

**1999
South Dakota
Motor Vehicle
Traffic Accident
Summary**



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Governor

Prepared By
Department of Transportation
Accident Records Office

In Cooperation With
Department of Commerce & Regulation
Office Of Highway Safety



STATE OF SOUTH DAKOTA
WILLIAM J. JANKLOW, GOVERNOR

May 15, 2000

Dear Reader:

The 1999 South Dakota Motor Vehicle Traffic Accident Summary is a sobering reminder of the human and financial costs of traffic crashes in South Dakota. This booklet contains a significant amount of information that can help us to identify traffic safety problems, and, hopefully, determine effective countermeasures to those problems.

Alcohol involvement in traffic crashes is too high. Strict enforcement of drinking and driving laws will continue to be a priority for the South Dakota Highway Patrol in 2000. In addition, efforts will continue to prevent underage persons from obtaining or consuming alcoholic beverages. Incredibly, over 18 percent of the drinking drivers involved in fatal and injury traffic crashes in 1999 were not old enough to consume alcohol legally.

Speeding is a major contributing factor in crashes where the driver was under the age of twenty-one; in fact, 38 percent of all speeding drivers in fatal and injury traffic crashes in 1999 were under the age of twenty-one.

The use of safety belts by motor vehicle occupants involved in traffic crashes is too low. Safety belt usage increases the odds of surviving a traffic crash by approximately 50 percent. Child safety seats have proven their effectiveness in protecting South Dakota's children in traffic crashes. Additionally, more parents need to remember to include the often-missed step in protecting their children by using booster seats.

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

Sincerely,

William J. Janklow

WJJ:drw

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I. INTRODUCTION

The South Dakota Motor Vehicle Traffic Accident Summary was developed to provide an overview of the South Dakota traffic accident picture, as well as make frequently requested information available. Information from 1999 comprises the major portion of the book; however, basic historic trends are also provided for reference.

The Motor Vehicle Traffic Accident Summary is divided into two main sections, Historical Trends and 1999 Motor Vehicle Traffic Accident Profile. The Historical Trend section provides information on alcohol involvement in motor vehicle accidents, severity of injury by record type and sex of drivers involved in accidents. This section also provides data on restraint usage and accident trends. The 1999 Traffic Accident Profile section details the accident picture for 1999 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 Transportation. 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 five hundred dollars or more to any one person's property or one thousand dollars accumulated damage per accident.** Law enforcement agencies provide the accident reports to Accident Records. These reports are available to the public for a fee of four dollars.

Examples of reports available through Accident Records are:

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

PLOT MAPS - These maps supply the user with a graphic display on which the location of each accident 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 or copies, write or call:

Accident Records Section
700 East Broadway Avenue
Pierre, SD 57501-2586
Phone: (605) 773-4156

SOUTH DAKOTA
STATISTICAL SUMMARY
1999

NUMBER OF REPORTED MOTOR VEHICLE TRAFFIC ACCIDENTS: **20,019**

AMOUNT OF MOTOR VEHICLE TRAFFIC ACCIDENT PROPERTY DAMAGE: **\$75 million**

NUMBER OF MOTOR VEHICLE TRAFFIC ACCIDENT INJURIES: **7,574**

NUMBER OF MOTOR VEHICLE TRAFFIC ACCIDENT FATALITIES: **150**

FATALITY RATE PER 100,000,000 MILES OF TRAVEL: **1.83** (lowest in SD history)

PERCENT OF DRIVERS IN FATAL ACCIDENTS WHO HAD BEEN DRINKING: **28.6%**

NUMBER KILLED IN ALCOHOL-RELATED ACCIDENTS: **62**

NUMBER INJURED IN ALCOHOL-RELATED ACCIDENTS: **1,027**

NUMBER OF PEDESTRIANS KILLED: **11**

NUMBER OF MOTORCYCLISTS KILLED: **10**

NUMBER OF BICYCLISTS KILLED: **0**

PERCENT OF LICENSED DRIVERS UNDER 25: **18.8%**

PERCENT OF ACCIDENT-INVOLVED SPEEDING DRIVERS UNDER 25: **54.1%**

PERCENT OF ACCIDENT-INVOLVED DRINKING DRIVERS UNDER 25: **42.1**

NUMBER OF OCCUPANTS KILLED IN MOTOR VEHICLES: **128**, **23** WERE WEARING A SAFETY RESTRAINT (EXCLUDES MOPED, MOTORCYCLE & SNOWMOBILE OCCUPANTS)

NUMBER OF DWI CONVICTIONS: **6,199** (Source: Dept. of Commerce & Regulation-Driver Improvement)

NUMBER OF UNRESTRAINED OCCUPANTS UNDER 5 YEARS OF AGE KILLED IN MOTOR VEHICLE ACCIDENTS: **0**, NUMBER KILLED WITH UNKNOWN RESTRAINT USAGE: **0**

NUMBER OF RESTRAINED OCCUPANTS UNDER 5 YEARS OF AGE KILLED IN MOTOR VEHICLE ACCIDENTS: **1** WITH CHILD RESTRAINT SYSTEM USED PROPERLY.

ECONOMIC LOSS FROM MOTOR VEHICLE TRAFFIC ACCIDENTS: **\$331 MILLION**

Source: SD Department of Transportation: Accident Records

II. HISTORICAL TRENDS

Motor Vehicle Accidents

The preliminary death rates per 100 million vehicle miles traveled from 1990-1999 for South Dakota, states surrounding South Dakota, and the nation are shown in TABLE 2-1. The national rate has shown a decline during the past 2 years. FIGURE 2-1 compares South Dakota with the national rate and two comparable rural states, North Dakota and Wyoming. The South Dakota rate has been adjusted to comply with changes made by the Department of Transportation in the computation of vehicle miles of travel.

**TABLE 2-1
FATALITY RATE COMPARISON
1990-1999**

<u>State</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>
South Dakota	2.2	2.1	2.2	1.9	2.0	2.1	2.2	1.9	2.1	1.8
Iowa	2.0	2.1	1.8	1.8	1.8	2.0	1.7	1.7	1.5	1.6
Minnesota	1.5	1.3	1.4	1.3	1.5	1.4	1.3	1.3	1.3	1.3
Montana	2.5	2.3	2.1	2.3	2.3	2.3	2.1	2.8	2.5	2.3
Nebraska	1.9	2.0	1.9	1.7	1.8	1.6	1.8	1.8	1.8	1.7
North Dakota	1.9	1.6	1.4	1.5	1.4	1.1	1.3	1.5	1.1	1.6
Wyoming	2.2	2.1	2.0	1.9	2.1	2.4	2.0	1.9	1.9	2.3
National	2.1	1.9	1.8	1.7	1.7	1.7	1.7	1.7	1.6	1.5

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

Source: SD Department of Transportation: Accident Records

TABLE 2-2 provides a yearly comparison of South Dakota's motor vehicle traffic accidents from 1967 through 1999. Any comparison of motor vehicle accidents must be made with caution due to the changes in the definition of a reportable accident. For example, in the late 1970's the definition of a fatality caused by a motor vehicle accident was changed from the death occurring up to one year after the accident to death occurring within 30 days after the accident. 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 1999 death rate decreased to 1.83, a 10.7% decrease from the 1998 2.05 rate. The 7,574 people injured is a 1.9% decrease from the 7,723 for 1998 (see TABLE 2-2).

FIGURE 2-1

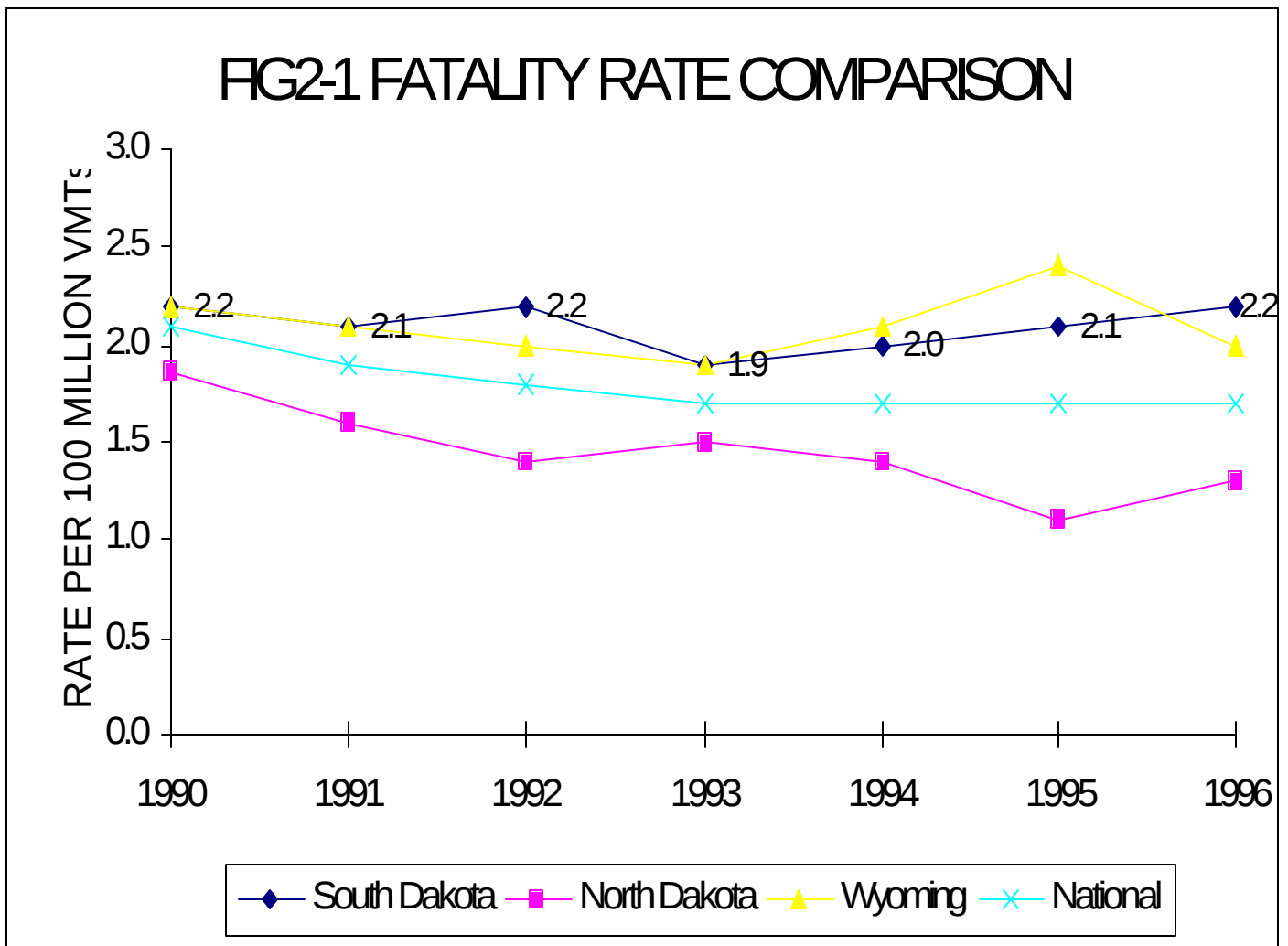


TABLE 2-2
SOUTH DAKOTA YEARLY COMPARISON
OF MOTOR VEHICLE TRAFFIC FATALITIES, INJURIES,
ACCIDENTS, MILES TRAVELED, & REGISTERED MOTOR VEHICLES

<u>Year</u>	<u>Deaths</u>	<u>Death</u> <u>Rate¹</u>	<u>Injuries</u>	<u>Total</u> <u>Accd.</u>	<u>Total</u> <u>Accd.</u> <u>Rate⁴</u>	<u>Fatal</u> <u>Accd.</u>	<u>Injury</u> <u>Accd.</u>	<u>PDO²</u> <u>Accd.</u>	<u>Miles³</u> <u>Traveled</u> <u>+(000,000)</u>	<u>Registered</u> <u>Motor</u> <u>Vehicles</u> <u>+(000)</u>
1967	224	5.41	5,286	12,154	293.43	183	3,250	8,721	4,142	407
1968	255	5.91	5,612	14,061	326.01	215	3,396	10,450	4,313	409
1969	296	6.79	5,921	16,565	379.84	219	3,584	12,762	4,361	422
1970	238	5.12	5,492	16,165	347.78	189	3,395	12,581	4,648	427
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	1.83	7,574	20,019	244.46	136	5,032	14,851	8,189	841

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) accident 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 accident.

³ Miles traveled from years 1980 through 1991 have been revised to agree with the Highway Performance Monitoring System's (HPMS) miles traveled. The revised travel was provided by Data Inventory of the SD Department of Transportation. Note! This revision of the miles traveled has caused the Death Rates to be adjusted also. Current year 1999 may be adjusted and updated in next year's publication.

⁴ Number of accidents per 100 million vehicle miles traveled.

Source: SD Department of Transportation: Accident Records

Alcohol Involvement

Nearly 18 percent (17.7) of the people killed in alcohol related accidents were teenagers - down from the previous 2 years (see Table 2-3A). The percent of alcohol involved accidents in injury and property damage accidents show a decrease in 1999 when compared to a 6 year (93-98) average. Fatal accidents show a 4.4% increase (see Table 2-3). Alcohol statistics dating back to the 1970's show 1993 to have the lowest number of fatalities for anyone year period and the highest number is 138 for the year of 1973.

TABLE 2-3
ALCOHOL INVOLVED ACCIDENTS AS PERCENT OF ALL ACCIDENTS
1993-1999

	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>
Total Accidents	8.0 (1501)	8.1 (1574)	7.5 (1457)	7.0 (1508)	6.9 (1449)	7.1 (1393)	6.4 (1290)
Fatal Accidents	39.8 (47)	44.7 (63)	42.9 (60)	38.0 (54)	39.1 (50)	40.3 (60)	42.6 (58)
Injury Accidents	13.3 (736)	14.1 (805)	13.3 (735)	12.8 (722)	12.0 (656)	12.9 (662)	12.6 (634)
PDO Accidents	5.5 (718)	5.2 (706)	4.8 (662)	4.6 (732)	4.9 (743)	4.6 (671)	4.0 (598)
Fatalities	39.3 (55)	45.5 (70)	44.3 (70)	38.9 (68)	39.9 (59)	39.4 (65)	41.3 (62)
Injuries	14.4 (1207)	15.1 (1286)	14.1 (1175)	13.8 (1170)	12.5 (1024)	13.9 (1074)	13.6 (1027)

NOTE: Alcohol involvement for Fatal Accidents 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 Accidents - 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 ACCIDENTS BY AGE
1993 - 1999

<u>AGE</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>
0 - 5	0	0	0	2	1	1	0
6 - 12	0	1	0	2	1	0	1
13 - 19	7	16	6	10	17	15	11
20	1	1	1	2	3	2	2
21 - 29	16	21	28	18	10	19	16
30 - 39	17	12	18	15	14	14	10
40 - 49	10	8	9	5	6	9	11
50 - 59	0	4	2	7	3	4	6
60 & OLDER	3	7	6	7	4	1	5
Unknown/Not Stated	1	0	0	0	0	0	0
TOTAL	55	70	70	68	59	65	62

Source: SD Department of Transportation: Accident Records

FIGURE 2-2 and 2-3

FIGURE 2-2 1999 TRAFFIC FATALITIES
Alcohol Related vs Non Alcohol Related

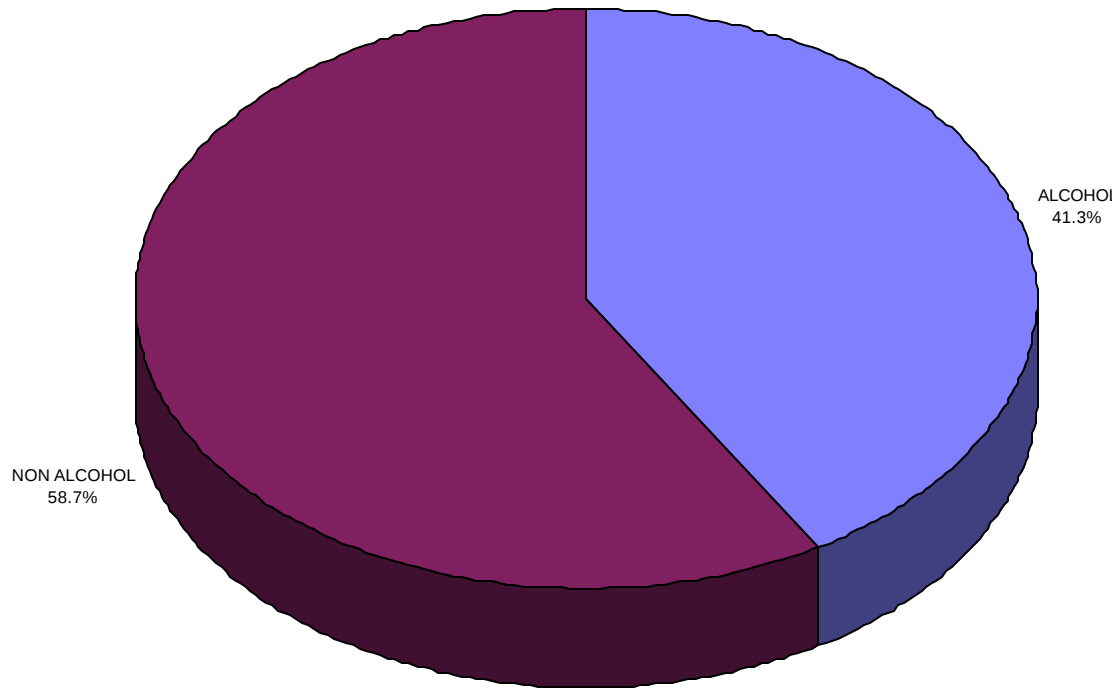
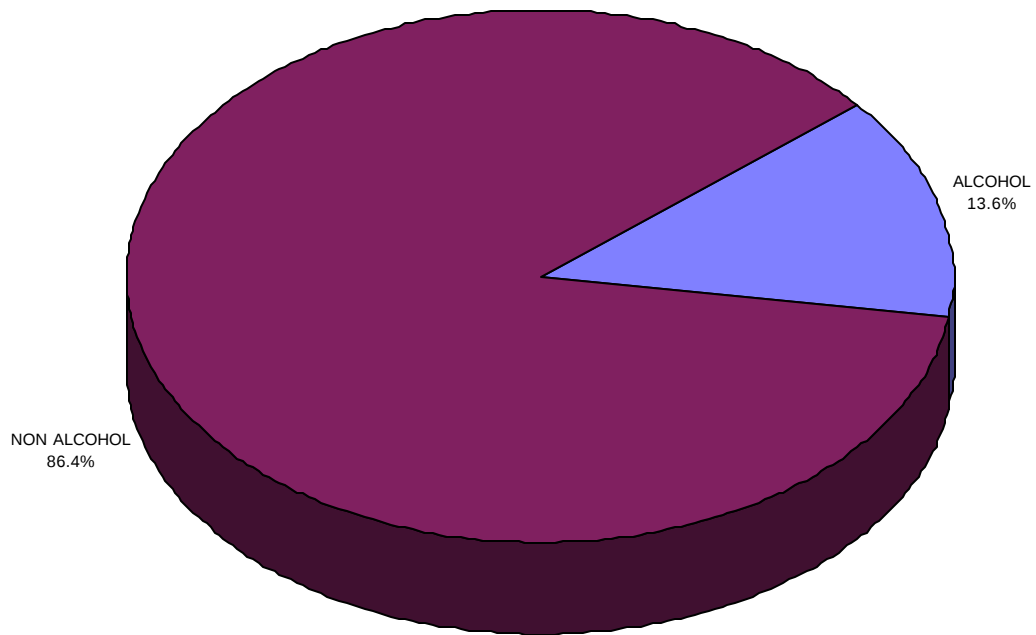


FIGURE 2-3 1999 TRAFFIC INJURIES
Alcohol Related vs Non Alcohol Related



The following accident and arrest data is presented to monitor changes in alcohol-related fatal and injury accidents and to compare changes with nonalcohol-related accident experiences (see TABLE 2-4). Alcohol-related fatal and injury accidents decreased by 4.2% while nonalcohol-related fatal and injury accidents decreased by 1.4% from the 1998 totals. The number of DWI arrests increased by 8.7% from 1998.

TABLE 2-4
ACCIDENT AND ARREST ACTIVITY
1991 - 1999

	FATAL ACCIDENTS		FATAL & INJURY ACCIDENTS		DWI ARRESTS*
	ALCOHOL RELATED	NONALCOHOL RELATED	ALCOHOL RELATED	NONALCOHOL RELATED	
1991	57	73	841	4,119	8,291
1992	65	76	829	4,424	8,378
1993	47	71	783	4,860	8,821
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

*Source: South Dakota Courts - The State of the Judiciary and 1999 Annual Report of the S. D. Unified Judicial System - January 2000
Based on Fiscal Year statistics

Source: SD Department of Transportation: Accident Records

FIGURE 2-4 presents the annual counts of DWI arrests, alcohol-related fatal and injury accidents, and nonalcohol-related fatal and injury accidents from 1991 through 1999. FIGURE 2-5 presents the alcohol-related and nonalcohol-related fatal accident experience for the years of 1991 through 1999.

There were 58 alcohol-related fatal accidents during 1999, which compares to 60 in 1998. The previous three-year average was 55 for the years of 1996-1998.

There were 692 alcohol-related fatal and injury accidents during 1999, which compares to 722 in 1998. The previous three-year average was 735 or a 5.9 percent decrease in 1999. Nonalcohol-related fatal and injury accidents in 1999 decreased (1.4%) when compared to 1998 and decreased 7.1 percent from the previous three-year average (96-98).

There were 9,383 DWI arrests in fiscal year 1999. This level is up 3.9% from the previous three-year average (96-98).

FIGURE 2-4 & FIGURE 2-5

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

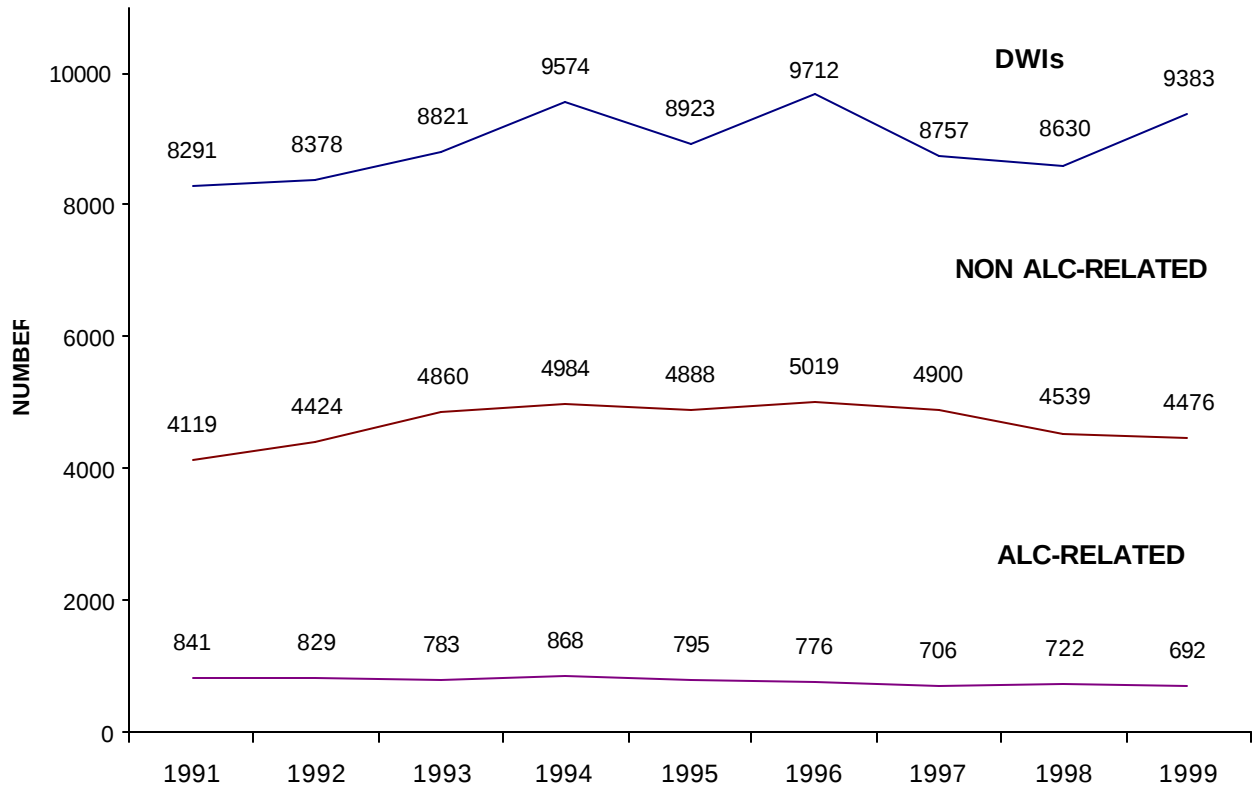
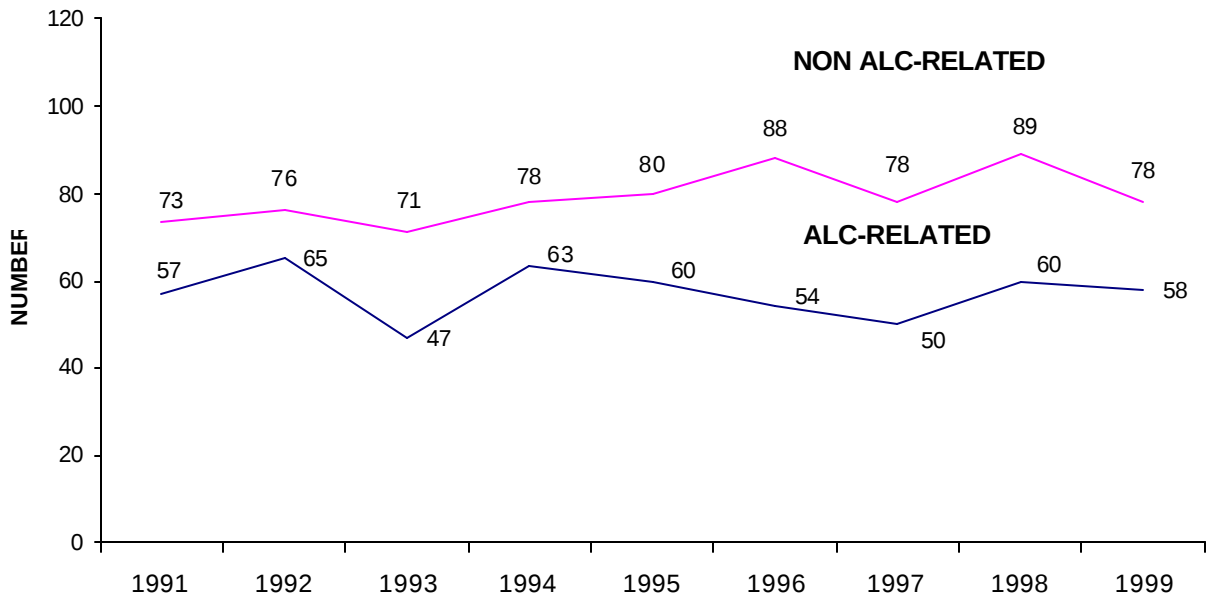


FIGURE 2-5 FATAL ACCIDENTS



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. Eighty-six occupants were killed while not wearing any safety restraint, while twenty-one occupants killed were wearing lap and shoulder harness, one was wearing a lap belt only, and one wore a child restraint used properly (see TABLE 2-5).

Fifty-nine (46.1%) of the 128 killed occupants were either partially or totally ejected from the vehicle (see TABLE 2-5B).

TABLE 2-5
SAFETY RESTRAINT USAGE
KILLED OCCUPANTS

	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>
No Safety Equipment	91	86	96	89	95	86
Lap Belt Only	0	1	5	0	1	1
Shoulder Harness Only	0	2	3	2	1	0
Lap Belt & Shoulder Harness	10	16	32	24	31	21
Child Restraint Used Properly	0	0	0	0	1	1
Child Restraint Not Properly Used	1	0	0	1	0	0
Other Type Restraints	0	0	0	1	2	0
Not Stated or Unknown	8	23	14	15	16	19
Total	110	128	150	132	147	128

TABLE 2-5A
SAFETY RESTRAINT USAGE
INJURED OCCUPANTS

	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>
No Safety Equipment	4,711	2,854	2,861	2,642	2,572	2,324
Lap Belt Only	203	248	248	211	171	150
Shoulder Harness Only	102	85	69	78	77	56
Lap Belt & Shoulder Harness	2,274	3,945	4,199	4,135	3,803	3,947
Child Restraint Used Properly	36	42	56	39	46	50
Child Restraint Not Properly Used	5	5	7	4	5	4
Other Type Restraints	14	13	15	13	11	12
Not Stated or Unknown	449	450	412	458	394	389
Total	7,794	7,642	7,867	7,580	7,079	6,932

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.

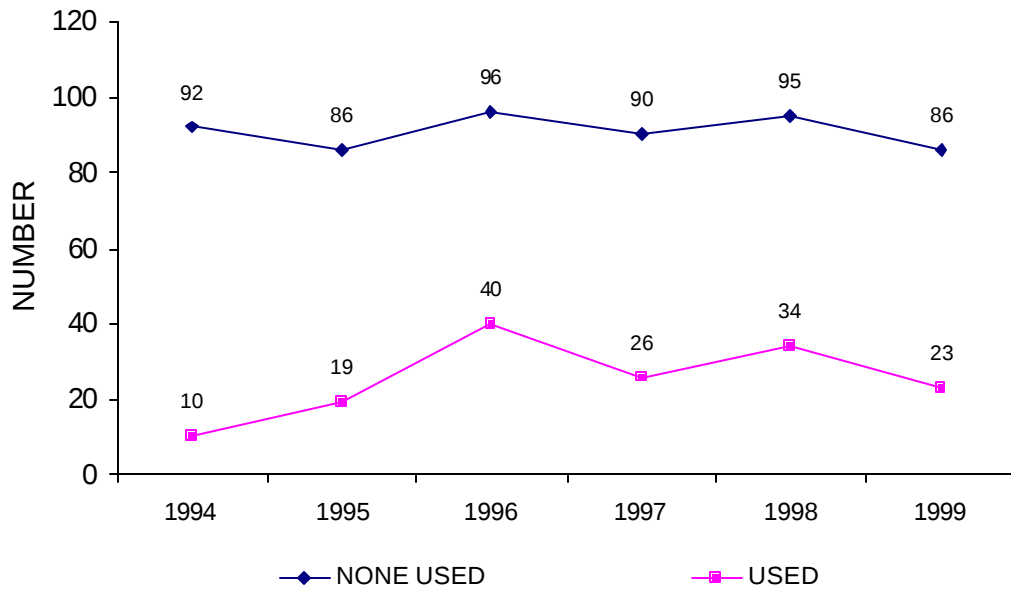
TABLE 2-5B
FATALITIES BY EJECTION STATUS FOR MOTOR VEHICLE OCCUPANTS
(Excludes Motorcycle, Mopeds and Snowmobiles)

1999	
Not Ejected	67
Partial Ejection	11
Total Ejection	48
Unknown Ejection	2
Total	128

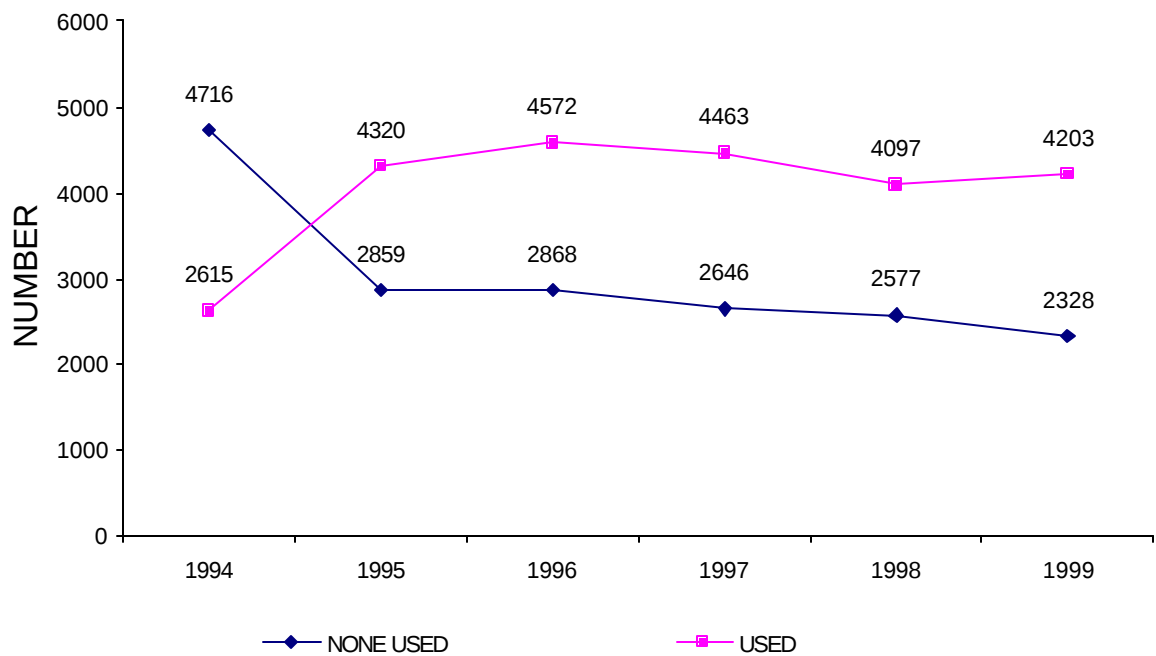
Source: SD Department of Transportation: Accident Records

FIGURE 2-6 & 2-7

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



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



There was one fatality to motor vehicle occupants from birth through four years of age during 1999, which compares to six fatalities during 1998 (see TABLE 2-6).

There were 130 children (birth through 4 years old) injured in 1999, which compares to 118 in 1998 and the three-year average of 129. Eighty-five of the 130 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). The Child Passenger Restraint System (SDCL 32-37) law took effect on July 1, 1984 -- since that time there have been 36 deaths to occupants of this age group and four have been restrained by a child safety restraint properly used and 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.

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>
1989	1	83	52	135
1990	1	67	46	113
1991	2	87	56	143
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

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
1999

	<u>Fatalities</u>	<u>Injuries</u>
No Safety Equipment Used	0	35
Lap Belt Only	0	10
Shoulder Harness Only	0	0
Lap Belt & Shoulder Harness	0	29
Child Restraint Used Properly	1	46
Child Restraint Not Used Properly	0	4
Other	0	0
Not Stated or Unknown	0	6
TOTAL	1	130

Source: SD Department of Transportation: Accident Records

Cycle and Pedestrian Accidents

The following tables provide a yearly comparison of South Dakota's motorcycle, pedestrian, and bicycle accidents, injuries, and fatalities. During the last 10 years the average number of motorcycle involved accidents is 373 and 13 deaths per year. Licensed motorcyclists increased 2.6 percent during 1999 while fatalities remained low with 10 deaths. Moped accidents are included with motorcycle accidents. There were no moped fatalities during 1999. 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 accident information.

TABLE 2-7
MOTORCYCLE ACCIDENTS
1976 - 1999

<u>Year</u>	<u>Motorcycle Accidents</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>		
1976	465	9	402	9	501	25,058	
1977	495	17	419	19	529	26,560	
1978	523	14	456	14	560	27,590	34,225
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

Source: SD Department of Transportation: Accident Records

TABLE 2-8
PEDESTRIAN FATALITIES AND INJURIES
1979 - 1999

<u>Year</u>	<u>Fatalities</u>	<u>Injuries</u>
1979	16	167
1980	21	162
1981	20	130
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

TABLE 2-9
BICYCLE FATALITIES AND INJURIES
1979 - 1999

<u>Year</u>	<u>Fatalities</u>	<u>Injuries</u>
1979	4	96
1980	0	78
1981	0	83
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

Source: SD Department of Transportation: Accident Records

Holiday Counts

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

TABLE 2-10
ACCIDENTS DURING HOLIDAYS
1987 - 1999

<u>Holiday</u>	<u>Total Hours</u>	<u>Total Accd.</u>	<u>Fatal Accd.</u>	<u>Injury Accd.</u>	<u>Fatalities</u>	<u>Injuries</u>
<u>MEMORIAL DAY*</u>						
1987	78	97	1	28	1	47
1988	78	127	2	36	2	68
1989	78	121	1	46	1	63
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
<u>FOURTH OF JULY</u>						
1987	78	124	1	53	4	74
1988	78	138	2	48	2	74
1989	102	185	3	67	3	119
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
<u>LABOR DAY</u>						
1987	78	135	2	44	3	73
1988	78	131	1	45	1	94
1989	78	134	1	58	4	101
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

*Nationally Observed

<u>Holiday</u>	<u>Total Hours</u>	<u>Total Accd.</u>	<u>Fatal Accd.</u>	<u>Injury Accd.</u>	<u>Fatalities</u>	<u>Injuries</u>
<u>THANKSGIVING</u>						
1987	102	255	2	56	3	91
1988	102	224	1	42	1	70
1989	102	232	2	61	2	112
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
<u>CHRISTMAS</u>						
1987	102	209	1	63	2	108
1988	78	153	1	38	1	57
1989	78	179	1	50	1	87
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
<u>NEW YEARS</u>						
1987-88	102	151	0	33	0	43
1988-89	78	103	2	23	2	40
1989-90	78	84	0	31	0	50
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

Source: SD Department of Transportation: 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 1990 through 1999. 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>		
1990	1501	20.7	3009	41.4	2751	37.9	7261	153
1991	1598	21.9	2945	40.3	2767	37.9	7310	143
1992	1765	22.6	3036	38.9	3012	38.6	7813	161
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

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>		
1990	936	20.2	1842	39.7	1857	40.1	4635	100
1991	927	20.0	1792	38.7	1913	41.3	4632	98
1992	1011	20.4	1855	37.5	2085	42.1	4951	99
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

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

<u>Year</u>	Incapacitating Injuries		Non-Incapacitating Injuries		Possible Injuries		<u>Total Injuries</u>	<u>Total Killed</u>
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>		
1990	480	20.4	1035	44.0	839	35.6	2354	35
1991	562	23.7	997	42.1	809	34.2	2368	30
1992	629	25.1	1015	40.4	866	34.5	2510	54
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

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

<u>Year</u>	Incapacitating Injuries		Non-Incapacitating Injuries		Possible Injuries		<u>Total Injuries</u>	<u>Total Killed</u>
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>		
1990	29	22.0	72	54.5	31	23.5	132	3
1991	34	23.6	85	59.0	25	17.4	144	4
1992	44	27.5	90	56.3	26	16.3	160	1
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

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

<u>Year</u>	Incapacitating Injuries		Non-Incapacitating Injuries		Possible Injuries		<u>Total Injuries</u>	<u>Total Killed</u>
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>		
1990	56	40.6	60	43.5	22	15.9	138	15
1991	75	45.5	70	42.4	20	12.1	165	11
1992	81	42.2	76	39.6	35	18.2	192	7
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

Sex of Drivers

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

TABLE 2-16
SEX OF DRIVERS
1988 - 1999

	<u>ACCIDENT 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>
1988	14,688	64.2	8,207	35.8	244,576	50.7	238,130	49.3
1989	14,581	63.1	8,520	36.9	251,120	51.0	241,468	49.0
1990	14,347	62.3	8,666	37.7	248,959	50.6	243,500	49.4
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

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

Source: Accident Involved Drivers: SD Department of Transportation: Accident Records

Source: Licensed Drivers: SD Department of Commerce & Regulation

III. 1999 MOTOR VEHICLE ACCIDENT PROFILE

Introduction

This section profiles the reported motor vehicle traffic accidents for 1999. Information will be given on where the accidents are occurring, when accidents happen, who is involved, and factors that contribute to accidents or why they are occurring. **Column percentages may not total 100 percent due to rounding error.**

During 1999, there were 20,019 reported motor vehicle traffic accidents, the majority of accidents being property damage only 14,851 (74.2%). Injury accidents accounted for 5,032 (25.1%) of the accidents, while 136 (0.7%) were fatal accidents. There were 7,574 persons injured and 150 persons killed in accidents during 1999 (see TABLE 3-1).

TABLE 3-1
FATALITIES AND SEVERITY OF INJURIES OF DRIVERS,
PASSENGERS, PEDESTRIANS, AND BICYCLE DRIVERS
1999

	Incapac. Injuries		Non- Incapac. Injuries		Possible Injuries		Total Nonfatal Injuries		Total Fatalities	
	No.	%	No.	%	No.	%	No.	%	No.	%
Drivers	1,018	62.1	1,836	63.9	2,157	70.4	5,011	66.2	92	61.3
Passengers	555	33.9	921	32.0	853	27.9	2,329	30.7	47	31.3
Pedestrians	50	3.1	56	1.9	25	0.8	131	1.7	11	7.3
Bicycle Dr	14	0.9	61	2.1	27	0.9	102	1.3	0	0.0
Other*	1	0.1	0	0.0	0	0.0	1	0.0	0	0.0
Total	1,638	100	2,874	100	3,062	100	7,574	100	150	100

*Other contains 1 injury sustained by Other operators. The injury was to a horse back rider.

Definition of Injuries:

Killed: An injury which results in death. An injury caused death that occurs within 30 days of an accident is considered an accident 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 accident without assistance).

Non-Incapacitating: Any injury other than a fatal injury or incapacitating injury which is evident to observers at the scene of the accident (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 Transportation: Accident Records

TABLE 3-2 provides information on persons killed and injured by method or mode of transportation. During 1999, 51.3 percent of the fatalities and 58.1 percent of the injuries occurred to occupants of passenger cars. Occupants of pickups and vans accounted for 29.3 percent of the fatalities and 31.3 percent of the injuries. Additionally, in 1999 eleven pedestrians and ten motorcyclists were killed. There was one snowmobile driver killed and no bicyclists killed during 1999 (see Table 3-2).

TABLE 3-2
FATALITIES AND INJURIES BY MODE OF TRANSPORTATION
1999

	Fatalities		Injuries	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
Passenger Cars	77	51.3	4,402	58.1
Pickups, Vans	44	29.3	2,369	31.3
Pedestrians	11	7.3	131	1.7
Motorcycle, Moped	10	6.7	406	5.4
Trucks (All)*	7	4.7	122	1.6
Other	1	0.7	35	0.5
Bicycle	0	0.0	102	1.3
Farm Machinery	0	0.0	3	0.0
Unknown	0	0.0	4	0.1
Total	150	100	7,574	100

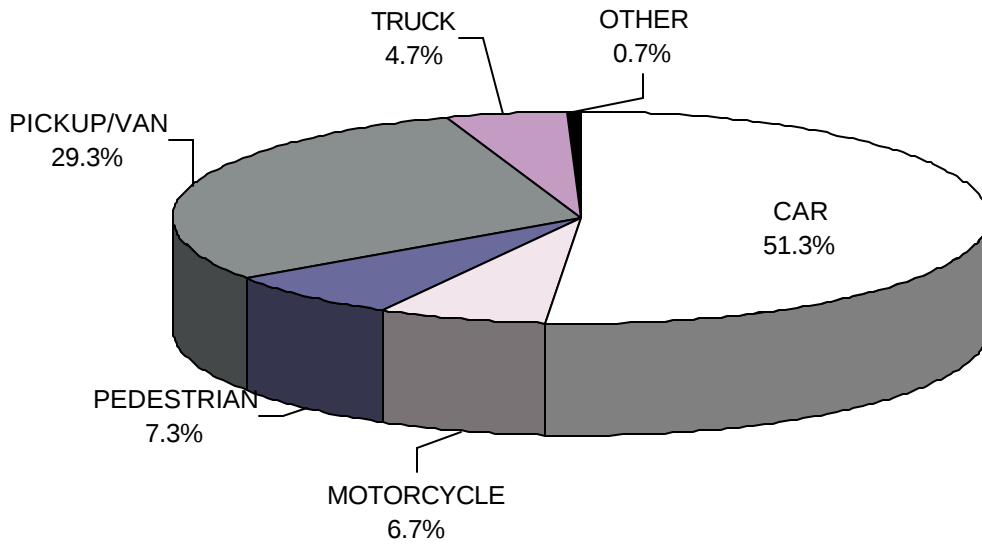
*Trucks	<u>Fatalities</u>	<u>Injuries</u>
Straight Truck	5	50
Straight Truck with Trailer	0	7
Truck Tractor Only	0	0
Truck Tractor with Single Semi Trailer	2	63
Truck Tractor with Two or More Trailers	0	2
Total	7	122

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

Source: SD Department of Transportation: Accident Records

FIGURE 3-1 & FIGURE 3-2

**FIGURE 3-1 FATALITIES BY TRAVEL MODE
1999**



**FIGURE 3-2 INJURIES BY TRAVEL MODE
1999**

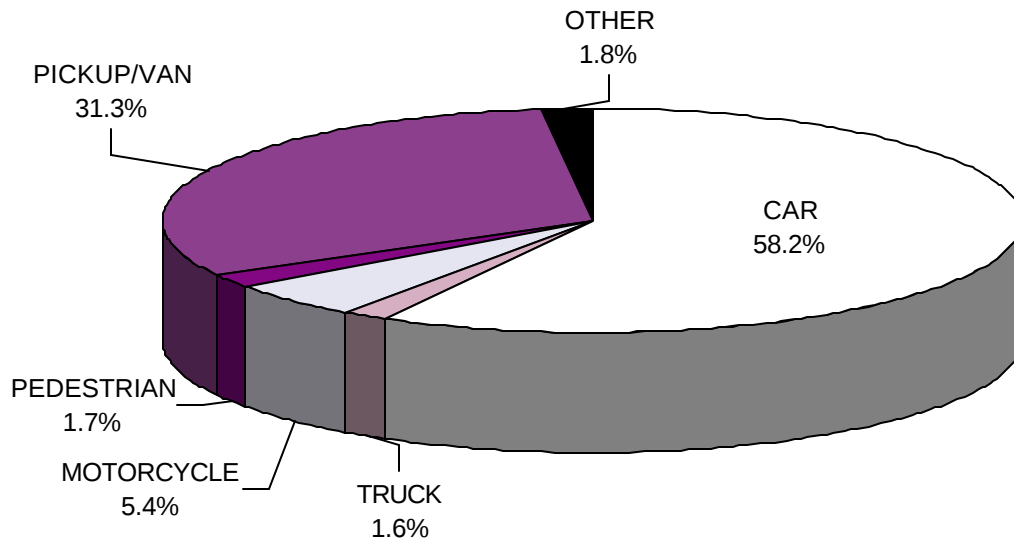


TABLE 3-3 provides information on all accident-involved vehicles by type. Passenger cars made up 44.0 percent of the vehicles involved in fatal accidents and 57.1 percent of those involved in injury accidents. Pickups and vans made up 39.0 percent of the vehicles involved in fatal accidents.

TABLE 3-3
VEHICLE TYPES INVOLVED IN ACCIDENTS
1999

	All Accidents		Fatal Accidents		Injury Accidents		PDO Accidents	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
Passenger Cars	17,935	56.4	88	44.0	4,976	57.1	12,871	56.2
Pickups, Vans	12,000	37.7	78	39.0	3,039	34.9	8,883	38.8
Trucks (All)*	1,139	3.6	19	9.5	272	3.1	848	3.7
Motorcycle	408	1.3	11	5.5	353	4.1	44	0.2
Farm Machinery or Heavy Equipment	82	0.3	2	1.0	17	0.2	63	0.3
Bus	80	0.3	1	0.5	21	0.2	58	0.3
Motor Home	56	0.2	0	0.0	14	0.2	42	0.2
Moped	2	0.0	0	0.0	2	0.0	0	0.0
Snowmobile	3	0.0	1	0.5	2	0.0	0	0.0
Other or Unknown	90	0.3	0	0.0	16	0.2	74	0.3
Total	31,795	100	200	100	8,712	100	22,883	100

*Trucks

	<u>All Accd.</u>	<u>Fatal Accd.</u>	<u>Injury Accd.</u>	<u>PDO Accd.</u>
Straight Truck	405	11	104	290
Straight Truck with Trailer	60	0	15	45
Truck Tractor Only	20	0	5	15
Truck Tractor with Single Semi Trailer	613	7	142	464
Truck Tractor with Two or More Trailers	41	1	6	34
Total	1,139	19	272	848

Source: SD Department of Transportation: Accident Records

TABLE 3-4 provides information on the ages of persons killed and injured. Over seven percent of the persons killed were age 19. Injured 16 & 17 years olds numbered 719 for 9.5 % of the total. Two children ages 0-5 were killed during 1999 (see Table 3-4).

TABLE 3-4
FATALITIES AND INJURIES
BY AGE GROUP
1999

	Fatalities		Injuries	
	No.	%	No.	%
0 - 5	2	1.3	175	2.3
6 - 13	7	4.7	425	5.6
14 - 15	3	2.0	425	5.6
16 - 17	8	5.3	719	9.5
18	3	2.0	349	4.6
19	11	7.3	289	3.8
20	3	2.0	246	3.2
21 - 24	16	10.7	737	9.7
25 - 34	19	12.7	1,181	15.6
35 - 44	28	18.7	1,084	14.3
45 - 54	17	11.3	814	10.7
55 - 64	9	6.0	431	5.7
65 - Over	24	16.0	662	8.7
Unknown	0	0.0	37	0.5
Total	150	100	7,574	100

Source: SD Department of Transportation: Accident Records

First Harmful Event

The initial incident which causes injury or damage is referred to as the first harmful event. Non-collision (overturning or other non-collision) represented 30.9 percent of the fatal accidents and only 8.1 percent of the total accidents, while 37.5 percent of the fatal accidents and 49.0 percent of all accidents represented a collision between 2 or more vehicles (see TABLE 3-5).

TABLE 3-5
FIRST HARMFUL EVENT
1999

<u>First Harmful Event</u>	Total Accidents		Fatal Accidents		Injury Accidents		PDO Accidents	
	No.	%	No.	%	No.	%	No.	%
Motor Vehicle Collision With:								
Another MV (Not Parked)	9,806	49.0	51	37.5	3,060	60.8	6,695	45.1
A Fixed or Other Object	2,628	13.1	29	21.3	724	14.4	1,875	12.6
An Animal	4,729	23.6	3	2.2	111	2.2	4,615	31.1
A Parked Motor Vehicle	990	4.9	0	0.0	110	2.2	880	5.9
A Pedestrian	123	0.6	11	8.1	112	2.2	0	0.0
A Bicyclist	105	0.5	0	0.0	101	2.0	4	0.0
A Railroad Vehicle	14	0.1	0	0.0	4	0.1	10	0.1
Non-Collision (Overturning or Other)	1,624	8.1	42	30.9	810	16.1	772	5.2
Total	20,019	100	136	100	5,032	100	14,851	100

Source: SD Department of Transportation: Accident Records

Manner of Collision

Head-on collisions are the most prevalent for severe accidents, accounting for 45.1 percent of the fatal accidents and only 1.6 percent of the total accidents. Angle collisions are second in prevalence for fatal accidents accounting for 23.5 percent of the fatal accidents and 20.7 percent of the total accidents (see TABLE 3-6). 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 accidents, 41.4 percent of the injury accidents, and 32.2 percent of the property damage only accidents.

TABLE 3-6
MANNER OF COLLISION FOR ACCIDENTS INVOLVING A COLLISION
BETWEEN TWO OR MORE MOTOR VEHICLES
1999

<u>Manner of Collision</u>	Total Accidents		Fatal Accidents		Injury Accidents		PDO Accidents	
	No.	%	No.	%	No.	%	No.	%
Rear-End	3,429	35.0	6	11.8	1,267	41.4	2,156	32.2
Head-On	156	1.6	23	45.1	92	3.0	41	0.6
Angle	2,030	20.7	12	23.5	716	23.4	1,302	19.4
Sideswipe-Same Direction	773	7.9	1	2.0	123	4.0	649	9.7
Sideswipe-Opposite Dir.	177	1.8	3	5.9	43	1.4	131	2.0
Turning Movement	2,735	27.9	6	11.8	793	25.9	1,936	28.9
Backing Movement	506	5.2	0	0.0	26	0.8	480	7.2
Total	9,806	100	51	100	3,060	100	6,695	100

Source: SD Department of Transportation: Accident Records

Highway System

The number of reported accidents by highway system is presented in TABLE 3-7. Injury and PDO accidents happened predominately within city limits. City streets and alleys experienced 33.8 percent of the PDO accidents and 37.2 percent of the injury accidents.

Noninterstate rural roads tallied 76.5 percent of the fatal accidents. The Interstate system experienced 2,620 (13.1%) of the total accidents while accounting for an estimated 27 percent of the vehicle miles traveled in 1999. Thirteen (9.6%) of the fatal accidents happened on the interstate system (see FIGURES 3-3 and 3-4).

TABLE 3-7
ACCIDENTS BY TYPE OF HIGHWAY
1999

<u>Type of Highway</u>	<u>Total Accidents</u>		<u>Fatal Accidents</u>		<u>Injury Accidents</u>		<u>PDO Accidents</u>		<u>No. Killed</u>	<u>No. Injured</u>
	<u>Number</u>	<u>%</u>	<u>Number</u>	<u>%</u>	<u>Number</u>	<u>%</u>	<u>Number</u>	<u>%</u>		
Interstate - Rural	1,856	9.3	9	6.6	350	7.0	1,497	10.1	11	566
US/State Hwys.-Rural	4,011	20.0	53	39.0	772	15.3	3,186	21.5	61	1,304
Co./Local Rds.-Rural	3,405	17.0	51	37.5	835	16.6	2,519	17.0	53	1,272
Interstate - City	764	3.8	4	2.9	201	4.0	559	3.8	5	283
US/State Hwys.-City	3,084	15.4	10	7.4	1,004	20.0	2,070	13.9	11	1,535
City Streets/Alleys	6,899	34.5	9	6.6	1,870	37.2	5,020	33.8	9	2,614
Total	20,019	100	136	100	5,032	100	14,851	100	150	7,574

Source: SD Department of Transportation: Accident Records

FIGURE 3-3 AND 3-4

FIGURE 3-3 1999 TRAFFIC ACCIDENTS
BY SYSTEM TYPE

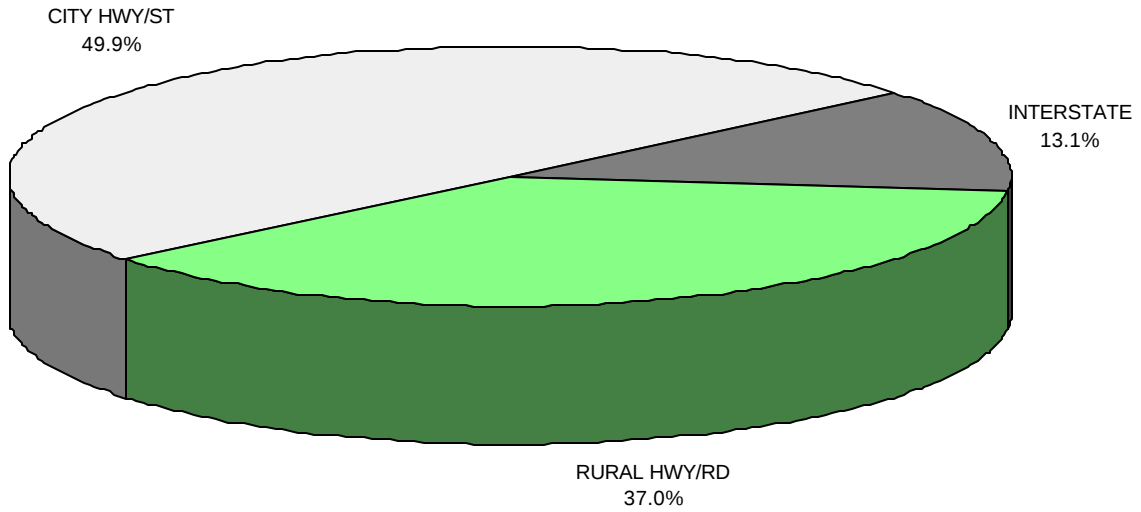
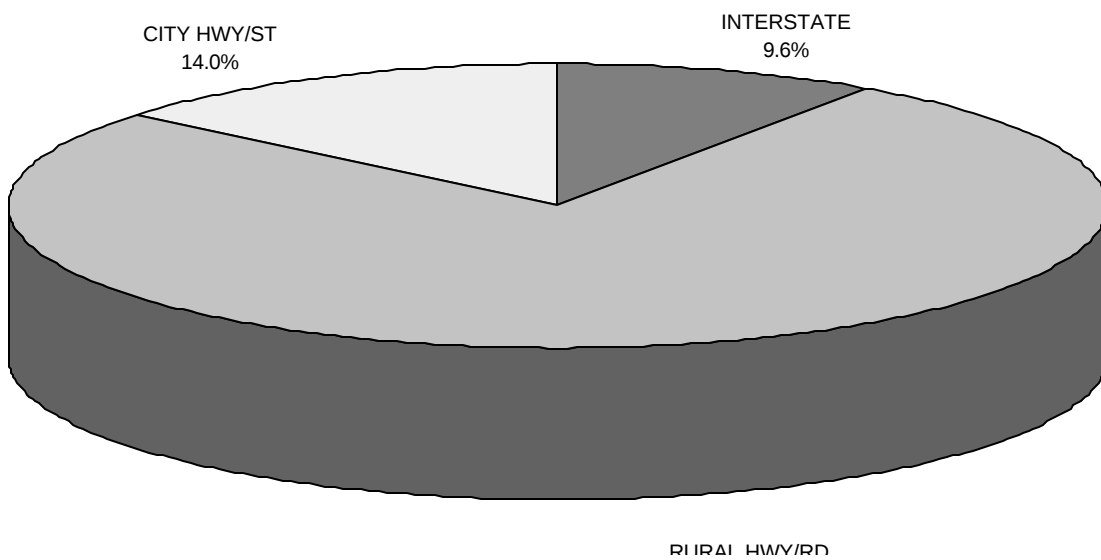


FIGURE 3-4 1999
FATAL TRAFFIC ACCIDENTS
BY SYSTEM TYPE



County Summary

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

Rural fatal and injury accidents occurred predominately in thirteen counties (see TABLE 3-9). Each of these counties reported over two percent of all rural fatal and injury accidents. The thirteen accounted for 57.0 percent of rural fatal and injury accidents and 22.8 percent of all fatal and injury accidents in South Dakota. Pennington County has 10.5 percent of all rural fatal and injury accidents with Minnehaha and Lawrence counties accounting for 9.9 and 6.1 percent. FIGURE 3-5 presents the percentage involvement of rural fatal and injury accidents and compares this to the percentage of rural vehicle miles traveled in these counties.

City Summary

Reported traffic accidents within South Dakota's cities (population of 2,500 and more) are presented in TABLE 3-10. These cities reported 56.3 percent of the statewide injury accidents and 14.0 percent of the fatal accidents. The two largest cities (Sioux Falls, Rapid City) accounted for 67.8 percent of fatal and injury accidents and 60.8 percent of the property damage only accidents that occurred in cities with populations of 2,500 or more.

Roadway Surface Conditions

The majority of the accidents occurred on dry roads, including fatal and injury accidents (see TABLE 3-11). Combining similar "bad" road conditions, ice, snow, frost, and slush accounts for 15.2 percent of all reported property damage accidents and 11.5 percent of all fatal and injury accidents. Dry roads were reported in 77.0 percent of all fatal and injury accidents.

Contributing Circumstances (Vision Obscurement and Other)

Contributing circumstances at the accident 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 3.3 percent of all accidents.

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 13.3 percent of all accidents.

TABLE 3-8
MOTOR VEHICLE TRAFFIC ACCIDENTS BY SD COUNTIES
1999

<u>County</u>	<u>Total Accd.</u>	<u>Fatal Accd.</u>	<u>Injury Accd.</u>	<u>PDO Accd.</u>	<u>Fatalities</u>	<u>Injuries</u>
AURORA	109	1	21	87	1	44
BEADLE	336	0	87	249	0	123
BENNETT	9	2	4	3	2	11
BON HOMME	126	1	31	94	1	52
BROOKINGS	672	5	129	538	5	173
BROWN	1,152	4	239	909	4	353
BRULE	182	2	33	147	2	49
BUFFALO	15	1	2	12	1	5
BUTTE	220	2	47	171	3	73
CAMPBELL	48	0	8	40	0	12
CHARLES MIX	128	5	23	100	5	53
CLARK	120	0	20	100	0	25
CLAY	206	0	62	144	0	84
CODINGTON	596	2	157	437	2	233
CORSON	77	3	26	48	4	48
CUSTER	231	1	83	147	1	124
DAVISON	666	1	132	533	1	179
DAY	106	4	29	73	4	46
DEUEL	115	0	20	95	0	23
DEWEY	56	2	13	41	2	21
DOUGLAS	57	0	11	46	0	13
EDMUNDS	148	0	26	122	0	40
FALL RIVER	169	2	44	123	2	78
FAULK	112	0	8	104	0	11
GRANT	120	0	22	98	0	36
GREGORY	55	1	18	36	1	30
HAAKON	61	1	7	53	1	7
HAMLIN	178	2	19	157	2	29
HAND	142	1	20	121	1	28
HANSON	92	0	18	74	0	28
HARDING	38	1	7	30	1	13
HUGHES	437	2	95	340	2	122
HUTCHINSON	112	1	21	90	1	32
HYDE	18	0	8	10	0	13
JACKSON	110	3	23	84	3	38
JERAULD	68	0	9	59	0	12
JONES	71	0	11	60	0	16
KINGSBURY	192	0	22	170	0	37
LAKE	280	0	48	232	0	68
LAWRENCE	649	8	179	462	8	255
LINCOLN	536	4	128	404	4	211
LYMAN	148	3	29	116	4	54
MC COOK	215	3	48	164	4	76
MC PHERSON	11	0	5	6	0	6
MARSHALL	141	2	23	116	2	40
MEADE	498	2	152	344	3	247
MELLETTE	16	3	6	7	3	10
MINER	99	1	22	76	1	34
MINNEHAHA	4,996	5	1,430	3,561	5	2,055
MOODY	269	4	58	207	5	87
PENNINGTON	2,714	18	928	1,768	20	1,449
PERKINS	83	0	14	69	0	16
POTTER	72	0	7	65	0	10
ROBERTS	190	5	54	131	7	87
SANBORN	128	1	8	119	4	12
SHANNON	53	6	17	30	6	42
SPINK	263	3	21	239	3	37
STANLEY	76	0	15	61	0	18
SULLY	41	1	8	32	1	14
TODD	12	7	2	3	8	25
TRIPP	134	0	26	108	0	33
TURNER	155	4	44	107	4	68
UNION	263	0	62	201	0	92
WALWORTH	133	1	31	101	1	45
YANKTON	468	3	105	360	3	159
ZIEBACH	26	2	7	17	2	10
Total:	20,019	136	5,032	14,851	150	7,574

TABLE 3-8A
ALCOHOL MOTOR VEHICLE TRAFFIC ACCIDENTS BY SD COUNTIES
1999

<u>County</u>	<u>Total Accd.</u>	<u>Fatal Accd.</u>	<u>Injury Accd.</u>	<u>PDO Accd.</u>	<u>Fatalities</u>	<u>Injuries</u>
AURORA	8	0	2	6	0	9
BEADLE	12	0	4	8	0	4
BENNETT	4	2	2	0	2	5
BON HOMME	7	0	5	2	0	11
BROOKINGS	27	1	13	13	1	15
BROWN	54	1	25	28	1	37
BRULE	13	0	9	4	0	19
BUFFALO	2	1	0	1	1	1
BUTTE	13	1	7	5	1	10
CAMPBELL	1	0	1	0	0	1
CHARLES MIX	12	2	7	3	2	23
CLARK	6	0	4	2	0	5
CLAY	17	0	9	8	0	14
CODINGTON	29	1	13	15	1	24
CORSON	21	3	17	1	4	37
CUSTER	19	1	14	4	1	19
DAVISON	31	0	8	23	0	10
DAY	13	2	7	4	2	9
DEUEL	7	0	3	4	0	4
DEWEY	8	1	6	1	1	13
DOUGLAS	5	0	2	3	0	2
EDMUNDS	9	0	5	4	0	6
FALL RIVER	11	1	5	5	1	8
FAULK	4	0	2	2	0	2
GRANT	6	0	3	3	0	4
GREGORY	4	0	2	2	0	3
HAAKON	5	1	2	2	1	2
HAMLIN	7	0	3	4	0	3
HAND	8	1	3	4	1	4
HANSON	0	0	0	0	0	0
HARDING	0	0	0	0	0	0
HUGHES	18	0	8	10	0	10
HUTCHINSON	10	0	5	5	0	5
HYDE	3	0	3	0	0	6
JACKSON	6	0	1	5	0	3
JERAULD	4	0	2	2	0	3
JONES	2	0	0	2	0	0
KINGSBURY	7	0	3	4	0	5
LAKE	12	0	5	7	0	6
LAWRENCE	67	3	27	37	3	39
LINCOLN	26	0	12	14	0	18
LYMAN	5	1	2	2	1	4
MC COOK	12	0	5	7	0	5
MC PHERSON	2	0	2	0	0	3
MARSHALL	8	1	5	2	1	13
MEADE	34	0	26	8	0	38
MELLETTE	4	2	2	0	2	4
MINER	4	1	3	0	1	5
MINNEHAHA	291	2	135	154	2	197
MOODY	14	2	7	5	3	12
PENNINGTON	254	11	130	113	12	220
PERKINS	3	0	0	3	0	0
POTTER	3	0	1	2	0	3
ROBERTS	21	3	11	7	3	18
SANBORN	7	0	3	4	0	5
SHANNON	9	4	3	2	4	11
SPINK	9	0	4	5	0	5
STANLEY	3	0	3	0	0	3
SULLY	0	0	0	0	0	0
TODD	7	6	1	0	7	16
TRIPP	11	0	5	6	0	5
TURNER	4	0	3	1	0	7
UNION	22	0	14	8	0	23
WALWORTH	10	1	5	4	1	5
YANKTON	29	1	12	16	1	22
ZIEBACH	6	1	3	2	1	4
Total:	1,290	58	634	598	62	1,027

TABLE 3-9
COUNTIES HAVING MORE THAN TWO PERCENT OF THE
RURAL FATAL & INJURY ACCIDENTS
1999

<u>County</u>	<u>Rural Fatal & Injury Accidents</u>	<u>Percent of All Rural Fatal & Injury Accidents</u>	<u>Percent of Rural VMTS*</u>
PENNINGTON	218	10.5	7.0
MINNEHAHA	204	9.9	6.0
LAWRENCE	127	6.1	3.3
MEADE	103	5.0	3.2
LINCOLN	101	4.9	4.5
CUSTER	71	3.4	1.8
BROWN	67	3.2	3.0
MOODY	53	2.6	2.4
YANKTON	53	2.6	1.6
BROOKINGS	49	2.4	2.5
MCCOOK	45	2.2	2.1
TURNER	45	2.2	1.3
ROBERTS	44	2.1	2.5

Note: Total Rural Fatal and Injury Accidents: 2,070

*S.D. Vehicle Miles of Travel Report April 2000

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

FIGURE 3-5

FIGURE 3-5 RURAL F&I ACC/VMTS SELECTED COUNTIES - 1999

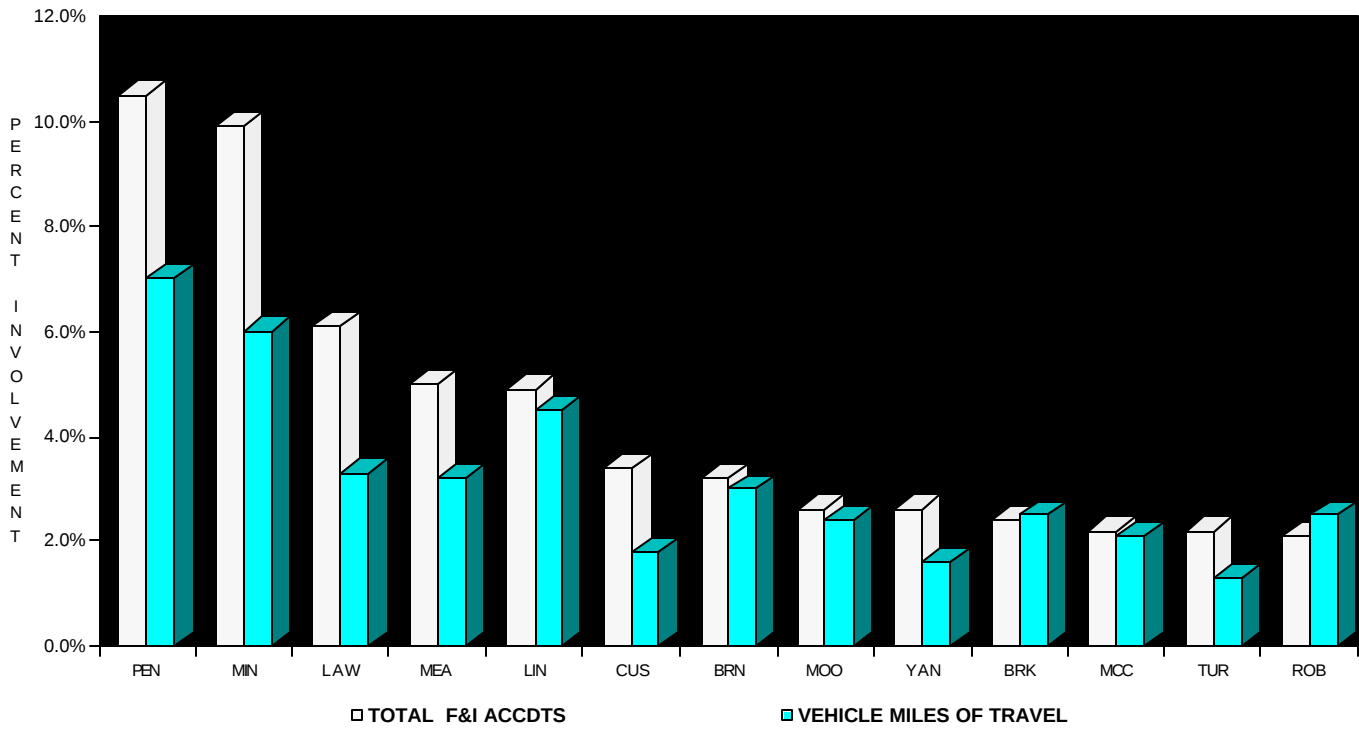


TABLE 3-10
TRAFFIC ACCIDENTS SOUTH DAKOTA CITIES
POPULATION 2500 AND OVER
1999

<u>City</u>	<u>Total Accd.</u>	<u>Fatal Accd.</u>	<u>Injury Accd.</u>	<u>PDO Accd.</u>	<u>Fatalities</u>	<u>Injuries</u>
Aberdeen	713	2	169	542	2	245
Belle Fourche	69	0	12	57	0	13
Box Elder	44	0	11	33	0	13
Brandon City	33	0	11	22	0	19
Brookings	301	1	77	223	1	95
Canton	48	0	7	41	0	8
Hot Springs	53	0	14	39	0	23
Huron	149	0	61	88	0	91
Lead	39	0	8	31	0	11
Madison	107	0	25	82	0	33
Milbank	85	0	16	69	0	25
Mitchell	479	1	107	371	1	150
Mobridge	44	0	11	33	0	12
Pierre	305	1	76	228	1	92
Rapid City	2,003	11	704	1,288	12	1,088
Redfield	36	0	6	30	0	10
Sioux Falls	3,972	2	1,218	2,752	2	1,722
Sisseton	55	0	11	44	0	17
Spearfish	124	0	32	92	0	45
Sturgis	159	1	49	109	2	77
Vermillion	101	0	28	73	0	34
Watertown	342	0	115	227	0	168
Winner	38	0	12	26	0	18
Yankton	198	0	54	144	0	82

Source: SD Department of Transportation: Accident Records

TABLE 3-11
ROADWAY SURFACE CONDITIONS
1999

	Total Accidents		Fatal Accidents		Injury Accidents		PDO Accidents	
	No.	%	No.	%	No.	%	No.	%
Dry	15,057	75.2	114	83.8	3,863	76.8	11,080	74.6
Wet	1,918	9.6	11	8.1	543	10.8	1,364	9.2
Ice	1,353	6.8	3	2.2	293	5.8	1,057	7.1
Frost	127	0.6	0	0.0	30	0.6	97	0.7
Slush	215	1.1	2	1.5	48	1.0	165	1.1
Snow	1,153	5.8	2	1.5	216	4.3	935	6.3
Mud	21	0.1	1	0.7	4	0.1	16	0.1
Other	47	0.2	1	0.7	17	0.3	29	0.2
Unknown	128	0.6	2	1.5	18	0.4	108	0.7
Total	20,019	100	136	100	5,032	100	14,851	100

Source: SD Department of Transportation: Accident Records

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

The peak 2 hour period for fatal and property damage only accidents was 5:00-6:59 p.m. Twenty-two (16.2%) of the fatal accidents and 2,319 (15.6%) of the property damage only accidents occurred during this time. The peak 3 hour period for injury accidents was 3:00-5:59 p.m. when 1,366 (27.1%) of the accidents occurred. The hour of 6:00-6:59 p.m. tallied the most fatal accidents (12) (see TABLE 3-12).

The month of August had the most fatal accidents (21) and the most injury accidents (591) during 1999, while the month of November had the most property damage only accidents. The 21 fatal accidents during August represented 15.4 percent of the total and the 591 injury accidents represented 11.7 percent for 1999. The 1,867 property damage only accidents during November represent 12.6 percent of the total for 1999 (see TABLE 3-13).

The day of the week Friday accounts for nearly eighteen percent of the total accidents (3,550), over seventeen percent of the injury accidents (877) and nearly eighteen percent of the property damage only accidents (2,652). Friday and Saturday accounted for 49 fatal accidents or 36 percent of the total for 1999 (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
ACCIDENTS BY TIME OF DAY
1999

<u>Time</u>	<u>Total Accd.</u>	<u>Fatal Accd.</u>	<u>Injury Accd.</u>	<u>PDO Accd.</u>	<u>Fatalities</u>	<u>Injuries</u>
Midnight	378	3	100	275	3	142
1:00 AM	325	5	91	229	5	139
2:00 AM	331	6	91	234	7	133
3:00 AM	198	4	66	128	4	103
4:00 AM	201	4	37	160	4	55
5:00 AM	355	3	59	293	3	84
6:00 AM	563	2	80	481	2	106
7:00 AM	1,061	6	245	810	8	341
8:00 AM	790	6	219	565	6	311
9:00 AM	671	7	186	478	8	255
10:00 AM	673	3	187	483	3	269
11:00 AM	824	5	231	588	5	348
12:00 PM	1,099	5	324	770	6	485
1:00 PM	907	7	301	599	7	454
2:00 PM	974	8	305	661	9	488
3:00 PM	1,521	7	459	1,055	10	717
4:00 PM	1,407	7	440	960	7	682
5:00 PM	1,701	10	467	1,224	10	715
6:00 PM	1,432	12	325	1,095	14	507
7:00 PM	1,118	7	211	900	8	339
8:00 PM	907	4	131	772	5	202
9:00 PM	976	6	172	798	6	257
10:00 PM	765	2	127	636	2	179
11:00 PM	610	5	133	472	6	200
Unknown	232	2	45	185	2	63
Total	20,019	136	5,032	14,851	150	7,574

Source: SD Department of Transportation: Accident Records

TABLE 3-13
ACCIDENTS BY MONTH
1999

<u>Month</u>	<u>Total Accd.</u>	<u>Fatal Accd.</u>	<u>Injury Accd.</u>	<u>PDO Accd.</u>	<u>Fatalities</u>	<u>Injuries</u>
JANUARY	1,908	8	414	1,486	9	606
FEBRUARY	1,277	7	302	968	7	444
MARCH	1,426	9	345	1,072	10	518
APRIL	1,310	9	377	924	12	560
MAY	1,502	7	403	1,092	7	602
JUNE	1,688	16	465	1,207	18	716
JULY	1,561	12	483	1,066	18	764
AUGUST	1,652	21	591	1,040	22	889
SEPTEMBER	1,556	9	451	1,096	9	689
OCTOBER	1,878	12	419	1,447	12	638
NOVEMBER	2,264	12	385	1,867	12	543
DECEMBER	1,997	14	397	1,586	14	605
Total	20,019	136	5,032	14,851	150	7,574

Source: SD Department of Transportation: Accident Records

TABLE 3-14
ACCIDENTS BY DAY OF WEEK
1999

<u>Day</u>	<u>Total Accd.</u>	<u>Fatal Accd.</u>	<u>Injury Accd.</u>	<u>PDO Accd.</u>	<u>Fatalities</u>	<u>Injuries</u>
SUNDAY	2,114	16	535	1,563	16	875
MONDAY	2,788	16	687	2,085	17	957
TUESDAY	2,858	18	713	2,127	19	1,040
WEDNESDAY	2,980	18	742	2,220	19	1,069
THURSDAY	2,922	19	731	2,172	22	1,100
FRIDAY	3,550	21	877	2,652	28	1,325
SATURDAY	2,807	28	747	2,032	29	1,208
Total	20,019	136	5,032	14,851	150	7,574

Source: SD Department of Transportation: Accident Records

FIGURES 3-6, 3-7, AND 3-8

FIGURE 3-6 ACCIDENTS BY TIME OF DAY 1999

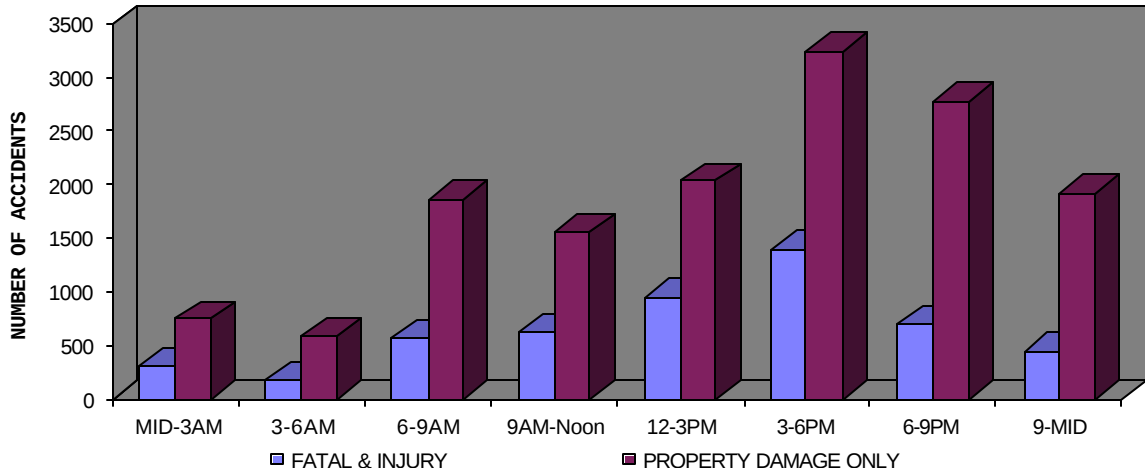


FIGURE 3-7 ACCIDENTS BY MONTH 1999

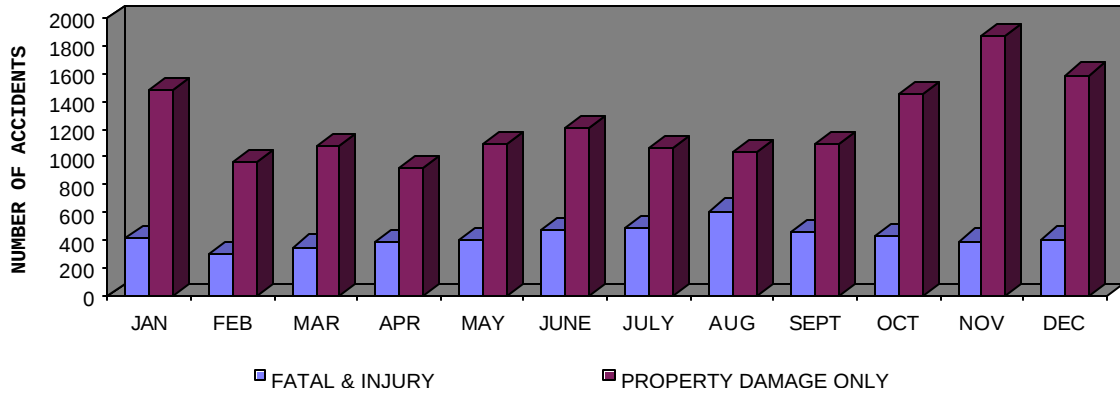
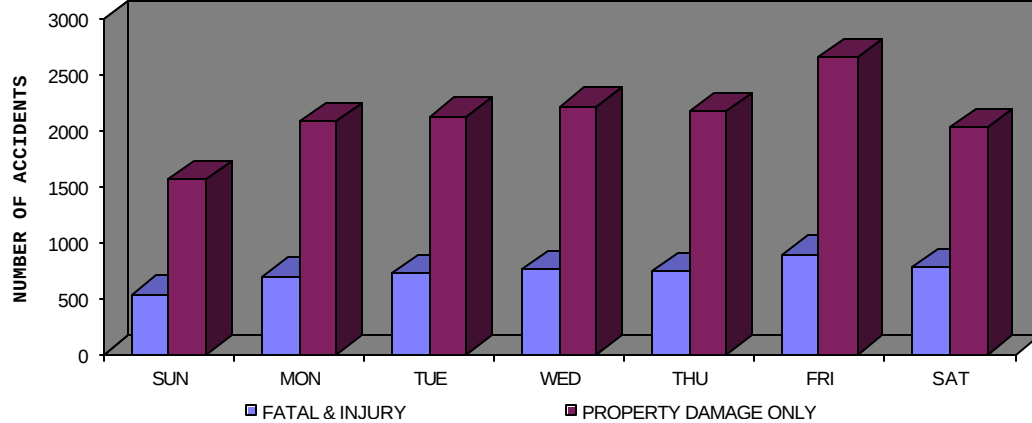


FIGURE 3-8 ACCIDENTS BY DAY OF WEEK 1999



Drivers

There were 30,556 motor vehicle drivers in the 20,019 reported motor vehicle accidents, including 196 drivers in fatal accidents and 8,529 drivers in injury accidents. Ninety-two drivers were killed, which is 61.3 percent of all persons killed in motor vehicle accidents and 66.2 percent of the 7,574 injured persons were drivers (see TABLE 3-1).

Young drivers are involved in more accidents than any other age group (see TABLE 3-15). In reported accidents 34.4 percent of the drivers were under 25 years of age and 51.7 percent are under 35. Age of drivers involved in fatal and injury accidents follow the pattern of drivers in all accidents. Those drivers under 25 represent 27.6 percent of the drivers involved in fatal accidents and 36.3 percent of the drivers in injury accidents. Drivers under the age of 35 make up 49.0 percent of the drivers in fatal accidents and 53.8 percent of the drivers in injury accidents. Forty-two (21.4%) of the drivers in fatal accidents were 25-34 years of age (see TABLE 3-15).

TABLE 3-15
AGE OF DRIVERS IN ACCIDENTS
1999

Age	Drivers In All Accidents		Drivers In Fatal Accidents		Drivers In Injury Accidents		Drivers In PDO Accidents	
	No.	%	No.	%	No.	%	No.	%
6 - 13	26	0.1	0	0.0	11	0.1	15	0.1
14 - 15	1,108	3.6	6	3.1	334	3.9	768	3.5
16 - 17	2,634	8.6	12	6.1	811	9.5	1,811	8.3
18	1,450	4.7	4	2.0	419	4.9	1,027	4.7
19	1,215	4.0	8	4.1	360	4.2	847	3.9
20	1,025	3.4	3	1.5	277	3.2	745	3.4
21 - 24	3,050	10.0	21	10.7	885	10.4	2,144	9.8
25 - 34	5,304	17.4	42	21.4	1,495	17.5	3,767	17.3
35 - 44	5,506	18.0	34	17.3	1,478	17.3	3,994	18.3
45 - 54	3,947	12.9	29	14.8	1,040	12.2	2,878	13.2
55 - 64	2,191	7.2	12	6.1	584	6.8	1,595	7.3
65 - Over	2,883	9.4	22	11.2	798	9.4	2,063	9.4
Unknown	217	0.7	3	1.5	37	0.4	177	0.8
Total	30,556	100	196	100	8,529	100	21,831	100

Source: SD Department of Transportation: Accident Records

TABLE 3-16 provides information on the age of drinking drivers in motor vehicle accidents. There were a reported 1,297 drinking drivers in all accidents which is 4.2 percent of all drivers in accidents. Fifty-six or 28.6 percent of drivers in fatal accidents had been drinking while 7.4 percent of the drivers involved in injury accidents had been drinking.

Young drivers are predominantly the drinking drivers in all accidents. Those drivers under 25 years of age accounted for 33.9 percent of the drinking drivers in fatal accidents and 38.3 percent of the drinking drivers in injury accidents. Those drivers under 35 years of age accounted for 67.9 percent of the drinking drivers in fatal accidents and 66.5 percent of the drinking drivers in all accidents.

TABLE 3-16
AGE OF DRINKING DRIVERS IN ACCIDENTS
1999

Age	Drivers In All Accidents		Drivers In Fatal Accidents		Drivers In Injury Accidents		Drivers In PDO Accidents	
	No.	%	No.	%	No.	%	No.	%
6-13	1	0.1	0	0.0	1	0.2	0	0.0
14 - 15	7	0.5	1	1.8	2	0.3	4	0.7
16 - 17	64	4.9	2	3.6	31	4.9	31	5.0
18	61	4.7	0	0.0	24	3.8	37	6.0
19	77	5.9	6	10.7	30	4.8	41	6.7
20	65	5.0	0	0.0	29	4.6	36	5.9
21 - 24	271	20.9	10	17.9	123	19.6	138	22.5
25 - 34	317	24.4	19	33.9	168	26.8	130	21.2
35 - 44	256	19.7	7	12.5	134	21.4	115	18.7
45 - 54	107	8.2	3	5.4	51	8.1	53	8.6
55 - 64	38	2.9	2	3.6	21	3.3	15	2.4
65 - Over	26	2.0	4	7.1	10	1.6	12	2.0
Unknown	7	0.5	2	3.6	3	0.5	2	0.3
Total	1,297	100	56	100	627	100	614	100

Source: SD Department of Transportation: Accident Records

TABLE 3-17 compares age of drivers in fatal and injury accidents, drinking drivers in fatal and injury accidents, and speeding drivers in fatal and injury accidents with licensed drivers by age. The young driver is over represented as those drivers in fatal and injury accidents, drinking drivers in fatal and injury accidents, and speeding drivers in fatal and injury accidents. Licensed drivers in South Dakota under 25 years of age represent 18.8 percent of the total licensed drivers, 37.9 percent of the drinking drivers in fatal and injury accidents and 52.7 percent of the speeding drivers in fatal and injury accidents. Over sixty-five percent (65.3) of the drinking drivers and 71.2 percent of the speeding drivers in fatal and injury accidents were under 35 years of age while drivers under 35 years of age constitute 35.2 percent of all licensed drivers (also see FIGURES 3-9 and 3-10).

TABLE 3-17
LICENSED DRIVERS AND FATAL AND INJURY ACCIDENT-INVOLVED DRIVERS BY AGE
1999

Age	Licensed Drivers %	Drivers In Fatal & Injury Accidents		Drinking Drivers In Fatal & Injury Accidents		Speeding Drivers In Fatal & Injury Accidents	
		No.	%	No.	%	No.	%
0 - 13	0.0	11	0.1	1	0.1	6	0.5
14 - 15	2.1	340	3.9	3	0.4	74	6.7
16 - 17	3.6	823	9.4	33	4.8	156	14.1
18	2.0	423	4.8	24	3.5	74	6.7
19	2.0	368	4.2	36	5.3	67	6.1
20	2.0	280	3.2	29	4.2	47	4.3
21 - 24	7.0	906	10.4	133	19.5	158	14.3
25 - 34	16.5	1,537	17.6	187	27.4	204	18.5
35 - 44	20.1	1,512	17.3	141	20.6	143	13.0
45 - 54	17.0	1,069	12.3	54	7.9	85	7.7
55 - 64	11.0	596	6.8	23	3.4	42	3.8
65 - Over	16.7	820	9.4	14	2.0	45	4.1
Unknown	0.0	40	0.5	5	0.7	3	0.3
TOTAL	100	8,725	100	683	100	1,104	100

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

FIGURE 3-9

FIGURE 3-9 DRIVERS BY AGE GROUP 1999
Fatal and Injury Accd. Involved Drivers

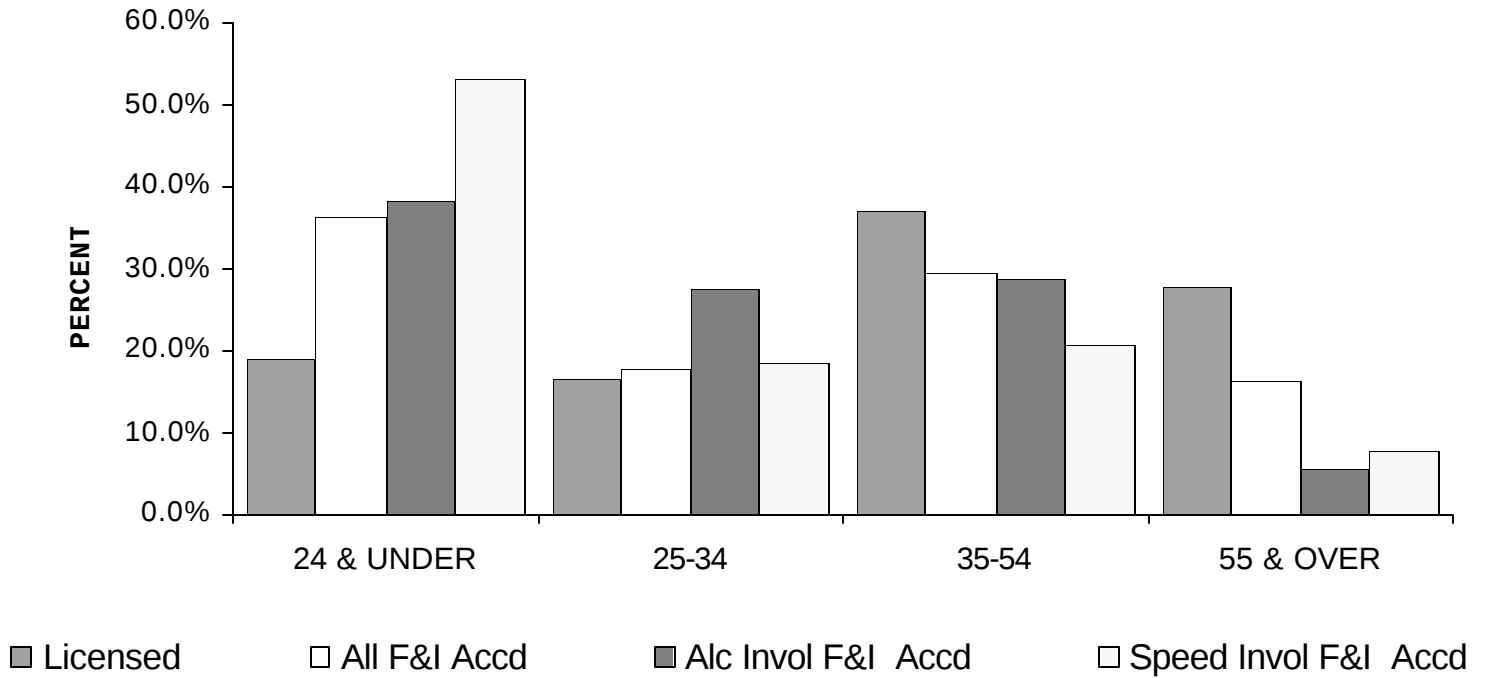
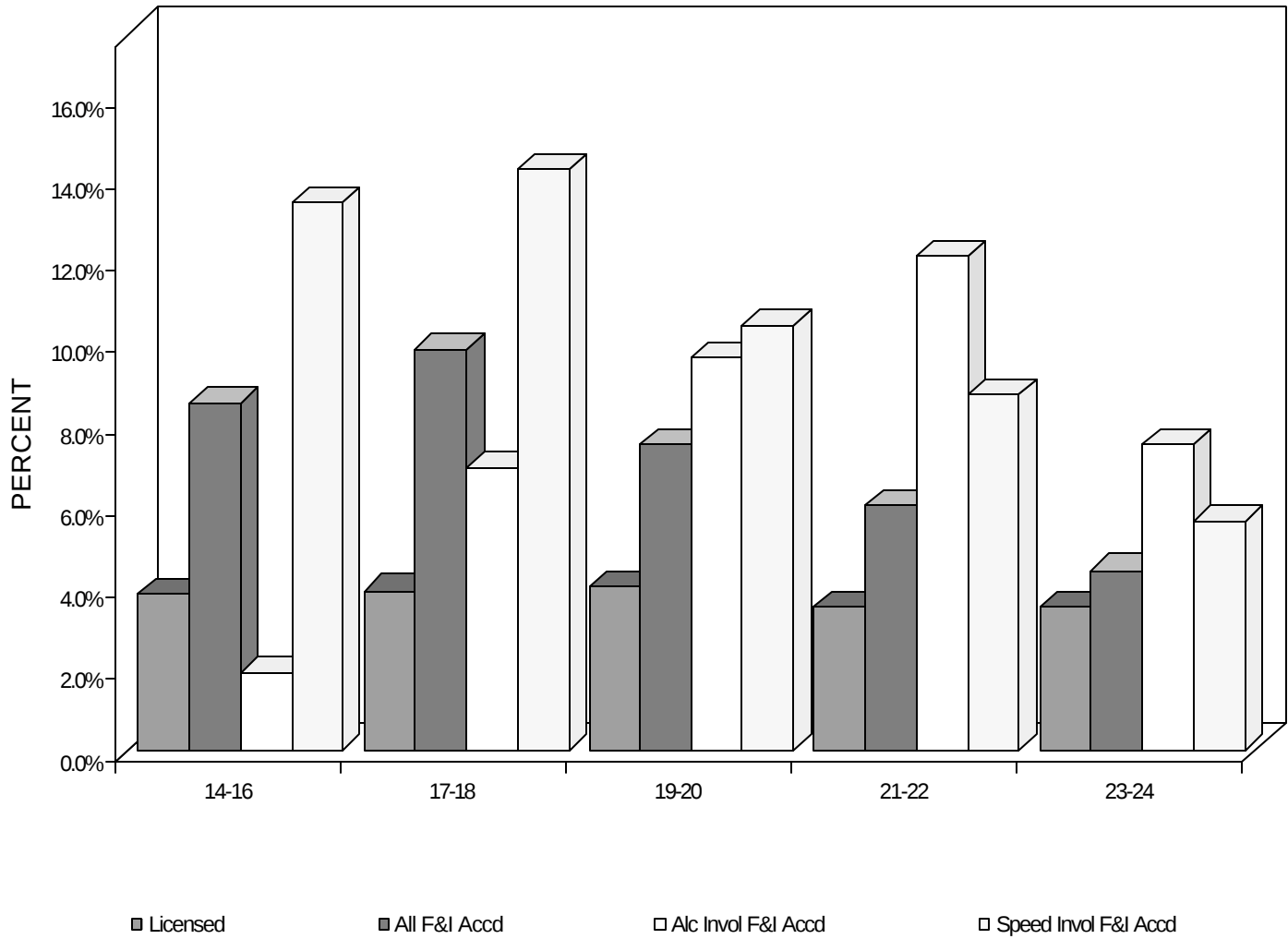


FIGURE 3-10

FIGURE 3-10 YOUNG DRIVERS 1999
FATAL & INJURY ACCIDENT INVOLVED DRIVERS



Driver actions are reported to indicate possible factors that may have contributed to the accidents. These factors are referred to as driver contributing circumstances. Drinking was the leading driver contributing circumstance in fatal accidents during 1999. It was indicated that the drinking of 56 or 28.6 percent of the drivers in fatal accidents contributed to the accident. Exceeding the speed limit and driving on the wrong side of the road were the other leading driver contributing circumstances in fatal accidents. Failing to yield to another vehicle was the leading contributing circumstance in injury accidents. Exceeding a safe speed but not the legal limit, following too closely and drinking were other leading driver contributing circumstances in injury accidents (see TABLE 3-18).

TABLE 3-18
MOTOR VEHICLE DRIVER CONTRIBUTING CIRCUMSTANCES
1999

	Total Accidents		Fatal Accidents		Injury Accidents		PDO Accidents	
	No.	%	No.	%	No.	%	No.	%
Drinking	1,297	4.2	56	28.6	627	7.4	614	2.8
Exceeded Speed Limit	948	3.1	38	19.4	456	5.3	454	2.1
Wrong Side of Road	398	1.3	25	12.8	193	2.3	180	0.8
Exceeded Safe Speed But Not Limit	1,984	6.5	16	8.2	594	7.0	1,374	6.3
Failed to Yield to Vehicle	3,877	12.7	14	7.1	1,266	14.8	2,597	11.9
Failed to Stop for Stop Sign or Flashing Red	393	1.3	6	3.1	172	2.0	215	1.0
Fell Asleep	338	1.1	8	4.1	158	1.9	172	0.8
Improper Passing	258	0.8	2	1.0	79	0.9	177	0.8
Distracted by Object/ Person in Car	776	2.5	4	2.0	313	3.7	459	2.1
Improper Turn	649	2.1	1	0.5	164	1.9	484	2.2
Following Too Closely	1,950	6.4	3	1.5	697	8.2	1,250	5.7
Improper Backing	579	1.9	0	0.0	25	0.3	554	2.5
Other*	2,711	8.9	17	8.7	936	11.0	1,758	8.1
Unknown	597	2.0	16	8.2	154	1.8	427	2.0
Total Drivers	30,556		196		8,529		21,831	

Note: The investigating officer may assign from zero to three contributing circumstances to each driver, therefore, the number of drivers in motor vehicle accidents 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 accidents.

*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, physical impairment, illness, and illegally in roadway.

Source: SD Department of Transportation: Accident Records

Motorcycles

Motorcycle accidents constitute 1.9 percent of all accidents, 7.4 percent of all fatal accidents, and 6.5 percent of all injury accidents. There were 10 people killed and 406 injured on motorcycles in the 381 reported motorcycle accidents during 1999 (see TABLE 2-7). The young motorcycle driver is over represented in accidents 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, 7.8 percent of drivers involved in motorcycle accidents, and 17.6 percent of the speeding drivers involved in motorcycle accidents. Seven (9.5%) of the speeding drivers involved in motorcycle accidents were 16 through 17 years of age. Four (7.5%) of the drinking drivers were age 28 - 29 (see TABLE 3-19 and FIGURE 3-11).

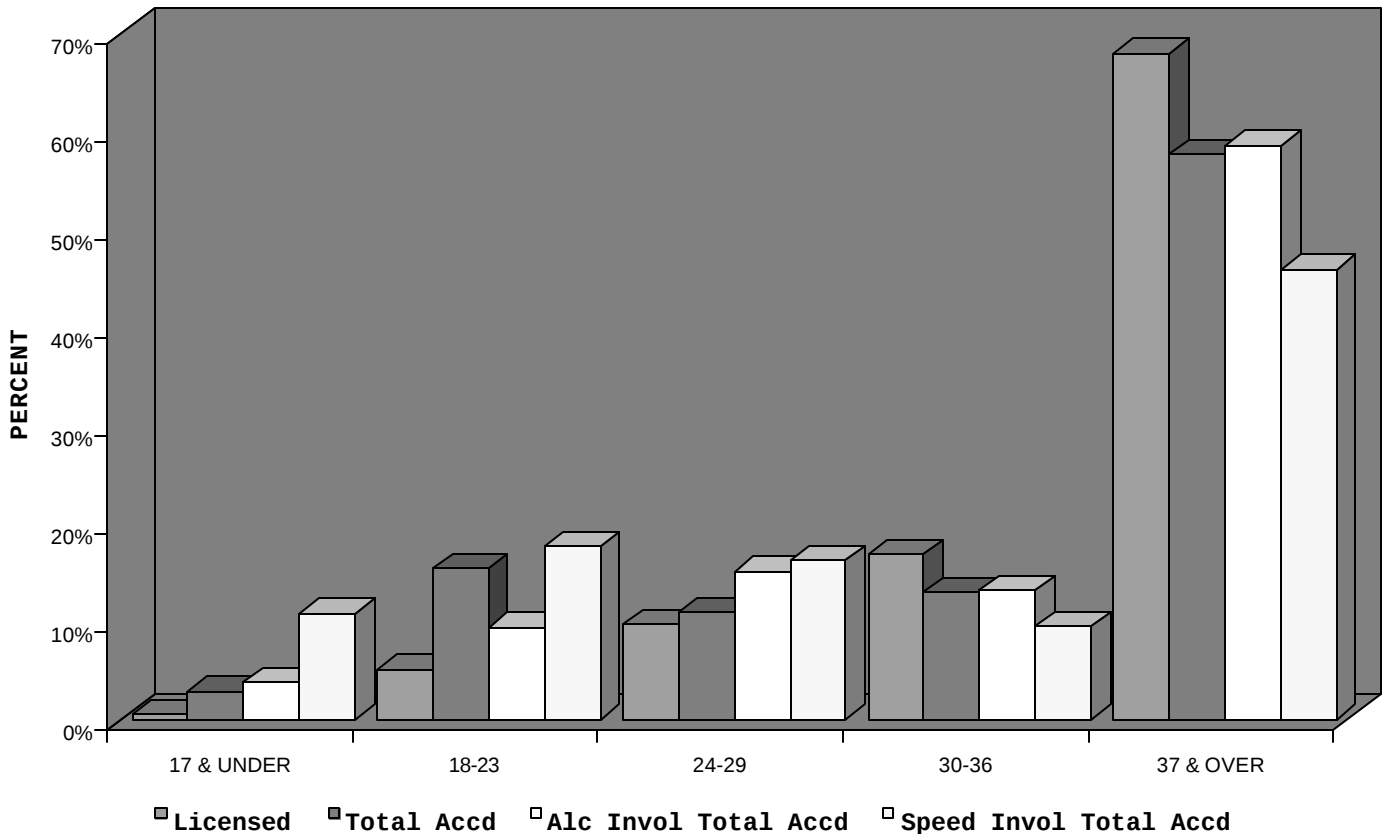
TABLE 3-19
MOTORCYCLISTS BY AGE GROUP
1999

Age Group	Licensed Motorcyclists		Motorcycle Drivers In Accidents		Drinking Motorcycle Drivers In Accidents		Speeding Motorcycle Drivers In Accidents	
	No.	%	No.	%	No.	%	No.	%
0 - 13	0	0.0	0	0.0	0	0.0	0	0.0
14 - 15	48	0.1	3	0.7	0	0.0	1	1.4
16 - 17	235	0.4	9	2.2	2	3.8	7	9.5
18 - 19	575	1.1	20	4.9	1	1.9	5	6.8
20 - 21	902	1.7	24	5.9	2	3.8	6	8.1
22 - 23	1,191	2.3	19	4.7	2	3.8	2	2.7
24 - 25	1,474	2.8	15	3.7	3	5.7	3	4.1
26 - 27	1,591	3.0	11	2.7	1	1.9	5	6.8
28 - 29	2,058	3.9	19	4.7	4	7.5	4	5.4
30 - 31	2,186	4.2	10	2.5	1	1.9	2	2.7
32 - 36	6,658	12.6	43	10.5	6	11.3	5	6.8
37 - 41	8,737	16.6	53	13.0	14	26.4	10	13.5
42 - 51	15,643	29.7	97	23.8	11	20.8	17	23.0
52 - Over	11,343	21.5	85	20.8	6	11.3	7	9.5
Unknown	0	0.0	0	0.0	0	0.0	0	0.0
Total	52,641	100	408	100	53	100	74	100

Sources: SD Department of Commerce & Regulation: Driver License Issuance
SD Department of Transportation: Accidents Records

FIGURE 3-11

FIGURE 3-11 MOTORCYCLISTS 1999
ACCIDENT INVOLVED MOTORCYCLE & MOPED DRIVERS



Helmets were used by 89 or 22.5 percent of the motorcycle drivers in accidents while 306 or 77.5 percent did not wear a helmet (see TABLE 3-20). Seven motorcycle drivers and three motorcycle passengers were killed during 1999. Five of the motorcycle drivers and all three of the passengers wore eye protection only, two drivers wore helmet and eye protection.

TABLE 3-20
HELMET USE BY MOTORCYCLE DRIVERS IN ACCIDENTS
1999

Age	Helmet Used		Helmet Not Used	
	No.	%	No.	%
6 - 13	0	0.0	0	0.0
14 - 15	1	33.3	2	66.7
16 - 17	3	37.5	5	62.5
18 - 20	7	24.1	22	75.9
21 - 24	11	28.2	28	71.8
25 - 34	16	23.2	53	76.8
35 - 44	16	16.5	81	83.5
45 - Over	35	23.3	115	76.7
Unknown	0	0.0	0	0.0
Total	89	22.5	306	77.5

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 was not used.

Source: SD Department of Transportation: Accident Records

Pedestrians

There were eleven pedestrian deaths and 131 injuries in motor vehicle accidents during 1999 (see TABLE 3-21). The youngest pedestrian killed was three years old, while the oldest was 83. Of the injured pedestrians, 42.7 percent were under 20 years of age. Cities accounted for 83.2 percent of the pedestrian injuries and 36.4 percent of the fatalities (see TABLE 3-23). Of the 11 pedestrians killed, 7 were male and 4 female. Of the 131 injured, 89 were male and 42 female.

Officers reported that four of the 11 pedestrians killed had been drinking alcohol (see TABLE 3-22).

TABLE 3-21
AGE OF PEDESTRIANS IN TRAFFIC ACCIDENTS
1999

Age	Fatalities		Injuries	
	No.	%	No.	%
0 - 5	1	9.1	14	10.7
6 - 13	2	18.2	23	17.6
14 - 19	1	9.1	19	14.5
20 - 24	2	18.2	11	8.4
25 - 34	1	9.1	16	12.2
35 - 44	2	18.2	19	14.5
45 - 54	0	0.0	14	10.7
55 - 64	1	9.1	6	4.6
65 - Over	1	9.1	9	6.9
Unknown	0	0.0	0	0.0
Total	11	100	131	100

Source: SD Department of Transportation: Accident Records

TABLE 3-22
ALCOHOL INVOLVEMENT BY PEDESTRIANS
1999

<u>Alcohol Involvement</u>	<u>Fatalities</u>		<u>Injuries</u>	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
Alcohol or Drugs	4	36.4	22	16.8
No Alcohol	5	45.5	97	74.0
Unknown	2	18.2	12	9.2
Total	11	100	131	100

Source: SD Department of Transportation: Accident Records

TABLE 3-23
RURAL vs. CITY PEDESTRIAN ACCIDENTS
1999

	<u>Fatalities</u>		<u>Injuries</u>	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
Rural	7	63.6	22	16.8
City	4	36.4	109	83.2
Total	11	100	131	100

Source: SD Department of Transportation: Accident Records

Bicycles

During 1999 there was no bicyclists killed (see TABLE 2-9). There were 102 bicycle drivers injured in reported motor vehicle accidents during 1999 (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 36.3 percent of the injured bicycle drivers. Thirty-six of the bicycle drivers in accidents had no contributing circumstances. The yearly 1979-1999 trend of bicycle fatalities and injuries is provided in TABLE 2-9.

TABLE 3-24
AGE OF BICYCLE DRIVERS IN TRAFFIC ACCIDENTS
1999

<u>Age</u>	<u>Fatalities Number</u>	<u>Injuries Number</u>	<u>%</u>
0 - 5	0	4	3.9
6 - 13	0	50	49.0
14 - 19	0	14	13.7
20 - 24	0	8	7.8
25 - 34	0	14	13.7
35 - 44	0	8	7.8
45 - 54	0	3	2.9
55 - 64	0	0	0.0
65 - Over	0	1	1.0
Total	0	102	100

Source: SD Department of Transportation: 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 use law became effective. |
| 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. |

IV. GLOSSARY OF TERMS

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

Fatal Accident: motor vehicle traffic accident in which at least one person dies as the result of the accident and dies within 30 days of the date of the accident.

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

Property Damage Only (PDO) Accident: motor vehicle accident in which no one was killed or injured but there was property damage to an apparent extent of five hundred dollars or more to any one person's property or accumulated property damage of one thousand dollars per accident.

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

Alcohol Involved Accident: 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 accidents are wage loss, medical expense, insurance administration cost, and property damage.
(Source: Estimating the Costs of Accidents 1998, National Safety Council)

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