2011 South Dakota Motor Vehicle Traffic Crash Summary



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

Dennis Daugaard Governor





STATE OF SOUTH DAKOTA Dennis Daugaard, Governor

July 2012

My Fellow South Dakotans:

The annual South Dakota Motor Vehicle Traffic Crash Summary is compiled in an attempt to help determine the causes of traffic crashes resulting in injuries and fatalities on the roads within South Dakota. This publication is a sobering reminder that hardly a day passes without an injury or fatal crash on our highways.

During 2011, motor vehicle crashes claimed the lives of 111 persons on our public roadways - a reduction of 21 percent from 2010. Thirty-seven (or 33 percent) of those deaths were alcohol-related. Sixteen (or 43 percent) of the lives claimed by alcohol-related crash deaths were persons under the age of 30!

Every single one of these deaths were preventable.

Although South Dakota fatality and injury rates are lower than those in some of our neighboring states, you and I need to stay focused on taking personal responsibility for safe driving and teaching our children to do the same.

Please set a good example by not driving under the influence of alcohol or drugs, avoiding distracted driving, wearing seatbelts every time you get into your vehicle, and encouraging family, friends and co-workers to do the same.

Thanks for doing your part to make our roadways safer for everyone!

Denas Daugard

Dennis Daugaard

TABLE OF CONTENTS

I.	INTRODUCTION	1
	South Dakota Statistical Summary	2
II.	HISTORICAL TRENDS	3
	Motor Vehicle Crashes Alcohol Involvement Restraint Usage	6
	Cycle and Pedestrian Crashes Holiday Counts Severity of Injuries	13 16
	Sex of Drivers	
III.	MOTOR VEHICLE CRASH PROFILE	21
	Introduction	21
	First Harmful Event	
	Manner of Collision	27
	Highway System	
	County Summary	
	City Summary	
	Roadway Surface Conditions	35
	Crashes by Time of Day, Month, and Day of Week	
	Drivers	
	Contributing Circumstances	44
	Motorcycles	
	Pedestrians	
	Bicycles	
IV.	IMPORTANT EVENTS AND DATES	52

V. <u>GLOSSARY OF TERMS</u>

53

LIST OF TABLES

2-1	Fatality Rate Comparison	3
2-2	South Dakota Yearly Comparison of Motor Vehicle Traffic	
	Fatalities, Injuries, Crashes, Miles Traveled, and	
	Registered Motor Vehicles	4
2-3	Alcohol Involved Crashes as Percent of All Crashes	6
2-3A	Persons Killed in Alcohol Involved Crashes by Age	6
2-4	Crash and Arrest Activity	
2-5	Safety Restraint Usage Killed Occupants	
2-5A	Safety Restraint Usage Injured Occupants	
2-5B	Killed & Injured Motor Vehicle Occupants by Ejection Status	10
2-6	Fatalities and Injuries to Motor Vehicle Occupants	
	Under Five Years of Age	
2-6A	Safety Restraint Usage Under 5 Years of Age	
2-7	Motorcycle Crashes	
2-8	Pedestrian Fatalities and Injuries	
2-9	Bicycle Fatalities and Injuries	
2-10	Crashes during Holidays	
2-11	Fatalities and Injuries of Total Persons	
2-12	Fatalities and Injuries of Total Drivers	
2-13	Fatalities and Injuries of Total Passengers	
2-14	Fatalities and Injuries of Total Bicycle Drivers	
2-15	Fatalities and Injuries of Total Pedestrians	
2-16	Sex of Drivers	20
3-1	Fatalities and Severity of Injuries of Drivers, Passengers,	
	Pedestrians, and Bicyclists	
3-2	Fatalities and Injuries by Mode of Transportation	
3-3	Vehicle Types Involved in Crashes	
3-4	Fatalities and Injuries by Age Group	
3-5	First Harmful Event	26
3-6	Manner of Collision for Crashes Involving a Collision Between	07
0.7	Two or More Motor Vehicles	
3-7	Crashes by Type of Highway	
3-8	Reported Traffic Crashes - South Dakota Counties	
3-8A	Reported Alcohol Traffic Crashes - South Dakota Counties	31
3-9	Counties Having More Than Two Percent of the Rural Fatal and Injury Crashes	22
3-10	Traffic Crashes - South Dakota Cities Population 2500 and Over	
3-10 3-11		
3-11	Roadway Surface Conditions	
3-12	Crashes by Time of Day	
3-13	Crashes by Month Crashes by Day of Week	
3-14	Age of Drivers in Crashes	
3-16	Age of Drinking Drivers in Crashes	
3-17	Licensed Drivers and Fatal and Injury Crash-Involved Drivers by Age	
3-18	Motor Vehicle Driver Contributing Circumstances	
3-19	Motorcyclists by Age Group	
3-20	Helmet Use by Motorcycle Drivers in Crashes	
3-20	Age of Pedestrians in Traffic Crashes	
3-22	Alcohol Involvement by Pedestrians	
3-23	Rural vs. City Pedestrian Crashes	
3-24	Age of Bicycle Drivers in Traffic Crashes	

LIST OF FIGURES

2-1	Fatality Rate Comparison3
2-2	Traffic Fatalities - Alcohol Related vs. Non-Alcohol Related7
2-3	Traffic Injuries - Alcohol Related vs. Non-Alcohol Related7
2-4	Fatal and Injury Crashes and DWIs9
2-5	Fatal Crashes9
2-6	Safety Equipment Usage Killed Occupants11
2-7	Safety Equipment Usage Injured Occupants11
3-1	Fatalities by Travel Mode23
3-2	Injuries by Travel Mode23
3-3	Traffic Crashes by Highway System Type29
3-4	Fatal Traffic Crashes by Highway System Type29
3-5	Rural Fatal and Injury Crashes/Vehicle Miles Traveled
3-6	Crashes by Time of Day
3-7	Crashes by Month
3-8	Crashes by Day of Week
3-9	Drivers by Age Group - Fatal and Injury Crash-Involved Drivers42
3-10	Young Drivers - Fatal and Injury Crash-Involved Drivers
3-11	Motorcyclists - Crash-Involved Motorcycle and Moped Drivers

I. INTRODUCTION

The Motor Vehicle Traffic Crash Summary is divided into two main sections, Historical Trends and 2011 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 2011 Traffic Crash Profile section details the crash picture for 2011 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.

date would not be included in this report.

- 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 FURTHE	R INFORMATION:	
Office of Acci 118 West Ca Pierre SD 57	pitol Avenue	Phone:605.773.415 Facsimile:605.773.6 E-mail: <u>Chuck.Ferge</u>	893
Webpage: <u>http://dp</u>	s.sd.gov/enforcemen	t/accident_records/Annual_	Crash_Reports.aspx

SOUTH DAKOTA TRAFFIC STATISTICAL SUMMARY 2010-2011

\triangleright	NUMBER OF REPORTED MOTOR VEHICLE TRAFFIC CRASHES	<u>2010</u> 17,626	<u>2011</u> 17,362
		·	·
	AMOUNT OF MOTOR VEHICLE TRAFFIC CRASH PROPERTY DAMAGE	\$93 MILLION	\$91 MILLION
۶	NUMBER OF MOTOR VEHICLE TRAFFIC CRASH INJURIES	5,801	5,374
\triangleright	NUMBER OF MOTOR VEHICLE TRAFFIC CRASH FATALITIES	140	111
≻	FATALITY RATE PER 100,000,000 MILES OF TRAVEL	1.58	1.23
\triangleright	PERCENT OF DRIVERS IN FATAL CRASHES WHO HAD BEEN DRINKING -	26.2%	20.6%
\triangleright	NUMBER KILLED IN ALCOHOL-RELATED CRASHES	49	37
\triangleright	NUMBER INJURED IN ALCOHOL-RELATED CRASHES	646	633
≻	NUMBER OF PEDESTRIANS KILLED	9	7
≻	NUMBER OF MOTORCYCLISTS KILLED	27	14
\succ	NUMBER OF BICYCLISTS KILLED	2	1
\triangleright	PERCENT OF LICENSED DRIVERS UNDER 25	15.8%	15.6%
\triangleright	PERCENT OF CRASH-INVOLVED SPEEDING DRIVERS UNDER 25	49.7%	51.5%
\triangleright	PERCENT OF CRASH-INVOLVED DRINKING DRIVERS UNDER 25	33.0%	34.0%
	NUMBER OF OCCUPANTS KILLED IN MOTOR VEHICLES (EXCLUDES MOPED, MOTORCYCLE, ATV & SNOWMOBILE OCCUPANTS)	101	87
	NUMBER OF OCCUPANTS KILLED IN MOTOR VEHICLES WHO WERE WEARING A SAFETY RESTRAINT	28	22
\triangleright	NUMBER OF UNRESTRAINED OCCUPANTS UNDER 5 YEARS OF AGE		
	IN MOTOR VEHICLE CRASHES WHO WERE KILLED	1	0
	WHO WERE INJURED (EXCLUDES MOPED, MOTORCYCLE, ATV & SNOWMOBILE OCCUPANTS)	17	9
•	NUMBER OF UNRESTRAINED OCCUPANTS UNDER 5 YEARS OF AGE WITH CHILD RESTRAINT NOT USED PROPERLY WHO WERE KILLED WHO WERE INJURED- (EXCLUDES MOPED, MOTORCYCLE, ATV & SNOWMOBILE OCCUPANTS)	0 2	0 2
۶	ECONOMIC LOSS FROM MOTOR VEHICLE TRAFFIC CRASHES	\$379 MILLION	\$345 MILLION
Se	purce: SD Department of Public Safety – Office of Accident Records		

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 2001-2011 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 2-1FATALITY RATE COMPARISON2002-2011											
<u>State</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	
South Dakota	2.2	2.4	2.3	2.3	2.3	1.7	1.4	1.5	1.6	1.2	
Iowa	1.3	1.4	1.2	1.4	1.4	1.4	1.4	1.2	1.0	1.2	
Minnesota	1.2	1.2	1.0	1.0	0.9	0.9	0.8	0.8	0.7	0.7	
Montana	2.6	2.4	2.0	2.3	2.3	2.4	2.1	2.0	1.7	1.8	
Nebraska	1.6	1.5	1.3	1.4	1.4	1.3	1.1	1.0	0.9	0.9	
North Dakota	1.3	1.4	1.3	1.6	1.4	1.4	1.3	1.8	1.3	1.6	
Wyoming	2.0	1.8	1.8	1.9	2.1	1.6	1.7	1.4	1.6	1.8	
National	1.5	1.5	1.4	1.5	1.4	1.3	1.3	1.2	1.1	1.1	

Note: Death Rate is the number of traffic fatalities per 100 million vehicle miles traveled. The 2011 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

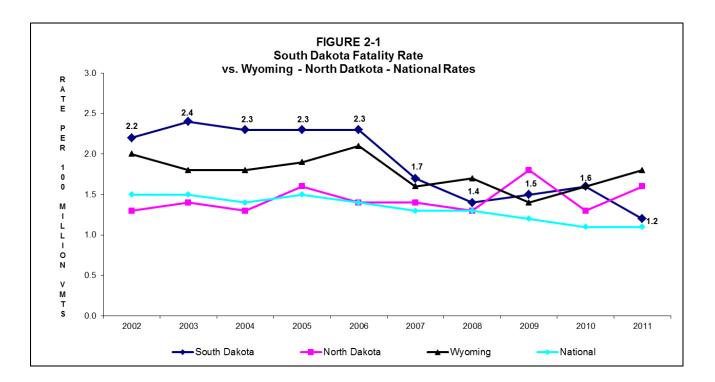


TABLE 2-2 provides a yearly comparison of South Dakota's motor vehicle traffic crashes from 1982 through 2011. Any comparison of motor vehicle crashes must be made with caution due to the changes in the definition of a reportable crash. For example, in the late 1970's the definition of a fatality caused 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 2011 death rate decreased to 1.2, a 21.9% decrease from the 2010 death rate of 1.58. The 5,374 people injured in crashes are a 7.4% decrease from the 5,801 in 2010 (see TABLE 2-2).

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

										Registered
					Total				Miles ³	Motor
		Death		Total	Crashes	Fatal	Injury	PDO ²	Traveled	Vehicles ⁵
Year	<u>Deaths</u>	Rate ¹	<u>Injuries</u>	<u>Crashes</u>	Rate ⁴	<u>Crashes</u>	<u>Crashes</u>	<u>Crashes</u>	<u>+(000,000)</u>	<u>+(000)</u>
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	924 ⁵
2009	131	1.50	5,704	16,994	194.44	112	4,101	12,781	8,740	952
2010	140	1.58	5,801	17,626	198.92	124	4,155	13,347	8,861	992
2011	111	1.23	5,374	17,362	193.06	101	3,973	13,288	8,993	976

FOOTNOTES

¹Number of deaths per 100 million vehicle miles traveled.

²July 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

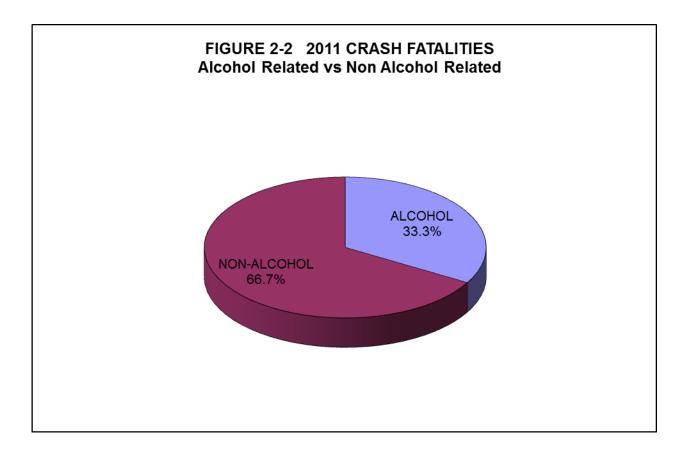
Alcohol Involvement

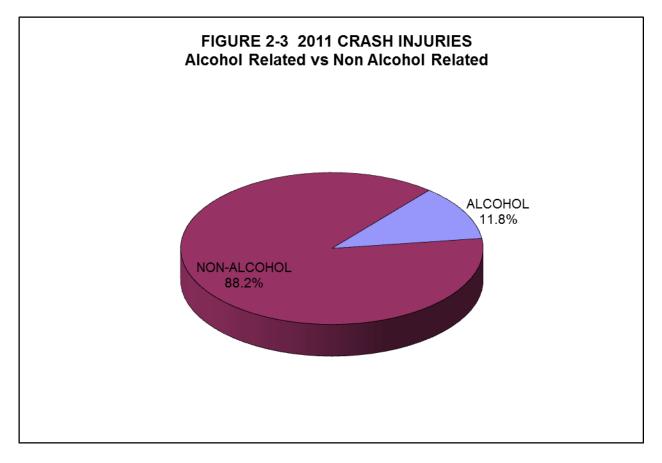
When comparing records dating back to 1979, 36.7% alcohol involved fatal crashes for 2004 is the lowest. Of the 111 traffic fatalities during 2011, 37 or 33.3% were alcohol related (see Table 2-3). Alcohol statistics dating back to the 1970's show 2011 to have the lowest number of alcohol related fatalities for any one-year period (37). The highest number is 138 for the year of 1973.

		Т	ABLE 2-3				
ALCO	HOL INVOLV	ED CRAS	HES AS PI	ERCENT C	F ALL CR	ASHES	
		2	2005-2011				
	<u>2005</u>	2006	2007	2008	2009	<u>2010</u>	<u>2011</u>
Total Crashes	6.8%	7.0%	5.9%	6.1%	6.0%	5.7%	5.7%
	(1113)	(1099)	(959)	(977)	(1022)	(999)	(992)
Fatal Crashes	39.2%	39.0%	42.3%	41.3%	45.5%	35.5%	29.7%
	(62)	(67)	(55)	(45)	(51)	(44)	(30)
Injury Crashes	12.7%	13.4%	11.5%	11.4%	11.6%	10.8%	11.5%
	(552)	(563)	(467)	(467)	(474)	(448)	(457)
PDO Crashes	4.2%	4.1%	3.6%	4.0%	3.9%	3.8%	3.8%
	(499)	(469)	(437)	(465)	(497)	(507)	(505)
Fatalities	39.8%	37.7%	42.5%	39.7%	46.6%	35.0%	33.3%
	(74)	(72)	(62)	(48)	(61)	(49)	(37)
Injuries	13.2%	14.2%	11.5%	11.5%	12.1%	11.1%	11.8%
,	(818)	(854)	(666)	(659)	(692)	(646)	(633)

NOTE: Alcohol involvement for Fatal Crashes is based upon a postitive 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.

PERSONS	KILLED I	N ALCOF	BLE 2-3A IOL INVO 05-2011		RASHES I	BY AGE	
AGE	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>
0-5	1	0	0	1	0	0	0
6 - 12	0	0	1	0	2	0	1
13 - 19	10	13	10	6	15	6	7
20	2	1	1	1	0	0	0
21 - 29	20	19	18	15	14	12	8
30 - 39	16	15	13	12	11	8	9
40 - 49	15	11	13	7	9	11	5
50 - 59	5	11	4	4	6	9	5
60 & OLDER	5	2	2	2	4	3	2
Unknown/Not Stated	0	0	0	0	0	0	0
TOTAL	74	72	62	48	61	49	37





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 1.0% while non-alcohol related fatal and injury crashes decreased by 5.3% from the 2010 totals. The number of DWI arrests decreased by 5.4% from 2010.

		CRASH A	ND ARRES [®] 2002- 2011			
		CRASHES	FATAL & IN	JURY CRASHES		
	ALCOHOL	NONALCOHOL	ALCOHOL	NONALCOHOL	DWI ¹	DWI ¹
	RELATED	<u>RELATED</u>	<u>RELATED</u>	<u>RELATED</u>	<u>ARRESTS</u>	CONVICTIONS
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
2009	51	61	525	3,688	10,147	6,462
2010	44	80	492	3,787	9,246	5,882
2011	30	71	487	3,587	8,744	5,199
		uth Dakota Courts - The 2011 Based on Fiscal Ye		ary and 2011 Annual Rep	ort of the S. D. Un	fied Judicial

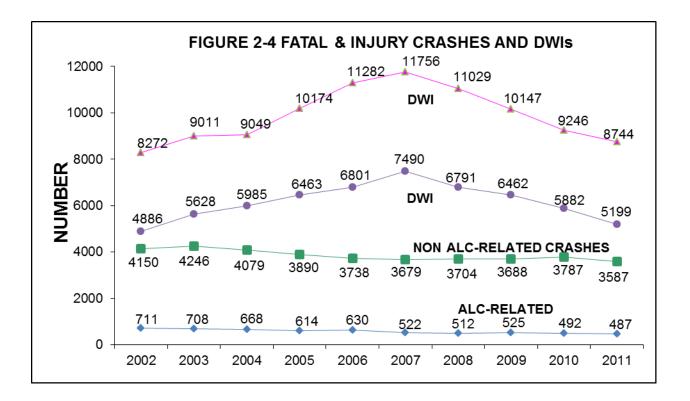
FIGURE 2-4 presents the annual counts of DWI arrests, alcohol related fatal and injury crashes, and non-alcohol related fatal and injury crashes from 2002 through 2011.

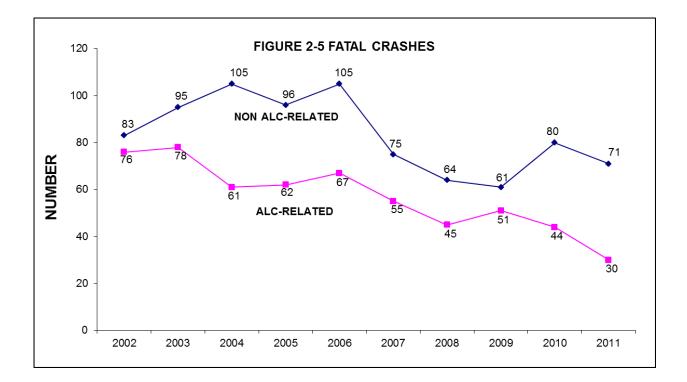
FIGURE 2-5 presents the alcohol related and non-alcohol related fatal crash experience for the years of 2002 through 2011.

There were 30 alcohol related fatal crashes during 2011, which compares to 44 in 2010. The previous three-year average was 47 for the years of 2008-2010.

There were 487 alcohol related fatal and injury crashes during 2011, which compares to 492 in 2010. The previous three-year average was 510 or a 4.5 percent decrease in 2011. Nonalcohol related fatal and injury crashes in 2011 decreased (5.3%) when compared to 2010 and decreased 3.7 percent from the previous three-year average (2008-2010).

There were 8,744 DWI arrests in fiscal year 2011. This level has gone down 13.8% from the previous three-year average (2008-2010). There were 5,199 DWI convictions in fiscal year 2011. This level has gone down 18.5% from the previous 3-year average (2008-2010).





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. Fifty-two occupants were killed while not wearing any safety restraint, while twenty-two occupants killed were wearing a lap belt and shoulder harness. (See TABLE 2-5)

TABLE 2-5 SAFETY RESTRAINT USAGE – KILLED OCCUPANTS									
	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>			
No Safety Equipment	117	74	60	79	67	52			
Lap Belt Only	1	0	1	1	2	C			
Shoulder Harness Only	0	0	1	0	0	0			
Lap Belt & Shoulder Harness	23	23	25	26	26	22			
Child Restraint Used Properly	1	0	0	1	0	C			
Child Restraint Not Properly Used	0	1	1	0	0	C			
Other, Not Stated or Unknown	16	10	6	4	6	13			
TOTAL	158	108	94	111	101	87			

Forty-three (49.4%) of the 87 killed occupants were either partially or totally ejected from the vehicle. (See TABLE 2-5B)

TABLE 2-5A SAFETY RESTRAINT USAGE – INJURED OCCUPANTS

	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>
No Safety Equipment	1,173	1,058	1,080	1,012	956	899
Lap Belt Only	68	52	59	48	46	45
Shoulder Harness Only	21	36	33	35	47	33
Lap Belt & Shoulder Harness	3,461	3,423	3,395	3,506	3,503	3,325
Child Restraint Used Properly	67	59	66	57	61	44
Child Restraint Not Properly Used	13	4	3	7	2	2
Other, Not Stated or Unknown	396	354	314	316	365	281
TOTAL	5,199	4,986	4,950	4,980	4,980	4,629

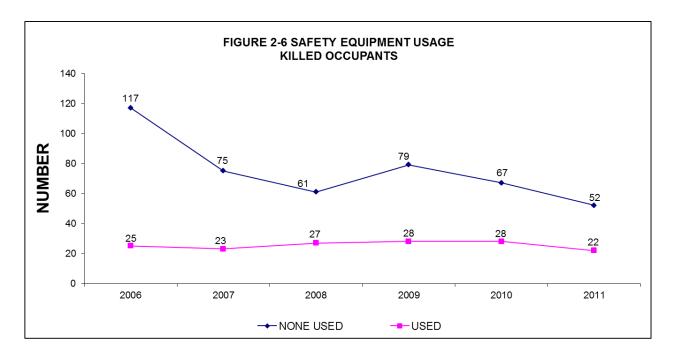
NOTE: Motor vehicle drivers and passengers are considered occupants.

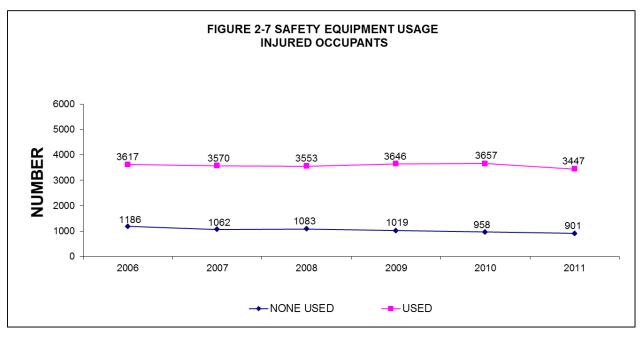
Drivers & Passengers of motorcycles, mpted, ATVs and snowmobiles are not counted in the above table 2-5 & 2-5A

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

KILLED					INJURED						
<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>
73	55	47	50	67	43	4,996	4,811	4,798	4,841	4,851	4,473
15	4	4	11	9	4	20	15	19	19	10	22
68	48	43	48	25	39	159	130	100	107	106	103
2	1	0	2	0	1	24	30	21	13	11	29
0	0	0	0	0	0	0	0	12	0	2	2
158	108	94	111	101	87	5,199	4,986	4,950	4,980	4,980	4,629
	73 15 68 2 0	73 55 15 4 68 48 2 1 0 0	2006 2007 2008 73 55 47 15 4 4 68 48 43 2 1 0 0 0 0	2006200720082009735547501544116848434821020000	200620072008200920107355475067154411968484348252102000000	20062007200820092010201173554750674315441194684843482539210201000000	20062007200820092010201120067355475067434,9961544119420684843482539159210201240000000	200620072008200920102011200620077355475067434,9964,811154411942015684843482539159130210201243000000000	2006200720082009201020112006200720087355475067434,9964,8114,79815441194201519684843482539159130100210201243021000000012	20062007200820092010201120062007200820097355475067434,9964,8114,7984,8411544119420151919684843482539159130100107210201243021130000000120	200620072008200920102011200620072008200920107355475067434,9964,8114,7984,8414,8511544119420151919106848434825391591301001071062102012430211311000000022

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





The Child Passenger Restraint System (SDCL 32-37) law took effect on July 1, 1984 - since that time there have been 59 deaths to occupants of this age group. Only six 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 no fatal injuries to any motor vehicle occupant from birth through four years of age during 2011, which compares to one fatality during 2010 (see TABLE 2-6).

There were 66 children (birth through 4 years old) injured in 2011, which compares to 82 for 2010. Fifty-four of the 66 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).

FATALITIES & INJURIES TO MOTOR VEHICLE OCCUPANTS UNDER 5 YEARS OF AGE											
		SERIOUS	SLIGHT	TOTAL NONFATAL							
YEAR	FATALITIES	INJURY	INJURY	INJURIES							
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							
2009	2	24	55	79							
2010	1	32	50	82							
2011	0	25	41	66							

TABLE 2-6AFATALITIES & INJURIES TO MOTOR VEHICLE OCCUPANTS UNDER 5 YEARS OLDBY SAFETY EQUIPMENT USAGE - 2011

	Fatalities	<u>Injuries</u>
No Safety Equipment Used	0	7
Lap Belt Only	0	2
Shoulder Harness Only	0	0
Lap Belt & Shoulder Harness	0	16
Child Restraint Used Properly	0	36
Child Restraint Not Used Properly	0	2
Other, Not Stated or Unknown	0	3
TOTAL	0	66

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 502 and 21 deaths per year. Licensed motorcyclists increased 1.9 percent during 2011 while fatalities decreased by thirteen to 14 (see Table 2-7). Moped crashes are included with motorcycle crashes. There were no moped fatalities during 2011. 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 1991 - 2011												
Motorcycle Crashes Motorcyclists Registered Licensed												
Year	<u>Total</u>	Fatal	Injury	Fatalities	<u>Injuries</u>	<u>Motorcycles</u>	<u>Motorcyclis</u>					
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					
2009	493	14	429	16	508	62,735	75,790					
2010	529	27	455	27	569	65,686	77,153					
2011	455	15	388	14	468	69,660	78,626					

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TABLE 2-8PEDESTRIAN FATALITIES AND INJURIES1991 - 2011

Year	Fatalities	Injuries
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
2009	4	95
2010	9	108
2011	7	119
Source: SD Depar	tment of Public Safety – Office of	Accident Records

TABLE 2-9BICYCLE FATALITIES AND INJURIES1991 - 2011									
Year	<u>Fatalities</u>	Injuries							
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							
2009	0	98							
2010	2	105							
2011	1	88							

	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.

Г

TABLE 2-10 CRASHES DURING HOLIDAYS 2002- 2011													
<u>Holiday</u>													
MEMORIAL DAY													
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							
2009	78	123	2	41	3	60							
2010	78	120	0	36	0	45							
2011	78	123	0	21	0	30							
FOURTH OF JULY													
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							
2009	78	127	1	32	1	42							
2010	78	129	1	36	1	49							
2011	78	127	2	30	2	42							
LABOR DAY													
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							
2009	78	122	2	33	2	45							
2010	78	116	2	25	2	33							
2011	78	120	2 3	33	3	52							

	Total	Total	Fatal	Injury		
<u>Holiday</u>	<u>Hours</u>	<u>Crashes</u>	<u>Crashes</u>	<u>Crashes</u>	Fatalities	<u>Injuries</u>
THANKSGIVING						
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
2009	102	243	1	38	1	46
2010	102	211	1	23	1	32
2011	102	215	1	29	1	34
<u>CHRISTMAS</u>						
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
2009	78	151	1	29	1	40
2010	78	141	0	26	0	36
2011	78	107	0	21	0	32
NEW YEARS						
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
2009-10	78	142	2	23	2	33
2010-11	78	128	0	24	0	28
2011-12	78	118	0	31	0	40
Source: SD Departme	ent of Public	Safety - Office	of Accident I	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 2002 through 2011. 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 Incapacitating Non-Incapacitating Possible Injuries Total Total Injuries Injuries % Injuries No. No. % % Killed Year No. 21.0 2,710 2002 1,466 38.7 2,821 40.3 6,997 180 2,806 6,944 2003 1,450 20.9 2,688 38.7 40.4 203 1,232 18.9 2,366 2,937 44.9 6,535 2004 36.2 197 2005 1,167 18.8 2,193 35.3 2,852 45.9 6,212 186 2006 1,028 17.1 2,178 36.2 2,809 46.7 6,015 191 2007 883 15.3 2,149 37.2 2,750 47.6 5,782 146 2008 924 16.2 1,989 34.9 2,795 49.0 5,708 121 2009 842 14.8 1,988 34.9 2,874 50.4 5,704 131 5,801 2010 845 14.6 2,136 36.8 48.6 140 2.820 35.9 2011 760 14.1 1,927 2,687 50.0 5,374 111 Note: This table also includes operators of other working type units (i.e.: motor vehicles used as equipment—snowplows, construction/maintenance vehicles, road graders, etc. & emergency response units.) (See Table 3-1)

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

	Incapacita Injuries	ating	Non-Inca Injuries	pacitating	Possible Injuries		Total	Total
Year	No.	%	No.	%	No.	%	Injuries	Killed
2002	946	20.3	1,761	37.8	1,957	42.0	4,664	119
2003	930	19.6	1,807	38.0	2,018	42.4	4,755	124
2004	844	18.3	1,586	34.4	2,177	47.3	4,607	129
2005	778	17.7	1,485	33.7	2,141	48.6	4,404	115
2006	687	16.5	1,430	34.3	2,058	49.3	4,175	134
2007	576	14.2	1,441	35.5	2,040	50.3	4,057	101
2008	628	15.4	1,372	33.6	2,078	51.0	4,078	80
2009	548	13.6	1,360	33.8	2,115	52.6	4,023	89
2010	536	13.1	1,455	35.6	2,099	51.3	4,090	80
2011	531	13.7	1,311	33.9	2,027	52.4	3,869	69

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

	Incapacita	ting	Non-Incapa	acitating	Possible			
	Injuries		Injuries		Injuries		Total	Total
Year	No.	%	No.	%	No.	%	<u>Injuries</u>	Killed
2002	468	21.8	861	40.2	814	38.0	2,143	52
2003	470	23.6	783	39.3	738	37.1	1,991	68
2004	346	19.7	691	39.4	715	40.8	1,752	58
2005	339	20.9	633	39.1	648	40.0	1,620	56
2006	303	18.5	649	39.7	683	41.8	1,635	49
2007	270	17.9	600	39.8	639	42.3	1,509	38
2008	255	17.9	507	35.6	662	46.5	1,424	31
2009	257	17.3	536	36.1	691	46.6	1,484	38
2010	253	17.0	589	39.7	643	43.3	1,485	49
2011	188	14.6	498	38.7	600	46.7	1,286	34

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

	Incapacita Injuries	ating	Non-Incapa Injuries	acitating	Possible Injuries		Total	Total
Year	No.	%	No.	%	No.	%	<u>Injuries</u>	Killed
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
2009	13	13.5	47	49.0	36	37.5	96	0
2010	10	9.5	52	49.5	43	41.0	105	2
2011	8	9.3	52	60.5	26	30.2	86	1

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

	Incapacita Injuries	iting	Non-Incapa Injuries	acitating	Possible Injuries		Total	Total
Year	<u>No.</u>	%	Ňo.	%	No.	%	<u>Injuries</u>	Killed
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
2009	24	25.3	44	46.3	27	28.4	95	4
2010	45	41.7	35	32.4	28	25.9	108	9
2011	31	26.1	61	51.3	27	22.7	119	7

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.

		GENDE		ABLE 2-16 ERS: CRA	SH & LICEN	CED		
	CR		20 UVED DRIV	000 - 2011			DRIVERS	
		ALE		FEMALE		E	FEMA	LE
	No.	%	No.	%	No.	%	No.	%
2000	17,737	60.1	11,75	39.9	277,127	49.9	277,858	50.1
			1					
2001	15,774	60.2	10,40	39.8	277,662	49.9	278,369	50.1
			9					
2002	14,975	59.7	10,10	40.3	278,283	49.9	279,149	50.1
			8					
2003	15,382	59.2	10,58	40.8	282,195	49.9	283,007	50.1
			6					
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
2009	14,030	57.4	10,29	42.1	301,618	50.1	300,547	49.9
			6					
2010	14,718	57.5	10,65	41.6	301,903	50.1	300,372	49.9
			9					
2011	14,585	58.3	10,42	41.7	303,017	50.2	300,216	49.8
			7					

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. 2011 MOTOR VEHICLE CRASH PROFILE

Introduction

This section profiles the reported motor vehicle traffic crashes for 2011. 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. <u>Column percentages may not total 100 percent</u> <u>due to rounding error.</u>

During 2011, there were 17,362 reported motor vehicle traffic crashes, the majority of crashes being property damage only 13,288 (76.5%). Injury crashes accounted for 3,973 (22.9%) of the crashes, while 101 (0.6%) were fatal crashes. There were 5,374 persons injured and 111 persons killed in crashes during 2011 (see TABLE 3-1).

			S AND SE' RS, PEDE							
	Incapaci Injuries	Ū	Non- Incapaci Injuries	U	Possibl Injuries	-	Total Nonfata Injuries	-	Total Fatalitie	-
	<u>No.</u>	%	<u>No.</u>	%	<u>No.</u>	%	<u>No.</u>	%	<u>No.</u>	%
Drivers	531	69.9	1,311	68.0	2,027	75.4	3,869	72.0	69	62.
Passengers	188	24.7	498	25.8	600	22.3	1,286	23.9	34	30.
Pedestrians	31	4.1	61	3.2	27	1.0	119	2.2	7	6.
Bicycle Dr	8	1.1	52	2.7	26	1.0	86	1.6	1	0.
Other*	2	0.3	5	0.3	7	0.3	14	0.3	0	0.
TOTAL	760	100	1,927	100	2,687	100	5,374	100	111	10

*Other – 14 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

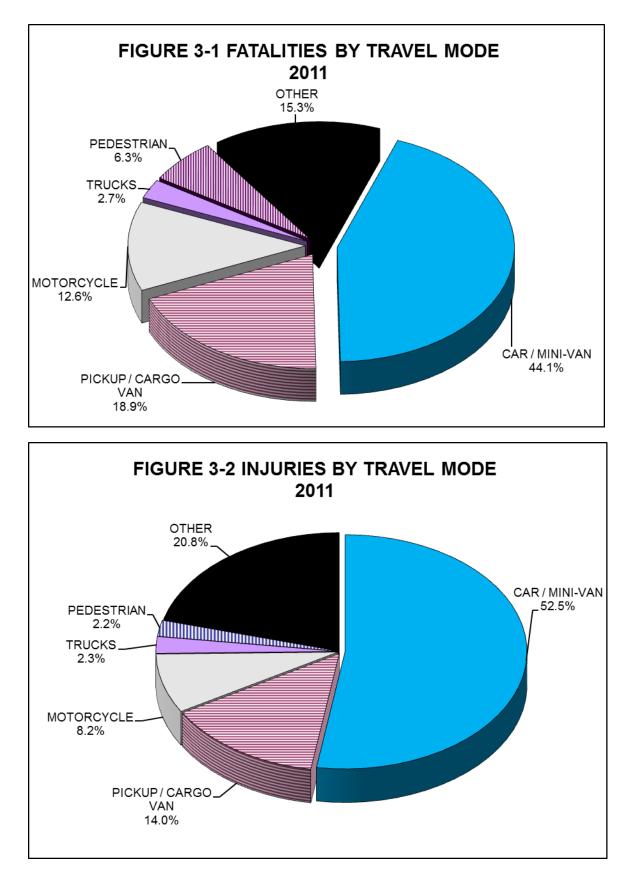
TABLE 3-2 provides information on persons killed and injured by method or mode of transportation. During 2011, 44.1 percent of the fatalities and 52.5 percent of the injuries occurred to occupants of passenger cars and mini-vans. Occupants of pickups and cargo vans accounted for 18.9 percent of the fatalities and 14.0 percent of the injuries. Additionally, in 2011 fourteen motorcyclists and seven pedestrians were killed. One bicyclist was killed during 2011 (See Table 3-2).

	20	11		
	Fatalities			
	<u>No.</u>	%	<u>No.</u>	%
Passenger Cars, Mini-vans	49	44.1	2,822	52.5
Pickups, Cargo Vans***	21	18.9	754	14.0
SUV's (Sports Utility Vehicles)	14	12.6	911	17.0
Trucks (All)*	3	2.7	123	2.3
Motorcycle	14	12.6	440	8.2
Moped	0	0.0	28	0.5
ATV's / 4-Wheelers	1	0.9	43	0.8
Bus	0	0.0	27	0.5
Farm Machinery, Heavy Equipment	0	0.0	9	0.2
Motor Home	0	0.0	0	0.0
Snowmobile	1	0.9	4	0.1
Bicycle	1	0.9	88	1.6
Pedestrians	7	6.3	119	2.2
Other**	0	0.0	6	0.1
Unknown	0	0.0	0	0.0
TOTAL	111	100	5,374	100
*Trucks Specifics:			Fatalities	<u>Injuries</u>
Straight Truck			3	51
Straight Truck with Trailer			0	4
Truck Tractor Only			0	1
Truck Tractor with Single Se			0	63
Truck Tractor with Two or M	ore Trailers		0	4
TOTAL			3	123

Note: **Other -- includes Train, Animal Drawn Vehicle and Other Types of Motor Vehicles.

***Cargo Vans are defined as large van-based light trucks used to transport cargo or large vans used to transport people with seating for 9 or more people, including the driver.

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



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

TABLE 3-3 provides information on all crash-involved vehicles by type. Passenger cars and mini-vans made up 37.2 percent of the vehicles involved in fatal crashes and 54.0 percent of those involved in injury crashes. Pickups and vans made up 24.8 percent of the vehicles involved in fatal crashes.

		TA	BLE 3-3					
	All Crashes <u>No.</u>	s <u>%</u>	Fatal Crashes <u>No.</u>	%	Injury Crashe <u>No.</u>	es <u>%</u>	PDO Crashes <u>No.</u>	Q
Passenger Cars / Mini-vans	14,248	54.3	51	37.2	3,593	54.0	10,604	54.
Pickups, Cargo Vans	5,000	19.0	34	24.8	1,070	16.1	3,896	20.
SUV's (Sports Utility Vehicles)	5,046	19.2	23	16.8	1,220	18.3	3,803	19.
Trucks (All)*	1,089	4.1	10	7.3	245	3.7	834	4.
Motorcycle	463	1.8	16	11.7	391	5.9	56	0
Moped	30	0.1	0	0.0	29	0.4	1	0
ATV's / 4-wheelers	45	0.2	1	0.7	36	0.5	8	0
Bus	130	0.5	0	0.0	30	0.5	100	0
Farm Machinery / Heavy Equip.	70	0.3	1	0.7	21	0.3	48	0
Motor Home	24	0.1	0	0.0	3	0.0	21	0
Snowmobile	7	0.0	1	0.7	5	0.1	1	0
Dther	12	0.0	0	0.0	3	0.0	9	0
Jnknown	93	0.4	0	0.0	3	0.0	90	0
TOTAL	26,257	100	137	100	6,649	100	19,471	10
<u>* Trucks Specifics</u> : Straight Truck Straight Truck with Trailer Truck Tractor Only Truck Tractor with Single Semi Trailer Truck Tractor with Two or More Trailers		All <u>Crash</u> 398 83 21 551 36		Fatal <u>Crashes</u> 4 0 0 5 1	Injury <u>Crashes</u> 95 17 3 122 8	PD0 <u>Crash</u> 299 66 18 424 27	<u>hes</u> 9 6 8 4	
TOTAL			1,089		10	245	834	4

TABLE 3-4 provides information on the ages of persons killed and injured. A total of 12 people (10.8%) of the persons killed were under 20 years of age and a total of 942 or (17.5%) of the persons injured were from 25 through 34 years of age. One child age 0-5 was killed during 2011 (see Table 3-4).

FA	TALITIES AN	TABLE 3-4 ID INJURIES B 2011	Y AGE GROUP	
	Fatalities		Injuries	
	No.	%	No.	%
0-5	1	0.9	90	1.7
6 - 13	1	0.9	191	3.6
14 - 15	1	0.9	190	3.5
16 - 17	5	4.5	346	6.4
18	2	1.8	195	3.6
19	2	1.8	187	3.5
20	3	2.7	155	2.9
21 - 24	8	7.2	576	10.7
25 - 34	23	20.7	942	17.5
35 - 44	15	13.5	673	12.5
45 - 54	14	12.6	748	13.9
55 - 64	15	13.5	599	11.2
65 - Over	21	18.9	475	8.8
Unknown	0	0.0	7	0.1
Total	111	100	5,374	100

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 41.6 percent of the fatal crashes and only 10.9 percent of the total crashes, while 28.7 percent of the fatal crashes and 42.0 percent of all crashes represented a collision between two or more vehicles (see TABLE 3-5).

TABLE 3-5 FIRST HARMFUL EVENT 2011											
First Harmful Event	Total Crashes <u>No.</u>	%	Fatal Crashes <u>No.</u>	s <u>%</u>	Injury Crashes <u>No.</u>	s <u>%</u>	PDO Crashes <u>No.</u>	%			
Motor Vehicle Collision With:											
MV in Transport	7,292	42.0	29	28.7	2,187	55.0	5,076	38.2			
A Fixed or Other Object	2,197	12.7	15	14.9	525	13.2	1,657	12.5			
An Animal	4,886	28.1	3	3.0	103	2.6	4,780	36.0			
A Pedestrian	115	0.7	7	6.9	107	2.7	1,100	0.0			
A Bicyclist	87	0.5	1	1.0	85	2.1	1	0.0			
A Parked Motor Vehicle	837	4.8	0	0.0	86	2.2	751	5.7			
A Railroad Vehicle	8	0.0	2	2.0	1	0.0	5	0.0			
Equipment in Roadway	47	0.3	2	2.0	12	0.3	33	0.2			
Non-Collision (Overturning or											
Other)	1,893	10.9	42	41.6	867	21.8	984	7.4			
Total	17,362	100	101	100	3,973	100	13,288	100			
1											

Manner of Collision

The most common type of manner of collision between two or more vehicles is an angle collision. Angle collisions constitute 55.2 percent of the fatal crashes 52.0 percent of the injury crashes, and 56.0 percent of the property damage only crashes. Angle collisions are the most prevalent for severe crashes, accounting for 55.2 percent of the fatal crashes and 54.8 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 2011												
	Total		Fatal		Injury		PDO					
	Crashes		Crashes		Crashe	S	Crashes	;				
Manner of Collision	No.	%	No.	%	<u>No.</u>	%	No.	%				
Rear-End	2,582	35.4	7	24.1	896	41.0	1,679	33.1				
Head-On	126	1.7	6	20.7	67	3.1	53	1.0				
Angle	3,996	54.8	16	55.2	1,138	52.0	2,842	56.0				
Sideswipe-Same Direction	494	6.8	0	0.0	60	2.7	434	8.6				
Sideswipe-Opposite Dir.	91	1.2	0	0.0	25	1.1	66	1.3				
Rear-Rear	2	0.0	0	0.0	0	0.0	2	0.0				
Unknown	2	0.0	0	0.0	1	0.0	1	0.0				
Total	7,293	100	29	100	2,187	100	5,077	100				
No Collision Between 2 or												
more MV	10,069		72		1,786		8,211					
Total Crashes	17,362		101		3,973		13,288					

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.

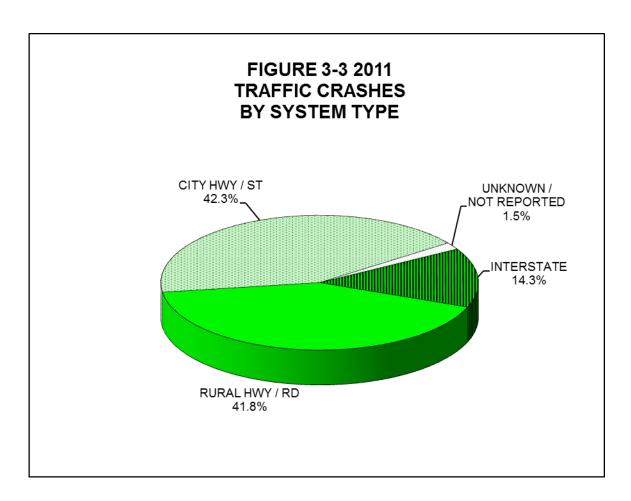
Source: SD Department of Public Safety - Office of Accident Records

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 33.4 percent of the PDO crashes and 46.6 percent of the injury crashes while accounting for 8.9 percent of the fatal crashes.

Non-interstate rural roads tallied 68.3 percent of the fatal crashes. The Interstate system experienced 2,476 (14.3%) of the total crashes while accounting for an estimated 29.6 percent of the vehicle miles traveled in 2011. Twenty or 19.8 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 2011											
Type of Highway	Total Crashes <u>Number</u>	%	Fatal Crash <u>Numb</u>		Injury Crashe <u>Numbe</u>	-	PDO Crashes <u>Number</u>	%	No. <u>Killed</u>	No. <u>Injured</u>	
Interstate - Rural	1,547	8.9	14	13.9	272	6.8	1,261	9.5	15	373	
US/State HwysRural	4,540	26.1	41	40.6	693	17.4	3,806	28.6	43	1,008	
Co./Local RdsRural	2,718	15.7	28	27.7	616	15.5	2,074	15.6	35	869	
Interstate - City	929	5.4	6	5.9	154	3.9	769	5.8	6	199	
US/State HwysCity	1,031	5.9	3	3.0	323	8.1	705	5.3	3	482	
City Streets/Alleys	6,305	36.3	9	8.9	1,852	46.6	4,444	33.4	9	2,369	
Unknown/Not Reported	292	1.7	0	0.0	63	1.6	229	1.7	0	74	
Total	17,362	100	101	100	3,973	100	13,288	100	111	5,374	



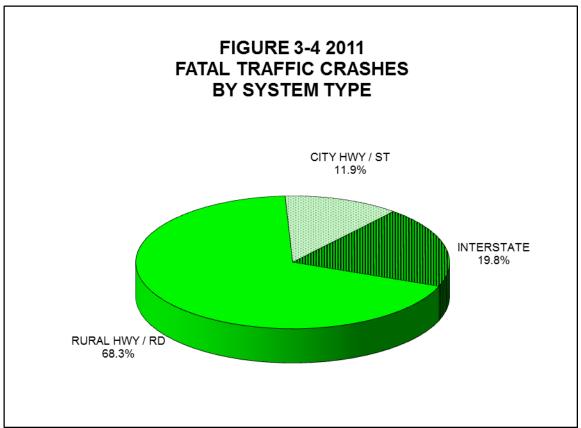


TABLE 3-8 MOTOR VEHICLE TRAFFIC CRASHES BY SD COUNTIES 2011

a	Total	Fatal	Injury	PDO		
County	Crashes	Crashes	Crashes	Crashes	Fatalities	Injuries
AURORA	136	0	20	116	0	23
BEADLE	293	2	57	234	2	78
BENNETT	16	0	6	10	0	16
BON HOMME BROOKINGS	87 592	0 5	13 110	74 477	0 5	16 137
BROWN	766	5 1	128	637	1	174
BRULE	133	2	29	102	3	40
BUFFALO	25	0	6	102	0	11
BUTTE	181	0	27	154	0	32
CAMPBELL	42	0 0	5	37	0	8
CHARLES MIX	100	1	17	82	1	24
CLARK	96	0	18	78	0	22
CLAY	203	1	37	165	1	53
CODINGTON	631	2	133	496	3	182
CORSON	56	2	3	51	2	6
CUSTER	230	0	47	183	0	61
DAVISON	581	1	101	479	1	130
DAY	69	0	18	51	0	25
DEUEL	141	0	29	112	0	39
DEWEY	75	2	19	54	2	27
DOUGLAS	32	0	2	30	0	2
EDMUNDS	111	1	12	98	1	24
FALL RIVER	130	3	37	90	3	60
FAULK	75	0	5	70	0	7
GRANT	166	1	31	134	1	43
GREGORY	45	0	11	34	0	15
HAAKON	67	1	5	61	1	10
HAMLIN	131	2	14	115	3	23
HAND	109	0	15	94	0	19
HANSON	129	0	14	115	0	21
HARDING	51	2	9	40	3	12
HUGHES	258	1	63	194	1	89
HUTCHINSON	118	1	25	92	1	34
HYDE	21	2	3	16	2	7
JACKSON	96	5	22	69	5	39
JERAULD	68	0	5	63	0	7
JONES	95	0	13	82	0	16
KINGSBURY LAKE	145 177	1	12 28	132 148	1	16 40
LAWRENCE	665	5	174	486	5	243
LINCOLN	736	4	206	526	4	243
LYMAN	205	2	200	180	6	34
MARSHALL	81	2	7	72	2	12
MC COOK	158	1	28	129	1	35
MC PHERSON	50	0	8	42	0	10
MEADE	463	4	117	342	4	167
MELLETTE	25	1	4	20	1	5
MINER	92	1	12	79	1	15
MINNEHAHA	3,719	10	1,189	2,520	10	1,559
MOODY	191	1	31	159	1	41
PENNINGTON	2,539	8	683	1,848	8	914
PERKINS	65	0	7	58	0	8
POTTER	82	0	9	73	0	12
ROBERTS	235	4	58	173	6	87
SANBORN	115	0	9	106	0	14
SHANNON	61	5	24	32	5	39
SPINK	270	2	34	234	2	41
STANLEY	120	0	15	105	0	25
SULLY	48	0	1	47	0	1
TODD	20	1	4	15	1	5
TRIPP	156	1	16	139	1	24
TURNER	70	3	22	45	3	31
UNION	245	4	44	197	4	65
WALWORTH	99	0	11	88	0	11
YANKTON	355	2	83	270	2	114
ZIEBACH Total:	20 17,362	0 101	5 3,973	15 13,288	0 111	7 5,374
i Jiai.	17,302	101	3,913	13,200	111	5,574

TABLE 3-8A ALCOHOL INVOLVED MOTOR VEHICLE TRAFFIC CRASHES BY SD COUNTIES 2011

			2011			
	Total	Fatal	Injury	PDO		
<u>County</u>	<u>Crashes</u>	Crashes	Crashes	<u>Crashes</u>	Fatalities	<u>Injuries</u>
AURORA	6	0	2	4	0	2
BEADLE	17	0	8	9	0	9
BENNETT	6	0	5	1	0	15
BON HOMME	0	0	0	0	0	0
BROOKINGS	31	1	12	18	1	13
BROWN	40	1	11	28	1	17
BRULE	4	1	2	1	2	3
BUFFALO	4	0	2	2	0	6
BUTTE	10	0	5	5	0	7
CAMPBELL	1	0	0	1	0	0
CHARLES MIX	5	0	1	4	0	2
CLARK	3	0	3	0	0	3
CLAY	8	1	6	1	1	8
CODINGTON	36	0	12	24	0	16
CORSON	2	1	0	1	1	2
CUSTER	11	0	4	7	0	4
DAVISON	35	0	8	27	0	13
DAY	7	0	7	0	0	7
DEUEL	6	0	5	1	0	6
DEWEY	11	0	5	6	0	8
DOUGLAS	1	0	0	1	0	0
	3	0	2	1	0	2
FALL RIVER	9	0	3	6	0	7
FAULK	2	0	0	2	0	0
GRANT	8	0	6	2	0	6
GREGORY	5	0	5	0	0	7
HAAKON	1	0	1	0	0	2
HAMLIN	7	0	4	3	0	6
HAND	2	0	2	0	0	3
HANSON	3	0	2	1	0	3
HARDING	1	0	1	0	0	1
HUGHES	15	0	6	9	0	6
HUTCHINSON	6	0	4	2	0	7
HYDE	1	0	0	1	0	0
JACKSON	4	2	2	0	2	9
JERAULD	0	0	0	0	0	0
JONES	0	0	0	0	0	0
KINGSBURY	5	1	3	1	1	5
	8	0	4	4	0	4
	42	1	21	20	1	25
	49	2	24	23	2	26
	7 5	1	3	3	5 2	7
MARSHALL	-	0	1	2	2	3
	4	0	2		0	2
MC PHERSON MEADE	3 26	0	18	2 8	0	26
MELLETTE	20	1	1	0	1	20
VIELLETTE	1	0	1	0	0	3
MINNEHAHA	270	2	117	151	2	149
MOODY	6	0	1	5	2	149
	136	4	61	5 71	4	81
PERKINS	130	4	1	0	4	1
POTTER	1	0	1	0	0	1
ROBERTS	18	1	7	10	3	7
SANBORN	4	0	2	2	0	2
SHANNON	21	5	12	4	5	26
SPINK	5	0	4	1	0	6
STANLEY	3	0	2	1	0	2
SULLY	1	0	0	1	0	0
TODD	1	0	0	1	0	0
TRIPP	7	1	5	1	1	11
TURNER	12	2	5	3	2	10
UNION	12	0	8	8	0	11
WALWORTH	4	0	0 1	3	0	1
YANKTON	17	0	11	6	0	18
ZIEBACH	6	0	2	4	0	3
Total:	992	30	457	505	37	633
i olai.	<u>JJ</u>	30	437	505	31	033

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. These eleven counties accounted for 51.7 percent of rural fatal and injury crashes and 71.3 percent of all fatal and injury crashes in South Dakota. Pennington County has 9.1 percent of all rural fatal and injury crashes with Minnehaha accounting for 8.1 percent. FIGURE 3-5 presents the percentage involvement of rural fatal and injury crashes and compares this to the percentage of rural vehicle miles traveled in these counties.

COUN	TABLE 3-9 COUNTIES HAVING MORE THAN TWO PERCENT OF THE RURAL FATAL & INJURY CRASHES 2011										
		Percent of All									
	Rural Fatal &	Rural Fatal &	Percent of								
<u>County</u>	Injury Crashes	Injury Crashes	<u>Rural VMTS</u>								
PENNINGTON	153	9.1	5.8								
MINNEHAHA	137	8.1	6.9								
LAWRENCE	118	7.0	2.6								
LINCOLN	104	6.2	5.7								
MEADE	87	5.2	3.0								
BROOKINGS	54	3.2	2.9								
BROWN	51	3.0	2.7								
ROBERTS	51	3.0	2.9								
CUSTER	43	2.6	1.9								
UNION	37	2.2	3.8								
DAVISON	36	2.1	1.7								
S.D. Vehicle N Source: SD Depart	Note: Total Rural Fatal and Injury Crashes: 1,684 S.D. Vehicle Miles of Travel Report (2011 data)										

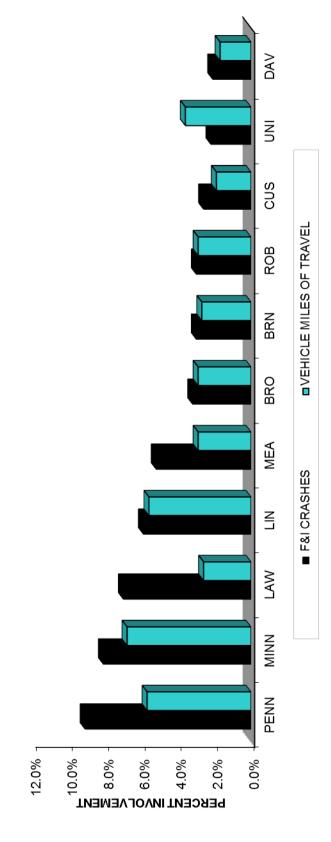


FIGURE 3-5 RURAL F&I CRASHES/VMTS SELECTED COUNTIES - 2011

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 57.3 percent of the statewide injury crashes and 15.8 percent of the fatal crashes. The two largest cities (Sioux Falls, Rapid City) accounted for 72.4 percent of fatal and injury crashes occurring in cities and 60.0 percent of the property damage only crashes.

TABLE 3-10 TRAFFIC CRASHES SOUTH DAKOTA CITIES POPULATION 2500 AND OVER 2011											
<u>City</u>	Total Crashes	Fatal Crashes	Injury Crashes	PDO <u>Crashes</u>	Fatalities	Injuries					
Aberdeen	392	1	76	315	<u>1 atantics</u>	<u>97</u>					
Belle Fourche	42	0	3	39	0	4					
Box Elder	61	1	20	40	1	30					
Brandon	46	0	8	38	0	9					
Brookings	290	2	54	234	2	65					
Canton	27	0	1	26	0	1					
Dell Rapids	28	0	3	25	0	3					
Harrisburg	8	0	1	7	0	1					
Hartford	8	0	1	7	0	2					
Hot Springs	51	0	16	35	0	21					
Huron	133	1	37	95	1	46					
Lead	9	1	4	4	1	5					
Madison	37	0	8	29	0	10					
Milbank	36	0	7	29	0	9					
Mitchell	340	0	66	274	0	83					
Mobridge	23	0	6	17	0	6					
N. Sioux City	37	0	8	29	0	11					
Pierre	144	0	45	99	0	61					
Rapid City	1,764	3	510	1,251	3	676					
Redfield	51	0	8	43	0	11					
Sioux Falls	3,190	4	1,144	2,042	4	1,486					
Sisseton	49	0	11	38	0	18					
Spearfish	199	1	44	154	1	58					
Sturgis	78	0	27	51	0	36					
Теа	11	0	2	9	0	3					
Vermillion	89	1	13	75	1	17					
Watertown	439	0	100	339	0	141					
Winner	18	0	2	16	0	2					
Yankton	182	1	53	128	1	74					
City Totals	7,782	16	2,278	5,488	16	2,986					
Statewide Totals	17,362	101	3,973	13,288	111	5,374					

Note! The cities of Harrisburg, Hartford, N. Sioux City & Tea have been added to this table due to an increas in population showing up in the April 1, 2010 Census.

Source: SD Department of Public Safety – Office of Accident Records US Census Bureau

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 22.4 percent of all reported property damage crashes and 19.5 percent of all fatal and injury crashes. Dry roads were reported in 69.3 percent of all fatal and injury crashes.

	TABLE 3-11 ROADWAY SURFACE CONDITIONS 2011											
	Total Crashes		Fatal Crashes		Injury Crashes		PDO Crashes					
	<u>No.</u>	%	<u>No.</u>	%	<u>No.</u>	%	<u>No.</u>	%				
Dry	11,901	68.5	82	81.2	2,743	69.0	9,076	68.3				
Wet	1,351	7.8	4	4.0	347	8.7	1,000	7.5				
Snow	1,715	9.9	0	0.0	323	8.1	1,392	10.5				
Slush	294	1.7	2	2.0	67	1.7	225	1.7				
Ice	1,624	9.4	8	7.9	358	9.0	1,258	9.5				
Frost	141	0.8	0	0.0	38	1.0	103	0.8				
Water	16	0.1	0	0.0	1	0.0	15	0.1				
Sand, mud, dirt, gravel	231	1.3	4	4.0	85	2.1	142	1.1				
Oil	1	0.0	0	0.0	0	0.0	1	0.0				
Other / Not applicable	12	0.0	0	0.0	7	0.2	5	0.0				
Unknown / Not reported	76	0.4	1	1.0	4	0.1	71	0.5				
Total	17,362	100	101	100	3,973	100	13,288	100				
Source: SD Department of	Public Safet	y – Offic	e of Acciden	t Record	ds							

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

The peak three-hour period for fatal crashes was 1:00-3:59 p.m. Twenty-one or 20.8 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 989 (24.9%) of the injury crashes occurred. The peak three hour period for property damage only crashes was 5:00-7:59 p.m. with 2,720 (20.5%) of the property damage only crashes occurred (see TABLE 3-12).

Sixteen fatal crashes or 15.8 percent occurred during September in 2011. The month of August shows 441 injury crashes or 11.1 percent of the injury crashes. The month of November shows 1,736 property damage only crashes which represents 13.1 percent of the property damage only crashes for 2011 (see TABLE 3-13).

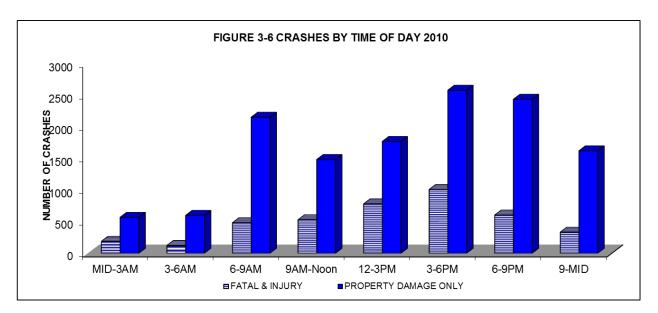
The day of the week Friday accounts for 2,966 of the total crashes or 17.1 percent, with 676 (17.0%) of injury crashes and 2,267 (17.1%) of property damage only crashes. Friday also accounted for 23 fatal crashes or 22.8 percent of the total for 2011 (see TABLE 3-14).

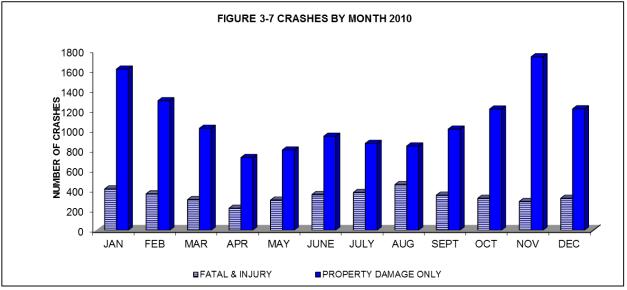
FIGURES 3-6 through 3-8 illustrate the distributions by time of day, month, and day of week.

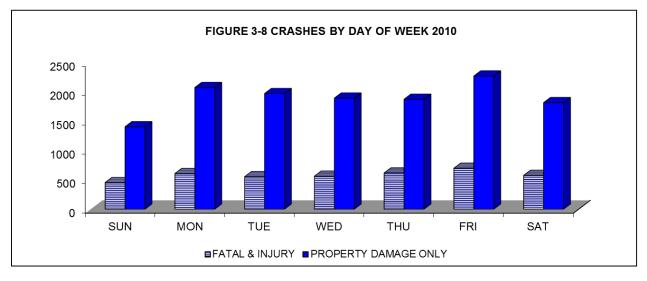
TABLE 3-12 CRASHES BY TIME OF DAY 2011											
<u>Time</u>	Total <u>Crashes</u>	Fatal <u>Crashes</u>	Injury <u>Crashes</u>	PDO <u>Crashes</u>	Fatalities	<u>Injurie</u> :					
Midnight	293	2	69	222	2	90					
1:00 AM	241	1	52	188	2	6					
2:00 AM	224	2	63	159	2	78					
3:00 AM	165	1	34	130	1	41					
4:00 AM	176	3	25	148	3	34					
5:00 AM	383	1	60	322	1	75					
6:00 AM	645	4	74	567	4	90					
7:00 AM	1,206	5	207	994	5	276					
8:00 AM	786	1	193	592	2	256					
9:00 AM	577	7	149	421	7	214					
10:00 AM	654	4	158	492	4	217					
11:00 AM	784	6	207	571	6	291					
12:00 PM	890	3	271	616	3	376					
1:00 PM	839	9	250	580	10	331					
2:00 PM	823	6	243	574	6	317					
3:00 PM	1,173	6	339	828	10	46					
4:00 PM	1,038	7	294	737	7	404					
5:00 PM	1,380	8	356	1,016	9	487					
6:00 PM	1,156	4	233	919	4	337					
7:00 PM	980	5	190	785	5	271					
8:00 PM	906	5	168	733	5	239					
9:00 PM	889	4	135	750	4	179					
10:00 PM	684	4	116	564	6	155					
11:00 PM	383	2	73	308	2	90					
Unknown	87	1	14	72	1	19					
Total	17,362	101	3,973	13,288	111	5,374					

TABLE 3-13 CRASHES BY MONTH 2011											
	Total	Fatal	Injury	PDO							
<u>Month</u>	<u>Crashes</u>	<u>Crashes</u>	<u>Crashes</u>	<u>Crashes</u>	Fatalities	<u>Injuries</u>					
JANUARY	2,026	3	410	1,613	3	515					
FEBRUARY	1,660	6	358	1,296	6	480					
MARCH	1,326	5	301	1,020	5	412					
APRIL	947	6	214	727	7	293					
MAY	1,104	6	295	803	6	402					
JUNE	1,298	7	350	941	7	479					
JULY	1,247	8	370	869	8	503					
AUGUST	1,299	15	441	843	19	612					
SEPTEMBER	1,363	16	335	1,012	17	445					
OCTOBER	1,533	14	306	1,213	16	406					
NOVEMBER	2,024	10	278	1,736	12	383					
DECEMBER	1,535	5	315	1,215	5	444					
Total	17,362	101	3,973	13,288	111	5,374					
Source: SD Depa	artment of Publi	c Safety – Offi	ce of Accident	Records							

TABLE 3-14 CRASHES BY DAY OF WEEK 2011											
Day	Total <u>Crashes</u>	Fatal <u>Crashes</u>	Injury <u>Crashes</u>	PDO <u>Crashes</u>	Fatalities	<u>Injuries</u>					
SUNDAY	1,858	16	438	1,404	17	593					
MONDAY	2,679	7	601	2,071	7	813					
TUESDAY	2,524	8	547	1,969	12	733					
WEDNESDAY	2,454	17	546	1,891	18	751					
THURSDAY	2,490	11	607	1,872	11	781					
FRIDAY	2,966	23	676	2,267	25	892					
SATURDAY	2,391	19	558	1,814	21	811					
Total	17,362	101	3,973	13,288	111						
						5,374					







Drivers

In the 17,362 reported motor vehicle crashes there were 25,220 motor vehicle drivers involved, including 136 drivers in fatal crashes and 6,502 drivers in injury crashes. Of these drivers 69 were killed, which is 62.2 percent of all persons killed in motor vehicle crashes and 72.0 percent or 3,869 of the 5,374 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, 27.8 percent of the drivers were under 25 years of age and 47.0 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 22.1 percent of the drivers involved in fatal crashes and 29.7 percent of the drivers in injury crashes. Drivers under the age of 35 make up 41.2 percent of the drivers in fatal crashes and 49.5 percent of the drivers in injury crashes. Forty or 29.4 percent of the drivers in fatal crashes were 21-34 years of age (see TABLE 3-15).

TABLE 3-15AGE OF DRIVERS IN CRASHES2011											
A .co	Drivers In All Crashes	0/	Drivers In Fatal Crashes	0/	Drivers In Injury Crashes	0/	Drivers In PDO Crashes	%			
<u>Age</u>	<u>No.</u>	%	<u>No.</u>	%	<u>No.</u>	%	<u>No.</u>	70			
0 - 5	1	0.0	0	0.0	0	0.0	1	0.0			
6 - 13	17	0.1	1	0.7	7	0.1	9	0.0			
14 - 15	608	2.4	1	0.7	170	2.6	437	2.4			
16 - 17	1,387	5.5	5	3.7	384	5.9	998	5.4			
18	837	3.3	5	3.7	243	3.7	589	3.2			
19	800	3.2	0	0.0	215	3.3	585	3.1			
20	723	2.9	4	2.9	183	2.8	536	2.9			
21 - 24	2,648	10.5	14	10.3	730	11.2	1,904	10.2			
25 - 34	4,831	19.2	26	19.1	1,286	19.8	3,519	18.9			
35 - 44	3,565	14.1	20	14.7	884	13.6	2,661	14.3			
45 - 54	3,972	15.7	20	14.7	993	15.3	2,959	15.9			
55 - 64	3,018	12.0	20	14.7	745	11.5	2,253	12.1			
65 - Over	2,521	10.0	20	14.7	612	9.4	1,889	10.2			
Unknown	292	1.2	0	0.0	50	0.8	242	1.3			
Total	25,220	100	136	100	6,502	100	18,582	100			

TABLE 3-16 provides information on the age of drinking drivers in motor vehicle crashes. There were a reported 984 drinking drivers in all crashes which is 3.9 percent of all drivers in crashes. Twenty-eight or 20.6 percent of drivers in fatal crashes had been drinking while 447 or 6.9 percent of the drivers involved in injury crashes had been drinking.

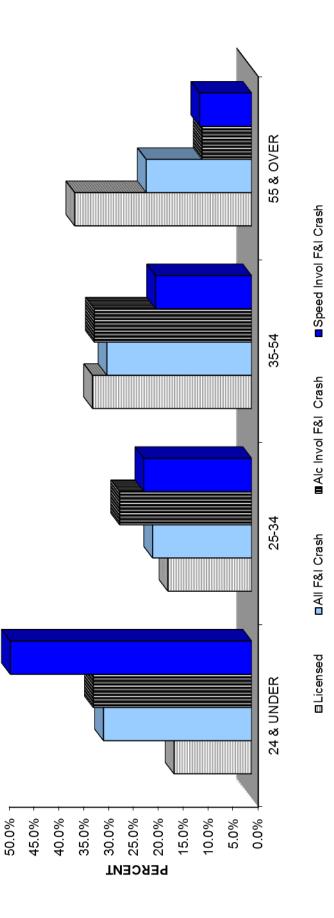
Young drivers are predominantly the drinking drivers in all crashes. Those drivers under 25 years of age accounted for 32.1 percent of the drinking drivers in fatal crashes and 31.5 percent of the drinking drivers in injury crashes. Those drivers under 35 years of age accounted for 60.7 percent of the drinking drivers in fatal crashes and 59.9 percent of the drinking drivers in all crashes.

	TABLE 3-16 AGE OF DRINKING DRIVERS IN CRASHES 2011											
	Drivers		Drivers		Drivers		Drivers					
	In All		In Fatal		In Injur		In PDO					
	Crashes		Crashes		Crashe		Crashe					
<u>Age</u>	<u>No.</u>	%	No.	%	No.	%	No.	%				
					-		-					
6 – 13	1	0.1	1	3.6	0	0.0	0	0.0				
14 - 15	4	0.4	1	3.6	1	0.2	2	0.4				
16 - 17	25	2.5	0	0.0	10	2.2	15	2.9				
18	38	3.8	3	10.7	15	3.4	20	3.9				
19	36	3.7	0	0.0	15	3.4	21	4.1				
20	43	4.4	0	0.0	16	3.6	27	5.3				
21 - 24	187	19.0	4	14.3	84	18.8	99	19.4				
25 - 34	255	25.9	8	28.6	117	26.2	130	25.5				
35 - 44	161	16.4	5	17.9	77	17.2	79	15.5				
45 - 54	135	13.7	3	10.7	64	14.3	68	13.4				
55 - 64	63	6.4	3	10.7	30	6.7	30	5.9				
65 - Over	31	3.1	0	0.0	14	3.1	17	3.3				
Unknown	5	0.5	0	0.0	4	0.9	1	0.2				
Total	984	100	28	100	447	100	509	100				
Source: SD D	epartment of	Public Sa	fety – Office	e of Accid	ent Recora	ls						

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 15.6 percent of the total licensed drivers, 31.8 percent of the drinking drivers in fatal and injury crashes and 48.5 percent of the speeding drivers in fatal and injury crashes. Drivers under 35 years of age constitute 32.5 percent of all licensed drivers, with 58.4 percent of the drinking drivers and 70.2 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).

LICENSED D	TABLE 3-17 LICENSED DRIVERS AND FATAL AND INJURY CRASH-INVOLVED DRIVERS BY AGE 2011												
	Licensed	Drivers In Fatal & Injury Crashes		Drinking Drivers In Fatal & Injury Crashes		Speeding Drivers In Fatal & Inj Crashes	ury						
Age	Drivers %	<u>No.</u>	%	No.	%	No.	%						
0 – 13 14 - 15 16 - 17 18	0.0 1.7 2.7 1.5	8 171 389 248	0.1 2.6 5.9 3.7	1 2 10 18	0.2 0.4 2.1 3.8	2 28 55 32	0.4 5.5 10.8 6.3						
19 20 21 - 24	1.6 1.6 6.7	248 215 187 744	3.7 3.2 2.8 11.2	15 16 88	3.2 3.4 18.5	29 21 79	5.7 4.1 15.5						
25 - 34 35 - 44	<u> </u>	<u>1,312</u> 904	19.8 13.6	125 82	26.3 17.3	<u>110</u> 48	21.6 9.4						
45 - 54 55 - 64 65 - Over	17.6 17.1 18.5	1,013 765 632	15.3 11.5 9.5	67 33 14	14.1 6.9 2.9	50 24 29	9.8 4.7 5.7						
Unknown TOTAL	0.0 100	50 6,638	0.8 100	4 475	0.8 100	3 510	0.6 100						
) Department of I) Department of I												

FIGURE 3-9 DRIVERS BY AGE GROUP 2011 Fatal and Injury Crash Involved Drivers



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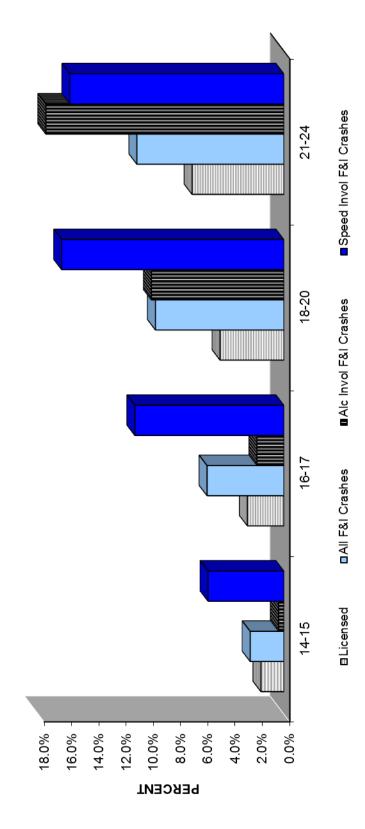


FIGURE 3-10 YOUNG DRIVERS 2011 Fatal & Injury Crash Involved Drivers

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 2.5 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 29.5 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 2011. Drinking and speeding were other leading driver contributing circumstances in fatal crashes. It was indicated that the drinking of 21 or 15.4 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 3-18MOTOR VEHICLE DRIVER CONTRIBUTING CIRCUMSTANCES2011

	Drivers i All Crasl		Driver Fatal	s in Crashes	Drivers Injury C		Drivers i PDO Cr	
	No.	%	No.	<u>%</u>	No.	<u>%</u>	<u>No.</u>	% %
Disregarded Traffic Signs or Signals	648	2.6	6	4.4	232	3.6	410	2.2
Distracted*	1085	4.3	5	3.7	397	6.1	683	3.7
Drinking	643	2.5	21	15.4	294	4.5	328	1.8
Driving Too Fast for Condition	2,037	8.1	15	11.0	559	8.6	1,463	7.9
Exceeded Speed Limit	322	1.3	19	14.0	159	2.5	144	0.8
Fail to Yield to Vehicle	3,105	12.3	11	8.1	962	14.8	2,132	11.5
Failure to Keep in Proper Lane	553	2.2	8	5.9	164	2.5	381	2.1
Fatigued/Fell Asleep	182	0.7	3	2.2	76	1.2	103	0.6
Following Too Closely	1,137	4.5	4	2.9	358	5.5	775	4.2
Improper Backing	410	1.6	0	0.0	24	0.4	386	2.1
Improper Passing	149	0.6	2	1.5	42	0.6	105	0.6
Improper Turn	338	1.3	0	0.0	80	1.2	258	1.4
Not Stated**	4,537	18.0	0	0.0	0	0.0	4,537	24.4
Other***	1040	4.1	11	8.1	360	5.5	669	3.6
Over-correcting/Over-steering	461	1.8	10	7.4	191	2.9	260	1.4
Running Off Road	933	3.7	22	16.2	384	5.9	527	2.8
Swerving or Avoiding due to: <i>wind, slippery</i>								
surface, vehicle, object, non-motorist, etc.	457	1.8	5	3.7	124	1.9	328	1.8
Unknown	916	3.6	8	5.9	195	3.0	713	3.8
Wrong Side of Road	109	0.4	6	4.4	58	0.9	45	0.3
Total Drivers	25,220		136		6,502		18,582	

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.

*Distracted includes cell phones, distracted driving and other electronic devices.

**Other includes 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, physical impairment and other driver contributing factors.

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

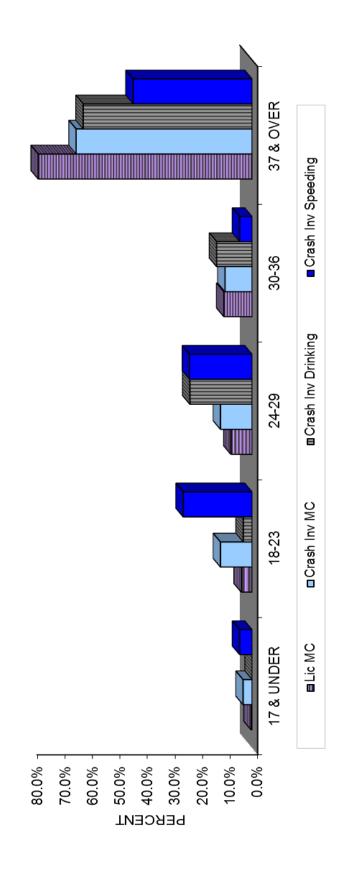
Source: SD Department of Public Safety - Office of Accident Records

Motorcycles

Motorcycle crashes constitute 2.6 percent of all crashes, 14.9 percent of all fatal crashes, and 7.2 percent of all injury crashes. There were 14 people killed and 468 injured on motorcycles in the 455 reported motorcycle crashes during 2011 (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 1.2 percent of the licensed motorcycle drivers, 5.7 percent of drivers involved in motorcycle crashes, and 9.1 percent of the speeding drivers involved in motorcycle crashes (see TABLE 3-19 and FIGURE 3-11).

TABLE 3-19 MOTORCYCLISTS BY AGE GROUP 2011								
Age <u>Group</u>	Licensed Motorcyc <u>No.</u>		Motorcy Drivers Crashes <u>No.</u>	In	Drinkin Motorcy Drivers Crashe <u>No.</u>	ycle In	Speedir Motorcy Drivers Crashes <u>No.</u>	rcle In
0 12	0	0.0	1	0.2	0	0.0	0	0.0
0 - 13 14 - 15	0 55	0.0 0.1	1 6	0.2 1.2	0 0	0.0 0.0	0 0	0.0 0.0
14 - 15 16 - 17	273	0.1	9	1.2	0	0.0	2	0.0 4.5
18 - 19	612	0.3	9 12	2.5	0	0.0	2	4.5
20 - 21	1,059	1.3	21	4.3	0	0.0	6	13.6
22 - 23	1,469	1.9	23	4.7	1	3.2	3	6.8
24 - 25	1,829	2.3	18	3.7	3	9.7	3	6.8
26 - 27	2,056	2.6	19	3.9	3	9.7	4	9.1
28 - 29	2,180	2.8	19	3.9	1	3.2	3	6.8
30 - 31	2,266	2.9	18	3.7	2	6.5	1	2.3
32 - 36	5,806	7.4	30	6.1	2	6.5	1	2.3
37 - 41	6,681	8.5	33	6.7	3	9.7	1	2.3
42 - 51	19,164	24.4	107	21.9	9	29.0	6	13.6
52 - Over	35,176	44.7	171	35.0	7	22.6	12	27.3
Unknown	1	0.0	2	0.4	0	0.0	0	0.0
Total	78,627	100	489	100	31	100	44	100

FIGURE 3-11 MOTORCYCLISTS 2011 Crash Involved Motorcycle & Moped Drivers



There were 14 motorcyclist fatalities during 2011. Twelve were motorcycle drivers and two passengers. One driver wore a helmet only, two drivers wore helmet and eye protection, seven drivers and one passenger wore eye protection only, two drivers and one passenger did not use safety equipment. Helmets were used by 159 or 34.0 percent of the motorcycle drivers in crashes while 309 or 66.0 percent did not wear a helmet (see TABLE 3-20).

	Helmet Us	ed	Helmet Not I	Jsed
<u>Age</u>	No.	%	<u>No.</u>	%
06 – 13	0	0.0	1	100.00
14 - 15	3	50.0	3	50.0
16 - 17	6	66.7	3	33.3
18 - 20	7	30.4	16	69.6
21 - 24	16	40.0	24	60.0
25 - 34	20	24.4	62	75.6
35 - 44	20	29.4	48	70.6
45 - Over	87	36.4	152	63.6
Unknown	0	0.0	0	0.0
Total	159	34.0	309	66.0

Pedestrians

There were seven pedestrian deaths and 119 injuries in motor vehicle crashes during 2011 (see TABLE 3-21). The youngest pedestrian killed was five years old, while the oldest was fifty-seven years old. Of the injured pedestrians, 17.6 percent were between the ages of 5-13. Cities accounted for 93.3 percent of the pedestrian injuries, while 28.6 percent of the fatalities were rural (see TABLE 3-23). Of the seven pedestrians killed, 6 were male and 1 female. Of the 119 pedestrians injured, 67 were male and 52 female.

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

	AGE OF PEDE	STRIANS IN TRA 2011	FFIC CRASHES	
	Fatalities		Injuries	
<u>Age</u>	No.	%	No.	%
0-4	0	0.0	5	4.2
5 - 13	1	14.3	21	17.6
14 - 19	1	14.3	12	10.1
20 - 24	0	0.0	10	8.4
25 - 34	0	0.0	19	16.0
35 - 44	1	14.3	10	8.4
45 - 54	2	28.6	18	15.1
55 - 64	2	28.6	17	14.3
65 - Over	0	0.0	7	5.9
Total	7	100	119	100

TABLE 3-22ALCOHOL INVOLVEMENT BY PEDESTRIANS2011					
	Fatalities		Injuries		
Alcohol Involvement	No.	%	No.	%	
Alcohol or Drugs	3	42.9	14	11.8	
No Alcohol	4	57.1	105	88.2	
Unknown	0	0.0	0	0.0	
Total	7	100	119	100	
Source: SD Department of Public Safety – Office of Accident Records					

	T RURAL vs. CITY	ABLE 3-23 PEDESTRIAN 2011	CRASHES	
	Fatalities	%	Injuries	%
Rural	2	28.6	8	6.7
City	5	71.4	111	93.3
Total	7	100	119	100
Source: SD Depa	rtment of Public Safety –	Office of Accident F	Records	

Bicycles

During 2011 there was one bicyclist killed (see TABLE 2-9). There were 86 bicycle drivers injured in reported motor vehicle crashes during 2011 (see TABLE 3-24). The leading factor in bicycle-involved crashes was improper crossing which was reported for 18.3 percent of the injured bicycle drivers. Seventy-three of the injured bicycle drivers in crashes had no contributing circumstances. The yearly 1991-2011 trend of bicycle fatalities and injuries is provided in TABLE 2-9.

TABLE 3-24 AGE OF BICYCLE DRIVERS IN TRAFFIC CRASHES 2011					
<u>Age</u>	Fatalities <u>Number</u>	Injuries <u>Number</u>	<u>%</u>		
0-4	0	1	1.2		
5 - 13	0	21	24.4		
14 - 19	0	12	14.0		
20 – 24	1	10	11.6		
25 - 34	0	20	23.3		
35 - 44	0	6	7.0		
45 - 54	0	7	8.1		
55 - 64	0	7	8.1		
65 - Over	0	2	2.3		
Total	1	86	100		
Source: SD Dep	artment of Public Safety – Office of Acc	ident 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 driver's 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: <u>Estimating the Costs of Unintentional</u> <u>Injuries, 2009</u>, National Safety Council)

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

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