

2003  
South Dakota  
**Motor Vehicle  
Traffic Crash  
Summary**



Prepared By  
Department of Public Safety  
Office of Accident Records

M. Michael Rounds  
Governor



STATE OF SOUTH DAKOTA  
M. MICHAEL ROUNDS, GOVERNOR

May 2004

My Fellow South Dakotans:

The 2003 South Dakota Motor Vehicle Traffic Accident Summary is a sobering reminder that not a day passes in South Dakota without a traffic crash. This booklet contains valuable information that helps to enhance public awareness about the human and financial cost of motor vehicle crashes, identify traffic safety problems, and hopefully, determine effective countermeasures to address those problems.

Alcohol involvement in motor vehicle crashes by both adults and underage drivers continues to be a major problem on South Dakota roadways. Strict enforcement of drinking and driving laws will continue to be a priority for South Dakota law enforcement agencies. While progress is being made, alcohol was a contributing factor in 46 percent of the fatalities in motor vehicle crashes in South Dakota. It is even more disturbing that 22 of these alcohol related fatalities were under the legal drinking age of 21. We must increase our efforts to prevent underage persons from obtaining and consuming alcoholic beverages.

Speeding and/or exceeding a safe speed is second only to failing to yield as the leading contributing factor to motor vehicle crashes. South Dakota drivers under the age of 25 are over-represented in speed-related fatalities and injury crashes. While they account for only 18.1 percent of total drivers, they are involved in 49.9 percent of speed-related fatality and injury crashes.

Studies have shown fatalities and injuries can be reduced by 50 percent with the proper use of safety equipment. While the use of child safety seats, booster seats, and safety belts continues to increase, the use of passenger safety restraints is still too low. Your personal choice to utilize a safety seat or safety belt is the single most effective act that will increase your or your family's odds of surviving a motor vehicle crash.

This booklet reinforces the need to promote a strong safety message and the use of safety equipment to protect occupants in motor vehicles on South Dakota's roadways. I encourage you to review the information in this booklet and do your part to improve traffic safety in South Dakota.

Sincerely,

M. Michael Rounds

# TABLE OF CONTENTS

	<u>PAGE</u>
I. <u>INTRODUCTION</u>	1
South Dakota Statistical Summary.....	2
II. <u>HISTORICAL TRENDS</u>	3
Motor Vehicle Crashes .....	3
Alcohol Involvement .....	6
Restraint Usage.....	10
Cycle and Pedestrian Crashes .....	13
Holiday Counts .....	15
Severity of Injuries .....	17
Sex of Drivers .....	19
III. <u>MOTOR VEHICLE CRASH PROFILE</u>	20
Introduction.....	20
First Harmful Event.....	25
Manner of Collision.....	26
Highway System.....	27
County Summary.....	29
City Summary .....	29
Roadway Surface Conditions .....	29
Contributing Circumstances.....	29
Crashes by Time of Day, Month, and Day of Week.....	35
Drivers .....	39
Motorcycles .....	46
Pedestrians.....	49
Bicycles .....	51
IV. <u>IMPORTANT EVENTS AND DATES</u>	52
V. <u>GLOSSARY OF TERMS</u>	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 .....	5
2-3	Alcohol Involved Crashes as Percent of All Crashes .....	6
2-3A	Persons Killed in Alcohol Involved Crashes by Age.....	6
2-4	Crash and Arrest Activity .....	8
2-5	Safety Restraint Usage Killed Occupants .....	10
2-5A	Safety Restraint Usage Injured Occupants .....	10
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 .....	12
2-6A	Safety Restraint Usage Under 5 Years of Age.....	12
2-7	Motorcycle Crashes.....	13
2-8	Pedestrian Fatalities and Injuries .....	14
2-9	Bicycle Fatalities and Injuries .....	14
2-10	Crashes During Holidays.....	15-16
2-11	Fatalities and Injuries of Total Persons .....	17
2-12	Fatalities and Injuries of Total Drivers .....	17
2-13	Fatalities and Injuries of Total Passengers .....	18
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.....	20
3-2	Fatalities and Injuries by Mode of Transportation .....	21
3-3	Vehicle Types Involved in Crashes .....	23
3-4	Fatalities and Injuries by Age Group .....	24
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 .....	27
3-8	Reported Traffic Crashes - South Dakota Counties.....	30
3-8A	Reported Alcohol Traffic Crashes - South Dakota Counties.....	31
3-9	Counties Having More Than Two Percent of the Rural Fatal and Injury Crashes .....	32
3-10	Traffic Crashes - South Dakota Cities Population 2500 and Over .....	34
3-11	Roadway Surface Conditions .....	35
3-12	Crashes by Time of Day .....	36
3-13	Crashes by Month .....	37
3-14	Crashes by Day of Week.....	37
3-15	Age of Drivers in Crashes .....	39
3-16	Age of Drinking Drivers in Crashes .....	40
3-17	Licensed Drivers and Fatal and Injury Crash-Involved Drivers by Age.....	41
3-18	Motor Vehicle Driver Contributing Circumstances .....	45
3-19	Motorcyclists by Age Group .....	46
3-20	Helmet Use by Motorcycle Drivers in Crashes.....	48
3-21	Age of Pedestrians in Traffic Crashes.....	49
3-22	Alcohol Involvement by Pedestrians .....	50
3-23	Rural vs. City Pedestrian Crashes .....	50
3-24	Age of Bicycle Drivers in Traffic Crashes.....	51

## LIST OF FIGURES

<u>FIGURE</u>	<u>PAGE</u>
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. Information from 2003 comprises the major portion of the book; however, basic historic trends are also provided for reference.

The Motor Vehicle Traffic Crash Summary is divided into two main sections, Historical Trends and 2003 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 2003 Traffic Crash Profile section details the crash picture for 2003 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.

Examples of reports available through the Accident Records Section are:

STANDARD REPORTS - These reports provide the user with a standard set of summary information for a pre-selected subset of all crashes, e.g., all crashes involving a drinking driver.

PLOT MAPS - These maps supply the user with a graphic display on which the location of each crash in a given geographic area has been plotted on transparent paper and scaled to overlay maps provided by the Department of Transportation.

SPECIAL REQUESTS - Special requests are answered using several computer packages, one of which is an on-line query system which provides almost immediate response to requests of a very specific nature.

For additional information:

Accident Records Section  
700 East Broadway Avenue  
Pierre, SD 57501-2586  
Phone: (605) 773-4156  
FAX: (605) 773-7144  
E-mail: [ARInfo@state.sd.us](mailto:ARInfo@state.sd.us)

**SOUTH DAKOTA  
TRAFFIC STATISTICAL SUMMARY  
2003**

ON THE AVERAGE ONE TRAFFIC CRASH OCCURRED EVERY **29** MINUTES, AN INJURY WAS SUSTAINED **EVERY HOUR** AND A DEATH OCCURRED EVERY **43** HOURS.

NUMBER OF REPORTED MOTOR VEHICLE TRAFFIC CRASHES: **18,018**

AMOUNT OF MOTOR VEHICLE TRAFFIC CRASH PROPERTY DAMAGE: **\$81 MILLION**

NUMBER OF MOTOR VEHICLE TRAFFIC CRASH INJURIES: **6,944**

NUMBER OF MOTOR VEHICLE TRAFFIC CRASH FATALITIES: **203**

FATALITY RATE PER 100,000,000 MILES OF TRAVEL: **2.41**

PERCENT OF DRIVERS IN FATAL CRASHES WHO HAD BEEN DRINKING: **33.9%**

NUMBER KILLED IN ALCOHOL-RELATED CRASHES: **94**

NUMBER INJURED IN ALCOHOL-RELATED CRASHES: **1,000**

NUMBER OF PEDESTRIANS KILLED: **10**

NUMBER OF MOTORCYCLISTS KILLED: **21**

NUMBER OF BICYCLISTS KILLED: **1**

PERCENT OF LICENSED DRIVERS UNDER 25: **18.1%**

PERCENT OF CRASH-INVOLVED SPEEDING DRIVERS UNDER 25: **51.3%**

PERCENT OF CRASH-INVOLVED DRINKING DRIVERS UNDER 25: **40.7%**

NUMBER OF OCCUPANTS KILLED IN MOTOR VEHICLES: **171**, **32** WERE WEARING A SAFETY RESTRAINT (EXCLUDES MOPED, MOTORCYCLE & SNOWMOBILE OCCUPANTS)

NUMBER OF DWI CONVICTIONS: **5,678** (Source: Dept. of Public Safety-Driver Improvement)

NUMBER OF UNRESTRAINED OCCUPANTS UNDER 5 YEARS OF AGE KILLED IN MOTOR VEHICLE CRASHES: **5**, NUMBER KILLED **1** WHILE WEARING A LAP BELT ONLY

ECONOMIC LOSS FROM MOTOR VEHICLE TRAFFIC CRASHES: **\$419 MILLION**

Source: SD Department of Public Safety: Accident Records Section

## II. HISTORICAL TRENDS

### Motor Vehicle Crashes

The preliminary death rates per 100 million vehicle miles traveled from 1994-2003 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  
1994-2003**

<u>State</u>	<u>1994</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>
South Dakota	2.0	2.1	2.2	1.9	2.1	1.8	2.1	2.0	2.2	2.4
Iowa	1.8	2.0	1.7	1.7	1.5	1.6	1.5	1.5	1.3	1.4
Minnesota	1.5	1.4	1.3	1.3	1.3	1.3	1.2	1.1	1.2	1.2
Montana	2.3	2.3	2.1	2.8	2.5	2.3	2.4	2.3	2.6	2.5
Nebraska	1.8	1.6	1.8	1.8	1.8	1.7	1.6	1.8	1.8	1.6
North Dakota	1.4	1.1	1.3	1.5	1.1	1.6	1.2	1.5	1.4	1.4
Wyoming	2.1	2.4	2.0	1.9	1.9	2.4	1.9	2.3	2.2	N/A
National	1.7	1.7	1.7	1.7	1.6	1.5	1.5	1.5	1.5	1.5

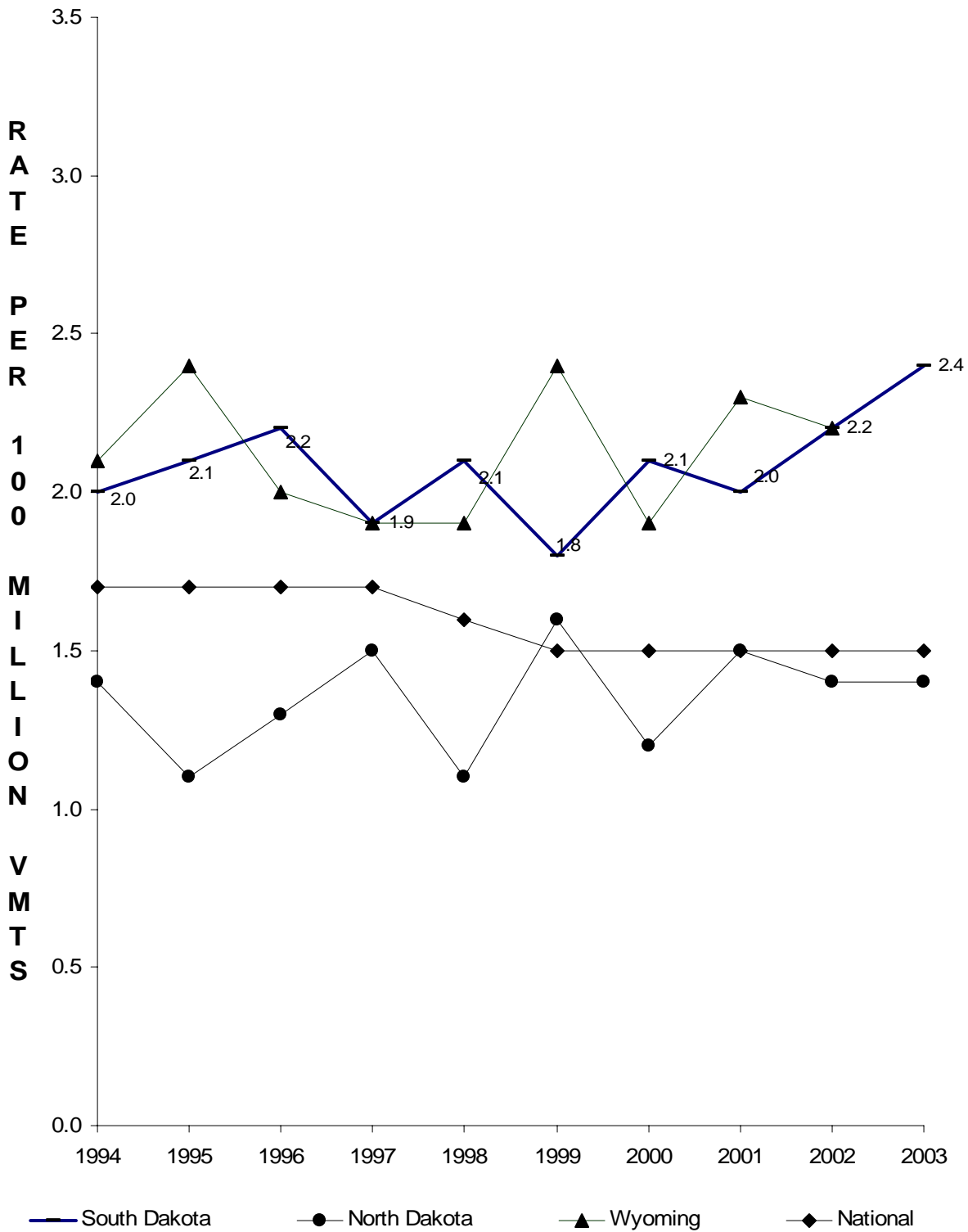
Note: Death Rate is the number of traffic fatalities per 100 million vehicle miles traveled.

Source: SD Department of Public Safety: Accident Records

TABLE 2-2 provides a yearly comparison of South Dakota's motor vehicle traffic crashes from 1972 through 2003. 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 2003 death rate increased to 2.41, a 14% increase from the 2002 death rate of 2.15. The 2.41 death rate is the highest death rate since 1983 when the rate was 2.77. The 6,944 people injured is a 0.8% decrease from the 6,997 for 2002 (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**

Year	Deaths	Death Rate <sup>1</sup>	Injuries	Total Crashes	Total Crashes Rate <sup>4</sup>	Fatal Crashes	Injury Crashes	PDO <sup>2</sup> Crashes	Miles <sup>3</sup> Traveled + (000,000)	Registered Motor Vehicles + (000)
1972	294	5.83	6,718	17,883	354.89	235	4,267	13,381	5,039	467
1973	286	5.57	6,774	14,985	291.76	228	4,321	10,436 <sup>2</sup>	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 <sup>2</sup>	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 <sup>2</sup>	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 <sup>3</sup>	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 <sup>2</sup>	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 <sup>2</sup>	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

<sup>1</sup> Number of deaths per 100 million vehicle miles traveled.

<sup>2</sup> Prior 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.

<sup>3</sup> 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 Public Safety. Note! This revision of the miles traveled has caused the Death Rates to be adjusted also. Current year 2003 may be adjusted and updated in next year's publication.

<sup>4</sup> Number of crashes per 100 million vehicle miles traveled.

Source: SD Department of Public Safety: Accident Records

Alcohol Involvement

Of the 203 traffic fatalities during 2003, 94 or 46.3% 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  
1997-2003**

	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>
Total Crashes	6.9 (1449)	7.1 (1393)	6.4 (1290)	6.8 (1331)	6.4 (1137)	7.3 (1265)	7.0 (1261)
Fatal Crashes	39.1 (50)	40.3 (60)	42.6 (58)	43.3 (65)	42.2 (65)	47.8 (76)	45.1 (78)
Injury Crashes	12.0 (656)	12.9 (662)	12.6 (634)	12.3 (648)	11.5 (563)	13.5 (635)	13.2 (630)
PDO Crashes	4.9 (743)	4.6 (671)	4.0 (598)	4.4 (618)	4.0 (509)	4.4 (554)	4.2 (553)
Fatalities	39.9 (59)	39.4 (65)	41.3 (62)	44.5 (77)	43.9 (75)	50.6 (91)	46.3 (94)
Injuries	12.5 (1024)	13.9 (1074)	13.6 (1027)	13.7 (1078)	12.0 (851)	14.2 (991)	14.4 (1000)

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  
1996- 2003**

<u>AGE</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>
0 - 5	1	1	0	0	0	0	3
6 - 12	1	0	1	1	2	2	1
13 - 19	17	15	11	11	9	15	18
20	3	2	2	1	2	3	0
21 - 29	10	19	16	25	23	19	24
30 - 39	14	14	10	21	16	18	22
40 - 49	6	9	11	9	10	17	10
50 - 59	3	4	6	4	4	9	11
60 & OLDER	4	1	5	5	8	8	5
Unknown/Not Stated	0	0	0	0	1	0	0
TOTAL	59	65	62	77	75	91	94

Source: SD Department of Public Safety: Accident Records

FIGURE 2-2 2002 CRASH FATALITIES  
Alcohol Related vs Non Alcohol Related

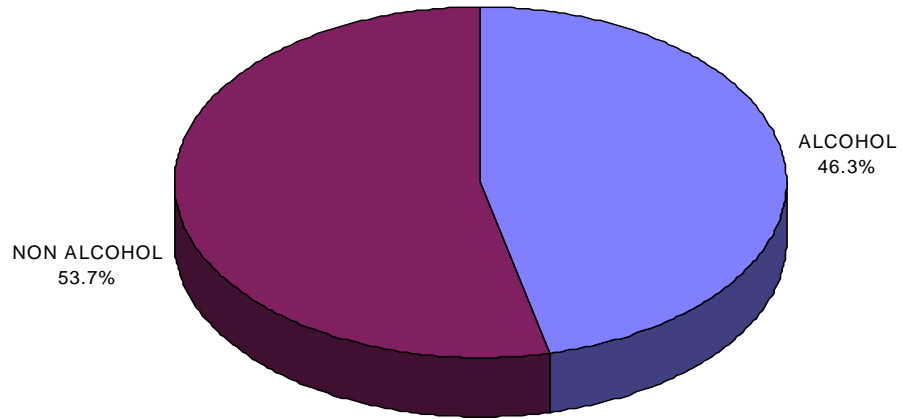
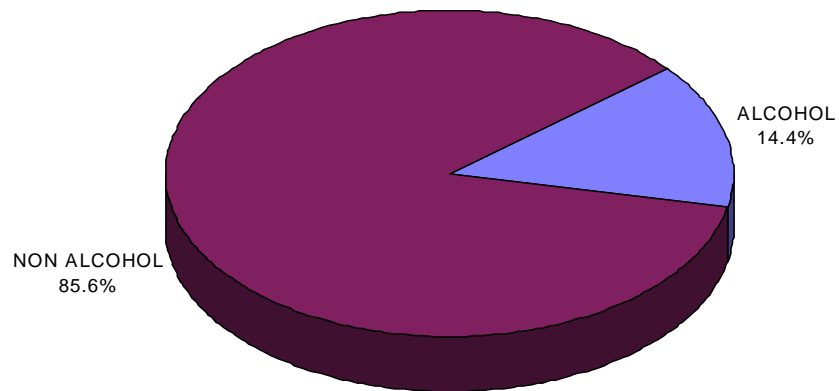


FIGURE 2-3 2002 CRASH INJURIES  
Alcohol Related vs Non Alcohol Related



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 0.4% while nonalcohol-related fatal and injury crashes increased by 2.3% from the 2002 totals. The number of DWI arrests increased by 8.9% from 2002.

**TABLE 2-4  
CRASH AND ARREST ACTIVITY  
1995 - 2003**

	FATAL CRASHES		FATAL & INJURY CRASHES		DWI ARRESTS*
	ALCOHOL RELATED	NONALCOHOL RELATED	ALCOHOL RELATED	NONALCOHOL RELATED	
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

\*Source: South Dakota Courts - The State of the Judiciary and 2003 Annual Report of the S. D. Unified Judicial System - January 2004  
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 2003. FIGURE 2-5 presents the alcohol-related and nonalcohol-related fatal crash experience for the years of 1995 through 2003.

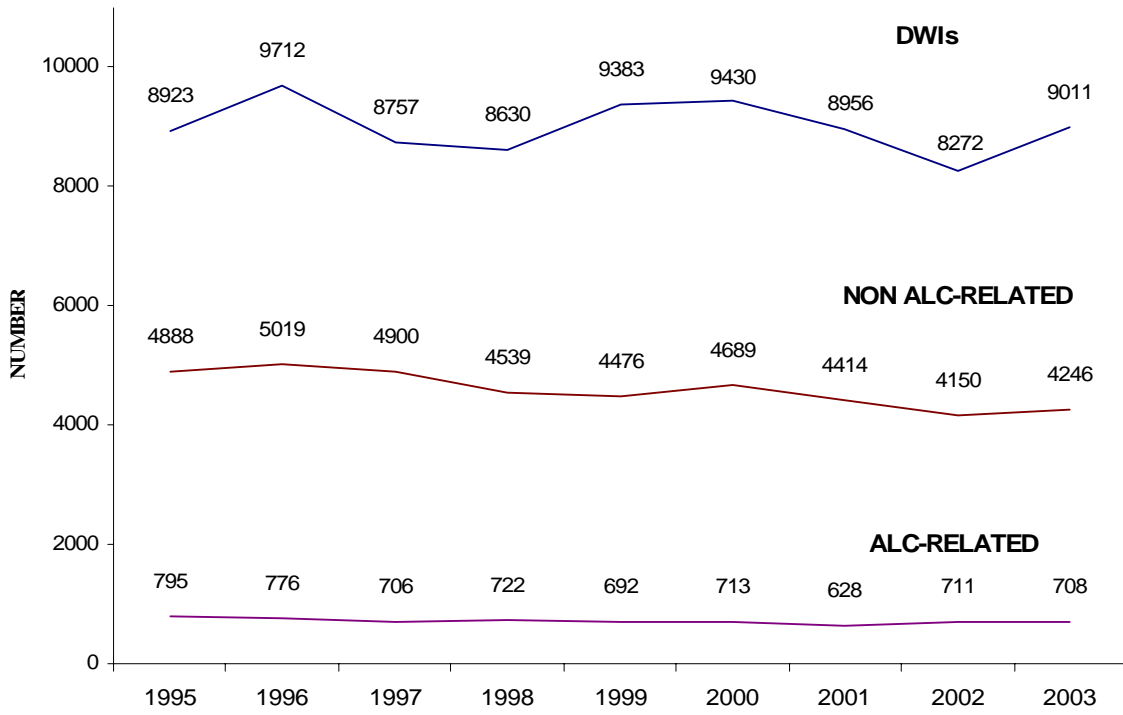
There were 78 alcohol-related fatal crashes during 2003, which compares to 76 in 2002. The previous three-year average was 69 for the years of 2000-2002.

There were 708 alcohol-related fatal and injury crashes during 2003, which compares to 711 in 2002. The previous three-year average was 684 or a 3.5 percent increase in 2003. Nonalcohol-related fatal and injury crashes in 2003 increased (2.3%) when compared to 2002 and decreased 3.9 percent from the previous three-year average (00-02).

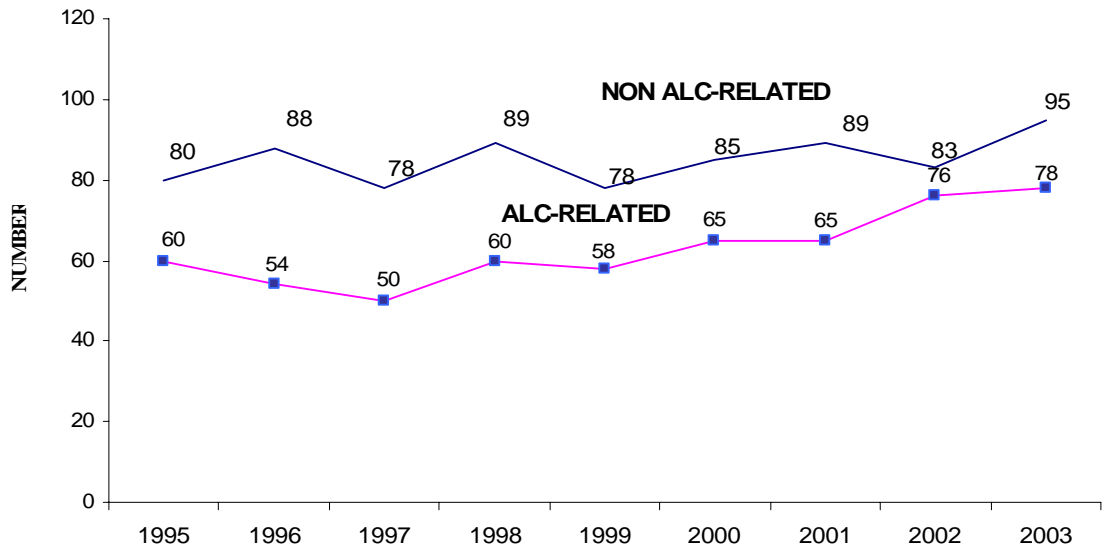
There were 9,011 DWI arrests in fiscal year 2003. This level has gone up 1.4% from the previous three-year average (00-02).

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 and twenty-three occupants were killed while not wearing any safety restraint, while twenty-six occupants killed were wearing lap and shoulder harness, four were wearing a lap belt only, and two wore a shoulder harness only. (see TABLE 2-5).

Eighty-eight (51.5%) of the 171 killed occupants were either partially or totally ejected from the vehicle (see TABLE 2-5B).

TABLE 2-5  
SAFETY RESTRAINT USAGE  
KILLED OCCUPANTS

	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>
No Safety Equipment	95	86	103	86	103	123
Lap Belt Only	1	1	3	2	1	4
Shoulder Harness Only	1	0	0	1	2	2
Lap Belt & Shoulder Harness	31	21	19	32	32	26
Child Restraint Used Properly	1	1	0	0	0	0
Child Restraint Not Properly Used	0	0	1	1	0	1
Other Type Restraints	2	0	0	0	0	0
Not Stated or Unknown	16	19	11	11	13	15
Total	147	128	137	133	151	171

TABLE 2-5A  
SAFETY RESTRAINT USAGE  
INJURED OCCUPANTS

	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>
No Safety Equipment	2,572	2,324	2,357	1,895	1,739	1,552
Lap Belt Only	171	150	151	139	129	92
Shoulder Harness Only	77	56	48	30	38	34
Lap Belt & Shoulder Harness	3,803	3,947	4,114	3,945	3,955	3,991
Child Restraint Used Properly	46	50	35	57	67	58
Child Restraint Not Properly Used	5	4	8	11	8	5
Other Type Restraints	11	12	7	5	14	11
Not Stated or Unknown	394	389	412	387	429	431
Total	7,079	6,932	7,132	6,469	6,379	6,174

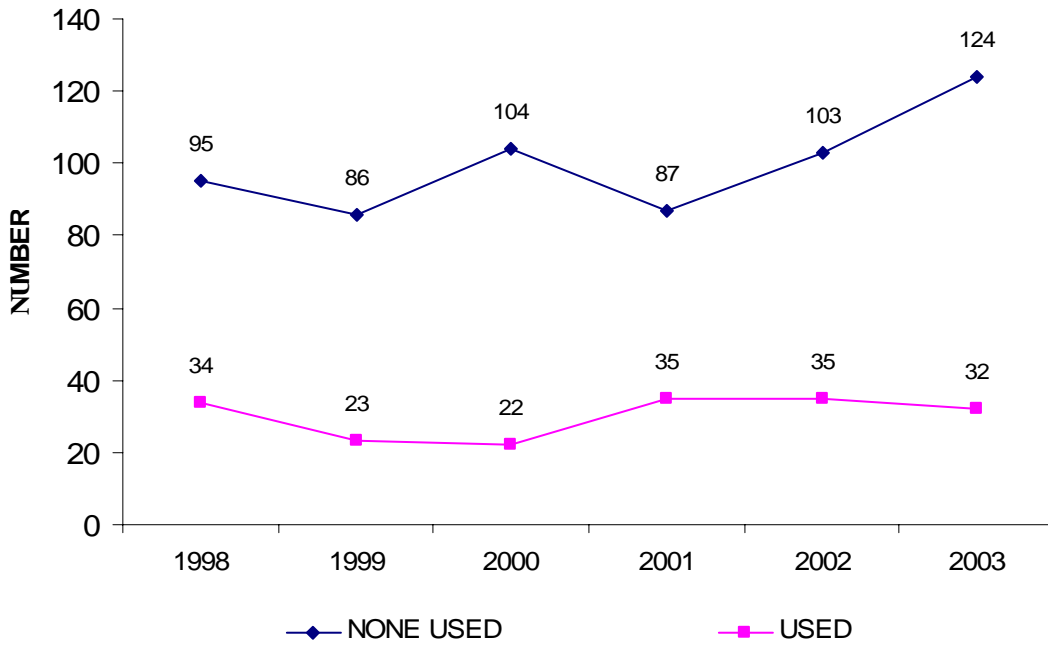
Note: Motor vehicle drivers and passengers are considered occupants. Motorcycle, moped and snowmobile drivers and motorcycle, moped and snowmobile passengers are not counted in the above tables.

TABLE 2-5B  
FATALITIES BY EJECTION STATUS FOR MOTOR VEHICLE OCCUPANTS  
(Excludes Motorcycle, Mopeds and Snowmobiles)  
2003

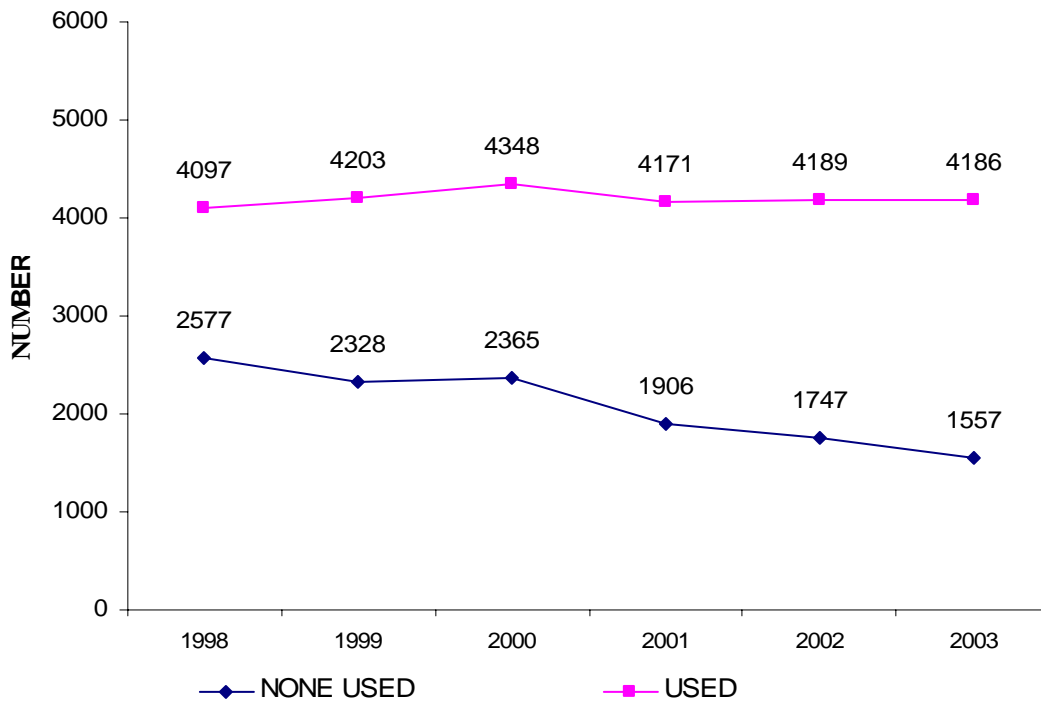
	<u>Killed</u>	<u>Injured</u>
Not Ejected	81	5,915
Partial Ejection	16	34
Total Ejection	72	183
Unknown Ejection	1	34
Not Applicable	1	8
Total	171	6,174

Source: SD Department of Public Safety: Accident Records

**FIGURE 2-6 SAFETY EQUIPMENT USAGE  
KILLED OCCUPANTS**



**FIGURE 2-7 SAFETY EQUIPMENT USAGE  
INJURED OCCUPANTS**





The Child Passenger Restraint System (SDCL 32-37) law took effect on July 1, 1984 -- since that time there have been 45 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 five fatalities to motor vehicle occupants from birth through four years of age during 2003, which compares to two during 2002 (see TABLE 2-6).

There were 105 children (birth through 4 years old) injured in 2003, which compares to 116 for 2002 and the three-year average of 110. Seventy-three of the 105 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

<u>YEAR</u>	<u>FATALITIES</u>	<u>SERIOUS INJURY</u>	<u>SLIGHT INJURY</u>	<u>TOTAL NONFATAL INJURIES</u>
1993	2	90	69	159
1994	1	78	54	132
1995	2	77	59	136
1996	2	78	68	146
1997	2	78	46	124
1998	6	70	48	118
1999	1	76	54	130
2000	1	45	55	100
2001	1	61	52	113
2002	2	56	60	116
2003	5	53	52	105

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  
2003

	<u>Fatalities</u>	<u>Injuries</u>
No Safety Equipment Used	3	22
Lap Belt Only	1	3
Shoulder Harness Only	0	2
Lap Belt & Shoulder Harness	0	24
Child Restraint Used Properly	0	44
Child Restraint Not Used Properly	1	3
Other	0	1
Not Stated or Unknown	0	6
TOTAL	5	105

Source: SD Department of Public Safety: Accident Records

## 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 394 and 16 deaths per year. Licensed motorcyclists increased 4.4 percent during 2003 while fatalities increased by one to 21. (see Table 2-7). Moped crashes are included with motorcycle crashes. There were no moped fatalities during 2003. 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  
1980 - 2003

<u>Year</u>	<u>Motorcycle Crashes</u>			<u>Motorcyclists</u>		<u>Registered Motorcycles</u>	<u>Licensed Motorcyclists</u>
	<u>Total</u>	<u>Fatal</u>	<u>Injury</u>	<u>Fatalities</u>	<u>Injuries</u>		
1980	707	17	608	18	763	35,045	41,431
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	33,116	59,971

Source: SD Department of Public Safety: Accident Records

TABLE 2-8  
PEDESTRIAN FATALITIES AND INJURIES  
1983 - 2003

<u>Year</u>	<u>Fatalities</u>	<u>Injuries</u>
1983	20	139
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

TABLE 2-9  
BICYCLE FATALITIES AND INJURIES  
1983 - 2003

<u>Year</u>	<u>Fatalities</u>	<u>Injuries</u>
1983	1	99
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

Source: SD Department of Public Safety Accident Records

## 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  
1991- 2003

<u>Holiday</u>	<u>Total Hours</u>	<u>Total Crashes</u>	<u>Fatal Crashes</u>	<u>Injury Crashes</u>	<u>Fatalities</u>	<u>Injuries</u>
<u>MEMORIAL DAY</u>						
1991	78	155	2	58	2	84
1992	78	120	2	35	2	57
1993	78	160	3	60	4	89
1994	78	141	1	43	1	67
1995	78	155	1	49	1	84
1996	78	139	0	33	0	61
1997	78	130	0	33	0	48
1998	78	149	1	35	1	68
1999	78	155	0	44	0	74
2000	78	159	0	39	0	67
2001	78	133	1	33	1	49
2002	78	155	2	28	2	43
2003	78	151	1	27	1	50
<u>FOURTH OF JULY</u>						
1991	102	195	1	61	1	91
1992	78	159	0	56	0	102
1993	78	150	2	60	2	117
1994	78	152	2	59	3	110
1995	102	226	3	69	3	112
1996	102	208	7	59	9	93
1997	78	139	1	53	1	99
1998	78	181	3	57	3	81
1999	78	143	2	37	2	66
2000	102	213	5	67	7	110
2001	30	52	4	15	4	27
2002	102	189	3	64	3	95
2003	78	146	1	57	2	82
<u>LABOR DAY</u>						
1991	78	118	1	43	1	64
1992	78	117	1	38	1	68
1993	78	151	4	49	5	87
1994	78	141	0	56	0	90
1995	78	150	1	45	1	74
1996	78	159	1	51	3	102
1997	78	137	4	37	4	62
1998	78	139	2	35	2	66
1999	78	134	2	38	2	59
2000	78	144	3	45	4	69
2001	78	134	4	42	5	64
2002	78	132	3	38	3	55
2003	78	123	1	39	1	62

<u>Holiday</u>	<u>Total Hours</u>	<u>Total Crashes</u>	<u>Fatal Crashes</u>	<u>Injury Crashes</u>	<u>Fatalities</u>	<u>Injuries</u>
<u>THANKSGIVING</u>						
1991	102	365	3	69	3	116
1992	102	244	1	55	1	82
1993	102	342	0	58	0	98
1994	102	297	0	58	0	85
1995	102	319	4	68	4	115
1996	102	384	2	75	2	127
1997	102	225	1	41	2	68
1998	102	309	1	53	1	82
1999	102	323	4	45	4	67
2000	102	210	2	36	2	54
2001	102	260	0	49	0	71
2002	102	259	2	48	2	83
2003	102	222	0	42	0	54
<u>CHRISTMAS</u>						
1991	54	52	0	16	0	24
1992	102	193	1	36	1	59
1993	78	178	1	35	1	51
1994	78	131	1	26	1	47
1995	78	151	1	38	2	62
1996	30	101	0	20	0	35
1997	102	130	1	26	1	36
1998	78	182	1	41	1	70
1999	78	137	0	20	0	31
2000	78	126	0	25	0	39
2001	102	160	3	33	3	61
2002	30	31	0	7	0	8
2003	102	195	3	46	3	66
<u>NEW YEARS</u>						
1991-92	54	95	1	28	1	47
1992-93	102	261	0	52	0	85
1993-94	78	172	0	43	0	62
1994-95	78	121	2	34	2	62
1995-96	78	234	3	60	3	91
1996-97	30	90	1	21	2	33
1997-98	102	169	1	37	1	54
1998-99	78	207	1	37	1	57
1999-00	78	141	3	34	3	51
2000-01	78	152	2	38	2	54
2001-02	102	166	1	34	1	51
2002-03	30	113	2	26	2	39
2003-04	102	N/A	0	N/A	0	N/A

Source: SD Department of Public Safety: Accident Records

## SEVERITY OF INJURIES BY PERSON TYPE

The following tables provide a yearly comparison of South Dakota's total injuries, drivers injuries, passengers injuries, bicyclists injuries and pedestrians injuries from 1994 through 2003. 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

<u>Year</u>	<u>Incapacitating Injuries</u>		<u>Non-Incapacitating Injuries</u>		<u>Possible Injuries</u>		<u>Total Injuries</u>	<u>Total Killed</u>
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>		
1994	1902	22.3	3110	36.4	3528	41.3	8540	154
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

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

<u>Year</u>	<u>Incapacitating Injuries</u>		<u>Non-Incapacitating Injuries</u>		<u>Possible Injuries</u>		<u>Total Injuries</u>	<u>Total Killed</u>
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>		
1994	1083	20.0	1929	35.7	2398	44.3	5410	92
1995	1030	19.0	1955	36.2	2422	44.8	5407	98
1996	1114	20.4	1938	35.5	2413	44.2	5465	98
1997	1014	19.2	1962	37.1	2308	43.7	5284	94
1998	954	19.2	1896	38.1	2123	42.7	4973	105
1999	1018	20.3	1836	36.6	2157	43.0	5011	92
2000	1012	19.3	1949	37.3	2269	43.4	5230	97
2001	929	19.3	1786	37.0	2109	43.7	4824	104
2002	946	20.3	1761	37.8	1957	42.0	4664	119
2003	930	19.6	1807	38.0	2018	42.4	4755	124

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

Year	Incapacitating Injuries		Non-Incapacitating Injuries		Possible Injuries		Total Injuries	Total Killed
	No.	%	No.	%	No.	%		
1994	715	25.6	1039	37.1	1044	37.3	2798	39
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

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

Year	Incapacitating Injuries		Non-Incapacitating Injuries		Possible Injuries		Total Injuries	Total Killed
	No.	%	No.	%	No.	%		
1994	37	23.7	80	51.3	39	25.0	156	0
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

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

Year	Incapacitating Injuries		Non-Incapacitating Injuries		Possible Injuries		Total Injuries	Total Killed
	No.	%	No.	%	No.	%		
1994	67	38.1	62	35.2	47	26.7	176	23
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

## 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  
1992 - 2003

	CRASH INVOLVED DRIVERS				LICENSED DRIVERS			
	MALE		FEMALE		MALE		FEMALE	
	No.	%	No.	%	No.	%	No.	%
1992	16,353	62.2	9,926	37.8	256,191	50.5	251,591	49.5
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

Note: Crash Involved Drivers table does not include cases where the sex of the driver was not reported.

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

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



### III. 2003 MOTOR VEHICLE CRASH PROFILE

#### Introduction

This section profiles the reported motor vehicle traffic crashes for 2003. 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 2003, there were 18,018 reported motor vehicle traffic crashes, the majority of crashes being property damage only 13,064 (72.5%). Injury crashes accounted for 4,781 (26.5%) of the crashes, while 173 (1%) were fatal crashes. There were 6,944 persons injured and 203 persons killed in crashes during 2003 (see TABLE 3-1).

TABLE 3-1  
FATALITIES AND SEVERITY OF INJURIES OF DRIVERS,  
PASSENGERS, PEDESTRIANS, AND BICYCLE DRIVERS  
2003

	Incapac. Injuries		Non-Incapac. Injuries		Possible Injuries		Total Nonfatal Injuries		Total Fatalities	
	No.	%	No.	%	No.	%	No.	%	No.	%
Drivers	930	64.1	1,807	67.2	2,018	71.9	4,755	68.5	124	61.1
Passengers	470	32.4	783	29.1	738	26.3	1,991	28.7	68	33.5
Pedestrians	33	2.3	39	1.5	19	0.7	91	1.3	10	4.9
Bicycle Dr	17	1.2	59	2.2	31	1.1	107	1.5	1	0.5
Total	1,450	100	2,688	100	2,806	100	6,944	100	203	100

#### 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).

Source: SD Department of Public Safety: Accident Records

TABLE 3-2 provides information on persons killed and injured by method or mode of transportation. During 2003, 41.4 percent of the fatalities and 52.5 percent of the injuries occurred to occupants of passenger cars. Occupants of pickups and vans accounted for 41.4 percent of the fatalities and 34 percent of the injuries. Additionally, in 2003 twenty-one motorcyclists and ten pedestrians were killed. There was one bicyclist killed during 2003 (see Table 3-2).

TABLE 3-2  
FATALITIES AND INJURIES BY MODE OF TRANSPORTATION  
2003

	Fatalities		Injuries	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
Passenger Cars	84	41.4	3,644	52.5
Pickups, Vans	84	41.4	2,362	34.0
Motorcycle, Moped	21	10.3	568	8.2
Pedestrians	10	4.9	91	1.3
Trucks (All)*	2	1.0	127	1.8
Bicycle	1	0.5	109	1.6
Other	1	0.5	38	0.5
Farm Machinery	0	0.0	5	0.1
Unknown	0	0.0	0	0.0
<b>Total</b>	<b>203</b>	<b>100</b>	<b>6,944</b>	<b>100</b>

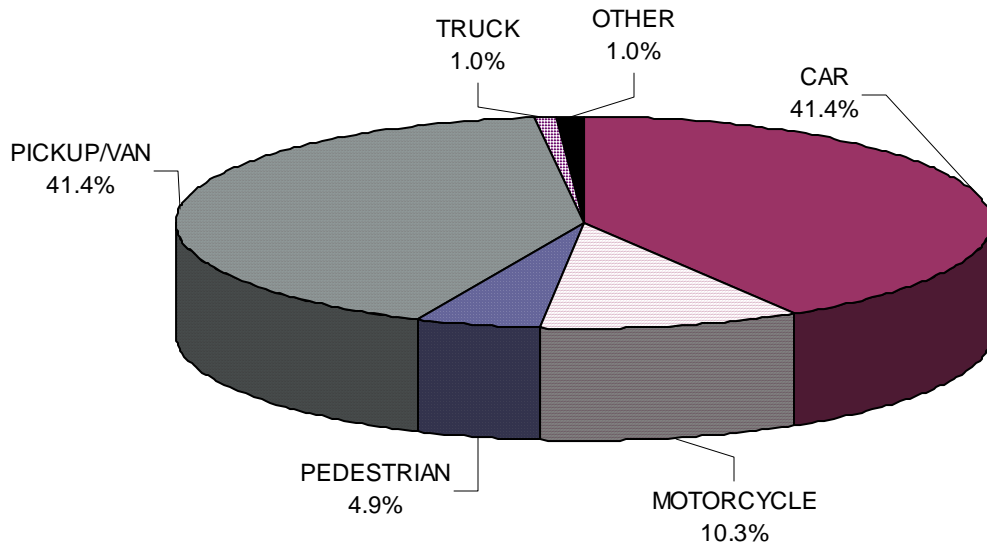
*Trucks	<u>Fatalities</u>	<u>Injuries</u>
Straight Truck	0	55
Straight Truck with Trailer	0	3
Truck Tractor Only	0	4
Truck Tractor with Single Semi Trailer	2	61
Truck Tractor with Two or More Trailers	0	4
<b>Total</b>	<b>2</b>	<b>127</b>

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

\*\* Other includes Bicycle, Farm Machinery, Bus, Motor Home, Snowmobile, Heavy Equipment, Train, Animal Drawn Vehicle and Other Types of Motor Vehicles.

Source: SD Department of Public Safety: Accident Records

**FIGURE 3-1 FATALITIES BY TRAVEL MODE  
2003**



**FIGURE 3-2 INJURIES BY TRAVEL MODE  
2003**

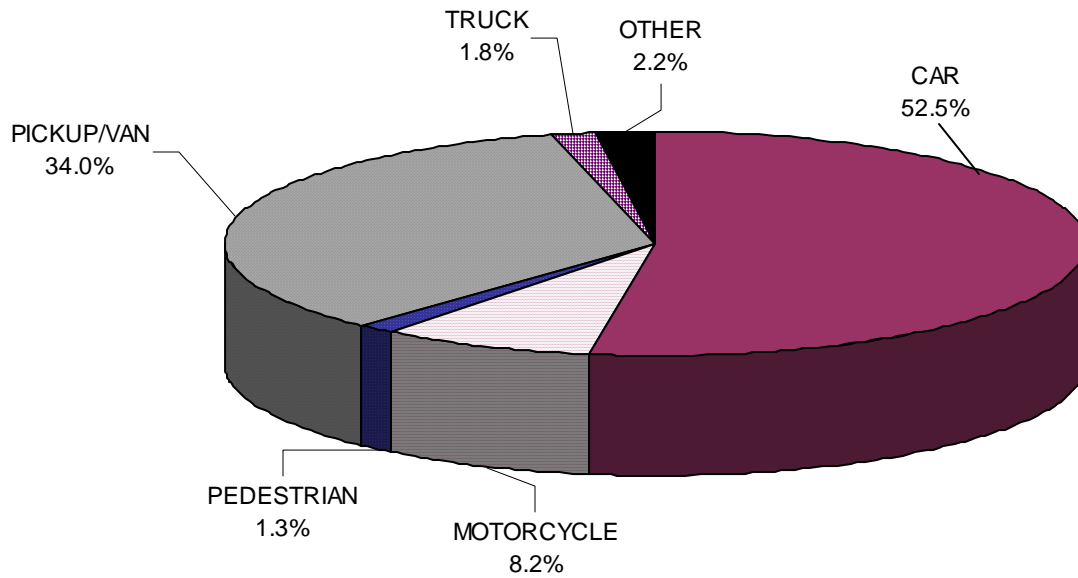


TABLE 3-3 provides information on all crash-involved vehicles by type. Passenger cars made up 38.6 percent of the vehicles involved in fatal crashes and 52.5 percent of those involved in injury crashes. Pickups and vans made up 43.0 percent of the vehicles involved in fatal crashes.

TABLE 3-3  
VEHICLE TYPES INVOLVED IN CRASHES  
2003

	All Crashes		Fatal Crashes		Injury Crashes		PDO Crashes	
	No.	%	No.	%	No.	%	No.	%
Passenger Cars	14,141	52.5	88	38.6	4,166	52.5	9,887	52.6
Pickups, Vans	11,101	41.2	98	43.0	2,961	37.3	8,042	42.8
Motorcycle	559	2.1	23	10.1	492	6.2	44	0.2
Trucks (All)*	892	3.3	16	7.0	252	3.2	624	3.3
Farm Machinery or Heavy Equipment	60	0.2	0	0.0	13	0.2	47	0.3
Bus	70	0.3	0	0.0	15	0.2	55	0.3
Motor Home	31	0.1	0	0.0	10	0.1	21	0.1
Moped	12	0.0	0	0.0	12	0.2	0	0.0
Snowmobile	6	0.0	0	0.0	4	0.1	2	0.0
Other or Unknown	79	0.3	3	1.3	10	0.1	66	0.4
Total	26,951	100	228	100	7,935	100	18,788	100

\*Trucks

	All Crashes	Fatal Crashes	Injury Crashes	PDO Crashes
Straight Truck	314	5	93	216
Straight Truck with Trailer	49	0	7	42
Truck Tractor Only	17	0	8	9
Truck Tractor with Single Semi Trailer	481	10	132	339
Truck Tractor with Two or More Trailers	31	1	12	18
Total	892	16	252	624

Source: SD Department of Public Safety: Accident Records

TABLE 3-4 provides information on the ages of persons killed and injured. A total of 35 people (17.2%) of the persons killed were from 25 through 34 years of age and this age group totals 1,041 for (15.0%) of the persons injured. Six children ages 0-5 were killed during 2003 (see Table 3-4).

TABLE 3-4  
FATALITIES AND INJURIES  
BY AGE GROUP  
2003

	Fatalities		Injuries	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
0 - 5	6	3.0	147	2.1
6 - 13	5	2.5	384	5.5
14 - 15	8	3.9	344	5.0
16 - 17	14	6.9	606	8.7
18	8	3.9	316	4.6
19	2	1.0	254	3.7
20	3	1.5	245	3.5
21 - 24	26	12.8	764	11.0
25 - 34	35	17.2	1,041	15.0
35 - 44	26	12.8	877	12.6
45 - 54	32	15.8	892	12.9
55 - 64	13	6.4	489	7.0
65 - Over	25	12.3	544	7.8
Unknown	0	0.0	41	0.6
Total	203	100	6,944	100

Source: SD Department of Public Safety: Accident Records

## 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 34.1 percent of the fatal crashes and only 10.1 percent of the total crashes, while 28.3 percent of the fatal crashes and 41.7 percent of all crashes represented a collision between 2 or more vehicles (see TABLE 3-5).

TABLE 3-5  
FIRST HARMFUL EVENT  
2003

<u>First Harmful Event</u>	Total Crashes		Fatal Crashes		Injury Crashes		PDO Crashes	
	No.	%	No.	%	No.	%	No.	%
Motor Vehicle Collision With:								
Another MV (Not Parked)	7,513	41.7	49	28.3	2,674	55.9	4,790	36.7
A Fixed or Other Object	2,729	15.1	51	29.5	728	15.2	1,950	14.9
An Animal	5,082	28.2	2	1.2	125	2.6	4,955	37.9
A Pedestrian	86	0.5	9	5.2	77	1.6	0	0.0
A Bicyclist	111	0.6	1	0.6	108	2.3	2	0.0
A Parked Motor Vehicle	661	3.7	1	0.6	80	1.7	580	4.4
A Railroad Vehicle	11	0.1	1	0.6	6	0.1	4	0.0
Non-Collision (Overturning or Other)	1,825	10.1	59	34.1	983	20.6	783	6.0
Total	18,018	100	173	100	4,781	100	13,064	100

Source: SD Department of Public Safety: Accident Records

## Manner of Collision

The most common type or manner of collision between two or more vehicles is a rear-end collision. Rear-end collisions constitute 16.3 percent of the fatal crashes, 40.2 percent of the injury crashes, and 30.9 percent of the property damage only crashes. Head-on collisions are the most prevalent for severe crashes, accounting for 42.9 percent of the fatal crashes and only 1.9 percent of the total crashes. Rear-End collisions are second in prevalence for fatal crashes accounting for 16.3 percent of the fatal crashes and 34.1 percent of the total crashes (see TABLE 3-6).

TABLE 3-6  
MANNER OF COLLISION FOR CRASHES INVOLVING A COLLISION  
BETWEEN TWO OR MORE MOTOR VEHICLES  
2003

<u>Manner of Collision</u>	<u>Total Crashes</u>		<u>Fatal Crashes</u>		<u>Injury Crashes</u>		<u>PDO Crashes</u>	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
Rear-End	2,564	34.1	8	16.3	1,075	40.2	1,481	30.9
Head-On	141	1.9	21	42.9	73	2.7	47	1.0
Angle	1,705	22.7	7	14.3	648	24.2	1,050	21.9
Sideswipe-Same Direction	571	7.6	4	8.2	116	4.3	451	9.4
Sideswipe-Opposite Dir.	158	2.1	3	6.1	46	1.7	109	2.3
Turning Movement	2,073	27.6	6	12.2	688	25.7	1,379	28.8
Backing Movement	302	4.0	0	0.0	28	1.0	274	5.7
Total	7,514	100	49	100	2,674	100	4,791	100

Source: SD Department of Public Safety: Accident Records

## Highway System

The number of reported crashes by highway system is presented in TABLE 3-7. Injury and PDO crashes happen predominately within city limits. City streets and alleys experienced 28.0 percent of the PDO crashes and 36.2 percent of the injury crashes while accounting for 3.5 percent of the fatal crashes.

Non-interstate rural roads tallied 71.7 percent of the fatal crashes. The Interstate system experienced 2644 (14.7%) of the total crashes while accounting for an estimated 23 percent of the vehicle miles traveled in 2003. Thirty-six (20.8%) of the fatal crashes happened on the interstate system (see FIGURES 3-3 and 3-4).

TABLE 3-7  
CRASHES BY TYPE OF HIGHWAY  
2003

Type of Highway	Total Crashes		Fatal Crashes		Injury Crashes		PDO Crashes		No. Killed	No. Injured
	Number	%	Number	%	Number	%	Number	%		
Interstate - Rural	2,019	11.2	33	19.1	389	8.1	1,597	12.2	41	605
US/State Hwys.-Rural	4,284	23.8	59	34.1	753	15.7	3,472	26.6	69	1,227
Co./Local Rds.-Rural	3,415	19.0	65	37.6	900	18.8	2,450	18.8	75	1,336
Interstate - City	625	3.5	3	1.7	187	3.9	435	3.3	3	256
US/State Hwys.-City	2,285	12.7	7	4.0	822	17.2	1,456	11.1	8	1,175
City Streets/Alleys	5,390	29.9	6	3.5	1,730	36.2	3,654	28.0	7	2,345
Total	18,018	100	173	100	4,781	100	13,064	100	203	6,944

Source: SD Department of Public Safety: Accident Records



FIGURE 3-3 2003  
TRAFFIC CRASHES  
BY SYSTEM TYPE

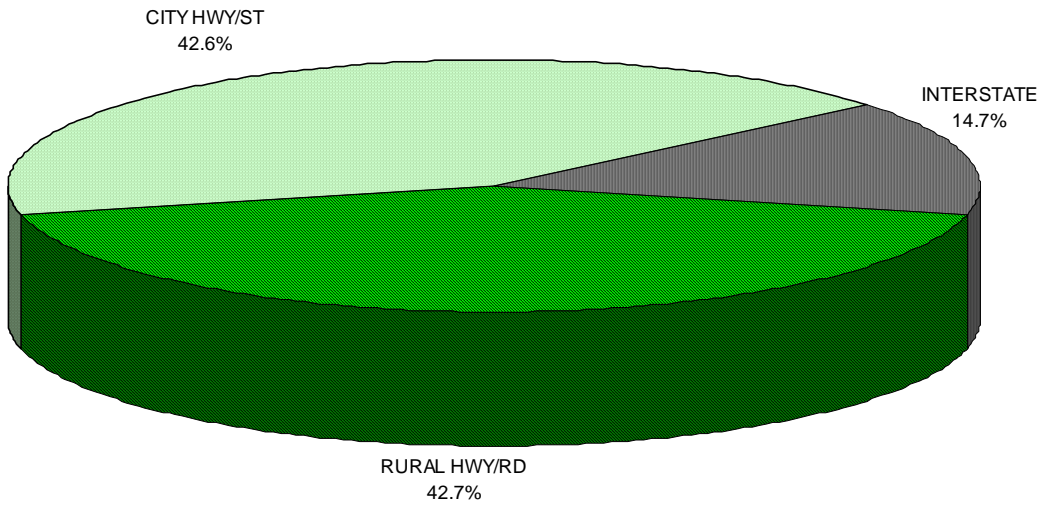
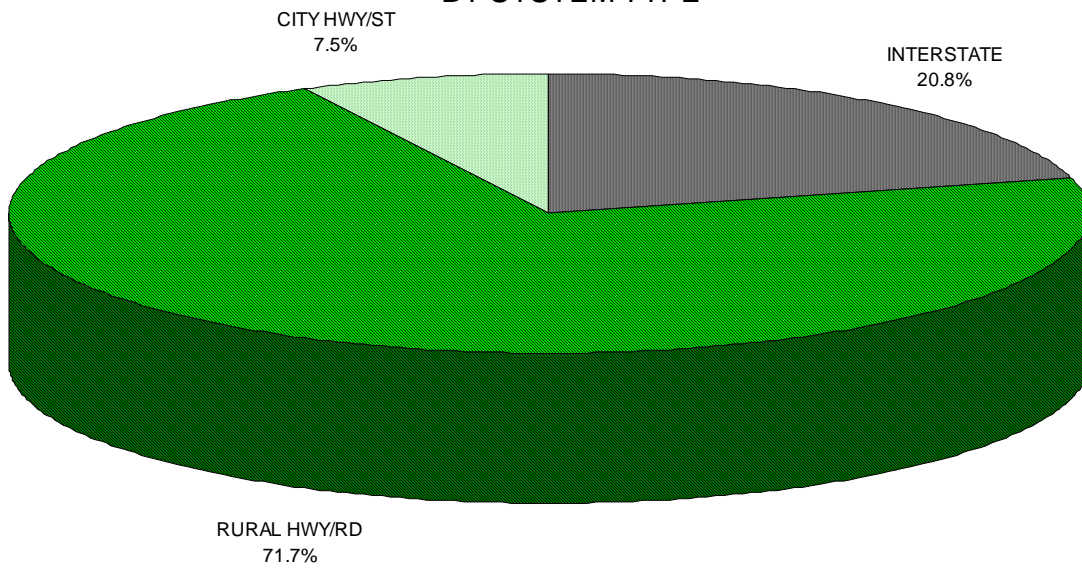


FIGURE 3-4 2003  
FATAL TRAFFIC CRASHES  
BY SYSTEM TYPE



## 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 50.6 percent of rural fatal and injury crashes and 22.5 percent of all fatal and injury crashes in South Dakota. Pennington County has 8.1 percent of all rural fatal and injury crashes with Minnehaha and Lawrence counties accounting for 8.0 and 7.1 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 53.6 percent of the statewide injury crashes and 8.7 percent of the fatal crashes. The two largest cities (Sioux Falls, Rapid City) accounted for 69.7 percent of fatal and injury crashes and 63.6 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 17.5 percent of all reported property damage crashes and 15.2 percent of all fatal and injury crashes. Dry roads were reported in 74.2 percent of all fatal and injury crashes.

## Contributing Circumstances (Vision Obscurement and Other)

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

Vision Obscurement - refers to conditions such as: fog or smoke, blowing soil, dirt or sand, rain, snow, sleet or hail, windshield or window obscured, glare from sun or lights, trees or other vegetation, snowbank, etc. Rain, snow, sleet or hail was the most frequently reported vision obscurement and was indicated as a problem in 4.5 percent of all crashes.

Contributing Circumstances - Other - These contributing circumstances include wind conditions, slippery surface, road shoulder conditions, objects or animals in the road, phantom vehicle, pedestrians, bicyclists, road construction conditions, rough roads, and faulty or missing traffic control devices. The most common condition reported was slippery surface, and it was reported as a factor in 14.6 percent of all crashes.

TABLE 3-8  
MOTOR VEHICLE TRAFFIC CRASHES BY SD COUNTIES

County	Total Crashes	Fatal Crashes	Injury Crashes	PDO Crashes	Fatalities	Injuries
AURORA	117	2	27	88	3	38
BEADLE	326	1	74	251	1	111
BENNETT	14	3	6	5	4	18
BON HOMME	95	1	10	84	1	12
BROOKINGS	624	3	153	468	3	209
BROWN	893	3	205	685	4	298
BRULE	136	2	30	104	2	51
BUFFALO	32	1	12	19	1	19
BUTTE	199	1	50	148	1	74
CAMPBELL	46	1	6	39	1	9
CHARLES MIX	107	4	28	75	4	49
CLARK	122	0	12	110	0	18
CLAY	202	7	53	142	8	84
CODINGTON	544	3	179	362	3	252
CORSON	65	5	16	44	6	29
CUSTER	295	1	87	207	1	126
DAVISON	567	8	107	452	8	153
DAY	75	1	22	52	6	31
DEUEL	169	0	32	137	0	52
DEWEY	43	1	8	34	1	14
DOUGLAS	27	0	7	20	0	10
EDMUNDS	118	2	16	100	2	22
FALL RIVER	126	1	40	85	1	65
FAULK	30	0	9	21	0	21
GRANT	217	2	50	165	2	80
GREGORY	58	2	20	36	2	41
HAAKON	62	0	12	50	0	17
HAMLIN	164	0	23	141	0	28
HAND	102	1	15	86	1	23
HANSON	135	0	25	110	0	35
HARDING	50	1	8	41	2	10
HUGHES	334	2	85	247	3	123
HUTCHINSON	87	0	24	63	0	31
HYDE	26	0	3	23	0	3
JACKSON	137	3	44	90	3	72
JERAULD	52	0	7	45	0	9
JONES	113	0	29	84	0	50
KINGSBURY	156	1	33	122	1	48
LAKE	262	1	38	223	1	53
LAWRENCE	605	7	200	398	7	291
LINCOLN	604	3	140	461	4	209
LYMAN	200	4	37	159	4	56
MC COOK	225	7	38	180	8	55
MC PHERSON	22	0	5	17	0	8
MARSHALL	144	1	20	123	1	27
MEADE	537	9	176	352	10	243
MELLETTTE	43	6	4	33	7	20
MINER	100	1	15	84	1	25
MINNEHAHA	4,130	15	1,369	2,746	19	1,874
MOODY	262	5	39	218	5	68
PENNINGTON	2,361	11	763	1,587	11	1,098
PERKINS	64	1	10	53	1	18
POTTER	66	1	10	55	1	13
ROBERTS	127	5	32	90	7	46
SANBORN	100	1	9	90	1	12
SHANNON	72	16	26	30	20	80
SPINK	242	0	30	212	0	42
STANLEY	88	0	22	66	0	29
SULLY	63	0	8	55	0	8
TODD	7	6	1	0	7	10
TRIPP	119	2	16	101	3	29
TURNER	176	1	40	135	1	57
UNION	270	4	63	203	6	96
WALWORTH	99	0	16	83	0	20
YANKTON	334	3	78	253	3	112
ZIEBACH	31	0	9	22	0	10
<b>Total:</b>	<b>18,018</b>	<b>173</b>	<b>4,781</b>	<b>13,064</b>	<b>203</b>	<b>6,944</b>

TABLE 3-8A  
ALCOHOL MOTOR VEHICLE TRAFFIC CRASHES BY SD COUNTIES  
2003

County	Total Crashes	Fatal Crashes	Injury Crashes	PDO Crashes	Fatalities	Injuries
AURORA	3	1	1	1	1	1
BEADLE	17	0	12	5	0	20
BENNETT	5	3	2	0	4	10
BON HOMME	5	0	3	2	0	3
BROOKINGS	38	1	23	14	1	28
BROWN	47	1	19	27	1	28
BRULE	11	0	8	3	0	13
BUFFALO	6	0	4	2	0	7
BUTTE	9	0	5	4	0	7
CAMPBELL	5	1	3	1	1	6
CHARLES MIX	19	2	9	8	2	22
CLARK	3	0	2	1	0	2
CLAY	20	2	10	8	3	16
CODINGTON	30	1	16	13	1	18
CORSON	11	3	5	3	4	13
CUSTER	10	0	5	5	0	6
DAVISON	31	2	14	15	2	22
DAY	6	1	4	1	6	8
DEUEL	7	0	5	2	0	6
DEWEY	6	1	3	2	1	8
DOUGLAS	1	0	1	0	0	1
EDMUNDS	9	2	2	5	2	2
FALL RIVER	13	0	5	8	0	12
FAULK	3	0	3	0	0	3
GRANT	14	0	8	6	0	13
GREGORY	7	0	6	1	0	12
HAAKON	6	0	4	2	0	6
HAMLIN	11	0	4	7	0	4
HAND	8	0	3	5	0	5
HANSON	5	0	3	2	0	6
HARDING	1	0	0	1	0	0
HUGHES	22	1	9	12	1	18
HUTCHINSON	6	0	6	0	0	6
HYDE	2	0	1	1	0	1
JACKSON	12	2	10	0	2	18
JERAULD	2	0	1	1	0	2
JONES	1	0	0	1	0	0
KINGSBURY	5	0	4	1	0	6
LAKE	14	1	5	8	1	5
LAWRENCE	43	2	22	19	2	30
LINCOLN	40	1	21	18	1	33
LYMAN	14	1	9	4	1	12
MC COOK	14	3	6	5	3	9
MARSHALL	9	1	3	5	1	5
MEADE	38	2	25	11	3	38
MELLETTTE	9	6	1	2	7	16
MINER	5	0	3	2	0	4
MINNEHAHA	324	8	159	157	9	223
MOODY	17	1	9	7	1	20
PENNINGTON	159	5	63	91	5	99
PERKINS	4	0	1	3	0	1
POTTER	1	1	0	0	1	0
ROBERTS	21	4	10	7	6	14
SANBORN	4	1	2	1	1	2
SHANNON	32	10	15	7	12	54
SPINK	13	0	4	9	0	6
STANLEY	2	0	1	1	0	2
SULLY	3	0	1	2	0	1
TODD	6	5	1	0	6	9
TRIPP	3	0	3	0	0	4
TURNER	13	1	10	2	1	14
UNION	15	0	10	5	0	13
WALWORTH	6	0	4	2	0	5
YANKTON	35	1	19	15	1	22
<b>Total:</b>	<b>1,261</b>	<b>78</b>	<b>630</b>	<b>553</b>	<b>94</b>	<b>1,000</b>

TABLE 3-9  
COUNTIES HAVING MORE THAN TWO PERCENT OF THE  
RURAL FATAL & INJURY CRASHES  
2003

<u>County</u>	<u>Rural Fatal &amp; Injury Crashes</u>	<u>Percent of All Rural Fatal &amp; Injury Crashes</u>	<u>Percent of Rural VMTS*</u>
PENNINGTON	178	8.1	7.1
MINNEHAHA	177	8.0	6.4
LAWRENCE	157	7.1	3.3
MEADE	137	6.2	3.5
LINCOLN	88	4.0	4.8
BROOKINGS	77	3.5	2.4
CUSTER	75	3.4	1.9
BROWN	71	3.2	2.8
UNION	55	2.5	4.1
CODINGTON	51	2.3	2.3
JACKSON	47	2.1	2.5

Note: Total Rural Fatal and Injury Crashes: 2,199

\*S.D. Vehicle Miles of Travel Report June 2002

Source: SD Department of Public Safety: Accident Records  
SD Department of Transportation: Data Inventory

**FIGURE 3-5 RURAL F&I CRASHES/VMTS  
SELECTED COUNTIES - 2003**

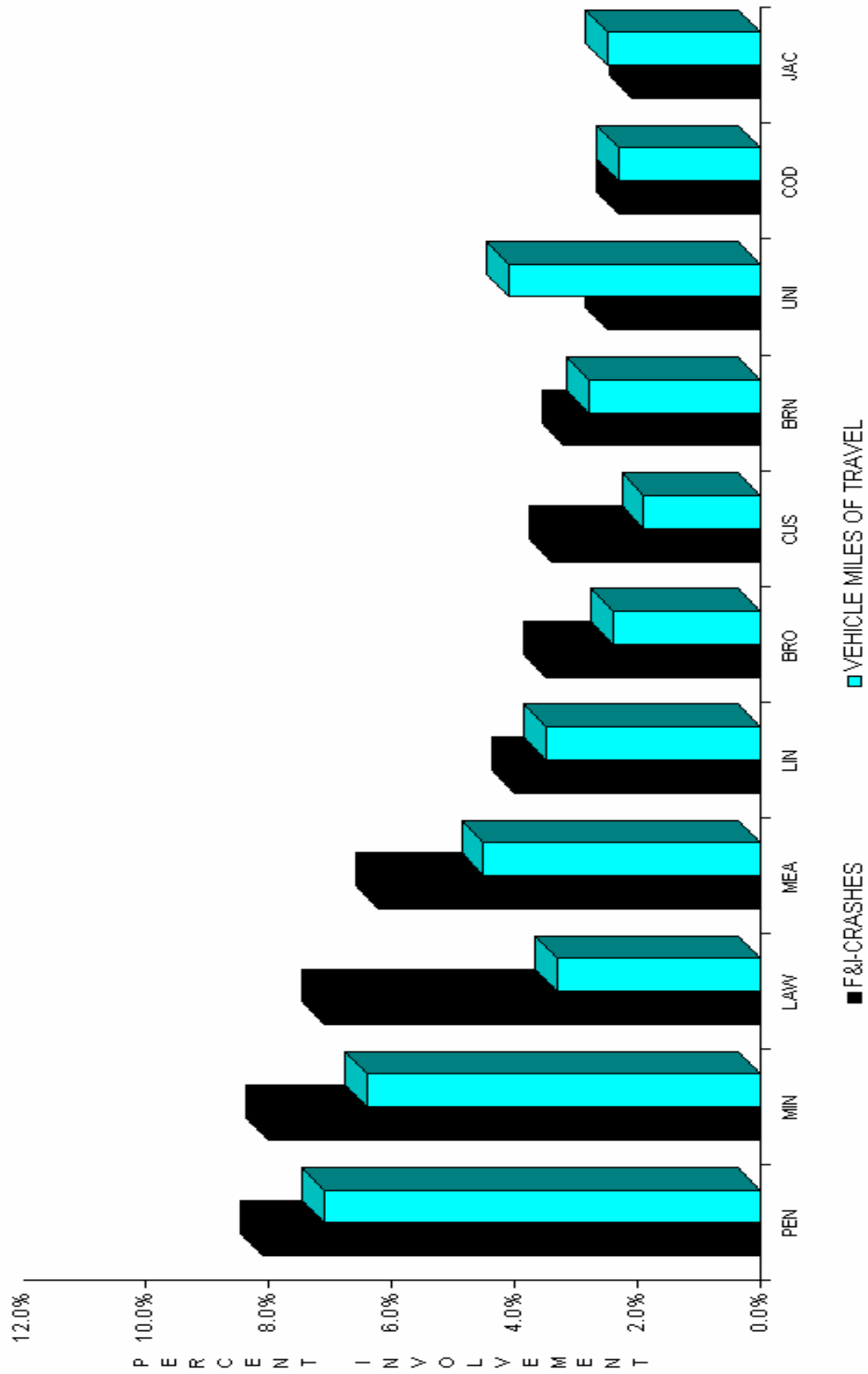


TABLE 3-10  
 TRAFFIC CRASHES SOUTH DAKOTA CITIES  
 POPULATION 2500 AND OVER  
 2003

<u>City</u>	<u>Total Crashes</u>	<u>Fatal Crashes</u>	<u>Injury Crashes</u>	<u>PDO Crashes</u>	<u>Fatalities</u>	<u>Injuries</u>
Aberdeen	432	0	134	298	0	183
Belle Fourche	50	0	11	39	0	14
Box Elder	46	0	18	28	0	30
Brandon City	36	0	9	27	0	13
Brookings	235	0	73	162	0	96
Canton	23	0	6	17	0	7
Hot Springs	34	0	5	29	0	8
Huron	105	0	38	67	0	60
Lead	26	0	6	20	0	6
Madison	63	0	7	56	0	11
Milbank	66	0	17	49	0	24
Mitchell	362	2	78	282	2	100
Mobridge	25	0	6	19	0	6
Pierre	218	1	67	150	1	90
Rapid City	1,658	3	564	1,091	3	793
Redfield	37	0	7	30	0	10
Sioux Falls	3,220	7	1,223	1,990	9	1,671
Sisseton	43	0	8	35	0	12
Spearfish	92	1	26	65	1	31
Sturgis	103	0	48	55	0	62
Vermillion	96	0	29	67	0	46
Watertown	282	1	128	153	1	180
Winner	20	0	3	17	0	6
Yankton	148	0	52	96	0	73

Source: SD Department of Public Safety: Accident Records

TABLE 3-11  
ROADWAY SURFACE CONDITIONS  
2003

	Total Crashes		Fatal Crashes		Injury Crashes		PDO Crashes	
	No.	%	No.	%	No.	%	No.	%
Dry	13,170	73.1	132	76.3	3,542	74.1	9,496	72.7
Wet	1,623	9.0	9	5.2	477	10.0	1,137	8.7
Ice	1,464	8.1	21	12.1	362	7.6	1,081	8.3
Frost	134	0.7	1	0.6	40	0.8	93	0.7
Slush	267	1.5	0	0.0	71	1.5	196	1.5
Snow	1,180	6.5	5	2.9	255	5.3	920	7.0
Mud	17	0.1	1	0.6	1	0.0	15	0.1
Other	32	0.2	0	0.0	17	0.4	15	0.1
Unknown	131	0.7	4	2.3	16	0.3	111	0.8
<b>Total</b>	<b>18,018</b>	<b>100</b>	<b>173</b>	<b>100</b>	<b>4,781</b>	<b>100</b>	<b>13,064</b>	<b>100</b>

Source: SD Department of Public Safety: Accident Records

#### 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-three (19.1%) 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 1,146 (24%) of the injury crashes occurred. The peak three hour period for property damage only crashes was 5:00-7:59 when 2,754 (21.1%) of the property damage only crashes occurred (see TABLE 3-12).

Thirt fatal crashes or 17.3 percent of the fatal crashes in 2003 occurred during August. The month of August shows 588 injury crashes or 12.3 percent of the injury crashes for 2003. The 1,840 property damage only crashes during November represent 14.1 percent of the property damage only crashes for 2003 (see TABLE 3-13).

The day of the week Friday accounts for nearly seventeen percent of the total crashes (3,053), seventeen percent of the injury crashes (815) and seventeen percent of the property damage only crashes (2,217). Saturday accounted for 31 fatal crashes or nearly 18 percent of the total for 2003 (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  
2003

<u>Time</u>	<u>Total Crashes</u>	<u>Fatal Crashes</u>	<u>Injury Crashes</u>	<u>PDO Crashes</u>	<u>Fatalities</u>	<u>Injuries</u>
Midnight	365	8	99	258	9	127
1:00 AM	297	5	77	215	6	102
2:00 AM	280	2	93	185	2	129
3:00 AM	221	1	57	163	1	79
4:00 AM	177	2	43	132	2	62
5:00 AM	429	5	64	360	5	82
6:00 AM	608	1	96	511	1	135
7:00 AM	1,028	6	248	774	7	345
8:00 AM	760	1	230	529	1	320
9:00 AM	605	4	195	406	4	277
10:00 AM	571	9	174	388	10	260
11:00 AM	765	6	250	509	7	352
12:00 PM	850	11	308	531	11	456
1:00 PM	818	2	283	533	2	393
2:00 PM	858	18	322	518	22	474
3:00 PM	1,161	14	410	737	19	572
4:00 PM	1,135	10	368	757	10	534
5:00 PM	1,334	9	368	957	15	570
6:00 PM	1,231	5	260	966	6	398
7:00 PM	1,066	13	222	831	14	356
8:00 PM	889	9	157	723	12	234
9:00 PM	1,031	11	155	865	11	217
10:00 PM	812	8	138	666	9	219
11:00 PM	539	4	121	414	6	188
Unknown	188	9	43	136	11	63
Total	18,018	173	4,781	13,064	203	6,944

Source: SD Department of Public Safety: Accident Records

TABLE 3-13  
CRASHES BY MONTH  
2003

<u>Month</u>	<u>Total Crashes</u>	<u>Fatal Crashes</u>	<u>Injury Crashes</u>	<u>PDO Crashes</u>	<u>Fatalities</u>	<u>Injuries</u>
JANUARY	1,519	13	349	1,157	18	514
FEBRUARY	1,402	14	349	1,039	16	474
MARCH	1,163	12	299	852	15	432
APRIL	1,121	11	334	776	12	477
MAY	1,391	22	380	989	24	573
JUNE	1,477	10	425	1,042	11	615
JULY	1,397	17	438	942	19	659
AUGUST	1,464	30	588	846	37	870
SEPTEMBER	1,340	11	391	938	15	584
OCTOBER	1,839	8	449	1,382	9	623
NOVEMBER	2,260	13	407	1,840	15	586
DECEMBER	1,645	12	372	1,261	12	537
Total	18,018	173	4,781	13,064	203	6,944

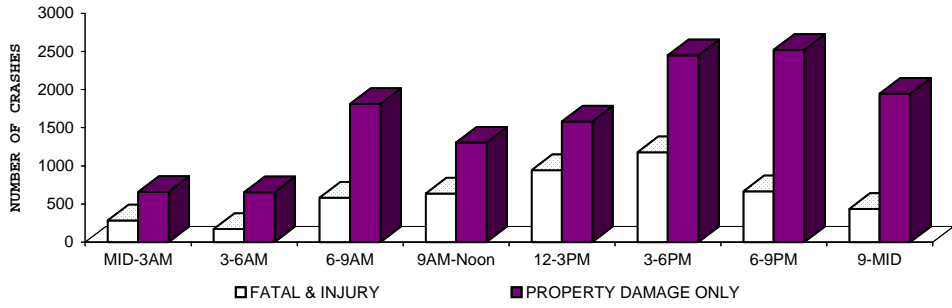
Source: SD Department of Public Safety: Accident Records

TABLE 3-14  
CRASHES BY DAY OF WEEK  
2003

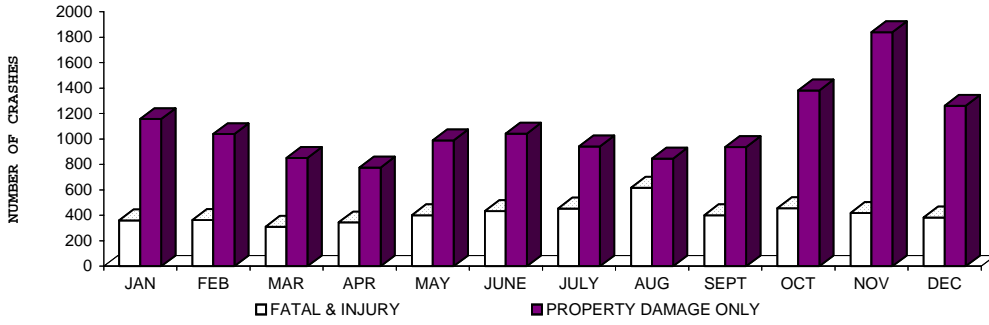
<u>Day</u>	<u>Total Crashes</u>	<u>Fatal Crashes</u>	<u>Injury Crashes</u>	<u>PDO Crashes</u>	<u>Fatalities</u>	<u>Injuries</u>
SUNDAY	2,121	24	545	1,552	30	827
MONDAY	2,582	24	669	1,889	29	936
TUESDAY	2,543	23	689	1,831	30	994
WEDNESDAY	2,550	20	654	1,876	21	935
THURSDAY	2,577	30	724	1,823	32	1038
FRIDAY	3,053	21	815	2,217	23	1165
SATURDAY	2,592	31	685	1,876	38	1049
Total	18,018	173	4,781	13,064	203	6,944

Source: SD Department of Public Safety: Accident Records

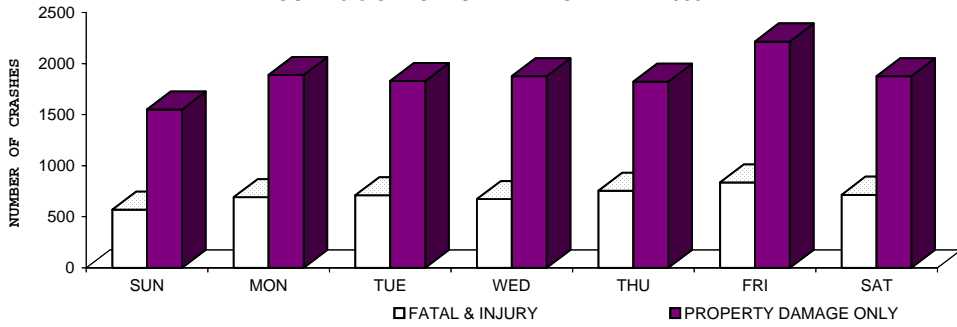
**FIGURE 3-6 CRASHES BY TIME OF DAY 2003**



**FIGURE 3-7 CRASHES BY MONTH 2003**



**FIGURE 3-8 CRASHES BY DAY OF WEEK 2003**



## Drivers

There were 26,102 motor vehicle drivers in the 18,018 reported motor vehicle crashes, including 224 drivers in fatal crashes and 7,799 drivers in injury crashes. One hundred and twenty-four drivers were killed, which is 61.1 percent of all persons killed in motor vehicle crashes and 68.5 percent or 4,755 of the 6,944 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 33 percent of the drivers were under 25 years of age and 50.4 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 28.6 percent of the drivers involved in fatal crashes and 35.6 percent of the drivers in injury crashes. Drivers under the age of 35 make up 49.6 percent of the drivers in fatal crashes and 52.9 percent of the drivers in injury crashes. Seventy-nine (35.3%) of the drivers in fatal crashes were 21-34 years of age (see TABLE 3-15).

TABLE 3-15  
AGE OF DRIVERS IN CRASHES  
2003

Age	Drivers In All Crashes		Drivers In Fatal Crashes		Drivers In Injury Crashes		Drivers In PDO Crashes	
	No.	%	No.	%	No.	%	No.	%
6 - 13	30	0.1	2	0.9	13	0.2	15	0.1
14 - 15	747	2.9	3	1.3	262	3.4	482	2.7
16 - 17	2,044	7.8	14	6.3	677	8.7	1,353	7.5
18	1,048	4.0	5	2.2	354	4.5	689	3.8
19	986	3.8	5	2.2	298	3.8	683	3.8
20	864	3.3	3	1.3	291	3.7	570	3.2
21 - 24	2,890	11.1	32	14.3	881	11.3	1,977	10.9
25 - 34	4,557	17.5	47	21.0	1,352	17.3	3,158	17.5
35 - 44	4,290	16.4	34	15.2	1,195	15.3	3,061	16.9
45 - 54	3,923	15.0	37	16.5	1,112	14.3	2,774	15.3
55 - 64	2,175	8.3	13	5.8	659	8.4	1,503	8.3
65 - Over	2,344	9.0	22	9.8	659	8.4	1,663	9.2
Unknown	204	0.8	7	3.1	46	0.6	151	0.8
Total	26,102	100	224	100	7,799	100	18,079	100

Source: SD Department of Public Safety: Accident Records

TABLE 3-16 provides information on the age of drinking drivers in motor vehicle crashes. There were a reported 1,272 drinking drivers in all crashes which is 4.9 percent of all drivers in crashes. Seventy-six or 33.9 percent of drivers in fatal crashes had been drinking while 8.1 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 32.9 percent of the drinking drivers in fatal crashes and 40.4 percent of the drinking drivers in injury crashes. Those drivers under 35 years of age accounted for 60.5 percent of the drinking drivers in fatal crashes and 66.5 percent of the drinking drivers in all crashes.

TABLE 3-16  
AGE OF DRINKING DRIVERS IN CRASHES  
2003

Age	Drivers In All Crashes		Drivers In Fatal Crashes		Drivers In Injury Crashes		Drivers In PDO Crashes	
	No.	%	No.	%	No.	%	No.	%
6 - 13	2	0.2	0	0.0	1	0.2	1	0.2
14 - 15	8	0.6	1	1.3	3	0.5	4	0.7
16 - 17	58	4.6	3	3.9	26	4.1	29	5.1
18	55	4.3	4	5.3	40	6.3	11	1.9
19	72	5.7	2	2.6	30	4.8	40	7.1
20	61	4.8	1	1.3	31	4.9	29	5.1
21 - 24	257	20.2	14	18.4	124	19.7	119	21.1
25 - 34	333	26.2	21	27.6	165	26.1	147	26.0
35 - 44	213	16.7	12	15.8	111	17.6	90	15.9
45 - 54	132	10.4	12	15.8	69	10.9	51	9.0
55 - 64	47	3.7	2	2.6	21	3.3	24	4.2
65 - Over	23	1.8	0	0.0	8	1.3	15	2.7
Unknown	11	0.9	4	5.3	2	0.3	5	0.9
Total	1,272	100	76	100	631	100	565	100

Source: SD Department of Public Safety: Accident Records

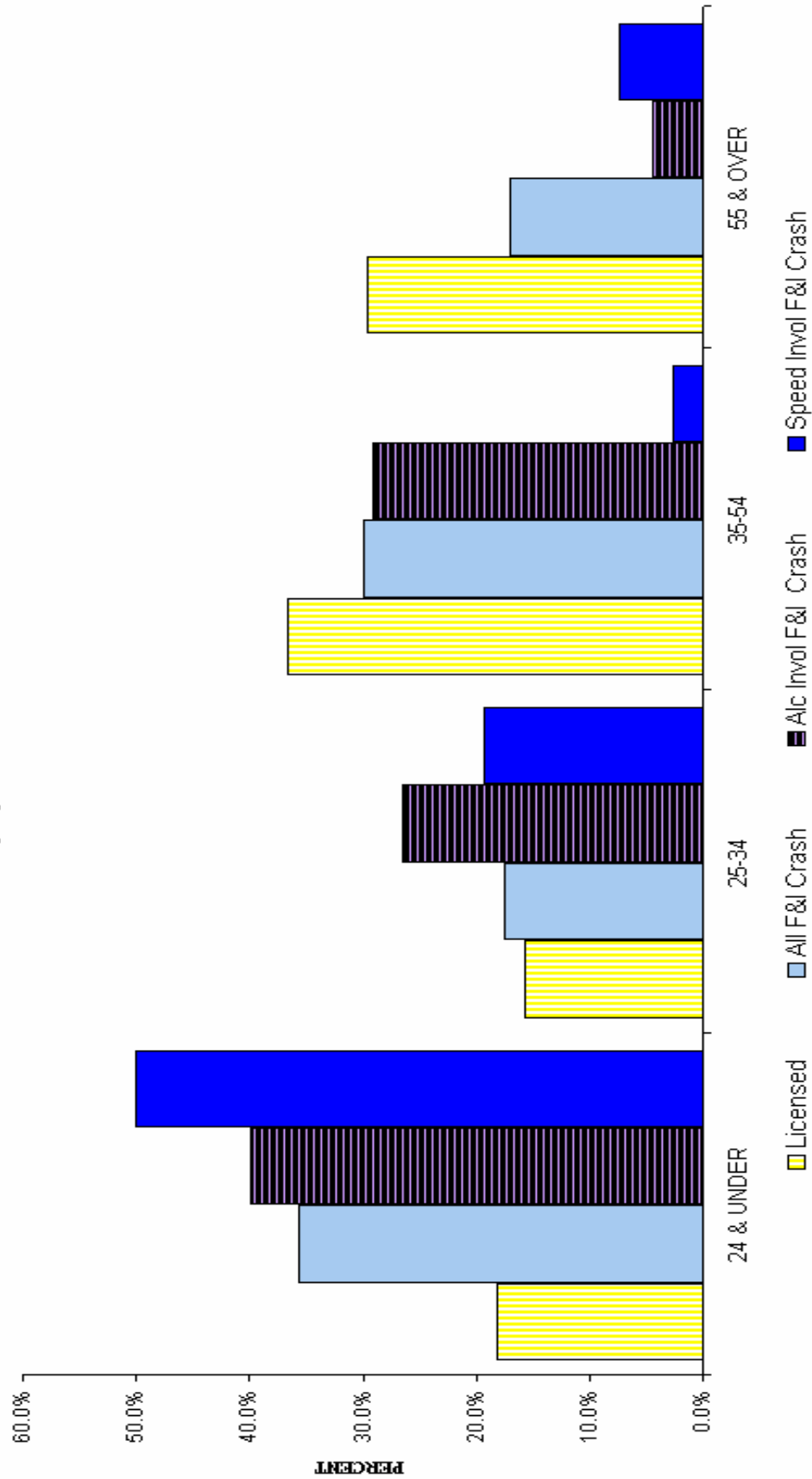
TABLE 3-17 compares age of drivers in fatal and injury crashes, drinking drivers in fatal and injury crashes, and speeding drivers in fatal and injury crashes with licensed drivers by age. The young driver is over represented as those drivers in fatal and injury crashes, drinking drivers in fatal and injury crashes, and speeding drivers in fatal and injury crashes. Licensed drivers in South Dakota under 25 years of age represent 18.1 percent of the total licensed drivers, 39.6 percent of the drinking drivers in fatal and injury crashes and 49.9 percent of the speeding drivers in fatal and injury crashes. Nearly 66 percent of the drinking drivers and 69.2 percent of the speeding drivers in fatal and injury crashes were under 35 years of age while drivers under 35 years of age constitute 33.8 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  
2003

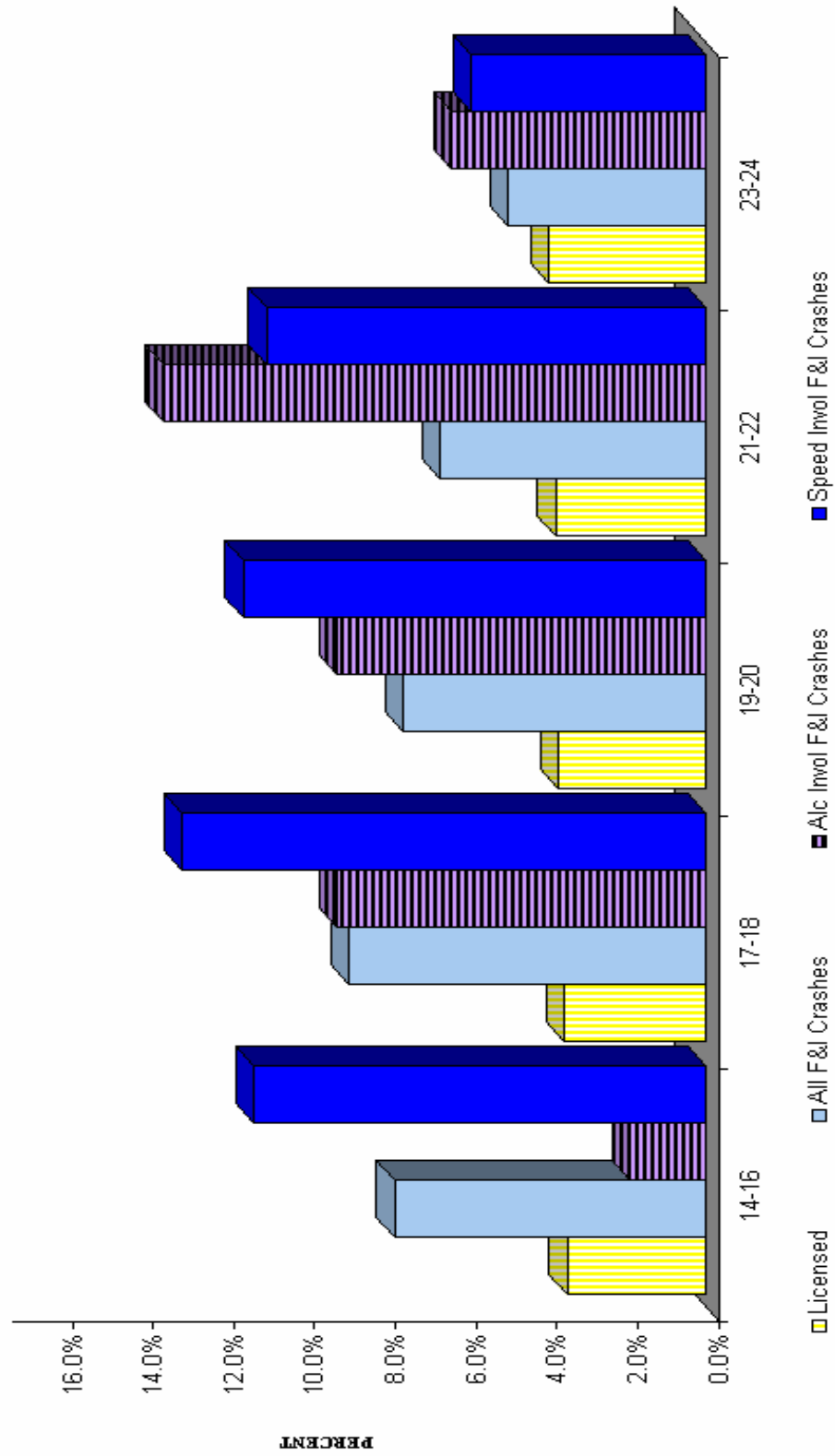
Age	Licensed Drivers		Drivers In Fatal & Injury Crashes		Drinking Drivers In Fatal & Injury Crashes		Speeding Drivers In Fatal & Injury Crashes	
	No.	%	No.	%	No.	%	No.	%
0 - 13		0.0	15	0.2	1	0.1	4	0.3
14 - 15		1.9	265	3.3	4	0.6	60	5.0
16 - 17		3.2	691	8.6	29	4.1	149	12.3
18		1.8	359	4.5	44	6.2	82	6.8
19		1.8	303	3.8	32	4.5	75	6.2
20		1.8	294	3.7	32	4.5	63	5.2
21 - 24		7.6	913	11.4	138	19.5	171	14.1
25 - 34		15.7	1,399	17.4	186	26.3	233	19.3
35 - 44		17.8	1,229	15.3	123	17.4	135	11.2
45 - 54		18.8	1,149	14.3	81	11.5	146	12.1
55 - 64		12.8	672	8.4	23	3.3	51	4.2
65 - Over		16.8	681	8.5	8	1.1	37	3.1
Unknown		0.0	53	0.7	6	0.8	4	0.3
TOTAL		100	8,023	100	707	100	1,210	100

Sources: SD Department of Public Safety: Accident Records  
SD Department of Public Safety: Driver License Issuance

**FIGURE 3-9 DRIVERS BY AGE GROUP 2003**  
**Fatal and Injury Crash Involved Drivers**



**FIGURE 3-10 YOUNG DRIVERS 2003  
FATAL & INJURY CRASH INVOLVED DRIVERS**





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 was the leading driver contributing circumstance in fatal crashes during 2003. It was indicated that the drinking of 76 or 33.9 percent of the drivers in fatal crashes contributed to the crash. Exceeding the speed limit and driving on the wrong side of the road were the other leading driver contributing circumstances in fatal crashes. Failing to yield to another vehicle was the leading contributing circumstance in injury crashes. Exceeding a safe speed but not the legal limit, following too closely and drinking were other leading driver contributing circumstances in injury crashes (see TABLE 3-18).

TABLE 3-18  
MOTOR VEHICLE DRIVER CONTRIBUTING CIRCUMSTANCES  
2003

	Total Crashes		Fatal Crashes		Injury Crashes		PDO Crashes	
	No.	%	No.	%	No.	%	No.	%
Drinking	1,272	4.9	76	33.9	631	8.1	565	3.1
Exceeded Speed Limit	926	3.5	53	23.7	469	6.0	404	2.2
Wrong Side of Road	351	1.3	27	12.1	158	2.0	166	0.9
Exceeded Safe Speed But Not Limit	2,009	7.7	26	11.6	662	8.5	1,321	7.3
Failed to Yield to Vehicle	2,913	11.2	7	3.1	1,097	14.1	1,809	10.0
Failed to Stop for Stop Sign or Flashing Red	372	1.4	8	3.6	153	2.0	211	1.2
Fell Asleep	297	1.1	9	4.0	131	1.7	157	0.9
Improper Passing	193	0.7	5	2.2	56	0.7	132	0.7
Distracted by Object/ Person in Car	727	2.8	11	4.9	309	4.0	407	2.3
Improper Turn	496	1.9	5	2.2	156	2.0	335	1.9
Following Too Closely	1,278	4.9	1	0.4	517	6.6	760	4.2
Improper Backing	333	1.3	1	0.4	26	0.3	306	1.7
Other*	2,379	9.1	20	8.9	911	11.7	1,448	8.0
Unknown	519	2.0	13	5.8	171	2.2	335	1.9
Not Stated*	4,592	17.6	1	0.4	0	2.2	4,591	25.4
Total Drivers	26,102		224		7,799		18,079	

Note: The investigating officer may assign from zero to three contributing circumstances to each driver, therefore, the number of drivers in motor vehicle crashes does not equal the number of contributing circumstances. The number of drivers having drinking as a contributing circumstance is equal to the number of reported drinking drivers in crashes.

\*Other includes driving under posted minimum, failed to yield to pedestrian, disregarded stop and go signal, disregarded other traffic control devices, improper signal or failure to signal, turning from wrong lane, improper lane change, improper start from parked position, improper parking, failure to comply with license restrictions, 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.

Source: SD Department of Public Safety: Accident Records

## Motorcycles

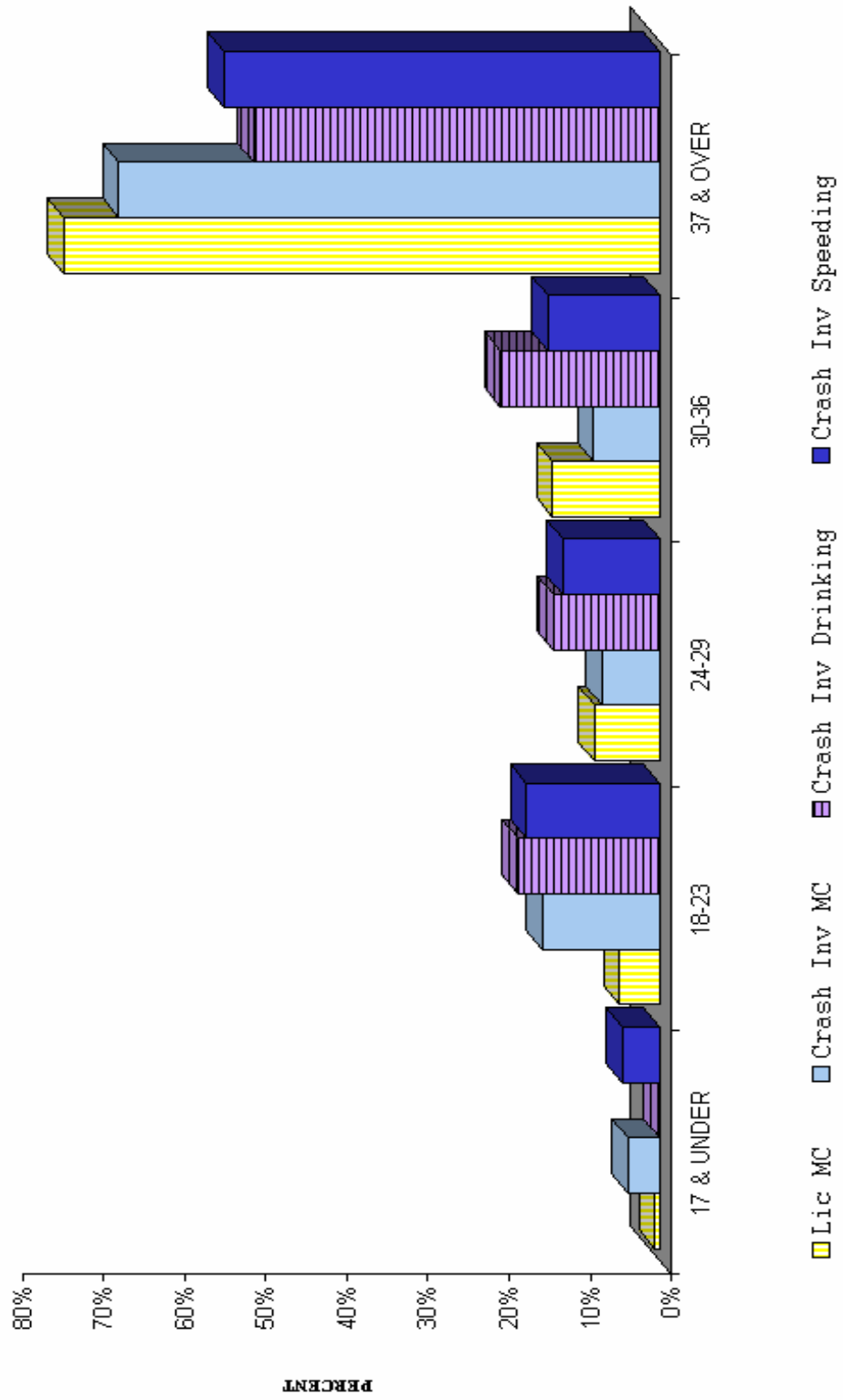
Motorcycle crashes constitute 2.9 percent of all crashes, 12.1 percent of all fatal crashes, and 9.4 percent of all injury crashes. There were 21 people killed and 568 injured on motorcycles in the 515 reported motorcycle crashes during 2003 (see TABLE 2-7). The young motorcycle driver is over represented 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, 8.6 percent of drivers involved in motorcycle crashes, and 9.1 percent of the speeding drivers involved in motorcycle crashes (see TABLE 3-19 and FIGURE 3-11).

TABLE 3-19  
MOTORCYCLISTS BY AGE GROUP  
2003

Age Group	Licensed Motorcyclists		Motorcycle Drivers In Crashes		Drinking Motorcycle Drivers In Crashes		Speeding Motorcycle Drivers In Crashes	
	No.	%	No.	%	No.	%	No.	%
0 - 13	0	0.0	4	0.7	0	0.0	0	0.0
14 - 15	50	0.1	2	0.4	0	0.0	1	0.9
16 - 17	265	0.4	16	2.8	0	0.0	4	3.6
18 - 19	652	1.1	27	4.7	1	2.2	5	4.5
20 - 21	920	1.5	27	4.7	3	6.5	9	8.2
22 - 23	1,344	2.2	28	4.9	4	8.7	4	3.6
24 - 25	1,489	2.5	10	1.8	1	2.2	4	3.6
26 - 27	1,568	2.6	16	2.8	3	6.5	6	5.5
28 - 29	1,746	2.9	14	2.5	2	4.4	3	2.7
30 - 31	1,888	3.1	8	1.4	1	2.2	2	1.8
32 - 36	5,980	10.0	38	6.7	8	17.4	13	11.8
37 - 41	7,974	13.3	63	11.1	5	10.9	10	9.1
42 - 51	18,797	31.3	166	29.1	17	37.0	30	27.3
52 - Over	17,298	28.8	151	26.5	1	2.2	19	17.3
Unknown	0	0.0	0	0.0	0	0.0	0	0.0
Total	59,971	100	570	100	46	100	110	100

Sources: SD Department of Public Safety: Driver License Issuance  
SD Department of Public Safety: Accident Records

**FIGURE 3-11 MOTORCYCLISTS 2003  
CRASH INVOLVED MOTORCYCLE & MOPED DRIVERS**



There were 21 motorcyclist fatalities during 2003. Twenty were motorcycle drivers. One driver wore helmet and eye protection, two wore helmet only, eight wore eye protection only and eight did not wear restraints. Unknown helmet usage was reported for one driver. One motorcycle passenger fatality wore eye protection only. Helmets were used by 128 or 23.1 percent of the motorcycle drivers in crashes while 426 or 76.9 percent did not wear a helmet (see TABLE 3-20).

TABLE 3-20  
HELMET USE BY MOTORCYCLE DRIVERS IN CRASHES  
2003

<u>Age</u>	Helmet Used		Helmet Not Used	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
6 - 13	1	25.0	3	75.0
14 - 15	2	100.0	0	0.0
16 - 17	9	56.3	7	43.8
18 - 20	7	18.9	30	81.1
21 - 24	10	20.8	38	79.2
25 - 34	15	25.0	45	75.0
35 - 44	20	17.7	93	82.3
45 - Over	64	23.4	210	76.6
Unknown	0	0.0	0	0.0
Total	128	23.1	426	76.9

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.

Source: SD Department of Public Safety: Accident Records

## Pedestrians

There were ten pedestrian deaths and 91 injuries in motor vehicle crashes during 2003 (see TABLE 3-21). The youngest pedestrian killed was fourteen years old, while the oldest was 69. Of the injured pedestrians, 20.9 percent were between the ages of 6-13. Cities accounted for 85.7 percent of the pedestrian injuries and 30 percent of the fatalities (see TABLE 3-23). Of the 10 pedestrians killed, 5 were male and 5 female. Of the 91 injured, 49 were male and 42 female.

Officers reported that seven of the 10 pedestrians killed had been drinking alcohol (see TABLE 3-22).

TABLE 3-21  
AGE OF PEDESTRIANS IN TRAFFIC CRASHES  
2003

<u>Age</u>	<u>Fatalities</u>		<u>Injuries</u>	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
0 - 5	0	0.0	7	7.7
6 - 13	0	0.0	19	20.9
14 - 19	2	20.0	7	7.7
20 - 24	0	0.0	11	12.1
25 - 34	1	10.0	14	15.4
35 - 44	2	20.0	3	3.3
45 - 54	3	30.0	14	15.4
55 - 64	1	10.0	7	7.7
65 - Over	1	10.0	9	9.9
Total	10	100	91	100

Source: SD Department of Public Safety: Accident Records

TABLE 3-22  
ALCOHOL INVOLVEMENT BY PEDESTRIANS  
2003

<u>Alcohol Involvement</u>	<u>Fatalities</u>		<u>Injuries</u>	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
Alcohol or Drugs	7	70.0	16	17.6
No Alcohol	3	30.0	70	76.9
Unknown	0	0.0	5	5.5
Total	10	100	91	100

Source: SD Department of Public Safety: Accident Records

TABLE 3-23  
RURAL vs. CITY PEDESTRIAN CRASHES  
2003

	<u>Fatalities</u>		<u>Injuries</u>	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
Rural	7	70.0	13	14.3
City	3	30.0	78	85.7
Total	10	100	91	100

Source: SD Department of Public Safety: Accident Records

## Bicycles

During 2003 there was one bicyclist killed (see TABLE 2-9). There were 107 bicycle drivers injured in reported motor vehicle crashes during 2003 (see TABLE 3-24). The leading factor in bicycle involved crashes was the bicycle driver failing to yield to a motor vehicle which was reported for 31.9 percent of the injured bicycle drivers. Forty-five of the bicycle drivers in crashes had no contributing circumstances. The yearly 1983-2003 trend of bicycle fatalities and injuries is provided in TABLE 2-9.

TABLE 3-24  
AGE OF BICYCLE DRIVERS IN TRAFFIC CRASHES  
2003

<u>Age</u>	<u>Fatalities Number</u>	<u>Injuries Number</u>	<u>%</u>
0 - 5	0	1	0.9
6 - 13	0	54	50.5
14 - 19	1	17	15.9
20 - 24	0	8	7.5
25 - 34	0	10	9.3
35 - 44	0	7	6.5
45 - 54	0	7	6.5
55 - 64	0	2	1.9
65 - Over	0	1	0.9
Total	1	107	100

Source: SD Department of Public Safety: Accident Records



#### **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.

#### 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.

Fatal Crash: 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.

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

Property Damage Only (PDO) Crash: 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.

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

Economic Loss: the calculable costs of motor vehicle crashes are wage loss, medical expense, insurance administration cost, and property damage. (Source: Estimating the Costs of Unintentional Injuries, 2002, National Safety Council)

"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."

1,600 copies of this document were printed by the Department of Public Safety at the cost of \$1.73 per copy.



MARKS

SPOT

THE

**THINK!**

DRIVE  
SAFELY