 32.3 | 52 | 41.9 | 32 | 25.8 | 124 | 6 |
| 1998 | 54 | 39.4 | 60 | 43.8 | 23 | 16.8 | 137 | 7 |
| 1999 | 50 | 38.2 | 56 | 42.7 | 25 | 19.1 | 131 | 11 |
| 2000 | 42 | 36.5 | 48 | 41.7 | 25 | 21.7 | 115 | 13 |
| 2001 | 40 | 36.0 | 50 | 45.0 | 21 | 18.9 | 111 | 15 |
| 2002 | 42 | 40.4 | 38 | 36.5 | 24 | 23.1 | 104 | 8 |
| 2003 | 33 | 36.3 | 39 | 42.9 | 19 | 20.9 | 91 | 10 |
| 2004 | 29 | 30.5 | 47 | 49.5 | 19 | 20.0 | 95 | 9 |
| | | | | | | | | |

18

Sex of Drivers

Table 2-16 provides a yearly comparison of drivers involved in motor vehicle crashes by sex of driver. The table also compares licensed drivers by sex.

TABLE 2-16 SEX OF DRIVERS 1993 - 2004

| | CR/ | ASH INVO | LVED DRIV | ERS | LICENSED DRIVERS | | | | | |
|------|--------|----------|-----------|----------|------------------|------|---------|------|--|--|
| | MA | \LE | FEM | 1ALE | MAL | E | FEMALE | | | |
| | No. | <u>%</u> | No. | <u>%</u> | No. | % | No. | % | | |
| 1993 | 18,132 | 61.9 | 11,167 | 38.1 | 260,591 | 50.4 | 256,288 | 49.6 | | |
| 1994 | 18,668 | 61.2 | 11,845 | 38.8 | 260,150 | 50.1 | 259,265 | 49.9 | | |
| 1995 | 18,407 | 61.2 | 11,687 | 38.8 | 263,705 | 50.0 | 263,439 | 50.0 | | |
| 1996 | 20,593 | 60.6 | 13,408 | 39.4 | 264,207 | 49.9 | 265,201 | 50.1 | | |
| 1997 | 19,570 | 60.8 | 12,628 | 39.2 | 266,828 | 49.9 | 268,184 | 50.1 | | |
| 1998 | 17,969 | 60.0 | 11,961 | 40.0 | 273,284 | 49.9 | 274,049 | 50.1 | | |
| 1999 | 18,190 | 59.8 | 12,213 | 40.2 | 277,345 | 50.0 | 277,789 | 50.0 | | |
| 2000 | 17,737 | 60.1 | 11,751 | 39.9 | 277,127 | 49.9 | 277,858 | 50.1 | | |
| 2001 | 15,774 | 60.2 | 10,409 | 39.8 | 277,662 | 49.9 | 278,369 | 50.1 | | |
| 2002 | 14,975 | 59.7 | 10,108 | 40.3 | 278,283 | 49.9 | 279,149 | 50.1 | | |
| 2003 | 15,382 | 59.2 | 10,586 | 40.8 | 282,195 | 49.9 | 283,007 | 50.1 | | |
| 2004 | 14,614 | 59.3 | 9,901 | 40.1 | 286,432 | 49.9 | 287,931 | 50.1 | | |

Note: Crash Involved Drivers table does not include cases where the sex of the driver was not reported. Licensed drivers with unknown age not included in totals.

Source: Crash Involved Drivers: SD Department of Public Safety: Accident Records

Source: Licensed Drivers: SD Department of Public Safety: Driver License Issuance

III. 2004 MOTOR VEHICLE CRASH PROFILE

Introduction

This section profiles the reported motor vehicle traffic crashes for 2004. Information will be given on where the crashes are occurring, when crashes happen, who is involved, and factors that contribute to crashes or why they are occurring. **Column percentages may not total 100 percent due to rounding error.**

During 2004, there were 17,163 reported motor vehicle traffic crashes, the majority of crashes being property damage only 12,416 (72.3%). Injury crashes accounted for 4,581 (26.7%) of the crashes, while 166 (1%) were fatal crashes. There were 6,535 persons injured and 197 persons killed in crashes during 2004 (see TABLE 3-1).

TABLE 3-1 FATALITIES AND SEVERITY OF INJURIES OF DRIVERS, PASSENGERS, PEDESTRIANS, AND BICYCLE DRIVERS 2004

| | Incapac Injuries | itating | Non- Incapacitating Injuries | | Possible Injuries | | Total Nonfata Injuries | | Total Fatalities | |
|-------------|---------------------|----------|------------------------------------|----------|----------------------|----------|------------------------------|------|---------------------|------|
| | No. | <u>%</u> | No. | <u>%</u> | No. | <u>%</u> | No. | % | No. | % |
| Drivers | 844 | 68.5 | 1586 | 67.0 | 2177 | 74.1 | 4607 | 70.5 | 129 | 65.5 |
| Passengers | 346 | 28.1 | 691 | 29.2 | 715 | 24.3 | 1752 | 26.8 | 58 | 29.4 |
| Pedestrians | 29 | 2.4 | 47 | 2.0 | 19 | 0.6 | 95 | 1.5 | 9 | 4.6 |
| Bicycle Dr | 12 | 1.0 | 41 | 1.7 | 24 | 8.0 | 77 | 1.2 | 1 | 0.5 |
| Other* | 1 | 0.1 | 1 | 0.0 | 2 | 0.1 | 4 | 0.1 | 0 | 0.0 |
| Total | 1,232 | 100 | 2,366 | 100 | 2,937 | 100 | 6,535 | 100 | 197 | 100 |

^{*}Other – 4 injuries were sustained by operators of working units.

Definition of Injuries:

Killed: An injury that results in death. An injury caused death that occurs within 30 days of a crash is considered a crash fatality.

Incapacitating: Any injury other than a fatal which prevents the injured person from walking, driving, or normally continuing the activities he/she was capable of performing before the injury occurred (severe lacerations, broken limbs or unable to leave the scene of the crash without assistance).

Non-Incapacitating: Any injury other than a fatal injury or incapacitating injury that is evident to observers at the scene of the crash (minor lacerations, lumps on the head, abrasions and bruises).

Possible Injury: Any injury reported or claimed which is not a fatal injury, incapacitating injury, or non-incapacitating injury (momentary unconsciousness, limping, nausea, or complaint of pain).

TABLE 3-2 provides information on persons killed and injured by method or mode of transportation. During 2004, 44.2 percent of the fatalities and 52.7 percent of the injuries occurred to occupants of passenger cars. Occupants of pickups and vans accounted for 25.4 percent of the fatalities and 20.7 percent of the injuries. Additionally, in 2004 twenty-six motorcyclists and 9 pedestrians were killed. There was one bicyclist killed during 2004 (see Table 3-2).

TABLE 3-2
FATALITIES AND INJURIES BY MODE OF TRANSPORTATION 2004

| | Fatalities | | Injuries | |
|---------------------------------|------------|----------|----------|------|
| | No. | <u>%</u> | No. | % |
| Passenger Cars | 87 | 44.2 | 3442 | 52.7 |
| Pickups, Vans | 50 | 25.4 | 1355 | 20.7 |
| Motorcycle, Moped | 26 | 13.2 | 522 | 8.0 |
| SUV's (Sports Utility Vehicles) | 14 | 7.1 | 808 | 12.4 |
| Pedestrians | 9 | 4.6 | 95 | 1.5 |
| ATV's / 4-Wheelers | 2 | 1.0 | 18 | 0.3 |
| Trucks (All)* | 8 | 4.1 | 160 | 2.4 |
| Bicycle | 1 | 0.5 | 77 | 1.2 |
| Other | 0 | 0.0 | 52 | 0.8 |
| Farm Machinery | 0 | 0.0 | 5 | 0.1 |
| Unknown | 0 | 0.0 | 1 | 0.0 |
| Total | 197 | 100 | 6,535 | 100 |

| *Trucks | | <u>Fatalities</u> | <u>Injuries</u> |
|---------|---|-------------------|-----------------|
| | Straight Truck | 3 | 80 |
| | Straight Truck with Trailer | 2 | 21 |
| | Truck Tractor Only | 0 | 2 |
| | Truck Tractor with Single Semi Trailer | 3 | 55 |
| | Truck Tractor with Two or More Trailers | 0 | 2 |
| | Total | 8 | 160 |

Note: Other includes Bus, Motor Home, Snowmobile, Heavy Equipment, Train, Animal Drawn Vehicle and Other Types of Motor Vehicles.

FIGURE 3-1 FATALITIES BY TRAVEL MODE 2004

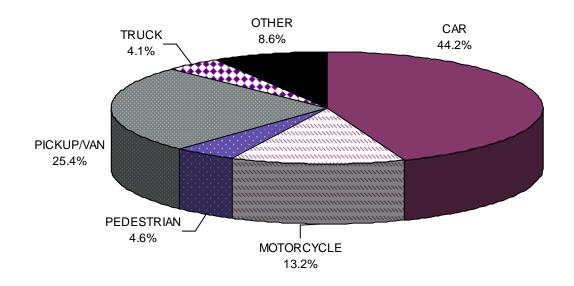
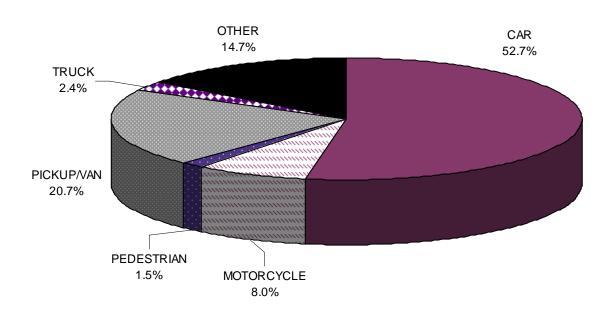


FIGURE 3-2 INJURIES BY TRAVEL MODE 2004



^{**} Other includes ATVs, SUVs, Bicycle, Farm Machinery, Bus, Motor Home, Snowmobile, Heavy Equipment, Train, Animal Drawn Vehicle and Other Types of Motor Vehicles.

TABLE 3-3 provides information on all crash-involved vehicles by type. Passenger cars made up 39.7 percent of the vehicles involved in fatal crashes and 53.3 percent of those involved in injury crashes. Pickups and vans made up 27.4 percent of the vehicles involved in fatal crashes.

TABLE 3-3 VEHICLE TYPES INVOLVED IN CRASHES 2004

| | All Crashes <u>No.</u> | <u>%</u> | Fatal Crashes No. | <u>%</u> | Injury Crashes <u>No</u> . | · % | PDO Crashes <u>No</u> . | % |
|---------------------------------|------------------------------|----------|-------------------------|----------|----------------------------------|--------|-------------------------------|------|
| Passenger Cars | 13745 | 53.9 | 94 | 39.7 | 4100 | 53.3 | 9551 | 54.4 |
| Pickups, Vans | 6521 | 25.6 | 65 | 27.4 | 1763 | 22.9 | 4693 | 26.7 |
| SUV's (Sports Utility Vehicles) | 3344 | 13.1 | 20 | 8.4 | 983 | 12.8 | 2341 | 13.3 |
| Trucks (All)* | 997 | 3.9 | 26 | 11.0 | 289 | 3.8 | 682 | 3.9 |
| Motorcycle | 550 | 2.2 | 28 | 11.8 | 460 | 6.0 | 62 | 0.4 |
| Farm Machinery | 41 | 0.2 | 1 | 0.4 | 15 | 0.2 | 25 | 0.1 |
| Bus | 127 | 0.5 | 0 | 0.0 | 25 | 0.3 | 102 | 0.6 |
| Motor Home | 39 | 0.2 | 0 | 0.0 | 12 | 0.2 | 27 | 0.2 |
| ATV's / 4-wheelers | 21 | 0.1 | 2 | 8.0 | 18 | 0.2 | 1 | 0.0 |
| Moped | 8 | 0.0 | 0 | 0.0 | 7 | 0.1 | 1 | 0.0 |
| Snowmobile | 5 | 0.0 | 0 | 0.0 | 4 | 0.1 | 1 | 0.0 |
| Other or Unknown | 87 | 0.3 | 1 | 0.4 | 20 | 0.3 | 66 | 0.4 |
| Total | 25,485 | 100 | | 100 | 7,696 | 100 | 17,552 | 100 |

237

| *Trucks | All <u>Crashes</u> | Fatal <u>Crashes</u> | Injury <u>Crashes</u> | PDO <u>Crashes</u> |
|---|-----------------------|-------------------------|--------------------------|-----------------------|
| Straight Truck | 434 | 13 | 134 | 287 |
| Straight Truck with Trailer | 183 | 3 | 47 | 133 |
| Truck Tractor Only | 18 | 0 | 11 | 7 |
| Truck Tractor with Single Semi Trailer | 340 | 8 | 91 | 241 |
| Truck Tractor with Two or More Trailers | 22 | 2 | 6 | 14 |
| Total | 997 | 26 | 289 | 682 |

TABLE 3-4 provides information on the ages of persons killed and injured. A total of 33 people (16.8%) of the persons killed were under 20 years of age and a total of 1,034 or (15.8%) of the persons injured were from 25 through 34 years of age. Four children ages 0-5 were killed during 2004 (see Table 3-4).

TABLE 3-4
FATALITIES AND INJURIES
BY AGE GROUP
2004

| | Fatalities | | Injuries | |
|-----------|------------|----------|----------|-------|
| | No. | <u>%</u> | No. | % |
| 0 - 5 | 4 | 2.0 | 122 | 1.9 |
| 6 - 13 | 8 | 4.1 | 295 | 4.5 |
| 14 - 15 | 7 | 3.6 | 329 | 5.0 |
| 16 - 17 | 7 | 3.6 | 527 | 8.1 |
| 18 | 4 | 2.0 | 285 | 4.4 |
| 19 | 3 | 1.5 | 256 | 3.9 |
| 20 | 6 | 3.0 | 234 | 3.6 |
| 21 - 24 | 24 | 12.2 | 700 | 10.7 |
| 25 - 34 | 25 | 12.7 | 1,034 | 15.8 |
| 35 - 44 | 33 | 16.8 | 923 | 14.1 |
| 45 - 54 | 33 | 16.8 | 837 | 12.8 |
| 55 - 64 | 20 | 10.2 | 499 | 7.6 |
| 65 - Over | 23 | 11.7 | 491 | 7.5 |
| Unknown | 0 | 0.0 | 3 | 0.0 |
| Total | 197 | 100 | 6,535 | 100.0 |

First Harmful Event

The initial incident that causes injury or damage is referred to as the first harmful event. Non-collision (overturning or other non-collision) represented 36.7 percent of the fatal crashes and only 9.8 percent of the total crashes, while 34.3 percent of the fatal crashes and 40.2 percent of all crashes represented a collision between 2 or more vehicles (see TABLE 3-5).

TABLE 3-5 FIRST HARMFUL EVENT 2004

| | Total Crashes | | Fatal Crashe | S | Injury Crashes | S | PDO Crashes | |
|-------------------------------|------------------|----------|-----------------|----------|-------------------|----------|----------------|----------|
| First Harmful Event | No. | <u>%</u> | No. | <u>%</u> | No. | <u>%</u> | No. | <u>%</u> |
| Motor Vehicle Collision With: | | | | | | | | |
| MV in Transport | 6,900 | 40.2 | 57 | 34.3 | 2,597 | 56.7 | 4,246 | 34.2 |
| A Fixed or Other Object | 2,240 | 13.1 | 29 | 17.5 | 702 | 15.3 | 1,509 | 12.2 |
| An Animal | 5,521 | 32.2 | 6 | 3.6 | 122 | 2.7 | 5,393 | 43.4 |
| A Pedestrian | 98 | 0.6 | 8 | 4.8 | 88 | 1.9 | 2 | 0.0 |
| A Bicyclist | 78 | 0.5 | 1 | 0.6 | 76 | 1.7 | 1 | 0.0 |
| A Parked Motor Vehicle | 625 | 3.6 | 2 | 1.2 | 99 | 2.2 | 524 | 4.2 |
| A Railroad Vehicle | 13 | 0.1 | 0 | 0.0 | 6 | 0.1 | 7 | 0.1 |
| Equipment in Roadway | 14 | 0.1 | 2 | 1.2 | 5 | 0.1 | 7 | 0.1 |
| Non-Collision (Overturning or | | | | | | | | |
| Other) | 1,674 | 9.8 | 61 | 36.7 | 886 | 19.3 | 727 | 5.9 |
| Total | 17,163 | 100 | 166 | 100 | 4,581 | 100 | 12,416 | 100 |

Manner of Collision

The most common type or manner of collision between two or more vehicles is an angle collision. Angle collisions constitute 42.1 percent of the fatal crashes, 48.8 percent of the injury crashes, and 52.3 percent of the property damage only crashes. Head-on and angle collisions are the most prevalent for severe crashes, each accounting for 42.1 percent of the fatal crashes and 54.7 percent of the total crashes involving two or more motor vehicles. (See TABLE 3-6).

TABLE 3-6
MANNER OF COLLISION FOR CRASHES INVOLVING A COLLISION
BETWEEN TWO OR MORE MOTOR VEHICLES
2004

| | Total Crashes | | Fatal Crashes | | Injury Crashe | S | PDO Crashe | - |
|-----------------------------------|------------------|----------|------------------|----------|------------------|----------|---------------|------|
| Manner of Collision | No. | <u>%</u> | No. | <u>%</u> | No. | <u>%</u> | No. | % |
| Rear-End | 2,521 | 36.5 | 6 | 10.5 | 1,072 | 41.3 | 1,443 | 34.0 |
| Head-On | 257 | 3.7 | 24 | 42.1 | 135 | 5.2 | 98 | 2.3 |
| Angle | 3,516 | 50.9 | 24 | 42.1 | 1,268 | 48.8 | 2,224 | 52.3 |
| Sideswipe-Same Direction | 464 | 6.7 | 3 | 5.3 | 81 | 3.1 | 380 | 8.9 |
| Sideswipe-Opposite Dir. | 128 | 1.9 | 0 | 0.0 | 37 | 1.4 | 91 | 2.1 |
| Rear-Rear | 12 | 0.2 | 0 | 0.0 | 3 | 0.1 | 9 | 0.2 |
| Unknown | 6 | 0.1 | 0 | 0.0 | 2 | 0.1 | 4 | 0.1 |
| Total | 6,904 | 100 | 57 | 100 | 2,598 | 100 | 4,249 | 100 |
| No Collision Between 2 or more MV | 10,259 | | 109 | | 1,983 | | 8,167 | |
| Total Crashes | 17,163 | | 166 | | 4,581 | | 12,416 | |

Beginning in 2004, South Dakota developed its Crash Data System to conform to the standards established by the Model Minimum Uniform Crash Criteria (MMUCC) guidelines. These guidelines have changed the way the data is collected, such as Manner of Collision. This element will be based on the impact location (i.e. front, side or rear) and vehicle orientation (i.e. facing the same or opposite direction) of the contact vehicles in the First Harmful Event. The data element Turning Movement collected in past years is currently reported as Angle.

Highway System

The number of reported crashes by highway system is presented in TABLE 3-7. Fatal and PDO crashes happen predominately in rural areas. City streets and alleys experienced 24.7 percent of the PDO crashes and 35.2 percent of the injury crashes while accounting for 6.0 percent of the fatal crashes.

Non-interstate rural roads tallied 59.6 percent of the fatal crashes. The Interstate system experienced 2,238 (13%) of the total crashes while accounting for an estimated 20 percent of the vehicle miles traveled in 2004. Twenty-six (15.7%) of the fatal crashes happened on the interstate system. (See FIGURES 3-3 and 3-4)

TABLE 3-7 CRASHES BY TYPE OF HIGHWAY 2004

| Type of Highway | Total Crashes Number | % | Fatal Crashes Number | | Injury Crashes Number | <u>%</u> | PDO Crashes Number | % | No. <u>Killed</u> | No. <u>Injured</u> |
|---|----------------------------|------|----------------------------|------|-----------------------------|----------|--------------------------|------|----------------------|-----------------------|
| Interstate - Rural | 1,731 | 10.1 | 23 | 13.9 | 292 | 6.4 | 1,416 | 11.4 | 24 | 443 |
| US/State HwysRural | 4,202 | 24.5 | 58 | 34.9 | 755 | 16.5 | 3,389 | 27.3 | 77 | 1,172 |
| Co./Local RdsRural | 2,989 | 17.4 | 41 | 24.7 | 704 | 15.4 | 2,244 | 18.1 | 46 | 971 |
| Interstate - City US/State HwysCity City Streets/Alleys | 507 | 3.0 | 3 | 1.8 | 126 | 2.8 | 378 | 3.0 | 3 | 182 |
| | 2,264 | 13.2 | 12 | 7.2 | 862 | 18.8 | 1,390 | 11.2 | 12 | 1,224 |
| | 4,694 | 27.3 | 10 | 6.0 | 1,612 | 35.2 | 3,072 | 24.7 | 12 | 2,183 |
| Unknown/Not Reported | 776 | 4.5 | 19 | 11.4 | 230 | 5.0 | 527 | 4.2 | 23 | 360 |
| Total | 17,163 | 100 | 166 | 100 | 4,581 | 100 | 12,416 | 100 | 197 | 6,535 |

FIGURE 3-3 2004 TRAFFIC CRASHES BY SYSTEM TYPE

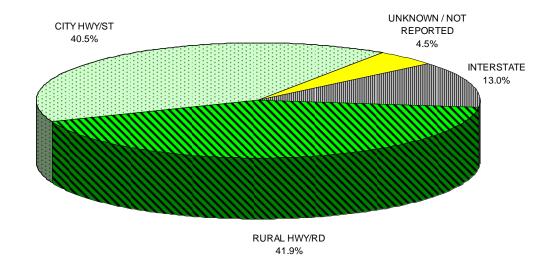
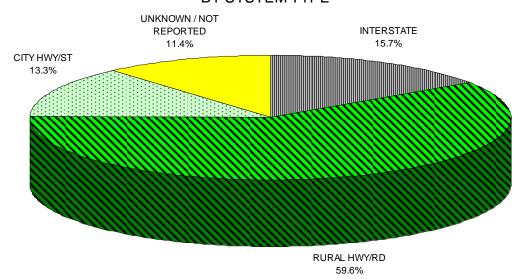


FIGURE 3-4 2004 FATAL TRAFFIC CRASHES BY SYSTEM TYPE



County Summary

TABLE 3-8 provides a summary of all reported crashes by county in South Dakota.

Rural fatal and injury crashes occurred predominately in eleven counties (see TABLE 3-9). Each of these counties reported over two percent of all rural fatal and injury crashes. The eleven accounted for 53.7 percent of rural fatal and injury crashes and 22.6 percent of all fatal and injury crashes in South Dakota. Pennington County has 10.2 percent of all rural fatal and injury crashes with Minnehaha and Meade counties accounting for 9.3 and 6.4 percent. FIGURE 3-5 presents the percentage involvement of rural fatal and injury crashes and compares this to the percentage of rural vehicle miles traveled in these counties.

City Summary

Reported traffic crashes within South Dakota's cities (population of 2,500 and more) are presented in TABLE 3-10. These cities reported 54.6 percent of the statewide injury crashes and 10.8 percent of the fatal crashes. The two largest cities (Sioux Falls, Rapid City) accounted for 66.8 percent of fatal and injury crashes and 60.7 percent of the property damage only crashes that occurred in cities with populations of 2,500 or more.

Roadway Surface Conditions

The majority of the crashes occurred on dry roads, including fatal and injury crashes (see TABLE 3-11). Combining similar "bad" road conditions, ice, snow, frost, and slush accounts for 11.8 percent of all reported property damage crashes and 10.9 percent of all fatal and injury crashes. Dry roads were reported in 76.2 percent of all fatal and injury crashes.

Contributing Circumstances (Vision Obscurement and Road)

Contributing circumstances at the crash level involve two categories: vision obscurement and road. The reporting officer may include one or no contributing circumstances for each category.

Vision Obscurement - refers to conditions such as: weather condition; physical obstruction; windshield or window obscured by frost, snow, mud, etc.; snow bank; trees, crops, bushes or other vegetation; guardrail barrier; motor vehicle; building; signs, billboards, etc.; glare; and other. Weather condition was the most frequently reported vision obscurement and was indicated as a problem in 2.9 percent of all crashes.

Road Contributing Circumstances - These contributing circumstances include road surface condition (wet, icy, snow, slush, etc.); road shoulder conditions; objects or animals in the road; phantom vehicle; pedestrians, bicyclists, other non-occupant in roadway; work zone conditions, rough roads; and faulty or missing traffic control devices. The most common condition reported was road surface condition, and it was reported as a factor in 15.6 percent of all crashes.

TABLE 3-8
MOTOR VEHICLE TRAFFIC CRASHES BY SD COUNTIES
2004

| | | | 2004 | | | |
|------------------------|----------------|---------|----------------|------------|-------------------|-----------------|
| | Total | Fatal | Injury | PDO | = | |
| County | <u>Crashes</u> | Crashes | <u>Crashes</u> | Crashes | <u>Fatalities</u> | <u>Injuries</u> |
| AURORA | 124 | 2 | 14 | 108 | 3 | 21 |
| BEADLE BENNETT | 332 21 | 2 5 | 71 5 | 259 11 | 2 9 | 91 20 |
| | 106 | 3 | 20 | 83 | 4 | 31 |
| BON HOMME BROOKINGS | 615 | 2 | 139 | 474 | 3 | 182 |
| BROWN | 937 | 3 | 201 | 733 | 3 | 284 |
| BRULE | 121 | 2 | 27 | 92 | 2 | 43 |
| BUFFALO | 11 | 0 | 4 | 7 | 0 | 5 |
| BUTTE | 186 | 1 | 34 | 151 | 1 | 46 |
| CAMPBELL | 36 | 1 | 8 | 27 | 1 | 12 |
| CHARLES MIX | 99 | 1 | 36 | 62 | 1 | 70 |
| CLARK | 97 | 1 | 13 | 83 | 3 | 22 |
| CLAY | 202 | 0 | 51 | 151 | 0 | 62 |
| CODINGTON | 549 | 4 | 171 | 374 | 4 | 247 |
| CORSON | 79 | 6 | 12 | 61 | 10 | 37 |
| CUSTER | 264 | 2 | 89 | 173 | 2 | 125 |
| DAVISON | 508 | 3 | 104 | 401 | 3 | 146 |
| DAY | 90 | 2 | 31 | 57 | 2 | 47 |
| DEUEL | 114 | 4 | 31 | 79 | 4 | 47 |
| DEWEY | 84 | 5 | 21 | 58 | 5 | 35 |
| DOUGLAS | 45 | 1 | 8 | 36 | 1 | 11 |
| EDMUNDS | 112 | 2 | 17 | 93 | 2 | 25 |
| FALL RIVER | 141 | 2 | 47 | 92 | 3 | 67 |
| FAULK | 76 | 0 | 9 | 67 | 0 | 14 |
| GRANT | 172 | 4 | 35 | 133 | 4 | 57 |
| GREGORY | 41 | 0 | 8 | 33 | 0 | 20 |
| HAAKON | 62 | 1 | 10 | 51 | 1 | 16 |
| HAMLIN | 184 | 0 | 30 | 154 | 0 | 42 |
| HAND | 146 | 4 | 19 | 123 | 4 | 25 |
| HANSON | 124 | 1 | 18 | 105 | 1 | 25 |
| HARDING | 47 | 1 | 14 | 32 | 1 | 17 |
| HUGHES | 264 | 1 | 77 | 186 | 1 | 109 |
| HUTCHINSON | 134 | 0 | 20 | 114 | 0 | 25 |
| HYDE | 11 | 0 | 1 | 10 | 0 | 4 |
| JACKSON | 96 | 4 | 24 | 68 | 5 | 42 |
| JERAULD | 52 | 0 | 7 | 45 | 0 | 12 |
| JONES | 69 | 3 | 13 | 53 | 4 | 18 |
| KINGSBURY | 133 300 | 2 | 16 40 | 115 | 3 | 25 51 |
| LAKE LAWRENCE | | 2 7 | | 258 | 2 | |
| LINCOLN | 636 669 | 1 | 190 149 | 439 519 | 8 1 | 266 208 |
| LYMAN | 162 | 4 | 36 | 122 | 5 | 54 |
| MC COOK | 198 | 2 | 40 | 156 | 3 | 56 |
| MC PHERSON | 14 | 1 | 40 | 9 | 1 | 6 |
| MARSHALL | 116 | 0 | 14 | 102 | 0 | 21 |
| MEADE | 504 | 5 | 157 | 342 | 5 | 220 |
| MELLETTE | 27 | 4 | 7 | 16 | 5 | 32 |
| MINER | 118 | 1 | 20 | 97 | 1 | 23 |
| MINNEHAHA | 3,701 | 21 | 1,256 | 2,424 | 21 | 1,747 |
| MOODY | 265 | 2 | 45 | 218 | 2 | 69 |
| PENNINGTON | 2,242 | 12 | 789 | 1,441 | 15 | 1,108 |
| PERKINS | 48 | 1 | 7 | 40 | 1 | 8 |
| POTTER | 50 | 0 | 2 | 48 | 0 | 3 |
| ROBERTS | 115 | 5 | 33 | 77 | 6 | 57 |
| SANBORN | 102 | 0 | 15 | 87 | 0 | 21 |
| SHANNON | 23 | 6 | 12 | 5 | 7 | 30 |
| SPINK | 213 | 0 | 32 | 181 | 0 | 46 |
| STANLEY | 78 | 1 | 20 | 57 | 2 | 31 |
| SULLY | 56 | 1 | 11 | 44 | 1 | 13 |
| TODD | 12 | 7 | 5 | 0 | 9 | 17 |
| TRIPP | 117 | 0 | 23 | 94 | 0 | 35 |
| TURNER | 138 | 3 | 32 | 103 | 3 | 40 |
| UNION | 277 | 2 | 65 | 210 | 3 | 76 |
| WALWORTH | 88 | 2 | 19 | 67 | 3 | 29 |
| YANKTON | 389 | 1 | 99 | 289 | 1 | 135 |
| ZIEBACH | 21 | 0 | 4 | 17 | 0 | 6 |
| Total: | 17,163 | 166 | 4,581 | 12,416 | 197 | 6,535 |

TABLE 3-8A ALCOHOL INVOLVED MOTOR VEHICLE TRAFFIC CRASHES BY SD COUNTIES 2004

| | Total | Fotol | 2004 | PDO | | |
|--------------------|-------------------------|-------------------------|-------------------|-----------------|----------------|-----------------|
| County | Total <u>Crashes</u> | Fatal <u>Crashes</u> | Injury Crashes | Crashes | Fatalities | <u>Injuries</u> |
| AURORA | 5 | 1 | 0 | 4 | 2 | 1 |
| BEADLE | 15 | 0 | 11 | 4 | 0 | 14 |
| BENNETT | 8 | 5 | 2 | 1 | 9 | 15 |
| BON HOMME | 3 | 0 | 1 | 2 | 0 | 3 |
| BROOKINGS | 34 | 0 | 18 | 16 | 0 | 23 |
| BROWN | 41 9 | 1 2 | 18 3 | 22 4 | 1 2 | 23 6 |
| BRULE BUFFALO | 0 | 0 | 0 | 0 | 0 | 0 |
| BUTTE | 7 | 1 | 4 | 2 | 1 | 6 |
| CAMPBELL | 3 | Ö | 2 | 1 | Ö | 2 |
| CHARLES MIX | 22 | 1 | 18 | 3 | 1 | 37 |
| CLARK | 4 | 0 | 2 | 2 | 0 | 2 |
| CLAY | 9 | 0 | 5 | 4 | 0 | 6 |
| CODINGTON | 48 | 2 | 25 | 21 | 2 | 39 |
| CORSON | 9 | 5 | 2 | 2 | 9 | 16 |
| CUSTER DAVISON | 15 35 | 1 | 8 15 | 6 19 | <u> </u> | 11 19 |
| DAVISON | 15 | 0 | 11 | 4 | 0 | 17 |
| DEUEL | 10 | 0 | 6 | 4 | 0 | 7 |
| DEWEY | 14 | 3 | 6 | 5 | 3 | 14 |
| DOUGLAS | 6 | 0 | 3 | 3 | 0 | 3 |
| EDMUNDS | 2 | 0 | 1 | 1 | 0 | 1 |
| FALL RIVER | 11 | 0 | 10 | 1 | 0 | 16 |
| FAULK | 1 | 0 | 1 | 0 | 0 | 1 |
| GRANT | 12 | 1 | 6 | 5 | 1 | 6 |
| GREGORY HAAKON | 3 | 0 | 3 2 | 0 | 0 | 10 6 |
| HAMLIN | 9 | 0 | 7 | 2 | 0 | 12 |
| HAND | 5 | 1 | 2 | 2 | 1 | 2 |
| HANSON | 4 | Ö | 2 | 2 | Ö | 2 |
| HARDING | 1 | 1 | 0 | 0 | 1 | 0 |
| HUGHES | 15 | 0 | 11 | 4 | 0 | 16 |
| HUTCHINSON | 6 | 0 | 5 | 1 | 0 | 7 |
| HYDE | 1 | 0 | 0 | 1 | 0 | 0 |
| JACKSON | 5 | 3 | 2 | 0 | 4 | 7 |
| JERAULD JONES | 1 3 | 0 2 | 1 1 | 0 | 3 | 2 4 |
| KINGSBURY | 7 | 1 | 1 | 5 | 2 | 2 |
| LAKE | 11 | Ö | 5 | 6 | 0 | 7 |
| LAWRENCE | 47 | 2 | 28 | 17 | 2 | 40 |
| LINCOLN | 34 | 0 | 13 | 21 | 0 | 14 |
| LYMAN | 6 | 1 | 3 | 2 | 1 | 7 |
| MC COOK | 13 | 1 | 10 | 2 | 1 | 11 |
| MC PHERSON | 2 | 0 | 1 | 1 | 0 | 1 |
| MARSHALL | 6 38 | 3 | 2 21 | 4 14 | 3 | 4 34 |
| MEADE MELLETTE | 5 | ა 1 | 4 | 0 | 2 | 23 |
| MINER | 1 | 0 | 1 | 0 | 0 | 1 |
| MINNEHAHA | 284 | 4 | 142 | 138 | 4 | 196 |
| MOODY | 12 | 0 | 9 | 3 | 0 | 10 |
| PENNINGTON | 171 | 6 | 86 | 79 | 8 | 120 |
| PERKINS | 1 | 0 | 1 | 0 | 0 | 1 |
| POTTER | 3 | 0 | 0 | 3 | 0 | 0 |
| ROBERTS | 15 | 2 | 6 | 7 | 3 | 18 |
| SANBORN SHANNON | 5 9 | 0 | 4 6 | 1 | 3 | 5 15 |
| SPINK | 12 | 0 | 7 | 5 | 0 | 12 |
| STANLEY | 5 | 0 | 2 | 3 | 0 | 2 |
| SULLY | 4 | 0 | 1 | 3 | 0 | 1 |
| TODD | 5 | 4 | 1 | 0 | 5 | 9 |
| TRIPP | 5 | 0 | 5 | 0 | 0 | 8 |
| TURNER | 9 | 2 | 5 | 2 | 2 | 5 |
| UNION | 16 | 0 | 11 | 5 | 0 | 12 |
| WALWORTH | 10 | 0 | 6 | 4 | 0 | 8 |
| YANKTON | 22 1 | 0 | 11 | 11 | 0 | 13 |
| ZIEBACH Total: | 1,1 53 | 0 61 | 1 607 | 0 485 | 0 78 | 936 |
| i Otal. | 1,100 | VI | 007 | 400 | 10 | 330 |

TABLE 3-9 COUNTIES HAVING MORE THAN TWO PERCENT OF THE RURAL FATAL & INJURY CRASHES 2004

| County | Rural Fatal & Injury Crashes | Percent of All Rural Fatal & Injury Crashes | Percent of Rural VMTS* |
|------------|---------------------------------|---|---------------------------|
| PENNINGTON | 204 | 10.2 | 7.3 |
| MINNEHAHA | 185 | 9.3 | 6.1 |
| MEADE | 128 | 6.4 | 3.7 |
| LAWRENCE | 119 | 6.0 | 3.4 |
| LINCOLN | 85 | 4.3 | 4.8 |
| CUSTER | 76 | 3.8 | 2.0 |
| BROWN | 69 | 3.5 | 2.8 |
| BROOKINGS | 58 | 2.9 | 2.5 |
| UNION | 56 | 2.8 | 4.0 |
| CODINGTON | 51 | 2.6 | 2.5 |
| MOODY | 41 | 2.1 | 2.7 |

Note: Total Rural Fatal and Injury Crashes: 1,995

*S.D. Vehicle Miles of Travel Report June 2004

Source: SD Department of Public Safety: Accident Records

SD Department of Transportation: Data Inventory

M00 COD S BRO ■ VEHICLE MILES OF TRAVEL FIGURE 3-5 RURAL F&I CRASHES/VMTS SELECTED COUNTIES - 2004 BRN CUS Z LAW ■F&I-CRASHES MEA Z Z PEN 2.0% 0.0% -0.001-%0.8-%0.4-%0.9 12.0% - z > 0 → > ш ≥ ш z ⊢ **сшкош**z⊢

TABLE 3-10
TRAFFIC CRASHES SOUTH DAKOTA CITIES
POPULATION 2500 AND OVER
2004

| City | Total <u>Crashes</u> | Fatal <u>Crashes</u> | Injury <u>Crashes</u> | PDO <u>Crashes</u> | <u>Fatalities</u> | <u>Injuries</u> |
|---------------|-------------------------|-------------------------|--------------------------|-----------------------|-------------------|-----------------|
| Aberdeen | 452 | 0 | 133 | 319 | 0 | 180 |
| Belle Fourche | 45 | 0 | 9 | 36 | 0 | 12 |
| Box Elder | 64 | 0 | 27 | 37 | 0 | 41 |
| Brandon City | 36 | 0 | 12 | 24 | 0 | 17 |
| Brookings | 224 | 0 | 78 | 146 | 0 | 105 |
| Canton | 34 | 0 | 8 | 26 | 0 | 10 |
| Dell Rapids | 15 | 0 | 2 | 13 | 0 | 2 |
| Hot Springs | 44 | 0 | 11 | 33 | 0 | 17 |
| Huron | 117 | 1 | 50 | 66 | 1 | 62 |
| Lead | 15 | 0 | 4 | 11 | 0 | 4 |
| Madison | 65 | 1 | 15 | 49 | 1 | 24 |
| Milbank | 43 | 1 | 9 | 33 | 1 | 20 |
| Mitchell | 303 | 0 | 81 | 222 | 0 | 110 |
| Mobridge | 32 | 0 | 13 | 19 | 0 | 19 |
| Pierre | 182 | 0 | 65 | 117 | 0 | 89 |
| Rapid City | 1,517 | 4 | 562 | 951 | 6 | 793 |
| Redfield | 23 | 0 | 6 | 17 | 0 | 7 |
| Sioux Falls | 2,839 | 10 | 1,107 | 1,722 | 10 | 1,507 |
| Sisseton | 26 | 0 | 10 | 16 | 0 | 16 |
| Spearfish | 154 | 1 | 49 | 104 | 1 | 67 |
| Sturgis | 110 | 0 | 30 | 80 | 0 | 35 |
| Vermillion | 89 | 0 | 29 | 60 | 0 | 35 |
| Watertown | 288 | 0 | 122 | 166 | 0 | 178 |
| Winner | 26 | 0 | 7 | 19 | 0 | 12 |
| Yankton | 177 | 0 | 62 | 115 | 0 | 86 |

TABLE 3-11 ROADWAY SURFACE CONDITIONS 2004

| | Total Crashes | | Fatal Crashe: | s | Injury Crashes | <u>.</u> | PDO Crashes | <u>:</u> |
|------------------------|------------------|------|------------------|----------|-------------------|----------|----------------|----------|
| | No. | % | No. | <u>%</u> | No. | <u>%</u> | No. | <u>%</u> |
| Dry | 13,280 | 77.4 | 138 | 83.1 | 3,481 | 76.0 | 9,661 | 77.8 |
| Wet | 1,437 | 8.4 | 3 | 1.8 | 444 | 9.7 | 990 | 8.0 |
| Snow | 967 | 5.6 | 4 | 2.4 | 227 | 5.0 | 736 | 5.9 |
| Slush | 158 | 0.9 | 0 | 0.0 | 44 | 1.0 | 114 | 0.9 |
| Ice | 769 | 4.5 | 9 | 5.4 | 207 | 4.5 | 553 | 4.5 |
| Frost | 85 | 0.5 | 1 | 0.6 | 26 | 0.6 | 58 | 0.5 |
| Water | 10 | 0.1 | 0 | 0.0 | 2 | 0.0 | 8 | 0.1 |
| Sand,mud,dirt,gravel | 321 | 1.9 | 7 | 4.2 | 124 | 2.7 | 190 | 1.5 |
| Oil | 5 | 0.0 | 0 | 0.0 | 2 | 0.0 | 3 | 0.0 |
| Other | 14 | 0.1 | 2 | 1.2 | 8 | 0.2 | 4 | 0.0 |
| Unknown / Not reported | 117 | 0.7 | 2 | 1.2 | 16 | 0.3 | 99 | 8.0 |
| Total | 17,163 | 100 | 166 | 100 | 4,581 | 100 | 12,416 | 100 |

Crashes by Time of Day, Month, and Day of Week

The peak three hour period for fatal crashes was 3:00-5:59 p.m. Thirty-one (18.7%) of the fatal crashes occurred during this three hour period. The peak three hour period for injury crashes was 3:00-5:59 p.m. when 1,182 (25.8%) of the injury crashes occurred. The peak three hour period for property damage only crashes was 5:00-7:59 when 2,710 (21.8%) of the property damage only crashes occurred (see TABLE 3-12).

Twenty-five fatal crashes or 15.1 percent of the fatal crashes in 2004 occurred during July. The month of August shows 586 injury crashes or 12.8 percent of the injury crashes for 2004. The 1,761 property damage only crashes during November represent 14.2 percent of the property damage only crashes for 2004 (see TABLE 3-13).

The day of the week Friday accounts for nearly seventeen percent of the total crashes (2,904), nearly eighteen percent of the injury crashes (809) and nearly seventeen percent of the property damage only crashes (2,068). Saturday accounted for 28 fatal crashes or nearly seventeen percent of the total for 2004 (see TABLE 3-14).

FIGURES 3-6 through 3-8 illustrate the distributions by time of day, month, and day of week.

TABLE 3-12 CRASHES BY TIME OF DAY 2004

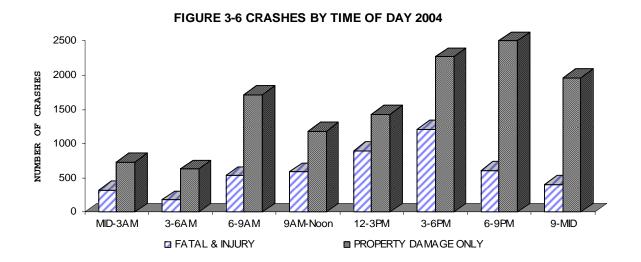
| <u>Time</u> | Total <u>Crashes</u> | Fatal <u>Crashes</u> | Injury <u>Crashes</u> | PDO <u>Crashes</u> | <u>Fatalities</u> | <u>Injuries</u> |
|-------------|-------------------------|-------------------------|--------------------------|-----------------------|-------------------|-----------------|
| Midnight | 465 | 6 | 124 | 335 | 6 | 160 |
| 1:00 AM | 302 | 6 | 83 | 213 | 9 | 103 |
| 2:00 AM | 292 | 7 | 99 | 186 | 9 | 144 |
| 3:00 AM | 192 | 6 | 56 | 130 | 6 | 78 |
| 4:00 AM | 226 | 2 | 42 | 182 | 2 | 52 |
| 5:00 AM | 392 | 4 | 71 | 317 | 4 | 91 |
| 6:00 AM | 611 | 8 | 84 | 519 | 9 | 115 |
| 7:00 AM | 995 | 8 | 252 | 735 | 9 | 352 |
| 8:00 AM | 640 | 2 | 178 | 460 | 2 | 231 |
| 9:00 AM | 569 | 9 | 168 | 392 | 11 | 256 |
| 10:00 AM | 551 | 5 | 177 | 369 | 6 | 247 |
| 11:00 AM | 652 | 8 | 220 | 424 | 9 | 301 |
| 12:00 PM | 842 | 10 | 303 | 529 | 11 | 438 |
| 1:00 PM | 715 | 7 | 282 | 426 | 8 | 402 |
| 2:00 PM | 770 | 7 | 287 | 476 | 9 | 422 |
| 3:00 PM | 1,068 | 10 | 398 | 660 | 12 | 558 |
| 4:00 PM | 1,083 | 12 | 392 | 679 | 15 | 576 |
| 5:00 PM | 1,329 | 9 | 392 | 928 | 10 | 582 |
| 6:00 PM | 1,219 | 9 | 241 | 969 | 11 | 368 |
| 7:00 PM | 1,008 | 2 | 193 | 813 | 2 | 277 |
| 8:00 PM | 878 | 5 | 155 | 718 | 7 | 219 |
| 9:00 PM | 1,084 | 11 | 150 | 923 | 13 | 225 |
| 10:00 PM | 753 | 7 | 112 | 634 | 11 | 169 |
| 11:00 PM | 527 | 6 | 122 | 399 | 6 | 169 |
| Total | 17,163 | 166 | 4,581 | 12,416 | 197 | 6,535 |

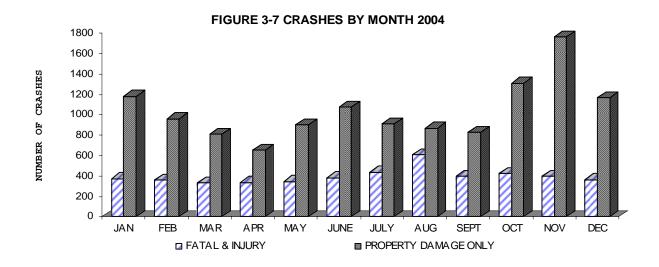
TABLE 3-13 CRASHES BY MONTH 2004

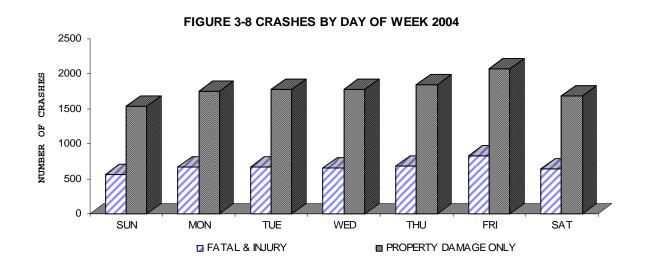
| <u>Month</u> | Total <u>Crashes</u> | Fatal <u>Crashes</u> | Injury <u>Crashes</u> | PDO <u>Crashes</u> | <u>Fatalities</u> | <u>Injuries</u> |
|--------------|-------------------------|-------------------------|--------------------------|-----------------------|-------------------|-----------------|
| JANUARY | 1,549 | 7 | 364 | 1,178 | 7 | 504 |
| FEBRUARY | 1,318 | 7 | 353 | 958 | 11 | 456 |
| MARCH | 1,142 | 11 | 323 | 808 | 12 | 445 |
| APRIL | 988 | 14 | 322 | 652 | 15 | 483 |
| MAY | 1,249 | 12 | 335 | 902 | 14 | 495 |
| JUNE | 1,455 | 18 | 362 | 1,075 | 22 | 549 |
| JULY | 1,347 | 25 | 413 | 909 | 32 | 608 |
| AUGUST | 1,478 | 22 | 586 | 870 | 23 | 822 |
| SEPTEMBER | 1,222 | 11 | 383 | 828 | 14 | 542 |
| OCTOBER | 1,731 | 14 | 409 | 1,308 | 19 | 563 |
| NOVEMBER | 2,155 | 11 | 383 | 1,761 | 11 | 558 |
| DECEMBER | 1,529 | 14 | 348 | 1,167 | 17 | 510 |
| Total | 17,163 | 166 | 4,581 | 12,416 | 197 | 6,535 |

TABLE 3-14 CRASHES BY DAY OF WEEK 2004

| <u>Day</u> | Total <u>Crashes</u> | Fatal <u>Crashes</u> | Injury <u>Crashes</u> | PDO <u>Crashes</u> | <u>Fatalities</u> | <u>Injuries</u> |
|------------|-------------------------|-------------------------|--------------------------|-----------------------|-------------------|-----------------|
| SUNDAY | 2,108 | 27 | 542 | 1,539 | 30 | 785 |
| MONDAY | 2,421 | 21 | 656 | 1,744 | 25 | 924 |
| TUESDAY | 2,441 | 25 | 644 | 1,772 | 28 | 892 |
| WEDNESDAY | 2,442 | 15 | 646 | 1,781 | 24 | 929 |
| THURSDAY | 2,524 | 23 | 665 | 1,836 | 27 | 941 |
| FRIDAY | 2,904 | 27 | 809 | 2,068 | 32 | 1,165 |
| SATURDAY | 2,323 | 28 | 619 | 1,676 | 31 | 899 |
| Total | 17,163 | 166 | 4,581 | 12,416 | 197 | 6,535 |







Drivers

There were 24,663 motor vehicle drivers in the 17,163 reported motor vehicle crashes, including 233 drivers in fatal crashes and 7,536 drivers in injury crashes. One hundred and twenty-nine drivers were killed, which is 65.5 percent of all persons killed in motor vehicle crashes and 70.5 percent or 4,607 of the 6,535 injured persons were drivers (see TABLE 3-1).

Young drivers are involved in more crashes than any other age group (see TABLE 3-15). In reported crashes 32.6 percent of the drivers were under 25 years of age and 49.5 percent are under 35. Age of drivers involved in fatal and injury crashes follow the pattern of drivers in all crashes. Those drivers under 25 represent 25.8 percent of the drivers involved in fatal crashes and 34.8 percent of the drivers in injury crashes. Drivers under the age of 35 make up 39.9 percent of the drivers in fatal crashes and 52.6 percent of the drivers in injury crashes. Fifty-nine (25.3%) of the drivers in fatal crashes were 21-34 years of age (see TABLE 3-15).

TABLE 3-15 AGE OF DRIVERS IN CRASHES 2004

| | Drivers In All | | Drivers In Fatal | | Drivers In Injury | | Drivers In PDO | |
|------------|-------------------|----------|---------------------|----------|----------------------|----------|-------------------|----------|
| • | Crashes | 0.4 | Crashes | 0.4 | Crashes | 0.4 | Crashes | 0.4 |
| <u>Age</u> | No. | <u>%</u> | No. | <u>%</u> | No. | <u>%</u> | No. | <u>%</u> |
| 0 40 | 40 | 0.4 | • | 0.0 | 0 | 0.4 | _ | 0.0 |
| 6 - 13 | 13 | 0.1 | 2 | 0.9 | 6 | 0.1 | 5 | 0.0 |
| 14 - 15 | 806 | 3.3 | 6 | 2.6 | 270 | 3.6 | 530 | 3.1 |
| 16 - 17 | 1797 | 7.3 | 7 | 3.0 | 620 | 8.2 | 1170 | 6.9 |
| 18 | 982 | 4.0 | 6 | 2.6 | 318 | 4.2 | 658 | 3.9 |
| 19 | 932 | 3.8 | 5 | 2.1 | 291 | 3.9 | 636 | 3.8 |
| 20 | 800 | 3.2 | 8 | 3.4 | 280 | 3.7 | 512 | 3.0 |
| 21 - 24 | 2718 | 11.0 | 26 | 11.2 | 841 | 11.2 | 1851 | 11.0 |
| 25 - 34 | 4165 | 16.9 | 33 | 14.2 | 1340 | 17.8 | 2792 | 16.5 |
| 35 - 44 | 4049 | 16.4 | 44 | 18.9 | 1167 | 15.5 | 2838 | 16.8 |
| 45 - 54 | 3759 | 15.2 | 45 | 19.3 | 1084 | 14.4 | 2630 | 15.6 |
| 55 - 64 | 2266 | 9.2 | 25 | 10.7 | 647 | 8.6 | 1594 | 9.4 |
| 65 - Over | 2211 | 9.0 | 23 | 9.9 | 620 | 8.2 | 1568 | 9.3 |
| Unknown | 165 | 0.7 | 3 | 1.3 | 52 | 0.7 | 110 | 0.7 |
| Total | 24,663 | 100 | 233 | 100 | 7,536 | 100 | 16,894 | 100 |

TABLE 3-16 provides information on the age of drinking drivers in motor vehicle crashes. There were a reported 1,167 drinking drivers in all crashes which is 4.7 percent of all drivers in crashes. Sixty-one or 26.2 percent of drivers in fatal crashes had been drinking while 8 percent of the drivers involved in injury crashes had been drinking.

Young drivers are predominantly the drinking drivers in all crashes. Those drivers under 25 years of age accounted for 34.4 percent of the drinking drivers in fatal crashes and 43 percent of the drinking drivers in injury crashes. Those drivers under 35 years of age accounted for 55.7 percent of the drinking drivers in fatal crashes and 67.4 percent of the drinking drivers in all crashes.

TABLE 3-16 AGE OF DRINKING DRIVERS IN CRASHES 2004

| <u>Age</u> | Drivers In All Crashes No. | <u>%</u> | Drivers In Fatal Crashes No. | <u>%</u> | Drivers In Injury Crashes No. | <u>%</u> | Drivers In PDO Crashes No. | % |
|------------|-------------------------------------|----------|---------------------------------------|----------|--|----------|-------------------------------------|------|
| 6 - 13 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| 14 - 15 | 5 | 0.4 | 0 | 0.0 | 2 | 0.3 | 3 | 0.6 |
| 16 - 17 | 44 | 3.8 | 2 | 3.3 | 23 | 3.8 | 19 | 3.8 |
| 18 | 49 | 4.2 | 1 | 1.6 | 23 | 3.8 | 25 | 5.0 |
| 19 | 74 | 6.3 | 1 | 1.6 | 35 | 5.8 | 38 | 7.6 |
| 20 | 63 | 5.4 | 5 | 8.2 | 40 | 6.6 | 18 | 3.6 |
| 21 - 24 | 279 | 23.9 | 12 | 19.7 | 136 | 22.6 | 131 | 26.0 |
| 25 - 34 | 272 | 23.3 | 13 | 21.3 | 141 | 23.4 | 118 | 23.5 |
| 35 - 44 | 202 | 17.3 | 15 | 24.6 | 107 | 17.7 | 80 | 15.9 |
| 45 - 54 | 119 | 10.2 | 7 | 11.5 | 68 | 11.3 | 44 | 8.7 |
| 55 - 64 | 40 | 3.4 | 3 | 4.9 | 19 | 3.2 | 18 | 3.6 |
| 65 - Over | 16 | 1.4 | 1 | 1.6 | 7 | 1.2 | 8 | 1.6 |
| Unknown | 4 | 0.3 | 1 | 1.6 | 2 | 0.3 | 1 | 0.2 |
| Total | 1,167 | 100 | 61 | 100 | 603 | 100 | 503 | 100 |

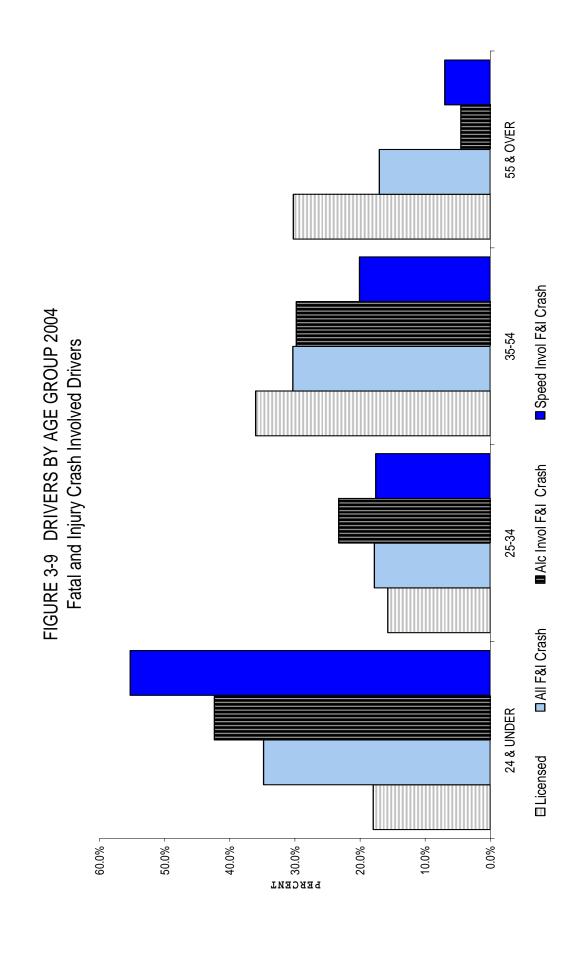
TABLE 3-17 compares age of drivers in fatal and injury crashes, drinking drivers in fatal and injury crashes, and speeding drivers in fatal and injury crashes with licensed drivers by age. The young driver is over represented as those drivers in fatal and injury crashes, drinking drivers in fatal and injury crashes, and speeding drivers in fatal and injury crashes. Licensed drivers in South Dakota under 25 years of age represent 17.8 percent of the total licensed drivers, 42.2 percent of the drinking drivers in fatal and injury crashes and 54.8 percent of the speeding drivers in fatal and injury crashes. Nearly 66 percent of the drinking drivers and 72.3 percent of the speeding drivers in fatal and injury crashes were under 35 years of age while drivers under 35 years of age constitute 33.5 percent of all licensed drivers (also see FIGURES 3-9 and 3-10).

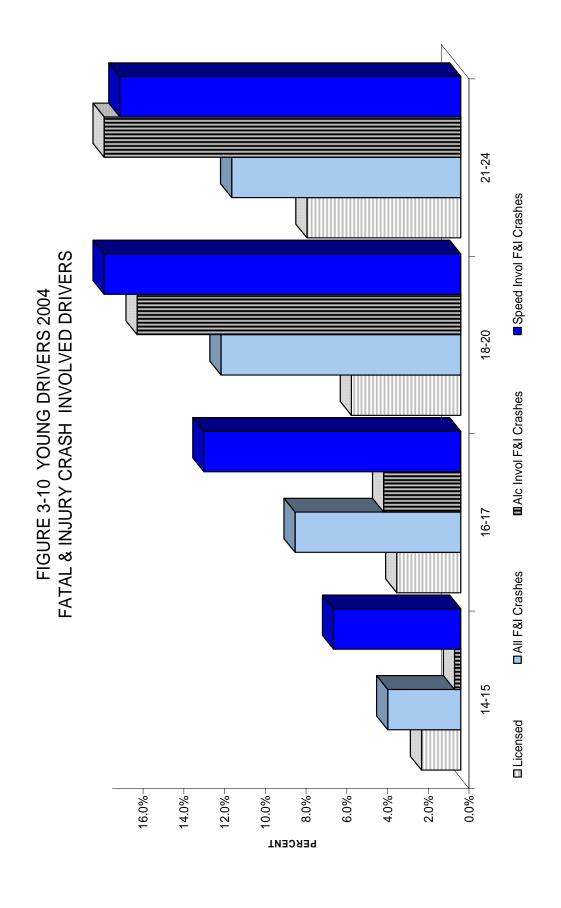
TABLE 3-17 LICENSED DRIVERS AND FATAL AND INJURY CRASH-INVOLVED DRIVERS BY AGE 2004

| <u>Age</u> | Licensed Drivers % | Drivers Ir Fatal & Ir Crashes No. | | Drinking Drivers Ir Fatal & Ir Crashes No. | | Speeding Drivers In Fatal & Inj Crashes No. | ury <u>%</u> |
|------------|-----------------------|--|------|--|------|---|--------------|
| 0 - 13 | 0.0 | 8 | 0.1 | 0 | 0.0 | 1 | 0.1 |
| 14 - 15 | 1.9 | 276 | 3.6 | 2 | 0.3 | 50 | 6.2 |
| 16 - 17 | 3.1 | 627 | 8.1 | 25 | 3.8 | 101 | 12.5 |
| 18 | 1.7 | 324 | 4.2 | 24 | 3.6 | 57 | 7.1 |
| 19 | 1.8 | 296 | 3.8 | 36 | 5.4 | 52 | 6.4 |
| 20 | 1.8 | 288 | 3.7 | 45 | 6.8 | 48 | 5.9 |
| 21 - 24 | 7.5 | 867 | 11.2 | 148 | 22.3 | 134 | 16.6 |
| 25 - 34 | 15.7 | 1373 | 17.7 | 154 | 23.2 | 141 | 17.5 |
| 35 - 44 | 17.2 | 1211 | 15.6 | 122 | 18.4 | 101 | 12.5 |
| 45 - 54 | 18.9 | 1129 | 14.5 | 75 | 11.3 | 60 | 7.4 |
| 55 - 64 | 13.4 | 672 | 8.6 | 22 | 3.3 | 29 | 3.6 |
| 65 - Over | 16.9 | 643 | 8.3 | 8 | 1.2 | 27 | 3.3 |
| Unknown | 0.0 | 55 | 0.7 | 3 | 0.5 | 7 | 0.9 |
| TOTAL | 100 | 7,769 | 100 | 664 | 100 | 808 | 100 |

Sources: SD Department of Public Safety: Accident Records

SD Department of Public Safety: Driver License Issuance





Driver actions are reported to indicate possible factors that may have contributed to the crashes. These factors are referred to as driver contributing circumstances. Drinking and Speeding were the leading driver contributing circumstance in fatal crashes during 2004. It was indicated that the drinking of 48 or 20.6 percent of the drivers in fatal crashes contributed to the crash. Speeding, to include Exceeding the Speed Limit and Driving too Fast for Road Condition also totaled 48 or 20.6 percent. Running off Road was another leading driver contributing circumstances in fatal crashes. Failing to Yield to Another Vehicle was the leading contributing circumstance in injury crashes. Following Too Close, Running off Road, Driving too Fast for Conditions and Drinking were other leading driver contributing circumstances in injury crashes (see TABLE 3-18).

TABLE 3-18
MOTOR VEHICLE DRIVER CONTRIBUTING CIRCUMSTANCES
2004

| | Total Crashes | | Fatal Crashe | es | Injury Crashe | 25 | PDO Crashes | |
|---|------------------|------|-----------------|------|------------------|------|----------------|------|
| | No. | % | No. | % | No. | % | No. | % |
| | | | | | | | | |
| Drinking | 809 | 3.3 | 48 | 20.6 | 448 | 5.9 | 313 | 1.9 |
| Running Off Road | 1,175 | 4.8 | 38 | 16.3 | 530 | 7.0 | 607 | 3.6 |
| Exceeded Speed Limit | 631 | 2.6 | 27 | 11.6 | 328 | 4.4 | 276 | 1.6 |
| Disregarded Traffic Signs or Signals | 645 | 2.6 | 6 | 2.6 | 294 | 3.9 | 345 | 2.0 |
| Distracted | 819 | 3.3 | 2 | 0.9 | 331 | 4.4 | 486 | 2.9 |
| Driving Too Fast for Condition | 1,530 | 6.2 | 21 | 9.0 | 506 | 6.7 | 1,003 | 5.9 |
| Fail to Yield to Vehicle | 3,214 | 13.0 | 11 | 4.7 | 1,182 | 15.7 | 2,021 | 12.0 |
| Failure to Keep in Proper Lane | 347 | 1.4 | 13 | 5.6 | 121 | 1.6 | 213 | 1.3 |
| Fatigued/Fell Asleep | 272 | 1.1 | 6 | 2.6 | 119 | 1.6 | 147 | 0.9 |
| Following Too Closely | 1,218 | 4.9 | 3 | 1.3 | 532 | 7.1 | 683 | 4.0 |
| Improper Backing | 298 | 1.2 | 0 | 0.0 | 23 | 0.3 | 275 | 1.6 |
| Improper Passing | 161 | 0.7 | 4 | 1.7 | 53 | 0.7 | 104 | 0.6 |
| Improper Turn | 390 | 1.6 | 1 | 0.4 | 118 | 1.6 | 271 | 1.6 |
| Over-correcting/Over-steering | 625 | 2.5 | 23 | 9.9 | 303 | 4.0 | 299 | 1.8 |
| Swerving or Avoiding due to wind, slippery surface, vehicle, object, non-motorist, etc. | 573 | 2.3 | 13 | 5.6 | 192 | 2.5 | 368 | 2.2 |
| Wrong Side of Road | 196 | 0.8 | 22 | 9.4 | 96 | 1.3 | 78 | 0.5 |
| Other* | 1,297 | 5.3 | 17 | 7.3 | 519 | 6.9 | 761 | 4.5 |
| Unknown | 594 | 2.4 | 16 | 6.9 | 205 | 2.7 | 373 | 2.2 |
| Not Stated** | 5,155 | 20.9 | 0 | 0.0 | 7 | 0.1 | 5,143 | 30.4 |
| Total Drivers | 24,663 | | 233 | | 7,536 | | 16,894 | |

Note: The investigating officer may assign from zero to two contributing circumstances to each driver, therefore, the number of drivers in motor vehicle crashes does not equal the number of contributing circumstances.

*Other includes cell phones, other electronic devices, failed to yield to pedestrian, improper lane change, improper parking, improper signal or failure to signal, improper start from parked position, drugs-medication, drugs-other, physical impairment, illness, and illegally in roadway.

^{**} Not Stated includes first harmful event of animal hit for property damage only crashes.

<u>Motorcycles</u>

Motorcycle crashes constitute 3.0 percent of all crashes, 14.5 percent of all fatal crashes, and 9.5 percent of all injury crashes. There were 26 people killed and 536 injured on motorcycles in the 517 reported motorcycle crashes during 2004 (see TABLE 2-7). The young motorcycle driver is over represented in crashes when compared to their portion of licensed motorcycle operators. The licensed drivers under 20 years of age represent 1.6 percent of the licensed motorcycle drivers, 6.3 percent of drivers involved in motorcycle crashes, and 14.5 percent of the speeding drivers involved in motorcycle crashes (see TABLE 3-19 and FIGURE 3-11).

TABLE 3-19 MOTORCYCLISTS BY AGE GROUP 2004

| Age | Licensec Motorcyc | | Motorcy Drivers Crashe | In | Drinkin Motorcy Drivers Crashe | ycle In | Speedir Motorcy Drivers Crashe | /cle In |
|------------------------------|----------------------|-------------------|------------------------------|-------------------|---|-------------------|---|-------------|
| <u>Group</u> | No. | % | No. | % | No. | <u>%</u> | No. | <u>%</u> |
| 0 - 13 14 - 15 16 - 17 | 0 69 | 0.0 0.1 0.5 | 1 3 | 0.2 0.5 2.0 | 0 | 0.0 0.0 0.0 | 0 1 | 0.0 1.4 |
| 18 - 17 18 - 19 | 291 668 | 0.5 1.1 | 11 20 | 2.0 3.6 | 0 1 | 2.0 | 1 8 | 1.4 11.6 |
| 20 - 21 22 - 23 | 1,055 1,395 | 1.7 2.2 | 23 18 | 4.1 3.2 | 0 | 0.0 2.0 | 6 7 | 8.7 10.1 |
| 24 - 25 | 1,640 | 2.6 | 21 | 3.8 | 6 | 11.8 | 6 | 8.7 |
| 26 - 27 | 1,580 | 2.5 | 8 | 1.4 | 1 | 2.0 | 3 | 4.3 |
| 28 - 29 | 1,786 | 2.8 | 11 | 2.0 | 3 | 5.9 | 4 | 5.8 |
| 30 - 31 | 1,928 | 3.1 | 9 | 1.6 | 0 | 0.0 | 1 | 1.4 |
| 32 - 36 | 5,915 | 9.4 | 46 | 8.2 | 8 | 15.7 | 3 | 4.3 |
| 37 - 41 | 7,728 | 12.3 | 54 | 9.7 | 7 | 13.7 | 3 | 4.3 |
| 42 - 51 | 19,500 | 31.0 | 173 | 31.0 | 15 | 29.4 | 15 | 21.7 |
| 52 - Over | 19,250 | 30.7 | 156 | 28.0 | 9 | 17.6 | 11 | 15.9 |
| Unknown | 0 | 0.0 | 4 | 0.7 | 0 | 0.0 | 0 | 0.0 |
| Total | 62,805 | 100 | 558 | 100 | 51 | 100 | 69 | 100 |

Sources: SD Department of Public Safety: Driver License Issuance

37 & OVER Crash Inv Speeding 30-36 Crash Inv Drinking 24-29 18-23 Crash Inv MC 17 & UNDER OLic MC −%08 -%02 -%09 -%08-20%10%-40% -%0 -%09 PERCENT

FIGURE 3-11 MOTORCYCLISTS 2004 CRASH INVOLVED MOTORCYCLE & MOPED DRIVERS There were 26 motorcyclist fatalities during 2004. Twenty-four were motorcycle drivers. Four drivers wore helmet and eye protection, one wore helmet only, twelve wore eye protection only and six did not use safety equipment. Unknown helmet usage was reported for one driver. There were two motorcycle passenger fatalities reported. One passenger wore helmet and eye protection, one did not use safety equipment. Helmets were used by 157 or 30 percent of the motorcycle drivers in crashes while 367 or 70 percent did not wear a helmet (see TABLE 3-20).

TABLE 3-20 HELMET USE BY MOTORCYCLE DRIVERS IN CRASHES 2004

| | Helmet Used | | Helmet Not U | Helmet Not Used | |
|------------|-------------|----------|--------------|-----------------|--|
| <u>Age</u> | No. | <u>%</u> | No. | <u>%</u> | |
| 0 40 | 0 | 0.0 | 4 | 400.0 | |
| 6 - 13 | 0 | 0.0 | 1 | 100.0 | |
| 14 - 15 | 2 | 66.7 | 1 | 33.3 | |
| 16 - 17 | 6 | 60.0 | 4 | 40.0 | |
| 18 - 20 | 8 | 25.8 | 23 | 74.2 | |
| 21 - 24 | 11 | 27.5 | 29 | 72.5 | |
| 25 - 34 | 11 | 18.0 | 50 | 82.0 | |
| 35 - 44 | 29 | 25.2 | 86 | 74.8 | |
| 45 - Over | 90 | 34.4 | 172 | 65.6 | |
| Unknown | 0 | 0.0 | 1 | 100.0 | |
| Total | 157 | 30.0 | 367 | 70.0 | |

Note: Percentages are row percents.

Excludes unknown, not stated and other helmet usage. Helmet only and helmet and eye protection counted as used. Eye protection only counted as not used.

<u>Pedestrians</u>

There were 9 pedestrian deaths and 95 injuries in motor vehicle crashes during 2004 (see TABLE 3-21). The youngest pedestrian killed was eight years old, while the oldest was 79. Of the injured pedestrians, 17.9 percent were between the ages of 6-13. Cities accounted for 87.4 percent of the pedestrian injuries and 55.6 percent of the fatalities (see TABLE 3-23). Of the 9 pedestrians killed, 5 were male and 4 female. Of the 95 injured, 56 were male and 39 female.

Officers reported that two of the 9 pedestrians killed had been drinking alcohol (see TABLE 3-22).

TABLE 3-21 AGE OF PEDESTRIANS IN TRAFFIC CRASHES 2004

| | Fatalities | | Injuries | |
|------------|------------|----------|----------|----------|
| <u>Age</u> | No. | <u>%</u> | No. | <u>%</u> |
| 0 - 5 | 0 | 0.0 | 5 | 5.3 |
| 6 - 13 | 1 | 11.1 | 17 | 17.9 |
| 14 - 19 | 2 | 22.2 | 13 | 13.7 |
| 20 - 24 | 0 | 0.0 | 11 | 11.6 |
| 25 - 34 | 1 | 11.1 | 9 | 9.5 |
| 35 - 44 | 1 | 11.1 | 11 | 11.6 |
| 45 - 54 | 1 | 11.1 | 13 | 13.7 |
| 55 - 64 | 2 | 22.2 | 8 | 8.4 |
| 65 - Over | 1 | 11.1 | 8 | 8.4 |
| Total | 9 | 100 | 95 | 100 |

TABLE 3-22 ALCOHOL INVOLVEMENT BY PEDESTRIANS 2004

| Alcohol Involvement | Fatalities No. | <u>%</u> | Injuries <u>No</u> . | % |
|---|-------------------|---------------------|-------------------------|---------------------|
| Alcohol or Drugs No Alcohol Unknown | 2 7 0 | 22.2 77.8 0.0 | 15 80 0 | 15.8 84.2 0.0 |
| Total | 9 | 100 | 95 | 100 |

TABLE 3-23 RURAL vs. CITY PEDESTRIAN CRASHES 2004

| | <u>Fatalities</u> | <u>%</u> | <u>Injuries</u> | <u>%</u> |
|-------|-------------------|----------|-----------------|----------|
| Rural | 4 | 44.4 | 12 | 12.6 |
| City | 5 | 55.6 | 83 | 87.4 |
| Total | 9 | 100 | 95 | 100 |

Bicycles

During 2004 there was one bicyclist killed (see TABLE 2-9). There were 77 bicycle drivers injured in reported motor vehicle crashes during 2004 (see TABLE 3-24). The leading factor in bicycle involved crashes was improper crossing which was reported for 24.7 percent of the injured bicycle drivers. Fifty-three of the bicycle drivers in crashes had no contributing circumstances. The yearly 1984-2004 trend of bicycle fatalities and injuries is provided in TABLE 2-9.

TABLE 3-24 AGE OF BICYCLE DRIVERS IN TRAFFIC CRASHES 2004

| <u>Age</u> | Fatalities <u>Number</u> | Injuries <u>Number</u> | <u>%</u> |
|------------|-----------------------------|---------------------------|----------|
| 0 - 5 | 0 | 0 | 0.0 |
| 6 - 13 | 1 | 37 | 48.1 |
| 14 - 19 | 0 | 18 | 23.4 |
| 20 - 24 | 0 | 2 | 2.6 |
| 25 - 34 | 0 | 5 | 6.5 |
| 35 - 44 | 0 | 8 | 10.4 |
| 45 - 54 | 0 | 5 | 6.5 |
| 55 - 64 | 0 | 2 | 2.6 |
| 65 - Over | 0 | 0 | 0.0 |
| Total | 1 | 77 | 100 |

IV. IMPORTANT EVENTS AND DATES

| March 1, 1974 | - Speed limit lowered to 55 miles per hour. |
|-----------------|--|
| July 1, 1976 | Right turn on red is allowed unless prohibited by a sign reading "No right turn on red". |
| July 1, 1977 | Helmet law repealed for motorcycle drivers and passengers age 18 and over. |
| April 1, 1979 | - Motor Vehicle Safety Inspection repealed. |
| March 1, 1982 | - Driving While Intoxicated Enforcement campaign began. |
| July 1, 1984 | - Child safety restraints became a law for children under age 5. |
| April 15, 1987 | - Speed limit on rural interstate raised to 65 miles per hour. |
| April 1, 1988 | - Drinking age raised to 21. |
| April 1, 1992 | - Commercial drivers license required for commercial vehicle operators. |
| January 1, 1995 | - Safety belt law became effective for front seat occupants. |
| April 1, 1996 | - Speed limit raised to 75 miles per hour on rural Interstate and 65 on most US and State Highways. |
| January 1, 1999 | - Graduated Driver License law implemented. |
| July 1, 2001 | - Safety belt primary law for all occupants age 17 and under. |
| July 1, 2002 | - BAC Level changed from .10 to .08. |
| January 1, 2004 | - South Dakota Accident Records System (SDARS) was implemented. |

IV. GLOSSARY OF TERMS

Reportable Traffic Crash: motor vehicle traffic crash which involves death, injury or property damage to an apparent extent of one thousand dollars or more to any one person's property or accumulated property damage of two thousand dollars per crash.

<u>Fatal Crash</u>: motor vehicle traffic crash in which at least one person dies as the result of the crash and dies within 30 days of the date of the crash.

<u>Injury Crash</u>: motor vehicle crash in which at least one person was injured and no one was killed.

<u>Property Damage Only (PDO) Crash</u>: motor vehicle crashes in which no one was killed or injured but there was property damage to an apparent extent of one thousand dollars or more to any one person's property or accumulated property damage of two thousand dollars per crash.

Fatality Rate: number of traffic fatalities per 100 million vehicle miles traveled.

<u>Alcohol Involved Crash</u>: at least one driver, pedestrian, or bicycle driver had been drinking in the opinion of the investigating officer.

<u>Economic Loss</u>: the calculable costs of motor vehicle crashes are wage loss, medical expense, insurance administration cost, and property damage. (Source: <u>Estimating the Costs of Unintentional Injuries</u>, 2003, National Safety Council)

[&]quot;SDCL 20-13, Title VI of the Civil Rights Act of 1964, the Rehabilitation Act of 1973 and the American Disabilities Act of 1990 require that the Department of Public Safety provide services to all persons without regard to race, color, creed, religion, sex, disability, ancestry or natural origin."

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