2018 South Dakota Motor Vehicle Traffic Crash Summary





TABLE OF CONTENTS

I.	INTRODUCTION	1
	South Dakota Statistical Summary	2
II.	HISTORICAL TRENDS	3
	Motor Vehicle Crashes	3
	Alcohol Involvement	6
	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	
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	
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	10
2-0	Under Five Years of Age	12
2-6A	Safety Restraint Usage Under 5 Years of Age	12
2-0A 2-7	Motorcycle Crashes	۱۷ ۱۵
2-7 2-8	Pedestrian Fatalities and Injuries	
2-0 2-9	Bicycle Fatalities and Injuries	
2-9 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	25
3-5	First Harmful Event	26
3-6	Manner of Collision for Crashes Involving a Collision Between	
	Two or More Motor Vehicles	27
3-7	Crashes by Type of Highway	28
3-8	Reported Traffic Crashes - South Dakota Counties	30
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	
3-13	Crashes by Month	
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	
3-10	Motorcyclists by Age Group	
3-19	Helmet Use by Motorcycle Drivers in Crashes	40
3-20 3-21		
3-21 3-22	Age of Pedestrians in Traffic Crashes	49 FA
3-22 3-23	Rural vs. City Pedestrian Crashes	
3-23 3-24	Age of Bicycle Drivers in Traffic Crashes	
J-24	Age of Dicycle Dirvers in Italiic Crashes	31

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 2018 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 2018 Traffic Crash Profile section details the crash picture for 2018 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. Copies of accident reports are available online at www.safeSD.gov for a fee of ten dollars. This fee is comprised of a \$6 convenience fee and a \$4 fee as required by SD Law §§32-34-13.1 for a copy of an accident report.

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://safesd.gov/yearly-crash-data.html

NOTE! Data Extracted on 06/06/2019. This report reflects a one day picture of CY2018 data collected, any data received after this date would not be included in this report.

SOUTH DAKOTA TRAFFIC STATISTICAL SUMMARY 2017-2018

>	NUMBER OF REPORTED MOTOR VEHICLE TRAFFIC CRASHES	<u>2017</u> 18,379	<u>2018</u> 19,091
>	AMOUNT OF MOTOR VEHICLE TRAFFIC CRASH PROPERTY DAMAGE	\$111 MILLION	\$118 MILLION
>	NUMBER OF MOTOR VEHICLE TRAFFIC CRASH INJURIES	5,319	5,011
>	NUMBER OF MOTOR VEHICLE TRAFFIC CRASH FATALITIES	129	130
>	FATALITY RATE PER 100,000,000 MILES OF TRAVEL	1.34	1.34
>	PERCENT OF DRIVERS IN FATAL CRASHES WHO HAD BEEN DRINKING	25.3%	27.7%
>	NUMBER KILLED IN ALCOHOL-RELATED CRASHES	49	54
>	NUMBER INJURED IN ALCOHOL-RELATED CRASHES	635	541
>	NUMBER OF PEDESTRIANS KILLED	10	11
>	NUMBER OF MOTORCYCLISTS KILLED	16	16
>	NUMBER OF BICYCLISTS KILLED	0	0
>	PERCENT OF LICENSED DRIVERS UNDER 25	15.0%	14.9%
>	PERCENT OF CRASH-INVOLVED SPEEDING DRIVERS UNDER 25	44.7%	44.0%
>	PERCENT OF CRASH-INVOLVED DRINKING DRIVERS UNDER 25	26.2%	27.7%
>	NUMBER OF OCCUPANTS KILLED IN MOTOR VEHICLES (EXCLUDES MOPED, MOTORCYCLE, ATV & SNOWMOBILE OCCUPANTS)	101	99
>	NUMBER OF OCCUPANTS KILLED IN MOTOR VEHICLES WHO WERE WEARING A SAFETY RESTRAINT	24	31
>	NUMBER OF UNRESTRAINED OCCUPANTS UNDER 5 YEARS OF AGE IN MOTOR VEHICLE CRASHES WHO WERE KILLED	1 10	2 15
>	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	1 3
>	ECONOMIC LOSS FROM MOTOR VEHICLE TRAFFIC CRASHES	\$447 MILLION	\$452 MILLION

II. HISTORICAL TRENDS

Motor Vehicle Crashes

The preliminary death rates per 100 million vehicle miles traveled from 2008-2017 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.

		F.	ATALIT	YRAT	LE 2-1 E COM 3-2017	IPARIS	ON			
<u>State</u>	2008	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
South Dakota	1.4	1.5	1.6	1.2	1.5	1.5	1.5	1.4	1.2	1.3
Iowa	1.3	1.2	1.2	1.2	1.2	1.0	1.0	1.0	1.2	1.0
Minnesota	0.8	0.7	0.7	0.7	0.7	0.7	0.6	0.7	0.7	0.6
Montana	2.1	2.0	1.7	1.8	1.7	1.9	1.6	1.8	1.5	1.5
Nebraska	1.1	1.2	1.0	1.0	1.1	1.1	1.2	1.2	1.1	1.1
North Dakota	1.3	1.7	1.3	1.6	1.7	1.5	1.3	1.3	1.2	1.2
Wyoming	1.7	1.4	1.7	1.5	1.3	0.9	1.6	1.5	1.2	1.3
National	1.3	1.2	1.1	1.1	1.2	1.1	1.1	1.2	1.2	1.2

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

Source: National Highway Traffic Safety Administration (NHTSA) – Fatality Analysis Reporting System (FARS)

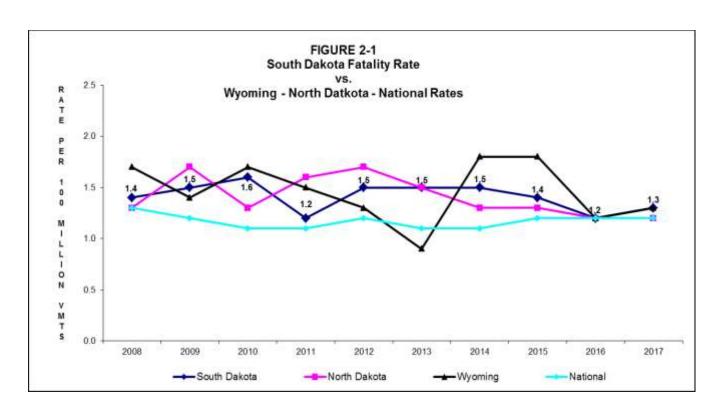


TABLE 2-2 provides a yearly comparison of South Dakota's motor vehicle traffic crashes from 1989 through 2018. Any comparison of motor vehicle crashes must be made with caution due to the changes in the definition of a reportable crash. For example, in the late 1970's the definition of a fatality caused 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 2018 death rate of 1.34 remains the same as that for 2017. The 5,011 people injured in crashes are a 5.8% decrease from the 5,319 in 2017 (see TABLE 2-2).

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

Dogistorod

									_	Registered
					Total				Miles ³	Motor
		Death		Total	Crashes	Fatal	Injury	PDO^2	Traveled	Vehicles ⁵
Year	Deaths	Rate ¹	<u>Injuries</u>	<u>Crashes</u>	<u>Rate⁴</u>	<u>Crashes</u>	Crashes	<u>Crashes</u>	+(000,000)	+(000)
1989	152	2.27	6,828	15,005	223.79	134	4,605	10,266	6,705	719
1990	153	2.19	7,261	15,073	215.67	139	4,820	10,114	6,989	698
1991	143	2.10	7,310	16,009	235.32	130	4,830	11,049	6,803	710
1992	161	2.24	7,813	17,170	238.51	141	5,112	11,917	7,199	722
1993	140	1.89	8,410	18,664	251.74	118	5,525	13,021	7,414	749
1994	154	2.02	8,540	19,408	254.30	141	5,711	13,556	7,632	805
1995	158	2.06	8,323	19,362	252.41	140	5,543	13,679	7,671	812
1996	175	2.24	8,490	21,653	277.57	142	5,653	15,858	7,801	815
1997	148	1.88	8,161	20,899	264.81	128	5,478	15,293	7,892	827
1998	165	2.05	7,723	19,735	245.49	149	5,112	14,474	8,039	837
1999	150	1.84	7,574	20,019	245.00	136	5,032	14,851	8,171	841
2000	173	2.08	7,888	19,475	234.16	150	5,252	14,073 ²	8,317	862
2001	171	2.04	7,118	17,699	211.43	154	4,888	12,657	8,371	872
2002	180	2.12	6,997	17,335	204.47	159	4,702	12,474	8,478	890
2003	203	2.43	6,944	18,018	215.99	173	4,781	13,064	8,342	909
2004	197	2.38	6,535	17,163	207.33	166	4,581	12,416	8,278	927
2005	186	2.29	6,212	16,254	200.07	158	4,346	11,750	8,124	919
2006	191	2.25	6,015	15,730	185.04	172	4,196	11,362	8,501	972
2007	146	1.72	5,782	16,220	191.25	130	4,071	12,019	8,481	971
2008	121	1.43	5,708	15,907	187.80	109	4,107	11,691	8,470	924 ⁵
2009	131	1.50	5,704	16,994	194.44	112	4,101	12,781	8,740	952
2010	140	1.58	5,801	17,626	198.92	124	4,155	13,347	8,861	992
2011	111	1.23	5,374	17,362	193.06	101	3,973	13,288	8,993	976
2012	133	1.47	5,432	16,261	179.15	118	3,887	12,256	9,077	992
2013	135	1.48	5,475	16,635	182.52	121	3,929	12,585	9,114	998
2014	136	1.49	5,090	17,346	189.45	125	3,805	13,416	9,156	1,010
2015	134	1.44	5,525	17,791	190.99	116	3,995	13,681	9,315	1,128
2016	116	1.23	5,174	17,512	185.04	103	3,831	13,578	9,464	1,031
2017	129	1.34	5,319	18,379	190.99	111	3,943	14,325	9,623	1,135
2018	130	1.34	5,011	19,091	196.77	110	3,612	15,369	9,702	1,137

FOOTNOTES

¹Number of deaths per 100 million vehicle miles traveled.

²July 1, 1978 the PDO threshold was increased to \$400 accumulated property damage.

July 1, 1986 the PDO threshold definition changed to \$500 damage to any one person's property or \$1000 accumulated property damage per crash.

July 1, 2000 the PDO threshold definition changed to \$1,000 damage to any one person's property or \$2,000 accumulated property damage per crash.

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

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

⁴Number of crashes per 100 million vehicle miles traveled.

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

Alcohol Involvement

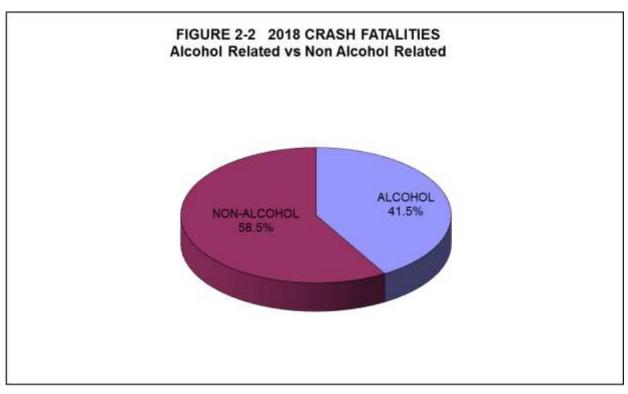
When comparing records dating back to 1979, 29.7% alcohol involved fatal crashes for 2011 is the lowest. Of the 130 traffic fatalities during 2018, 45 or 40.9% were alcohol related (see Table 2-3). Alcohol statistics dating back to the 1970's show 2011 to have the lowest number of alcohol related

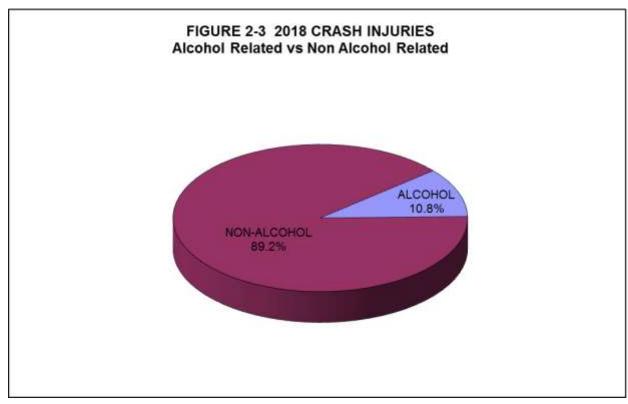
fatalities for any one-year period (37). The highest number is 138 for the year of 1973.

ALCOH	IOL INVOLV	ED CRAS	ABLE 2-3 HES AS PE 2012-2018	ERCENT O	F ALL CRA	ASHES	
Total Crashes	2012	2013	2014	2015	2016	2017	2018
	6.1%	5.9%	5.8%	6.1%	5.5%	5.6%	5.2%
	(988)	(986)	(1002)	(1086)	(962)	(1032)	(1001)
Fatal Crashes	38.1%	30.6%	35.2%	36.2%	45.6%	40.5%	40.9%
	(45)	(37)	(44)	(42)	(47)	(45)	(45)
Injury Crashes	12.5%	11.6%	11.2%	12.3%	10.7%	11.8%	11.2%
	(486)	(454)	(426)	(492)	(411)	(467)	(404)
PDO Crashes	3.7%	3.9%	4.0%	4.0%	3.7%	3.6%	3.6%
	(457)	(495)	(532)	(552)	(504)	(520)	(552)
Fatalities	39.8%	31.1%	34.6%	36.6%	47.4%	38.0%	41.5%
	(53)	(42)	(47)	(49)	(55)	(49)	(54)
Injuries	13.3%	11.7%	11.5%	13.0%	11.4%	11.9%	10.8%
	(721)	(639)	(583)	(721)	(589)	(635)	(541)

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 12-2018		ASHES E	BY AGE	
<u>AGE</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
0 – 5	2	0	1	0	1	1	0
6 - 12	2	0	0	0	0	0	1
13 - 19	4	0	4	3	8	3	6
20	3	1	2	1	1	0	1
21 - 29	14	17	12	9	21	16	16
30 - 39	10	8	11	11	11	11	9
40 - 49	7	9	6	6	5	6	6
50 - 59	8	6	8	13	4	7	8
60 & OLDER	3	1	3	5	4	5	7
Unknown/Not Stated	0	0	0	0	0	0	0
TOTAL	53	42	47	48	55	49	54
Source: SD Department of I	Public Safe	ty: Office o	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 12.3% while non-alcohol related fatal and injury crashes decreased by 7.6% from the 2017 totals.

The number of DWI arrests increased by 1.0% from 2017.

TABLE 2-4
CRASH AND ARREST ACTIVITY
2009- 2018

	FATAL	. CRASHES	FATAL & IN	JURY CRASHES		
	ALCOHOL	NONALCOHOL	ALCOHOL	NONALCOHOL	DWI 1	DWI ¹
	RELATED	RELATED	RELATED	RELATED	<u>ARRESTS</u>	CONVICTIONS
2009	51	61	525	3,688	10,147	8,899
2010	44	80	492	3,787	9,246	8,187
2011	30	71	487	3,587	8,744	7,455
2012	45	73	531	3,474	9,194	8,264
2013	37	84	491	3,551	8,683	7,965
2014	44	81	470	3,460	9,450	7,146
2015	41	74	533	3,577	9,271	6,835
2016	47	56	458	3,476	10,166	7,280
2017	45	66	512	3,542	10,514	7,544
2018	45	65	449	3,273	10,619	8,057

Note: [1] - Based on South Dakota Courts - The State of the Judiciary and Fiscal Year 2018 Annual Report of the

S. D. Unified Judicial System - Based on Fiscal Year statistics.

DWI Convictions are guilty pleas, plus suspended impositions, plus convictions at trial.

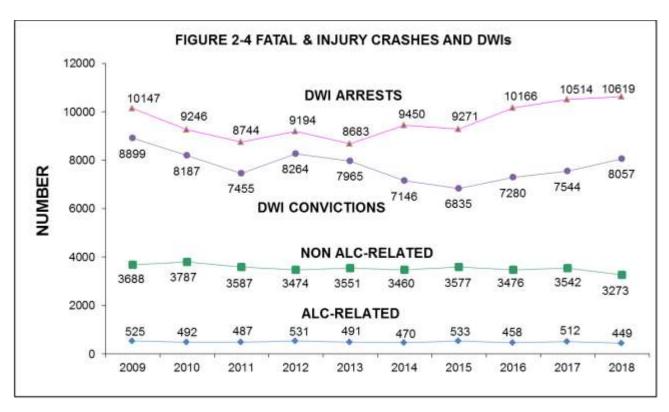
FIGURE 2-4 presents the annual counts of DWI arrests, alcohol related fatal and injury crashes, and non-alcohol related fatal and injury crashes from 2009 through 2018.

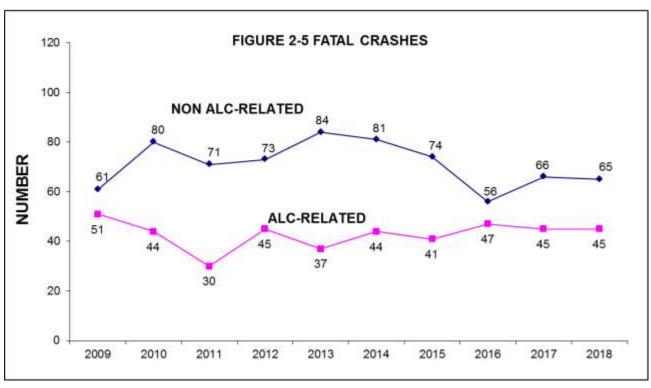
FIGURE 2-5 presents the alcohol related and non-alcohol related fatal crash experience for the years of 2009 through 2018.

There were 45 alcohol related fatal crashes during 2018, which compares to 45 in 2017. The previous three-year average was 44 for the years of 2015-2017.

There were 449 alcohol related fatal and injury crashes during 2018, which compares to 512 in 2017. The previous three-year average was 501 or a 10.4 percent decrease in 2018. Non-alcohol related fatal and injury crashes in 2018 decreased (7.6%) when compared to 2017 and decreased 7.3 percent from the previous three-year average (2015-2017).

There were 10,619 DWI arrests in fiscal year 2018. This level has gone up 6.4% from the previous three-year average (2015-2017). There were 8,057 DWI convictions in fiscal year 2018. This level has gone up 11.6% from the previous 3-year average (2015-2017).





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

Forty-seven (47.5%) of the 99 killed occupants were either partially or totally ejected from the vehicle. (See TABLE 2-5B)

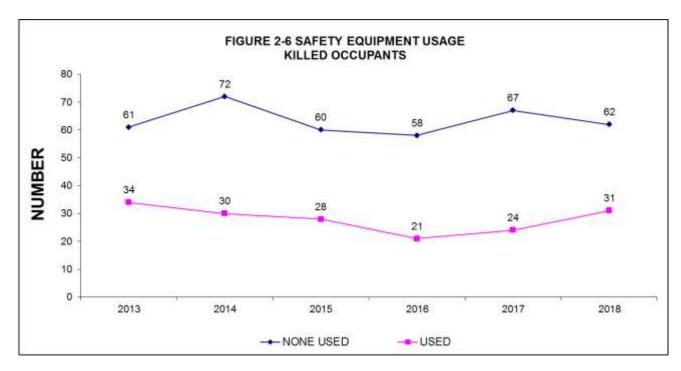
TABLE 2-5 SAFETY RESTRAINT USAGE – KILLED OCCUPANTS								
	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>		
No Safety Equipment	61	72	60	58	67	61		
Lap Belt Only	1	2	1	2	1	1		
Shoulder Harness Only	0	0	1	1	0	0		
Lap Belt & Shoulder Harness	33	28	26	18	22	28		
Child Restraint Used Properly	0	0	0	0	1	2		
Child Restraint Not Properly Used	0	0	0	0	0	1		
Other, Not Stated or Unknown	8	4	7	4	10	6		
TOTAL	103	106	95	83	101	99		

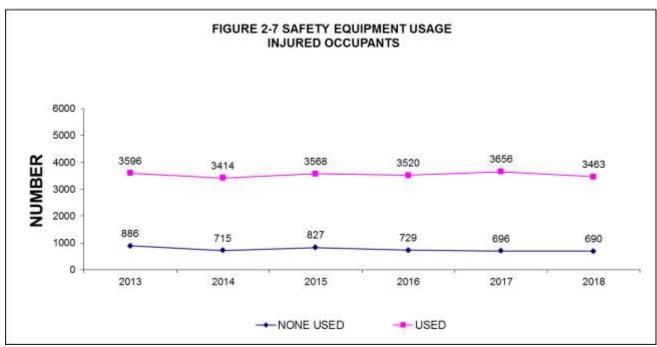
	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
No Safety Equipment	884	712	825	728	693	684
Lap Belt Only	39	35	52	39	42	123
Shoulder Harness Only	21	22	23	18	16	16
Lap Belt & Shoulder Harness	3,476	3,309	3,442	3,410	3,547	3,270
Child Restraint Used Properly	60	48	51	53	51	54
Child Restraint Not Properly Used	2	3	2	1	3	6
Other, Not Stated or Unknown	243	250	278	248	299	269
TOTAL	4,725	4,379	4,673	4,497	4,651	4,422

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 & 2-5A

TABLE 2-5B KILLED & INJURED MOTOR VEHICLE OCCUPANTS BY EJECTION STATUS (Excludes Motorcycle, Mopeds, ATVs and Snowmobiles)													
KILLED						Ī			INJU	RED			
	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u> 2017</u>	<u>2018</u>		<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
Not Ejected	61	65	57	40	60	52		4,613	4,287	4,552	4,373	4,539	4,312
Partial Ejection	6	5	3	7	9	6		14	16	20	14	15	5
Total Ejection	35	36	34	36	31	41		89	67	84	91	70	92
Unknown Ejection	1	0	1	0	1	0		9	9	16	17	27	13
Not Applicable	0	0	0	0	0	0		0	0	1	2	0	0
TOTAL	103	106	95	83	101	99		4,725	4,379	4,673	4,497	4,651	4,422





The Child Passenger Restraint System (SDCL 32-37) law took effect on July 1, 1984 - since that time there have been 75 deaths to occupants of this age group. Of these deaths only 10 were reported to have been restrained by a child safety restraint properly used, six 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 five reported fatal injury to a motor vehicle occupant from birth through four years of age during 2018, which compares to two fatalities during 2017 (see TABLE 2-6).

There were 65 children (birth through 4 years old) injured in 2018, which compares to 53 for 2017. Forty-nine of the 65 injured children were restrained by either a lap belt only, lap belt 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>	FATALITIES	<u>INJURY</u>	<u>INJURY</u>	<u>INJURIES</u>
2008	3	26	46	72
2009	2	24	55	79
2010	1	33	50	83
2011	0	25	41	66
2012	4	36	39	75
2013	0	36	39	75
2014	3	15	40	55
2015	1	21	27	48
2016	1	28	35	63
2017	2	22	31	53
2018	5	22	43	65

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 - 2018

	<u>Fatalities</u>	<u>Injuries</u>
No Safety Equipment Used	1	12
Lap Belt Only	1	3
Shoulder Harness Only	0	0
Lap Belt & Shoulder Harness	0	4
Child Restraint Used Properly	2	42
Child Restraint Not Used Properly	1	3
Other, Not Stated or Unknown	0	1
TOTAL	5	65

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 past 10 years, the average number of motorcycle-involved crashes is 495 and 21 deaths per year. Licensed motorcyclists increased 2.1 percent during 2018 while fatalities remained the same with 16 (see Table 2-7). Moped crashes are included with motorcycle crashes. There were no moped fatalities during 2018. Over the years there have been five moped fatalities and the number of injuries is small. See pages 46-51 for additional motorcycle, pedestrian, and bicycle crash information.

TABLE 2-7 MOTORCYCLE CRASHES 1998 - 2018								
	Moto	orcycle Cr	ashes	Motor	cyclists	Registered	Licensed	
<u>Year</u>	Total	Fatal	<u>Injury</u>	<u>Fatalities</u>	Injuries	Motorcycles	<u>Motorcyclists</u>	
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	
2014	470	17	401	17	473	78,380	83,623	
2015	598	30	485	31	614	91,452	85,513	
2016	475	22	387	22	450	94,696	87,027	
2017	433	16	351	16	408	96,653	88,168	
2018	394	16	304	16	363	99,750	90,032	

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TABLE 2-8 PEDESTRIAN FATALITIES AND INJURIES 1998 - 2018

<u>Year</u>	<u>Fatalities</u>	<u>Injuries</u>
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
2014	9	101
2015	5	95
2016	6	93
2017	10	123
2018	11	93

TABLE 2-9 BICYCLE FATALITIES AND INJURIES 1998 - 2018

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

<u>Year</u>	<u>Fatalities</u>	<u>Injuries</u>
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
2014	2	77
2015	1	90
2016	0	73
2017	0	69
2018	0	80

Holiday Counts

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

TABLE 2-10 CRASHES DURING HOLIDAYS 2009- 2018							
<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							
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	
2014	78	123	4	24	6	34	
2015	78	118	3	16	4	24	
2016	78	121	0	31	0	37	
2017	78	128	2	22	6	30	
2018	78	112	1	25	1	35	
FOURTH OF JULY							
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	
2014	78	123	3	32	3	37	
2015	78	127	3	33	3	49	
2016	78	131	2	33	2	47	
2017	102	198	2	49	3	70	
2018	30	57	1	12	5	18	
LABOR DAY							
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	
2014	78	110	0	35	0	42	
2015	78	129	2	36	2	54	
2016	78	106	1	31	1	46	

<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						
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
2014	102	201	2	26	2	37
2015	102	243	2	39	2	61
2016	102	191	1	23	2	28
2017	102	262	2	31	3	38
2018	102	281	2	27	3	35
CHRISTMAS						
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
2014	102	219	4	42	5	65
2015	78	150	0	18	0	31
2016	78	119	1	23	1	33
2017	78	129	2	19	2	30
2018	102	173	2	31	2	48
NEW YEARS						
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
2014-15	102	210	0	44	0	57
2015-16	78	138	1	35	1	47
2016-17	78	158	2	26	2	37
2017-18	78	211	0	26	0	35
2018-19	102	299	1	41	1	51

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 2009 through 2018. 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 Injuries	ting	Non-Incap	acitating	Possible Injuries		Total	Total
Year	No.	%	No.	%	No.	%	Injuries	Killed
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
2014	738	14.5	1,826	35.9	2,526	49.6	5,090	136
2015	803	14.5	2,071	37.5	2,651	48.0	5,525	133
2016	692	13.4	1,892	36.6	2,590	50.1	5,174	116
2017	649	12.2	1,850	34.8	2,820	53.0	5,319	129
2018	570	11.4	1,819	36.3	2,622	52.3	5,011	130

Note: This table also includes operators of other road vehicle type units (i.e.: Animal-drawn veh, emergency response units & motor vehicles used as equipment—snowplows, construction/maintenance vehicles, road graders, etc.) (See Table 3-1)

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

	Incapacita	iting	Non-Incapacitating Possible					
	Injuries		Injuries		Injuries		Total	Total
<u>Year</u>	No.	%	No.	%	No.	%	<u>Injuries</u>	<u>Killed</u>
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
2014	527	14.0	1,303	34.7	1,923	51.2	3,753	97
2015	538	13.2	1,479	36.4	2,044	50.3	4,061	95
2016	464	11.9	1,396	35.8	2,036	52.3	3,896	86
2017	454	11.4	1,313	33.0	2,214	55.6	3,981	91
2018	385	10.4	1,318	35.5	2,013	54.2	3,716	89

TABLE 2-13 FATALITIES AND SEVERITY OF INJURIES OF TOTAL PASSENGERS									
	Incapacita	ting	Non-Incapa	acitating	Possible				
	Injuries		Injuries		Injuries		Total	Total	
<u>Year</u>	No.	%	No.	%	No.	%	<u>Injuries</u>	<u>Killed</u>	
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	
2014	171	14.8	441	38.2	542	47.0	1,154	28	
2015	229	18.1	492	38.8	547	43.1	1,268	32	
2016	194	17.7	413	37.6	492	44.8	1,099	24	
2017	154	13.5	439	38.6	544	47.8	1,137	28	
2018	148	13.2	431	38.3	546	48.5	1.125	30	

Year No. % No. % No. % Injuries K 2009 13 13.5 47 49.0 36 37.5 96 2010 10 9.5 52 49.5 43 41.0 105	TABLE 2-14 FATALITIES AND SEVERITY OF INJURIES OF TOTAL BICYCLE DRIVERS									
Year No. % No. % No. % Injuries K 2009 13 13.5 47 49.0 36 37.5 96 2010 10 9.5 52 49.5 43 41.0 105										
2009 13 13.5 47 49.0 36 37.5 96 2010 10 9.5 52 49.5 43 41.0 105	Total									
2010 10 9.5 52 49.5 43 41.0 105	<u>Cilled</u>									
	0									
	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									
2014 9 12.0 42 56.0 24 32.0 75	2									
2015 9 10.0 53 58.9 28 31.1 90	1									
2016 6 8.2 38 52.1 29 39.7 73	0									
2017 6 8.7 34 49.3 29 42.0 69	0									
2018 9 12.5 32 44.4 31 43.1 72	0									

TABLE 2-15 FATALITIES AND SEVERITY OF INJURIES OF TOTAL PEDESTRIANS									
	Incapacitating		Non-Incapacitating		Possible				
	Injuries		Injuries		Injuries		Total	Total	
<u>Year</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>Injuries</u>	<u>Killed</u>	
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	
2014	30	29.7	37	36.6	34	33.7	101	9	
2015	26	27.4	41	43.2	28	29.5	95	5	
2016	24	25.8	40	43.0	29	31.2	93	6	
2017	34	27.6	59	48.0	30	24.4	123	10	
2018	27	29.0	37	39.8	29	31.2	93	11	

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 2008 - 2018

		ASH INVO	LVED DRIV	ERS MALE	MALI		ED DRIVERS FEMA	<u>ERS</u> FEMALE	
	No.	<u>%</u>	No.	%	No.	<u>%</u>	No.	<u>%</u>	
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	
2014	14,950	59.0	10,402	41.0	312,671	50.4	307,682	49.6	
2015	15,209	58.6	10,733	41.4	318,195	50.4	312,869	49.6	
2016	14,866	58.6	10,485	41.4	320,646	50.5	314,772	49.5	
2017	15,537	58.0	11,274	42.0	323,027	50.5	316,963	49.5	
2018	16,353	57.6	12,016	42.4	328,360	50.5	321,961	49.5	

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. 2018 MOTOR VEHICLE CRASH PROFILE

Introduction

This section profiles the reported motor vehicle traffic crashes for 2018. 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 2018, there were 19,091 reported motor vehicle traffic crashes, the majority of crashes being property damage only 15,369 (80.5%). Injury crashes accounted for 3,612 (18.9%) of the crashes, while 110 (0.6%) were fatal crashes. There were 5,011 persons injured and 130 persons killed in crashes during 2018 (see TABLE 3-1).

				EVERITY ESTRIA	LE 3-1 Y OF INJU INS, AND 118			•		
	Non- Incapacitating Incapacitating Injuries Injuries			Possib Injuries	_	Total Nonfata Injuries		Total Fatalities		
	No.	<u>%</u>	No.	%	No.	%	No.	%	No.	9
Drivers	385	67.5	1,318	72.5	2,013	76.8	3,716	74.2	89	68.
Passengers	148	26.0	431	23.7	546	20.8	1,125	22.5	30	23.
Pedestrians	27	4.7	37	2.0	29	1.1	93	1.9	11	8.
Bicycle Drv	9	1.6	32	1.8	31	1.2	72	1.4	0	0.0
Other*	1	0.2	1	0.1	3	0.1	5	0.1	0	0.
TOTAL	570	100	1,819	100	2,622	100	5,011	100	130	10

^{*}Other – 5 injuries were sustained by operators of other road vehicle types (see Table 2-1 definition).

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 2018, 36.9 percent of the fatalities and 43 percent of the injuries occurred to occupants of passenger cars and mini-vans. Occupants of pickups and cargo vans accounted for 13.1 percent of the fatalities and 16.1 percent of the injuries. Additionally, in 2018 sixteen motorcyclists and eleven pedestrians were killed. (See Table 3-2).

	Fatalities No.	<u>%</u>	Injuries <u>No</u> .	%	
Passenger Cars, Mini-vans	48	36.9	2,153	43.0	
Pickups, Cargo Vans***	17	13.1	807	16.1	
SUV's (Sports Utility Vehicles)	29	22.3	1,282	25.6	
Trucks (All)*	5	3.8	124	2.5	
Motorcycle	16	12.3	352	7.0	
Moped	0	0.0	11	0.2	
ATV's / 4-Wheelers	4	3.1	39	0.8	
Bus	0	0.0	59	1.2	
Farm Machinery, Heavy Equipment	0	0.0	6	0.1	
Motor Home	0	0.0	1	0.0	
Snowmobile	0	0.0	0	0.0	
Bicycle	0	0.0	80	1.6	
Pedestrians	11	8.5	93	1.9	
Other**	0	0.0	4	0.1	
Unknown	0	0.0	0	0.0	
TOTAL	130	100	5,011	100	
*Trucks Specifics:			<u>Fatalities</u>	<u>Injuri</u>	
Straight Truck			3	29	
Straight Truck with Trailer			0	8	
Truck Tractor Only Truck Tractor with Single Ser	ni Trailer		0 2	82	
Truck Tractor with Single Ser Truck Tractor with Two or Mo			2		

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

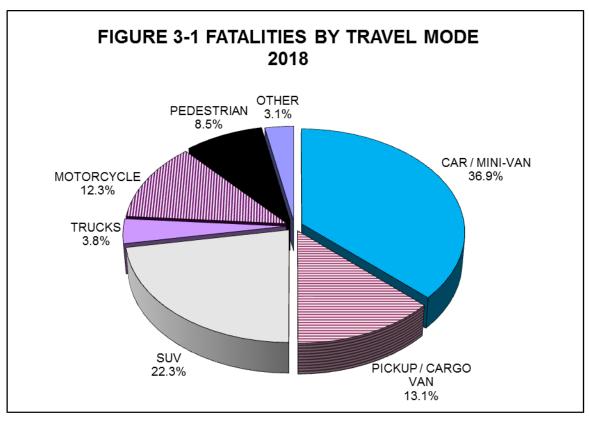
Source: SD Department of Public Safety - Office of Accident Records

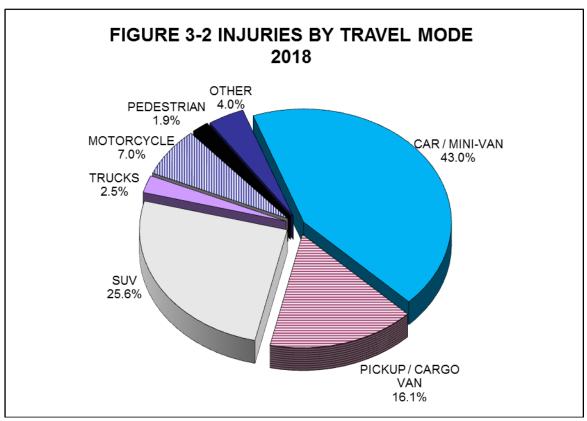
TOTAL

124

5

^{****}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.





^{**} Other includes ATVs, 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 33.1 percent of the vehicles involved in fatal crashes and 44.1 percent of those involved in injury crashes. Pickups and vans made up 17.6 percent of the vehicles involved in fatal crashes, while SUV's made up 20.3 percent those involved in fatal crashes and 26.5 percent in injury crashes.

	All Crashes	;	Fatal Crashes		Injury Crashe	es	PDO Crashes	
	No.	<u>%</u>	No.	<u>%</u>	No.	<u>%</u>	No.	(
Passenger Cars / Mini-vans	13,599	45.1	49	33.1	2,776	44.1	10,774	45.
Pickups, Cargo Vans	6,262	20.8	26	17.6	1,221	19.4	5,015	21.
SUV's (Sports Utility Vehicles)	8,391	27.8	30	20.3	1,669	26.5	6,692	28
Trucks (All)*	1,093	3.6	22	14.9	209	3.3	862	3.
Motorcycle	428	1.4	17	11.5	326	5.2	85	0
Moped	13	0.0	0	0.0	12	0.2	1	0
ATV's / 4-wheelers	46	0.2	3	2.0	32	0.5	11	0
Bus	138	0.5	1	0.7	24	0.4	113	0
Farm Machinery / Heavy Equip.	51	0.2	0	0.0	16	0.3	35	0
Motor Home	27	0.1	0	0.0	3	0.0	24	0
Snowmobile	0	0.0	0	0.0	0	0.0	0	0
Other	10	0.0	0	0.0	1	0.0	9	0
Unknown	85	0.3	0	0.0	3	0.0	82	0
TOTAL	30,143	100	148	100	6,292	100	23,703	10
			Al		Fatal	Injury	PDO	
<u>* Trucks Specifics</u> : Straight Truck			<u>Crasl</u> 248		<u>Crashes</u> 6	Crashes 45	<u>Crasl</u> 19	
Straight Truck with Traile	er		50		2	43	4	
Truck Tractor Only	o Com: Tr	a:la#	35		1	5	29	
Truck Tractor with Single Truck Tractor with Two			710 50		11 2	146 9	553 39	
TOTAL			1,093		22	209	862	2

TABLE 3-4 provides information on the ages of persons killed and injured. A total of 21 people or (16.2%) of the persons killed were under 20 years of age and a total of 931 or (18.6%) of the persons injured were between 25 and 34 years of age.

Five children age 0-5 were killed during 2018 (see Table 3-4).

TABLE 3-4
FATALITIES AND INJURIES BY AGE GROUP
2018

	Fatalities		Injuries	
	No.	%	, <u>No</u> .	%
0 - 5	5	3.8	89	1.8
6 - 13	2	1.5	225	4.5
14 - 15	0	0.0	187	3.7
16 - 17	4	3.1	244	4.9
18	6	4.6	121	2.4
19	4	3.1	136	2.7
20	3	2.3	126	2.5
21 - 24	9	6.9	453	9.0
25 - 34	22	16.9	931	18.6
35 - 44	16	12.3	677	13.5
45 - 54	14	10.8	647	12.9
55 - 64	14	10.8	585	11.7
65 - Over	31	23.8	588	11.7
Unknown	0	0.0	2	0.0
Total	130	100	5,011	100

First Harmful Event

The initial incident that causes injury or damage is referred to as the first harmful event. Non-collision (overturning or other non-collision) represented 30 percent of the fatal crashes and only 6.3 percent of the total crashes, while 30.9 percent of the fatal crashes and 47.5 percent of all crashes represented a collision between two or more vehicles (see TABLE 3-5).

TABLE 3-5 FIRST HARMFUL EVENT 2018									
	PDO								
	Crashes	07	Crash		Crashe		Crashes	0/	
First Harmful Event	No.	<u>%</u>	No.	<u>%</u>	No.	<u>%</u>	No.	<u>%</u>	
Motor Vehicle Collision With:									
MV in Transport	9,077	47.5	34	30.9	2,193	60.7	6,850	44.6	
A Fixed or Other Object	2,831	14.8	29	26.4	564	15.6	2,238	14.6	
An Animal	4,723	24.7	3	2.7	83	2.3	4,637	30.2	
A Pedestrian	93	0.5	11	10.0	82	2.3	0	0.0	
A Bicyclist	75	0.4	0	0.0	71	2.0	4	0.0	
A Parked Motor Vehicle	1,051	5.5	0	0.0	100	2.8	951	6.2	
A Railroad Vehicle	7	0.0	0	0.0	1	0.0	6	0.0	
Equipment in Roadway	38	0.2	0	0.0	6	0.2	32	0.2	
Non-Collision (Overturning									
or Other)	1,196	6.3	33	30.0	512	14.2	651	4.2	
Total	19,091	100	110	100	3,612	100	15,369	100	
Source: SD Department of Public	Safety – Of	fice of Ac	cident Re	ecords					

Manner of Collision

The most common type of manner of collision between two or more vehicles is an angle collision. Angle collisions constitute 58.8 percent of the fatal crashes, 51.2 percent of the injury crashes and 46.8 percent of the property damage only crashes. Angle collisions are the most prevalent for severe crashes, accounting for 58.8 percent of the fatal crashes and 47.9 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
2018

Manner of Collision	Total Crashes No.	<u>%</u>	Fatal Crashes <u>No</u> .	%	Injury Crashe <u>No</u> .	es <u>%</u>	PDO Crashes No.	s <u>%</u>
Rear-End	3,645	40.2	5	14.7	936	42.7	2,704	39.5
Head-On	71	0.8	5	14.7	27	1.2	39	0.6
Angle	4,348	47.9	20	58.8	1,123	51.2	3,205	46.8
Sideswipe-Same Direction	868	9.6	2	5.9	78	3.6	788	11.5
Sideswipe-Opposite Dir.	140	1.5	2	5.9	29	1.3	109	1.6
Rear-Rear	5	0.1	0	0.0	0	0.0	5	0.1
Unknown	0	0.0	0	0.0	0	0.0	0	0.0
Total	9,077	100	34	100	2,193	100	6,850	100
No Collision Between 2 or								
more MV	10,014		76		1,419		8,519	
Total Crashes	19,091		110		3,612		15,369	

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.

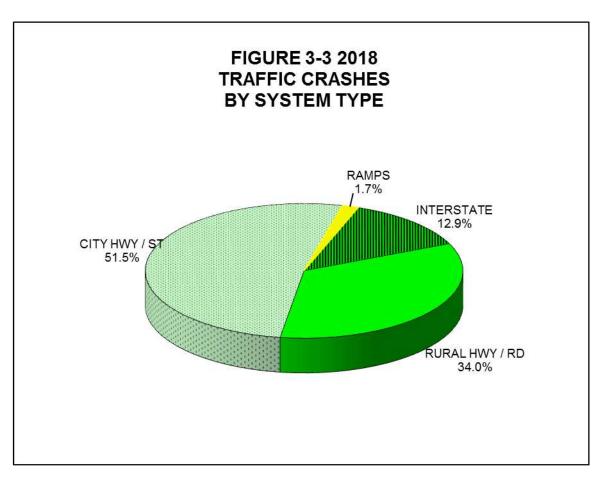
Highway System

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 42.2 percent of the PDO crashes and 49.2 percent of the injury crashes while accounting for 7.3 percent of the fatal crashes.

Non-interstate rural roads tallied 75.5 percent of the fatal crashes. The Interstate system experienced 2,453 (12.8%) of the total crashes while accounting for an estimated 29.6 percent of the vehicle miles traveled in 2018. Fourteen or 12.7 percent of the fatal crashes happened on the interstate system. (See FIGURES 3-3 and 3-4)

TABLE 3-7							
CRASHES BY TYPE OF HIGH	WAY						
2018							

Type of Highway	Total Crashes Number	<u>%</u>	Fatal Crashe Numbe		Injury Crashes <u>Number</u>	<u>%</u>	PDO Crashes Number	%	No. <u>Killed</u>	No. <u>Injured</u>
Interstate - Rural	1,770	9.3	13	11.8	242	6.7	1,515	9.9	14	363
US/State Hwys-Rural	3,819	20.0	55	50.0	533	14.8	3,231	21.0	71	807
Co./Local RdsRural	2,673	14.0	28	25.5	544	15.1	2,101	13.7	31	769
Interstate - City	683	3.6	1	0.9	98	2.7	584	3.8	1	127
US/State Hwys-City	1,564	8.2	4	3.6	347	9.6	1,213	7.9	4	510
City Streets/Alleys	8,263	43.3	8	7.3	1,776	49.2	6,479	42.2	8	2,337
Ramps	319	1.7	1	0.9	72	2.0	246	1.6	1	98
Unknown/Not Reported	0	0.0	0	0.0	0	0.0	0	0.0	0	0
Total	19,091	100	110	100	3,612	100	15,369	100	130	5,011



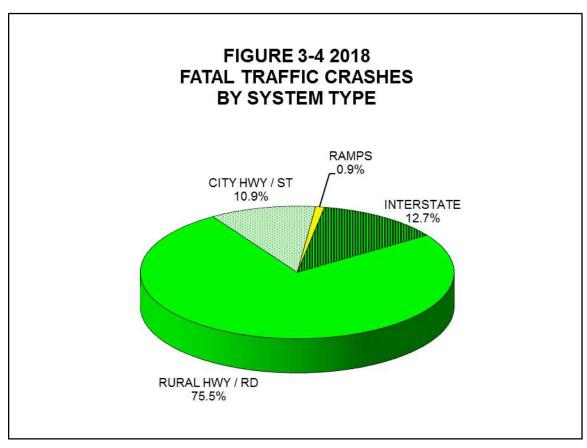


TABLE 3-8 MOTOR VEHICLE TRAFFIC CRASHES BY SD COUNTIES 2018

0	Total	Fatal	Injury	PDO	=	
County	Crashes	Crashes	Crashes	Crashes	Fatalities	Injuries
AURORA	102	1	14	87	1	22
BEADLE	215	1	51	163	1	82
BENNETT	48	2	9	37	2	11
BON HOMME	78	1	11	66	1	17
BROOKINGS	519	3	84	432	3	107
BROWN	733	4	135	594	4	188
BRULE	95	1	14	80	1	23
BUFFALO	20	1	3	16	1	3
BUTTE	208	0	31	177	0	42
CAMPBELL	25	0	1	24	0	1
CHARLES MIX	110	1	19	90	1	31
CLARK	86	0	8	78	0	8
CLAY	199	2	36	161	2	53
CODINGTON	644	2	120	522	2	152
CORSON	33	1	1	31	1	1
CUSTER	246	5	53	188	7	84
DAVISON	477	0	71	406	0	88
DAY	74	0	24	50	0	31
DEUEL	77	1	15	61	2	19
DEWEY	23	0	2	21	0	4
DOUGLAS	21	1	2	18	1	2
EDMUNDS	97	0	5	92	0	11
FALL RIVER	109	2	21	86	2	35
FAULK	72	1	11	60	1	22
GRANT	69	2	14	53	4	27
GREGORY	43	2	6	35	2	9
HAAKON	7	0	2	5	0	2
HAMLIN	180	1	18	161	1	24
HAND	93	2	11	80	2	14
HANSON	111	3	18	90	4	33
HARDING	50	3	6	41	3	7
HUGHES	258	1	53	204	1	71
HUTCHINSON	100	1	10	89	3	15
HYDE	11	0	4	7	0	6
JACKSON	107	2	23	82	2	36
JERAULD	36	0	5	31	0	8
JONES	88	0	8	80	0	15
KINGSBURY	153	0	14	139	0	19
LAKE	203	1	35	167	1	44
LAWRENCE	730	3	128	599	3	163
LINCOLN	1,114	5	200	909	5	274
LYMAN	174	4	24	146	5	42
MARSHALL	68	0	10	58	0	14
MC COOK	204	1	32	171	1	42
MC PHERSON	54	1	6	47	2	10
MEADE	518	5	92	421	5	120
MELLETTE	24	0	2	22	0	2
MINER	86	0	10	76	0	14
MINNEHAHA	5,891	12	1,231	4,648	13	1,650
MOODY	203	0	26	177	0	29
OGLALA LAKOTA	52	7	15	30	11	70
PENNINGTON	2,525	11	598	1,916	11	828
PERKINS	60	0	6	54	0	6
POTTER	50	0	4	46	0	4
ROBERTS	176	3	35	138	3	56
SANBORN	72	0	8	64	0	12
SPINK	177	0	18	159	0	23
STANLEY	81	1	12	68	1	17
SULLY	26	0	3	23	0	3
TODD	4	1	1	2	1	3
TRIPP	151	1	18	132	1	35
TURNER	104	3	19	82	4	26
UNION	284	1	58	225	1	84
WALWORTH	63	0	8	55	0	8
YANKTON	367	3	79	285	7	108
ZIEBACH	13	0	1	12	0	1
Total:	19,091	110	3,612	15,369	130	5,011

TABLE 3-8A ALCOHOL INVOLVED MOTOR VEHICLE TRAFFIC CRASHES BY SD COUNTIES 2018

	Total	Fatal	Injury	PDO		
County	<u>Crashes</u>	<u>Crashes</u>	<u>Crashes</u>	<u>Crashes</u>	<u>Fatalities</u>	<u>Injuries</u>
AURORA	2	0	1	1	0	1
BEADLE	7	0	4	3	0	4
BENNETT	3	0	3	0	0	4
BON HOMME	1	0	1	0	0	1
BROOKINGS	31	1	14	16	1	15
BROWN	30	2	13	15	2	21
BRULE	6	0	4	2	0	4
BUFFALO BUTTE	3 8	1 0	0 4	2 4	1	0 4
CAMPBELL	2	0	0	2	0	0
CHARLES MIX	6	1	2	3	1	4
CLARK	2	Ö	2	0	Ö	2
CLAY	10	1	3	6	1	5
CODINGTON	43	1	16	26	1	16
CORSON	2	1	0	1	1	0
CUSTER	12	2	7	3	4	11
DAVISON	26	0	9	17	0	12
DAY	6	0	4	2	0	4
DEUEL	3	0	2	1	0	2
DEWEY	1	0	0	1	0	0
DOUGLAS	1	0	1	0	0	1
EDMUNDS	2	0	0	2	0	0
FALL RIVER	7	0	6	1	0	9
FAULK	5	0	4	1	0	5
GRANT	2	0	1	1	0	1
GREGORY	3	0	0	2	1	0
HAAKON HAMLIN	3	0	0	3	0	0
HAND	1	0	0	1	0	0
HANSON	3	1	0	2	1	0
HARDING	3	2	0	1	2	0
HUGHES	15	1	4	10	1	6
HUTCHINSON	3	0	1	2	0	1
HYDE	0	0	0	0	0	0
JACKSON	9	0	6	3	0	12
JERAULD	2	0	0	2	0	0
JONES	0	0	0	0	0	0
KINGSBURY	5	0	3	2	0	3
LAKE	7	1	2	4	1	5
LAWRENCE	46	1	17	28	1	20
LINCOLN	58	0	13	45	0	18
LYMAN	6	1	3	2	1	5
MARSHALL MCCOOK	4	0	4	0	0	4
MCPHERSON	9 1	0	4 0	5 1	0	6 0
MEADE	28	3	9	16	3	12
MELLETTE	2	0	1	1	0	1
MINER	0	0	0	0	0	0
MINNEHAHA	288	6	98	184	7	126
MOODY	10	0	5	5	0	5
OGLALA LAKOTA	9	4	2	3	6	7
PENNINGTON	171	6	75	90	6	106
PERKINS	1	0	1	0	0	1
POTTER	1	0	1	0	0	1
ROBERTS	15	3	10	2	3	17
SANBORN	5	0	1	4	0	1
SPINK	5	0	3	2	0	3
STANLEY	4	0	2	2	0	2
SULLY	2	0	1	1	0	1
TODD	1	1	0	0	1	0
TRIPP	7	0	6	1	0	8
TURNER	6	1	4	1 4	1	5
UNION WALWORTH	14 5	1	9 1	4	1	11 1
YANKTON	5 28	2	17	9	6	1 27
ZIEBACH	0	0	0	0	0	0
Total:	1,001	45	404	552	54	541
- Jun	1,001	ru	197		V 1	V 1 1

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 57.2 percent of rural fatal and injury crashes and 75.8 percent of all fatal and injury crashes in South Dakota. Pennington County has 9.8 percent of all rural fatal and injury crashes with Minnehaha County accounting for 9.3 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.

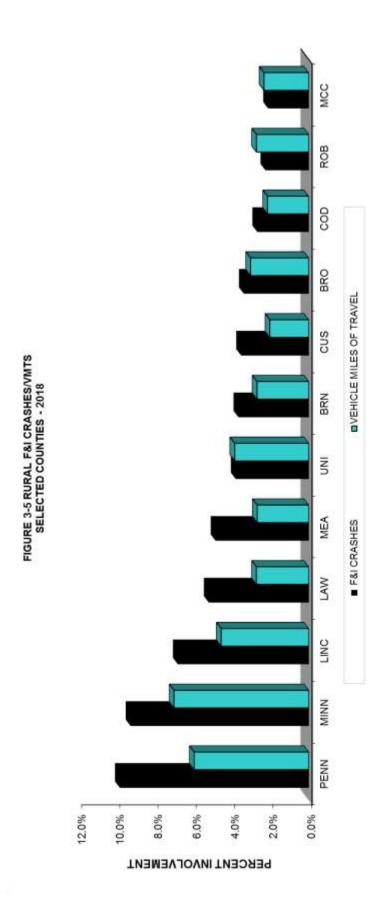
TABLE 3-9 COUNTIES HAVING MORE THAN TWO PERCENT OF THE RURAL FATAL & INJURY CRASHES 2018

	Rural Fatal &	Percent of All Rural Fatal &	Percent of
<u>County</u>	Injury Crashes	Injury Crashes	Rural VMTS
PENNINGTON	140	9.8%	6.0%
MINNEHAHA	132	9.3%	7.0%
LINCOLN	97	6.8%	4.6%
LAWRENCE	74	5.2%	2.7%
MEADE	69	4.8%	2.7%
UNION	54	3.8%	3.9%
BROWN	52	3.6%	2.7%
CUSTER	50	3.5%	2.2%
BROOKINGS	48	3.4%	3.0%
CODINGTON	38	2.7%	2.1%
ROBERTS	32	2.2%	2.7%
MCCOOK	30	2.1%	2.3%

Note: Total Rural Fatal and Injury Crashes: 1,426 S.D. Vehicle Miles of Travel Report (2018 data)

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

SD Department of Transportation – Data Inventory



City Summary

Reported traffic crashes within South Dakota cities (population of 2,500 and more) are presented in TABLE 3-10. These cities reported 60.5 percent of the statewide injury crashes and 10.9 percent of the fatal crashes. The two largest cities (Sioux Falls, Rapid City) accounted for 74.8 percent of fatal and injury crashes occurring in cities and 70.5 percent of the property damage only crashes.

TABLE 3-10
TRAFFIC CRASHES SOUTH DAKOTA CITIES
POPULATION 2500 AND OVER
2018

City	Total <u>Crashes</u>	Fatal <u>Crashes</u>	Injury <u>Crashes</u>	PDO <u>Crashes</u>	<u>Fatalities</u>	<u>Injuries</u>
Aberdeen	430	0	87	343	0	113
Belle Fourche	85	0	9	76	0	13
Box Elder	96	2	19	75	2	29
Brandon	46	0	5	41	0	8
Brookings	232	0	37	195	0	47
Canton	22	0	4	18	0	5
Dell Rapids	32	0	3	29	0	5
Harrisburg	15	0	2	13	0	2
Hartford	20	0	3	17	0	3
Hot Springs	21	0	7	14	0	10
Huron	102	0	31	71	0	45
Lead	23	0	4	19	0	4
Madison	47	0	10	37	0	12
Milbank	12	0	0	12	0	0
Mitchell	311	0	52	259	0	63
Mobridge	10	0	2	8	0	2
N. Sioux City	35	0	4	31	0	4
Pierre	162	0	40	122	0	55
Rapid City	1,714	4	442	1,268	4	609
Redfield	27	0	5	22	0	5
Sioux Falls	5,475	5	1,191	4,279	5	1,591
Sisseton	26	0	5	21	0	7
Spearfish	283	0	43	240	0	56
Sturgis	80	0	19	61	0	27
Tea	16	0	5	11	0	7
Vermillion	77	0	12	65	0	16
Watertown	423	1	82	340	1	103
Winner	16	0	4	12	0	13
Yankton	221	0	57	164	0	71
City Totals	10,059	12	2,184	7,863	12	2,925
Statewide Totals	19,091	110	3,612	15,369	130	5,011

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 20.9 percent of all reported property damage only crashes and 16 percent of all fatal and injury crashes. Dry roads were reported in 71.9 percent of all fatal and injury crashes.

TABLE 3-11 ROADWAY SURFACE CONDITIONS 2018								
	Total		Fatal		Injury		PDO	
	Crashes		Crashes		Crashes		Crashes	
	No.	<u>%</u>	No.	<u>%</u>	No.	<u>%</u>	<u>No.</u>	%
Dry	13,068	68.5	92	83.6	2,585	71.6	10,391	67.6
Wet	1,976	10.4	6	5.5	376	10.4	1,594	10.4
Snow	2,007	10.5	2	1.8	280	7.8	1,725	11.2
Slush	321	1.7	0	0.0	57	1.6	264	1.7
Ice	1,376	7.2	9	8.2	227	6.3	1,140	7.4
Frost	102	0.5	1	0.9	20	0.6	81	0.5
Water	5	0.0	0	0.0	1	0.0	4	0.0
Sand, mud, dirt, gravel	165	0.9	0	0.0	60	1.7	105	0.7
Oil	1	0.0	0	0.0	0	0.0	1	0.0
Other / Not applicable	9	0.0	0	0.0	4	0.1	5	0.0
Unknown / Not reported	61	0.3	0	0.0	2	0.1	59	0.4

110

100

3,612

100

15,369

100

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

19,091

100

Total

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

The peak three-hour period for fatal crashes was 11:00-1:59 p.m. Twenty-eight or 25.5 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 941 (26.1%) of the injury crashes occurred. The peak three hour period for property damage only crashes was 4:00-6:59 p.m. with 3,308 (21.5%) of the property damage only crashes occurred (see TABLE 3-12).

Seventeen fatal crashes or 15.5 percent and 426 (11.8%) of the injury crashes occurred during the month of August in 2018. The month of November shows 1,974 property damage only crashes which represents 12.8 percent of the property damage only crashes for 2018 (see TABLE 3-13).

The day of the week Friday accounts for 3,120 of the total crashes or 16.3 percent and 2,554 (16.6%) of property damage only crashes. Tuesday accounted for 573 (15.9%) of the injury crashes. Twenty-seven or 24.5 percent of the fatal crashes occurred on Saturday for 2018 (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 2018								
<u>Time</u>	Total <u>Crashes</u>	Fatal <u>Crashes</u>	Injury <u>Crashes</u>	PDO <u>Crashes</u>	<u>Fatalities</u>	<u>Injurie</u>		
Midnight	295	2	49	244	2	73		
1:00 ĂM	224	6	46	172	10	58		
2:00 AM	212	8	27	177	8	41		
3:00 AM	167	1	31	135	1	41		
4:00 AM	192	2	30	160	2	44		
5:00 AM	418	1	39	378	1	42		
6:00 AM	684	3	74	607	5	96		
7:00 AM	1,420	3	215	1,202	4	290		
8:00 AM	942	4	172	766	5	216		
9:00 AM	598	1	122	475	1	173		
10:00 AM	697	2	174	521	2	244		
11:00 AM	912	13	215	684	16	310		
12:00 PM	1,093	3	254	836	3	355		
1:00 PM	971	12	242	717	12	340		
2:00 PM	952	3	218	731	5	302		
3:00 PM	1,277	9	294	974	11	413		
4:00 PM	1,331	3	295	1,033	3	404		
5:00 PM	1,652	6	352	1,294	7	509		
6:00 PM	1,177	4	192	981	4	265		
7:00 PM	978	9	157	812	10	229		
8:00 PM	929	5	141	783	5	185		
9:00 PM	887	1	114	772	1	166		
10:00 PM	643	4	93	546	6	122		
11:00 PM	410	5	59	346	6	86		
Unknown	30	0	7	23	0	7		
Total	19,091	110	3,612	15,369	130	5,011		

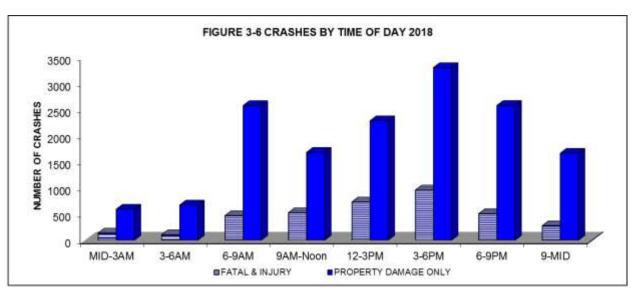
TABLE 3-13 CRASHES BY MONTH 2018

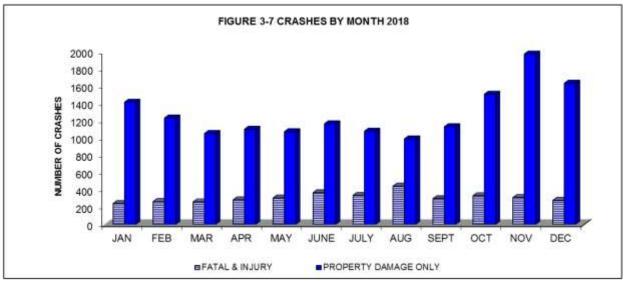
<u>Month</u>	Total <u>Crashes</u>	Fatal <u>Crashes</u>	Injury <u>Crashes</u>	PDO <u>Crashes</u>	<u>Fatalities</u>	<u>Injuries</u>
JANUARY	1,658	8	234	1,416	10	341
FEBRUARY	1,497	3	261	1,233	5	338
MARCH	1,314	9	251	1,054	12	378
APRIL	1,387	6	278	1,103	6	365
MAY	1,381	15	291	1,075	17	387
JUNE	1,533	9	358	1,166	11	518
JULY	1,416	8	328	1,080	12	477
AUGUST	1,434	17	426	991	18	579
SEPTEMBER	1,430	5	293	1,132	5	410
OCTOBER	1,841	9	323	1,509	10	435
NOVEMBER	2,285	10	301	1,974	12	409
DECEMBER	1,915	11	268	1,636	12	374
Total	19,091	110	3,612	15,369	130	5,011

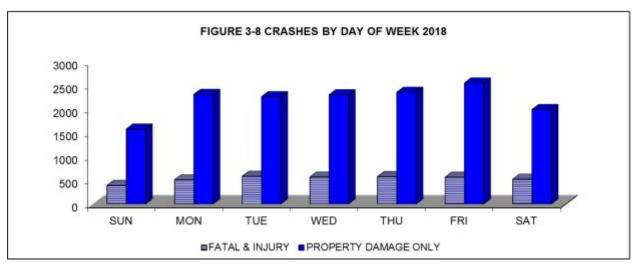
Source: SD Department of Public Safety - Office of Accident Records

TABLE 3-14							
CRASHES BY DAY OF WEEK							
2018							

<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	1,972	17	374	1,581	18	515
MONDAY	2,824	18	492	2,314	21	690
TUESDAY	2,850	13	573	2,264	16	772
WEDNESDAY	2,874	13	556	2,305	17	751
THURSDAY	2,935	10	568	2,357	13	787
FRIDAY	3,120	12	554	2,554	14	792
SATURDAY	2,516	27	495	1,994	31	704
Total	19,091	110	3,612	15,369	130	5,011







Drivers

In the 19,091 reported motor vehicle crashes there were 28,859 motor vehicle drivers involved, including 148 drivers in fatal crashes and 6,124 drivers in injury crashes. Of these drivers 89 were killed, which is 68.5 percent of all persons killed in motor vehicle crashes and 74.2 percent or 3,716 of the 5,011 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, 25.7 percent of the drivers were under 25 years of age and 45.1 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 20.9 percent of the drivers involved in fatal crashes and 25.7 percent of the drivers in injury crashes. Drivers under the age of 35 make up 39.9 percent of the drivers in fatal crashes and 45.7 percent of the drivers in injury crashes. Forty-two or 28.4 percent of the drivers in fatal crashes were 21-34 years of age (see TABLE 3-15).

TABLE 3-15
AGE OF DRIVERS IN CRASHES
2018

<u>Age</u>	Drivers In All Crashes No.	%	Drivers In Fatal Crashes <u>No</u> .	; %	Drivers In Injury Crashes No.	%	Drivers In PDO Crashes No.	%
0 - 5	0	0.0	0	0.0	0	0.0	0	0.0
6 - 13	16	0.1	0	0.0	9	0.1	7	0.0
14 - 15	756	2.6	0	0.0	170	2.8	586	2.6
16 - 17	1,534	5.3	6	4.1	311	5.1	1,217	5.4
18	842	2.9	6	4.1	164	2.7	672	3.0
19	784	2.7	5	3.4	171	2.8	608	2.7
20	719	2.5	0	0.0	140	2.3	579	2.6
21 - 24	2,756	9.5	14	9.5	609	9.9	2,133	9.4
25 - 34	5,604	19.4	28	18.9	1,226	20.0	4,350	19.3
35 - 44	4,462	15.5	18	12.2	941	15.4	3,503	15.5
45 - 54	3,641	12.6	19	12.8	803	13.1	2,819	12.5
55 - 64	3,719	12.9	17	11.5	766	12.5	2,936	13.0
65 - Over	3,485	12.1	34	23.0	762	12.4	2,689	11.9
Unknown	541	1.9	1	0.7	52	8.0	488	2.2
Total	28,859	100	148	100	6,124	100	22,587	100

TABLE 3-16 provides information on the age of drinking drivers in motor vehicle crashes. There were a reported 994 drinking drivers in all crashes which is 3.4 percent of all drivers in crashes. Forty-one or 27.7 percent of drivers in fatal crashes had been drinking while 398 or 6.5 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 26.8 percent of the drinking drivers in fatal crashes and 25.1 percent of the drinking drivers in injury crashes. Those drivers under 35 years of age accounted for 51.2 percent of the drinking drivers in fatal crashes and 56.5 percent of the drinking drivers in all crashes.

TABLE 3-16 AGE OF DRINKING DRIVERS IN CRASHES 2018								
	Drivers In All Crashes	0/	Drivers In Fatal Crashes		Drivers In Injury Crashe	S	Drivers In PDO Crashes	
<u>Age</u>	No.	<u>%</u>	No.	<u>%</u>	No.	<u>%</u>	No.	<u>%</u>
6 – 13	0	0.0	0	0.0	0	0.0	0	0.0
14 - 15	2	0.2	0	0.0	2	0.5	0	0.0
16 - 17	17	1.7	0	0.0	6	1.5	11	2.0
18	28	2.8	2	4.9	13	3.3	13	2.3
19	29	2.9	2	4.9	12	3.0	15	2.7
20	34	3.4	0	0.0	8	2.0	26	4.7
21 - 24	165	16.6	7	17.1	59	14.8	99	17.8
25 - 34	304	30.6	10	24.4	125	31.4	169	30.5
35 - 44	175	17.6	6	14.6	73	18.3	96	17.3
45 - 54	108	10.9	7	17.1	45	11.3	56	10.1
55 - 64	99	10.0	7	17.1	43	10.8	49	8.8
65 - Over	33	3.3	0	0.0	12	3.0	21	3.8
Unknown	0	0.0	0	0.0	0	0.0	0	0.0
Total	994	100	41	100	398	100	555	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 14.9 percent of the total licensed drivers, 25.6 percent of the drinking drivers in fatal and injury crashes and 39.9 percent of the speeding drivers in fatal and injury crashes. Drivers under 35 years of age constitute 31.1 percent of all licensed drivers, with 45.6 percent of the drinking drivers and 63.3 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	:
2018	

<u>Age</u>	Licensed <u>Drivers %</u>	Drivers In Fatal & In Crashes No.		Drinking Drivers In Fatal & In Crashes No.		Speeding Drivers In Fatal & Inj Crashes No.	iury <u>%</u>
0 - 13	0.0	9	0.1	0	0.0	1	0.2
14 - 15	1.8	170	2.7	2	0.5	18	3.8
16 - 17	2.6	317	5.1	6	1.4	36	7.6
18	1.4	170	2.7	15	3.4	19	4.0
19	1.5	176	2.8	14	3.2	24	5.1
20	1.5	140	2.2	8	1.8	16	3.4
21 - 24	6.1	623	9.9	66	15.0	74	15.7
25 - 34	16.2	1,254	20.0	135	30.8	110	23.4
35 - 44	15.2	959	15.3	79	18.0	57	12.1
45 - 54	14.0	822	13.1	52	11.8	45	9.6
55 - 64	17.6	783	12.5	50	11.4	39	8.3
65 - Over	22.1	796	12.7	12	2.7	32	6.8
Unknown	0.0	53	0.8	0	0.0	0	0.0
TOTAL	100	6,272	100	439	100	471	100

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

SD Department of Public Safety – Driver License Issuance

55 & OVER Speed Invol F&I Crash FIGURE 3-9 DRIVERS BY AGE GROUP 2018 Fatal and Injury Crash Involved Drivers 35-54 ■Alc Invol F&I Crash 25-34 □All F&l Crash ⊟Licensed 24 & UNDER 40.0% 25.0% 35.0% 30.0% 20.0% 15.0% 10.0% %0.0 2.0%

42

PERCENT

Speed Invol F&I Crashes 21-24 FIGURE 3-10 YOUNG DRIVERS 2018 Fatal & Injury Crash Involved Drivers ■Alc Invol F&I Crashes 18-20 □All F&l Crashes 16-17 ⊟Licensed 14-15 16.0% 14.0% 12.0% 10.0% 8.0% %0.9 4.0% 2.0% %0:0 РЕВСЕИТ

43

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 three 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 animal in roadway, and it was reported as a factor in 25.1 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. Exceeded Speed Limit and Running Off Road were leading driver contributing circumstances in fatal crashes during 2018. Thirty-one or 20.9 percent of the drivers in fatal crashes reported Running Off Road as a contributing factor in the crash. While 25 or 16.9 percent reported Exceeded Speed Limit as a contributing factor. Failing to Yield to Another Vehicle was the leading contributing circumstance in injury crashes. Following Too Close, Driving too Fast for Conditions and Running off Road were other leading driver contributing circumstances in injury crashes (see TABLE 3-18).

TABLE 3-18
MOTOR VEHICLE DRIVER CONTRIBUTING CIRCUMSTANCES
2018

	Drivers in All Crash No.		Drivers Fatal Ci No.		Drivers Injury C No.		Drivers in PDO Cra	
Disregarded Traffic Signs or Signals	728	2.5	3	2.0	272	4.4	453	2.0
Distracted*	1,030	3.6	4	2.7	312	5.1	714	3.2
Drinking	566	2.0	17	11.5	231	3.8	318	1.4
Driving Too Fast for Condition	2,031	7.0	12	8.1	382	6.2	1,637	7.2
Exceeded Speed Limit	316	1.1	25	16.9	137	2.2	154	0.7
Fail to Yield to Vehicle	2,890	10.0	8	5.4	782	12.8	2,100	9.3
Failure to Keep in Proper Lane	793	2.7	21	14.2	181	3.0	591	2.6
Fatigued/Fell Asleep	222	0.8	0	0.0	76	1.2	146	0.6
Following Too Closely	1,943	6.7	0	0.0	481	7.9	1,462	6.5
Improper Backing	543	1.9	0	0.0	21	0.3	522	2.3
Improper Passing	119	0.4	3	2.0	31	0.5	85	0.4
Improper Turn	456	1.6	2	1.4	101	1.6	353	1.6
Not Stated***	4,462	15.5	0	0.0	2	0.0	4,460	19.7
Other**	1,379	4.8	9	6.1	323	5.3	1,047	4.6
Over-correcting/Over-steering	351	1.2	10	6.8	133	2.2	208	0.9
Running Off Road	1,020	3.5	31	20.9	347	5.7	642	2.8
Swerving or Avoiding due to: wind, slippery surface, vehicle, object, non-motorist, etc.	338	1.2	3	2.0	98	1.6	237	1.0
Unknown	1,422	4.9	10	6.8	228	3.7	1,184	5.2
Wrong Side of Road	119	0.4	7	4.7	38	0.6	74	0.3
Total Drivers	28,859		148		6,124		22,587	

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

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

^{**}Other includes drugs-medication, drugs-other, failed to yield to pedestrian, illegally in roadway, illness, improper lane change, improper parking, improper signal or failure to signal, improper start from parked position, physical impairment and other driver contributing factors.

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

Motorcycles

Motorcycle crashes constitute 2.1 percent of all crashes, 14.5 percent of all fatal crashes, and 8.4 percent of all injury crashes. There were 16 people killed and 363 injured on motorcycles in the 394 reported motorcycle crashes during 2018 (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 0.8 percent of the licensed motorcycle drivers, 3.5 percent of drivers involved in motorcycle crashes, and 5.8 percent of the speeding drivers involved in motorcycle crashes (see TABLE 3-19 and FIGURE 3-11).

TABLE 3-19
MOTORCYCLISTS BY AGE GROUP
2018

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	1	0.2	0	0.0	0	0.0
14 - 15	39	0.0	1	0.2	0	0.0	0	0.0
16 - 17	223	0.2	4	0.9	0	0.0	0	0.0
18 - 19	485	0.5	9	2.1	1	2.3	3	5.8
20 - 21	817	0.9	16	3.7	1	2.3	4	7.7
22 - 23	1,186	1.3	15	3.5	3	6.8	3	5.8
24 - 25	1,528	1.7	17	3.9	2	4.5	2	3.8
26 - 27	1,789	2.0	12	2.8	3	6.8	2	3.8
28 - 29	2,094	2.3	9	2.1	3	6.8	1	1.9
30 - 31	2,232	2.5	16	3.7	1	2.3	0	0.0
32 - 36	6,459	7.2	28	6.5	3	6.8	4	7.7
37 - 41	6,878	7.6	28	6.5	4	9.1	3	5.8
42 - 51	15,695	17.4	91	21.0	10	22.7	8	15.4
52 - Over	50,607	56.2	184	42.4	13	29.5	22	42.3
Unknown	0	0.0	3	0.7	0	0.0	0	0.0
Total	90,032	100	434	100	44	100	52	100

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

SD Department of Public Safety – Driver License Issuance

FIGURE 3-11 MOTORCYCLISTS 2018 Crash Involved Motorcycle & Moped Drivers

37 & OVER ■Crash Inv Speeding 30-36 ■Crash Inv Drinking □Crash Inv MC ■Lic MC 17 & UNDER %0.06 %0.08 30.0% 20.0% 10.0% %0.07 %0.09 50.0% 40.0% %0.0 PERCENT

Helmets were used by 149 or 37.8 percent of the motorcycle drivers in crashes while 245 or 62.2 percent did not wear a helmet (see TABLE 3-20). Fifteen motorcycle drivers and one motorcycle passenger were killed in 2018. One wore a helmet only, three drivers wore helmet and eye protection, eight drivers wore eye protection only, and three drivers reported no safety equipment used. Helmet usage was unknown for the motorcycle passenger.

TABLE 3-20 HELMET USE BY MOTORCYCLE DRIVERS IN CRASHES 2018

	Helmet Us	sed	Helmet Not U	sed
<u>Age</u>	No.	<u>%</u>	No.	%
6 - 13	1	100.0	0	0.0
14 - 15	0	0.0	1	100.0
16 - 17	3	75.0	1	25.0
18 - 20	7	46.7	8	53.3
21 - 24	13	52.0	12	48.0
25 - 34	17	29.8	40	70.2
35 - 44	19	32.8	39	67.2
45 - Over	89	38.2	144	61.8
Unknown	0	0.0	0	0.0
Total	149	37.8	245	62.2

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 11 pedestrian killed and 93 injured in motor vehicle crashes during 2018 (see TABLE 3-21). The youngest pedestrian killed was sixteen years old, while the oldest was eighty years old. Of the injured pedestrians, 16.1 percent were between the ages of 5-13. Cities accounted for 86 percent of the pedestrian injuries and 45.5 percent of the pedestrian fatalities (see TABLE 3-23). Of the eleven pedestrians killed ten were male and one was female. And of the 93 pedestrians injured, 53 were male and 40 were female.

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

	AGE OF PEDES	TABLE 3-21 TRIANS IN TRA 2018	FFIC CRASHES	
	Fatalities		Injuries	
<u>Age</u>	No.	<u>%</u>	No.	%
0 - 4	0	0.0	2	2.2
5 - 13	0	0.0	15	16.1
14 - 19	1	9.1	18	19.4
20 - 24	0	0.0	7	7.5
25 - 34	2	18.2	10	10.8
35 - 44	2	18.2	6	6.5
45 - 54	2	18.2	16	17.2
55 - 64	1	9.1	9	9.7
65 - Over	3	27.3	10	10.8
Total	11	100	93	100

TABLE 3-22
ALCOHOL INVOLVEMENT BY PEDESTRIANS
2018

Alcohol Involvement	Fatalities <u>No</u> .	<u>%</u>	Injuries <u>No</u> .	%
Alcohol or Drugs	7	63.6	10	10.8
No Alcohol	4	36.4	83	89.2
Unknown	0	0.0	0	0.0
Total	11	100	93	100

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

TABLE 3-23
RURAL vs. CITY PEDESTRIAN CRASHES
2018

	<u>Fatalities</u>	<u>%</u>	<u>Injuries</u>	%
Rural City	6 5	54.5 45.5	13 80	14.0 86.0
Total	11	100	93	100

Bicycles

During 2018 there were no bicyclist killed (see TABLE 2-9). There were 72 bicycle drivers injured in reported motor vehicle crashes during 2018 (see TABLE 3-24). The leading factor in bicycle-involved crashes was improper crossing which was reported for 31.9 percent of the injured bicycle drivers. Fifty-one of the injured bicycle drivers in crashes had no contributing circumstances. The yearly 1998-2018 trend of bicycle fatalities and injuries is provided in TABLE 2-9.

AGE OF	TABLE 3-24 BICYCLE DRIVERS IN 2018		ES .
<u>Age</u>	Fatalities <u>Number</u>	Injuries <u>Number</u>	%
0 - 4	0	0	0.0
5 - 13	0	22	30.6
14 - 19	0	14	19.4
20 - 24	0	7	9.7
25 - 34	0	4	5.6
35 - 44	0	12	16.7
45 - 54	0	4	5.6
55 - 64	0	6	8.3
65 - Over	0	3	4.2
Total	0	72	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.
 - **April 1, 2015** Speed limit on rural interstate was raised to 80 miles per hour.

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, 2017</u>, National Safety Council)