# 2013 South Dakota Motor Vehicle Traffic Crash Summary







July 22, 2014

My Fellow South Dakotans,

I am pleased to release the 2013 issue of the Annual South Dakota Crash Report. Within this document, you will find some roadway safety victories, along with other areas that need continued vigilance and correction.

One area showing great improvement is the number of drivers in alcohol-involved fatal crashes. In 2013, South Dakota had 25 percent fewer motor vehicle drivers involved in this type of crash over the same category in 2012. This is a significant decrease and is a good sign of the continued social abhorrence of this behavior.

A very important law impacting roadway safety went into effect on July 1, 2014. Earlier this year, legislators passed a bill banning texting while driving in South Dakota. On July 1, our state joined the ranks of other states that recognize this challenging safety issue. I assure you our highway safety professionals are working on various means to reduce the number of injury and fatal crashes caused by those distracted by a simple text message.

Finally, I cannot overstate the importance of adults setting good examples for the young passengers who watch our every move behind the wheel. Please buckle up every time you drive and ask your passengers to do the same. Keep your hands on the steering wheel, your eyes on the road, and your cell phone tucked away while driving. Never put other drivers and innocent pedestrians in jeopardy by drinking and driving.

Our roadways will be much safer if we all follow these simple steps. Please be safe out there.

Sincerely.

**Dennis Daugaard** 

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#### **TABLE OF CONTENTS**

l.	INTRODUCTION	1
	South Dakota Statistical Summary	2
II.	HISTORICAL TRENDS	3
	Motor Vehicle Crashes	
	Alcohol Involvement	
	Restraint Usage	10
	Cycle and Pedestrian Crashes	
	Holiday Counts	
	Severity of Injuries	
	Sex of Drivers	20
III.	MOTOR VEHICLE CRASH PROFILE	21
	Introduction	
	First Harmful Event	
	Manner of Collision	
	Highway System	
	County Summary	
	City Summary	
	Roadway Surface Conditions	
	Crashes by Time of Day, Month, and Day of Week	
	Drivers	
	Contributing Circumstances	
	Motorcycles	
	Pedestrians	
	Bicycles	51
IV.	IMPORTANT EVENTS AND DATES	52
V	GLOSSARY OF TERMS	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	
2-3A	Persons Killed in Alcohol Involved Crashes by Age	
2-4	Crash and Arrest Activity	
2-5	Safety Restraint Usage Killed Occupants	10
2-5A	Safety Restraint Usage Injured Occupants	
2-5B	Killed & Injured Motor Vehicle Occupants by Ejection Status	
2-6	Fatalities and Injuries to Motor Vehicle Occupants	
20	Under Five Years of Age	12
2-6A	Safety Restraint Usage Under 5 Years of Age	
2-07	Motorcycle Crashes	
2- <i>i</i> 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	
	Two or More Motor Vehicles	
3-7	Crashes by Type of Highway	28
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	32
3-10	Traffic Crashes - South Dakota Cities Population 2500 and Over	34
3-11	Roadway Surface Conditions	35
3-12	Crashes by Time of Day	36
3-13	Crashes by Month	37
3-14	Crashes by Day of Week	
3-15	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	48
3-21	Age of Pedestrians in Traffic Crashes	
3-21	Alcohol Involvement by Pedestrians	
3-23	Rural vs. City Pedestrian Crashes	
3-24	Age of Bicycle Drivers in Traffic Crashes	
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#### **LIST OF FIGURES**

2-1	Fatality Rate Comparison	. 3
2-2	Traffic Fatalities - Alcohol Related vs. Non-Alcohol Related	. 7
2-3	Traffic Injuries - Alcohol Related vs. Non-Alcohol Related	. 7
2-4	Fatal and Injury Crashes and DWIs	. 9
2-5	Fatal Crashes	. 9
2-6	Safety Equipment Usage Killed Occupants	11
2-7	Safety Equipment Usage Injured Occupants	11
3-1	Fatalities by Travel Mode	23
3-2	Injuries by Travel Mode	23
3-3	Traffic Crashes by Highway System Type	29
3-4	Fatal Traffic Crashes by Highway System Type	29
3-5	Rural Fatal and Injury Crashes/Vehicle Miles Traveled	33
3-6	Crashes by Time of Day	38
3-7	Crashes by Month	38
3-8	Crashes by Day of Week	38
3-9	Drivers by Age Group - Fatal and Injury Crash-Involved Drivers	42
3-10	Young Drivers - Fatal and Injury Crash-Involved Drivers	43
3-11	Motorcyclists - Crash-Involved Motorcycle and Moped Drivers	47

#### I. INTRODUCTION

The Motor Vehicle Traffic Crash Summary is divided into two main sections, Historical Trends and 2013 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 2013 Traffic Crash Profile section details the crash picture for 2013 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: Lee.Axdahl@state.sd.us

Webpage:

http://dps.sd.gov/enforcement/accident records/Annual Crash Reports.aspx

NOTE! Data Extracted on 04/16/2014 This report reflects a one day picture of CY2013 data collected, any data received after this date would not be included in this report.

## SOUTH DAKOTA TRAFFIC STATISTICAL SUMMARY 2012-2013

>	NUMBER OF REPORTED MOTOR VEHICLE TRAFFIC CRASHES	<u>2012</u> 16,261	<u>2013</u> 16,620
>	AMOUNT OF MOTOR VEHICLE TRAFFIC CRASH PROPERTY DAMAGE	\$112 MILLION	\$88 MILLION
>	NUMBER OF MOTOR VEHICLE TRAFFIC CRASH INJURIES	5,432	5,462
>	NUMBER OF MOTOR VEHICLE TRAFFIC CRASH FATALITIES	133	135
>	FATALITY RATE PER 100,000,000 MILES OF TRAVEL	1.47	1.48
>	PERCENT OF DRIVERS IN FATAL CRASHES WHO HAD BEEN DRINKING	26.1%	18.0%
>	NUMBER KILLED IN ALCOHOL-RELATED CRASHES	53	42
>	NUMBER INJURED IN ALCOHOL-RELATED CRASHES	721	639
>	NUMBER OF PEDESTRIANS KILLED	2	9
>	NUMBER OF MOTORCYCLISTS KILLED	25	22
>	NUMBER OF BICYCLISTS KILLED	0	0
>	PERCENT OF LICENSED DRIVERS UNDER 25	15.5%	15.3%
>	PERCENT OF CRASH-INVOLVED SPEEDING DRIVERS UNDER 25	51.9%	48.6%
>	PERCENT OF CRASH-INVOLVED DRINKING DRIVERS UNDER 25	37.0%	31.0%
>	NUMBER OF OCCUPANTS KILLED IN MOTOR VEHICLES(EXCLUDES MOPED, MOTORCYCLE, ATV & SNOWMOBILE OCCUPANTS)	102	103
>	NUMBER OF OCCUPANTS KILLED IN MOTOR VEHICLES WHO WERE WEARING A SAFETY RESTRAINT	29	34
>	NUMBER OF UNRESTRAINED OCCUPANTS UNDER 5 YEARS OF AGE IN MOTOR VEHICLE CRASHES WHO WERE KILLED	2 9	0 11
>	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
>	ECONOMIC LOSS FROM MOTOR VEHICLE TRAFFIC CRASHES	\$406 MILLION	\$389 MILLION

#### II. HISTORICAL TRENDS

#### **Motor Vehicle Crashes**

The preliminary death rates per 100 million vehicle miles traveled from 2004-2013 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 2004-2013										
<u>State</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>	<u>2012</u>	<u>2013</u>
South Dakota	2.3	2.3	2.3	1.7	1.4	1.5	1.6	1.2	1.5	1.5
Iowa	1.2	1.4	1.4	1.4	1.4	1.2	1.0	1.2	1.2	n/a
Minnesota	1.0	1.0	0.9	0.9	0.8	0.8	0.7	0.7	0.7	0.7
Montana	2.0	2.3	2.3	2.4	2.1	2.0	1.7	1.8	1.7	n/a
Nebraska	1.3	1.4	1.4	1.3	1.1	1.0	0.9	0.9	1.1	1.1
North Dakota	1.3	1.6	1.4	1.4	1.3	1.8	1.3	1.6	1.7	1.5
Wyoming	1.8	1.9	2.1	1.6	1.7	1.4	1.7	1.5	1.3	n/a
National	1.4	1.5	1.4	1.3	1.3	1.2	1.1	1.1	1.2	1.1

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

The 2013 rates are preliminary estimates and will be updated the following year with the final numbers.

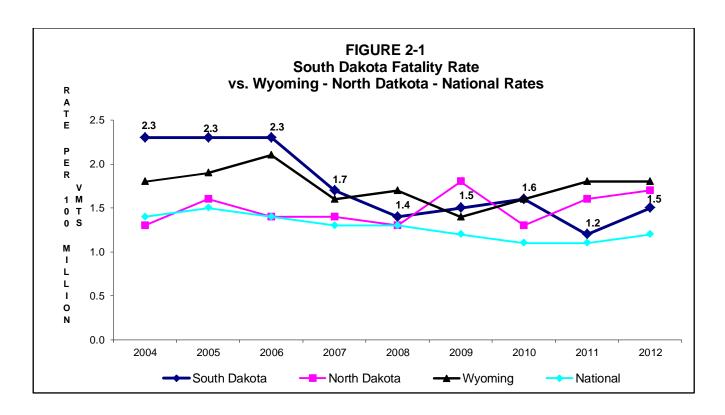


TABLE 2-2 provides a yearly comparison of South Dakota's motor vehicle traffic crashes from 1984 through 2013. Any comparison of motor vehicle crashes must be made with caution due to the changes in the definition of a reportable crash. For example, in the late 1970's the definition of a fatality caused 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 2013 death rate increased to 1.48, a 1.1% increase from the 2012 death rate of 1.47. The 5,462 people injured in crashes are a 0.6% increase from the 5,432 in 2012 (see TABLE 2-2).

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

			CRASHE	S, WIILES I	RAVELED,	& KEGISTE	KED MOTO	JK VEHICL	_3	
									2	Registered
					Total			2	Miles <sup>3</sup>	Motor
		Death		Total	Crashes	Fatal	Injury	$PDO^2$	Traveled	Vehicles <sup>5</sup>
<u>Year</u>	<u>Deaths</u>	Rate <sup>1</sup>	<u>Injuries</u>	<u>Crashes</u>	<u>Rate⁴</u>	<u>Crashes</u>	<u>Crashes</u>	<u>Crashes</u>	<u>+(000,000)</u>	<u>+(000)</u>
1984	143	2.24	6,158	15,093	236.42	132	4,297	10,664	6,384	669
1985	130	2.07	6,240	15,435	245.94	109	4,229	11,097	6,276	674
1986	134	2.15	6,008	13,714	219.85	118	4,105	9,491 <sup>2</sup>	6,238	686
1987	134	2.09	6,221	13,083	203.59	107	4,173	8,803	6,426	711
1988	147	2.22	6,579	14,821	224.02	127	4,455	10,239	6,616	709
1989	152	2.27	6,828	15,005	223.79	134	4,605	10,266	6,705	719
1990	153	2.19	7,261	15,073	215.67	139	4,820	10,114	6,989	698
1991	143	2.10	7,310	16,009	235.32	130	4,830	11,049	6,803	710
1992	161	2.24	7,813	17,170	238.51	141	5,112	11,917	7,199	722
1993	140	1.89	8,410	18,664	251.74	118	5,525	13,021	7,414	749
1994	154	2.02	8,540	19,408	254.30	141	5,711	13,556	7,632	805
1995	158	2.06	8,323	19,362	252.41	140	5,543	13,679	7,671	812
1996	175	2.24	8,490	21,653	277.57	142	5,653	15,858	7,801	815
1997	148	1.88	8,161	20,899	264.81	128	5,478	15,293	7,892	827
1998	165	2.05	7,723	19,735	245.49	149	5,112	14,474	8,039	837
1999	150	1.84	7,574	20,019	245.00	136	5,032	14,851	8,171	841
2000	173	2.08	7,888	19,475	234.16	150	5,252	14,073 <sup>2</sup>	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 <sup>5</sup>
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
2012	133	1.47	5,432	16,261	179.15	118	3,887	12,256	9,077	992
2013	135	1.48	5,462	16,620	182.36	121	3,921	12,578	9,114	1,006

#### **FOOTNOTES**

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

<sup>&</sup>lt;sup>2</sup>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.

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

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

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

<sup>&</sup>lt;sup>5</sup>Based 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 years data based on previous plate registration staying with the vehicle.

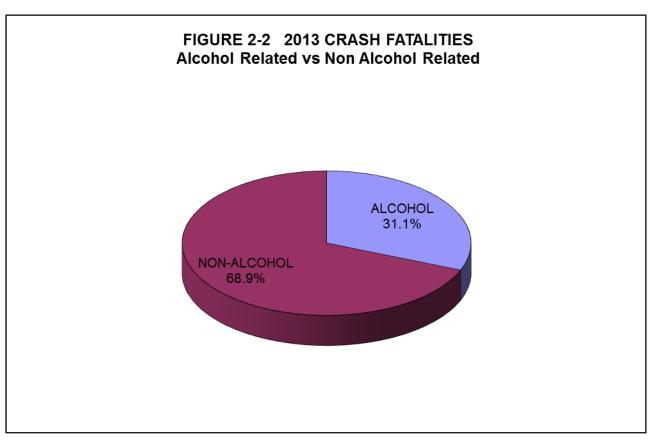
#### Alcohol Involvement

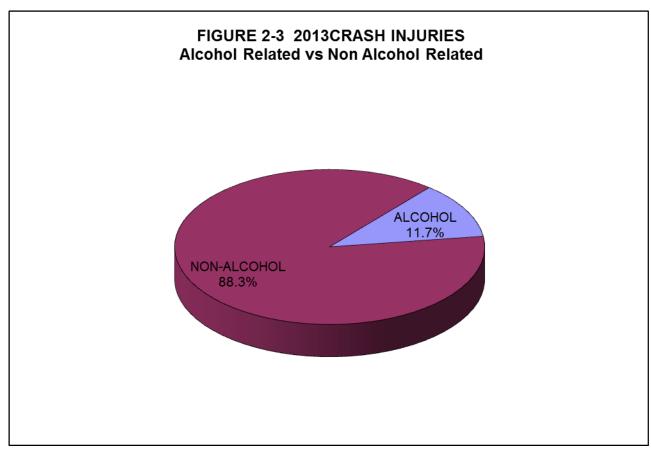
When comparing records dating back to 1979, 29.7% alcohol involved fatal crashes for 2011 is the lowest. Of the 135 traffic fatalities during 2013, 42 or 31.1% were alcohol related (see Table 2-3). Alcohol statistics dating back to the 1970's show 2011 to have the lowest number of alcohol related fatalities for any one-year period (37). The highest number is 138 for the year of 1973.

TABLE 2-3 ALCOHOL INVOLVED CRASHES AS PERCENT OF ALL CRASHES 2007-2013									
Total Crashes	2007	2008	2009	2010	2011	2012	2013		
	5.9%	6.1%	6.0%	5.7%	5.7%	6.1%	5.9%		
	(959)	(977)	(1022)	(999)	(992)	(988)	(986)		
Fatal Crashes	42.3%	41.3%	45.5%	35.5%	29.7%	38.1%	30.6%		
	(55)	(45)	(51)	(44)	(30)	(45)	(37)		
Injury Crashes	11.5%	11.4%	11.6%	10.8%	11.5%	12.5%	11.6%		
	(467)	(467)	(474)	(448)	(457)	(486)	(454)		
PDO Crashes	3.6%	4.0%	3.9%	3.8%	3.8%	3.7%	3.9%		
	(437)	(465)	(497)	(507)	(505)	(457)	(495)		
Fatalities	42.5%	39.7%	46.6%	35.0%	33.3%	39.8%	31.1%		
	(62)	(48)	(61)	(49)	(37)	(53)	(42)		
Injuries	11.5%	11.5%	12.1%	11.1%	11.8%	13.3%	11.7%		
	(666)	(659)	(692)	(646)	(633)	(721)	(639)		

**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.

PERSONS	KILLED I	N ALCOH	BLE 2-3A IOL INVO 07-2013		ASHES E	BY AGE	
<u>AGE</u>	2007	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
0 – 5	0	1	0	0	0	2	0
6 - 12	1	0	2	0	1	2	0
13 - 19	10	6	15	6	7	4	0
20	1	1	0	0	0	3	1
21 - 29	18	15	14	12	8	14	17
30 - 39	13	12	11	8	9	10	8
40 - 49	13	7	9	11	5	7	9
50 - 59	4	4	6	9	5	8	6
60 & OLDER	2	2	4	3	2	3	1
Unknown/Not Stated	0	0	0	0	0	0	0
TOTAL	62	48	61	49	37	53	42
Source: SD Department of I	Public Safe	ty: Office c	of Accident	Records			





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 7.5% while non-alcohol related fatal and injury crashes increased by 2.2% from the 2012 totals. **The number of DWI arrests decreased by 5.4% from 2012.** 

TABLE 2-4
<b>CRASH AND ARREST ACTIVITY</b>
2004- 2013

	FATAL	CRASHES	FATAL & IN	JURY CRASHES		
	ALCOHOL	NONALCOHOL	ALCOHOL	NONALCOHOL	DWI 1	DWI <sup>1</sup>
	<b>RELATED</b>	RELATED	<b>RELATED</b>	RELATED	<b>ARRESTS</b>	<b>CONVICTIONS</b>
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
2012	45	73	531	3,474	9,194	6,432
2013	37	84	491	3,551	8,683	6,083

Note: [1] – Based on South Dakota Courts - The State of the Judiciary and 2011 Annual Report of the S. D. Unified Judicial System - January 2013 Based on Fiscal Year statistics.

DWI Convictions are guilty pleas, plus suspended impositions, plus convictions at trial, less dismissals & acquittals at trial. at

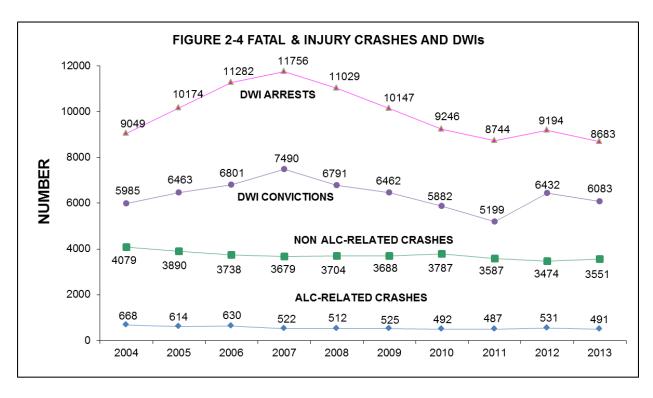
**FIGURE 2-4** presents the annual counts of DWI arrests, alcohol related fatal and injury crashes, and non-alcohol related fatal and injury crashes from 2004 through 2013.

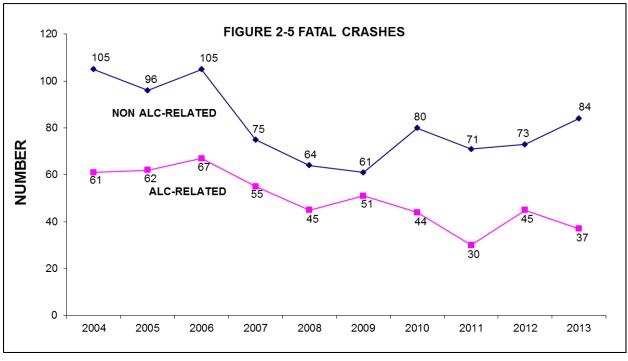
**FIGURE 2-5** presents the alcohol related and non-alcohol related fatal crash experience for the years of 2004 through 2013.

There were 37 alcohol related fatal crashes during 2013, which compares to 45 in 2012. The previous three-year average was 40 for the years of 2010-2012.

There were 491 alcohol related fatal and injury crashes during 2013, which compares to 531 in 2012. The previous three-year average was 503 or a 2.5 percent decrease in 2013. Non-alcohol related fatal and injury crashes in 2013 increased (2.2%) when compared to 2012 and decreased 1.8 percent from the previous three-year average (2010-2012).

There were 8683 DWI arrests in fiscal year 2013. This level has gone down 4.2% from the previous three-year average (2010-2012). There were 6083 DWI convictions in fiscal year 2013. This level has gone up 4.2% from the previous 3-year average (2010-2012).





#### 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-one occupants were killed while not wearing any safety restraint, while thirty-three occupants killed were wearing a lap belt and shoulder harness. (See TABLE 2-5)

Forty-one (39.8%) of the 103 killed occupants were either partially or totally ejected from the vehicle. (See TABLE 2-5B)

TABLE 2-5 SAFETY RESTRAINT USAGE – KILLED OCCUPANTS									
	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>			
No Safety Equipment	60	79	67	52	65	61			
Lap Belt Only	1	1	2	0	0	1			
Shoulder Harness Only	1	0	0	0	0	0			
Lap Belt & Shoulder Harness	25	26	26	22	28	33			
Child Restraint Used Properly	0	1	0	0	1	0			
Child Restraint Not Properly Used	1	0	0	0	0	0			
Other, Not Stated or Unknown	6	4	6	13	8	8			
TOTAL	94	111	101	87	102	103			

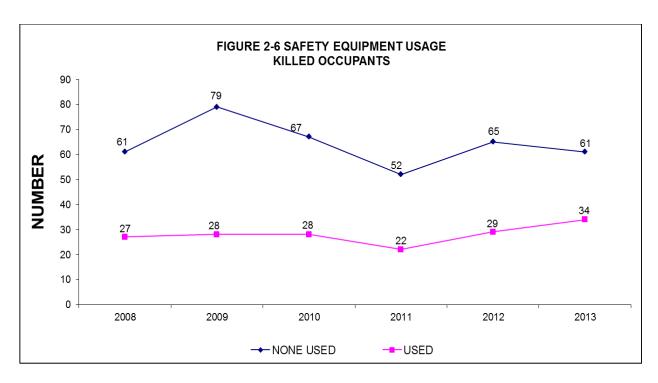
TABLE 2-5A SAFETY RESTRAINT USAGE – INJURED OCCUPANTS								
	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>		
No Safety Equipment	1,080	1,012	956	899	899	884		
Lap Belt Only	59	48	46	45	39	39		
Shoulder Harness Only	33	35	47	33	21	21		
Lap Belt & Shoulder Harness	3,395	3,506	3,503	3,325	3319	3476		
Child Restraint Used Properly	66	57	61	44	62	60		
Child Restraint Not Properly Used	3	7	2	2	3	2		
Other, Not Stated or Unknown	314	315	365	281	290	243		
TOTAL	4,950	4.980	4,980	4.629	4,633	4,725		

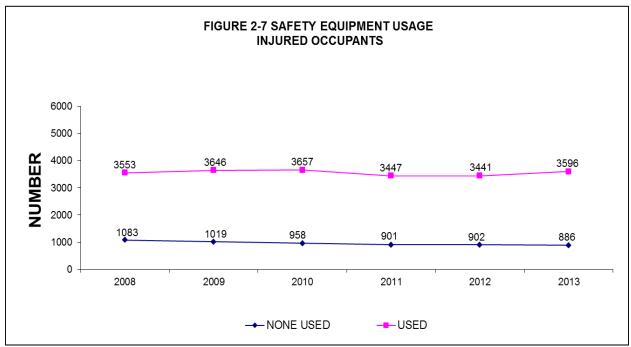
**NOTE:** Motor vehicle drivers and passengers are considered occupants.

Drivers & Passengers of motorcycles, moped, ATVs and snowmobiles are not counted in the above table 2-5 & 2-54

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

			KILLI	ED			1			INJU	RED			
	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>		<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	
Not Ejected	47	50	67	43	46	61		4,798	4,841	4,851	4,473	4,501	4,613	
Partial Ejection	4	11	9	4	9	6		19	19	10	22	10	14	
Total Ejection	43	48	25	39	47	35		100	107	106	103	114	89	
Unknown Ejection	0	2	0	1	0	1		21	13	11	29	7	9	
Not Applicable	0	0	0	0	0	0		12	0	2	2	1	0	
TOTAL	94	111	101	87	102	103		4,950	4,980	4,980	4,629	4,633	4,725	





The Child Passenger Restraint System (SDCL 32-37) law took effect on July 1, 1984 - since that time there have been 63 deaths to occupants of this age group. Only seven 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 motor vehicle occupants from birth through four years of age during 2013, which compares to four fatalities during 2012 (see TABLE 2-6).

There were 76 children (birth through 4 years old) injured in 2013, which compares to 77 for 2012. Sixty-six of the 76 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

				TOTAL
		SERIOUS	SLIGHT	NONFATAL
<u>YEAR</u>	<u>FATALITIES</u>	<u>INJURY</u>	<u>INJURY</u>	<u>INJURIES</u>
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
2012	4	36	41	77
2013	0	37	39	76

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 - 2013

	<u>Fatalities</u>	<u>Injuries</u>
No Safety Equipment Used	0	10
Lap Belt Only	0	0
Shoulder Harness Only	0	0
Lap Belt & Shoulder Harness	0	13
Child Restraint Used Properly	0	51
Child Restraint Not Used Properly	0	2
Other, Not Stated or Unknown	0	0
TOTAL	0	76

#### 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 507 and 22 deaths per year. Licensed motorcyclists increased 2.3 percent during 2013 while fatalities increased by three to 22 (see Table 2-7). Moped crashes are included with motorcycle crashes. There were no moped fatalities during 2013. 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
<b>MOTORCYCLE CRASHES</b>
1993 - 2013

<u>Year</u>	Moto <u>Total</u>	orcycle Cr Fatal	ashes <u>Injury</u>	Moto <u>Fatalitie</u>	orcyclists s Injuries	Registered Motorcycles	Licensed Motorcyclists
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
2012	501	24	421	25	501	73,310	80,410
2013	491	21	398	22	474	75,669	82,313

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# TABLE 2-8 PEDESTRIAN FATALITIES AND INJURIES 1993 - 2013

<u>Year</u>	<u>Fatalities</u>	<u>Injuries</u>
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
2012	2	116
2013	9	124

#### TABLE 2-9 BICYCLE FATALITIES AND INJURIES 1993 - 2013

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

<u>Year</u>	<u>Fatalities</u>	<u>Injuries</u>
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
2012	0	110
2013	0	87

#### **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.

	(	CRASHES D	BLE 2-10 URING HOL 04- 2013	IDAYS		
<u>Holiday</u>	Total <u>Hours</u>	Total <u>Crashes</u>	Fatal <u>Crashes</u>	Injury <u>Crashes</u>	<u>Fatalities</u>	<u>Injuries</u>
MEMORIAL DAY						
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
2012	78	137	1	30	1	42
2013	78	100	0	21	0	34
FOURTH OF JULY						
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
2012	30	45	2	11	2	14
2013	102	153	1	41	1	64
LABOR DAY						
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	3	33	3	52
2012	78	138	1	38	1	56
2013	78	107	1	33	1	52

<u>Holiday</u>	Total <u>Hours</u>	Total <u>Crashes</u>	Fatal <u>Crashes</u>	Injury <u>Crashes</u>	<u>Fatalities</u>	<u>Injuries</u>
THANKSGIVING						
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
2012	102	225	0	37	0	48
2013	102	182	2	29	2	39
CHRISTMAS						
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
2012	102	149	1	23	1	41
2013	30	55	0	12	0	20
NEW YEARS						
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
2012-13	102	148	0	29	0	35
2013-14	30	48	1	8	1	13

#### 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 2004 through 2013. The percentages are row percentages.

Note: For definition of class of injury, see page 21.

TABLE 2-11
FATALITIES AND SEVERITY OF INJURIES OF TOTAL PERSONS

	Incapacita	ting	Non-Incap	acitating	Possible			
	Injuries		Injuries		Injuries		Total	Total
<u>Year</u>	No.	%	No.	%	No.	%	<u>Injuries</u>	Killed
2004	1,232	18.9	2,366	36.2	2,937	44.9	6,535	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
2010	845	14.6	2,136	36.8	2,820	48.6	5,801	140
2011	760	14.1	1,927	35.9	2,687	50.0	5,374	111
2012	811	14.9	2,010	37.0	2,611	48.1	5,432	133
2013	832	15.2	1,997	36.6	2,633	48.2	5,462	135

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)

<b>TABLE 2-12</b>
FATALITIES AND SEVERITY OF INJURIES OF TOTAL DRIVERS

	Incapacita	iting	Non-Inca	pacitating	Possible			
	Injuries		Injuries		Injuries		Total	Total
<u>Year</u>	No.	%	No.	%	No.	%	<u>Injuries</u>	<u>Killed</u>
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
2012	553	14.5	1,323	34.7	1,932	50.7	3,808	92
2013	544	14.0	1,345	34.7	1,984	51.2	3,873	100

FATALIT	IES AND S		TABLE 2-1 OF INJUR	-	TAL PAS	SENGERS	
Incapacita	ating	Non-Incap	acitating	Possible			_
Injuries		Injuries		Injuries		Total	Total
No.	%	No.	%	No.	%	<u>Injuries</u>	<u>Killed</u>
346	19.7	691	39.4	715	40.8	1,752	58
339	20.9	633	39.1	648	40.0	1,620	56
000	40 =	0.40	~~ -	000	44.0	4 005	

	mjunes		mjunes		IIIJulies		TOlai	TOlai
<u>Year</u>	No.	%	No.	%	No.	%	<u>Injuries</u>	<u>Killed</u>
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
2012	219	15.7	574	41.3	598	43.0	1,391	39
2013	239	17.4	551	40.2	581	42.4	1,371	26

F	ATALITIES	S AND SE	T VERITY OF	TABLE 2-1 FINJURIE		AL BICYC	LE DRIVE	RS
	Incapacitating		Non-Incapacitating		Possible			
	Injuries		Injuries		Injuries		Total	Total
<u>Year</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	%	<u>No.</u>	%	<u>Injuries</u>	<u>Killed</u>
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
2012	10	9.1	65	59.1	35	31.8	110	0
2013	13	14.9	44	50.6	30	34.5	87	0

	FATALIT	IES AND S	SEVERITY	TABLE 2-1 OF INJUR	- •	TAL PED	ESTRIANS	3
	Incapacita	ating	Non-Incapa	acitating	Possible			
	Injuries		Injuries		Injuries		Total	Total
<u>Year</u>	<u>No.</u>	%	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>Injuries</u>	<u>Killed</u>
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
2012	27	23.3	47	40.5	42	36.2	116	2
2013	36	29.0	55	44.4	33	26.6	124	9

#### **Sex of Drivers**

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

## TABLE 2-16 GENDER OF DRIVERS: CRASH & LICENCED 2002 - 2013

			LVED DRIV				D DRIVERS	. –
	No.	ALE <u>%</u>	No.	MALE %	MA <u>No.</u>	LE <u>%</u>	FEMA <u>No.</u>	LE <u>%</u>
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
2009	14,030	57.4	10,296	42.1	301,618	50.1	300,547	49.9
2010	14,718	57.5	10,659	41.6	301,903	50.1	300,372	49.9
2011	14,585	58.3	10,427	41.7	303,017	50.2	300,216	49.8
2012	13,601	58.5	9,655	41.5	305,385	50.3	301,394	49.7
2013	14,174	58.5	10,051	41.5	309,218	50.4	304,694	49.6

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. 2013 MOTOR VEHICLE CRASH PROFILE

#### Introduction

This section profiles the reported motor vehicle traffic crashes for 2013. 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 due to rounding error.</u>

During 2013, there were 16,620 reported motor vehicle traffic crashes, the majority of crashes being property damage only 12,578 (75.7%). Injury crashes accounted for 3,921 (23.6%) of the crashes, while 121 (0.7%) were fatal crashes. There were 5,462 persons injured and 135 persons killed in crashes during 2013 (see TABLE 3-1).

			S AND SE ERS, PED	EVERITY ESTRIA				•		
	Incapac Injuries	itating	Non- Incapac Injuries	itating	Possib Injuries	-	Total Nonfata Injuries	al	Total Fatalitie	es
	No.	<u>%</u>	No.	<u>%</u>	No.	<u>%</u>	No.	<u>%</u>	No.	%
Drivers	544	65.4	1345	67.4	1984	75.4	3873	70.9	100	74.
Passengers	239	28.7	551	27.6	581	22.1	1371	25.1	26	19.3
Pedestrians	36	4.3	55	2.8	33	1.3	124	2.3	9	6.
Bicycle Drv	13	1.6	44	2.2	30	1.1	87	1.6	0	0.0
Other*	0	0.0	2	0.1	5	0.2	7	0.1	0	0.
TOTAL	832	100	1,997	100	2,633	100	5,462	100	135	10

<sup>\*</sup>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).

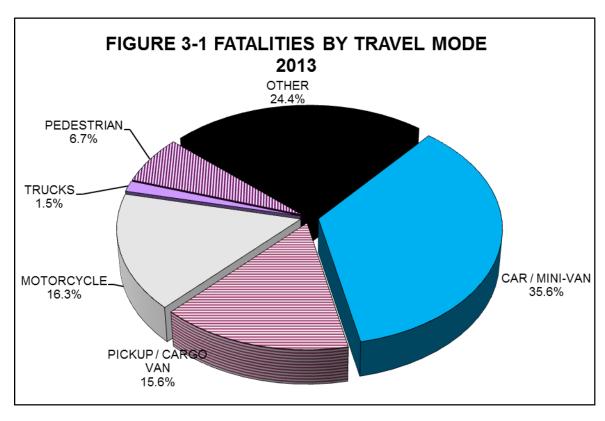
TABLE 3-2 provides information on persons killed and injured by method or mode of transportation. During 2013, 35.6 percent of the fatalities and 50.7 percent of the injuries occurred to occupants of passenger cars and mini-vans. Occupants of pickups and cargo vans accounted for 15.6 percent of the fatalities and 13.3 percent of the injuries. Additionally, in 2013 twenty-two motorcyclists and nine pedestrians were killed. (See Table 3-2).

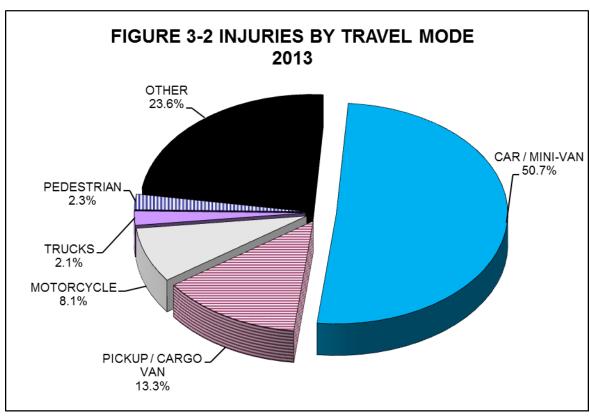
FATALITIES AND	TABLE INJURIES BY 1 201	MODE OF TRAN	NSPORTATION	
	Fatalities No.	<u>%</u>	Injuries <u>No</u> .	<u>%</u>
Passenger Cars, Mini-vans	48	35.6	2,769	50.7
Pickups, Cargo Vans***	21	15.6	728	13.3
SUV's (Sports Utility Vehicles)	30	22.2	1,062	19.4
Trucks (All)*	2	1.5	113	2.1
Motorcycle	22	16.3	441	8.1
Moped	0	0.0	33	0.6
ATV's / 4-Wheelers	1	0.7	37	0.7
Bus	1	0.7	45	0.8
Farm Machinery, Heavy Equipment	1	0.7	7	0.1
Motor Home	0	0.0	2	0.0
Snowmobile	0	0.0	2	0.0
Bicycle	0	0.0	87	1.6
Pedestrians	9	6.7	124	2.3
Other**	0	0.0	12	0.2
Unknown	0	0.0	0	0.0
TOTAL	135	100.0	5,462	100.0

*Trucks Specifics:	<u>Fatalities</u>	<u>Injuries</u>
Straight Truck	1	43
Straight Truck with Trailer	0	4
Truck Tractor Only	0	2
Truck Tractor with Single Semi Trailer	1	64
Truck Tractor with Two or More Trailers	0	0
TOTAL	2	113

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

<sup>\*\*\*\*</sup>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.





<sup>\*\*</sup> 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 36.7 percent of the vehicles involved in fatal crashes and 51.3 percent of those involved in injury crashes. Pickups and vans made up 18.1 percent of the vehicles involved in fatal crashes.

	All Crashes		Fatal Crashes	0.4	Injury Crashes		PDO Crashes	
	No.	<u>%</u>	No.	<u>%</u>	<u>No.</u>	<u>%</u>	No.	
Passenger Cars / Mini-vans	13,185	51.8	69	36.7	3,394	51.3	9,722	52.
Pickups, Cargo Vans	4,870	19.1	34	18.1	1,082	16.3	3,754	20.
SUV's (Sports Utility Vehicles)	5,485	21.5	34	18.1	1,388	21.0	4,063	21.
Trucks (All)*	1,032	4.1	19	10.1	233	3.5	780	4.
Motorcycle	498	2.0	23	12.2	397	6.0	78	0.
Moped	32	0.1	0	0.0	31	0.5	1	0.
ATV's / 4-wheelers	43	0.2	1	0.5	36	0.5	6	0.
Bus	118	0.5	3	1.6	20	0.3	95	0.
Farm Machinery / Heavy Equip.	63	0.2	4	2.1	17	0.3	42	0.
Motor Home	21	0.1	0	0.0	5	0.1	16	0.
Snowmobile	2	0.0	0	0.0	2	0.0	0	0.
Other	15	0.1	0	0.0	3	0.0	12	0.
Unknown	91	0.4	1	0.5	11	0.2	79	0.
TOTAL	25,455	100	188	100	6,619	100	18,648	10
* Trucks Specifics:			Al <u>Crast</u>		Fatal <u>Crashes</u>	Injury <u>Crashes</u>	PD <u>Cras</u>	
Straight Truck Straight Truck with Traile Truck Tractor Only			360 94 13		1 1 0	93 10 5		3 8
Truck Tractor with Single Truck Tractor with Two			528 37		16 1	119 6	39: 3	
TOTAL			1,032		19	233	78	0

TABLE 3-4 provides information on the ages of persons killed and injured. A total of 7 people (5.2%) of the persons killed were under 20 years of age and a total of 989 or (18.1%) of the persons injured were from 25 through 34 years of age. No children age 0-5 were killed during 2013 (see Table 3-4).

TABLE 3-4
FATALITIES AND INJURIES BY AGE GROUP
2013

Total	135	100	5,462	100
Unknown	0	0.0	2	0.0
65 - Over	28	20.7	472	8.6
55 - 64	21	15.6	646	11.8
45 - 54	15	11.1	742	13.6
35 - 44	19	14.1	673	12.3
25 - 34	27	20.0	989	18.1
21 - 24	13	9.6	549	10.1
20	5	3.7	153	2.8
19	1	0.7	153	2.8
18	0	0.0	180	3.3
16 - 17	4	3.0	356	6.5
14 - 15	1	0.7	231	4.2
6 - 13	1	0.7	220	4.0
0 - 5	0	0.0	96	1.8
	No.	<u>%</u>	No.	%
	Fatalities		Injuries	

#### 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 28.9 percent of the fatal crashes and only 9.9 percent of the total crashes, while 41.3 percent of the fatal crashes and 43.4 percent of all crashes represented a collision between two or more vehicles (see TABLE 3-5).

TABLE 3-5 FIRST HARMFUL EVENT 2013											
	Total		Fatal		Injury	_	PDO				
First Harmful Event	Crashes No.	%	Crashe No.	s %	Crashe: No.	s %	Crashes No.	%			
I IIST HAITIIGI EVERIL	110.	70	110.	70	140.	/0	110.				
Motor Vehicle Collision With:											
MV in Transport	7,212	43.4	50	41.3	2,235	57.0	4,927	39.2			
A Fixed or Other Object	2,416	14.5	23	19.0	544	13.9	1,849	14.7			
An Animal	4,265	25.7	2	1.7	79	2.0	4,184	33.3			
A Pedestrian	120	0.7	8	6.6	111	2.8	1	0.0			
A Bicyclist	88	0.5	0	0.0	87	2.2	1	0.0			
A Parked Motor Vehicle	804	4.8	1	0.8	70	1.8	733	5.8			
A Railroad Vehicle	13	0.1	1	0.8	3	0.1	9	0.1			
Equipment in Roadway	55	0.3	1	0.8	15	0.4	39	0.3			
Non-Collision (Overturning or Other)	1,647	9.9	35	28.9	777	19.8	835	6.6			
Total	16,620	100	121	100	3,921	100	12,578	100			

#### Manner of Collision

The most common type of manner of collision between two or more vehicles is an angle collision. Angle collisions constitute 54.0 percent of the fatal crashes 51.7 percent of the injury crashes, and 54.6 percent of the property damage only crashes. Angle collisions are the most prevalent for severe crashes, accounting for 54.0 percent of the fatal crashes and 53.7 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
2013

Manner of Collision	Total Crashes <u>No. %</u>		Fatal Crashes <u>No. %</u>		Injury Crashes <u>No. %</u>		PDO Crashe <u>No</u> .	s <u>%</u>
Rear-End	2,704	37.5	7	14.0	952	42.6	1,745	35.4
Head-On	87	1.2	13	26.0	49	2.2	25	0.5
Angle	3,874	53.7	27	54.0	1,155	51.7	2,692	54.6
Sideswipe-Same Direction	477	6.6	3	6.0	54	2.4	420	8.5
Sideswipe-Opposite Dir.	66	0.9	0	0.0	25	1.1	41	0.8
Rear-Rear	3	0.0	0	0.0	0	0.0	3	0.1
Unknown	0	0.0	0	0.0	0	0.0	0	0.0
Total	7,211	100	50	100	2,235	100	4,926	100
No Collision Between 2 or more MV	9,409		71		1,686		7,652	
Total Crashes	16,620		121		3,921		12,578	

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.

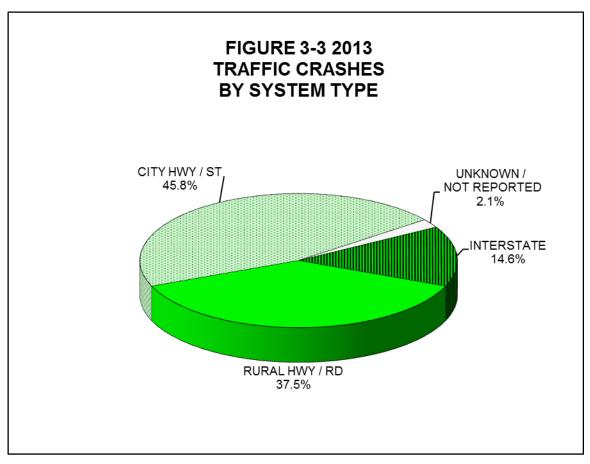
#### **Highway System**

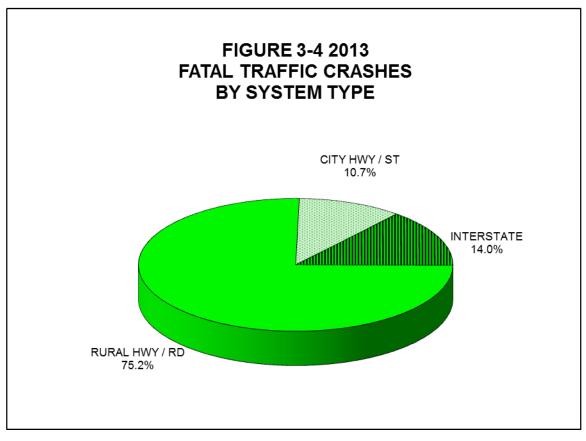
The number of reported crashes by "type of highway system" is presented in TABLE 3-7. **Fatal and PDO crashes happen predominately in rural areas.** City streets and alleys experienced 35.8 percent of the PDO crashes and 46.1 percent of the injury crashes while accounting for 9.1 percent of the fatal crashes.

Non-interstate rural roads tallied 75.2 percent of the fatal crashes. The Interstate system experienced 2,420 (14.6%) of the total crashes while accounting for an estimated 28.9 percent of the vehicle miles traveled in 2013. Seventeen or 14 percent of the fatal crashes happened on the interstate system. (See FIGURES 3-3 and 3-4)

TABLE 3-7							
<b>CRASHES BY TYPE OF HIGHWAY</b>							
2013							

Type of Highway	Total Crashes Number	<u>%</u>	Fatal Crashe <u>Numbe</u>	-	Injury Crashes <u>Number</u>	<u>%</u>	PDO Crashes Number	<u>%</u>	No. <u>Killed</u>	No. <u>Injured</u>
Interstate - Rural	1,530	9.2	11	9.1	247	6.3	1,272	10.1	14	357
US/State Hwys-Rural	3,582	21.6	50	41.3	577	14.7	2,955	23.5	56	925
Co./Local RdsRural	2,658	16.0	41	33.9	617	15.7	2,000	15.9	44	849
Interstate - City	890	5.4	6	5.0	194	4.9	690	5.5	7	263
US/State Hwys-City	1,293	7.8	2	1.7	400	10.2	891	7.1	3	543
City Streets/Alleys	6,323	38.0	11	9.1	1,808	46.1	4,504	35.8	11	2,416
Ramps	298	1.8	0	0.0	67	1.7	231	1.8	0	95
Unknown/Not Reported <b>Total</b>	46 <b>16,620</b>	0.3 <b>100</b>	0 <b>121</b>	0.0 <b>100</b>	11 <b>3,921</b>	0.3 <b>100</b>	35 <b>12,578</b>	0.3 <b>100</b>	0 <b>135</b>	14 <b>5,462</b>





#### TABLE 3-8 MOTOR VEHICLE TRAFFIC CRASHES BY SD COUNTIES 2013

	Total	Fatal	Injury	PDO		
County	<u>Crashes</u>	<u>Crashes</u>	Crashes	<u>Crashes</u>	<u>Fatalities</u>	<u>Injuries</u>
AURORA	130	4	17	109	4	25
BEADLE	309	2	75	232	2	90
BENNETT	32	1	9	22	1	16
BON HOMME	53	2	16	35	2	23
BROOKINGS	577	6	112	459	7	152
BROWN	792	2	140	650	2	191
BRULE	110	0	21	89	0	32
BUFFALO	21 166	0	8 27	13	0 1	16 34
BUTTE CAMPBELL	33	1	2	138 30	1	5 5
CHARLES MIX	93	3	22	68	5	40
CLARK	110	3	14	93	3	27
CLAY	188	2	33	153	2	44
CODINGTON	633	2	165	466	2	215
CORSON	40	2	4	34	3	5
CUSTER	239	1	74	164	1	99
DAVISON	458	1	77	380	2	107
DAY	63	4	21	38	4	31
DEUEL	141	1	19	121	1	26
DEWEY	12	2	2	8	3	3
DOUGLAS	20	0	6	14	0	10
EDMUNDS	103	0	15	88	0	24
FALL RIVER	100	2	18	80	2	27
FAULK	61	1	6	54	1	6
GRANT	156	2	32	122	2	46
GREGORY	25	2	10	13	2	12
HAAKON	13	1	3	9	1	4
HAMLIN	174	1	33	140	1	47
HAND	77	1	7	69	1	12
HANSON	86	1	15	70	1	20
HARDING	55 211	1	13 54	41	1 1	23
HUGHES HUTCHINSON	211 91	1	16	156 74	1	68 19
HYDE	12	0	1	11	0	2
JACKSON	69	0	18	51	0	25
JERAULD	53	0	3	50	0	4
JONES	73	1	11	61	1	16
KINGSBURY	152	1	13	138	1	41
LAKE	240	2	39	199	2	53
LAWRENCE	596	5	161	430	7	219
LINCOLN	752	4	190	558	4	268
LYMAN	165	3	37	125	3	57
MARSHALL	64	0	7	57	0	8
MC COOK	167	2	16	149	2	23
MC PHERSON	45	1	5	39	1	7
MEADE	422	7	93	322	7	136
MELLETTE	19	2	3	14	2	4
MINER	74	1	4	69	1	7
MINNEHAHA	4014	8	1163	2843	11	1566
MOODY	259	1	28	230	1	38
PENNINGTON	2422	8	749	1665	9	1044
PERKINS POTTER	50 64	1 0	7 7	42 57	1	9 8
ROBERTS	277	4	52	221	4	83
SANBORN	91	1	10	80	1	13
SHANNON	23	5	10	8	6	29
SPINK	186	1	23	162	1	39
STANLEY	59	Ö	9	50	0	20
SULLY	58	Ö	6	52	Ö	8
TODD	11	1	1	9	1	2
TRIPP	143	0	16	127	0	23
TURNER	78	0	13	65	0	16
UNION	145	2	38	105	2	50
WALWORTH	90	1	14	75	1	24
YANKTON	365	3	87	275	3	118
ZIEBACH	10	2	1	7	3	3
Total:	16,620	121	3,921	12,578	135	5,462

#### TABLE 3-8A ALCOHOL INVOLVED MOTOR VEHICLE TRAFFIC CRASHES BY SD COUNTIES 2013

County   Crashes   Crashes   Crashes   Crashes   Crashes   Injuries   Injur		Total	Fatal	Injury	PDO		
BEADLE							
BENNETT						· · · · · · · · · · · · · · · · · · ·	
BON HOMME 2 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1							
BROWN  99  BRULE  5  0  3  2  1  0  6  BUFFALO  3  0  2  1  0  2  5  0  2  CAMPBELL  4  0  0  0  4  0  0  0  CHARLES MIX  14  3  8  3  5  17  CLARK  4  1  1  1  2  1  2  CLAY  9  0  5  4  0  0  0  0  0  0  0  0  0  0  0  0							
BRULE  5 0 3 2 1 0 6 BUFFALO 3 0 2 1 1 0 2 BUTTE  7 0 2 5 0 2 BUTTE  7 0 0 2 5 0 0 2 BUTTE  7 0 0 2 5 0 0 2 BUTTE  14 1 1 2 1 1 2 1 2 CLAY 9 0 5 4 0 5 CORSON 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			0	17	22	0	21
BUFFALO BUTTE 7 0 2 CAMPBELL 4 0 0 0 1 CAMPBELL 4 0 0 0 0 4 0 0 0 CAMPBELL 4 0 0 0 0 4 0 0 0 0 CLARLES MIX 14 3 8 3 5 17 CLARK 4 1 1 1 2 1 2 1 2 CLAY 9 0 5 4 0 5 CODINGTON 33 1 19 13 1 23 CORSON 0 0 0 0 0 0 0 0 0 0 0 0 0 CUSTER 14 1 6 7 1 6 CANY 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			-			-	
BUTTE 7 0 0 2 5 0 0 2 CAMPBELL 4 0 0 0 4 0 0 0 CHARLES MIX 14 3 8 3 5 17 CLARK 4 1 1 1 2 1 2 1 2 CLAY 9 0 5 4 0 5 2 COSTOR 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0							
CAMPBELL 4 0 0 4 0 0 CHARLES MIX 14 3 8 8 3 5 17 CLARK 4 1 1 1 2 1 2 2 CLAY 9 9 0 5 5 4 0 0 5 CODINGTON 33 1 1 19 13 1 23 CORSON 0 0 0 0 0 0 0 0 0 0 0 0 0 CUSTER 14 1 1 6 7 1 6 EDAVISON 24 0 8 16 0 12 DAY 2 0 0 0 2 0 0 0 DEUEL 4 0 0 2 2 0 0 0 DEUEL 4 0 0 1 0 0 0 1 0 0 0 0 0 DEUEL 4 0 0 1 0 0 0 1 1 0 0 0 1 1 DOUGLAS 1 1 0 1 0 0 1 1 DOUGLAS 1 0 0 1 0 0 0 1 2 DAY 1 0 0 1 1 0 0 0 1 EDMINDS 4 0 0 3 1 1 0 3 FALL RIVER 5 1 2 2 2 1 2 2 1 2 FAULK 4 0 3 3 1 0 3 3 FALL RIVER 5 1 2 2 2 1 2 2 1 2 FAULK 4 0 3 3 1 0 3 3 GREGORY 4 1 3 3 0 1 4 4 HAMLIN 5 0 4 1 1 3 0 0 1 4 HAMLIN 5 0 4 1 1 0 4 4 HAMLIN 5 0 4 1 1 0 4 1 1 0 4 1 1 1 1 1 1 1 1 1 1							
CHARLES MIX  4 1 1 2 1 2  CLAY 9 0 5 4 0 5  CODINGTON 33 1 19 13 1 22  CORSON 0 0 0 0 0 0 0 0 0  CUSTER 14 1 1 6 7 1 6  DAYSON 24 0 8 16 0 12  DEUEL 0 0 2 2 0 0 2  DEUEL 4 0 0 2 2 2 0 0 2  DEUEL 4 0 0 1 0 0 0 1  DEUEL 4 0 0 1 0 0 0 1  DOUGLAS 1 0 1 0 0 0 1  DOUGLAS 1 0 1 0 0 0 1  DOUGLAS 1 0 0 1 0 0 0 1  DOUGLAS 1 0 1 0 0 0 1  FALLRIVER 5 1 2 2 1 2 1 2  FAULK 4 0 0 3 1 0 0 3  FALL RIVER 5 1 2 2 1 1 2  FAULK 4 0 0 3 1 0 0 3  GRANT 7 1 3 3 3 1 3 3  GRANT 7 1 3 3 3 1 3 3  GRANT 7 1 3 3 3 1 3 3  GRANT 7 1 3 3 3 1 3 3  GRANT 7 1 3 3 3 0 0 1 4  HAMKON 3 0 3 0 3 0 0 4  HAMMIN 5 0 0 1 0 0 1  HAMNON 1 0 1 0 0 0 1  HANDON 1 0 0 1 0 0 0 1  HANSON 4 0 1 1 0 0 0 1  HANSON 4 0 0 1 0 0 0 1  HANSON 4 0 0 1 0 0 0 1  HANSON 4 0 0 1 0 0 0 1  HANSON 4 0 0 1 0 0 0 1  HANSON 4 0 0 1 0 0 0 1  HANSON 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	-						
CLARK 4 1 1 1 2 1 2 CLAY 9 9 0 5 5 4 0 5 CODINGTON 33 1 199 13 1 23 CORSON 0 0 0 0 0 0 0 0 0 0 CUSTER 14 1 6 7 1 6 6 DAVISON 24 0 8 16 0 0 12 DAY 2 0 0 0 2 0 0 0 DEULEL 4 0 0 2 2 0 0 0 DEULEL 4 0 0 1 0 0 0 1 DOUGLAS 1 1 0 0 1 0 0 1 DOUGLAS 1 1 0 0 1 0 0 1 DOUGLAS 1 1 0 0 1 0 0 1 EDMUNDS 4 0 0 3 1 0 0 3 FALL RIVER 5 1 2 2 1 1 2 FALLE K 4 0 0 3 1 0 0 3 FALL RIVER 5 1 2 2 1 1 2 FAULK 4 0 0 3 1 0 0 3 GRANT 7 1 3 3 3 1 0 3 GREGORY 4 1 1 3 0 1 1 0 0 3 GREGORY 4 1 1 3 0 1 1 0 0 1 4 HAMALIN 5 0 0 4 1 1 0 0 0 4 HAMILIN 5 1 0 1 1 0 0 0 1 1 HANSON 1 1 0 0 1 0 0 1 1 HANSON 1 1 0 0 1 0 0 1 1 HANSON 1 1 0 0 0 1 1 HANSON 1 1 0 0 1 0 0 1 1 HANSON 1 1 0 0 0 1 1 HANSON 1 1 0 0 0 1 1 0 0 1 1 HANSON 1 1 0 0 1 1 0 0 0 1 HARDING 2 0 0 1 1 1 0 0 0 1 HARDING 2 1 0 1 1 0 0 0 1 HUTCHINSON 1 1 0 0 1 0 0 2 HUTCHINSON 1 1 0 0 0 2 JACKSON 3 0 2 1 0 0 2 JACKSON 3 0 2 2 1 0 0 2 JACKSON 3 0 2 2 1 0 0 2 JACKSON 3 0 0 2 2 LAWRENCE 4 7 0 2 5 5 0 2 LAWRENCE 4 7 0 0 2 5 5 0 2 LAWRENCE 4 7 0 0 0 0 0 0 0 0 MINDERHALL 1 1 0 1 0 0 1 1 MC PHERSON 0 0 0 0 0 0 0 0 0 MINDERHALL 1 1 0 1 0 0 0 1 MINDERHALL 1 1 0 1 0 0 0 0 0 0 MINDERHALL 1 1 0 1 0 0 0 0 0 0 0 MINDERHALL 1 1 0 0 1 0 0 0 0 0 0 MINDERHALL 1 1 0 1 1 0 0 0 0 0 0 0 MINDERHALL 1 1 0 1 1 0 0 0 0 0 0 MINDERHALL 1 1 0 1 1 0 0 0 0 0 0 0 MINDERHALL 1 1 0 1 1 0 0 0 0 0 0 0 MINDERHALL 1 1 0 1 1 0 0 0 0 0 0 0 MINDERHALL 1 1 0 1 1 0 0 0 0 0 0 0 MINDERHALL 1 1 0 1 1 0 0 0 0 0 0 0 MINDERHALL 1 1 0 0 0 0 0 0 0 0 0 0 0 MINDERHALL 2 2 0 0 1 1 1 0 0 0 0 0 MINDERHALL 2 2 0 0 1 1 1 0 0 0 0 0 MINDERHALL 2 2 0 0 1 1 1 0 0 0 0 0 0 MINDERHALL 2 2 0 0 1 1 1 0 0 0 0 0 0 MINDERHALL 2 2 0 0 1 1 1 0 0 0 0 0 0 MINDERHALL 2 2 0 0 0 0 0 0 0 0 0 0 0 MINDERHALL 2 2 0 0 1 1 1 0 0 0 0 0 0 MINDERHALL 2 2 0 0 1 1 1 0 0 0 0 0 0 0 0 MINDERHALL 2 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			-				
CODINGTON 33 1 199 13 1 23 CORSON 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				-			
CORSON 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	_	9	0	5		0	
CUSTER  14  1 6  DAVISON  24  0 8  16  0 12  DAY  2 0 0 0 2 0 0  DEUEL  4 0 2 2 0 0 0  DEUEL  4 0 0 1 0 2 0 0  DEUEL  5 0 0 0 1 0 0 0 0  DEUEL  6 0 0 1 0 0 0 0 0 0 0 0  DEUEL  6 0 0 0 0 0 0 0 0 0 0 0 0  DEUEL  7 0 0 0 0 0 0 0 0 0 0 0 0 0  DEUEL  8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  DEUEL  8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  DEUEL  8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0							
DAYISON							
DAY							
DEUEL							
DOUGLAS							
EDMINDS  4  0  3  1  2  FALL RIVER  5  1  2  2  1  2  FAULK  4  0  3  1  0  3  3  1  0  3  GRANT  7  1  3  3  0  1  4  HARKON  3  0  3  0  0  4  HARKON  3  0  3  0  0  4  HANLIN  5  0  4  1  1  0  1  1  0  1  1  0  1  1  0  1  1	DEWEY	1	0	1	0	0	1
FAULK 4 0 3 1 1 0 3 3 1 0 3 3 6 6 6 7 1 1 2 6 7 1 1 3 3 3 1 0 0 3 3 6 7 1 1 3 3 3 1 0 0 3 3 6 7 1 1 3 3 3 3 1 0 3 3 3 1 3 3 3 1 3 3 3 1 3 3 3 3						-	
FAULK  GRANT  7  1  3  3  1  GREGORY  4  1  3  0  1  4  HARKON  3  0  3  0  1  4  HARKON  3  0  3  0  0  4  HARKON  3  0  1  4  HAND  1  0  0							
GREGORY 4 1 3 3 3 1 3 4 4 4 1 4 4 4 1 4 4 4 4 1 4 4 4 4							
GREGORY 4 1 1 3 0 1 4 4 HAAKON 3 0 0 3 0 0 1 4 4 HAAKON 3 0 0 3 0 0 0 4 4 HAMLIN 5 0 0 4 1 1 0 0 1 4 HAMLIN 5 0 0 1 1 0 0 0 1 1 HANDD 1 1 0 0 1 1 0 0 0 1 1 HANSON 4 0 1 3 0 0 2 2 HARDING 2 0 0 1 1 1 0 0 5 6 HUGHES 13 0 5 8 8 0 6 6 HUTCHINSON 4 1 0 0 3 1 1 0 0 3 HYDE 1 1 0 0 1 0 0 2 2 JACKSON 3 0 2 1 0 0 2 2 JERAULD 1 0 0 1 0 0 2 2 JERAULD 1 0 0 1 0 0 2 2 JERAULD 1 0 0 1 0 0 2 2 JERAULD 1 0 0 1 0 0 2 2 JERAULD 1 0 0 0 1 0 0 0 1 1 0 0 0 2 2 JERAULD 1 0 0 0 1 0 0 0 1 1 0 0 0 1 1 KINGSBURY 1 0 0 0 0 1 0 0 0 1 KINGSBURY 1 0 0 0 0 1 0 0 0 1 1 0 0 0 0 1 LAKE 7 7 0 2 5 5 0 2 2 LINCOLN 55 2 2 33 30 2 35 LIYMAN 6 0 0 4 2 0 0 5 MARSHALL 1 0 0 1 0 0 0 1 1 MC PHERSON 0 0 0 0 0 0 0 0 0 0 0 MEADE 45 3 21 21 3 37 MELLETTE 4 2 2 0 0 5 MARSHALL 1 1 0 1 1 0 0 0 1 1 MC PHERSON 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0							
HAAKON	_						
HAMILN							
HANSON							
HARDING							
HUGHES							
HUTCHINSON							
HYDE							
JACKSON   3							
JERAULD							
KINGSBURY 1 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0					0		
LAKE         7         0         2         5         0         2           LAWRENCE         47         4         17         26         6         22           LINCOLN         55         2         23         30         2         35           LYMAN         6         0         4         2         0         5           MARSHALL         1         0         1         0         0         1           MC COOK         3         0         1         2         0         1           MC PHERSON         0         0         0         0         0         0           MC PHERSON         0         0         0         0         0         0         0           MC PHERSON         0         0         0         0         0         0         0         0         0           MC PHERSON         0					0		
LAWRENCE 47 4 17 26 6 22 LINCOLN 55 2 2 23 30 2 35 LYMAN 6 0 4 2 0 5 MARSHALL 1 0 1 0 1 0 0 1 MC COOK 3 0 1 2 0 0 MEADE 45 3 21 21 3 37 MELLETTE 4 2 2 2 0 0 0 0 MINNER 0 0 0 0 0 0 0 0 0 MINNEHAHA 261 1 107 153 1 142 MOODY 5 0 1 4 0 0 1 PERNINGTON 157 3 84 70 3 119 PERKINS 3 1 2 2 0 1 3 POTTER 0 0 0 0 0 0 0 0 0 0 ROBERTS 22 3 11 8 3 3 21 SANBORN 2 0 1 1 1 0 1 1 0 1 SHANNON 5 4 1 0 0 1 SHANNON 5 4 1 0 0 1 SHANNON 5 4 1 0 0 4 SPINK 7 0 2 5 0 0 SULLLY 2 0 0 0 TRIPP 9 0 3 6 0 0 TURNER 3 0 0 0 0 0 0 TRIPP 9 0 3 6 0 0 0 TURNER 3 0 0 0 0 0 0 0 TURNER 3 0 0 0 0 0 0 0 TURNER 3 0 0 0 0 0 0 0 0 TURNER 3 0 0 0 0 0 0 0 0 TURNER 3 0 0 0 0 0 0 0 0 TURNER 3 0 0 0 0 0 0 0 0 TURNER 3 0 0 0 0 0 0 0 0 TURNER 3 0 0 0 0 0 0 0 0 TURNER 3 0 0 0 0 0 0 0 0 TURNER 3 0 0 3 0 0 0 4 UNION 6 0 0 2 4 0 0 2 WALWORTH 10 1 4 5 1 8 YANKTON 31 1 14 16 1 15 ZIEBACH 1 1 1 15			-				
LINCOLN 55 2 2 33 30 2 35 LYMAN 6 0 4 2 0 5 MARSHALL 1 0 1 0 1 0 0 1 MC COOK 3 0 1 2 0 1 MC PHERSON 0 0 0 0 0 0 0 0 0 MEADE 45 3 21 21 3 3 37 MINER 0 0 0 0 0 0 0 0 0 0 MINNEHAHA 261 1 1 107 153 1 142 MOODY 5 0 1 4 0 1 PENNINGTON 157 3 84 70 3 119 PERKINS 3 1 2 0 1 3 POTTER 0 0 0 0 0 0 0 0 0 0 ROBERTS 22 3 11 8 3 21 SANBORN 2 0 1 1 3 SHANNON 5 4 1 1 0 1 1 0 1 1 8 SPINK 7 0 2 5 0 3 STANLEY 2 0 0 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1							
LYMAN         6         0         4         2         0         5           MARSHALL         1         0         1         0         0         1           MC COOK         3         0         1         2         0         1           MC PHERSON         0         0         0         0         0         0           MEADE         45         3         21         21         3         37           MELLETTE         4         2         2         0         2         3           MINNER         0         0         0         0         0         0           MINNEHAHA         261         1         107         153         1         142           MOODY         5         0         1         4         0         1         1         142         0         0 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>							
MARSHALL         1         0         1         0         0         1           MC COOK         3         0         1         2         0         1           MC PHERSON         0         0         0         0         0         0           MEADE         45         3         21         21         3         37           MELLETTE         4         2         2         0         2         3           MINRER         0         0         0         0         0         0           MINNEHAHA         261         1         107         153         1         142           MOODY         5         0         1         4         0         1         142           MOODY         5         0         1         4         0         1         142         0         1         142         0         1         142         0         1         142         0         1         142         0         1         1         142         0         1         1         1         1         1         1         3         119         1         1         3         1         1 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
MC PHERSON         0         0         0         0         0           MEADE         45         3         21         21         3         37           MELLETTE         4         2         2         0         2         3           MINNER         0         0         0         0         0         0         0           MINNER         0         0         0         0         0         0         0         0           MINNER         0         142         0         1         142         0         1         142         0         1         142         0         1         142         0         1         1         0         1         1         0         1         1         3         119         9         0         0         0         0         0         0         0         0         0         0         0         0         0							
MEADE         45         3         21         21         3         37           MELLETTE         4         2         2         0         2         3           MINNER         0         0         0         0         0         0           MINNEHAHA         261         1         107         153         1         142           MOODY         5         0         1         4         0         1         142           MOODY         5         0         1         4         0         1         142         0         1         142         0         1         142         0         1         142         0         1         142         0         1         142         0         1         142         0         1         142         0         1         142         0         1         1         3         119         19         119         19         119	MC COOK	3	0	1	2	0	1
MELLETTE         4         2         2         0         2         3           MINER         0         0         0         0         0         0           MINNEHAHA         261         1         107         153         1         142           MOODY         5         0         1         4         0         1           PENNINGTON         157         3         84         70         3         119           PERKINS         3         1         2         0         1         3         119           PERKINS         3         1         2         0         1         3         119         3         119         9         9         0         1         1         3         119         9         9         0         1         1         3         119         119         119         119         119         119         119         119         1         1         1         1         1         3         119         119         119         1         1         1         1         1         1         1         1         1         1         1         1         1         <							
MINER         0         0         0         0         0         0           MINNEHAHA         261         1         107         153         1         142           MOODY         5         0         1         4         0         1           PENNINGTON         157         3         84         70         3         119           PERKINS         3         1         2         0         1         3         119           PERKINS         3         1         2         0         1         3         119         3         119         9         0         1         1         1         0         1         1         1         0         0         1         1         0         0							
MINNEHAHA         261         1         107         153         1         142           MOODY         5         0         1         4         0         1           PENNINGTON         157         3         84         70         3         119           PERKINS         3         1         2         0         1         3         119           PERKINS         3         1         2         0         1         3         119         3         119 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>							
MOODY         5         0         1         4         0         1           PENNINGTON         157         3         84         70         3         119           PERKINS         3         1         2         0         1         3           POTTER         0         0         0         0         0         0           ROBERTS         22         3         11         8         3         21           SANBORN         2         0         1         1         0         1           SHANNON         5         4         1         0         4         8           SPINK         7         0         2         5         0         3           STANLEY         2         0         0         2         0         0           SULLY         2         0         1         1         0         2           TODD         0         0         0         0         0         0           TURNER         3         0         3         6         0         3           TURNER         3         0         2         4         0         2							
PENNINGTON         157         3         84         70         3         119           PERKINS         3         1         2         0         1         3           POTTER         0         0         0         0         0         0           ROBERTS         22         3         11         8         3         21           SANBORN         2         0         1         1         0         1           SHANNON         5         4         1         0         4         8           SPINK         7         0         2         5         0         3           STANLEY         2         0         0         2         0         0           SULLY         2         0         1         1         0         2           TODD         0         0         0         0         0         0           TRIPP         9         0         3         6         0         3           TURNER         3         0         3         0         0         4           UNION         6         0         2         4         0         2							
POTTER         0         0         0         0         0         0           ROBERTS         22         3         11         8         3         21           SANBORN         2         0         1         1         0         1           SHANNON         5         4         1         0         4         8           SPINK         7         0         2         5         0         3           STANLEY         2         0         0         2         0         0           SULLY         2         0         1         1         0         2           TODD         0         0         0         0         0         0           TRIPP         9         0         3         6         0         3           TURNER         3         0         3         0         0         4           UNION         6         0         2         4         0         2           WALWORTH         10         1         4         5         1         8           YANKTON         31         1         14         16         1         15	PENNINGTON	157	3		70		
ROBERTS         22         3         11         8         3         21           SANBORN         2         0         1         1         0         1           SHANNON         5         4         1         0         4         8           SPINK         7         0         2         5         0         3           STANLEY         2         0         0         2         0         0           SULLY         2         0         1         1         0         2           TODD         0         0         0         0         0         0         0           TRIPP         9         0         3         6         0         3         0         0         4           UNION         6         0         2         4         0         2         0         2         4         0         2         0         2         4         0         2         0         1         1         8         3         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1							
SANBORN       2       0       1       1       0       1         SHANNON       5       4       1       0       4       8         SPINK       7       0       2       5       0       3         STANLEY       2       0       0       2       0       0         SULLY       2       0       1       1       0       2         TODD       0       0       0       0       0       0       0         TRIPP       9       0       3       6       0       3       0       0       4         UNION       6       0       2       4       0       2       0       4         WALWORTH       10       1       4       5       1       8       8         YANKTON       31       1       14       16       1       15       2       1							
SHANNON         5         4         1         0         4         8           SPINK         7         0         2         5         0         3           STANLEY         2         0         0         2         0         0           SULLY         2         0         1         1         0         2           TODD         0         0         0         0         0         0         0           TRIPP         9         0         3         6         0         3         0         0         4           UNION         6         0         2         4         0         2         0         2           WALWORTH         10         1         4         5         1         8           YANKTON         31         1         14         16         1         15           ZIEBACH         1         1         0         0         2         1							
SPINK         7         0         2         5         0         3           STANLEY         2         0         0         2         0         0           SULLY         2         0         1         1         0         2           TODD         0         0         0         0         0         0         0           TRIPP         9         0         3         6         0         3         0         0         4           UNION         6         0         2         4         0         2         0         2         4         0         2         0         2         4         0         2         1         8         0         1 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
STANLEY         2         0         0         2         0         0           SULLY         2         0         1         1         0         2           TODD         0         0         0         0         0         0           TRIPP         9         0         3         6         0         3           TURNER         3         0         3         0         0         4           UNION         6         0         2         4         0         2           WALWORTH         10         1         4         5         1         8           YANKTON         31         1         14         16         1         15           ZIEBACH         1         1         0         0         2         1							
TODD         0         0         0         0         0           TRIPP         9         0         3         6         0         3           TURNER         3         0         3         0         0         4           UNION         6         0         2         4         0         2           WALWORTH         10         1         4         5         1         8           YANKTON         31         1         14         16         1         15           ZIEBACH         1         1         0         0         2         1		2			2	0	0
TRIPP       9       0       3       6       0       3         TURNER       3       0       3       0       0       4         UNION       6       0       2       4       0       2         WALWORTH       10       1       4       5       1       8         YANKTON       31       1       14       16       1       15         ZIEBACH       1       1       0       0       2       1							
TURNER     3     0     3     0     0     4       UNION     6     0     2     4     0     2       WALWORTH     10     1     4     5     1     8       YANKTON     31     1     14     16     1     15       ZIEBACH     1     1     0     0     2     1	=		-				
UNION     6     0     2     4     0     2       WALWORTH     10     1     4     5     1     8       YANKTON     31     1     14     16     1     15       ZIEBACH     1     1     0     0     2     1							
WALWORTH     10     1     4     5     1     8       YANKTON     31     1     14     16     1     15       ZIEBACH     1     1     0     0     2     1							
YANKTON     31     1     14     16     1     15       ZIEBACH     1     1     0     0     2     1						-	
ZIEBACH 1 1 0 0 2 1				•		•	
Total: 986 37 454 495 42 639	ZIEBACH	1	1	0	0	2	1
	Total:	986	37	454	495	42	639

## **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 twelve counties (see TABLE 3-9). Each of these counties reported over two percent of all rural fatal and injury crashes. These twelve counties accounted for 56 percent of rural fatal and injury crashes and 74.7 percent of all fatal and injury crashes in South Dakota. Pennington County has 10.4 percent of all rural fatal and injury crashes with Lincoln County accounting for 6.6 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 2013

County	Rural Fatal & Injury Crashes	Percent of All Rural Fatal & Injury Crashes	Percent of Rural VMTS
PENNINGTON	161	10.4%	5.6%
LINCOLN	103	6.6%	4.6%
LAWRENCE	97	6.2%	2.6%
MINNEHAHA	97	6.2%	6.7%
MEADE	73	4.7%	3.1%
BROOKINGS	66	4.2%	2.9%
CUSTER	65	4.2%	2.0%
BROWN	49	3.2%	2.9%
CODINGTON	48	3.1%	2.3%
ROBERTS	42	2.7%	2.9%
LYMAN	37	2.4%	2.6%
HAMLIN	32	2.1%	1.1%

Note: Total Rural Fatal and Injury Crashes: 1,554 S.D. Vehicle Miles of Travel Report (2013 data)

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

SD Department of Transportation – Data Inventory

HAM X 80B 8 ■VEHICLE MILES OF TRAVEL BRN FIGURE 3-5 RURAL F&I CRASHES/VMTS SELECTED COUNTIES - 2013 SNO BRO MEA ■ F&I CRASHES N N W AZ PENN 12.0% 10.0% 8.0% %0:9 4.0% 2.0% %0:0 PERCENT INVOLVEMENT

33

## **City Summary**

Reported traffic crashes within South Dakota cities (population of 2,500 and more) are presented in TABLE 3-10. These cities reported 59.9 percent of the statewide injury crashes and 13.2 percent of the fatal crashes. The two largest cities (Sioux Falls, Rapid City) accounted for 71.7 percent of fatal and injury crashes occurring in cities and 62.6 percent of the property damage only crashes.

# TABLE 3-10 TRAFFIC CRASHES SOUTH DAKOTA CITIES POPULATION 2500 AND OVER 2013

	Total	Fatal	Injury	PDO		
<u>City</u>	<u>Crashes</u>	<u>Crashes</u>	<u>Crashes</u>	<u>Crashes</u>	<u>Fatalities</u>	<u>Injuries</u>
Aberdeen	407	0	89	318	0	109
Belle Fourche	56	0	4	52	0	6
Box Elder	57	1	16	40	1	28
Brandon	72	0	12	60	0	16
Brookings	269	1	50	218	2	65
Canton	18	0	4	14	0	5
Dell Rapids	40	1	5	34	1	5
Harrisburg	10	0	2	8	0	3
Hartford	33	0	6	27	0	8
Hot Springs	45	0	9	36	0	9
Huron	154	0	53	101	0	62
Lead	13	0	2	11	0	3
Madison	64	0	18	46	0	22
Milbank	25	0	5	20	0	5
Mitchell	276	0	57	219	0	77
Mobridge	30	0	5	25	0	7
N. Sioux City	19	0	4	15	0	8
Pierre	106	0	42	64	0	54
Rapid City	1701	3	568	1130	4	789
Redfield	29	1	3	25	1	3
Sioux Falls	3567	5	1119	2443	5	1506
Sisseton	53	0	13	40	0	23
Spearfish	197	2	49	146	2	60
Sturgis	76	0	23	53	0	29
Tea	6	0	0	6	0	0
Vermillion	85	0	10	75	0	13
Watertown	422	0	117	305	0	146
Winner	22	0	2	20	0	2
Yankton	216	2	61	153	2	84
City Totals	8,068	16	2,348	5,704	18	3,147
Statewide Totals	16,620	121	3,921	1,2578	135	5,462

Note! The cities of Harrisburg, Hartford, N. Sioux City & Tea have been added to this table due to an increase 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 22.5 percent of all reported property damage only crashes and 18.3 percent of all fatal and injury crashes. Dry roads were reported in 70.7 percent of all fatal and injury crashes.

	ROAL		TABLE 3-1 SURFACE 2013		DITIONS			
	Total		Fatal		Injury		PDO	
	Crashes		Crashes		Crashes		Crashes	
	No.	%	No.	%	No.	%	No.	%
		<u>.</u>		<u>.</u>			_	
Dry	11,395	68.6	102	84.3	2,756	70.3	8,537	67.9
Wet	1,382	8.3	5	4.1	346	8.8	1,031	8.2
Snow	1,637	9.8	3	2.5	281	7.2	1,353	10.8
Slush	375	2.3	0	0.0	75	1.9	300	2.4
Ice	1,431	8.6	6	5.0	335	8.5	1,090	8.7
Frost	121	0.7	1	0.8	39	1.0	<sup>°</sup> 81	0.6
Water	8	0.0	0	0.0	3	0.1	5	0.0
Sand, mud, dirt, gravel	216	1.3	4	3.3	71	1.8	141	1.1
Oil	2	0.0	0	0.0	2	0.1	0	0.0
Other / Not applicable	16	0.1	0	0.0	9	0.2	7	0.1
Unknown / Not reported	37	0.2	0	0.0	4	0.1	33	0.3
Total	16,620	100	121	100	3,921	100	12,578	100

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

The peak three-hour period for fatal crashes was 3:00-5:59 p.m. Thirty-four or 28.1 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 1,026 (26.2%) of the injury crashes occurred. The peak three hour period for property damage only crashes was 4:00-6:59 p.m. with 2,651 (21.1%) of the property damage only crashes occurred (see TABLE 3-12).

Twenty fatal crashes or 16.5 percent and 431 (11.0%) of the injury crashes occurred during August in 2013. The month of November shows 1,713 property damage only crashes which represents 13.6 percent of the property damage only crashes for 2013 (see TABLE 3-13).

The day of the week Friday accounts for 2,769 of the total crashes or 16.7 percent, with 622 (15.9%) of injury crashes and 2,122 (16.9%) of property damage only crashes. Friday also accounted for 25 fatal crashes or 20.7 percent of the total for 2013 (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 2013									
<u>Time</u>	Total <u>Crashes</u>	Fatal <u>Crashes</u>	Injury <u>Crashes</u>	PDO <u>Crashes</u>	<u>Fatalities</u>	<u>Injuries</u>			
Midnight 1:00 AM 2:00 AM 3:00 AM 4:00 AM 5:00 AM 6:00 AM 7:00 AM 8:00 AM 9:00 AM 10:00 AM 11:00 AM 12:00 PM	267 226 211 167 166 367 633 1159 747 629 654 710 880 802	4 1 4 6 4 0 5 3 5 3 4 7 4 8	55 54 57 42 40 58 84 219 173 147 170 206 266 239	208 171 150 119 122 309 544 937 569 479 480 497 610 555	4 1 5 6 4 0 5 3 5 3 4 9 4 8	68 70 79 65 55 72 113 299 223 198 234 293 373 334			
2:00 PM 3:00 PM 4:00 PM 5:00 PM 6:00 PM 7:00 PM 8:00 PM 9:00 PM 10:00 PM 11:00 PM Unknown Total	756 1064 1092 1397 1094 840 825 865 607 395 67 <b>16,620</b>	7 9 12 13 5 3 4 3 4 0 121	241 328 334 364 204 163 144 136 107 84 6 3,921	508 727 746 1020 885 674 677 726 497 307 61 <b>12,578</b>	9 9 15 18 5 3 5 3 4 0 <b>135</b>	337 465 496 504 302 235 196 192 148 104 7 <b>5,462</b>			

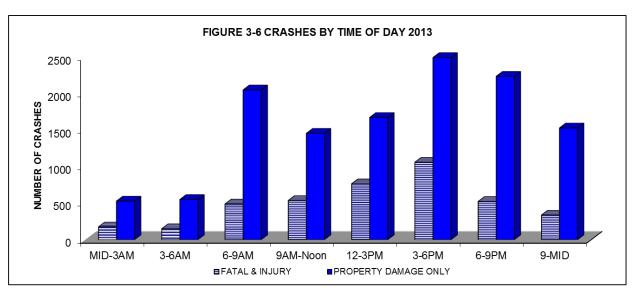
TABLE 3-13 CRASHES BY MONTH 2013

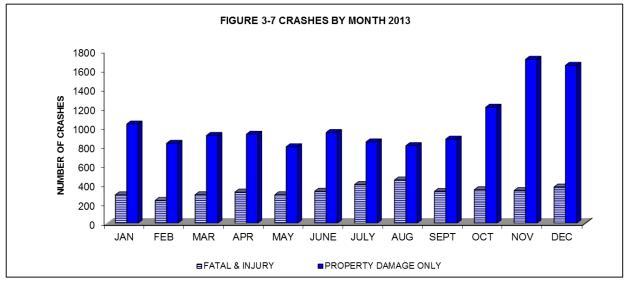
<u>Month</u>	Total <u>Crashes</u>	Fatal <u>Crashes</u>	Injury <u>Crashes</u>	PDO <u>Crashes</u>	<u>Fatalities</u>	<u>Injuries</u>
JANUARY	1,332	3	293	1,036	3	385
FEBRUARY	1,073	6	232	835	10	323
MARCH	1,214	11	286	917	11	432
APRIL	1,255	6	319	930	6	433
MAY	1,096	9	288	799	10	417
JUNE	1,282	10	324	948	11	448
JULY	1,253	12	392	849	14	560
AUGUST	1,261	20	431	810	24	605
SEPTEMBER	1,211	13	319	879	15	446
OCTOBER	1,561	9	340	1,212	9	473
NOVEMBER	2,054	15	326	1,713	15	437
DECEMBER	2,028	7	371	1,650	7	503
Total	16,620	121	3,921	12,578	135	5,462

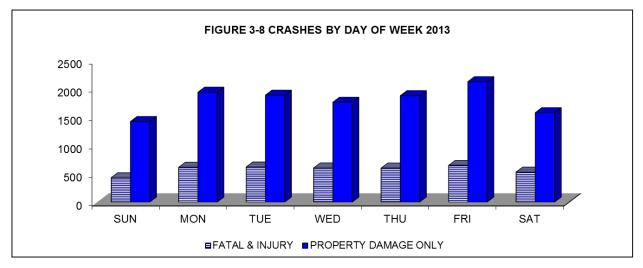
Source: SD Department of Public Safety – Office of Accident Records

TABLE 3-14
<b>CRASHES BY DAY OF WEEK</b>
2013

<u>Day</u>	Total <u>Crashes</u>	Fatal <u>Crashes</u>	Injury <u>Crashes</u>	PDO <u>Crashes</u>	<u>Fatalities</u>	<u>Injuries</u>
SUNDAY	1,851	18	412	1,421	20	592
MONDAY	2,552	12	603	1,937	14	855
TUESDAY	2,504	13	606	1,885	13	853
WEDNESDAY	2,362	11	591	1,760	13	815
THURSDAY	2,476	22	578	1,876	23	789
FRIDAY	2,769	25	622	2,122	27	836
SATURDAY	2,106	20	509	1,577	25	722
Total	16,620	121	3,921	12,578	135	5,462







## **Drivers**

In the 16,620 reported motor vehicle crashes there were 24,448 motor vehicle drivers involved, including 183 drivers in fatal crashes and 6,500 drivers in injury crashes. Of these drivers 100 were killed, which is 74.1 percent of all persons killed in motor vehicle crashes and 70.9 percent or 3,873 of the 5,462 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, 27.7 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 15.8 percent of the drivers involved in fatal crashes and 29.4 percent of the drivers in injury crashes. Drivers under the age of 35 make up 36.1 percent of the drivers in fatal crashes and 49.3 percent of the drivers in injury crashes. Fifty or 27.3 percent of the drivers in fatal crashes were 21-34 years of age (see TABLE 3-15).

		AGE	OF DRIVE	.E 3-15 RS IN ( 013	CRASHES			
	Drivers		Drivers		Drivers		Drivers	
	In All		In Fatal		In Injury		In PDO	
	Crashes		Crashes		Crashes		Crashes	
<u>Age</u>	No.	<u>%</u>	No.	%	No.	<u>%</u>	No.	%
0 - 5	0	0.0	0	0.0	0	0.0	0	0.0
	_				=		_	
6 - 13	10	0.0	0	0.0	6	0.1	4	0.0
14 - 15	634	2.6	2	1.1	191	2.9	441	2.5
16 - 17	1,402	5.7	5	2.7	413	6.4	984	5.5
18	744	3.0	1	0.5	226	3.5	517	2.9
19	735	3.0	2	1.1	197	3.0	536	3.0
20	682	2.8	6	3.3	183	2.8	493	2.8
21 - 24	2,555	10.5	13	7.1	698	10.7	1,844	10.4
25 - 34	4,719	19.3	37	20.2	1,288	19.8	3,394	19.1
35 - 44	3,409	13.9	22	12.0	892	13.7	2,495	14.0
45 - 54	3,520	14.4	26	14.2	927	14.3	2,567	14.4
55 - 64	3,140	12.8	34	18.6	799	12.3	2,307	13.0
65 - Over	2,587	10.6	33	18.0	624	9.6	1,930	10.9
Unknown	311	1.3	2	1.1	56	0.9	253	1.4
Total	24,448	100	183	100	6,500	100	17,765	100

TABLE 3-16 provides information on the age of drinking drivers in motor vehicle crashes. There were a reported 968 drinking drivers in all crashes which is 4 percent of all drivers in crashes. Thirty-three or 18 percent of drivers in fatal crashes had been drinking while 439 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 15.2 percent of the drinking drivers in fatal crashes and 29.6 percent of the drinking drivers in injury crashes. Those drivers under 35 years of age accounted for 51.5 percent of the drinking drivers in fatal crashes and 60.4 percent of the drinking drivers in all crashes.

TABLE 3-16 AGE OF DRINKING DRIVERS IN CRASHES 2013									
Drivers Drivers Drivers Drivers In All In Fatal In Injury In PDO Crashes Crashes Crashes									
<u>Age</u>	No.	%	No.	%	No.	%	No.	%	
6 – 13	2	0.2	0	0.0	1	0.2	1	0.2	
14 - 15	3	0.3	0	0.0	2	0.5	1	0.2	
16 - 17	23	2.4	0	0.0	10	2.3	13	2.6	
18	19	2.0	0	0.0	10	2.3	9	1.8	
19	35	3.6	0	0.0	18	4.1	17	3.4	
20	31	3.2	1	3.0	11	2.5	19	3.8	
21 - 24	187	19.3	4	12.1	78	17.8	105	21.2	
25 - 34	285	29.4	12	36.4	128	29.2	145	29.2	
35 - 44	154	15.9	8	24.2	60	13.7	86	17.3	
45 - 54	138	14.3	6	18.2	79	18.0	53	10.7	
55 - 64	66	6.8	2	6.1	31	7.1	33	6.7	
65 - Over	24	2.5	0	0.0	11	2.5	13	2.6	
Unknown	1	0.1	0	0.0	0	0.0	1	0.2	
Total	968	100	33	100	439	100	496	100	

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 15.3 percent of the total licensed drivers, 28.6 percent of the drinking drivers in fatal and injury crashes and 47.1 percent of the speeding drivers in fatal and injury crashes. Drivers under 35 years of age constitute 32.2 percent of all licensed drivers, with 58.3 percent of the drinking drivers and 70.3 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
2013

<u>Age</u>	Licensed Drivers %	Drivers In Fatal & In Crashes No.	jury <u>%</u>	Drinking Drivers In Fatal & In Crashes No.		Speeding Drivers In Fatal & In Crashes No.	
0 - 13	0.0	6	0.1	1	0.2	2	0.4
14 - 15	1.7	193	2.9	2	0.4	22	4.2
16 - 17	2.6	418	6.3	10	2.1	55	10.5
18	1.5	227	3.4	10	2.1	29	5.6
19	1.5	199	3.0	18	3.8	24	4.6
20	1.6	189	2.8	12	2.5	16	3.1
21 - 24	6.5	711	10.6	82	17.4	98	18.8
25 - 34	16.9	1,325	19.8	140	29.7	121	23.2
35 - 44	14.4	914	13.7	68	14.4	63	12.1
45 - 54	16.5	953	14.3	85	18.0	51	9.8
55 - 64	17.5	833	12.5	33	7.0	18	3.4
65 - Over	19.4	657	9.8	11	2.3	23	4.4
Unknown	0.0	58	0.9	0	0.0	0	0.0
TOTAL	100	6,683	100	472	100	522	100

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

SD Department of Public Safety - Driver License Issuance

55 & OVER FIGURE 3-9 DRIVERS BY AGE GROUP 2013 Fatal and Injury Crash Involved Drivers 35-54 25-34 24 & UNDER **PERCENT** 30.0% 25.0% 20.0% 20.0% 45.0% 40.0% 30.0% 10.0% %0:0 15.0% 2.0% 35.0%

Speed Invol F&I Crash

■Alc Invol F&I Crash

□All F&l Crash

□Licensed

42

Speed Invol F&I Crashes 21-24 18-20 ■Alc Invol F&I Crashes 16-17 ■All F&I Crashes ⊟Licensed 14-15 20.0% 18.0% 16.0% 14.0% 12.0% 10.0% 8.0% %0.9 4.0% 2.0% %0.0 РЕВСЕИТ

FIGURE 3-10 YOUNG DRIVERS 2013 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 2.7 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 16.6 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. Drinking and speeding were leading driver contributing circumstances in fatal crashes during 2013. It was indicated that the drinking of 23 or 12.6 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. Driving too Fast for Conditions, Running off Road, Following Too Close and Distracted Driving were other leading driver contributing circumstances in injury crashes (see TABLE 3-18).

TABLE 3-18
MOTOR VEHICLE DRIVER CONTRIBUTING CIRCUMSTANCES
2013

	Drivers i All Crash <u>No.</u>		Drivers Fatal C No.		Drivers Injury C No.		Drivers i PDO Cr <u>No</u> .	
Disregarded Traffic Signs or Signals	650	2.7	10	5.5	267	4.1	373	2.1
Distracted*	1,068	4.4	5	2.7	400	6.2	663	3.7
Drinking	573	2.3	23	12.6	262	4.0	288	1.6
Driving Too Fast for Condition	2,039	8.3	16	8.7	547	8.4	1476	8.3
Exceeded Speed Limit	331	1.4	19	10.4	184	2.8	128	0.7
Fail to Yield to Vehicle	2,890	11.8	21	11.5	936	14.4	1933	10.9
Failure to Keep in Proper Lane	502	2.1	12	6.6	155	2.4	335	1.9
Fatigued/Fell Asleep	190	8.0	2	1.1	80	1.2	108	0.6
Following Too Closely	1,221	5.0	1	0.5	404	6.2	816	4.6
Improper Backing	395	1.6	0	0.0	10	0.2	385	2.2
Improper Passing	115	0.5	2	1.1	27	0.4	86	0.5
Improper Turn	376	1.5	1	0.5	99	1.5	276	1.6
Not Stated***	3,987	16.3	0	0.0	4	0.1	3983	22.4
Other**	1,083	4.4	12	6.6	379	5.8	692	3.9
Over-correcting/Over-steering	444	1.8	16	8.7	177	2.7	251	1.4
Running Off Road	1,063	4.3	26	14.2	410	6.3	627	3.5
Swerving or Avoiding due to: wind, slippery surface, vehicle, object, non-motorist, etc.	346	1.4	2	1.1	97	1.5	247	1.4
Unknown	1,073	4.4	16	8.7	229	3.5	828	4.7
Wrong Side of Road	125	0.5	8	4.4	56	0.9	61	0.3
Total Drivers	24,448		183		6,500		17,765	

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.

<sup>\*</sup>Distracted includes cell phones, distracted driving and other electronic devices.

<sup>\*\*</sup>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.

<sup>\*\*\*</sup>Not Stated includes first harmful event of animal hit for property damage only crashes.

# **Motorcycles**

Motorcycle crashes constitute 3 percent of all crashes, 17.4 percent of all fatal crashes, and 7.3 percent of all injury crashes. There were 22 people killed and 474 injured on motorcycles in the 491 reported motorcycle crashes during 2013 (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 1.1 percent of the licensed motorcycle drivers, 3.8 percent of drivers involved in motorcycle crashes, and 8.2 percent of the speeding drivers involved in motorcycle crashes (see TABLE 3-19 and FIGURE 3-11).

<b>TABLE 3-19</b>
MOTORCYCLISTS BY AGE GROUP
2013

Age	Licensed Motorcyc		Motorcy Drivers Crashe	In	Drinkin Motorc Drivers Crashe	ycle In	Speedir Motorcy Drivers Crashes	/cle In
Group	No.	%	No.	%	No.	%	No.	%
0 - 13	0	0.0	0	0.0	0	0.0	0	0.0
14 - 15	39	0.0	4	8.0	0	0.0	0	0.0
16 - 17	273	0.3	4	8.0	0	0.0	0	0.0
18 - 19	587	0.7	12	2.3	1	2.0	4	8.2
20 - 21	990	1.2	27	5.1	0	0.0	6	12.2
22 - 23	1,424	1.7	18	3.4	3	5.9	3	6.1
24 - 25	1,823	2.2	17	3.2	4	7.8	1	2.0
26 - 27	1,964	2.4	17	3.2	0	0.0	6	12.2
28 - 29	2,263	2.7	18	3.4	1	2.0	2	4.1
30 - 31	2,326	2.8	12	2.3	0	0.0	1	2.0
32 - 36	6,068	7.4	30	5.7	1	2.0	3	6.1
37 - 41	6,355	7.7	42	8.0	6	11.8	3	6.1
42 - 51	18,153	22.1	120	22.7	21	41.2	12	24.5
52 - Over	40,048	48.7	204	38.6	14	27.5	8	16.3
Unknown	0	0.0	3	0.6	0	0.0	0	0.0
Total	82,313	100	528	100	51	100	49	100

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

SD Department of Public Safety - Driver License Issuance

37 & OVER ■ Crash Inv Speeding 30-36 FIGURE 3-11 MOTORCYCLISTS 2013 Crash Involved Motorcycle & Moped Drivers ■Crash Inv Drinking 24-29 □Crash Inv MC 18-23 ■Lic MC 17 & UNDER 90.0% 80.0% 70.0% %0.03 40.0% 20.0% %0:09 30.0% %0.0 РЕВСЕИТ

47

There were 22 motorcyclist fatalities during 2013. Twenty were motorcycle drivers and two were passengers. One driver and one passenger wore a helmet only, five drivers and one passenger wore helmet and eye protection, six drivers wore eye protection only, eight drivers did not use safety equipment. Helmets were used by 173 or 34.7 percent of the motorcycle drivers in crashes while 325 or 65.3 percent did not wear a helmet (see TABLE 3-20).

TABLE 3-20 HELMET USE BY MOTORCYCLE DRIVERS IN CRASHES 2013

	Helmet Us	sed	Helmet Not Us	sed
<u>Age</u>	No.	<u>%</u>	No.	%
06 – 13	0	0.0	0	0.0
14 - 15	2	50.0	2	50.0
16 - 17	4	100.0	0	0.0
18 - 20	8	40.0	12	60.0
21 - 24	11	28.2	28	71.8
25 - 34	25	35.2	46	64.8
35 - 44	15	19.5	62	80.5
45 - Over	108	38.3	174	61.7
Unknown	0	0.0	1	0.0
Total	173	34.7	325	65.3

Note: Percentages are row percents. Excludes unknown, not stated and other helmet usage. Helmet only and helmet & eye protection counted as used.

Eye protection only counted as not used.

## **Pedestrians**

There were nine pedestrian deaths and 124 injuries in motor vehicle crashes during 2013 (see TABLE 3-21). The youngest pedestrian killed was twenty-three years old, while the oldest was ninety years old. Of the injured pedestrians, 16.1 percent were between the ages of 5-13. Cities accounted for 89.5 percent of the pedestrian injuries, while 77.8 percent of the fatalities were rural (see TABLE 3-23). Of the nine pedestrians killed, 7 were male and 2 were female. Of the 124 pedestrians injured, 61 were male and 63 female.

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

	AGE OF PEDE	TABLE 3-21 STRIANS IN TRA 2013	FFIC CRASHES	
	Fatalities		Injuries	
<u>Age</u>	No.	<u>%</u>	No.	%
0 - 4	0	0.0	5	4.0
5 - 13	0	0.0	20	16.1
14 - 19	0	0.0	11	8.9
20 - 24	1	11.1	9	7.3
25 - 34	3	33.3	20	16.1
35 - 44	2	22.2	14	11.3
45 - 54	1	11.1	14	11.3
55 - 64	0	0.0	18	14.5
65 - Over	2	22.2	13	10.5
Total	9	100	124	100

<b>TABLE 3-22</b>
ALCOHOL INVOLVEMENT BY PEDESTRIANS
2013

Alcohol Involvement	Fatalities <u>No.</u>	<u>%</u>	Injuries <u>No</u> .	<u>%</u>
Alcohol or Drugs	5	55.6	21	16.9
No Alcohol	4	44.4	103	83.1
Unknown	0	0.0	0	0.0
Total	9	100	124	100

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

## TABLE 3-23 RURAL vs. CITY PEDESTRIAN CRASHES 2013

	<u>Fatalities</u>	<u>%</u>	<u>Injuries</u>	<u>%</u>
Rural City	7 2	77.8 22.2	13 111	10.5 89.5
Total	9	100	124	100

# **Bicycles**

During 2013 there was no bicyclist killed (see TABLE 2-9). There were 87 bicycle drivers injured in reported motor vehicle crashes during 2013 (see TABLE 3-24). The leading factor in bicycle-involved crashes was improper crossing which was reported for 29.9 percent of the injured bicycle drivers. Twenty-nine of the injured bicycle drivers in crashes had no contributing circumstances. The yearly 1993-2013 trend of bicycle fatalities and injuries is provided in TABLE 2-9.

TABLE 3-24 AGE OF BICYCLE DRIVERS IN TRAFFIC CRASHES 2013				
<u>Age</u>	Fatalities <u>Number</u>	Injuries <u>Number</u>	<u>%</u>	
0 - 4	0	0	0.0	
5 - 13	0	21	24.1	
14 - 19	0	15	17.2	
20 – 24	0	13	14.9	
25 - 34	0	16	18.4	
35 - 44	0	5	5.7	
45 - 54	0	9	10.3	
55 - 64	0	5	5.7	
65 - Over	0	3	3.4	
Total	0	87	100	

## 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 was raised to 65 miles per hour.
  - April 1, 1988 Drinking age was 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 Injuries, 2009</u>, National Safety Council)

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<sup>&</sup>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."