

2008
South Dakota
**Motor Vehicle
Traffic Crash
Summary**







STATE OF SOUTH DAKOTA
M. MICHAEL ROUNDS, GOVERNOR

June 9, 2009

My Fellow South Dakotans:

I am pleased to present the 2008 South Dakota Motor Vehicle Traffic Crash Summary. We use statistical information to help identify traffic safety problems and determine effective counter-measures to address those problems. This publication also identifies crashes involving alcohol impairment and the use of safety restraint devices and other safety equipment.

In 2008, motor vehicle crashes claimed the lives of 121 people on our public roadways. Injuries impacted 5,708 individuals. Forty-eight deaths occurred in alcohol-related crashes (nearly 40 percent). Over 16 percent of the alcohol-related crash deaths happened to persons 20 years old or younger! All of these crashes are preventable by changing habits. Drivers need to take responsibility and use a designated driver when needed.

Although both the fatality and injury rates are the lowest they've been in 30 years, we can do better. The number of registered drivers and vehicles continue to increase, creating more activity on our roadways.

We all need to make highway safety a top priority. South Dakotans must lead by example, and make sure our family members and neighbors use safety belts and drive within the speed limit.

With your help, I look forward to continued success in making South Dakota a safer place for our citizens and visitors traveling the roadways of this great state.

Sincerely,

A handwritten signature in black ink that reads "M. Michael Rounds".

M. Michael Rounds

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I. INTRODUCTION

The Motor Vehicle Traffic Crash Summary is divided into two main sections, Historical Trends and 2008 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 2008 Traffic Crash Profile section details the crash picture for 2008 as well as a glossary of terms.

The South Dakota Crash Data System conforms to standards established by the Model Minimum Uniform Crash Criteria (MMUCC) guidelines. The purpose of MMUCC is to provide a standardized data set for describing crashes of motor vehicles that generates the necessary information to improve highway safety.

By utilizing MMUCC, the highway safety community is making an explicit statement that comparable data from all states are crucial to our ability to identify problems and make improvements.

Information collected from crash reports is merged into a central computerized crash database. This data provides the basic information necessary for developing effective highway and traffic safety programs. The crash data is used by local, state and federal agencies to:

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

The majority of the information in this book is compiled by the Office of Accident Records within the Department of Public Safety. Current state law requires an accident report to 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.**

Law enforcement agencies provide the accident reports to the Office of Accident Records. These individual reports are available to the public for a search fee of four dollars.

FOR FURTHER INFORMATION:

Office of Accident Records
118 West Capitol Avenue
Pierre SD 57501-2000

Phone: 605.773.4156
Facsimile: 605.773.6893
E-mail: arinfo@state.sd.us

SOUTH DAKOTA TRAFFIC STATISTICAL SUMMARY 2007-2008

	<u>2007</u>	<u>2008</u>
➤ NUMBER OF REPORTED MOTOR VEHICLE TRAFFIC CRASHES -----	16,220	15,907
➤ AMOUNT OF MOTOR VEHICLE TRAFFIC CRASH PROPERTY DAMAGE -----	\$78 MILLION	\$77 MILLION
➤ NUMBER OF MOTOR VEHICLE TRAFFIC CRASH INJURIES -----	5,782	5,708
➤ NUMBER OF MOTOR VEHICLE TRAFFIC CRASH FATALITIES -----	146	121
➤ FATALITY RATE PER 100,000,000 MILES OF TRAVEL -----	1.72	1.43
➤ PERCENT OF DRIVERS IN FATAL CRASHES WHO HAD BEEN DRINKING ----	31.4%	29.3%
➤ NUMBER KILLED IN ALCOHOL-RELATED CRASHES -----	62	48
➤ NUMBER INJURED IN ALCOHOL-RELATED CRASHES -----	666	659
➤ NUMBER OF PEDESTRIANS KILLED -----	7	10
➤ NUMBER OF MOTORCYCLISTS KILLED-----	28	15
➤ NUMBER OF BICYCLISTS KILLED -----	0	0
➤ PERCENT OF LICENSED DRIVERS UNDER 25 -----	16.9%	16.5%
➤ PERCENT OF CRASH-INVOLVED SPEEDING DRIVERS UNDER 25 -----	49.3%	55.9%
➤ PERCENT OF CRASH-INVOLVED DRINKING DRIVERS UNDER 25-----	36.7%	38.9%
➤ NUMBER OF OCCUPANTS KILLED IN MOTOR VEHICLES-----	108	94
➤ NUMBER OF OCCUPANTS KILLED IN MOTOR VEHICLES WHO WERE WEARING A SAFETY RESTRAINT -----	23	27
<i>(EXCLUDES MOPED, MOTORCYCLE, ATV & SNOWMOBILE OCCUPANTS)</i>		
➤ NUMBER OF UNRESTRAINED OCCUPANTS UNDER 5 YEARS OF AGE IN MOTOR VEHICLE CRASHES WHO WERE KILLED -----	1	3
WHO WERE INJURED-----	12	7
➤ NUMBER OF UNRESTRAINED OCCUPANTS UNDER 5 YEARS OF AGE WITH CHILD RESTRAINT NOT USED PROPERLY WHO WERE KILLED-----	0	1
WHO WERE INJURED -----	3	2
➤ ECONOMIC LOSS FROM MOTOR VEHICLE TRAFFIC CRASHES -----	\$357 MILLION	\$320 MILLION

Source: SD Department of Public Safety – Office of Accident Records

II. HISTORICAL TRENDS

Motor Vehicle Crashes

The preliminary death rates per 100 million vehicle miles traveled from 1999-2008 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
1999-2008**

<u>State</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>
South Dakota	1.8	2.1	2.0	2.2	2.4	2.3	2.3	2.3	1.7	1.4
Iowa	1.6	1.5	1.5	1.3	1.4	1.2	1.4	1.4	1.4	1.4
Minnesota	1.3	1.2	1.1	1.2	1.2	1.0	1.0	0.9	0.9	0.8
Montana	2.3	2.4	2.3	2.6	2.4	2.0	2.3	2.3	2.4	2.4
Nebraska	1.6	1.5	1.4	1.6	1.5	1.3	1.4	1.4	1.3	1.1
North Dakota	1.6	1.2	1.5	1.3	1.4	1.3	1.6	1.4	1.4	1.3
Wyoming	2.4	1.9	2.2	2.0	1.8	1.8	1.9	2.1	1.6	1.7
National	1.6	1.5	1.5	1.5	1.5	1.4	1.5	1.4	1.3	1.3

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

The 2008 rates are preliminary estimates and will be updated the following year with the final numbers.

Source: SD Department of Public Safety - Office of Accident Records

**FIGURE 2-1
South Dakota Fatality Rate
vs. Wyoming - North Dakota - National Rates**

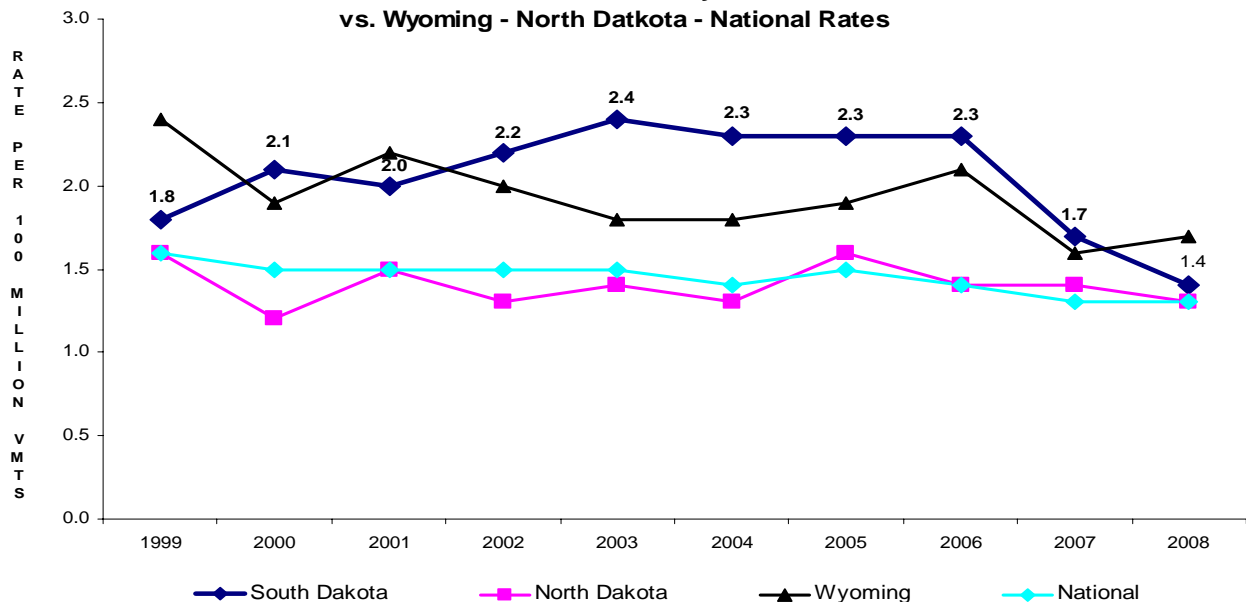


TABLE 2-2 provides a yearly comparison of South Dakota's motor vehicle traffic crashes from 1979 through 2008. Any comparison of motor vehicle crashes must be made with caution due to the changes in the definition of a reportable crash. For example, in the late 1970's the definition of a fatality caused by a motor vehicle crash was changed from the death occurring up to one year after the crash to death occurring within 30 days after the crash. Using vehicle miles of travel, the 2008 death rate decreased to 1.43, a 16.9% decrease from the 2007 death rate of 1.72. The 5,708 people injured in crashes are a 1.3% decrease from the 5,782 in 2007 (see TABLE 2-2).

**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 ⁵ + (000)
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	234.16	150	5,252	14,073 ²	8,317	862
2001	171	2.04	7,118	17,699	211.43	154	4,888	12,657	8,371	872
2002	180	2.12	6,997	17,335	204.47	159	4,702	12,474	8,478	890
2003	203	2.43	6,944	18,018	215.99	173	4,781	13,064	8,342	909
2004	197	2.38	6,535	17,163	207.33	166	4,581	12,416	8,278	927
2005	186	2.29	6,212	16,254	200.07	158	4,346	11,750	8,124	919
2006	191	2.25	6,015	15,730	185.04	172	4,196	11,362	8,501	972
2007	146	1.72	5,782	16,220	191.25	130	4,071	12,019	8,481	971
2008	121	1.43	5,708	15,907	187.80	109	4,107	11,691	8,470	924⁵

FOOTNOTES

¹ Number of deaths per 100 million vehicle miles traveled.

² 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 damage to any one person's property or \$2,000 accumulated property damage per crash.

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

⁴Number of crashes per 100 million vehicle miles traveled.

⁵Based on statutory changes primarily impacting SDCL 32-5-2.7 in 2008, a vehicle plate can be effective on more than one vehicle per year due to vehicle replacement. Thus, the registration count may be lower than past year s data based on previous plate registration staying with the vehicle.

*Source: SD Department of Public Safety – Office of Accident Records
SD Department of Transportation – Inventory Management
SD Department of Revenue – Titles and Registration*

Alcohol Involvement

When comparing records dating back to 1979, 36.7% alcohol involved fatal crashes for 2004 is the lowest. Of the 121 traffic fatalities during 2008, 48 or 39.7% were alcohol related (see Table 2-3). Alcohol statistics dating back to the 1970's show 2008 to have the lowest number of fatalities for any one-year period (48). The highest number is 138 for the year of 1973.

**TABLE 2-3
ALCOHOL INVOLVED CRASHES AS PERCENT OF ALL CRASHES
2001-2008**

	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>
Total Crashes	7.3 (1265)	7.0 (1261)	6.7 (1153)	6.8 (1113)	7.0 (1099)	5.9 (959)	6.1 (977)
Fatal Crashes	47.8 (76)	45.1 (78)	36.7 (61)	39.2 (62)	39.0 (67)	42.3 (55)	41.3 (45)
Injury Crashes	13.5 (635)	13.2 (630)	13.3 (607)	12.7 (552)	13.4 (563)	11.5 (467)	11.4 (467)
PDO Crashes	4.4 (554)	4.2 (553)	3.9 (485)	4.2 (499)	4.1 (469)	3.6 (437)	4.0 (465)
Fatalities	50.6 (91)	46.3 (94)	39.6 (78)	39.8 (74)	37.7 (72)	42.5 (62)	39.7 (48)
Injuries	14.2 (991)	14.4 (1000)	14.3 (936)	13.2 (818)	14.2 (854)	11.5 (666)	11.5 (659)

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
2000- 2008**

<u>AGE</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>
0 - 5	0	3	3	1	0	0	1
6 - 12	2	1	1	0	0	1	0
13 - 19	15	18	11	10	13	10	6
20	3	0	3	2	1	1	1
21 - 29	19	24	26	20	19	18	15
30 - 39	18	22	15	16	15	13	12
40 - 49	17	10	11	15	11	13	7
50 - 59	9	11	4	5	11	4	4
60 & OLDER	8	5	4	5	2	2	2
Unknown/Not Stated	0	0	0	0	0	0	0
TOTAL	91	94	78	74	72	62	48

Source: SD Department of Public Safety: Office of Accident Records

FIGURE 2-2 2008 CRASH FATALITIES
Alcohol Related vs Non Alcohol Related

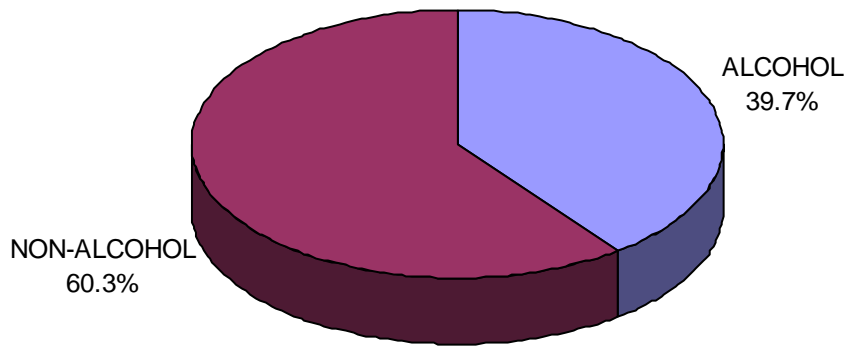
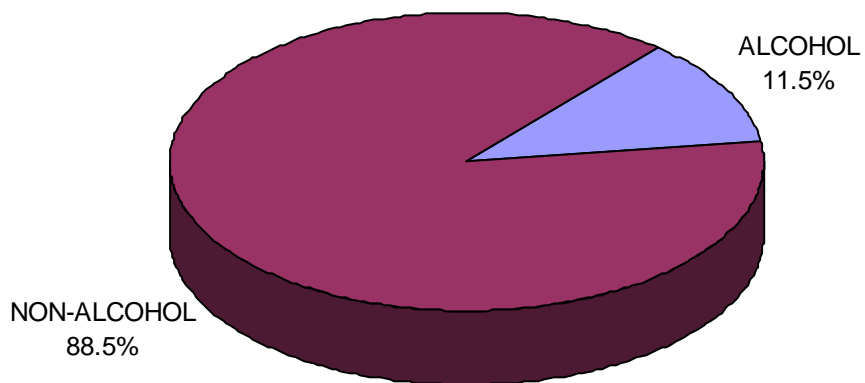


FIGURE 2-3 2008 CRASH INJURIES
Alcohol Related vs Non Alcohol Related



The following crash and arrest data is presented to monitor changes in alcohol-related fatal and injury crashes and to compare changes with non-alcohol related crash experiences (see TABLE 2-4). Alcohol-related fatal and injury crashes decreased by 1.9% while non-alcohol related fatal and injury crashes increased by 0.7% from the 2007 totals. **The number of DWI arrests decreased by 6.2% from 2007.**

**TABLE 2-4
CRASH AND ARREST ACTIVITY
1998 - 2008**

	FATAL CRASHES		FATAL & INJURY CRASHES		DWI ¹ ARRESTS	DWI ¹ CONVICTIONS
	ALCOHOL RELATED	NONALCOHOL RELATED	ALCOHOL RELATED	NONALCOHOL RELATED		
1999	58	78	692	4,476	9,383	5,292
2000	65	85	713	4,689	9,430	5,543
2001	65	89	628	4,414	8,956	5,559
2002	76	83	711	4,150	8,272	4,886
2003	78	95	708	4,246	9,011	5,628
2004	61	105	668	4,079	9,049	5,985
2005	62	96	614	3,890	10,174	6,463
2006	67	105	630	3,738	11,282	6,801
2007	55	75	522	3,679	11,756	7,490
2008	45	64	512	3,704	11,029	6,791

Note: [1] – Based on South Dakota Courts - The State of the Judiciary and 2008 Annual Report of the S. D. Unified Judicial System - January 2007 Based on Fiscal Year statistics.
DWI Convictions are guilty pleas, plus suspended impositions, plus convictions at trial, less dismissals & acquittals at trial.

FIGURE 2-4 presents the annual counts of DWI arrests, alcohol related fatal and injury crashes, and non-alcohol related fatal and injury crashes from 1999 through 2008. FIGURE 2-5 presents the alcohol related and non-alcohol related fatal crash experience for the years of 1999 through 2008.

There were 45 alcohol related fatal crashes during 2008, which compares to 55 in 2007. The previous three-year average was 61 for the years of 2005-2007.

There were 512 alcohol related fatal and injury crashes during 2008, which compares to 522 in 2007. The previous three-year average was 589 or a 13.1 percent decrease in 2008. Non-alcohol related fatal and injury crashes in 2008 increased (0.7%) when compared to 2007 and decreased 1.7 percent from the previous three-year average (05-07).

There were 11,029 DWI arrests in fiscal year 2008. This level has gone down 0.4% from the previous three-year average (05-07). There were 6,791 DWI convictions in fiscal year 2008. This level has gone down 1.8% from the previous 3-year average (05-07).

FIGURE 2-4 FATAL & INJURY CRASHES AND DWIs

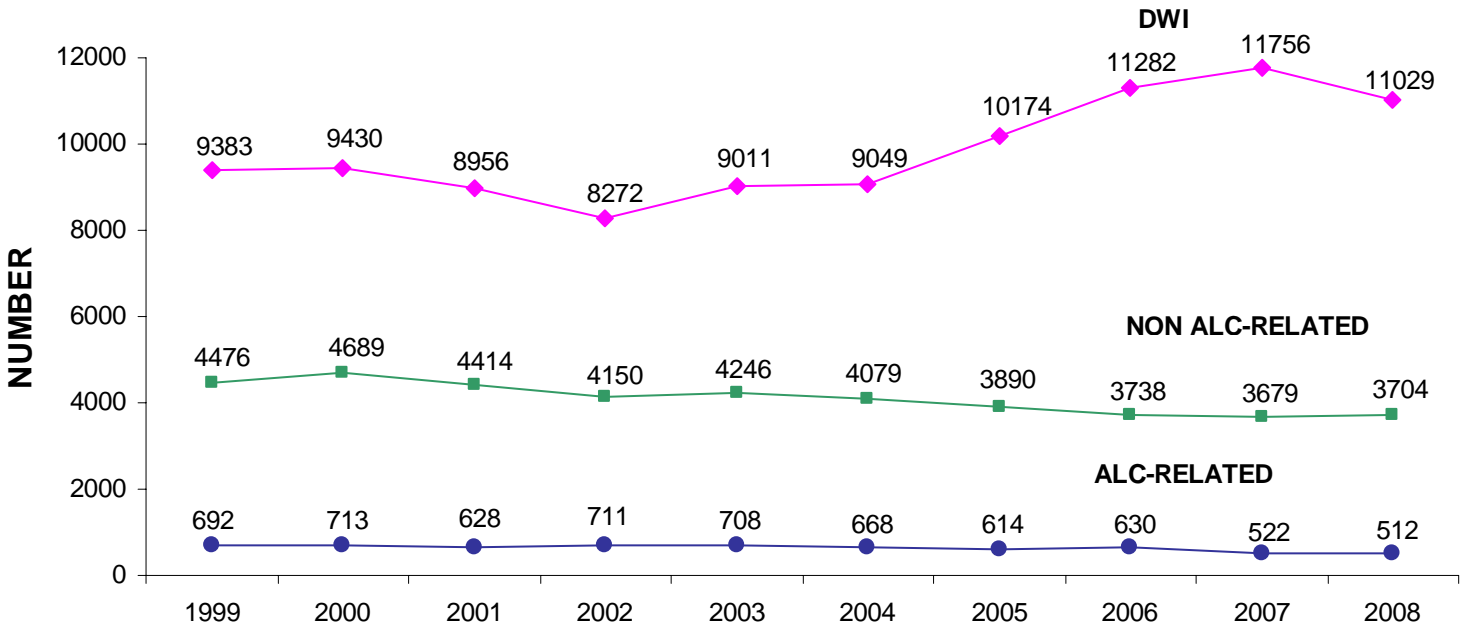
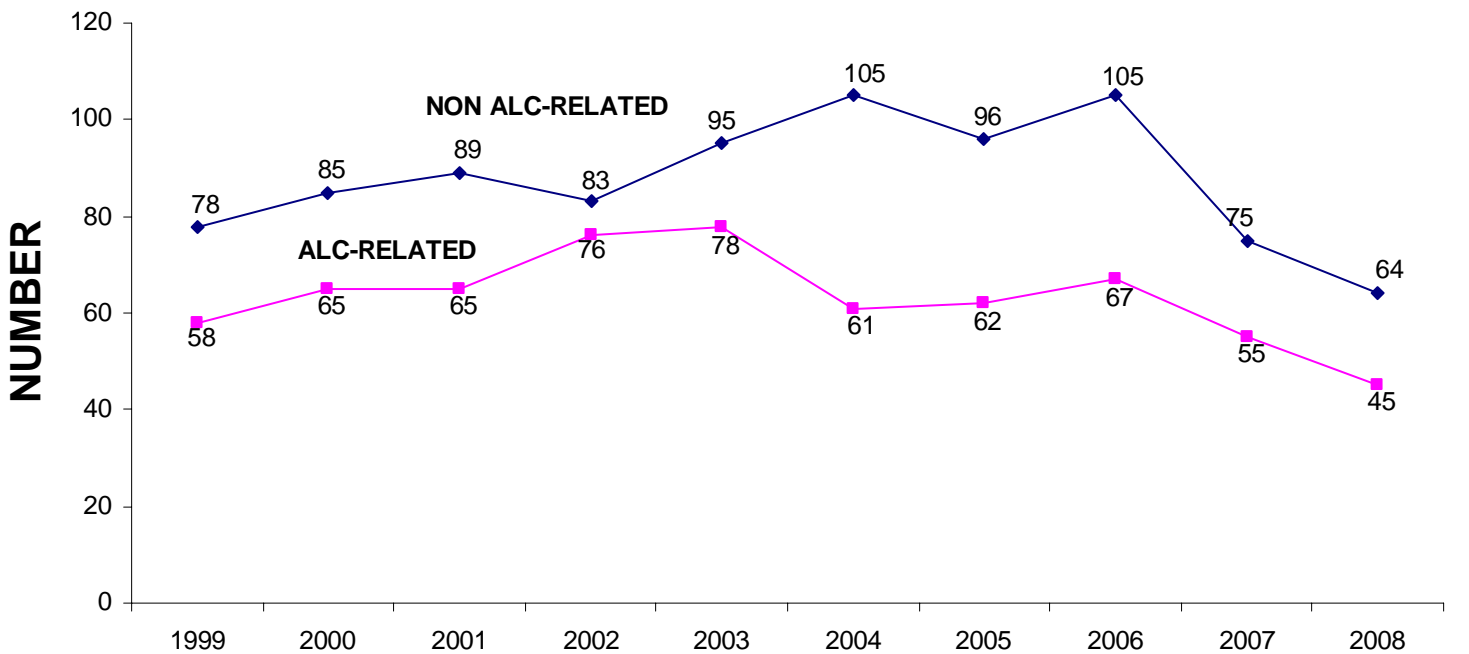


FIGURE 2-5 FATAL CRASHES



Safety Restraint Usage, Ejection and Child Injuries

Front seat occupants have been required to be fastened by a safety belt system since 1995. The use of safety equipment is reported for all motor vehicle drivers and only those passengers that are injured. Sixty occupants were killed while not wearing any safety restraint, while twenty-five occupants killed were wearing a lap belt and shoulder harness, one was wearing a lap belt only and one wore a shoulder harness only. One passenger was killed with child restraint not used properly. (See TABLE 2-5)

Forty-seven (50%) of the 94 killed occupants were either partially or totally ejected from the vehicle. (See TABLE 2-5B)

TABLE 2-5 SAFETY RESTRAINT USAGE - KILLED OCCUPANTS

	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>
No Safety Equipment	123	103	96	117	74	60
Lap Belt Only	4	1	1	1	0	1
Shoulder Harness Only	2	2	0	0	0	1
Lap Belt & Shoulder Harness	26	39	33	23	23	25
Child Restraint Used Properly	0	0	0	1	0	0
Child Restraint Not Properly Used	1	0	1	0	1	1
Other, Not Stated or Unknown	15	14	16	16	10	6
TOTAL	171	159	147	158	108	94

TABLE 2-5A SAFETY RESTRAINT USAGE - INJURED OCCUPANTS

	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>
No Safety Equipment	1,552	1,361	1,238	1,173	1,058	1,080
Lap Belt Only	92	81	79	68	52	59
Shoulder Harness Only	34	32	28	21	36	33
Lap Belt & Shoulder Harness	3,991	3,847	3,680	3,461	3,423	3,395
Child Restraint Used Properly	58	60	66	67	59	66
Child Restraint Not Properly Used	5	2	5	13	4	3
Other, Not Stated or Unknown	442	428	373	396	354	314
TOTAL	6,174	5,811	5,469	5,199	4,986	4,950

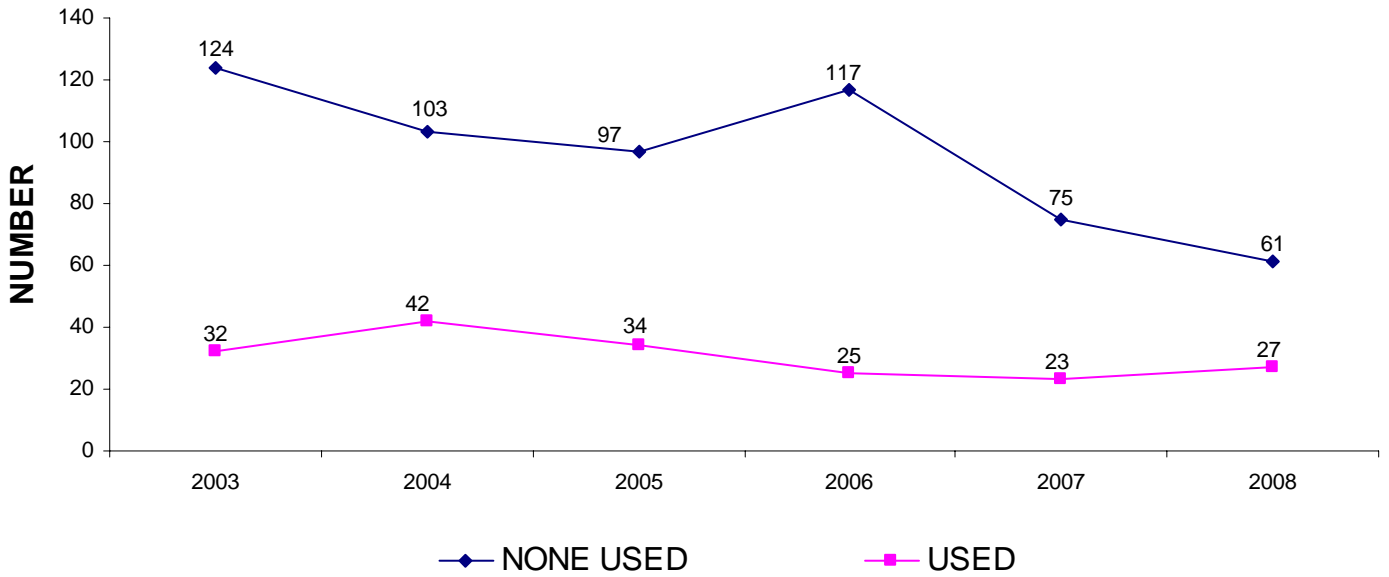
Note: Motor vehicle drivers and passengers are considered occupants. Motorcycle, moped, ATV, snowmobile drivers and motorcycle, moped, ATV and snowmobile passengers are not counted in the above tables.

**TABLE 2-5B KILLED & INJURED MOTOR VEHICLE OCCUPANTS BY EJECTION STATUS
(Excludes Motorcycle, Mopeds, ATVs and Snowmobiles)**

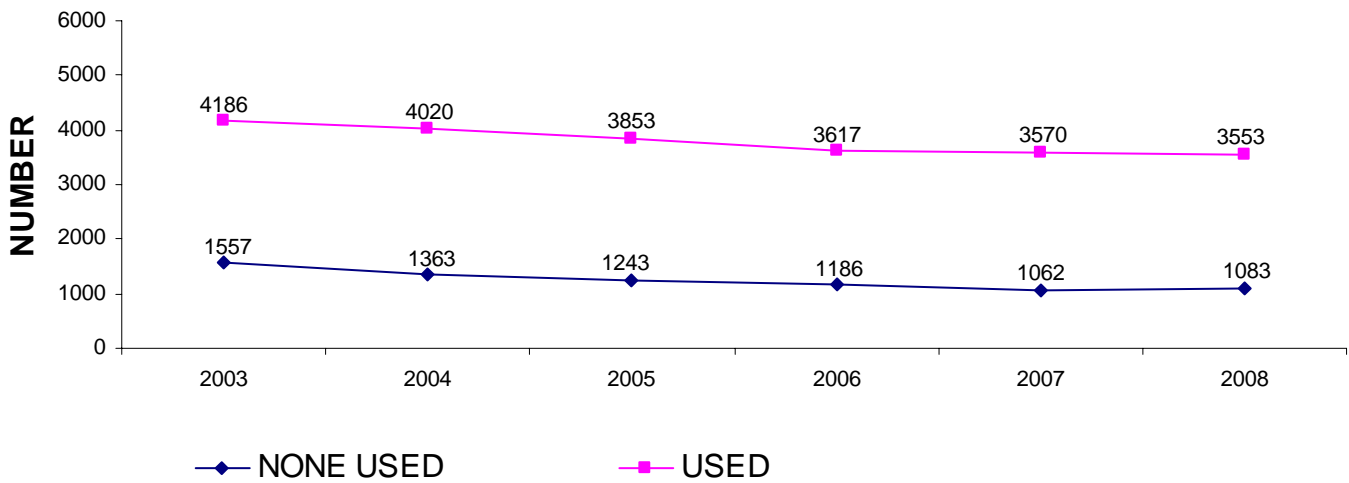
	KILLED						INJURED					
	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>
Not Ejected	81	81	73	73	55	47	5,915	5,130	5,299	4,996	4,811	4,798
Partial Ejection	16	14	11	15	4	4	34	20	16	20	15	19
Total Ejection	72	57	60	68	48	43	183	148	131	159	130	100
Unknown Ejection	1	7	1	2	1	0	34	505	21	24	30	21
Not Applicable	1	0	2	0	0	0	8	8	2	0	0	12
TOTAL	171	159	147	158	108	94	6,174	5,811	5,469	5,199	4,986	4,950

Source: SD Department of Public Safety: Office of Accident Records

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



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



The Child Passenger Restraint System (SDCL 32-37) law took effect on July 1, 1984 - since that time there have been 56 deaths to occupants of this age group. Only five have been restrained by a child safety restraint properly used, two were restrained by a lap belt only. No deaths have been reported where a lap and shoulder harness was used to restrain the child.

There were three fatalities to motor vehicle occupants from birth through four years of age during 2008, which compares to one fatality during 2007 (see TABLE 2-6).

There were 72 children (birth through 4 years old) injured in 2008, which compares to 76 for 2007. Sixty-two of the 72 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>
1998	6	70	48	118
1999	1	76	54	130
2000	1	45	55	100
2001	1	61	52	113
2002	2	56	60	116
2003	5	53	52	105
2004	3	44	57	101
2005	2	43	58	101
2006	2	49	69	118
2007	1	29	47	76
2008	3	26	46	72

NOTE: Table includes passengers of Motor Vehicles not normally equipped with safety restraints.

**TABLE 2-6A
FATALITIES & INJURIES TO MOTOR VEHICLE OCCUPANTS UNDER 5 YEARS OLD
BY SAFETY EQUIPMENT USAGE - 2008**

	<u>Fatalities</u>	<u>Injuries</u>
No Safety Equipment Used	2	5
Lap Belt Only	0	3
Shoulder Harness Only	0	0
Lap Belt & Shoulder Harness	0	8
Child Restraint Used Properly	0	51
Child Restraint Not Used Properly	1	2
Other, Not Stated or Unknown	0	3
TOTAL	3	72

Source: SD Department of Public Safety - Office of 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 479 and 21 deaths per year. Licensed motorcyclists increased 4.6 percent during 2008 while fatalities decreased by thirteen to 15 (see Table 2-7). Moped crashes are included with motorcycle crashes. There were no moped fatalities during 2008. 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
1988 - 2008**

<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>		
1988	424	13	371	13	441	31,421	44,058
1989	377	14	329	14	394	29,942	45,844
1990	492	20	432	23	555	23,719	46,184
1991	407	9	359	10	420	24,133	46,986
1992	383	10	317	11	388	23,389	47,906
1993	320	10	267	12	324	26,173	48,822
1994	387	19	326	20	415	25,822	49,492
1995	375	14	320	14	407	25,155	49,932
1996	309	10	264	11	342	24,704	50,013
1997	316	9	261	9	334	24,561	50,205
1998	358	9	307	9	373	25,188	51,307
1999	381	10	326	10	406	25,735	52,641
2000	473	21	404	22	520	29,175	54,066
2001	395	19	336	19	418	31,493	55,658
2002	427	18	353	20	426	33,906	57,471
2003	515	21	448	21	568	37,528	59,971
2004	517	24	435	26	536	41,579	62,805
2005	515	20	439	22	531	46,383	65,019
2006	544	22	461	22	589	53,451	67,513
2007	519	25	428	28	554	58,529	70,270
2008	505	14	442	15	532	58,508	73,500

Source: SD Department of Public Safety – Office of Accident Records

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**TABLE 2-8
PEDESTRIAN FATALITIES AND INJURIES
1988 - 2008**

<u>Year</u>	<u>Fatalities</u>	<u>Injuries</u>
1988	14	149
1989	10	125
1990	15	138
1991	11	165
1992	7	192
1993	18	163
1994	23	176
1995	14	148
1996	11	141
1997	6	124
1998	7	137
1999	11	131
2000	13	115
2001	15	111
2002	8	104
2003	10	91
2004	9	95
2005	15	89
2006	7	113
2007	7	110
2008	10	96

Source: SD Department of Public Safety – Office of Accident Records

**TABLE 2-9
BICYCLE FATALITIES AND INJURIES
1988 - 2008**

<u>Year</u>	<u>Fatalities</u>	<u>Injuries</u>
1988	2	137
1989	2	144
1990	3	135
1991	4	147
1992	1	161
1993	0	179
1994	0	156
1995	1	122
1996	2	139
1997	1	115
1998	2	133
1999	0	102
2000	1	120
2001	1	105
2002	1	87
2003	1	109
2004	1	77
2005	0	99
2006	1	92
2007	0	101
2008	0	103

Source: SD Department of Public Safety – Office of 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 1996- 2008						
<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>						
1999	78	155	0	44	0	74
2000	78	159	0	39	0	67
2001	78	133	1	33	1	49
2002	78	155	2	28	2	43
2003	78	151	1	27	1	50
2004	78	143	1	27	1	45
2005	78	142	1	34	1	53
2006	78	126	2	38	2	55
2007	78	127	1	31	1	49
2008	78	88	0	20	0	26
<u>FOURTH OF JULY</u>						
1999	78	143	2	37	2	66
2000	102	213	5	67	7	110
2001	30	52	4	15	4	27
2002	102	189	3	64	3	95
2003	78	146	1	57	2	82
2004	78	114	4	27	5	40
2005	78	138	3	42	6	62
2006	102	169	3	39	3	54
2007	30	40	0	13	0	25
2008	78	137	2	43	2	61
<u>LABOR DAY</u>						
1999	78	134	2	38	2	59
2000	78	144	3	45	4	69
2001	78	134	4	42	5	64
2002	78	132	3	38	3	55
2003	78	123	1	39	1	62
2004	78	129	0	37	0	51
2005	78	119	3	39	3	59
2006	78	115	3	29	3	45
2007	78	109	1	40	1	70
2008	78	110	2	36	2	47

<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>						
1999	102	323	4	45	4	67
2000	102	210	2	36	2	54
2001	102	260	0	49	0	71
2002	102	259	2	48	2	83
2003	102	222	0	42	0	54
2004	102	274	2	53	2	69
2005	102	279	1	49	1	78
2006	102	268	2	51	2	82
2007	102	260	6	32	7	57
2008	102	241	4	52	5	81
<u>CHRISTMAS</u>						
1999	78	137	0	20	0	31
2000	78	126	0	25	0	39
2001	102	160	3	33	3	61
2002	30	31	0	7	0	8
2003	102	195	3	46	3	66
2004	102	85	1	9	1	19
2005	78	98	1	21	4	33
2006	78	112	2	25	2	31
2007	102	239	1	49	1	65
2008	102	148	2	31	4	49
<u>NEW YEARS</u>						
1999-00	78	141	3	34	3	51
2000-01	78	152	2	38	2	54
2001-02	102	166	1	34	1	51
2002-03	30	113	2	26	2	39
2003-04	102	173	0	39	0	53
2004-05	102	110	1	30	1	49
2005-06	78	134	4	27	4	47
2006-07	78	146	0	38	0	59
2007-08	102	137	0	26	0	29
2008-09	102	178	1	29	1	42

Source: SD Department of Public Safety - Office of Accident Records

Severity of Injuries by Person Type

The following tables provide a yearly comparison of South Dakota's total injuries, driver's injuries, passenger's injuries, bicyclist's injuries and pedestrian's injuries from 1999 through 2008. 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**

Year	Incapacitating Injuries		Non-Incapacitating Injuries		Possible Injuries		Total Injuries	Total Killed
	No.	%	No.	%	No.	%		
1999	1638	21.6	2874	37.9	3062	40.4	7574	150
2000	1603	20.3	2975	37.7	3310	42.0	7888	173
2001	1434	20.1	2693	37.8	2991	42.0	7118	171
2002	1466	21.0	2710	38.7	2821	40.3	6997	180
2003	1450	20.9	2688	38.7	2806	40.4	6944	203
2004	1232	18.9	2366	36.2	2937	44.9	6535	197
2005	1167	18.8	2193	35.3	2852	45.9	6212	186
2006	1028	17.1	2178	36.2	2809	46.7	6015	191
2007	883	15.3	2149	37.2	2750	47.6	5782	146
2008	924	16.2	1989	34.9	2795	49.0	5708	121

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

Year	Incapacitating Injuries		Non-Incapacitating Injuries		Possible Injuries		Total Injuries	Total Killed
	No.	%	No.	%	No.	%		
1999	1018	20.3	1836	36.6	2157	43.0	5011	92
2000	1012	19.3	1949	37.3	2269	43.4	5230	97
2001	929	19.3	1786	37.0	2109	43.7	4824	104
2002	946	20.3	1761	37.8	1957	42.0	4664	119
2003	930	19.6	1807	38.0	2018	42.4	4755	124
2004	844	18.3	1586	34.4	2177	47.3	4607	129
2005	778	17.7	1485	33.7	2141	48.6	4404	115
2006	687	16.5	1430	34.3	2058	49.3	4175	134
2007	576	14.2	1441	35.5	2040	50.3	4057	101
2008	628	15.4	1372	33.6	2078	51.0	4078	80

**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.	%		
1999	555	23.8	921	39.5	853	36.6	2329	47
2000	519	21.4	922	38.1	982	40.5	2423	62
2001	442	21.3	802	38.6	834	40.1	2078	51
2002	468	21.8	861	40.2	814	38.0	2143	52
2003	470	23.6	783	39.3	738	37.1	1991	68
2004	346	19.7	691	39.4	715	40.8	1752	58
2005	339	20.9	633	39.1	648	40.0	1620	56
2006	303	18.5	649	39.7	683	41.8	1635	49
2007	270	17.9	600	39.8	639	42.3	1509	38
2008	255	17.9	507	35.6	662	46.5	1424	31

**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.	%		
1999	14	13.7	61	59.8	27	26.5	102	0
2000	29	24.4	56	47.1	34	28.6	119	1
2001	23	21.9	55	52.4	27	25.7	105	1
2002	10	11.8	49	57.6	26	30.6	85	1
2003	17	15.9	59	55.1	31	29.0	107	1
2004	12	15.6	41	53.2	24	31.2	77	1
2005	15	15.5	49	50.5	33	34.0	97	0
2006	10	10.9	49	53.3	33	35.9	92	1
2007	11	10.9	50	49.5	40	39.6	101	0
2008	12	11.7	68	66.0	23	22.3	103	0

**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.	%		
1999	50	38.2	56	42.7	25	19.1	131	11
2000	42	36.5	48	41.7	25	21.7	115	13
2001	40	36.0	50	45.0	21	18.9	111	15
2002	42	40.4	38	36.5	24	23.1	104	8
2003	33	36.3	39	42.9	19	20.9	91	10
2004	29	30.5	47	49.5	19	20.0	95	9
2005	35	39.3	25	28.1	29	32.6	89	15
2006	28	24.8	50	44.2	35	31.0	113	7
2007	26	23.6	56	50.9	28	25.5	110	7
2008	28	29.2	41	42.7	27	28.1	96	10

Sex of Drivers

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

	CRASH INVOLVED DRIVERS				LICENSED DRIVERS			
	MALE		FEMALE		MALE		FEMALE	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
1999	18,190	59.8	12,213	40.2	277,345	50.0	277,789	50.0
2000	17,737	60.1	11,751	39.9	277,127	49.9	277,858	50.1
2001	15,774	60.2	10,409	39.8	277,662	49.9	278,369	50.1
2002	14,975	59.7	10,108	40.3	278,283	49.9	279,149	50.1
2003	15,382	59.2	10,586	40.8	282,195	49.9	283,007	50.1
2004	14,614	59.6	9,901	40.4	286,432	49.9	287,931	50.1
2005	13,681	58.1	9,467	40.9	287,841	49.9	289,179	50.1
2006	13,114	58.8	9,111	40.8	291,548	50.0	290,969	50.0
2007	13,529	58.1	9,616	41.3	294,381	50.0	294,165	50.0
2008	13,334	58.1	9,620	41.9	298,983	50.1	298,330	49.9

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

Source: Crash Involved Drivers: SD Department of Public Safety – Office of Accident Records
Source: Licensed Drivers: SD Department of Public Safety – Driver License Issuance

III. 2008 MOTOR VEHICLE CRASH PROFILE

Introduction

This section profiles the reported motor vehicle traffic crashes for 2008. 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 2008, there were 15,907 reported motor vehicle traffic crashes, the majority of crashes being property damage only 11,691 (73.5%). Injury crashes accounted for 4,107 (25.8%) of the crashes, while 109 (0.7%) were fatal crashes. There were 5,708 persons injured and 121 persons killed in crashes during 2008 (see TABLE 3-1).

	Incapacitating Injuries		Non-Incapacitating Injuries		Possible Injuries		Total Nonfatal Injuries		Total Fatalities	
	No.	%	No.	%	No.	%	No.	%	No.	%
Drivers	628	68.0	1372	69.0	2078	74.3	4078	71.4	80	66.1
Passengers	255	27.6	507	25.5	662	23.7	1424	24.9	31	25.6
Pedestrians	28	3.0	41	2.1	27	1.0	96	1.7	10	8.3
Bicycle Dr	12	1.3	68	3.4	23	0.8	103	1.8	0	0.0
Other*	1	0.1	1	0.1	5	0.2	7	0.1	0	0.0
TOTAL	924	100	1,989	100	2,795	100	5,708	100	121	100

*Other – 7 injuries were sustained by operators of working units.

Definition of Injuries:

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

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

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

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

Source: SD Department of Public Safety - Office of Accident Records

TABLE 3-2 provides information on persons killed and injured by method or mode of transportation. During 2008, 41.3 percent of the fatalities and 48.9 percent of the injuries occurred to occupants of passenger cars. Occupants of pickups and vans accounted for 19.8 percent of the fatalities and 19.4 percent of the injuries. Additionally, in 2008 fifteen motorcyclists and 10 pedestrians were killed. No bicyclists were killed during 2008 (See Table 3-2).

**TABLE 3-2
FATALITIES AND INJURIES BY MODE OF TRANSPORTATION
2008**

	Fatalities		Injuries	
	No.	%	No.	%
Passenger Cars	50	41.3	2790	48.9
Pickups, Vans	24	19.8	1105	19.4
Motorcycle, Moped	15	12.4	511	9.0
SUV's (Sports Utility Vehicles)	19	15.7	821	14.4
Pedestrians	10	8.3	96	1.7
ATV's / 4-Wheelers	2	1.7	34	0.6
Trucks (All)*	1	0.8	139	2.4
Bicycle	0	0.0	103	1.8
Other	0	0.0	98	1.7
Farm Machinery	0	0.0	11	0.2
Unknown	0	0.0	0	0.0
TOTAL	121	100	5,708	100

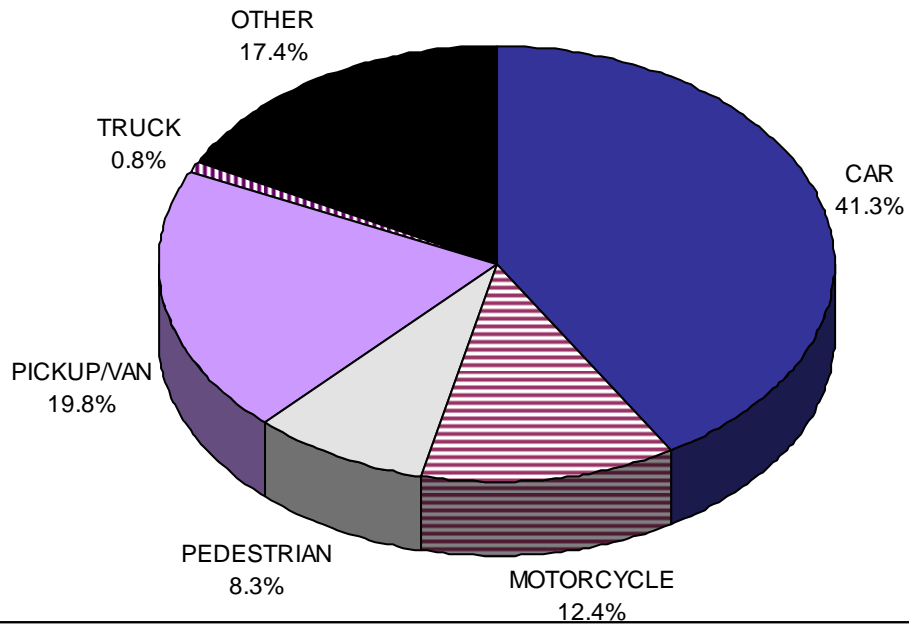
*Trucks Specifics:

	<u>Fatalities</u>	<u>Injuries</u>
Straight Truck	1	69
Straight Truck with Trailer	0	13
Truck Tractor Only	0	2
Truck Tractor with Single Semi Trailer	0	50
Truck Tractor with Two or More Trailers	0	5
TOTAL	1	139

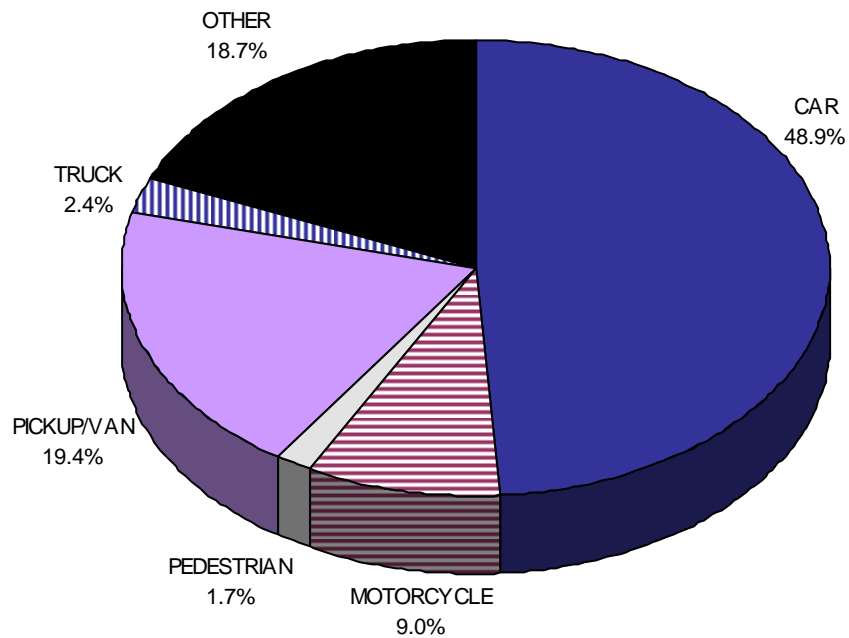
Note: Other includes Bus, Motor Home, Snowmobile, Heavy Equipment, Train, Animal Drawn Vehicle and Other Types of Motor Vehicles.

Source: SD Department of Public Safety – Office of Accident Records

**FIGURE 3-1 FATALITIES BY TRAVEL MODE
2008**



**FIGURE 3-2 INJURIES BY TRAVEL MODE
2008**



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

TABLE 3-3 provides information on all crash-involved vehicles by type. Passenger cars made up 44.7 percent of the vehicles involved in fatal crashes and 50.5 percent of those involved in injury crashes. Pickups and vans made up 22 percent of the vehicles involved in fatal crashes.

**TABLE 3-3
VEHICLE TYPES INVOLVED IN CRASHES
2008**

	All Crashes		Fatal Crashes		Injury Crashes		PDO Crashes	
	No.	%	No.	%	No.	%	No.	%
Passenger Cars	12,359	51.6	67	44.7	3,510	50.5	8,782	52.2
Pickups, Vans	5,929	24.8	33	22.0	1,495	21.5	4,401	26.1
SUV's (Sports Utility Vehicles)	3,746	15.7	17	11.3	1,089	15.7	2,640	15.7
Trucks (All)*	1,067	4.5	12	8.0	273	3.9	782	4.6
Motorcycle	516	2.2	16	10.7	446	6.4	54	0.3
Farm Machinery	35	0.1	0	0.0	14	0.2	21	0.1
Bus	121	0.5	2	1.3	33	0.5	86	0.5
Motor Home	26	0.1	1	0.7	8	0.1	17	0.1
ATV's / 4-wheelers	35	0.1	2	1.3	31	0.4	2	0.0
Moped	38	0.2	0	0.0	37	0.5	1	0.0
Snowmobile	6	0.0	0	0.0	2	0.0	4	0.0
Other or Unknown	55	0.2	0	0.0	10	0.1	45	0.3
TOTAL	23,933	100	150	100	6,948	100	16,835	100

* Trucks Specifics:

	All Crashes	Fatal Crashes	Injury Crashes	PDO Crashes
Straight Truck	445	4	121	320
Straight Truck with Trailer	151	0	38	113
Truck Tractor Only	12	1	4	7
Truck Tractor with Single Semi Trailer	430	6	102	322
Truck Tractor with Two or More Trailers	29	1	8	20
TOTAL	1,067	12	273	782

Source: SD Department of Public Safety – Office of Accident Records

TABLE 3-4 provides information on the ages of persons killed and injured. A total of 19 people (15.7%) of the persons killed were under 20 years of age and a total of 954 or (16.7%) of the persons injured were from 25 through 34 years of age. Four children ages 0-5 were killed during 2008 (see Table 3-4).

**TABLE 3-4
FATALITIES AND INJURIES BY AGE GROUP
2008**

	Fatalities		Injuries	
	No.	%	No.	%
0 - 5	4	3.3	104	1.8
6 - 13	2	1.7	229	4.0
14 - 15	1	0.8	240	4.2
16 - 17	7	5.8	379	6.6
18	4	3.3	250	4.4
19	1	0.8	201	3.5
20	2	1.7	182	3.2
21 - 24	15	12.4	595	10.4
25 - 34	21	17.4	954	16.7
35 - 44	9	7.4	753	13.2
45 - 54	16	13.2	749	13.1
55 - 64	16	13.2	554	9.7
65 - Over	23	19.0	515	9.0
Unknown	0	0.0	3	0.1
Total	121	100	5,708	100

Source: SD Department of Public Safety - Office of 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 40.4 percent of the fatal crashes and only 9.5 percent of the total crashes, while 32.1 percent of the fatal crashes and 41.4 percent of all crashes represented a collision between 2 or more vehicles (see TABLE 3-5).

**TABLE 3-5
FIRST HARMFUL EVENT
2008**

First Harmful Event	Total Crashes		Fatal Crashes		Injury Crashes		PDO Crashes	
	No.	%	No.	%	No.	%	No.	%
Motor Vehicle Collision With:								
MV in Transport	6,585	41.4	35	32.1	2,336	56.9	4,214	36.0
A Fixed or Other Object	2,301	14.5	18	16.5	599	14.6	1,684	14.4
An Animal	4,622	29.1	2	1.8	115	2.8	4,505	38.5
A Pedestrian	103	0.6	9	8.3	94	2.3	0	0.0
A Bicyclist	101	0.6	0	0.0	101	2.5	0	0.0
A Parked Motor Vehicle	651	4.1	0	0.0	83	2.0	568	4.9
A Railroad Vehicle	12	0.1	1	0.9	7	0.2	4	0.0
Equipment in Roadway	24	0.2	0	0.0	5	0.1	19	0.2
Non-Collision (Overturning or Other)	1,508	9.5	44	40.4	767	18.7	697	6.0
Total	15,907	100	109	100	4,107	100	11,691	100

Source: SD Department of Public Safety – Office of Accident Records

Manner of Collision

The most common type of manner of collision between two or more vehicles is an angle collision. Angle collisions constitute 71.4 percent of the fatal crashes, 51.2 percent of the injury crashes, and 57.3 percent of the property damage only crashes. Angle collisions are the most prevalent for severe crashes, accounting for 71.4 percent of the fatal crashes and 55.2 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
2008**

<u>Manner of Collision</u>	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>
Rear-End	2,397	36.4	5	14.3	989	42.3	1,403	33.3
Head-On	105	1.6	5	14.3	67	2.9	33	0.8
Angle	3,638	55.2	25	71.4	1,196	51.2	2,417	57.3
Sideswipe-Same Direction	356	5.4	0	0.0	53	2.3	303	7.2
Sideswipe-Opposite Dir.	85	1.3	0	0.0	29	1.2	56	1.3
Rear-Rear	4	0.1	0	0.0	2	0.1	2	0.0
Unknown	1	0.0	0	0.0	0	0.0	1	0.0
Total	6,586	100	35	100	2,336	100	4,215	100
No Collision Between 2 or more MV	9,321		74		1,771		7,476	
Total Crashes	15,907		109		4,107		11,691	

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

Source: SD Department of Public Safety - Office of Accident Records

Highway System

The number of reported crashes by “type of highway system” is presented in TABLE 3-7. **Fatal and PDO crashes happen predominately in rural areas.** City streets and alleys experienced 31.1 percent of the PDO crashes and 47.3 percent of the injury crashes while accounting for 4.6 percent of the fatal crashes.

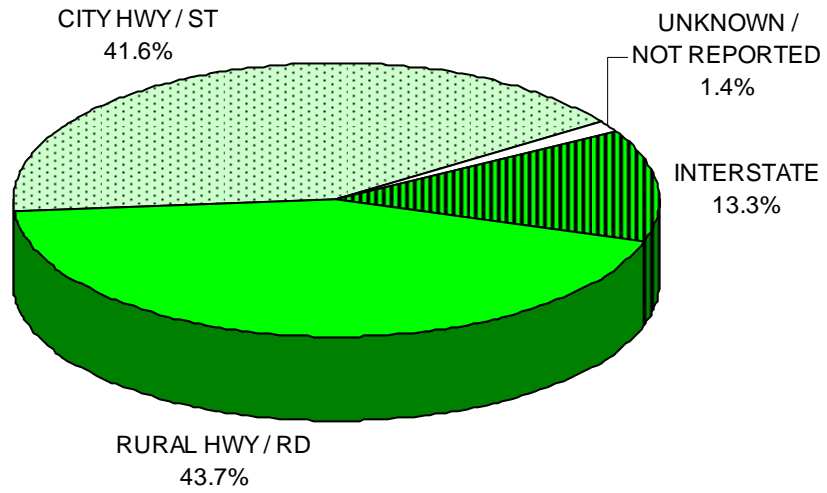
Non-interstate rural roads tallied 74.3 percent of the fatal crashes. The Interstate system experienced 2,120 (13.3%) of the total crashes while accounting for an estimated 30.3 percent of the vehicle miles traveled in 2008. Nineteen or 17.5 percent of the fatal crashes happened on the interstate system. (See FIGURES 3-3 and 3-4)

**TABLE 3-7
CRASHES BY TYPE OF HIGHWAY
2008**

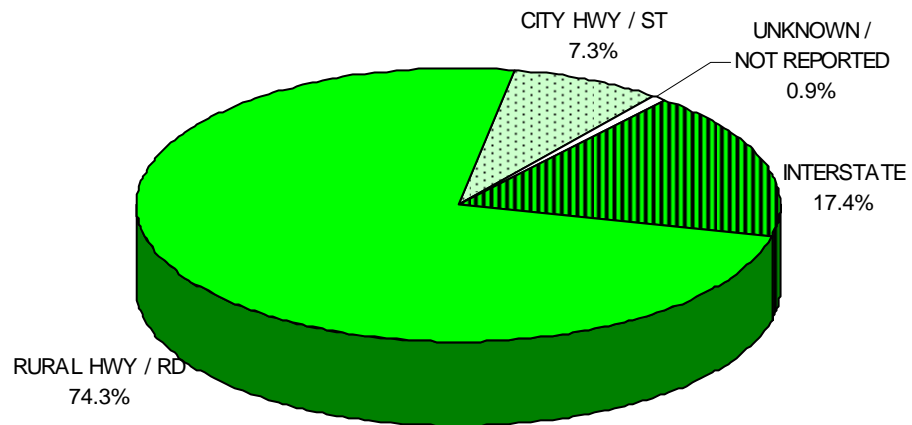
Type of Highway	Total Crashes		Fatal Crashes		Injury Crashes		PDO Crashes		No. Killed	No. Injured
	Number	%	Number	%	Number	%	Number	%		
Interstate - Rural	1,309	8.2	16	14.7	223	5.4	1,070	9.2	18	331
US/State Hwys.-Rural	4,099	25.8	41	37.6	689	16.8	3,369	28.8	47	1,090
Co./Local Rds.-Rural	2,850	17.9	40	36.7	657	16.0	2,154	18.4	44	907
Interstate - City	811	5.1	3	2.8	173	4.2	635	5.4	3	258
US/State Hwys.-City	1,029	6.5	3	2.8	370	9.0	656	5.6	3	498
City Streets/Alleys	5,590	35.1	5	4.6	1,943	47.3	3,641	31.1	5	2,552
Unknown/Not Reported	219	1.4	1	0.9	52	1.3	166	1.4	1	72
Total	15,907	100	109	100	4,107	100	11,691	100	121	5,708

Source: SD Department of Public Safety – Office of Accident Records

**FIGURE 3-3 2008
TRAFFIC CRASHES
BY SYSTEM TYPE**



**FIGURE 3-4 2008
FATAL TRAFFIC CRASHES
BY SYSTEM TYPE**



**TABLE 3-8
MOTOR VEHICLE TRAFFIC CRASHES BY SD COUNTIES
2008**

County	Total Crashes	Fatal Crashes	Injury Crashes	PDO Crashes	Fatalities	Injuries
AURORA	125	0	20	105	0	21
BEADLE	331	3	81	247	4	119
BENNETT	35	1	13	21	1	16
BON HOMME	96	0	18	78	0	28
BROOKINGS	501	3	113	385	3	147
BROWN	729	2	168	559	2	205
BRULE	121	1	17	103	1	22
BUFFALO	18	0	4	14	0	8
BUTTE	208	4	46	158	5	63
CAMPBELL	37	0	3	34	0	5
CHARLES MIX	99	1	30	68	1	41
CLARK	77	0	13	64	0	15
CLAY	199	2	38	159	2	57
CODINGTON	473	3	146	324	3	200
CORSON	56	1	18	37	1	29
CUSTER	203	1	57	145	1	87
DAVISON	480	2	87	391	2	119
DAY	68	2	23	43	2	41
DEUEL	112	2	21	89	3	28
DEWEY	41	1	1	39	2	1
DOUGLAS	45	0	11	34	0	16
EDMUNDS	136	0	21	115	0	24
FALL RIVER	125	1	23	101	1	27
FAULK	65	0	8	57	0	12
GRANT	154	2	29	123	3	46
GREGORY	26	1	11	14	1	14
HAAKON	81	2	9	70	2	12
HAMLIN	146	1	17	128	1	25
HAND	106	3	14	89	3	20
HANSON	85	1	16	68	1	19
HARDING	38	0	9	29	0	11
HUGHES	295	2	72	221	2	101
HUTCHINSON	108	0	19	89	0	30
HYDE	22	1	5	16	1	8
JACKSON	93	3	16	74	3	25
JERAULD	67	0	6	61	0	8
JONES	43	1	4	38	2	7
KINGSBURY	147	1	11	135	1	12
LAKE	169	2	28	139	2	85
LAWRENCE	676	4	151	521	4	203
LINCOLN	571	3	165	403	3	233
LYMAN	166	2	18	146	3	26
MARSHALL	79	0	11	68	0	12
MC COOK	156	1	31	124	1	47
MC PHERSON	48	0	7	41	0	12
MEADE	497	7	119	371	8	179
MELLETTE	10	1	4	5	1	4
MINER	69	0	9	60	0	13
MINNEHAHA	3,694	11	1,280	2,403	11	1,709
MOODY	216	1	32	183	1	47
PENNINGTON	2,170	10	722	1,438	10	990
PERKINS	59	2	9	48	2	10
POTTER	70	1	16	53	1	23
ROBERTS	115	2	28	85	2	47
SANBORN	90	1	7	82	2	13
SHANNON	23	5	11	7	6	30
SPINK	202	0	32	170	0	52
STANLEY	114	1	11	102	1	13
SULLY	44	0	4	40	0	5
TODD	14	0	1	13	0	2
TRIPP	100	0	16	84	0	22
TURNER	85	1	24	60	3	41
UNION	242	3	48	191	3	67
WALWORTH	83	0	17	66	0	25
YANKTON	330	2	83	245	2	123
ZIEBACH	24	1	5	18	1	6
Total:	15,907	109	4,107	11,691	121	5,708

**TABLE 3-8A
ALCOHOL INVOLVED MOTOR VEHICLE TRAFFIC CRASHES BY SD COUNTIES
2008**

<u>County</u>	<u>Total Crashes</u>	<u>Fatal Crashes</u>	<u>Injury Crashes</u>	<u>PDO Crashes</u>	<u>Fatalities</u>	<u>Injuries</u>
AURORA	5	0	1	4	0	1
BEADLE	17	2	11	4	3	18
BENNETT	3	0	2	1	0	2
BON HOMME	5	0	2	3	0	3
BROOKINGS	26	1	12	13	1	14
BROWN	33	1	16	16	1	20
BRULE	6	1	3	2	1	6
BUFFALO	4	0	2	2	0	4
BUTTE	15	3	11	1	3	17
CAMPBELL	1	0	0	1	0	0
CHARLES MIX	11	1	9	1	1	10
CLARK	2	0	2	0	0	2
CLAY	11	0	4	7	0	11
CODINGTON	21	1	13	7	1	18
CORSON	7	0	5	2	0	5
CUSTER	5	0	2	3	0	3
DAVISON	13	0	6	7	0	6
DAY	9	2	7	0	2	11
DEUEL	6	1	2	3	1	2
DEWEY	2	1	0	1	2	0
DOUGLAS	2	0	2	0	0	2
EDMUNDS	5	0	3	2	0	3
FALL RIVER	10	0	5	5	0	5
FAULK	4	0	2	2	0	2
GRANT	9	1	6	2	1	8
GREGORY	2	1	1	0	1	2
HAAKON	4	1	1	2	1	1
HAMLIN	4	0	2	2	0	2
HAND	6	2	2	2	2	4
HANSON	3	0	2	1	0	2
HARDING	3	0	3	0	0	3
HUGHES	18	1	6	11	1	14
HUTCHINSON	3	0	1	2	0	1
HYDE	0	0	0	0	0	0
JACKSON	3	1	2	0	1	7
JERAULD	3	0	1	2	0	2
JONES	1	0	0	1	0	0
KINGSBURY	6	0	2	4	0	2
LAKE	8	1	2	5	1	3
LAWRENCE	48	2	18	28	2	22
LINCOLN	37	3	20	14	3	34
LYMAN	5	1	3	1	1	5
MARSHALL	3	0	3	0	0	3
MC COOK	4	0	3	1	0	6
MC PHERSON	1	0	1	0	0	2
MEADE	34	1	19	14	1	25
MELLETTE	0	0	0	0	0	0
MINER	2	0	1	1	0	1
MINNEHAHA	270	1	116	153	1	150
MOODY	12	0	5	7	0	7
PENNINGTON	152	5	67	80	5	89
PERKINS	4	2	0	2	2	0
POTTER	6	1	3	2	1	5
ROBERTS	21	1	12	8	1	22
SANBORN	3	0	2	1	0	2
SHANNON	10	4	5	1	5	16
SPINK	9	0	4	5	0	7
STANLEY	2	1	0	1	1	0
SULLY	0	0	0	0	0	0
TODD	0	0	0	0	0	0
TRIPP	3	0	2	1	0	2
TURNER	3	0	1	2	0	1
UNION	13	1	7	5	1	7
WALWORTH	8	0	3	5	0	3
YANKTON	30	0	18	12	0	33
ZIEBACH	1	0	1	0	0	1
Total:	977	45	467	465	48	659

County Summary

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

Rural fatal and injury crashes occurred predominately in eleven counties (see TABLE 3-9). Each of these counties reported over two percent of all rural fatal and injury crashes. The eleven accounted for 51.5 percent of rural fatal and injury crashes and 73.6 percent of all fatal and injury crashes in South Dakota. Pennington County has 10.6 percent of all rural fatal and injury crashes with Minnehaha accounting for 8.4 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.

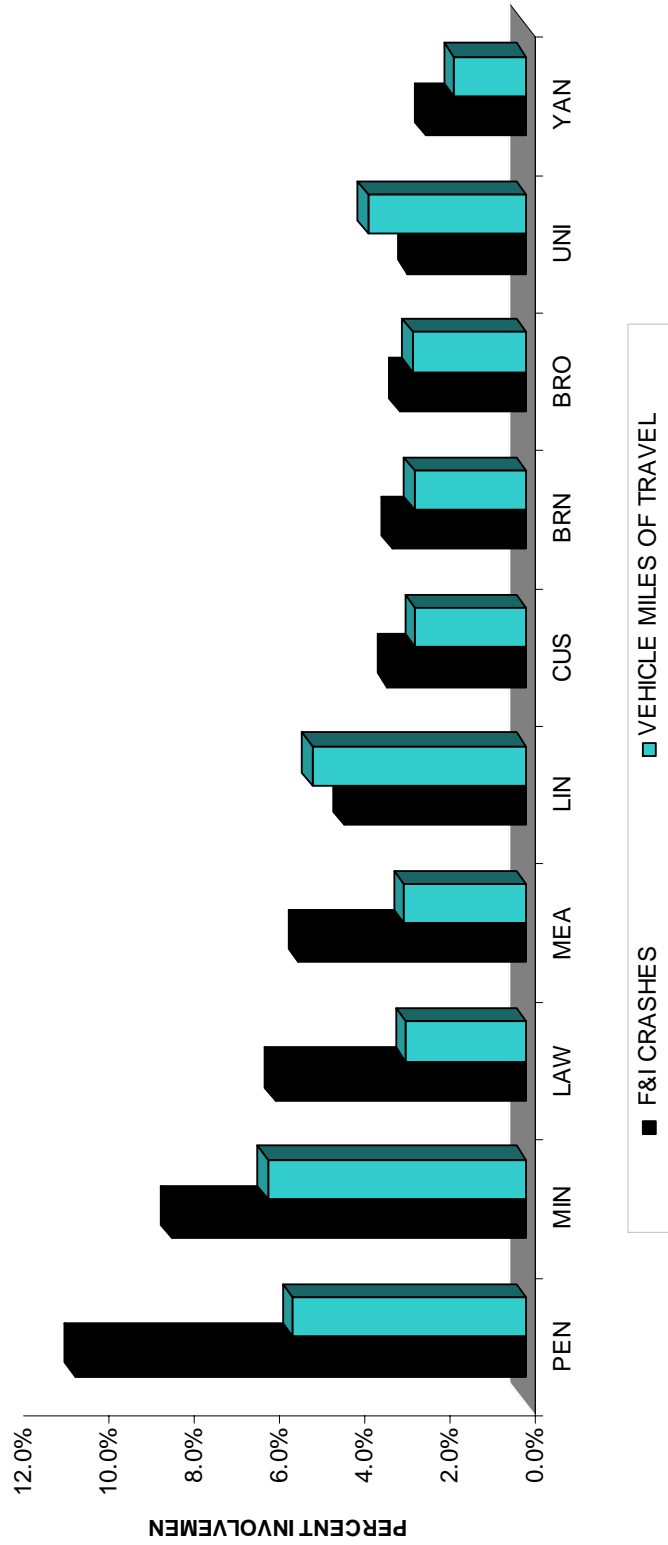
**TABLE 3-9
COUNTIES HAVING MORE THAN TWO PERCENT OF THE
RURAL FATAL & INJURY CRASHES
2008**

<u>County</u>	<u>Rural Fatal & Injury Crashes</u>	<u>Percent of All Rural Fatal & Injury Crashes</u>	<u>Percent of Rural VMTS</u>
PENNINGTON	178	10.6	5.5
MINNEHAHA	140	8.4	6.1
LAWRENCE	99	5.9	2.8
MEADE	90	5.4	2.9
LINCOLN	72	4.3	5.0
CUSTER	55	3.3	2.6
BROWN	53	3.2	2.6
BROOKINGS	50	3.0	2.7
UNION	47	2.8	3.7
YANKTON	40	2.4	1.7
CODINGTON	39	2.3	2.2

Note: Total Rural Fatal and Injury Crashes: 1,676
S.D. Vehicle Miles of Travel Report (2008 data)

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

**FIGURE 3-5 RURAL F&I CRASHES/VMTS
SELECTED COUNTIES - 2008**



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 58.6 percent of the statewide injury crashes and 11 percent of the fatal crashes. The two largest cities (Sioux Falls, Rapid City) accounted for 72.4 percent of fatal and injury crashes and 60.9 percent of the property damage only crashes.

**TABLE 3-10
TRAFFIC CRASHES SOUTH DAKOTA CITIES
POPULATION 2500 AND OVER
2008**

<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	364	0	113	251	0	130
Belle Fourche	52	0	16	36	0	19
Box Elder	46	0	13	33	0	20
Brandon	48	0	9	39	0	12
Brookings	224	0	59	165	0	75
Canton	15	0	2	13	0	2
Dell Rapids	19	0	1	18	0	2
Hot Springs	31	0	6	25	0	6
Huron	149	1	50	98	1	72
Lead	17	0	3	14	0	4
Madison	37	0	6	31	0	6
Milbank	23	0	8	15	0	11
Mitchell	303	0	60	243	0	73
Mobridge	26	0	6	20	0	7
Pierre	182	0	57	125	0	71
Rapid City	1,441	4	526	911	4	733
Redfield	24	0	10	14	0	18
Sioux Falls	3,037	5	1,216	1,816	5	1,623
Sisseton	29	0	4	25	0	5
Spearfish	230	0	48	182	0	62
Sturgis	96	1	33	62	1	43
Vermillion	59	0	8	51	0	12
Watertown	286	1	108	177	1	147
Winner	15	0	2	13	0	2
Yankton	143	0	44	99	0	61

Source: SD Department of Public Safety – Office of Accident Records

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 20.6 percent of all reported property damage crashes and 16.9 percent of all fatal and injury crashes. Dry roads were reported in 70.3 percent of all fatal and injury crashes.

**TABLE 3-11
ROADWAY SURFACE CONDITIONS
2008**

	Total Crashes		Fatal Crashes		Injury Crashes		PDO Crashes	
	No.	%	No.	%	No.	%	No.	%
Dry	10,943	68.8	93	85.3	2,872	69.9	7,978	68.2
Wet	1,413	8.9	5	4.6	415	10.1	993	8.5
Snow	1,436	9.0	3	2.8	299	7.3	1,134	9.7
Slush	371	2.3	1	0.9	84	2.0	286	2.4
Ice	1,224	7.7	5	4.6	296	7.2	923	7.9
Frost	92	0.6	0	0.0	23	0.6	69	0.6
Water	13	0.1	0	0.0	7	0.2	6	0.1
Sand,mud,dirt,gravel	273	1.7	2	1.8	93	2.3	178	1.5
Oil	5	0.0	0	0.0	4	0.1	1	0.0
Other	17	0.1	0	0.0	8	0.2	9	0.1
Unknown / Not reported	120	0.8	0	0.0	6	0.1	114	0.9
Total	15,907	100	109	100	4,107	100	11,691	100

Source: SD Department of Public Safety – Office of Accident Records

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

The peak three-hour period for fatal crashes was 6:00-8:59 a.m. Nineteen or 17.4 percent of the fatal crashes occurred during this three hour period. The peak three hour period for injury crashes was 3:00-5:59 p.m. with 1,163 (28.3%) of the injury crashes occurred. The peak three hour period for property damage only crashes was 5:00-7:59 p.m. with 2,517 (21.5%) of the property damage only crashes occurred (see TABLE 3-12).

Fifteen fatal crashes or 13.8 percent occurred during July in 2008. The month of August shows 465 injury crashes or 11.3 percent of the injury crashes. The month of November shows 1,608 property damage only crashes which represents 13.8 percent of the property damage only crashes for 2008 (see TABLE 3-13).

The day of the week Friday accounts for 2,556 of the total crashes or 16.1 percent, with 704 (17.1%) of injury crashes and 1,837 (15.7%) of property damage only crashes. Wednesday accounted for 20 fatal crashes or 18.3 percent of the total for 2008 (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
2008**

<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	259	7	43	209	7	63
1:00 AM	243	4	68	171	5	100
2:00 AM	250	3	67	180	4	89
3:00 AM	158	1	44	113	1	52
4:00 AM	198	5	43	150	5	52
5:00 AM	414	0	63	351	0	72
6:00 AM	586	4	88	494	4	122
7:00 AM	1,047	11	214	822	12	308
8:00 AM	731	4	192	535	4	260
9:00 AM	525	5	160	360	5	271
10:00 AM	524	3	151	370	4	213
11:00 AM	690	6	208	476	6	293
12:00 PM	752	6	260	486	8	362
1:00 PM	668	4	240	424	5	335
2:00 PM	681	6	224	451	6	300
3:00 PM	1,028	4	359	665	4	476
4:00 PM	1,021	6	384	631	8	532
5:00 PM	1,355	4	420	931	4	605
6:00 PM	1,083	3	230	850	3	317
7:00 PM	902	1	165	736	1	226
8:00 PM	803	11	124	668	14	167
9:00 PM	887	3	141	743	3	195
10:00 PM	629	3	109	517	3	149
11:00 PM	414	5	94	315	5	127
Unknown	59	0	16	43	0	22
Total	15,907	109	4,107	11,691	121	5,708

Source: SD Department of Public Safety – Office of Accident Records

**TABLE 3-13
CRASHES BY MONTH
2008**

<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	1,239	4	261	974	4	355
FEBRUARY	1,186	9	287	890	9	422
MARCH	1,158	9	302	847	10	466
APRIL	1,010	3	277	730	4	371
MAY	1,013	10	309	694	11	442
JUNE	1,260	8	379	873	10	526
JULY	1,195	15	408	772	15	546
AUGUST	1,218	13	465	740	17	632
SEPTEMBER	1,185	11	324	850	11	428
OCTOBER	1,543	10	328	1,205	10	457
NOVEMBER	1,989	10	371	1,608	11	527
DECEMBER	1,911	7	396	1,508	9	536
Total	15,907	109	4,107	11,691	121	5,708

Source: SD Department of Public Safety – Office of Accident Records

**TABLE 3-14
CRASHES BY DAY OF WEEK
2008**

<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	1,704	16	437	1,251	17	623
MONDAY	2,443	8	599	1,836	9	809
TUESDAY	2,373	14	595	1,764	16	791
WEDNESDAY	2,410	20	634	1,756	22	920
THURSDAY	2,361	17	602	1,742	18	836
FRIDAY	2,556	15	704	1,837	16	972
SATURDAY	2,060	19	536	1,505	23	757
Total	15,907	109	4,107	11,691	121	5,708

Source: SD Department of Public Safety – Office of Accident Records

FIGURE 3-6 CRASHES BY TIME OF DAY 2008

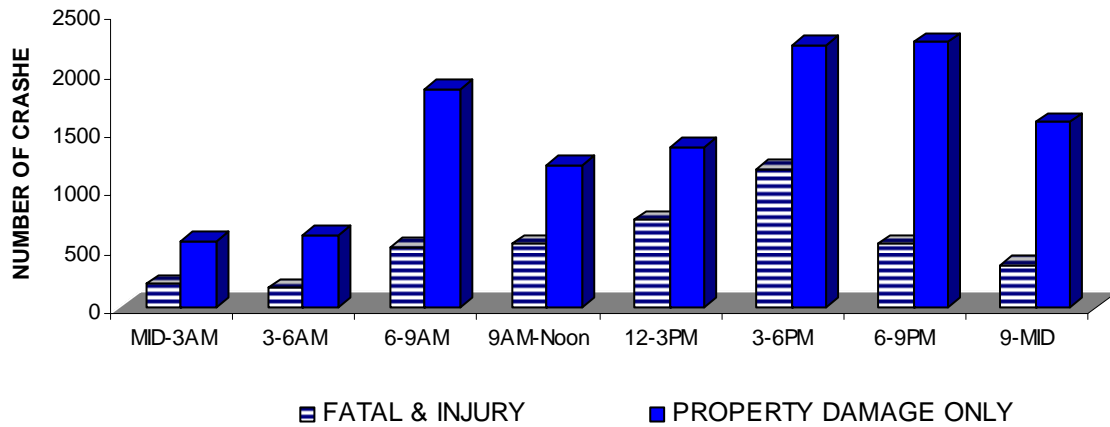


FIGURE 3-7 CRASHES BY MONTH 2008

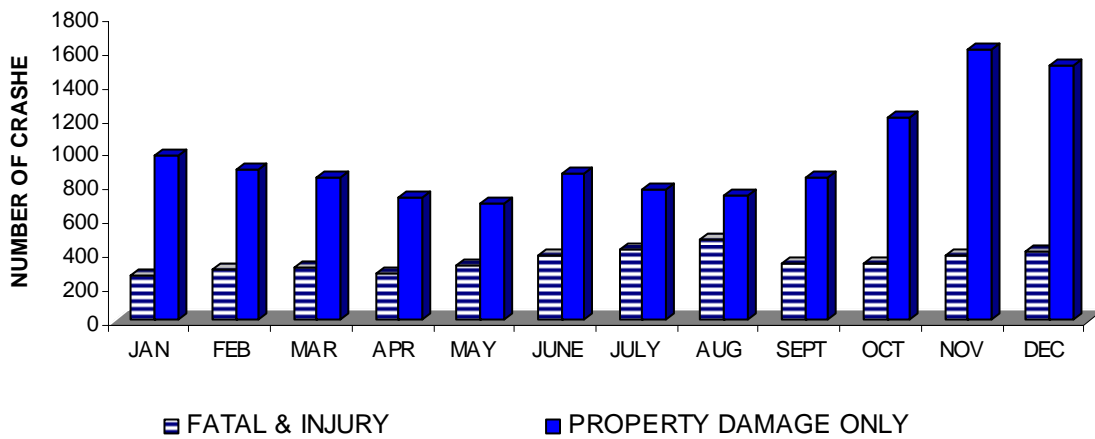
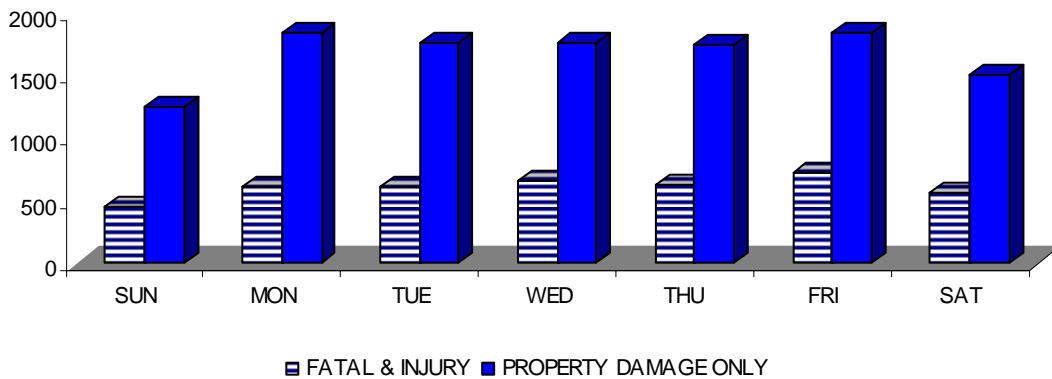


FIGURE 3-8 CRASHES BY DAY OF WEEK 2008



Drivers

In the 15,907 reported motor vehicle crashes there were 23,088 motor vehicle drivers involved, including 150 drivers in fatal crashes and 6,810 drivers in injury crashes. Of these drivers 80 were killed, which is 66.1 percent of all persons killed in motor vehicle crashes and 71.4 percent or 4,078 of the 5,708 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, 29.8 percent of the drivers were under 25 years of age and 48 percent were under 35. Age of drivers involved in fatal and injury crashes follow the pattern of drivers in all crashes. Those drivers under 25 represent 28.7 percent of the drivers involved in fatal crashes and 32 percent of the drivers in injury crashes. Drivers under the age of 35 make up 43.3 percent of the drivers in fatal crashes and 50.4 percent of the drivers in injury crashes. Forty-two or 27.1 percent of the drivers in fatal crashes were 21-34 years of age (see TABLE 3-15).

**TABLE 3-15
AGE OF DRIVERS IN CRASHES
2008**

Age	Drivers In All Crashes		Drivers In Fatal Crashes		Drivers In Injury Crashes		Drivers In PDO Crashes	
	No.	%	No.	%	No.	%	No.	%
0 - 5	1	0.0	0	0.0	1	0.0	0	0.0
6 - 13	16	0.1	2	1.4	10	0.1	4	0.0
14 - 15	617	2.7	1	0.7	187	2.7	429	2.7
16 - 17	1,489	6.5	12	8.1	460	6.8	1,017	6.3
18	891	3.9	5	3.4	298	4.4	588	3.6
19	741	3.2	1	0.7	248	3.6	492	3.1
20	695	3.0	2	1.4	230	3.4	463	2.9
21 - 24	2,419	10.5	20	12.2	744	10.9	1,655	10.3
25 - 34	4,220	18.3	22	14.9	1,251	18.4	2,947	18.3
35 - 44	3,432	14.9	17	11.5	1,009	14.8	2,406	14.9
45 - 54	3,781	16.4	22	14.9	1,039	15.2	2,720	16.9
55 - 64	2,484	10.8	22	14.9	684	10.0	1,778	11.0
65 - Over	2,140	9.3	21	14.2	603	8.9	1,516	9.4
Unknown	162	0.7	3	2.0	46	0.7	113	0.7
				100				
Total	23,088	100	150		6,810	100	16,128	100

Source: SD Department of Public Safety – Office of Accident Records

TABLE 3-16 provides information on the age of drinking drivers in motor vehicle crashes. There were a reported 979 drinking drivers in all crashes which is 4.2 percent of all drivers in crashes. Forty-four or 29.3 percent of drivers in fatal crashes had been drinking while 463 or 6.8 percent of the drivers involved in injury crashes had been drinking.

Young drivers are predominantly the drinking drivers in all crashes. Those drivers under 25 years of age accounted for 36.4 percent of the drinking drivers in fatal crashes and 38 percent of the drinking drivers in injury crashes. Those drivers under 35 years of age accounted for 54.5 percent of the drinking drivers in fatal crashes and 63.2 percent of the drinking drivers in all crashes.

**TABLE 3-16
AGE OF DRINKING DRIVERS IN CRASHES
2008**

Age	Drivers In All Crashes		Drivers In Fatal Crashes		Drivers In Injury Crashes		Drivers In PDO Crashes	
	No.	%	No.	%	No.	%	No.	%
6 - 13	2	0.2	1	2.3	1	0.2	0	0.0
14 - 15	3	0.3	0	0.0	2	0.4	1	0.2
16 - 17	38	3.9	2	4.5	18	3.9	18	3.8
18	48	4.9	3	6.8	21	4.5	24	5.1
19	30	3.1	0	0.0	14	3.0	16	3.4
20	44	4.5	1	2.3	24	5.2	19	4.0
21 - 24	216	22.1	9	20.	96	20.7	111	23.5
25 - 34	238	24.3	8	18.2	114	24.6	116	24.6
35 - 44	152	15.5	6	13.6	77	16.6	69	14.6
45 - 54	137	14.0	8	18.2	62	13.4	67	14.2
55 - 64	48	4.9	3	6.8	24	5.2	21	4.4
65 - Over	19	1.9	1	2.3	10	2.2	8	1.7
Unknown	4	0.4	2	4.5	0	0.0	2	0.4
			44					
Total	979	100		100	463	100	472	100

Source: SD Department of Public Safety – Office of 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. In South Dakota, licensed drivers under 25 years of age represent 16.5 percent of the total licensed drivers, 37.9 percent of the drinking drivers in fatal and injury crashes and 49.8 percent of the speeding drivers in fatal and injury crashes. Drivers under 35 years of age constitute 32.9 percent of all licensed drivers, with 61.9 percent of the drinking drivers and 69.6 percent of the speeding drivers involved in fatal and injury crashes being under 35 years of age (also see FIGURES 3-9 and 3-10).

**TABLE 3-17
LICENSED DRIVERS AND FATAL AND INJURY CRASH-INVOLVED DRIVERS BY AGE
2008**

Age	Licensed Drivers %	Drivers In Fatal & Injury Crashes		Drinking Drivers In Fatal & Injury Crashes		Speeding Drivers In Fatal & Injury Crashes	
		No.	%	No.	%	No.	%
0 - 13	0.0	13	0.2	2	0.4	1	0.2
14 - 15	1.7	188	2.7	2	0.4	31	6.1
16 - 17	2.9	472	6.8	20	3.9	55	10.9
18	1.6	303	4.4	24	4.7	38	7.5
19	1.7	249	3.6	14	2.8	24	4.7
20	1.7	232	3.3	25	4.9	25	4.9
21 - 24	7.0	764	11.0	105	20.7	78	15.4
25 - 34	16.4	1,273	18.3	122	24.1	100	19.8
35 - 44	15.0	1,026	14.7	83	16.4	57	11.3
45 - 54	18.8	1,061	15.2	70	13.8	48	9.5
55 - 64	15.7	706	10.1	27	5.3	31	6.1
65 - Over	17.7	624	9.0	11	2.2	16	3.2
Unknown	0.0	49	0.7	2	0.4	2	0.4
TOTAL	100	6,960	100	507	100	506	100

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

FIGURE 3-9 DRIVERS BY AGE GROUP 2008
Fatal and Injury Crash Involved Drivers

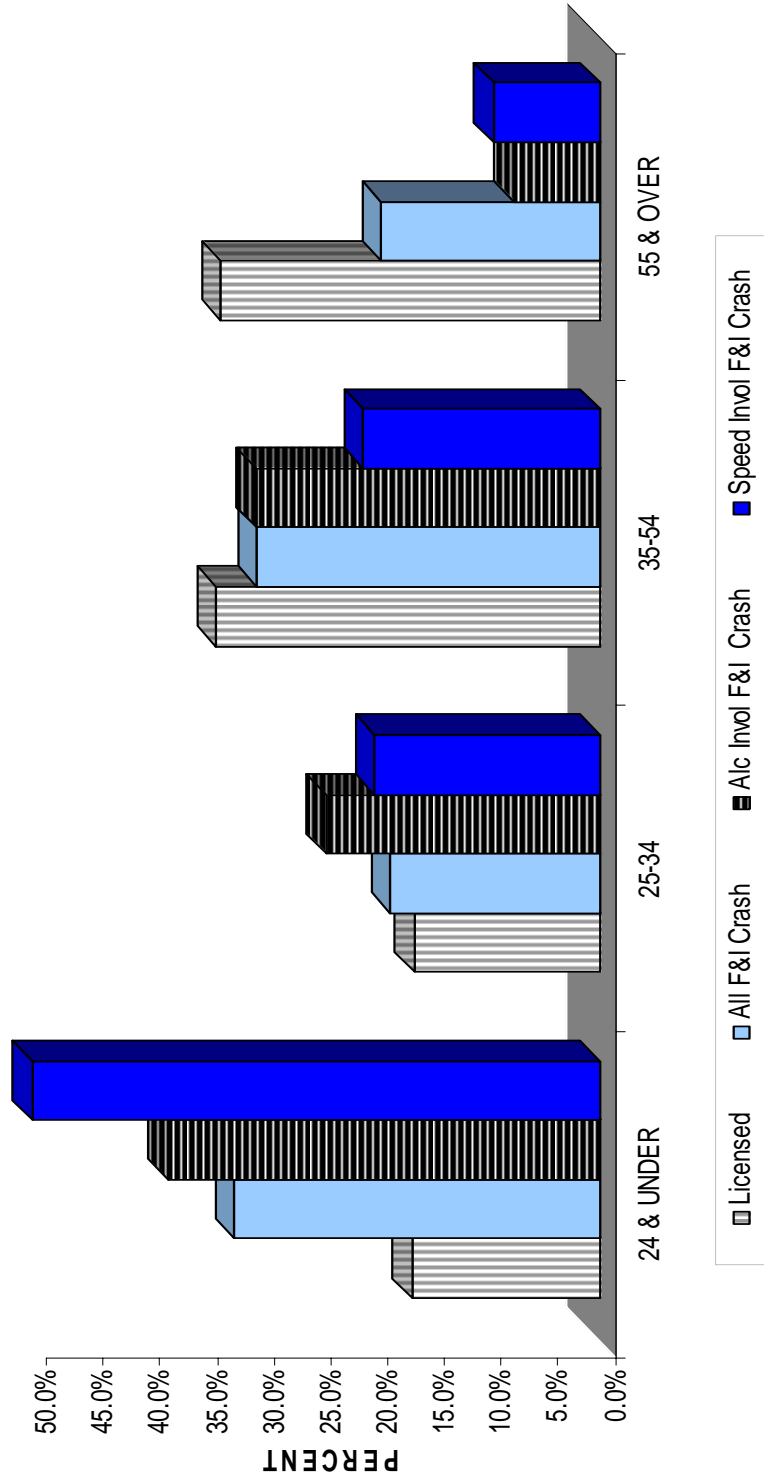
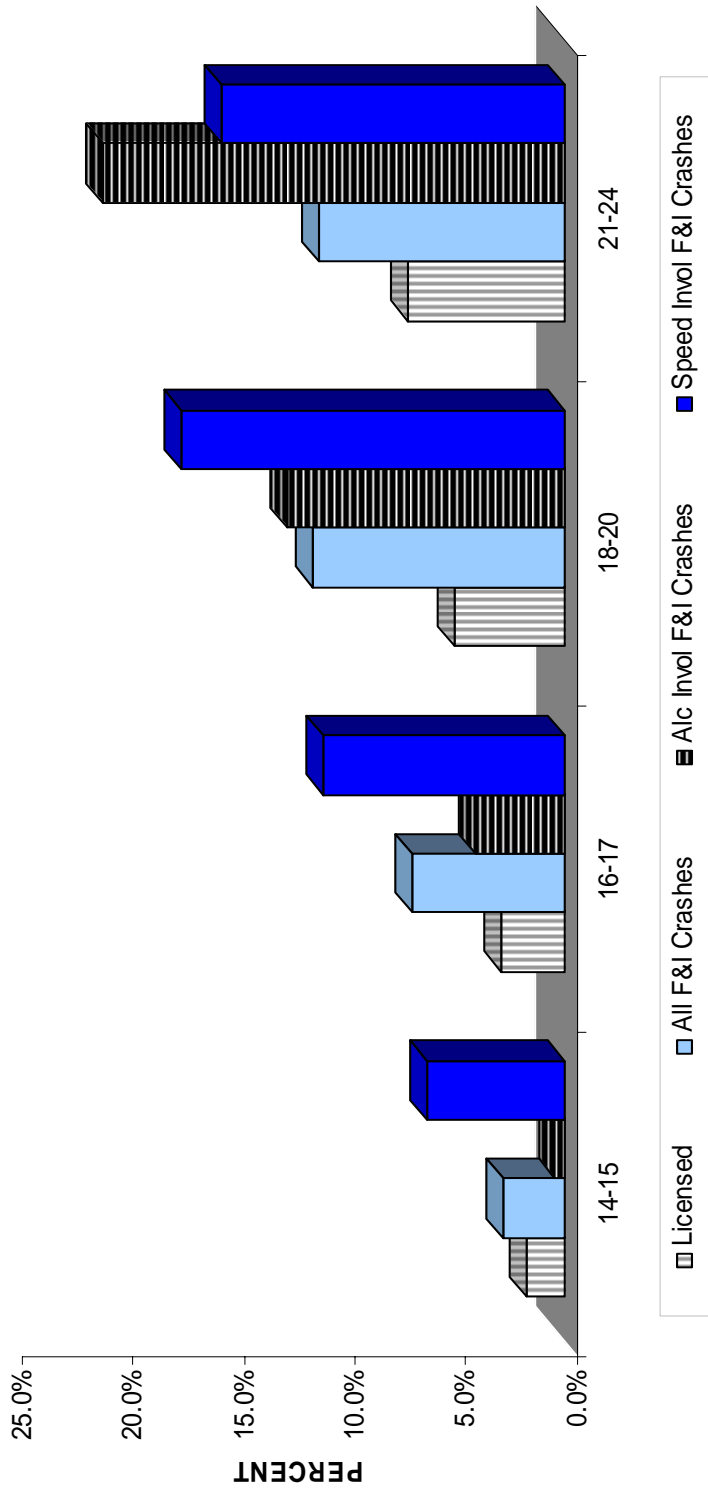


FIGURE 3-10 YOUNG DRIVERS 2008
Fatal & Injury Crash Involved Drivers



Contributing Circumstances (Vision Obscurement and Road)

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

Vision Obscurement - refers to conditions such as: weather condition; physical obstruction; windshield or window obscured by frost, snow, mud, etc.; snow bank; trees, crops, bushes or other vegetation; guardrail barrier; motor vehicle; building; signs, billboards, etc.; glare; and other. Weather condition was the most frequently reported vision obscurement and was indicated as a problem in 3.5 percent of all crashes.

Road Contributing Circumstances - These contributing circumstances include road surface condition (wet, icy, snow, slush, etc.); road shoulder conditions; objects or animals in the road; phantom vehicle; pedestrians, bicyclists, other non-occupant in roadway; work zone conditions, rough roads; and faulty or missing traffic control devices. The most common condition reported was road surface condition, and it was reported as a factor in 15.9 percent of all crashes.

Motor Vehicle Driver Contributing Circumstances

Driver actions are reported to indicate possible factors that may have contributed to the crashes. These factors are referred to as driver contributing circumstances. Running off road was the leading driver contributing circumstance in fatal crashes during 2008. Drinking and speeding were other leading driver contributing circumstances in fatal crashes. It was indicated that the drinking of 26 or 17.3 percent of the drivers in fatal crashes contributed to the crash. Failing to Yield to Another Vehicle was the leading contributing circumstance in injury crashes. Running off Road, Driving too Fast for Conditions and Following Too Close were other leading driver contributing circumstances in injury crashes (see TABLE 3-18).

**TABLE 3-18
MOTOR VEHICLE DRIVER CONTRIBUTING CIRCUMSTANCES
2008**

	Drivers in All Crashes		Drivers in Fatal Crashes		Drivers in Injury Crashes		Drivers in PDO Crashes	
	No.	%	No.	%	No.	%	No.	%
Disregarded Traffic Signs or Signals	613	2.7	5	3.3	260	3.8	348	2.2
Distracted	832	3.6	4	2.7	341	5.0	487	3.0
Drinking	638	2.8	26	17.3	299	4.4	313	1.9
Driving Too Fast for Condition	1,670	7.2	11	7.3	468	6.9	1,191	7.4
Exceeded Speed Limit	387	1.7	19	12.7	180	2.6	188	1.2
Fail to Yield to Vehicle	2,742	11.9	12	8.0	966	14.2	1,764	10.9
Failure to Keep in Proper Lane	370	1.6	11	7.3	129	1.9	230	1.4
Fatigued/Fell Asleep	240	1.0	3	2.0	113	1.7	124	0.8
Following Too Closely	1,075	4.7	2	1.3	438	6.4	635	3.9
Improper Backing	297	1.3	0	0.0	20	0.3	277	1.7
Improper Passing	127	0.6	0	0.0	36	0.5	91	0.6
Improper Turn	384	1.7	0	0.0	100	1.5	284	1.8
Not Stated**	4,304	18.6	0	0.0	3	0.0	4,301	26.7
Other*	1,241	5.4	10	6.7	488	7.2	743	4.6
Over-correcting/Over-steering	506	2.2	9	6.0	199	2.9	298	1.8
Running Off Road	990	4.3	29	19.3	402	5.9	559	3.5
Swerving or Avoiding due to wind, slippery surface, vehicle, object, non-motorist, etc.	490	2.1	4	2.7	156	2.3	330	2.0
Unknown	706	3.1	8	5.3	228	3.3	470	2.9
Wrong Side of Road	109	0.5	5	3.3	45	0.7	59	0.4
Total Drivers	23,088		150		6,810		16,128	

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

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

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

Source: SD Department of Public Safety - Office of Accident Records

Motorcycles

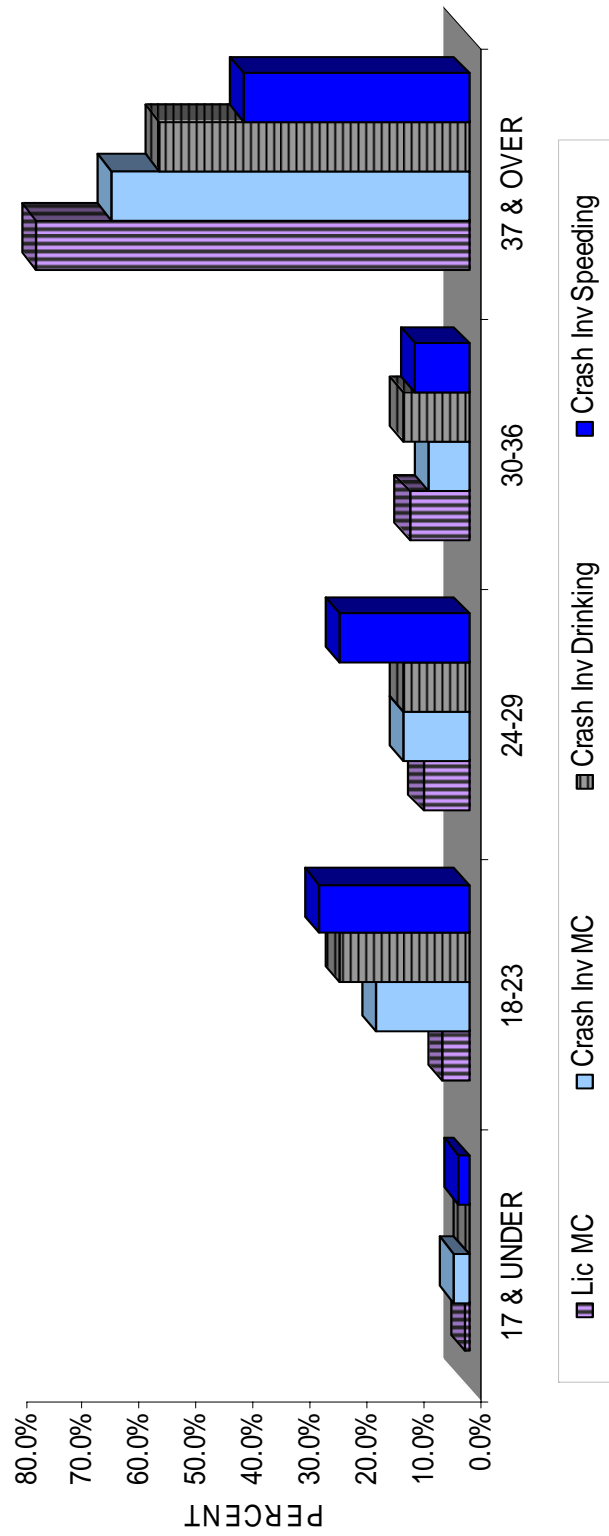
Motorcycle crashes constitute 3.2 percent of all crashes, 12.8 percent of all fatal crashes, and 7.7 percent of all injury crashes. There were 15 people killed and 532 injured on motorcycles in the 505 reported motorcycle crashes during 2008 (see TABLE 2-7). The young motorcycle driver is over represented 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, 7.8 percent of drivers involved in motorcycle crashes, and 7.6 percent of the speeding drivers involved in motorcycle crashes (see TABLE 3-19 and FIGURE 3-11).

**TABLE 3-19
MOTORCYCLISTS BY AGE GROUP
2008**

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	0	0.0	0	0.0	0	0.0
14 - 15	54	0.1	3	0.5	0	0.0	0	0.0
16 - 17	330	0.4	11	2.0	0	0.0	1	1.9
18 - 19	777	1.1	29	5.3	0	0.0	3	5.7
20 - 21	1,125	1.5	33	6.0	4	9.1	9	17.0
22 - 23	1,532	2.1	27	4.9	6	13.6	2	3.8
24 - 25	1,854	2.5	21	3.8	4	9.1	4	7.5
26 - 27	1,950	2.7	16	2.9	1	2.3	4	7.5
28 - 29	2,108	2.9	25	4.6	0	0.0	4	7.5
30 - 31	2,024	2.8	17	3.1	1	2.3	4	7.5
32 - 36	5,689	7.7	21	3.8	4	9.1	1	1.9
37 - 41	7,189	9.8	39	7.1	3	6.8	3	5.7
42 - 51	20,288	27.6	137	25.0	9	20.5	8	15.1
52 - Over	28,580	38.9	167	30.5	12	27.3	10	18.9
Unknown	0	0.0	2	0.4	0	0.0	0	0.0
Total	73,500	100	548	100	44	100	53	100

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

FIGURE 3-11 MOTORCYCLISTS 2008
Crash Involved Motorcycle & Moped Drivers



There were 15 motorcyclist fatalities during 2008. Fourteen were motorcycle drivers and one passenger. Four drivers wore helmet and eye protection, nine drivers and one passenger wore eye protection only and one driver did not use safety equipment. Helmets were used by 182 or 34.8 percent of the motorcycle drivers in crashes while 341 or 65.2 percent did not wear a helmet (see TABLE 3-20).

**TABLE 3-20
HELMET USE BY MOTORCYCLE DRIVERS IN CRASHES
2008**

<u>Age</u>	Helmet Used		Helmet Not Used	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
6 - 13	0	0.0	0	0.0
14 - 15	1	50.0	1	50.0
16 - 17	8	72.7	3	27.3
18 - 20	13	31.0	29	69.0
21 - 24	18	32.7	37	67.3
25 - 34	21	27.3	56	72.7
35 - 44	16	21.6	58	78.4
45 - Over	105	40.2	156	59.8
Unknown	0	0.0	1	0.0
Total	182	34.8	341	65.2

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 – Office of Accident Records

Pedestrians

There were ten pedestrian deaths and 96 injuries in motor vehicle crashes during 2008 (see TABLE 3-21). The youngest pedestrian killed was eighteen years old, while the oldest was 85. Of the injured pedestrians, 18.7 percent were between the ages of 5-13. Cities accounted for 94.8 percent of the pedestrian injuries, while 80 percent of the fatalities were rural (see TABLE 3-23). Of the ten pedestrians killed, 8 were male and 2 female. Of the 96 pedestrians injured, 51 were male and 45 female.

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

**TABLE 3-21
AGE OF PEDESTRIANS IN TRAFFIC CRASHES
2008**

<u>Age</u>	<u>Fatalities</u>		<u>Injuries</u>	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
0 - 4	0	0.0	6	6.2
5 - 13	0	0.0	18	18.7
14 - 19	1	10.0	9	9.4
20 - 24	1	10.0	9	9.4
25 - 34	2	20.0	16	16.7
35 - 44	0	0.0	10	10.4
45 - 54	1	10.0	9	9.4
55 - 64	2	20.0	8	8.3
65 - Over	3	30.0	11	11.5
Total	10	100	96	100

Source: SD Department of Public Safety – Office of Accident Records

**TABLE 3-22
ALCOHOL INVOLVEMENT BY PEDESTRIANS
2008**

<u>Alcohol Involvement</u>	<u>Fatalities</u>		<u>Injuries</u>	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
Alcohol or Drugs	2	20.0	19	19.8
No Alcohol	8	80.0	77	80.2
Unknown	0	0.0	0	0.0
Total	10	100	96	100

Source: SD Department of Public Safety – Office of Accident Records

**TABLE 3-23
RURAL vs. CITY PEDESTRIAN CRASHES
2008**

	<u>Fatalities</u>		<u>Injuries</u>	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
Rural	8	80.0	5	5.2
City	2	20.0	91	94.8
Total	10	100	96	100

Source: SD Department of Public Safety – Office of Accident Records

Bicycles

During 2008 there were no bicyclists killed (see TABLE 2-9). There were 103 bicycle drivers injured in reported motor vehicle crashes during 2008 (see TABLE 3-24). The leading factor in bicycle-involved crashes was improper crossing which was reported for 17.7 percent of the injured bicycle drivers. Eighty-one of the bicycle drivers in crashes had no contributing circumstances. The yearly 1988-2008 trend of bicycle fatalities and injuries is provided in TABLE 2-9.

**TABLE 3-24
AGE OF BICYCLE DRIVERS IN TRAFFIC CRASHES
2008**

<u>Age</u>	<u>Fatalities Number</u>	<u>Injuries Number</u>	<u>%</u>
0 - 4	0	2	1.9
5 - 13	0	33	32.0
14 - 19	0	24	23.3
20 - 24	0	14	13.6
25 - 34	0	8	7.8
35 - 44	0	10	9.7
45 - 54	0	9	8.7
55 - 64	0	2	1.9
65 - Over	0	1	1.0
Total	0	103	100

Source: SD Department of Public Safety – Office of 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.
- January 1, 2004** - South Dakota Accident Records System (SDARS) was implemented.
- July 20, 2007** - Highway Patrol begins testing TraCS (Traffic and Criminal Software) in nine vehicles. Full implementation of computerized in-vehicle accident reporting expected in early 2008.
- January 1, 2008** - SD Highway Patrol begins submission of all reportable crashes using TraCS (Traffic and Criminal Software) system. The Office of Accident Records will expand TraCS to add municipalities & counties for more efficient reporting during 2008

V. 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, 2006, National Safety Council)

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