

2002
South Dakota
**Motor Vehicle
Traffic Crash
Summary**



Prepared By
Department of Public Safety
Office of Accident Records

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Governor



STATE OF SOUTH DAKOTA

M. MICHAEL ROUNDS, GOVERNOR

May 12, 2003

My Fellow South Dakotans:

The 2002 South Dakota Motor Vehicle Traffic Accident Summary is a sobering reminder that not a day goes by without a traffic crash occurring in South Dakota. This booklet contains valuable information to help us realize the human and financial cost of motor vehicle crashes, identify traffic safety problems and work toward effective countermeasures to 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 our law enforcement agencies. We also need to increase our efforts to prevent underage persons from obtaining and consuming alcoholic beverages. We cannot afford to be complacent when 40.7 percent of the drinking drivers involved in fatal or injury crashes were under age 25 with 53 percent of these under the legal drinking age of 21.

Speeding or exceeding a safe speed is second only to failing to yield as the leading contributing factor in our motor vehicle crashes. Drivers under the age of 25 are over-represented in speed-related fatal and injury crashes. While they account for only 18.5 percent of the total drivers in South Dakota, they are involved in 53.6 percent of the speed-related fatal and injury crashes.

The use of child safety seats, booster seats, and safety belts has increased significantly in South Dakota in the past 2 years but our statewide use of passenger safety restraints is still too low. Safety seat and safety belt usage increases the odds of surviving traffic crashes by approximately 50 percent. This booklet reinforces the need to continue promoting a strong safety message and the use of safety equipment to protect occupants traveling in motor vehicles on South Dakota roadways.

I encourage you to review the information in this booklet and to do your part to help us improve traffic safety in South Dakota.

Sincerely,



M. Michael Rounds

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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 2002 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 2002 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 2002 Traffic Crash Profile section details the crash picture for 2002 as well as a glossary of terms.

The majority of the information in this book is provided by the Office of Accident Records 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 the Office of Accident Records. These reports are available to the public for a search fee of four dollars.

Examples of reports available through the Office of Accident Records 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:

Office of Accident Records
118 West Capitol Ave.
Pierre, SD 57501
Phone: (605) 773-4156
E-mail: ARInfo@state.sd.us

**SOUTH DAKOTA
TRAFFIC STATISTICAL SUMMARY
2002**

ONE TRAFFIC CRASH OCCURRED EVERY **30** MINUTES, AN INJURY WAS SUSTAINED **NEARLY EVERY HOUR** AND A DEATH OCCURRED EVERY **49** HOURS.

NUMBER OF REPORTED MOTOR VEHICLE TRAFFIC CRASHES: **17,335**

AMOUNT OF MOTOR VEHICLE TRAFFIC CRASH PROPERTY DAMAGE: **\$80 million**

NUMBER OF MOTOR VEHICLE TRAFFIC CRASH INJURIES: **6,997**

NUMBER OF MOTOR VEHICLE TRAFFIC CRASH FATALITIES: **180**

FATALITY RATE PER 100,000,000 MILES OF TRAVEL: **2.15**

PERCENT OF DRIVERS IN FATAL CRASHES WHO HAD BEEN DRINKING: **34.7%**

NUMBER KILLED IN ALCOHOL-RELATED CRASHES: **91**

NUMBER INJURED IN ALCOHOL-RELATED CRASHES: **991**

NUMBER OF PEDESTRIANS KILLED: **8**

NUMBER OF MOTORCYCLISTS KILLED: **20**

NUMBER OF BICYCLISTS KILLED: **1**

PERCENT OF LICENSED DRIVERS UNDER 25: **18.5 %**

PERCENT OF CRASH-INVOLVED SPEEDING DRIVERS UNDER 25: **53.8%**

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

NUMBER OF OCCUPANTS KILLED IN MOTOR VEHICLES: **151, 35** WERE WEARING A SAFETY RESTRAINT (EXCLUDES MOPED, MOTORCYCLE & SNOWMOBILE OCCUPANTS)

NUMBER OF DWI CONVICTIONS: **5,858** (Source: Dept. of Commerce & Regulation-Driver Improvement)

NUMBER OF UNRESTRAINED OCCUPANTS UNDER 5 YEARS OF AGE KILLED IN MOTOR VEHICLE CRASHES: **2**, NUMBER KILLED WITH RESTRAINTS USED: **0**

ECONOMIC LOSS FROM MOTOR VEHICLE TRAFFIC CRASHES: **\$378 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 1993-2002 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
1993-2002**

<u>State</u>	<u>1993</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>
South Dakota	1.9	2.0	2.1	2.2	1.9	2.1	1.8	2.1	2.0	2.2
Iowa	1.8	1.8	2.0	1.7	1.7	1.5	1.6	1.5	1.5	1.3
Minnesota	1.3	1.5	1.4	1.3	1.3	1.3	1.3	1.2	1.1	1.2
Montana	2.3	2.3	2.3	2.1	2.8	2.5	2.3	2.4	2.3	2.7
Nebraska	1.7	1.8	1.6	1.8	1.8	1.8	1.7	1.6	1.8	1.8
North Dakota	1.5	1.4	1.1	1.3	1.5	1.1	1.6	1.2	1.5	1.4
Wyoming	1.9	2.1	2.4	2.0	1.9	1.9	2.4	1.9	2.3	2.2
National	1.7	1.7	1.7	1.7	1.7	1.6	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 1971 through 2002. 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. There does not appear to be a single reason why there are fewer fatalities; however, the national 55 mph speed limit law initiated in 1974 and the increased efforts in the drinking driving area in 1981 have probably had the most impact. Other factors include improvements in the highways, safer vehicles, and traffic enforcement efforts. Using vehicle miles of travel, the 2002 death rate increased to 2.15, a 4.9% increase from the 2001 death rate of 2.04. The 2.15 death rate is the highest death rate since 1992 when the rate was 2.24. The 6,997 people injured is a 1.7% decrease from the 7,118 for 2001 (see TABLE 2-2).

FIGURE 2-1 FATALITY RATE COMPARISON

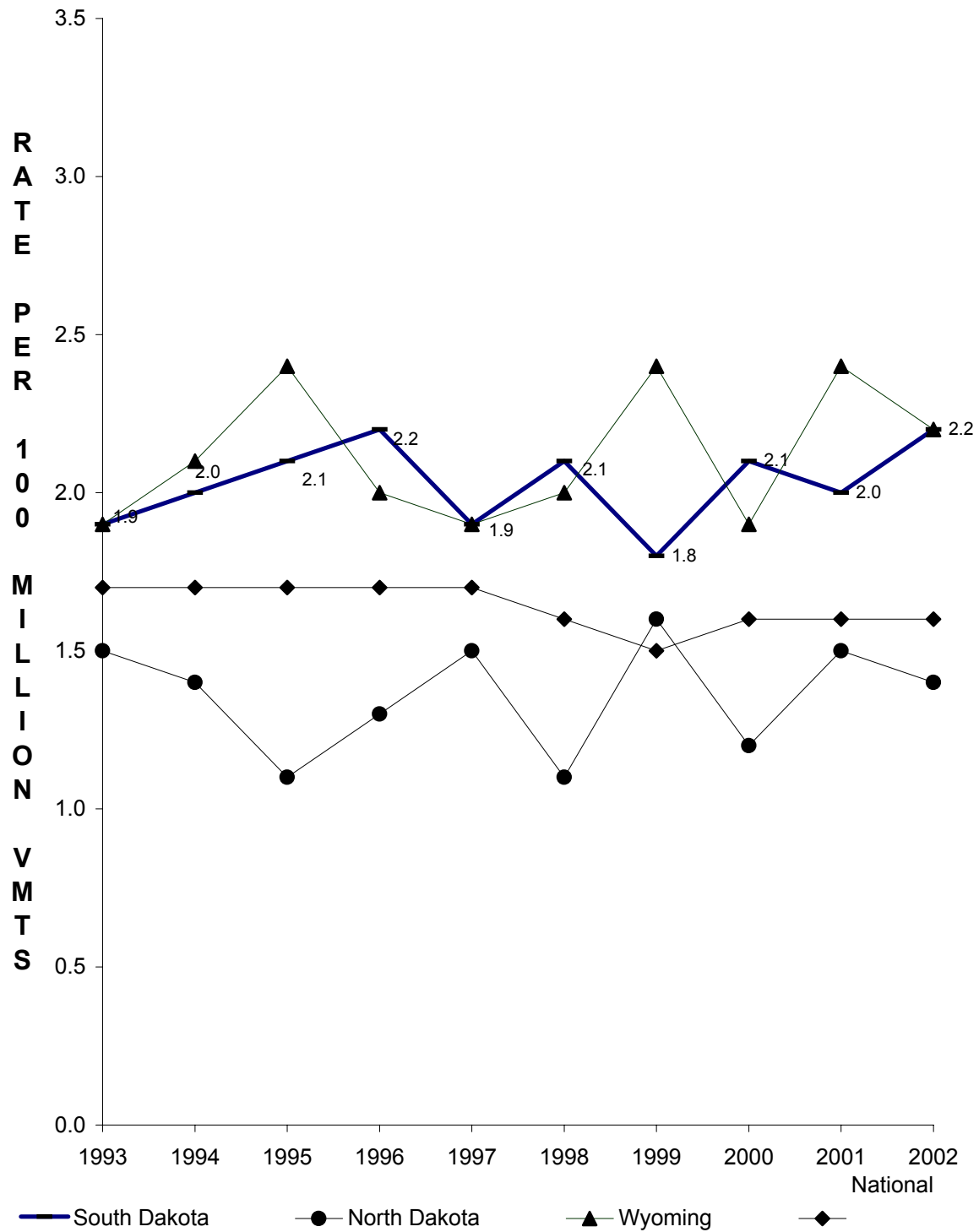


TABLE 2-2
SOUTH DAKOTA YEARLY COMPARISON
OF MOTOR VEHICLE TRAFFIC FATALITIES, INJURIES,
CRASHES, MILES TRAVELED, & REGISTERED MOTOR VEHICLES

Year	Deaths	Death Rate ¹	Injuries	Total Crashes	Total Crashes Rate ⁴	Fatal Crashes	Injury Crashes	PDO ² Crashes	Miles ³ Traveled +(000,000)	Registered Motor Vehicles +(000)
1971	262	5.36	6,705	16,995	347.97	210	4,152	12,633	4,884	444
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 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

¹ Number of deaths per 100 million vehicle miles traveled.

² 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.

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 Public Safety. Note! This revision of the miles traveled has caused the Death Rates to be adjusted also. Current year 2002 may be adjusted and updated in next year's publication.

⁴ Number of crashes per 100 million vehicle miles traveled.

Source: SD Department of Public Safety: Accident Records

Alcohol Involvement

There were 91 people killed in alcohol related crashes during 2002. This represents 50.6 percent of the total fatalities (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
1996-2002

	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>
Total Crashes	7.0 (1508)	6.9 (1449)	7.1 (1393)	6.4 (1290)	6.8 (1331)	6.4 (1137)	7.3 (1265)
Fatal Crashes	38.0 (54)	39.1 (50)	40.3 (60)	42.6 (58)	43.3 (65)	42.2 (65)	47.8 (76)
Injury Crashes	12.8 (722)	12.0 (656)	12.9 (662)	12.6 (634)	12.3 (648)	11.5 (563)	13.5 (635)
PDO Crashes	4.6 (732)	4.9 (743)	4.6 (671)	4.0 (598)	4.4 (618)	4.0 (509)	4.4 (554)
Fatalities	38.9 (68)	39.9 (59)	39.4 (65)	41.3 (62)	44.5 (77)	43.9 (75)	50.6 (91)
Injuries	13.8 (1170)	12.5 (1024)	13.9 (1074)	13.6 (1027)	13.7 (1078)	12.0 (851)	14.2 (991)

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- 2002

<u>AGE</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>
0 - 5	2	1	1	0	0	0	0
6 - 12	2	1	0	1	1	2	2
13 - 19	10	17	15	11	11	9	15
20	2	3	2	2	1	2	3
21 - 29	18	10	19	16	25	23	19
30 - 39	15	14	14	10	21	16	18
40 - 49	5	6	9	11	9	10	17
50 - 59	7	3	4	6	4	4	9
60 & OLDER	7	4	1	5	5	8	8
Unknown/Not Stated	0	0	0	0	0	1	0
TOTAL	68	59	65	62	77	75	91

Source: SD Department of Public Safety: Accident Records

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

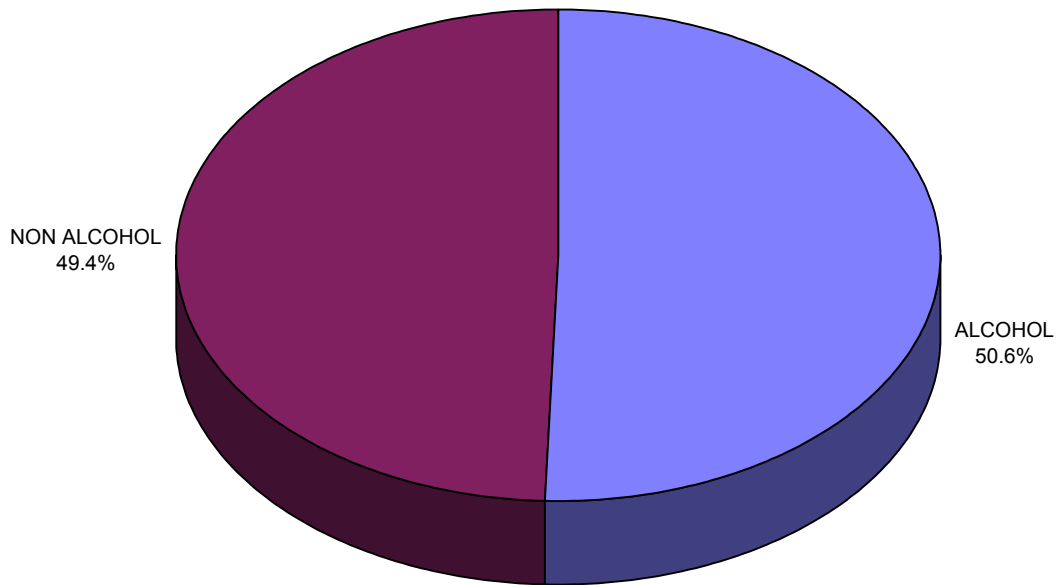
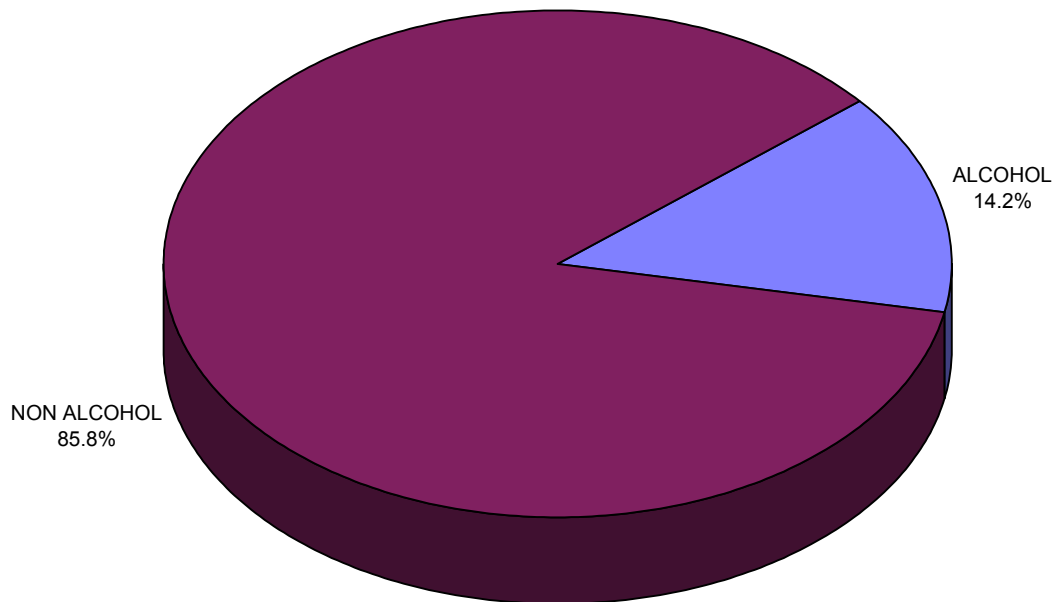


FIGURE 2-3 2002 CRASH INJURIES
Alcohol Related vs Non Alcohol Related



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 increased by 13.2% while nonalcohol-related fatal and injury crashes decreased by 6.0% from the 2001 totals. The number of DWI arrests decreased by 7.6% from 2001.

**TABLE 2-4
CRASH AND ARREST ACTIVITY
1994 - 2002**

	FATAL CRASHES		FATAL & INJURY CRASHES		DWI
	<u>ALCOHOL RELATED</u>	<u>NONALCOHOL RELATED</u>	<u>ALCOHOL RELATED</u>	<u>NONALCOHOL RELATED</u>	<u>ARRESTS*</u>
1994	63	78	868	4,984	9,574
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

*Source: South Dakota Courts - The State of the Judiciary and 2002 Annual Report of the S. D. Unified Judicial System - January 2003
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 1994 through 2002. FIGURE 2-5 presents the alcohol-related and nonalcohol-related fatal crash experience for the years of 1994 through 2002.

There were 76 alcohol-related fatal crashes during 2002, which compares to 65 in 2001. The previous three-year average was 63 for the years of 1999-2001.

There were 711 alcohol-related fatal and injury crashes during 2002, which compares to 628 in 2001. The previous three-year average was 678 or a 4.9 percent increase in 2002. Nonalcohol-related fatal and injury crashes in 2002 decreased (6.0%) when compared to 2001 and decreased 8.3 percent from the previous three-year average (99-01).

There were 8,272 DWI arrests in fiscal year 2002. This level is down 10.6% from the previous three-year average (99-01).

Source: SD Department of Public Safety: Accident Records

**FIGURE 2-4 FATAL & INJURY
CRASHES AND DWIs**

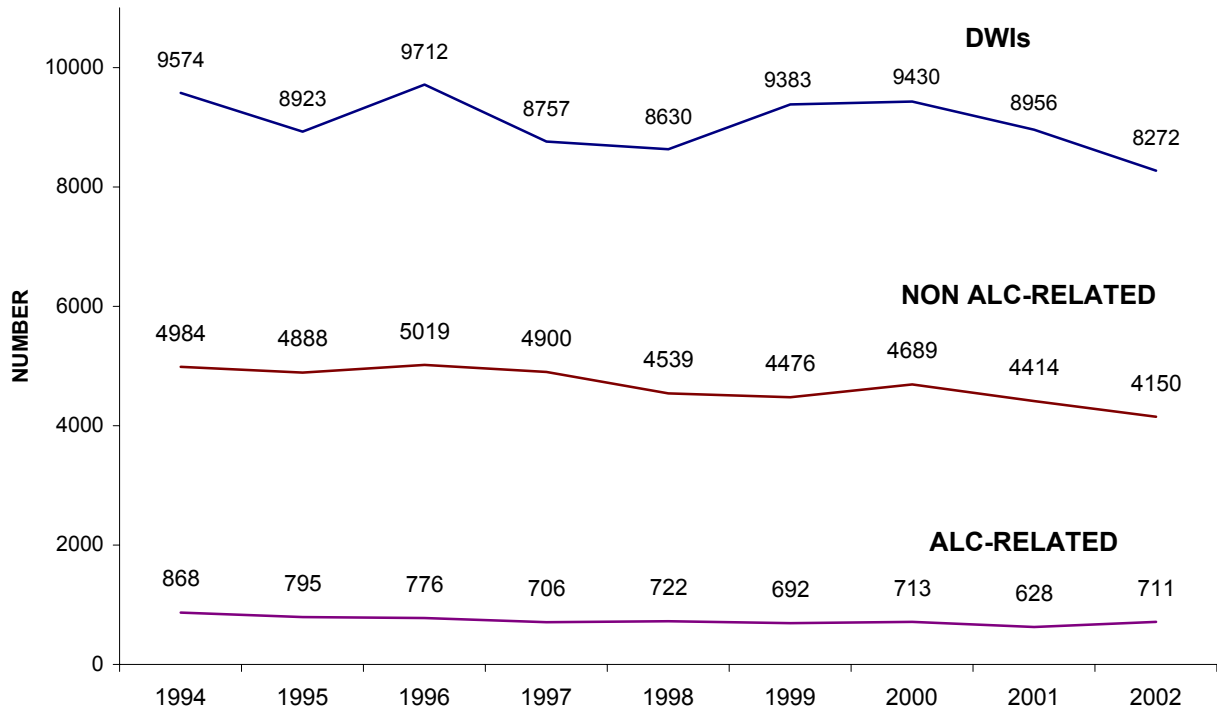
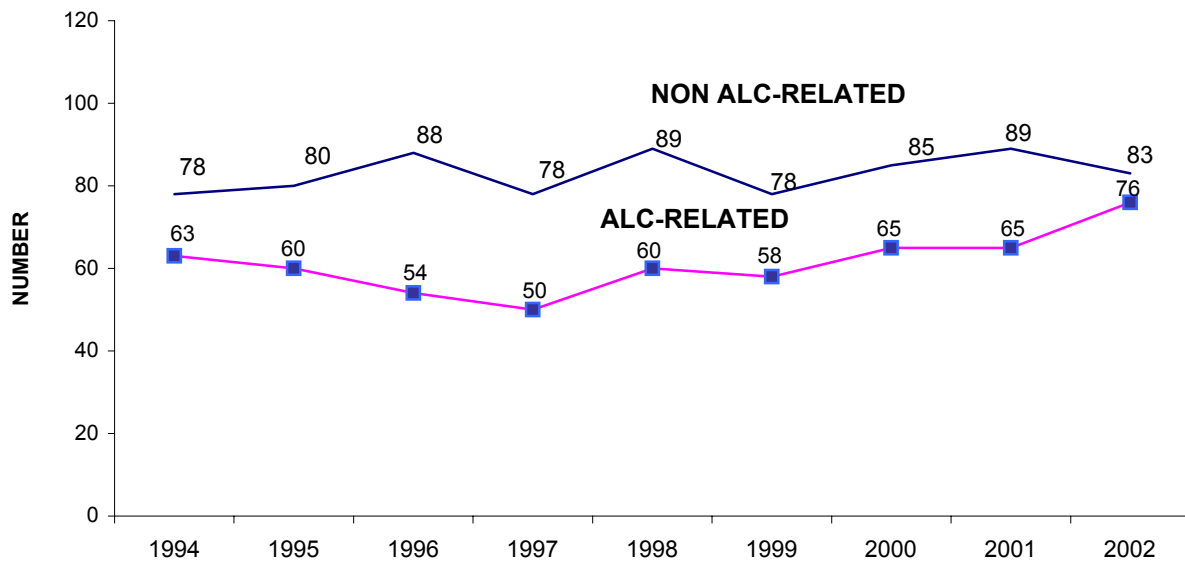


FIGURE 2-5 FATAL CRASHES



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 three occupants were killed while not wearing any safety restraint, while thirty-two 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).

Eighty-three (55%) of the 151 killed occupants were either partially or totally ejected from the vehicle (see TABLE 2-5B).

TABLE 2-5
SAFETY RESTRAINT USAGE
KILLED OCCUPANTS

	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>
No Safety Equipment	89	95	86	103	86	103
Lap Belt Only	0	1	1	3	2	1
Shoulder Harness Only	2	1	0	0	1	2
Lap Belt & Shoulder Harness	24	31	21	19	32	32
Child Restraint Used Properly	0	1	1	0	0	0
Child Restraint Not Properly Used	1	0	0	1	1	0
Other Type Restraints	1	2	0	0	0	0
Not Stated or Unknown	15	16	19	11	11	13
Total	132	147	128	137	133	151

TABLE 2-5A
SAFETY RESTRAINT USAGE
INJURED OCCUPANTS

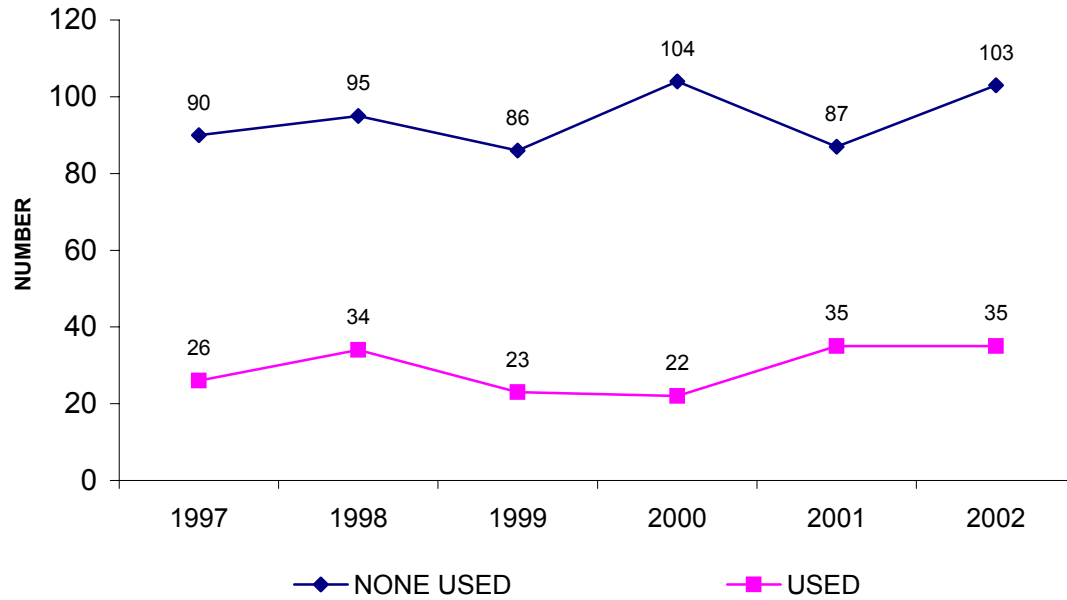
	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>
No Safety Equipment	2,642	2,572	2,324	2,357	1,895	1,739
Lap Belt Only	211	171	150	151	139	129
Shoulder Harness Only	78	77	56	48	30	38
Lap Belt & Shoulder Harness	4,135	3,803	3,947	4,114	3,945	3,955
Child Restraint Used Properly	39	46	50	35	57	67
Child Restraint Not Properly Used	4	5	4	8	11	8
Other Type Restraints	13	11	12	7	5	14
Not Stated or Unknown	458	394	389	412	387	429
Total	7,580	7,079	6,932	7,132	6,469	6,379

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.

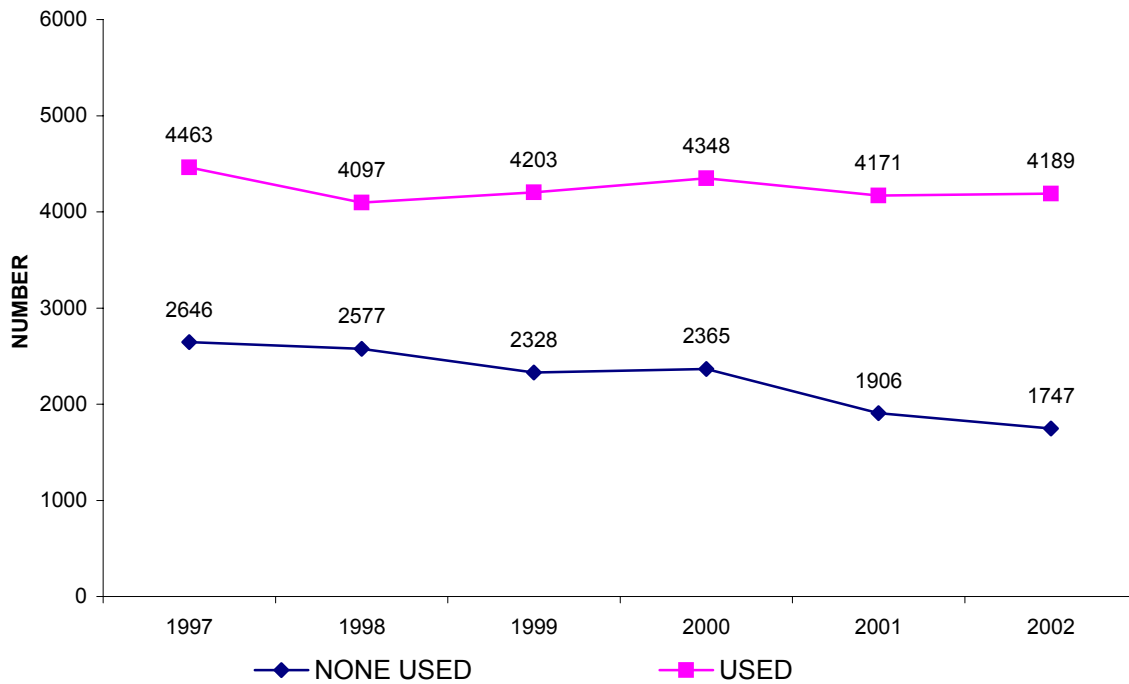
TABLE 2-5B
FATALITIES BY EJECTION STATUS FOR MOTOR VEHICLE OCCUPANTS
(Excludes Motorcycle, Mopeds and Snowmobiles)
2002

	<u>Killed</u>	<u>Injured</u>
Not Ejected	68	6,115
Partial Ejection	15	43
Total Ejection	68	185
Unknown Ejection	0	33
Not Applicable	0	3

**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 40 deaths to occupants of this age group. Only four have been restrained by a child safety restraint properly used, one was 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 two fatalities to motor vehicle occupants from birth through four years of age during 2002, which compares to one during 2001 (see TABLE 2-6).

There were 116 children (birth through 4 years old) injured in 2002, which compares to 113 for 2001 and the three-year average of 114. Eighty-six of the 116 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>
1992	0	77	54	131
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

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
2002

	<u>Fatalities</u>	<u>Injuries</u>
No Safety Equipment Used	2	18
Lap Belt Only	0	7
Shoulder Harness Only	0	0
Lap Belt & Shoulder Harness	0	21
Child Restraint Used Properly	0	58
Child Restraint Not Used Properly	0	7
Other	0	0
Not Stated or Unknown	0	5
TOTAL	2	116

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 374 and 15 deaths per year. Licensed motorcyclists increased 3.3 percent during 2002 while fatalities increased by one to 20. (see Table 2-7). Moped crashes are included with motorcycle crashes. There were no moped fatalities during 2002. 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
1979 - 2002

<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>		
1979	597	21	522	22	664	31,102	37,286
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

Source: SD Department of Public Safety: Accident Records

TABLE 2-8
PEDESTRIAN FATALITIES AND INJURIES
1982 - 2002

<u>Year</u>	<u>Fatalities</u>	<u>Injuries</u>
1982	16	146
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

TABLE 2-9
BICYCLE FATALITIES AND INJURIES
1982 - 2002

<u>Year</u>	<u>Fatalities</u>	<u>Injuries</u>
1982	1	93
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

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
1990 - 2002

<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>						
1990	78	120	1	39	2	51
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
<u>FOURTH OF JULY</u>						
1990	30	64	1	20	1	34
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
<u>LABOR DAY</u>						
1990	78	123	2	51	3	84
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

<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>						
1990	102	186	1	48	1	65
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
<u>CHRISTMAS</u>						
1990	102	178	1	34	1	55
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
<u>NEW YEARS</u>						
1990-91	102	166	2	43	2	71
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

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 1993 through 2002. 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>		
1993	1715	20.4	3253	38.7	3442	40.9	8410	140
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

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>		
1993	1041	19.8	1941	37.0	2271	43.2	5253	79
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

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.	%		
1993	572	20.3	1142	40.5	1103	39.2	2817	43
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

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.	%		
1993	42	23.9	105	59.7	29	16.5	176	0
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

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.	%		
1993	60	36.8	65	39.9	38	23.3	163	18
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

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
1991 - 2002

	<u>CRASH INVOLVED DRIVERS</u>				<u>LICENSED DRIVERS</u>			
	<u>MALE</u>		<u>FEMALE</u>		<u>MALE</u>		<u>FEMALE</u>	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
1991	15,263	62.5	9,156	37.5	252,916	50.5	247,717	49.5
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

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

III. 2002 MOTOR VEHICLE CRASH PROFILE

Introduction

This section profiles the reported motor vehicle traffic crashes for 2002. 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 2002, there were 17,335 reported motor vehicle traffic crashes, the majority of crashes being property damage only 12,474 (72%). Injury crashes accounted for 4,702 (27.1%) of the crashes, while 159 (0.9%) were fatal crashes. There were 6,997 persons injured and 180 persons killed in crashes during 2002 (see TABLE 3-1).

TABLE 3-1
FATALITIES AND SEVERITY OF INJURIES OF DRIVERS,
PASSENGERS, PEDESTRIANS, AND BICYCLE DRIVERS
2002

	Incapac. Injuries		Non- Incapac. Injuries		Possible Injuries		Total Nonfatal Injuries		Total Fatalities	
	No.	%	No.	%	No.	%	No.	%	No.	%
Drivers	946	64.5	1,761	65.0	1,957	69.4	4,664	66.7	119	66.1
Passengers	468	31.9	861	31.8	814	28.9	2,143	30.6	52	28.9
Pedestrians	42	2.9	38	1.4	24	0.9	104	1.5	8	4.4
Bicycle Dr	10	0.7	49	1.8	26	0.9	85	1.2	1	0.6
Other*	0	0.0	1	0.0	0	0.0	1	0.0	0	0
Total	1,466	100	2,710	100	2,821	100	6,997	100	180	100

*Other - 1 injury sustained by Other operator. The injury was to an occupant of a vehicle traveling on railroad track.

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 2002, 43.9 percent of the fatalities and 55.4 percent of the injuries occurred to occupants of passenger cars. Occupants of pickups and vans accounted for 36.7 percent of the fatalities and 33.8 percent of the injuries. Additionally, in 2002 twenty motorcyclists and eight pedestrians were killed. There was one bicyclist killed during 2002 (see Table 3-2).

TABLE 3-2
FATALITIES AND INJURIES BY MODE OF TRANSPORTATION
2002

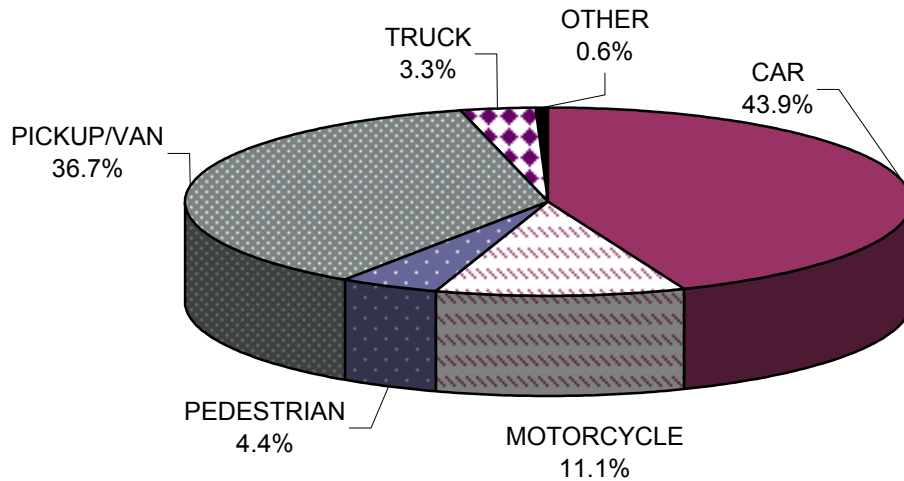
	Fatalities		Injuries	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
Passenger Cars	79	43.9	3,878	55.4
Pickups, Vans	66	36.7	2,362	33.8
Motorcycle, Moped	20	11.1	426	6.1
Pedestrians	8	4.4	104	1.5
Trucks (All)*	6	3.3	116	1.7
Bicycle	1	0.6	87	1.2
Other	0	0.0	21	0.3
Farm Machinery	0	0.0	3	0.0
Unknown	0	0.0	0	0.0
Total	180	100	6,997	100

*Trucks	<u>Fatalities</u>	<u>Injuries</u>
Straight Truck	1	40
Straight Truck with Trailer	0	5
Truck Tractor Only	0	1
Truck Tractor with Single Semi Trailer	5	68
Truck Tractor with Two or More Trailers	0	2
Total	6	116

Note: Other includes 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
2002**



**FIGURE 3-2 INJURIES BY TRAVEL MODE
2002**

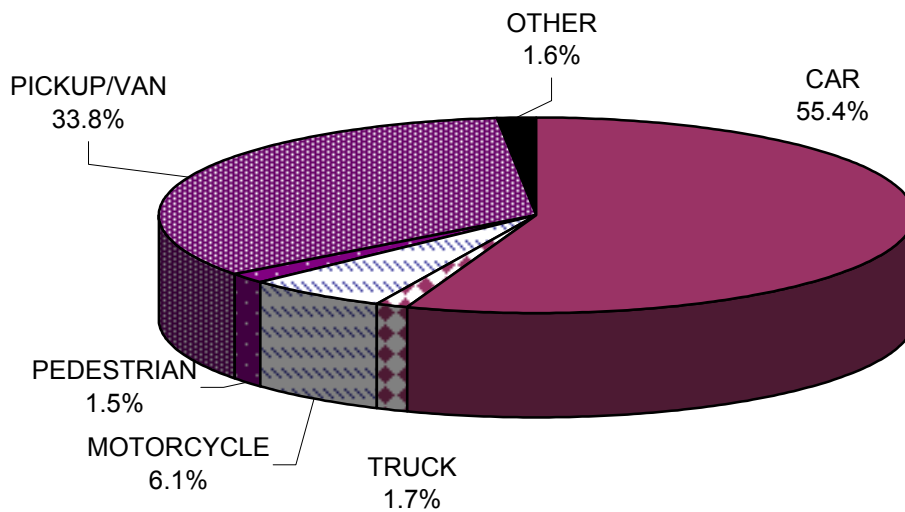


TABLE 3-3 provides information on all crash-involved vehicles by type. Passenger cars made up 40.6 percent of the vehicles involved in fatal crashes and 54.4 percent of those involved in injury crashes. Pickups and vans made up 39.7 percent of the vehicles involved in fatal crashes.

TABLE 3-3
VEHICLE TYPES INVOLVED IN CRASHES
2002

	<u>All 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>
Passenger Cars	14,044	53.8	89	40.6	4,297	54.4	9,658	53.6
Pickups, Vans	10,537	40.3	87	39.7	2,921	37.0	7,529	41.8
Motorcycle	461	1.8	26	11.9	378	4.8	57	0.3
Trucks (All)*	836	3.2	16	7.3	232	2.9	588	3.3
Farm Machinery or Heavy Equipment	69	0.3	1	0.5	22	0.3	46	0.3
Bus	54	0.2	0	0.0	18	0.2	36	0.2
Motor Home	36	0.1	0	0.0	9	0.1	27	0.1
Moped	4	0.0	0	0.0	4	0.1	0	0.0
Snowmobile	5	0.0	0	0.0	2	0.0	3	0.0
Other or Unknown	77	0.3	0	0.0	11	0.1	66	0.4
Total	26,123	100	219	100	7,894	100	18,010	100

*Trucks

	<u>All Crashes</u>	<u>Fatal Crashes</u>	<u>Injury Crashes</u>	<u>PDO Crashes</u>
Straight Truck	260	2	82	176
Straight Truck with Trailer	49	0	12	37
Truck Tractor Only	22	1	6	15
Truck Tractor with Single Semi Trailer	479	12	127	340
Truck Tractor with Two or More Trailers	26	1	5	20
Total	836	16	232	588

Source: SD Department of Public Safety: Accident Records

TABLE 3-4 provides information on the ages of persons killed and injured. A total of 29 people (16.1%) of the persons killed were from 25 through 34 years of age and this age group totals 1,016 for (14.5%) of the persons injured. Two children ages 0-5 were killed during 2002 (see Table 3-4).

TABLE 3-4
FATALITIES AND INJURIES
BY AGE GROUP
2002

	Fatalities		Injuries	
	No.	%	No.	%
0 - 5	2	1.1	153	2.2
6 - 13	5	2.8	367	5.2
14 - 15	9	5.0	432	6.2
16 - 17	10	5.6	675	9.6
18	8	4.4	317	4.5
19	5	2.8	269	3.8
20	3	1.7	248	3.5
21 - 24	12	6.7	752	10.7
25 - 34	29	16.1	1,016	14.5
35 - 44	25	13.9	949	13.6
45 - 54	27	15.0	824	11.8
55 - 64	16	8.9	396	5.7
65 - Over	29	16.1	549	7.8
Unknown	0	0.0	50	0.7
Total	180	100	6,997	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 35.2 percent of the fatal crashes and only 9.8 percent of the total crashes, while 32.1 percent of the fatal crashes and 41.9 percent of all crashes represented a collision between 2 or more vehicles (see TABLE 3-5).

TABLE 3-5
FIRST HARMFUL EVENT
2002

First Harmful Event	Total Crashes		Fatal Crashes		Injury Crashes		PDO Crashes	
	No.	%	No.	%	No.	%	No.	%
Motor Vehicle Collision With:								
Another MV (Not Parked)	7,261	41.9	51	32.1	2,658	56.5	4,552	36.5
A Fixed or Other Object	2,464	14.2	39	24.5	730	15.5	1,695	13.6
An Animal	5,022	29.0	6	3.8	154	3.3	4,862	39.0
A Pedestrian	105	0.6	6	3.8	99	2.1	0	0.0
A Bicyclist	84	0.5	1	0.6	82	1.7	1	0.0
A Parked Motor Vehicle	684	3.9	0	0.0	75	1.6	609	4.9
A Railroad Vehicle	19	0.1	0	0.0	7	0.1	12	0.1
Non-Collision (Overturning or Other)	1,696	9.8	56	35.2	897	19.1	743	6.0
Total	17,335	100	159	100	4,702	100	12,474	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 11.8 percent of the fatal crashes, 40 percent of the injury crashes, and 29.9 percent of the property damage only crashes. Head-on collisions are the most prevalent for severe crashes, accounting for 47.1 percent of the fatal crashes and only 1.9 percent of the total crashes. Turning Movement collisions are second in prevalence for fatal crashes accounting for 17.6 percent of the fatal crashes and 28.6 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
2002

<u>Manner of Collision</u>	Total Crashes		Fatal Crashes		Injury Crashes		PDO Crashes	
	No.	%	No.	%	No.	%	No.	%
Rear-End	2,433	33.5	6	11.8	1,064	40.0	1,363	29.9
Head-On	140	1.9	24	47.1	76	2.9	40	0.9
Angle	1,605	22.1	8	15.7	642	24.2	955	21.0
Sideswipe-Same Direction	552	7.6	2	3.9	95	3.6	455	10.0
Sideswipe-Opposite Dir.	152	2.1	2	3.9	53	2.0	97	2.1
Turning Movement	2,080	28.6	9	17.6	696	26.2	1,375	30.2
Backing Movement	298	4.1	0	0.0	32	1.2	266	5.8
Rear to Rear	1	0.0	0	0.0	0	0.0	1	0.0
Total	7,261	100	51	100	2,658	100	4,552	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 27.8 percent of the PDO crashes and 34.3 percent of the injury crashes while accounting for 6.9 percent of the fatal crashes.

Non-interstate rural roads tallied 74.2 percent of the fatal crashes. The Interstate system experienced 2305 (13.3%) of the total crashes while accounting for an estimated 23 percent of the vehicle miles traveled in 2002. Twenty (12.6%) of the fatal crashes happened on the interstate system (see FIGURES 3-3 and 3-4).

TABLE 3-7
CRASHES BY TYPE OF HIGHWAY
2002

<u>Type of Highway</u>	<u>Total Crashes Number</u>	<u>%</u>	<u>Fatal Crashes Number</u>	<u>%</u>	<u>Injury Crashes Number</u>	<u>%</u>	<u>PDO Crashes Number</u>	<u>%</u>	<u>No. Killed</u>	<u>No. Injured</u>
Interstate - Rural	1,748	10.1	18	11.3	342	7.3	1,388	11.1	19	544
US/State Hwys.-Rural	4,212	24.3	56	35.2	778	16.5	3,378	27.1	67	1,251
Co./Local Rds.-Rural	3,369	19.4	62	39.0	868	18.5	2,439	19.6	69	1,305
Interstate - City	557	3.2	2	1.3	160	3.4	395	3.2	2	220
US/State Hwys.-City	2,361	13.6	10	6.3	940	20.0	1,411	11.3	11	1,439
City Streets/Alleys	5,088	29.4	11	6.9	1,614	34.3	3,463	27.8	12	2,238
Total	17,335	100	159	100	4,702	100	12,474	100	180	6,997

Source: SD Department of Public Safety: Accident Records

FIGURE 3-3 2002
TRAFFIC CRASHES
BY SYSTEM TYPE

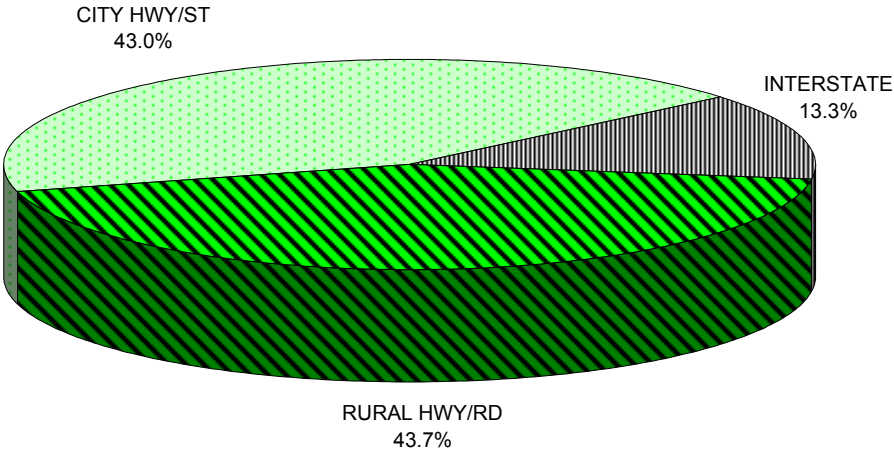
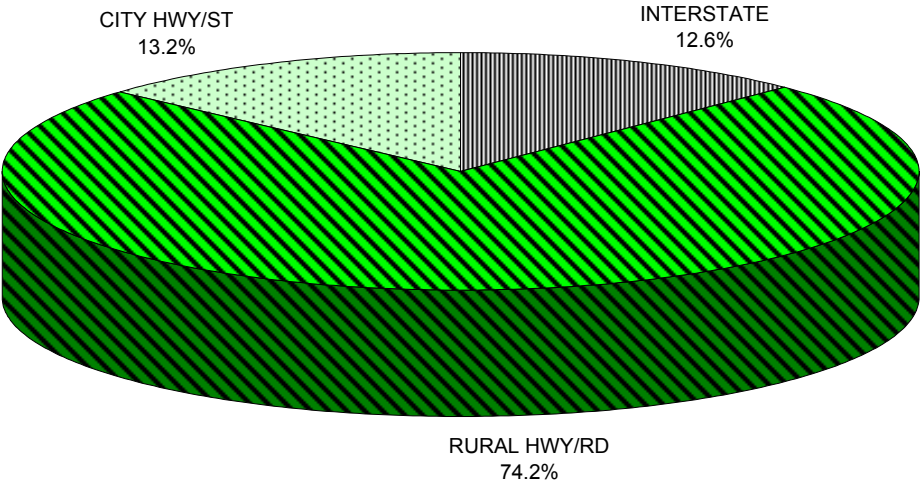


FIGURE 3-4 2002
FATAL TRAFFIC CRASHES
BY SYSTEM TYPE



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 fourteen counties (see TABLE 3-9). Each of these counties reported over two percent of all rural fatal and injury crashes. The fourteen accounted for 56.1 percent of rural fatal and injury crashes and 24.5 percent of all fatal and injury crashes in South Dakota. Minnehaha County has 8.9 percent of all rural fatal and injury crashes with Pennington and Lawrence counties accounting for 8.5 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 53.3 percent of the statewide injury crashes and 12.6 percent of the fatal crashes. The two largest cities (Sioux Falls, Rapid City) accounted for 68.0 percent of fatal and injury crashes and 62.7 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 12.6 percent of all reported property damage crashes and 10.7 percent of all fatal and injury crashes. Dry roads were reported in 80.1 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 3.6 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 11.6 percent of all crashes.

TABLE 3-8
MOTOR VEHICLE TRAFFIC CRASHES BY SD COUNTIES
2002

County	Total Crashes	Fatal Crashes	Injury Crashes	PDO Crashes	Fatalities	Injuries
AURORA	110	2	10	98	2	12
BEADLE	393	2	93	298	2	127
BENNETT	24	1	8	15	1	15
BON HOMME	98	2	23	73	2	33
BROOKINGS	550	5	132	413	6	188
BROWN	1002	3	246	753	3	359
BRULE	161	1	30	130	1	48
BUFFALO	28	2	11	15	2	17
BUTTE	186	0	50	136	0	72
CAMPBELL	24	0	1	23	0	1
CHARLES MIX	122	2	35	85	2	64
CLARK	138	0	18	120	0	23
CLAY	150	2	38	110	3	58
CODINGTON	569	2	188	379	2	283
CORSON	68	6	16	46	7	27
CUSTER	243	3	62	178	4	95
DAVISON	500	0	101	399	0	144
DAY	98	2	32	64	2	52
DEUEL	155	4	42	109	4	66
DEWEY	60	2	12	46	2	18
DOUGLAS	25	2	3	20	2	3
EDMUNDS	120	1	14	105	1	20
FALL RIVER	152	1	54	97	1	84
FAULK	42	2	7	33	2	11
GRANT	188	2	31	155	2	67
GREGORY	47	1	18	28	1	25
HAAKON	76	1	14	61	1	22
HAMLIN	157	0	19	138	0	25
HAND	118	2	21	95	2	37
HANSON	122	0	20	102	0	28
HARDING	31	4	6	21	4	15
HUGHES	306	0	67	239	0	92
HUTCHINSON	79	4	26	49	5	43
HYDE	22	1	8	13	1	12
JACKSON	108	4	28	76	4	45
JERAULD	63	1	6	56	2	7
JONES	67	2	16	49	2	27
KINGSBURY	162	1	23	138	1	34
LAKE	259	0	45	214	0	60
LAWRENCE	546	10	181	355	12	263
LINCOLN	469	3	114	352	3	177
LYMAN	157	3	31	123	3	50
MC COOK	200	0	61	139	0	100
MC PHERSON	13	0	6	7	0	8
MARSHALL	118	1	14	103	2	26
MEADE	506	5	158	343	5	245
MELLETTE	23	0	5	18	0	7
MINER	95	0	9	86	0	15
MINNEHAHA	4028	13	1342	2673	13	1899
MOODY	251	0	45	206	0	64
PENNINGTON	2212	17	740	1455	20	1119
PERKINS	74	1	15	58	1	18
POTTER	74	0	7	67	0	8
ROBERTS	152	6	57	89	10	92
SANBORN	131	1	15	115	1	23
SHANNON	47	10	19	18	12	42
SPINK	238	1	46	191	1	61
STANLEY	90	1	22	67	1	33
SULLY	55	1	5	49	1	7
TODD	9	5	3	1	7	12
TRIPP	117	2	20	95	2	34
TURNER	162	2	43	117	2	70
UNION	225	2	55	168	2	82
WALWORTH	96	0	13	83	0	17
YANKTON	400	5	100	295	6	163
ZIEBACH	24	0	2	22	0	3
Total:	17,335	159	4,702	12,474	180	6,997

TABLE 3-8A
ALCOHOL MOTOR VEHICLE TRAFFIC CRASHES BY SD COUNTIES
2002

County	Total Crashes	Fatal Crashes	Injury Crashes	PDO Crashes	Fatalities	Injuries
AURORA	6	1	2	3	1	2
BEADLE	21	1	9	11	1	12
BENNETT	3	1	2	0	1	8
BON HOMME	11	2	5	4	2	7
BROOKINGS	38	3	18	17	3	22
BROWN	46	1	22	23	1	30
BRULE	6	1	5	0	1	6
BUFFALO	7	2	3	2	2	4
BUTTE	9	0	7	2	0	10
CAMPBELL	3	0	0	3	0	0
CHARLES MIX	19	1	10	8	1	21
CLARK	1	0	0	1	0	0
CLAY	14	1	4	9	1	5
CODINGTON	45	0	22	23	0	36
CORSON	14	5	6	3	6	17
CUSTER	12	2	6	4	3	16
DAVISON	23	0	9	14	0	11
DAY	14	2	7	5	2	14
DEUEL	7	0	4	3	0	5
DEWEY	14	2	7	5	2	12
DOUGLAS	4	2	1	1	2	1
EDMUNDS	8	0	6	2	0	8
FALL RIVER	22	1	13	8	1	21
FAULK	8	2	5	1	2	9
GRANT	14	1	7	6	1	20
GREGORY	5	0	4	1	0	8
HAAKON	6	0	3	3	0	3
HAMLIN	3	0	1	2	0	1
HAND	8	1	5	2	1	11
HANSON	3	0	2	1	0	2
HARDING	1	1	0	0	1	0
HUGHES	20	0	13	7	0	17
HUTCHINSON	7	1	5	1	2	7
HYDE	3	1	0	2	1	3
JACKSON	7	2	3	2	2	5
JERAULD	4	1	3	0	2	4
JONES	2	0	2	0	0	5
KINGSBURY	8	0	4	4	0	5
LAKE	13	0	7	6	0	9
LAWRENCE	60	4	30	26	6	53
LINCOLN	35	1	16	18	1	19
LYMAN	8	1	3	4	1	7
MC COOK	10	0	5	5	0	5
MC PHERSON	1	0	1	0	0	3
MARSHALL	4	1	1	2	2	2
MEADE	37	1	22	14	1	31
MELLETTE	1	0	0	1	0	0
MINER	4	0	3	1	0	4
MINNEHAHA	288	3	137	148	3	193
MOODY	16	0	9	7	0	9
PENNINGTON	201	9	105	87	10	156
PERKINS	3	0	1	2	0	1
POTTER	5	0	2	3	0	3
ROBERTS	25	5	14	6	8	28
SANBORN	5	0	2	3	0	3
SHANNON	18	5	11	2	7	28
SPINK	10	1	5	4	1	6
STANLEY	3	0	2	1	0	5
SULLY	2	0	1	1	0	1
TODD	4	4	0	0	6	7
TRIPP	6	0	4	2	0	11
TURNER	9	0	5	4	0	6
UNION	23	1	7	15	1	10
WALWORTH	3	0	1	2	0	1
YANKTON	22	2	15	5	2	21
ZIEBACH	3	0	1	2	0	1
Total:	1,265	76	635	554	91	991

TABLE 3-9
COUNTIES HAVING MORE THAN TWO PERCENT OF THE
RURAL FATAL & INJURY CRASHES
2002

<u>County</u>	<u>Rural Fatal & Injury Crashes</u>	<u>Percent of All Rural Fatal & Injury Crashes</u>	<u>Percent of Rural VMTS*</u>
MINNEHAHA	188	8.9	6.2
PENNINGTON	180	8.5	6.7
LAWRENCE	135	6.4	3.1
MEADE	120	5.6	3.2
LINCOLN	84	4.0	4.8
BROWN	69	3.2	3.0
BROOKINGS	61	2.9	2.5
CUSTER	58	2.7	1.8
CODINGTON	56	2.6	2.2
YANKTON	51	2.4	1.6
MCCOOK	50	2.4	2.1
UNION	50	2.4	3.8
ROBERTS	48	2.3	2.4
MOODY	42	2.0	2.5

Note: Total Rural Fatal and Injury Crashes: 2,124

*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 - 2002**

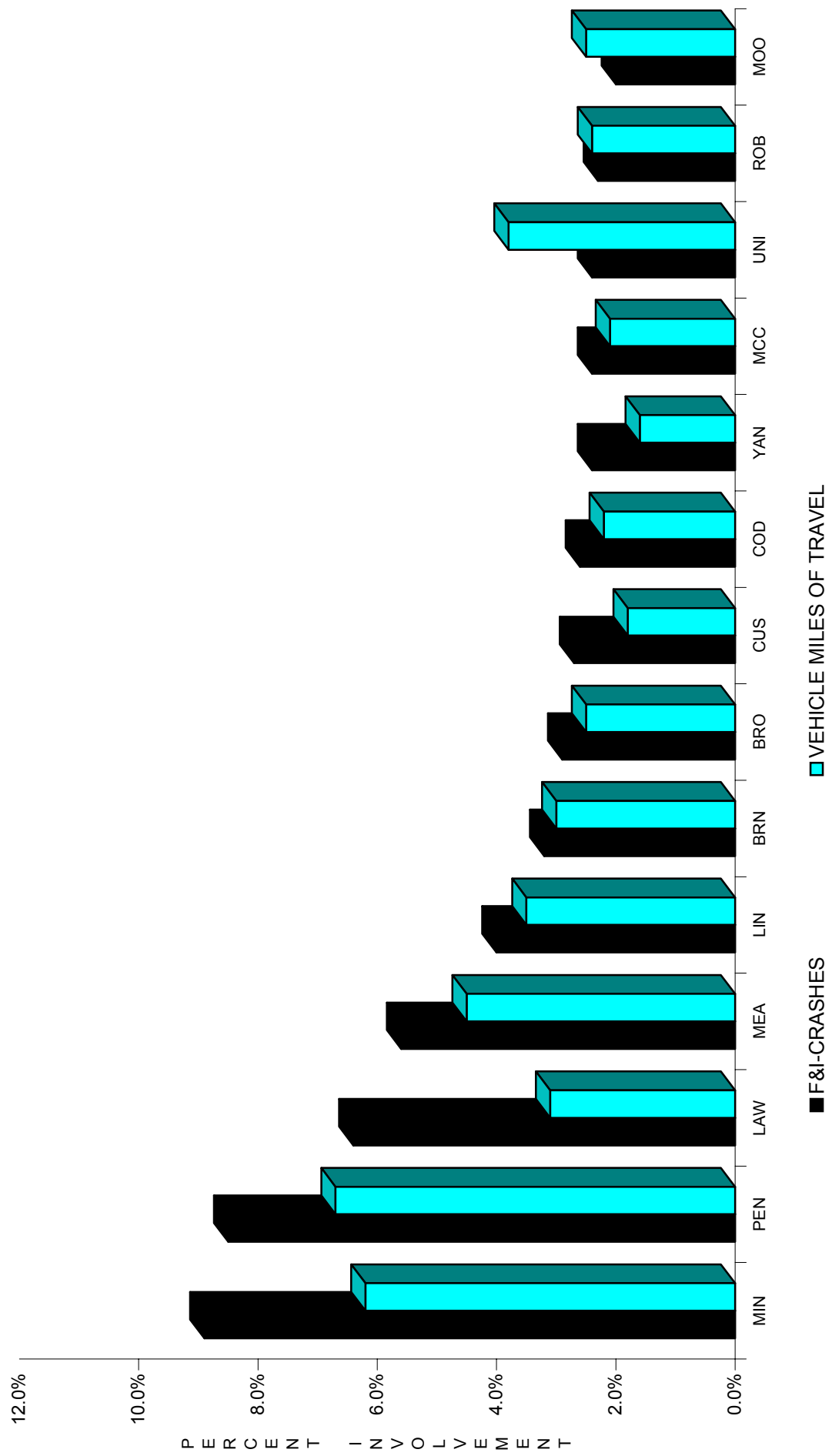


TABLE 3-10
TRAFFIC CRASHES SOUTH DAKOTA CITIES
POPULATION 2500 AND OVER
2002

<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	520	0	174	346	0	245
Belle Fourche	50	0	12	38	0	17
Box Elder	33	1	12	20	2	15
Brandon City	48	0	16	32	0	26
Brookings	197	0	74	123	0	99
Canton	36	0	7	29	0	8
Hot Springs	47	0	19	28	0	31
Huron	146	1	55	90	1	76
Lead	25	0	3	22	0	6
Madison	46	0	14	32	0	16
Milbank	59	0	8	51	0	14
Mitchell	324	0	66	258	0	96
Mobridge	7	0	3	4	0	5
Pierre	193	0	53	140	0	74
Rapid City	1,512	8	548	956	9	840
Redfield	27	0	6	21	0	6
Sioux Falls	3,088	6	1,158	1,924	6	1,605
Sisseton	45	1	11	33	1	19
Spearfish	75	1	28	46	1	39
Sturgis	119	1	41	77	1	60
Vermillion	51	1	12	38	1	18
Watertown	282	0	130	152	0	192
Winner	29	0	5	24	0	6
Yankton	165	0	53	112	0	91

Source: SD Department of Public Safety: Accident Records

TABLE 3-11
ROADWAY SURFACE CONDITIONS
2002

	Total Crashes		Fatal Crashes		Injury Crashes		PDO Crashes	
	No.	%	No.	%	No.	%	No.	%
Dry	13,796	79.6	133	83.6	3,760	80.0	9,903	79.4
Wet	1,295	7.5	7	4.4	414	8.8	874	7.0
Ice	1,127	6.5	6	3.8	268	5.7	853	6.8
Frost	119	0.7	4	2.5	36	0.8	79	0.6
Slush	181	1.0	1	0.6	52	1.1	128	1.0
Snow	662	3.8	3	1.9	148	3.1	511	4.1
Mud	21	0.1	1	0.6	6	0.1	14	0.1
Other	19	0.1	0	0.0	9	0.2	10	0.1
Unknown	115	0.7	4	2.5	9	0.2	102	0.8
Total	17,335	100	159	100	4,702	100	12,474	100

Source: SD Department of Public Safety: Accident Records

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

The peak two hour period for fatal crashes was 1:00-2:59 p.m. Twenty-two (13.8%) of the fatal crashes occurred during this two hour period. The peak three hour period for injury crashes was 3:00-5:59 p.m. when 1,264 (26.9%) of the injury crashes occurred. The peak three hour period for property damage only crashes was 5:00-7:59 when 2,712 (21.7%) of the property damage only crashes occurred (see TABLE 3-12).

Twenty fatal crashes or 12.6 percent of the fatal crashes in 2002 occurred during May. The month of August shows 567 injury crashes or 12.1 percent of the injury crashes for 2002. The 1,772 property damage only crashes during November represent 14.2 percent of the property damage only crashes for 2002 (see TABLE 3-13).

The day of the week Friday accounts for seventeen percent of the total crashes (2,943), nearly seventeen percent of the injury crashes (785) and over seventeen percent of the property damage only crashes (2,142). Saturday accounted for 35 fatal crashes or 22 percent of the total for 2002 (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
2002

<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	370	6	96	268	9	133
1:00 AM	300	4	80	216	4	109
2:00 AM	319	6	102	211	8	136
3:00 AM	210	5	55	150	5	84
4:00 AM	190	2	39	149	2	57
5:00 AM	367	6	51	310	6	82
6:00 AM	583	5	73	505	7	105
7:00 AM	988	3	242	743	4	327
8:00 AM	627	5	180	442	5	249
9:00 AM	500	6	151	343	6	194
10:00 AM	547	3	178	366	4	283
11:00 AM	666	6	210	450	7	286
12:00 PM	813	8	282	523	8	445
1:00 PM	783	12	270	501	14	439
2:00 PM	782	10	301	471	10	476
3:00 PM	1,170	7	440	723	7	674
4:00 PM	1,090	4	384	702	5	551
5:00 PM	1,425	8	440	977	9	667
6:00 PM	1,245	12	259	974	14	402
7:00 PM	964	3	200	761	4	315
8:00 PM	862	8	168	686	9	249
9:00 PM	1,053	11	161	881	11	244
10:00 PM	791	7	173	611	9	237
11:00 PM	523	5	126	392	6	196
Unknown	167	7	41	119	7	57
Total	17,335	159	4,702	12,474	180	6,997

Source: SD Department of Public Safety: Accident Records

TABLE 3-13
CRASHES BY MONTH
2002

<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	1,408	15	333	1,060	19	488
FEBRUARY	1,038	14	285	739	14	426
MARCH	1,352	12	369	971	12	534
APRIL	1,092	9	338	745	9	496
MAY	1,335	20	400	915	23	580
JUNE	1,412	13	430	969	18	663
JULY	1,376	13	472	891	14	703
AUGUST	1,473	16	567	890	19	864
SEPTEMBER	1,321	11	379	931	11	585
OCTOBER	1,758	13	398	1,347	15	602
NOVEMBER	2,128	11	345	1,772	12	492
DECEMBER	1,642	12	386	1,244	14	564
Total	17,335	159	4,702	12,474	180	6,997

Source: SD Department of Public Safety: Accident Records

TABLE 3-14
CRASHES BY DAY OF WEEK
2002

<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	2,034	34	535	1,465	40	825
MONDAY	2,258	15	653	1,590	15	994
TUESDAY	2,536	23	683	1,830	28	979
WEDNESDAY	2,444	18	668	1,758	18	949
THURSDAY	2,618	18	708	1,892	21	1,005
FRIDAY	2,943	16	785	2,142	18	1,168
SATURDAY	2,502	35	670	1,797	40	1,077
Total	17,335	159	4,702	12,474	180	6,997

Source: SD Department of Public Safety: Accident Records

FIGURE 3-6 CRASHES BY TIME OF DAY 2002

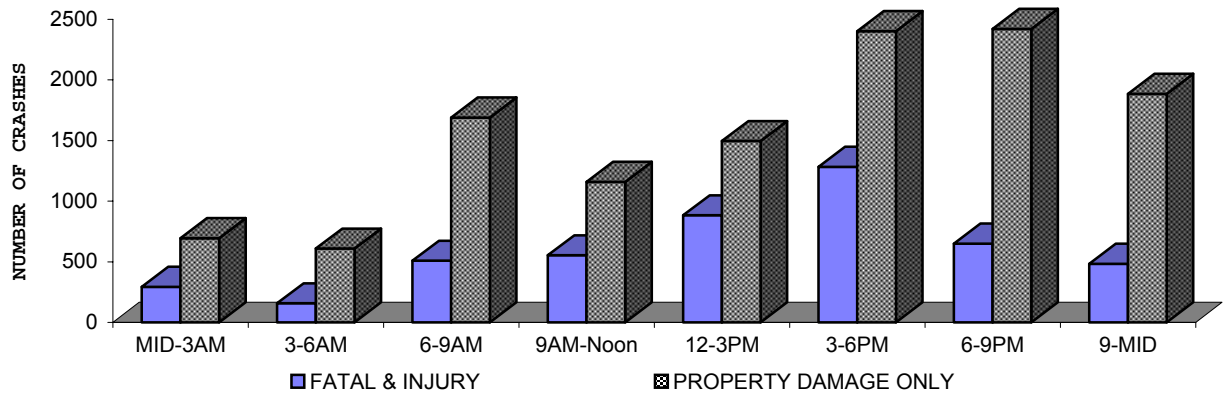


FIGURE 3-7 CRASHES BY MONTH 2002

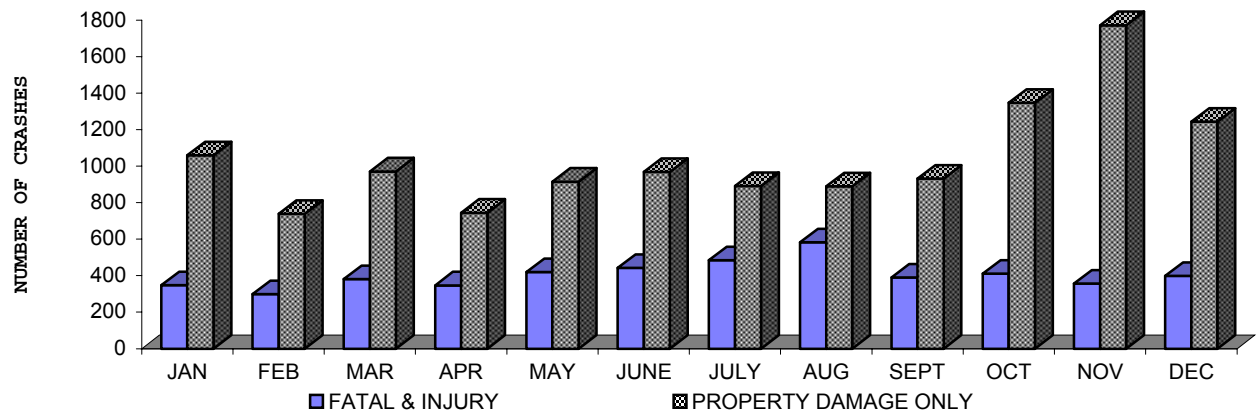
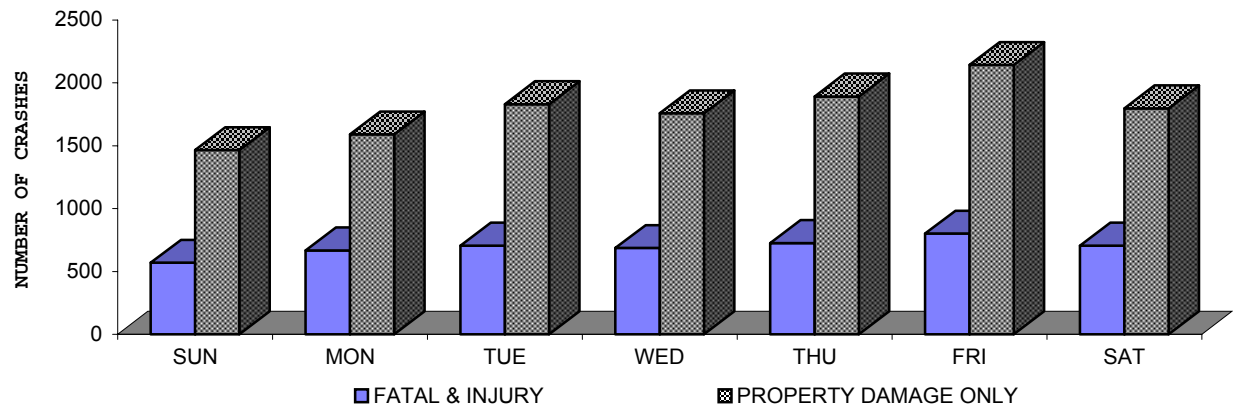


FIGURE 3-8 CRASHES BY DAY OF WEEK 2002



Drivers

There were 25,224 motor vehicle drivers in the 17,335 reported motor vehicle crashes, including 216 drivers in fatal crashes and 7,747 drivers in injury crashes. One hundred and nineteen drivers were killed, which is 66.1 percent of all persons killed in motor vehicle crashes and 66.7 percent or 4,664 of the 6,997 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 34.4 percent of the drivers were under 25 years of age and 51.1 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 26.4 percent of the drivers involved in fatal crashes and 37.6 percent of the drivers in injury crashes. Drivers under the age of 35 make up 41.2 percent of the drivers in fatal crashes and 54.7 percent of the drivers in injury crashes. Fifty-nine (22.7%) of the drivers in fatal crashes were 21-34 years of age (see TABLE 3-15).

TABLE 3-15
AGE OF DRIVERS IN CRASHES
2002

Age	Drivers In All Crashes		Drivers In Fatal Crashes		Drivers In Injury Crashes		Drivers In PDO Crashes	
	No.	%	No.	%	No.	%	No.	%
6 - 13	27	0.1	0	0.0	13	0.2	14	0.1
14 - 15	883	3.5	7	3.2	318	4.1	558	3.2
16 - 17	2,130	8.4	15	6.9	732	9.4	1,383	8.0
18	1,114	4.4	7	3.2	364	4.7	743	4.3
19	947	3.8	3	1.4	321	4.1	623	3.6
20	839	3.3	8	3.7	264	3.4	567	3.3
21 - 24	2,741	10.9	17	7.9	898	11.6	1,826	10.6
25 - 34	4,205	16.7	32	14.8	1,327	17.1	2,846	16.5
35 - 44	4,285	17.0	33	15.3	1,267	16.4	2,985	17.3
45 - 54	3,601	14.3	37	17.1	1,051	13.6	2,513	14.6
55 - 64	1,962	7.8	26	12.0	500	6.5	1,436	8.3
65 - Over	2,282	9.0	29	13.4	644	8.3	1,609	9.3
Unknown	208	0.8	2	0.9	48	0.6	158	0.9
Total	25,224	100	216	100	7,747	100	17,261	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 1,277 drinking drivers in all crashes which is 5.1 percent of all drivers in crashes. Seventy-five or 34.7 percent of drivers in fatal crashes had been drinking while 8.2 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 29.3 percent of the drinking drivers in fatal crashes and 42.0 percent of the drinking drivers in injury crashes. Those drivers under 35 years of age accounted for 52.0 percent of the drinking drivers in fatal crashes and 63.1 percent of the drinking drivers in all crashes.

TABLE 3-16
AGE OF DRINKING DRIVERS IN CRASHES
2002

Age	Drivers In All Crashes		Drivers In Fatal Crashes		Drivers In Injury Crashes		Drivers In PDO Crashes	
	No.	%	No.	%	No.	%	No.	%
14 - 15	7	0.5	0	0.0	2	0.3	5	0.9
16 - 17	76	6.0	5	6.7	36	5.7	35	6.2
18	65	5.1	4	5.3	29	4.6	32	5.6
19	65	5.1	2	2.7	38	6.0	25	4.4
20	59	4.6	4	5.3	33	5.2	22	3.9
21 - 24	248	19.4	7	9.3	129	20.3	112	19.8
25 - 34	286	22.4	17	22.7	134	21.1	135	23.8
35 - 44	250	19.6	14	18.7	128	20.2	108	19.0
45 - 54	139	10.9	11	14.7	76	12.0	52	9.2
55 - 64	42	3.3	8	10.7	14	2.2	20	3.5
65 - Over	33	2.6	2	2.7	16	2.5	15	2.6
Unknown	7	0.5	1	1.3	0	0.0	6	1.1
Total	1,277	100	75	100	635	100	567	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 18.5 percent of the total licensed drivers, 40.8 percent of the drinking drivers in fatal and injury crashes and 53.6 percent of the speeding drivers in fatal and injury crashes. Sixty-two percent of the drinking drivers and 70.7 percent of the speeding drivers in fatal and injury crashes were under 35 years of age while drivers under 35 years of age constitute 34.2 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
2002

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		13	0.2	0	0.0	3	0.3
14 - 15	2.0		325	4.1	2	0.3	83	7.5
16 - 17	3.4		747	9.4	41	5.8	152	13.7
18	1.8		371	4.7	33	4.6	80	7.2
19	1.8		324	4.1	40	5.6	67	6.1
20	1.9		272	3.4	37	5.2	50	4.5
21 - 24	7.5		915	11.5	136	19.2	158	14.3
25 - 34	15.7		1359	17.1	151	21.3	190	17.2
35 - 44	18.4		1300	16.3	142	20.0	121	10.9
45 - 54	18.5		1088	13.7	87	12.3	116	10.5
55 - 64	12.2		526	6.6	22	3.1	48	4.3
65 - Over	16.6		673	8.5	18	2.5	37	3.3
Unknown	0.0		50	0.6	1	0.1	2	0.2
TOTAL	100		7,963	100	710	100	1,107	100

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

FIGURE 3-9 DRIVERS BY AGE GROUP 2002
Fatal and Injury Crash Involved Drivers

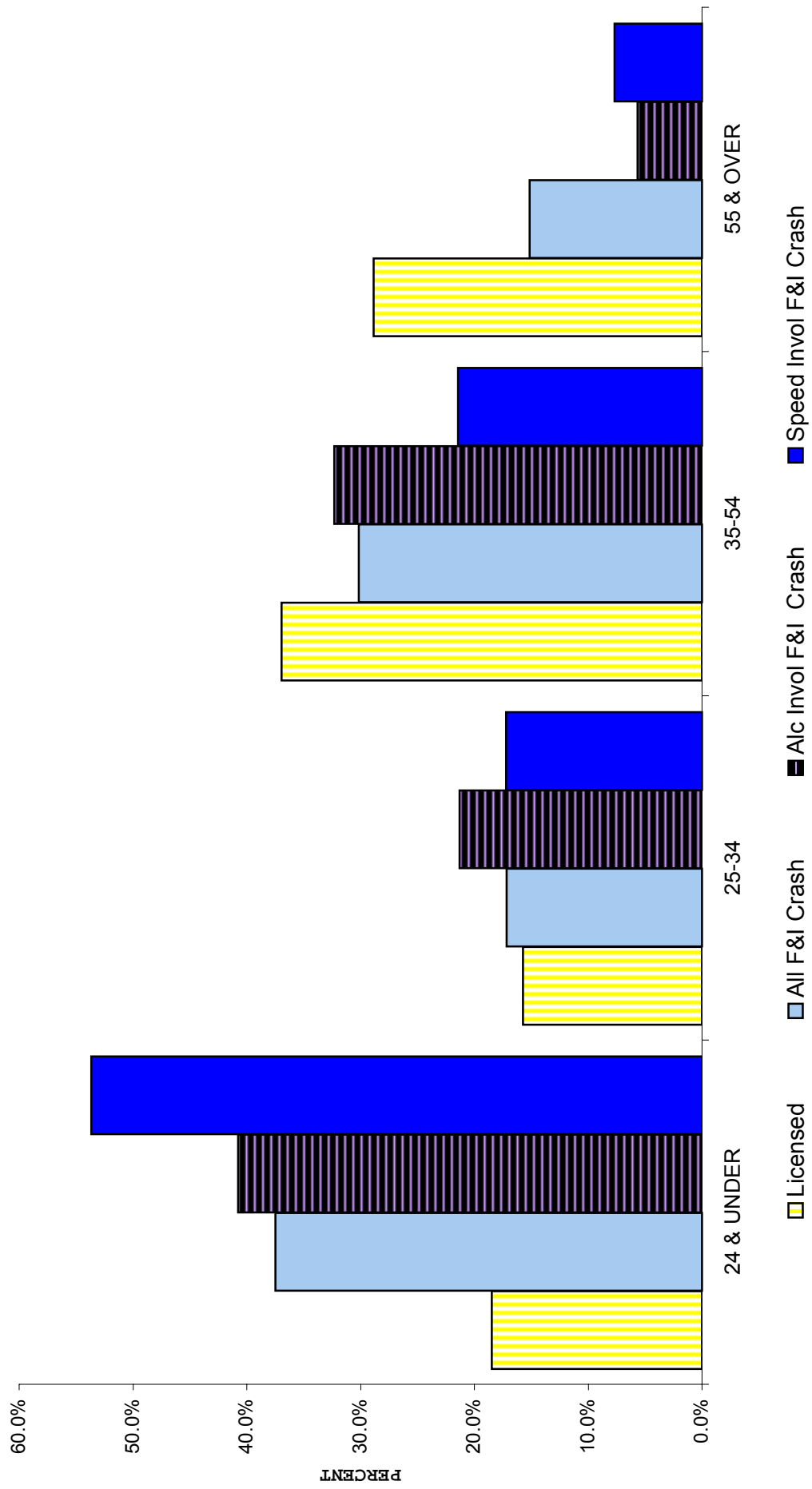
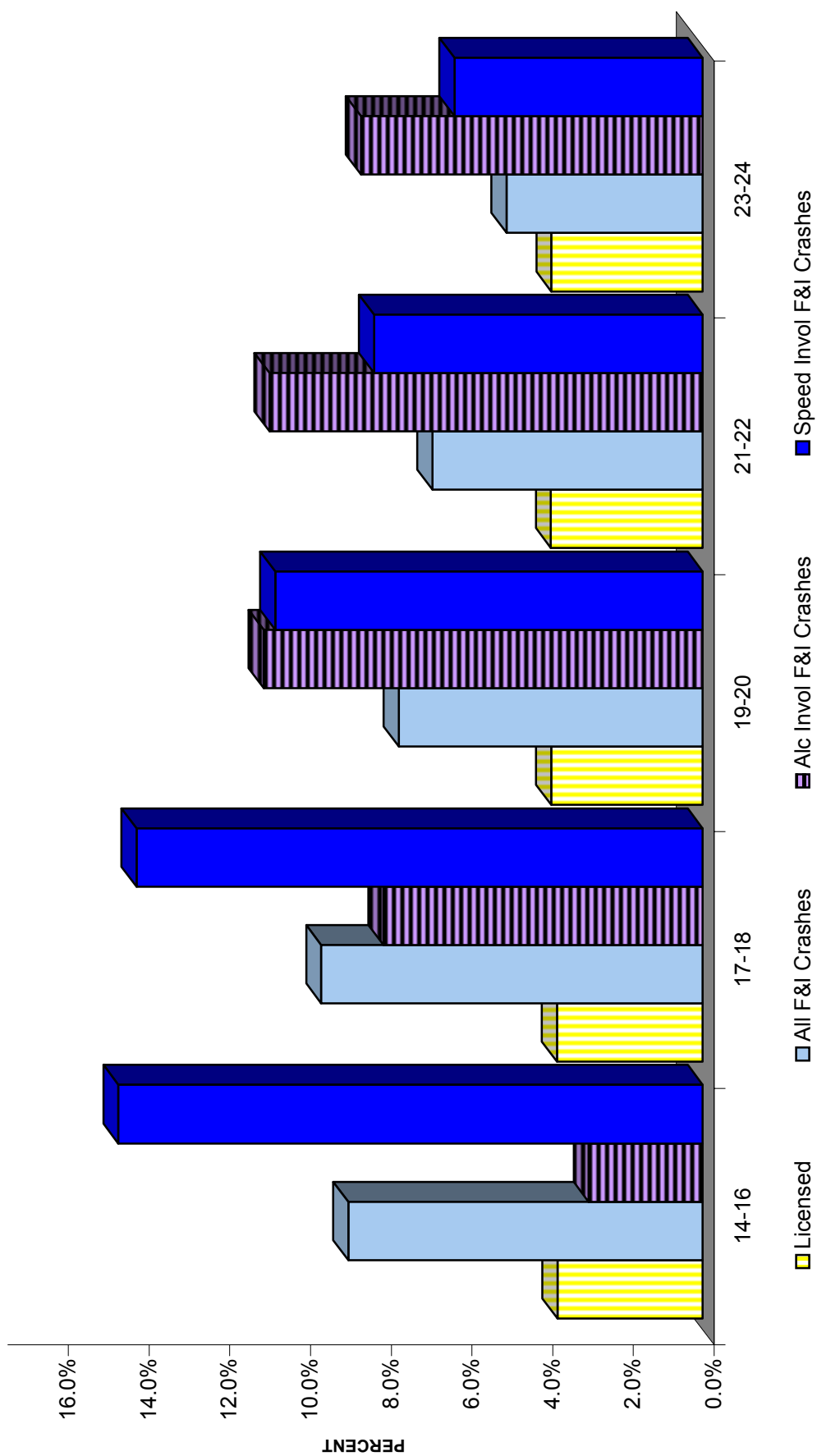


FIGURE 3-10 YOUNG DRIVERS 2002
FATAL & INJURY CRASH INVOLVED DRIVERS



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 2002. It was indicated that the drinking of 75 or 34.7 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
2002

	Total Crashes		Fatal Crashes		Injury Crashes		PDO Crashes	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
Drinking	1,277	5.1	75	34.7	635	8.2	567	3.3
Exceeded Speed Limit	923	3.7	53	24.5	468	6.0	402	2.3
Wrong Side of Road	358	1.4	37	17.1	165	2.1	156	0.9
Exceeded Safe Speed But Not Limit	1,646	6.5	16	7.4	570	7.4	1,060	6.1
Failed to Yield to Vehicle	2,919	11.6	12	5.6	1,095	14.1	1,812	10.5
Failed to Stop for Stop Sign or Flashing Red	366	1.5	3	1.4	152	2.0	211	1.2
Fell Asleep	315	1.2	9	4.2	147	1.9	159	0.9
Improper Passing	229	0.9	4	1.9	75	1.0	150	0.9
Distracted by Object/ Person in Car	714	2.8	6	2.8	307	4.0	401	2.3
Improper Turn	478	1.9	4	1.9	135	1.7	339	2.0
Following Too Closely	1,346	5.3	2	0.9	566	7.3	778	4.5
Improper Backing	303	1.2	0	0.0	24	0.3	279	1.6
Other*	2,248	8.9	27	12.5	861	11.1	1,360	7.9
Unknown	430	1.7	11	5.1	157	2.0	262	1.5
Not Stated*	4,485	17.8	0	0.0	0	0.0	4,485	26.0
Total Drivers	25,224		216		7,747		17,261	

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

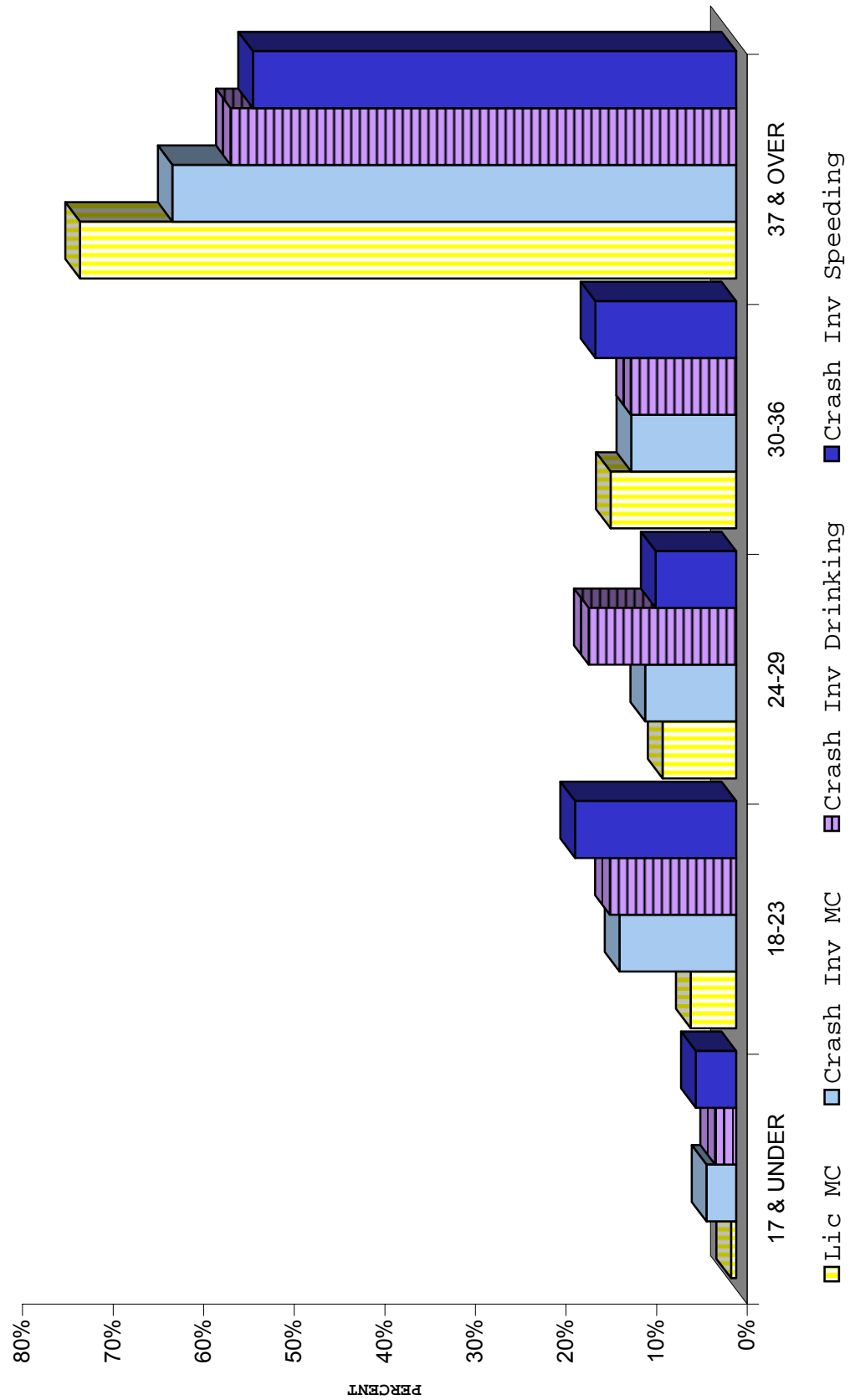
Motorcycle crashes constitute 2.5 percent of all crashes, 11.3 percent of all fatal crashes, and 7.5 percent of all injury crashes. There were 20 people killed and 426 injured on motorcycles in the 427 reported motorcycle crashes during 2002 (see TABLE 2-7). The young motorcycle driver is over represented 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, 6.1 percent of drivers involved in motorcycle crashes, and 8.9 percent of the speeding drivers involved in motorcycle crashes (see TABLE 3-19 and FIGURE 3-11).

TABLE 3-19
MOTORCYCLISTS BY AGE GROUP
2002

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	5	1.1	0	0.0	0	0.0
14 - 15	48	0.1	2	0.4	0	0.0	0	0.0
16 - 17	278	0.5	8	1.7	1	2.3	4	4.4
18 - 19	616	1.1	13	2.8	2	4.7	4	4.4
20 - 21	973	1.7	25	5.4	3	7.0	5	5.6
22 - 23	1,301	2.3	21	4.6	1	2.3	7	7.8
24 - 25	1,425	2.5	14	3.0	2	4.7	4	4.4
26 - 27	1,532	2.7	21	4.6	2	4.7	2	2.2
28 - 29	1,708	3.0	11	2.4	3	7.0	2	2.2
30 - 31	1,981	3.4	12	2.6	0	0.0	4	4.4
32 - 36	5,981	10.4	41	8.9	5	11.6	10	11.1
37 - 41	8,365	14.6	56	12.2	9	20.9	7	7.8
42 - 51	17,970	31.3	152	33.0	9	20.9	27	30.0
52 - Over	15,293	26.6	77	16.7	6	14.0	14	15.6
Unknown	0	0.0	2	0.4	0	0.0	0	0.0
Total	57,471	100	460	100	43	100	90	100

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

FIGURE 3-11 MOTORCYCLISTS 2002
CRASH INVOLVED MOTORCYCLE & MOPED DRIVERS



There were 20 motorcyclist fatalities during 2002. Eighteen were motorcycle drivers. Three drivers wore helmets and eye protection, one wore helmet only, nine wore eye protection only and five did not wear restraints. Two motorcycle passenger fatalities wore eye protection only. Helmets were used by 120 or 27.3 percent of the motorcycle drivers in crashes while 318 or 72.6 percent did not wear a helmet (see TABLE 3-20).

TABLE 3-20
HELMET USE BY MOTORCYCLE DRIVERS IN CRASHES
2002

<u>Age</u>	Helmet Used		Helmet Not Used	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
6 - 13	1	20.0	4	80.0
14 - 15	0	00.0	2	100.0
16 - 17	8	100.0	0	00.0
18 - 20	4	18.2	18	81.8
21 - 24	11	27.5	29	72.5
25 - 34	17	23.0	57	77.0
35 - 44	21	21.2	78	78.8
45 - Over	58	30.7	129	69.0
Unknown	0	0.0	1	100.0
Total	120	27.3	318	72.6

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 eight pedestrian deaths and 104 injuries in motor vehicle crashes during 2002 (see TABLE 3-21). The youngest pedestrian killed was sixteen years old, while the oldest was 78. Of the injured pedestrians, 21.2 percent were between the ages of 14-19. Cities accounted for 84.6 percent of the pedestrian injuries and 37.5 percent of the fatalities (see TABLE 3-23). Of the 8 pedestrians killed, 7 were male and 1 female. Of the 104 injured, 57 were male and 47 female.

Officers reported that three of the 8 pedestrians killed had been drinking alcohol (see TABLE 3-22).

TABLE 3-21
AGE OF PEDESTRIANS IN TRAFFIC CRASHES
2002

<u>Age</u>	<u>Fatalities</u>		<u>Injuries</u>	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
0 - 5	0	0.0	6	5.8
6 - 13	0	0.0	18	17.3
14 - 19	1	12.5	22	21.2
20 - 24	0	0.0	8	7.7
25 - 34	1	12.5	11	10.6
35 - 44	2	25.0	11	10.6
45 - 54	1	12.5	13	12.5
55 - 64	2	25.0	4	3.8
65 - Over	1	12.5	11	10.6
Total	8	100	104	100

Source: SD Department of Public Safety: Accident Records

TABLE 3-22
ALCOHOL INVOLVEMENT BY PEDESTRIANS
2002

<u>Alcohol Involvement</u>	<u>Fatalities</u>		<u>Injuries</u>	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
Alcohol or Drugs	3	37.5	9	8.7
No Alcohol	5	62.5	91	87.5
Unknown	0	0.0	4	3.8
Total	8	100	104	100

Source: SD Department of Public Safety: Accident Records

TABLE 3-23
RURAL vs. CITY PEDESTRIAN CRASHES
2002

	<u>Fatalities</u>		<u>Injuries</u>	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
Rural	5	62.5	16	15.4
City	3	37.5	88	84.6
Total	8	100	104	100

Source: SD Department of Public Safety: Accident Records

Bicycles

During 2002 there was one bicyclist killed (see TABLE 2-9). There were 85 bicycle drivers injured in reported motor vehicle crashes during 2002 (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 45.9 percent of the injured bicycle drivers. Twenty-seven of the bicycle drivers in crashes had no contributing circumstances. The yearly 1982-2002 trend of bicycle fatalities and injuries is provided in TABLE 2-9.

TABLE 3-24
AGE OF BICYCLE DRIVERS IN TRAFFIC CRASHES
2002

<u>Age</u>	<u>Fatalities Number</u>	<u>Injuries Number</u>	<u>%</u>
0 - 5	0	1	1.2
6 - 13	1	46	54.1
14 - 19	0	14	16.5
20 - 24	0	6	7.1
25 - 34	0	5	5.9
35 - 44	0	7	8.2
45 - 54	0	4	4.7
55 - 64	0	1	1.2
65 - Over	0	1	1.2
Total	1	85	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, 2001, National Safety Council)

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