2012
South Dakota
Motor Vehicle Traffic Crash Summary

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

Dennis Daugaard
Governor

MARKS
SPOT
THE
WHY DIE?

STATE OF SOUTH DAKOTA
DENNIS DAUGAARD, GOVERNOR

May 20, 2013

My Fellow South Dakotans:

The 2012 South Dakota Motor Vehicle Traffic Crash Summary is a sobering reminder that hardly a day passes without a traffic injury or fatal crash in our great state.

During 2012, motor vehicle crashes claimed the lives of 133 persons on our public roadways, an increase of 20 percent from 2011. Regrettably, nearly 40 percent of those deaths were alcohol-related, and almost half of the lives claimed by alcohol-related crashes were persons under the age of 30.

Every one of these alcohol-related deaths was preventable.

While fatality and injury rates have decreased over the last ten years, drivers, cyclist, and pedestrians need to practice safe habits and teach children to do the same.

As technology increases, the task of operating a motor vehicle seems to get more complicated each year. That's why I'm encouraging you to keep the basics in mind every time you get behind the wheel. Use your seatbelt, don't drive if you are impaired, and put your cell phone away to avoid the temptation to answer a text or email while driving.

Thank you for your contribution to roadway safety.

Sincerely,

Dennis

Dennis Daugaard

STATE CAPITOL • 500 EAST CAPITOL • PIERRE, SOUTH DAKOTA 57501-5070 • 605.773.3212

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I. INTRODUCTION

The Motor Vehicle Traffic Crash Summary is divided into two main sections, Historical Trends and 2012 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 2012 Traffic Crash Profile section details the crash picture for 2012 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: Chuck.Fergen@state.sd.us

Webpage:
http://dps.sd.gov/enforcement/accident_records/Annual_Crash_Reports.aspx

NOTE! Data Extracted on 04/12/2013. This report reflects a one day picture of CY2012 data collected, any data received after this date would not be included in this report.

SOUTH DAKOTA TRAFFIC STATISTICAL SUMMARY
2011-2012

	2011	2012
➢ NUMBER OF REPORTED MOTOR VEHICLE TRAFFIC CRASHES	**17,362**	**16,261**
➢ AMOUNT OF MOTOR VEHICLE TRAFFIC CRASH PROPERTY DAMAGE	**$91 MILLION**	**$112 MILLION**
➢ NUMBER OF MOTOR VEHICLE TRAFFIC CRASH INJURIES	**5,374**	**5,432**
➢ NUMBER OF MOTOR VEHICLE TRAFFIC CRASH FATALITIES	**111**	**133**
➢ FATALITY RATE PER 100,000,000 MILES OF TRAVEL	**1.23**	**1.47**
➢ PERCENT OF DRIVERS IN FATAL CRASHES WHO HAD BEEN DRINKING	**20.6%**	**26.1%**
➢ NUMBER KILLED IN ALCOHOL-RELATED CRASHES	**37**	**53**
➢ NUMBER INJURED IN ALCOHOL-RELATED CRASHES	**633**	**721**
➢ NUMBER OF PEDESTRIANS KILLED	**7**	**2**
➢ NUMBER OF MOTORCYCLISTS KILLED	**14**	**25**
➢ NUMBER OF BICYCLISTS KILLED	**1**	**0**
➢ PERCENT OF LICENSED DRIVERS UNDER 25	**15.6%**	**15.5%**
➢ PERCENT OF CRASH-INVOLVED SPEEDING DRIVERS UNDER 25	**51.5%**	**51.9%**
➢ PERCENT OF CRASH-INVOLVED DRINKING DRIVERS UNDER 25	**34.0%**	**37.0%**
➢ NUMBER OF OCCUPANTS KILLED IN MOTOR VEHICLES *(EXCLUDES MOPED, MOTORCYCLE, ATV & SNOWMOBILE OCCUPANTS)*	**87**	**102**
➢ NUMBER OF OCCUPANTS KILLED IN MOTOR VEHICLES WHO WERE WEARING A SAFETY RESTRAINT *(EXCLUDES MOPED, MOTORCYCLE, ATV & SNOWMOBILE OCCUPANTS)*	**22**	**29**
➢ NUMBER OF UNRESTRAINED OCCUPANTS UNDER 5 YEARS OF AGE IN MOTOR VEHICLE CRASHES WHO WERE KILLED	**0**	**2**
WHO WERE INJURED *(EXCLUDES MOPED, MOTORCYCLE, ATV & SNOWMOBILE OCCUPANTS)*	**9**	**9**
➢ NUMBER OF UNRESTRAINED OCCUPANTS UNDER 5 YEARS OF AGE WITH CHILD RESTRAINT NOT USED PROPERLY WHO WERE KILLED	**0**	**0**
WHO WERE INJURED *(EXCLUDES MOPED, MOTORCYCLE, ATV & SNOWMOBILE OCCUPANTS)*	**2**	**2**
➢ ECONOMIC LOSS FROM MOTOR VEHICLE TRAFFIC CRASHES	**$345 MILLION**	**$406 MILLION**

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

II. HISTORICAL TRENDS

Motor Vehicle Crashes

The preliminary death rates per 100 million vehicle miles traveled from 2003-2012 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
2003-2012

State	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
South Dakota	2.4	2.3	2.3	2.3	1.7	1.4	1.5	1.6	1.2	**1.5**
Iowa	1.4	1.2	1.4	1.4	1.4	1.4	1.2	1.0	1.2	**1.2**
Minnesota	1.2	1.0	1.0	0.9	0.9	0.8	0.8	0.7	0.7	**0.7**
Montana	2.4	2.0	2.3	2.3	2.4	2.1	2.0	1.7	1.8	**N/A**
Nebraska	1.5	1.3	1.4	1.4	1.3	1.1	1.0	0.9	0.9	**1.1**
North Dakota	1.4	1.3	1.6	1.4	1.4	1.3	1.8	1.3	1.6	**N/A**
Wyoming	1.8	1.8	1.9	2.1	1.6	1.7	1.4	1.6	1.8	**N/A**
National	1.5	1.4	1.5	1.4	1.3	1.3	1.2	1.1	1.1	**1.2**

Note: Death Rate is the number of traffic fatalities per 100 million vehicle miles traveled.
The 2012 rates are preliminary estimates and will be updated the following year with the final numbers.

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

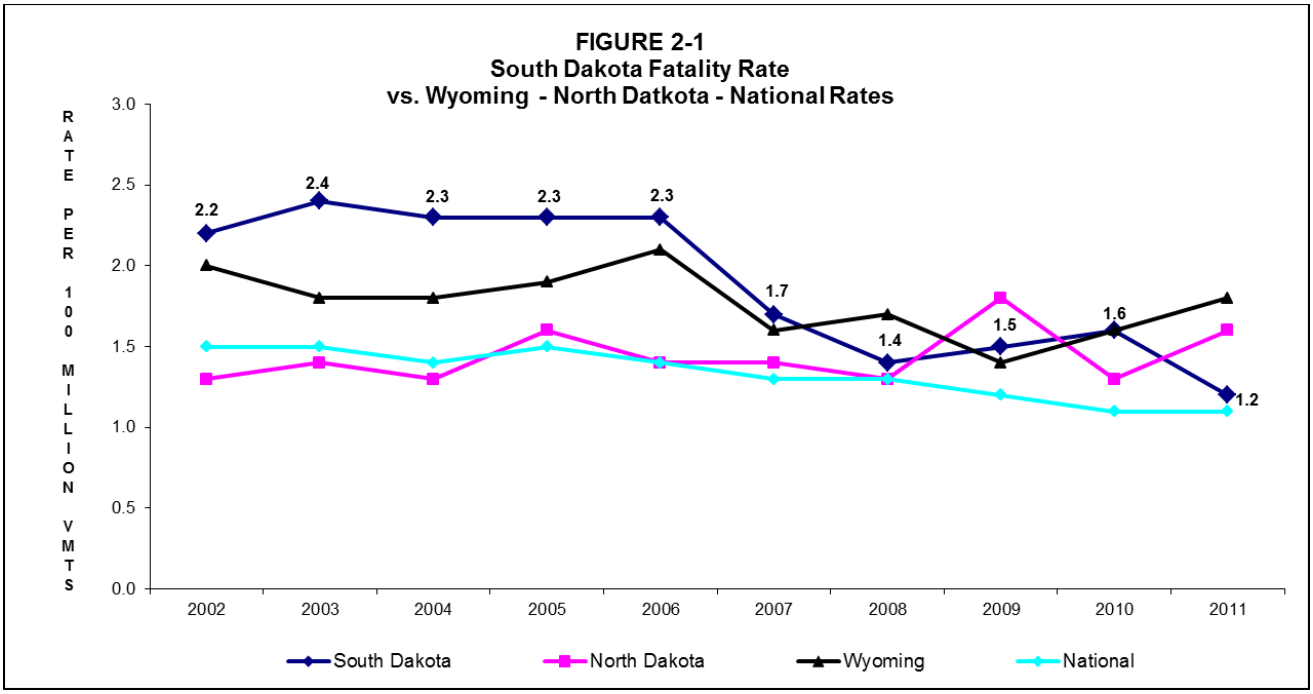


TABLE 2-2 provides a yearly comparison of South Dakota's motor vehicle traffic crashes from 1983 through 2012. Any comparison of motor vehicle crashes must be made with caution due to the changes in the definition of a reportable crash. For example, in the late 1970's the definition of a fatality caused by a motor vehicle crash was changed from the death occurring up to one year after the crash to death occurring within 30 days after the crash. Using vehicle miles of travel, the 2011 death rate decreased to 1.2, a 21.9% decrease from the 2010 death rate of 1.58. The 5,374 people injured in crashes are a 7.4% decrease from the 5,801 in 2010 (see TABLE 2-2).

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

Year	Deaths	Death Rate[1]	Injuries	Total Crashes	Total Crashes Rate[4]	Fatal Crashes	Injury Crashes	PDO[2] Crashes	Miles[3] Traveled +(000,000)	Registered Motor Vehicles[5] +(000)
1983	175	2.77	6,287	14,971	237.07	147	4,175	10,649	6,315	655
1984	143	2.24	6,158	15,093	236.42	132	4,297	10,664	6,384	669
1985	130	2.07	6,240	15,435	245.94	109	4,229	11,097	6,276	674
1986	134	2.15	6,008	13,714	219.85	118	4,105	9,491[2]	6,238	686
1987	134	2.09	6,221	13,083	203.59	107	4,173	8,803	6,426	711
1988	147	2.22	6,579	14,821	224.02	127	4,455	10,239	6,616	709
1989	152	2.27	6,828	15,005	223.79	134	4,605	10,266	6,705	719
1990	153	2.19	7,261	15,073	215.67	139	4,820	10,114	6,989	698
1991	143	2.10	7,310	16,009	235.32	130	4,830	11,049	6,803	710
1992	161	2.24	7,813	17,170	238.51	141	5,112	11,917	7,199	722
1993	140	1.89	8,410	18,664	251.74	118	5,525	13,021	7,414	749
1994	154	2.02	8,540	19,408	254.30	141	5,711	13,556	7,632	805
1995	158	2.06	8,323	19,362	252.41	140	5,543	13,679	7,671	812
1996	175	2.24	8,490	21,653	277.57	142	5,653	15,858	7,801	815
1997	148	1.88	8,161	20,899	264.81	128	5,478	15,293	7,892	827
1998	165	2.05	7,723	19,735	245.49	149	5,112	14,474	8,039	837
1999	150	1.84	7,574	20,019	245.00	136	5,032	14,851	8,171	841
2000	173	2.08	7,888	19,475	234.16	150	5,252	14,073[2]	8,317	862
2001	171	2.04	7,118	17,699	211.43	154	4,888	12,657	8,371	872
2002	180	2.12	6,997	17,335	204.47	159	4,702	12,474	8,478	890
2003	203	2.43	6,944	18,018	215.99	173	4,781	13,064	8,342	909
2004	197	2.38	6,535	17,163	207.33	166	4,581	12,416	8,278	927
2005	186	2.29	6,212	16,254	200.07	158	4,346	11,750	8,124	919
2006	191	2.25	6,015	15,730	185.04	172	4,196	11,362	8,501	972
2007	146	1.72	5,782	16,220	191.25	130	4,071	12,019	8,481	971
2008	121	1.43	5,708	15,907	187.80	109	4,107	11,691	8,470	924[5]
2009	131	1.50	5,704	16,994	194.44	112	4,101	12,781	8,740	952
2010	140	1.58	5,801	17,626	198.92	124	4,155	13,347	8,861	992
2011	111	1.23	5,374	17,362	193.06	101	3,973	13,288	8,993	976
2012	**133**	**1.47**	**5,432**	**16,261**	**179.15**	**118**	**3,887**	**12,256**	**9,077**	**992**

FOOTNOTES

[1] Number of deaths per 100 million vehicle miles traveled.

[2] July 1, 1978 the PDO threshold was increased to $400 accumulated property damage.
July 1, 1986 the PDO threshold definition changed to $500 damage to any one person's property or $1000 accumulated property damage per crash.
July 1, 2000 the PDO threshold definition changed to $1,000 damage to any one person's property or $2,000 accumulated property damage per crash.

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

[4]Number of crashes per 100 million vehicle miles traveled.

[5]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.

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

Alcohol Involvement

When comparing records dating back to 1979, 35.0% alcohol involved fatal crashes for 2010 is the lowest. Of the 133 traffic fatalities during 2012, 53 or 39.8% 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
2006-2012

	2006	2007	2008	2009	2010	2011	2012
Total Crashes	7.0% (1099)	5.9% (959)	6.1% (977)	6.0% (1022)	5.7% (999)	5.7% (992)	6.1% (988)
Fatal Crashes	39.0% (67)	42.3% (55)	41.3% (45)	45.5% (51)	35.5% (44)	29.7% (30)	38.1% (45)
Injury Crashes	13.4% (563)	11.5% (467)	11.4% (467)	11.6% (474)	10.8% (448)	11.5% (457)	12.5% (486)
PDO Crashes	4.1% (469)	3.6% (437)	4.0% (465)	3.9% (497)	3.8% (507)	3.8% (505)	3.7% (457)
Fatalities	37.7% (72)	42.5% (62)	39.7% (48)	46.6% (61)	35.0% (49)	33.3% (37)	39.8% (53)
Injuries	14.2% (854)	11.5% (666)	11.5% (659)	12.1% (692)	11.1% (646)	11.8% (633)	13.3% (721)

NOTE: Alcohol involvement for Fatal Crashes is based upon a positive BAC result and /or indication of alcohol use by at least one driver, pedestrian or bicycle driver as reported by the investigating officer. For Injury and Property Damage Crashes – It is based upon indication of alcohol use by at least one driver, pedestrian or bicycle driver as reported by the investigating officer.

TABLE 2-3A
PERSONS KILLED IN ALCOHOL INVOLVED CRASHES BY AGE
2006-2012

AGE	2006	2007	2008	2009	2010	2011	2012
0 – 5	0	0	1	0	0	0	2
6 - 12	0	1	0	2	0	1	2
13 - 19	13	10	6	15	6	7	4
20	1	1	1	0	0	0	3
21 - 29	19	18	15	14	12	8	14
30 - 39	15	13	12	11	8	9	10
40 - 49	11	13	7	9	11	5	7
50 - 59	11	4	4	6	9	5	8
60 & OLDER	2	2	2	4	3	2	3
Unknown/Not Stated	0	0	0	0	0	0	0
TOTAL	**72**	**62**	**48**	**61**	**49**	**37**	**53**

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

FIGURE 2-2 2012 CRASH FATALITIES
Alcohol Related vs Non Alcohol Related

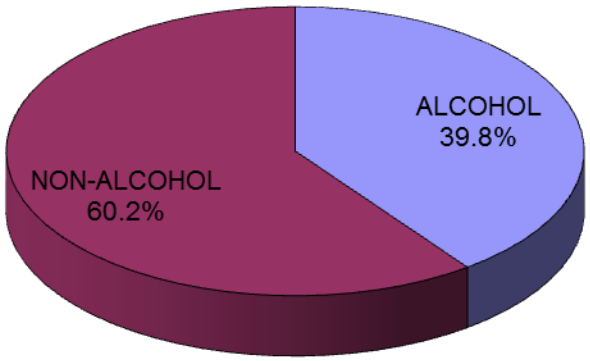
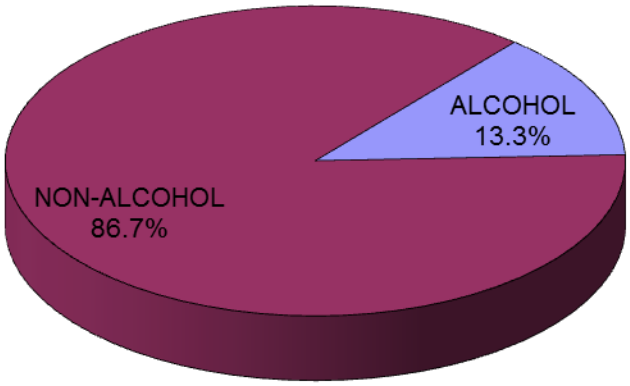


FIGURE 2-3 2012 CRASH INJURIES
Alcohol Related vs Non Alcohol Related



The following crash and arrest data is presented to monitor changes in alcohol-related fatal and injury crashes and to compare changes with non-alcohol related crash experiences (see TABLE 2-4). Alcohol-related fatal and injury crashes increased by 9.0% while non-alcohol related fatal and injury crashes decreased by 3.2% from the 2011 totals. **The number of DWI arrests increased by 19.8% from 2011.**

TABLE 2-4
CRASH AND ARREST ACTIVITY
2003- 2012

	FATAL CRASHES		FATAL & INJURY CRASHES			
	ALCOHOL RELATED	NONALCOHOL RELATED	ALCOHOL RELATED	NONALCOHOL RELATED	DWI [1] ARRESTS	DWI [1] CONVICTIONS
2003	78	95	708	4,246	9,011	5,628
2004	61	105	668	4,079	9,049	5,985
2005	62	96	614	3,890	10,174	6,463
2006	67	105	630	3,738	11,282	6,801
2007	55	75	522	3,679	11,756	7,490
2008	45	64	512	3,704	11,029	6,791
2009	51	61	525	3,688	10,147	6,462
2010	44	80	492	3,787	9,246	5,882
2011	30	71	487	3,587	8,744	5,199
2012	**45**	**73**	**531**	**3,474**	**10,487**	**5,821**

Note: [1] – Based on South Dakota Courts - The State of the Judiciary and 2011 Annual Report of the S. D. Unified Judicial System - January 2012 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 2003 through 2012.

FIGURE 2-5 presents the alcohol related and non-alcohol related fatal crash experience for the years of 2003 through 2012.

There were 45 alcohol related fatal crashes during 2012, which compares to 30 in 2011. The previous three-year average was 42 for the years of 2009-2011.

There were 531 alcohol related fatal and injury crashes during 2012, which compares to 487 in 2011. The previous three-year average was 501 or a 5.9 percent increase in 2012. Non-alcohol related fatal and injury crashes in 2012 decreased (3.2%) when compared to 2011 and decreased 5.8 percent from the previous three-year average (2009-2011).

There were 10,487 DWI arrests in fiscal year 2012. This level has gone up 11.8% from the previous three-year average (2009-2011). There were 5,821 DWI convictions in fiscal year 2012. This level has gone down 0.5% from the previous 3-year average (2009-2011).

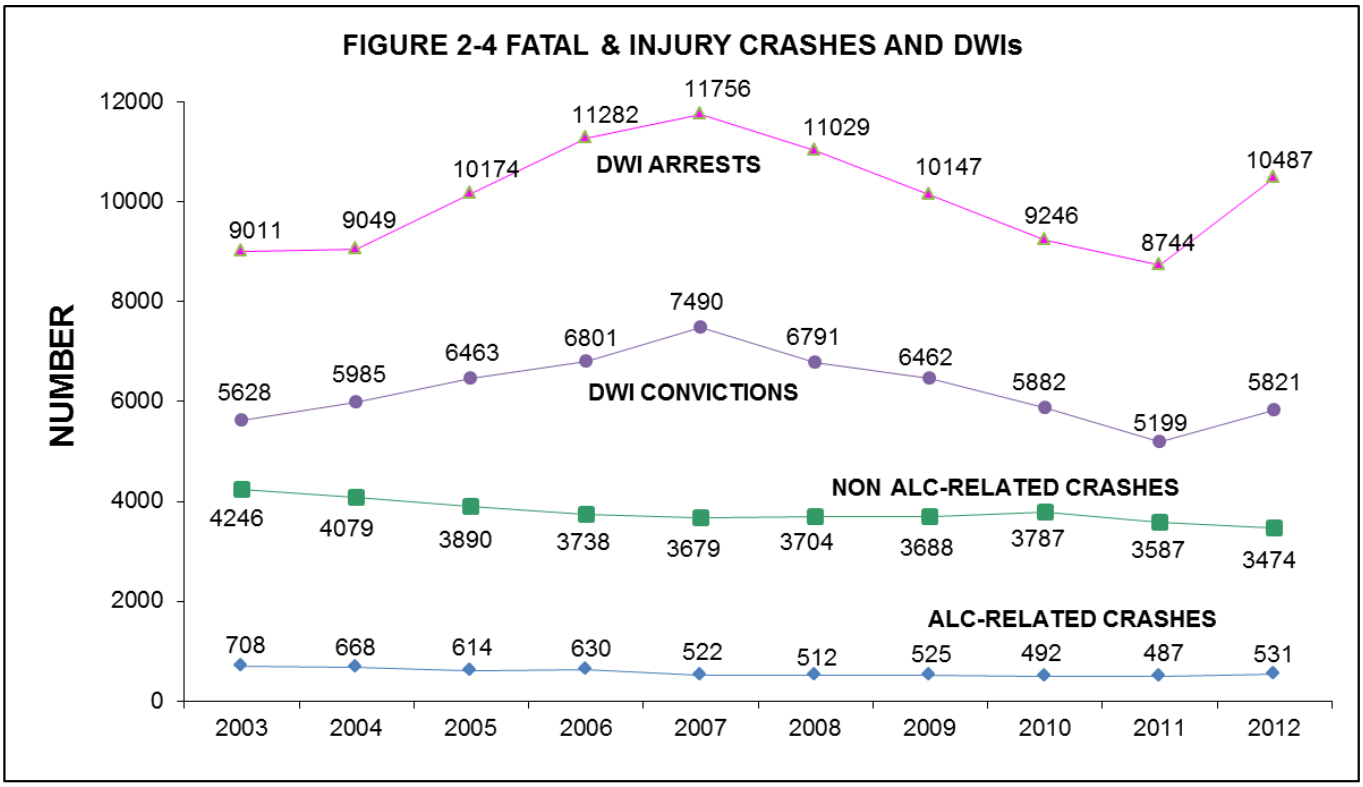


FIGURE 2-4 FATAL & INJURY CRASHES AND DWIs
NUMBER
12000
10000
8000
6000
4000
2000
0
DWI ARRESTS
9011
9049
10174
11282
11756
11029
10147
9246
8744
10487
DWI CONVICTIONS
5628
5985
6463
6801
7490
6791
6462
5882
5199
5821
NON ALC-RELATED CRASHES
4246
4079
3890
3738
3679
3704
3688
3787
3587
3474
ALC-RELATED CRASHES
708
668
614
630
522
512
525
492
487
531
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012

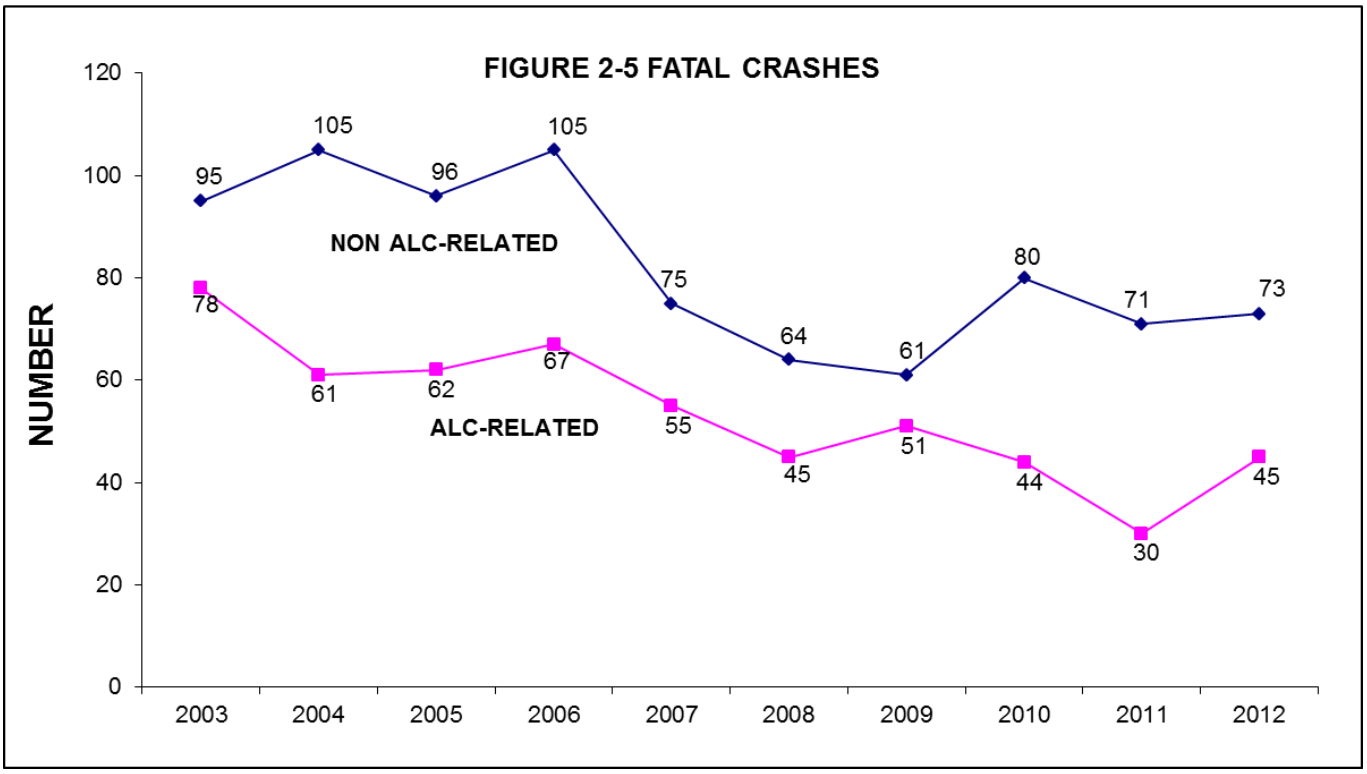


FIGURE 2-5 FATAL CRASHES
NUMBER
120
100
80
60
40
20
0
NON ALC-RELATED
95
105
96
105
75
64
61
80
71
73
ALC-RELATED
78
61
62
67
55
45
51
44
30
45
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012

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

Fifty-six (54.9%) of the 102 killed occupants were either partially or totally ejected from the vehicle. (See TABLE 2-5B)

TABLE 2-5 SAFETY RESTRAINT USAGE – KILLED OCCUPANTS

	2007	2008	2009	2010	2011	2012
No Safety Equipment	74	60	79	67	52	65
Lap Belt Only	0	1	1	2	0	0
Shoulder Harness Only	0	1	0	0	0	0
Lap Belt & Shoulder Harness	23	25	26	26	22	28
Child Restraint Used Properly	0	0	1	0	0	1
Child Restraint Not Properly Used	1	1	0	0	0	0
Other, Not Stated or Unknown	10	6	4	6	13	8
TOTAL	**108**	**94**	**111**	**101**	**87**	**102**

TABLE 2-5A SAFETY RESTRAINT USAGE – INJURED OCCUPANTS

	2007	2008	2009	2010	2011	2012
No Safety Equipment	1,058	1,080	1,012	956	899	899
Lap Belt Only	52	59	48	46	45	39
Shoulder Harness Only	36	33	35	47	33	21
Lap Belt & Shoulder Harness	3,423	3,395	3,506	3,503	3,325	3319
Child Restraint Used Properly	59	66	57	61	44	62
Child Restraint Not Properly Used	4	3	7	2	2	3
Other, Not Stated or Unknown	354	314	316	365	281	290
TOTAL	**4,986**	**4,950**	**4,980**	**4,980**	**4,629**	**4,633**

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						INJURED					
	2007	2008	2009	2010	2011	2012	2007	2008	2009	2010	2011	2012
Not Ejected	55	47	50	67	43	46	4,811	4,798	4,841	4,851	4,473	4,501
Partial Ejection	4	4	11	9	4	9	15	19	19	10	22	10
Total Ejection	48	43	48	25	39	47	130	100	107	106	103	114
Unknown Ejection	1	0	2	0	1	0	30	21	13	11	29	7
Not Applicable	0	0	0	0	0	0	0	12	0	2	2	1
TOTAL	**108**	**94**	**111**	**101**	**87**	**102**	**4,986**	**4,950**	**4,980**	**4,980**	**4,629**	**4,633**

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

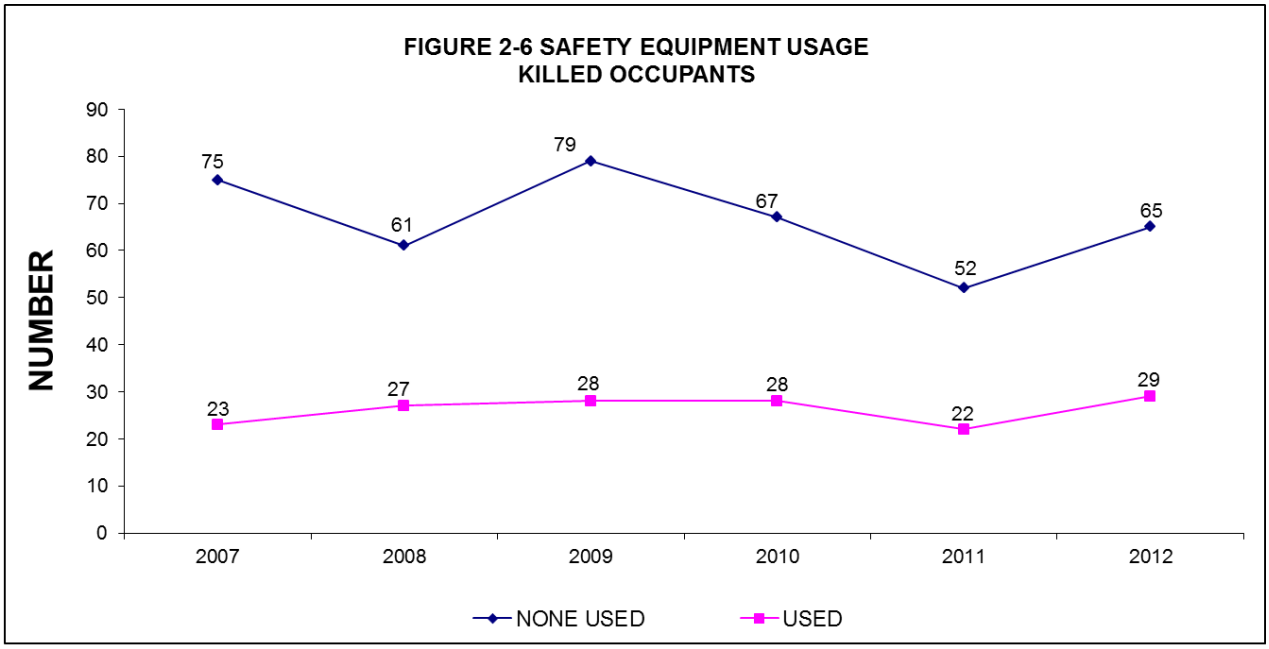


FIGURE 2-6 SAFETY EQUIPMENT USAGE
KILLED OCCUPANTS
NUMBER
90
80
70
60
50
40
30
20
10
0
75
61
79
67
52
65
23
27
28
28
22
29
2007
2008
2009
2010
2011
2012
NONE USED
USED

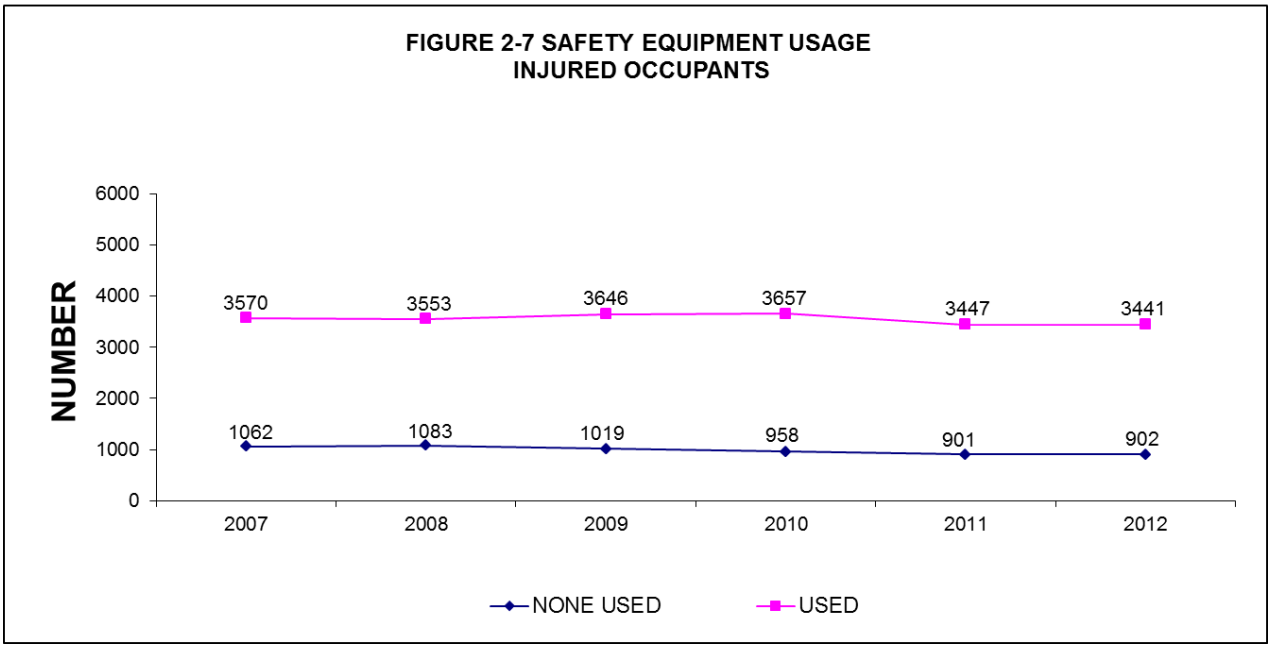


FIGURE 2-7 SAFETY EQUIPMENT USAGE
INJURED OCCUPANTS
NUMBER
6000
5000
4000
3000
2000
1000
0
3570
3553
3646
3657
3447
3441
1062
1083
1019
958
901
902
2007
2008
2009
2010
2011
2012
NONE USED
USED

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 four fatal injuries to motor vehicle occupants from birth through four years of age during 2012, which compares to no fatality during 2011 (see TABLE 2-6).

There were 77 children (birth through 4 years old) injured in 2012, which compares to 66 for 2011. Sixty-five of the 77 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

YEAR	FATALITIES	SERIOUS INJURY	SLIGHT INJURY	TOTAL NONFATAL INJURIES
2002	2	56	60	116
2003	5	53	52	105
2004	3	44	57	101
2005	2	43	58	101
2006	2	49	69	118
2007	1	29	47	76
2008	3	26	46	72
2009	2	24	55	79
2010	1	32	50	82
2011	0	25	41	66
2012	**4**	**36**	**41**	**77**

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 - 2012

	Fatalities	Injuries
No Safety Equipment Used	2	7
Lap Belt Only	0	0
Shoulder Harness Only	0	0
Lap Belt & Shoulder Harness	0	17
Child Restraint Used Properly	1	48
Child Restraint Not Used Properly	0	2
Other, Not Stated or Unknown	1	3
TOTAL	**4**	**77**

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

Cycle and Pedestrian Crashes

The following tables provide a yearly comparison of South Dakota's motorcycle, pedestrian, and bicycle crashes, injuries, and fatalities. During the last 10 years, the average number of motorcycle-involved crashes is 509 and 22 deaths per year. Licensed motorcyclists increased 2.2 percent during 2012 while fatalities increased by eleven to 25 (see Table 2-7). Moped crashes are included with motorcycle crashes. There were no moped fatalities during 2012. Over the years, there have been two moped fatalities and the number of injuries is small. See pages 46-51 for additional motorcycle, pedestrian, and bicycle crash information.

TABLE 2-7
MOTORCYCLE CRASHES
1992 - 2012

	Motorcycle Crashes			Motorcyclists		Registered	Licensed
Year	Total	Fatal	Injury	Fatalities	Injuries	Motorcycles	Motorcyclists
1992	383	10	317	11	388	23,389	47,906
1993	320	10	267	12	324	26,173	48,822
1994	387	19	326	20	415	25,822	49,492
1995	375	14	320	14	407	25,155	49,932
1996	309	10	264	11	342	24,704	50,013
1997	316	9	261	9	334	24,561	50,205
1998	358	9	307	9	373	25,188	51,307
1999	381	10	326	10	406	25,735	52,641
2000	473	21	404	22	520	29,175	54,066
2001	395	19	336	19	418	31,493	55,658
2002	427	18	353	20	426	33,906	57,471
2003	515	21	448	21	568	37,528	59,971
2004	517	24	435	26	536	41,579	62,805
2005	515	20	439	22	531	46,383	65,019
2006	544	22	461	22	589	53,451	67,513
2007	519	25	428	28	554	58,529	70,270
2008	505	14	442	15	532	58,508	73,500
2009	493	14	429	16	508	62,735	75,790
2010	529	27	455	27	569	65,686	77,153
2011	455	15	388	14	468	69,660	78,626
2012	**501**	**24**	**421**	**25**	**501**	**73,310**	**80,410**

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

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TABLE 2-8
PEDESTRIAN FATALITIES AND INJURIES
1992 - 2012

Year	Fatalities	Injuries
1992	7	192
1993	18	163
1994	23	176
1995	14	148
1996	11	141
1997	6	124
1998	7	137
1999	11	131
2000	13	115
2001	15	111
2002	8	104
2003	10	91
2004	9	95
2005	15	89
2006	7	113
2007	7	110
2008	10	96
2009	4	95
2010	9	108
2011	7	119
2012	**2**	**116**

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

TABLE 2-9
BICYCLE FATALITIES AND INJURIES
1992 - 2012

Year	Fatalities	Injuries
1992	1	161
1993	0	179
1994	0	156
1995	1	122
1996	2	139
1997	1	115
1998	2	133
1999	0	102
2000	1	120
2001	1	105
2002	1	87
2003	1	109
2004	1	77
2005	0	99
2006	1	92
2007	0	101
2008	0	103
2009	0	98
2010	2	105
2011	1	88
2012	**0**	**110**

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

Holiday Counts

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

TABLE 2-10
CRASHES DURING HOLIDAYS
2003- 2012

Holiday	Total Hours	Total Crashes	Fatal Crashes	Injury Crashes	Fatalities	Injuries
MEMORIAL DAY						
2003	78	151	1	27	1	50
2004	78	143	1	27	1	45
2005	78	142	1	34	1	53
2006	78	126	2	38	2	55
2007	78	127	1	31	1	49
2008	78	88	0	20	0	26
2009	78	123	2	41	3	60
2010	78	120	0	36	0	45
2011	78	123	0	21	0	30
2012	**78**	**137**	**1**	**30**	**1**	**42**
FOURTH OF JULY						
2003	78	146	1	57	2	82
2004	78	114	4	27	5	40
2005	78	138	3	42	6	62
2006	102	169	3	39	3	54
2007	30	40	0	13	0	25
2008	78	137	2	43	2	61
2009	78	127	1	32	1	42
2010	78	129	1	36	1	49
2011	78	127	2	30	2	42
2012	**30**	**45**	**2**	**11**	**2**	**14**
LABOR DAY						
2003	78	123	1	39	1	62
2004	78	129	0	37	0	51
2005	78	119	3	39	3	59
2006	78	115	3	29	3	45
2007	78	109	1	40	1	70
2008	78	110	2	36	2	47
2009	78	122	2	33	2	45
2010	78	116	2	25	2	33
2011	78	120	3	33	3	52
2012	**78**	**138**	**1**	**38**	**1**	**56**

Holiday	Total Hours	Total Crashes	Fatal Crashes	Injury Crashes	Fatalities	Injuries
THANKSGIVING						
2003	102	222	0	42	0	54
2004	102	274	2	53	2	69
2005	102	279	1	49	1	78
2006	102	268	2	51	2	82
2007	102	260	6	32	7	57
2008	102	241	4	52	5	81
2009	102	243	1	38	1	46
2010	102	211	1	23	1	32
2011	102	215	1	29	1	34
2012	**102**	**225**	**0**	**37**	**0**	**48**
CHRISTMAS						
2003	102	195	3	46	3	66
2004	102	85	1	9	1	19
2005	78	98	1	21	4	33
2006	78	112	2	25	2	31
2007	102	239	1	49	1	65
2008	102	148	2	31	4	49
2009	78	151	1	29	1	40
2010	78	141	0	26	0	36
2011	78	107	0	21	0	32
2012	**102**	**149**	**1**	**23**	**1**	**41**
NEW YEARS						
2003-04	102	173	0	39	0	53
2004-05	102	110	1	30	1	49
2005-06	78	134	4	27	4	47
2006-07	78	146	0	38	0	59
2007-08	102	137	0	26	0	29
2008-09	102	178	1	29	1	42
2009-10	78	142	2	23	2	33
2010-11	78	128	0	24	0	28
2011-12	78	118	0	31	0	40
2012-13	**102**	**148**	**0**	**29**	**0**	**35**

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

Severity of Injuries by Person Type

The following tables provide a yearly comparison of South Dakota's total injuries, driver's injuries, passenger's injuries, bicyclist's injuries and pedestrian's injuries from 2003 through 2012. The percentages are row percentages.

Note: For definition of class of injury, see page 20.

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

Year	Incapacitating Injuries No.	%	Non-Incapacitating Injuries No.	%	Possible Injuries No.	%	Total Injuries	Total Killed
2003	1,450	20.9	2,688	38.7	2,806	40.4	6,944	203
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**

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

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

Year	Incapacitating Injuries No.	%	Non-Incapacitating Injuries No.	%	Possible Injuries No.	%	Total Injuries	Total Killed
2003	930	19.6	1,807	38.0	2,018	42.4	4,755	124
2004	844	18.3	1,586	34.4	2,177	47.3	4,607	129
2005	778	17.7	1,485	33.7	2,141	48.6	4,404	115
2006	687	16.5	1,430	34.3	2,058	49.3	4,175	134
2007	576	14.2	1,441	35.5	2,040	50.3	4,057	101
2008	628	15.4	1,372	33.6	2,078	51.0	4,078	80
2009	548	13.6	1,360	33.8	2,115	52.6	4,023	89
2010	536	13.1	1,455	35.6	2,099	51.3	4,090	80
2011	531	13.7	1,311	33.9	2,027	52.4	3,869	69
2012	**553**	**14.5**	**1,323**	**34.7**	**1,932**	**50.7**	**3,808**	**92**

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

Year	Incapacitating Injuries No.	%	Non-Incapacitating Injuries No.	%	Possible Injuries No.	%	Total Injuries	Total Killed
2003	470	23.6	783	39.3	738	37.1	1,991	68
2004	346	19.7	691	39.4	715	40.8	1,752	58
2005	339	20.9	633	39.1	648	40.0	1,620	56
2006	303	18.5	649	39.7	683	41.8	1,635	49
2007	270	17.9	600	39.8	639	42.3	1,509	38
2008	255	17.9	507	35.6	662	46.5	1,424	31
2009	257	17.3	536	36.1	691	46.6	1,484	38
2010	253	17.0	589	39.7	643	43.3	1,485	49
2011	188	14.6	498	38.7	600	46.7	1,286	34
2012	**219**	**15.7**	**574**	**41.3**	**598**	**43.0**	**1,391**	**39**

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

Year	Incapacitating Injuries No.	%	Non-Incapacitating Injuries No.	%	Possible Injuries No.	%	Total Injuries	Total Killed
2003	17	15.9	59	55.1	31	29.0	107	1
2004	12	15.6	41	53.2	24	31.2	77	1
2005	15	15.5	49	50.5	33	34.0	97	0
2006	10	10.9	49	53.3	33	35.9	92	1
2007	11	10.9	50	49.5	40	39.6	101	0
2008	12	11.7	68	66.0	23	22.3	103	0
2009	13	13.5	47	49.0	36	37.5	96	0
2010	10	9.5	52	49.5	43	41.0	105	2
2011	8	9.3	52	60.5	26	30.2	86	1
2012	**10**	**9.1**	**65**	**59.1**	**35**	**31.8**	**110**	**0**

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

Year	Incapacitating Injuries No.	%	Non-Incapacitating Injuries No.	%	Possible Injuries No.	%	Total Injuries	Total Killed
2003	33	36.3	39	42.9	19	20.9	91	10
2004	29	30.5	47	49.5	19	20.0	95	9
2005	35	39.3	25	28.1	29	32.6	89	15
2006	28	24.8	50	44.2	35	31.0	113	7
2007	26	23.6	56	50.9	28	25.5	110	7
2008	28	29.2	41	42.7	27	28.1	96	10
2009	24	25.3	44	46.3	27	28.4	95	4
2010	45	41.7	35	32.4	28	25.9	108	9
2011	31	26.1	61	51.3	27	22.7	119	7
2012	**27**	**23.3**	**47**	**40.5**	**42**	**36.2**	**116**	**2**

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
2001 - 2012

	CRASH INVOLVED DRIVERS				LICENSED DRIVERS			
	MALE		FEMALE		MALE		FEMALE	
	No.	%	No.	%	No.	%	No.	%
2001	15,774	60.2	10,409	39.8	277,662	49.9	278,369	50.1
2002	14,975	59.7	10,108	40.3	278,283	49.9	279,149	50.1
2003	15,382	59.2	10,586	40.8	282,195	49.9	283,007	50.1
2004	14,614	59.6	9,901	40.4	286,432	49.9	287,931	50.1
2005	13,681	58.1	9,467	40.9	287,841	49.9	289,179	50.1
2006	13,114	58.8	9,111	40.8	291,548	50.0	290,969	50.0
2007	13,529	58.1	9,616	41.3	294,381	50.0	294,165	50.0
2008	13,334	58.1	9,620	41.9	298,983	50.1	298,330	49.9
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**

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. 2012 MOTOR VEHICLE CRASH PROFILE

Introduction

This section profiles the reported motor vehicle traffic crashes for 2012. Information will be given on where the crashes are occurring, when crashes happen, who is involved, and factors that contribute to crashes or why they are occurring. *Column percentages may not total 100 percent due to rounding error.*

During 2012, there were 16,261 reported motor vehicle traffic crashes, the majority of crashes being property damage only 12,256 (75.4%). Injury crashes accounted for 3,887 (23.9%) of the crashes, while 118 (0.7%) were fatal crashes. There were 5,432 persons injured and 133 persons killed in crashes during 2012 (see TABLE 3-1).

TABLE 3-1
FATALITIES AND SEVERITY OF INJURIES OF DRIVERS, PASSENGERS, PEDESTRIANS, AND BICYCLE DRIVERS
2012

	Incapacitating Injuries		Non-Incapacitating Injuries		Possible Injuries		Total Nonfatal Injuries		Total Fatalities	
	No.	%	No.	%	No.	%	No.	%	No.	%
Drivers	553	68.2	1,323	65.8	1,932	74.0	3,808	70.1	92	69.2
Passengers	219	27.0	574	28.6	598	22.9	1,391	25.6	39	29.3
Pedestrians	27	3.3	47	2.3	42	1.6	116	2.1	2	1.5
Bicycle Dry	10	1.2	65	3.2	35	1.3	110	2.0	0	0.0
Other*	2	0.2	1	0.0	4	0.2	7	0.1	0	0.0
TOTAL	**811**	**100**	**2,010**	**100**	**2,611**	**100**	**5,432**	**100**	**133**	**100**

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

Definition of Injuries:

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

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

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

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

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

TABLE 3-2 provides information on persons killed and injured by method or mode of transportation. During 2012, 36.8 percent of the fatalities and 51.0 percent of the injuries occurred to occupants of passenger cars and mini-vans. Occupants of pickups and cargo vans accounted for 17.3 percent of the fatalities and 14.0 percent of the injuries. Additionally, in 2012 twenty-five motorcyclists and two pedestrians were killed.
(See Table 3-2).

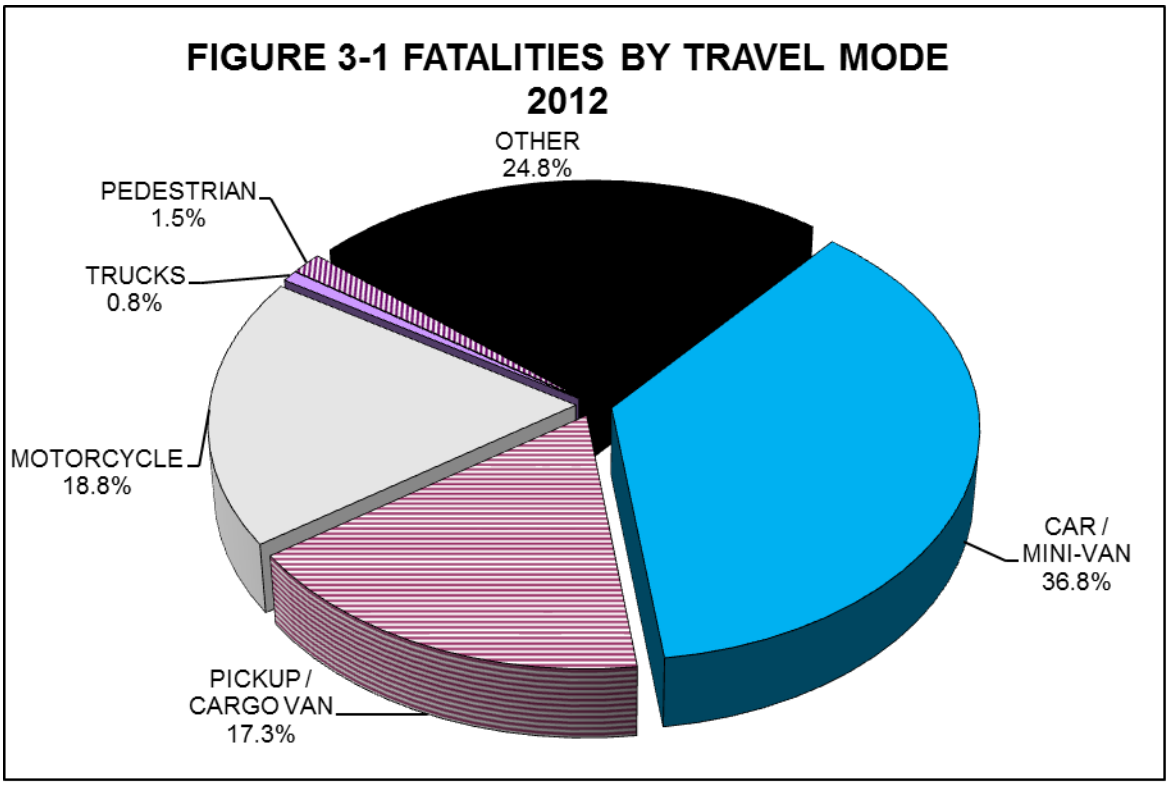
TABLE 3-2
FATALITIES AND INJURIES BY MODE OF TRANSPORTATION
2012

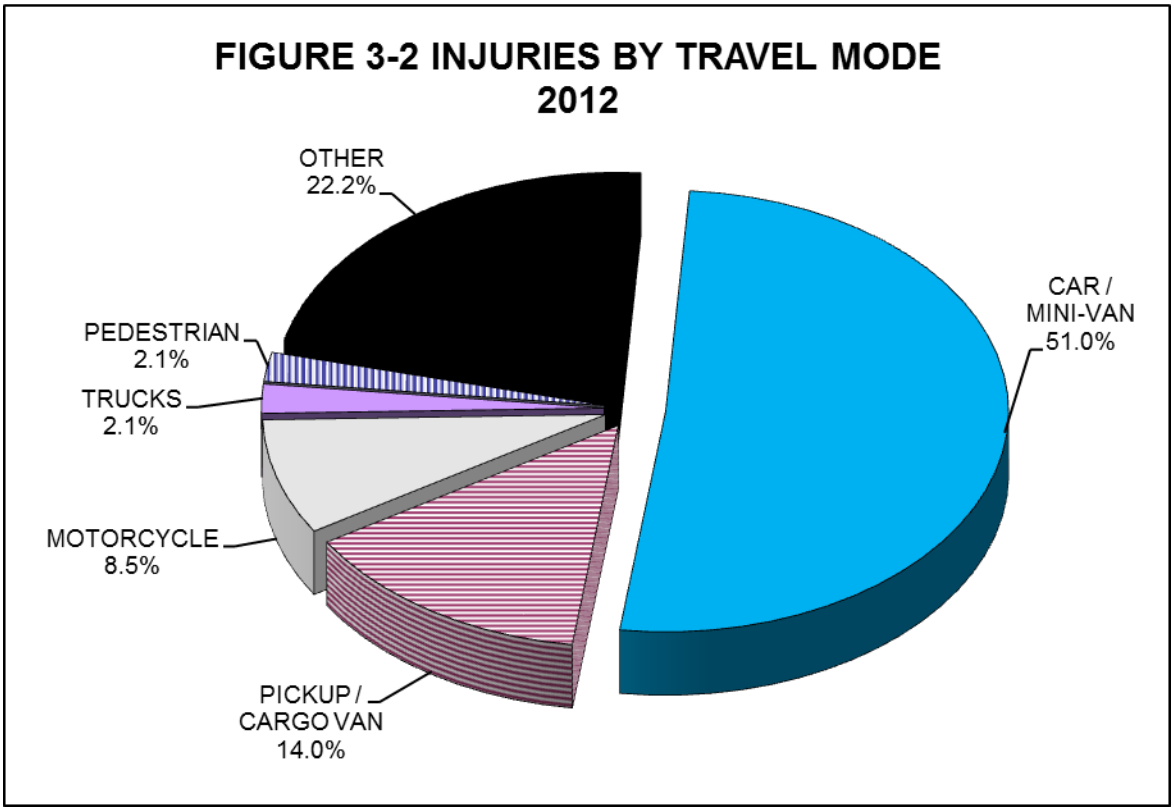
	Fatalities		Injuries	
	No.	%	No.	%
Passenger Cars, Mini-vans	49	36.8	2,772	51.0
Pickups, Cargo Vans***	23	17.3	761	14.0
SUV's (Sports Utility Vehicles)	25	18.8	938	17.3
Trucks (All)*	1	0.8	115	2.1
Motorcycle	25	18.8	460	8.5
Moped	0	0.0	41	0.8
ATV's / 4-Wheelers	4	3.0	57	1.0
Bus	1	0.8	36	0.7
Farm Machinery, Heavy Equipment	2	1.5	6	0.1
Motor Home	0	0.0	17	0.3
Snowmobile	0	0.0	0	0.0
Bicycle	0	0.0	110	2.0
Pedestrians	2	1.5	116	2.1
Other**	1	0.8	3	0.1
Unknown	0	0.0	0	0.0
TOTAL	**133**	**100**	**5,432**	**100**

*Trucks Specifics:	Fatalities	Injuries
Straight Truck	1	47
Straight Truck with Trailer	0	7
Truck Tractor Only	0	2
Truck Tractor with Single Semi Trailer	0	58
Truck Tractor with Two or More Trailers	0	1
TOTAL	**1**	**115**

Note: **Other -- includes Train, Animal Drawn Vehicle and Other Types of Motor Vehicles.
***Cargo Vans are defined as large van-based light trucks used to transport cargo or large vans used to transport people with seating for 9 or more people, including the driver.

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





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

TABLE 3-3 provides information on all crash-involved vehicles by type. Passenger cars and mini-vans made up 29.9 percent of the vehicles involved in fatal crashes and 54.0 percent of those involved in injury crashes. Pickups and vans made up 22.0 percent of the vehicles involved in fatal crashes.

VEHICLE TYPES INVOLVED IN CRASHES
2011
TABLE 3-3

	All Crashes		Fatal Crashes		Injury Crashes		PDO Crashes	
	No.	%	No.	%	No.	%	No.	%
Passenger Cars / Mini-vans	13,132	54.2	53	29.9	3,471	54.0	9,608	54.5
Pickups, Cargo Vans	4,421	18.2	39	22.0	992	15.4	3,390	19.2
SUV's (Sports Utility Vehicles)	4,855	20.0	35	19.8	1,187	18.5	3,633	20.6
Trucks (All)*	1,001	4.1	15	8.5	224	3.5	762	4.3
Motorcycle	500	2.1	26	14.7	415	6.5	59	0.3
Moped	40	0.2	0	0.0	39	0.6	1	0.0
ATV's / 4-wheelers	55	0.2	4	2.3	50	0.8	1	0.0
Bus	97	0.4	1	0.6	24	0.4	72	0.4
Farm Machinery / Heavy Equip.	41	0.2	3	1.7	9	0.1	29	0.2
Motor Home	28	0.1	0	0.0	9	0.1	19	0.1
Snowmobile	6	0.0	0	0.0	0	0.0	6	0.0
Other	15	0.1	1	0.6	2	0.0	12	0.1
Unknown	43	0.2	0	0.0	1	0.0	42	0.2
TOTAL	**24,234**	**100**	**177**	**100**	**6,423**	**100**	**17,634**	**100**

* Trucks Specifics:	All Crashes	Fatal Crashes	Injury Crashes	PDO Crashes
Straight Truck	336	8	82	246
Straight Truck with Trailer	86	0	17	69
Truck Tractor Only	13	0	7	6
Truck Tractor with Single Semi Trailer	523	6	110	407
Truck Tractor with Two or More Trailers	43	1	8	34
TOTAL	**1,001**	**15**	**224**	**762**

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

TABLE 3-4 provides information on the ages of persons killed and injured. A total of 21 people (15.8%) of the persons killed were under 20 years of age and a total of 890 or (16.4%) of the persons injured were from 25 through 34 years of age.
Five children age 0-5 were killed during 2012 (see Table 3-4).

TABLE 3-4
FATALITIES AND INJURIES BY AGE GROUP
2012

	Fatalities		Injuries	
	No.	%	No.	%
0 - 5	5	3.8	104	1.9
6 - 13	4	3.0	253	4.7
14 - 15	2	1.5	211	3.9
16 - 17	4	3.0	337	6.2
18	1	0.8	202	3.7
19	5	3.8	195	3.6
20	3	2.3	175	3.2
21 - 24	12	9.0	605	11.1
25 - 34	22	16.5	890	16.4
35 - 44	21	15.8	661	12.2
45 - 54	19	14.3	740	13.6
55 - 64	15	11.3	555	10.2
65 - Over	20	15.0	504	9.3
Unknown	0	0.0	0	0.0
Total	**133**	**100**	**5,432**	**100**

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

First Harmful Event

The initial incident that causes injury or damage is referred to as the first harmful event. Non-collision (overturning or other non-collision) represented 46.6 percent of the fatal crashes and only 9.1 percent of the total crashes, while 39.0 percent of the fatal crashes and 40.5 percent of all crashes represented a collision between two or more vehicles (see TABLE 3-5).

TABLE 3-5
FIRST HARMFUL EVENT
2012

First Harmful Event	Total Crashes No.	%	Fatal Crashes No.	%	Injury Crashes No.	%	PDO Crashes No.	%
Motor Vehicle Collision With:								
MV in Transport	6,588	40.5	46	39.0	2,119	54.5	4,423	36.1
A Fixed or Other Object	2,225	13.7	12	10.2	580	14.9	1,633	13.3
An Animal	5,034	31.0	2	1.7	108	2.8	4,924	40.2
A Pedestrian	112	0.7	2	1.7	108	2.8	2	0.0
A Bicyclist	107	0.7	0	0.0	107	2.8	0	0.0
A Parked Motor Vehicle	688	4.2	0	0.0	90	2.3	598	4.9
A Railroad Vehicle	12	0.1	1	0.8	3	0.1	8	0.1
Equipment in Roadway	15	0.1	0	0.0	2	0.1	13	0.1
Non-Collision (Overturning or Other)	1,480	9.1	55	46.6	770	19.8	655	5.3
Total	**16,261**	**100**	**118**	**100**	**3,887**	**100**	**12,256**	**100**

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

Manner of Collision

The most common type of manner of collision between two or more vehicles is an angle collision. Angle collisions constitute 60.9 percent of the fatal crashes 51.4 percent of the injury crashes, and 53.6 percent of the property damage only crashes. Angle collisions are the most prevalent for severe crashes, accounting for 60.9 percent of the fatal crashes and 52.9 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
2012

Manner of Collision	Total Crashes No.	%	Fatal Crashes No.	%	Injury Crashes No.	%	PDO Crashes No.	%
Rear-End	2492	37.8	5	10.9	911	43.0	1576	35.6
Head-On	71	1.1	9	19.6	34	1.6	28	0.6
Angle	3486	52.9	28	60.9	1089	51.4	2369	53.6
Sideswipe-Same Direction	460	7.0	2	4.3	71	3.4	387	8.7
Sideswipe-Opposite Dir.	75	1.1	2	4.3	14	0.7	59	1.3
Rear-Rear	1	0.0	0	0.0	0	0.0	1	0.0
Unknown	3	0.0	0	0.0	0	0.0	3	0.1
Total	6,588	100	46	100	2,119	100	4,423	100
No Collision Between 2 or more MV	9,673		72		1,768		7,833	
Total Crashes	**16,261**		**118**		**3,887**		**12,256**	

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

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

Highway System

The number of reported crashes by "type of highway system" is presented in TABLE 3-7. **Fatal and PDO crashes happen predominately in rural areas.** City streets and alleys experienced 31.6 percent of the PDO crashes and 47.2 percent of the injury crashes while accounting for 11.9 percent of the fatal crashes.

Non-interstate rural roads tallied 72.0 percent of the fatal crashes. The Interstate system experienced 2,138 (13.1%) of the total crashes while accounting for an estimated 29.2 percent of the vehicle miles traveled in 2012. Seventeen or 14.4 percent of the fatal crashes happened on the interstate system. (See FIGURES 3-3 and 3-4)

TABLE 3-7
CRASHES BY TYPE OF HIGHWAY
2012

Type of Highway	Total Crashes Number	%	Fatal Crashes Number	%	Injury Crashes Number	%	PDO Crashes Number	%	No. Killed	No. Injured
Interstate - Rural	1,401	8.6	15	12.7	191	4.9	1,195	9.8	17	305
US/State Hwys-Rural	4,205	25.9	46	39.0	638	16.4	3,521	28.7	54	1,015
Co./Local Rds.-Rural	2,868	17.6	39	33.1	686	17.6	2,143	17.5	44	982
Interstate - City	737	4.5	2	1.7	144	3.7	591	4.8	2	185
US/State Hwys-City	1,099	6.8	2	1.7	339	8.7	758	6.2	2	461
City Streets/Alleys	5,724	35.2	14	11.9	1,833	47.2	3,877	31.6	14	2,423
Unknown/Not Reported	227	1.4	0	0.0	56	1.4	171	1.4	0	61
Total	**16,261**	**100**	**118**	**100**	**3,887**	**100**	**12,256**	**100**	**133**	**5,432**

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

FIGURE 3-3 2012
TRAFFIC CRASHES
BY SYSTEM TYPE

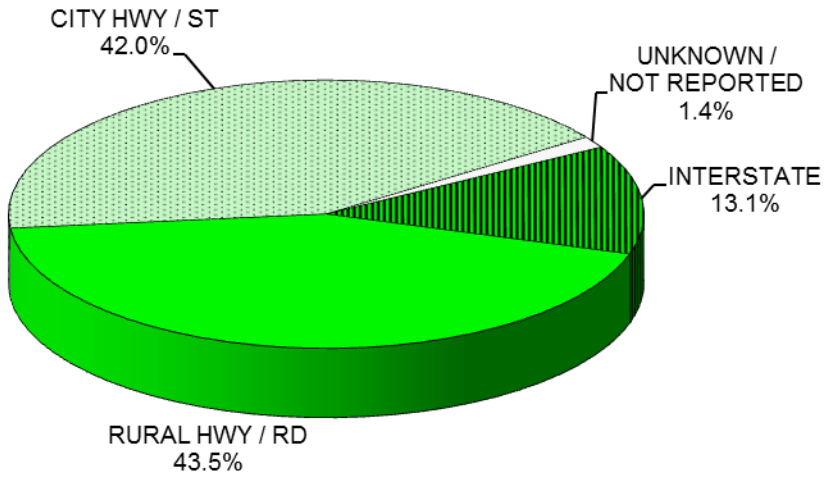


FIGURE 3-4 2012
FATAL TRAFFIC CRASHES
BY SYSTEM TYPE

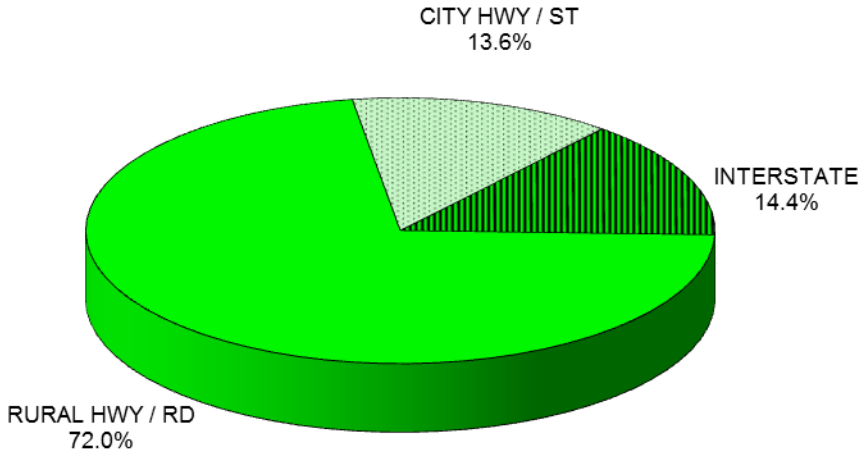


TABLE 3-8
MOTOR VEHICLE TRAFFIC CRASHES BY SD COUNTIES
2012

County	Total Crashes	Fatal Crashes	Injury Crashes	PDO Crashes	Fatalities	Injuries
AURORA	148	1	14	133	1	24
BEADLE	299	0	76	223	0	105
BENNETT	35	3	14	18	4	31
BON HOMME	90	2	26	62	2	39
BROOKINGS	543	2	101	440	2	123
BROWN	613	3	138	472	3	183
BRULE	120	1	25	94	1	40
BUFFALO	21	1	5	15	1	12
BUTTE	221	3	34	184	4	51
CAMPBELL	42	2	5	35	2	6
CHARLES MIX	128	0	29	99	0	45
CLARK	98	0	19	79	0	25
CLAY	169	0	38	131	0	56
CODINGTON	606	1	139	466	1	194
CORSON	59	2	8	49	3	14
CUSTER	247	4	69	174	6	104
DAVISON	523	2	92	429	2	129
DAY	63	2	18	43	2	28
DEUEL	132	0	28	104	0	36
DEWEY	50	0	7	43	0	10
DOUGLAS	29	0	7	22	0	7
EDMUNDS	107	1	13	93	2	24
FALL RIVER	118	3	19	96	3	35
FAULK	47	0	2	45	0	3
GRANT	134	0	26	108	0	38
GREGORY	36	2	10	24	2	28
HAAKON	37	1	8	28	1	17
HAMLIN	127	1	19	107	1	25
HAND	111	1	12	98	1	20
HANSON	93	1	19	73	1	29
HARDING	70	1	17	52	1	22
HUGHES	230	1	59	170	1	76
HUTCHINSON	127	1	17	109	1	25
HYDE	17	0	4	13	0	7
JACKSON	96	3	7	86	3	11
JERAULD	60	2	4	54	3	6
JONES	100	0	10	90	0	13
KINGSBURY	144	0	19	125	0	25
LAKE	198	3	36	159	3	50
LAWRENCE	638	7	157	474	7	215
LINCOLN	763	6	200	557	6	295
LYMAN	192	1	22	169	1	30
MARSHALL	76	0	8	68	0	9
MC COOK	161	2	20	139	2	24
MC PHERSON	50	1	1	48	1	1
MEADE	455	2	105	348	2	149
MELLETTE	23	1	1	21	1	5
MINER	48	2	5	41	2	8
MINNEHAHA	3,712	15	1,237	2,460	16	1,652
MOODY	206	4	18	184	5	29
PENNINGTON	2,162	9	612	1,541	9	851
PERKINS	48	1	10	37	1	10
POTTER	86	0	8	78	0	10
ROBERTS	172	4	33	135	4	44
SANBORN	133	0	15	118	0	20
SHANNON	25	4	11	10	7	29
SPINK	200	1	25	174	4	48
STANLEY	104	1	11	92	1	14
SULLY	51	1	2	48	1	4
TODD	14	0	4	10	0	7
TRIPP	157	0	27	130	0	50
TURNER	79	0	16	63	0	19
UNION	172	5	39	128	5	59
WALWORTH	90	1	18	71	1	25
YANKTON	334	0	85	249	0	102
ZIEBACH	22	0	4	18	0	7
Total:	**16,261**	**118**	**3,887**	**12,256**	**133**	**5,432**

TABLE 3-8A
ALCOHOL INVOLVED MOTOR VEHICLE TRAFFIC CRASHES BY SD COUNTIES
2012

County	Total Crashes	Fatal Crashes	Injury Crashes	PDO Crashes	Fatalities	Injuries
AURORA	3	0	0	3	0	0
BEADLE	23	0	9	14	0	10
BENNETT	7	2	5	0	3	9
BON HOMME	6	1	2	3	1	4
BROOKINGS	28	1	14	13	1	19
BROWN	39	1	16	22	1	22
BRULE	8	0	5	3	0	8
BUFFALO	5	1	2	2	1	8
BUTTE	15	1	5	9	2	10
CAMPBELL	2	1	1	0	1	1
CHARLES MIX	13	0	11	2	0	22
CLARK	4	0	3	1	0	4
CLAY	14	0	7	7	0	8
CODINGTON	37	0	21	16	0	30
CORSON	2	1	1	0	1	5
CUSTER	14	2	8	4	4	13
DAVISON	18	1	6	11	1	16
DAY	7	1	5	1	1	6
DEUEL	4	0	1	3	0	1
DEWEY	2	0	0	2	0	0
DOUGLAS	3	0	2	1	0	2
EDMUNDS	6	0	4	2	0	7
FALL RIVER	8	1	3	4	1	7
FAULK	1	0	1	0	0	2
GRANT	15	0	7	8	0	10
GREGORY	3	1	2	0	1	7
HAAKON	3	1	2	0	1	6
HAMLIN	2	0	1	1	0	1
HAND	3	0	1	2	0	1
HANSON	3	0	2	1	0	3
HARDING	6	1	4	1	1	6
HUGHES	12	0	6	6	0	8
HUTCHINSON	5	0	3	2	0	4
HYDE	1	0	1	0	0	1
JACKSON	3	1	0	2	1	0
JERAULD	3	0	2	1	0	3
JONES	0	0	0	0	0	0
KINGSBURY	8	0	7	1	0	9
LAKE	6	0	6	0	0	10
LAWRENCE	41	3	23	15	3	26
LINCOLN	36	2	18	16	2	28
LYMAN	10	1	4	5	1	6
MARSHALL	9	0	3	6	0	3
MC COOK	5	1	2	2	1	2
MC PHERSON	1	1	0	0	1	0
MEADE	36	2	18	16	2	28
MELLETTE	1	0	1	0	0	4
MINER	0	0	0	0	0	0
MINNEHAHA	265	3	112	150	3	142
MOODY	9	2	4	3	3	8
PENNINGTON	143	3	69	71	3	97
PERKINS	1	0	1	0	0	1
POTTER	0	0	0	0	0	0
ROBERTS	13	4	7	2	4	9
SANBORN	4	0	4	0	0	4
SHANNON	10	4	6	0	7	23
SPINK	6	0	4	2	0	9
STANLEY	3	1	1	1	1	1
SULLY	1	0	1	0	0	1
TODD	1	0	1	0	0	3
TRIPP	8	0	8	0	0	19
TURNER	7	0	5	2	0	5
UNION	5	0	3	2	0	4
WALWORTH	9	0	3	6	0	3
YANKTON	22	0	12	10	0	12
ZIEBACH	0	0	0	0	0	0
Total:	**988**	**45**	**486**	**457**	**53**	**721**

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 nine counties (see TABLE 3-9). Each of these counties reported over two percent of all rural fatal and injury crashes. These nine counties accounted for 48.3 percent of rural fatal and injury crashes and 67.7 percent of all fatal and injury crashes in South Dakota. Minnehaha County has 9.7 percent of all rural fatal and injury crashes with Pennington 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.

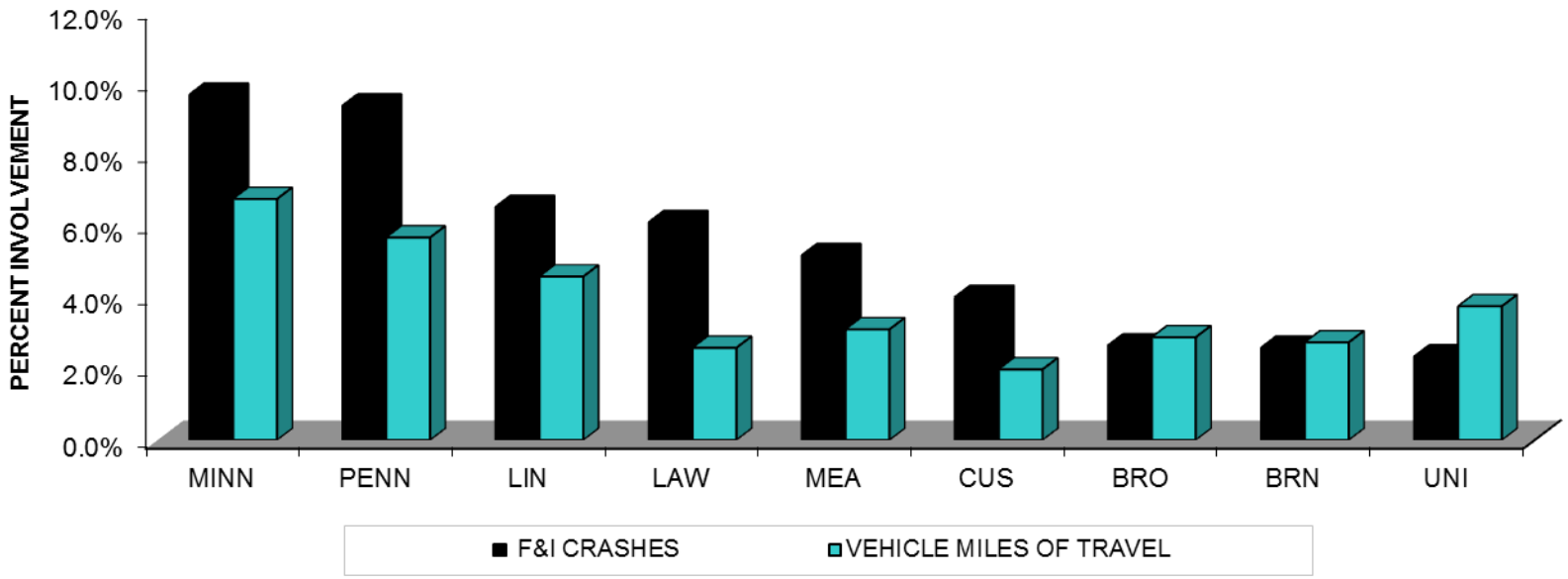
TABLE 3-9
COUNTIES HAVING MORE THAN TWO PERCENT OF THE RURAL FATAL & INJURY CRASHES
2012

County	Rural Fatal & Injury Crashes	Percent of All Rural Fatal & Injury Crashes	Percent of Rural VMTS
MINNEHAHA	157	9.7%	6.7%
PENNINGTON	152	9.3%	5.7%
LINCOLN	106	6.5%	4.6%
LAWRENCE	99	6.1%	2.6%
MEADE	84	5.2%	3.1%
CUSTER	65	4.0%	2.0%
BROOKINGS	43	2.6%	2.9%
BROWN	42	2.6%	2.7%
UNION	38	2.3%	3.7%

Note: Total Rural Fatal and Injury Crashes: 1,626
S.D. Vehicle Miles of Travel Report (2012 data)

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

FIGURE 3-5 RURAL F&I CRASHES/VMTS
SELECTED COUNTIES - 2012



City Summary

Reported traffic crashes within South Dakota's cities (population of 2,500 and more) are presented in TABLE 3-10. These cities reported 57.9 percent of the statewide injury crashes and 12.7 percent of the fatal crashes. The two largest cities (Sioux Falls, Rapid City) accounted for 71.8 percent of fatal and injury crashes occurring in cities and 61.1 percent of the property damage only crashes.

TABLE 3-10
TRAFFIC CRASHES SOUTH DAKOTA CITIES
POPULATION 2500 AND OVER
2012

City	Total Crashes	Fatal Crashes	Injury Crashes	PDO Crashes	Fatalities	Injuries
Aberdeen	323	0	96	227	0	120
Belle Fourche	33	0	7	26	0	9
Box Elder	36	0	8	28	0	11
Brandon	53	0	12	41	0	15
Brookings	239	2	57	180	2	69
Canton	22	0	2	20	0	2
Dell Rapids	27	0	3	24	0	3
Harrisburg	14	0	0	14	0	0
Hartford	6	0	0	6	0	0
Hot Springs	33	0	6	27	0	8
Huron	133	0	45	88	0	59
Lead	6	0	2	4	0	2
Madison	44	0	10	34	0	13
Milbank	24	0	4	20	0	4
Mitchell	313	2	61	250	2	83
Mobridge	27	0	7	20	0	7
N. Sioux City	23	0	4	19	0	5
Pierre	110	0	43	67	0	56
Rapid City	1457	1	455	1001	1	619
Redfield	26	0	5	21	0	6
Sioux Falls	3114	10	1162	1942	10	1540
Sisseton	30	0	6	24	0	6
Spearfish	198	0	50	148	0	68
Sturgis	90	0	20	70	0	24
Tea	1	0	1	0	0	1
Vermillion	79	0	16	63	0	22
Watertown	421	0	106	315	0	145
Winner	20	0	5	15	0	7
Yankton	178	0	58	120	0	71
City Totals	7,080	15	2,251	4,814	15	2,975
Statewide Totals	16,261	118	3,887	12,256	133	5,432

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 14.0 percent of all reported property damage crashes and 9.0 percent of all fatal and injury crashes. Dry roads were reported in 81.7 percent of all fatal and injury crashes.

TABLE 3-11
ROADWAY SURFACE CONDITIONS
2012

	Total Crashes		Fatal Crashes		Injury Crashes		PDO Crashes	
	No.	%	No.	%	No.	%	No.	%
Dry	12,943	79.6	100	84.7	3,173	81.6	9,670	78.9
Wet	943	5.8	3	2.5	273	7.0	667	5.4
Snow	901	5.5	1	0.8	141	3.6	759	6.2
Slush	226	1.4	1	0.8	46	1.2	179	1.5
Ice	884	5.4	8	6.8	143	3.7	733	6.0
Frost	64	0.4	1	0.8	20	0.5	43	0.4
Water	8	0.0	0	0.0	1	0.0	7	0.1
Sand, mud, dirt, gravel	214	1.3	3	2.5	77	2.0	134	1.1
Oil	7	0.0	0	0.0	5	0.1	2	0.0
Other / Not applicable	10	0.1	0	0.0	5	0.1	5	0.0
Unknown / Not reported	61	0.4	1	0.8	3	0.1	57	0.5
Total	**16,261**	**100**	**118**	**100**	**3,887**	**100**	**12,256**	**100**

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

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

The peak three-hour period for fatal crashes was 3:00-5:59 p.m. Twenty-nine or 24.6 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 1,020 (26.2%) of the injury crashes occurred. The peak three hour period for property damage only crashes was 5:00-7:59 p.m. with 2,483 (20.3%) of the property damage only crashes occurred (see TABLE 3-12).

Twenty-seven fatal crashes or 22.9 percent occurred during August in 2012. The month of August shows 460 injury crashes or 11.8 percent of the injury crashes. The month of November shows 1,442 property damage only crashes which represents 11.8 percent of the property damage only crashes for 2012 (see TABLE 3-13).

The day of the week Friday accounts for 2,793 of the total crashes or 17.2 percent, with 660 (17.0%) of injury crashes and 2,117 (17.3%) of property damage only crashes. Saturday accounted for 25 fatal crashes or 21.2 percent of the total for 2012 (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
2012

Time	Total Crashes	Fatal Crashes	Injury Crashes	PDO Crashes	Fatalities	Injuries
Midnight	295	4	55	236	4	73
1:00 AM	247	1	61	185	1	75
2:00 AM	212	1	61	150	2	82
3:00 AM	170	3	46	121	3	63
4:00 AM	187	3	35	149	3	45
5:00 AM	443	3	65	375	6	93
6:00 AM	677	2	70	605	3	83
7:00 AM	1,031	5	228	798	5	291
8:00 AM	627	3	156	468	3	219
9:00 AM	502	5	118	379	5	163
10:00 AM	606	3	162	441	5	229
11:00 AM	697	6	199	492	7	285
12:00 PM	816	11	236	569	13	353
1:00 PM	738	8	233	497	8	325
2:00 PM	739	4	259	476	4	359
3:00 PM	1,005	6	331	668	9	446
4:00 PM	1,051	10	338	703	10	478
5:00 PM	1,268	13	351	904	13	499
6:00 PM	1,080	4	245	831	4	343
7:00 PM	928	6	174	748	6	261
8:00 PM	883	5	139	739	5	196
9:00 PM	969	4	136	829	4	193
10:00 PM	633	6	101	526	8	155
11:00 PM	404	2	77	325	2	109
Unknown	53	0	11	42	0	14
Total	**16,261**	**118**	**3,887**	**12,256**	**133**	**5,432**

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

TABLE 3-13
CRASHES BY MONTH
2012

Month	Total Crashes	Fatal Crashes	Injury Crashes	PDO Crashes	Fatalities	Injuries
JANUARY	1,343	5	272	1,066	5	383
FEBRUARY	1,250	4	260	986	5	358
MARCH	1,034	12	281	741	14	405
APRIL	1,037	7	268	762	8	383
MAY	1,329	6	354	969	6	500
JUNE	1,271	9	349	913	12	481
JULY	1,272	14	382	876	14	535
AUGUST	1,385	27	460	898	30	630
SEPTEMBER	1,376	10	346	1,020	10	452
OCTOBER	1,551	6	321	1,224	7	454
NOVEMBER	1,731	5	284	1,442	8	390
DECEMBER	1,682	13	310	1,359	14	461
Total	**16,261**	**118**	**3,887**	**12,256**	**133**	**5,432**

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

TABLE 3-14
CRASHES BY DAY OF WEEK
2012

Day	Total Crashes	Fatal Crashes	Injury Crashes	PDO Crashes	Fatalities	Injuries
SUNDAY	1,803	18	461	1,324	20	669
MONDAY	2,348	9	539	1,800	10	729
TUESDAY	2,334	13	556	1,765	13	758
WEDNESDAY	2,279	19	557	1,703	24	773
THURSDAY	2,470	18	542	1,910	18	724
FRIDAY	2,793	16	660	2,117	20	946
SATURDAY	2,234	25	572	1,637	28	833
Total	**16,261**	**118**	**3,887**	**12,256**	**133**	**5,432**

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

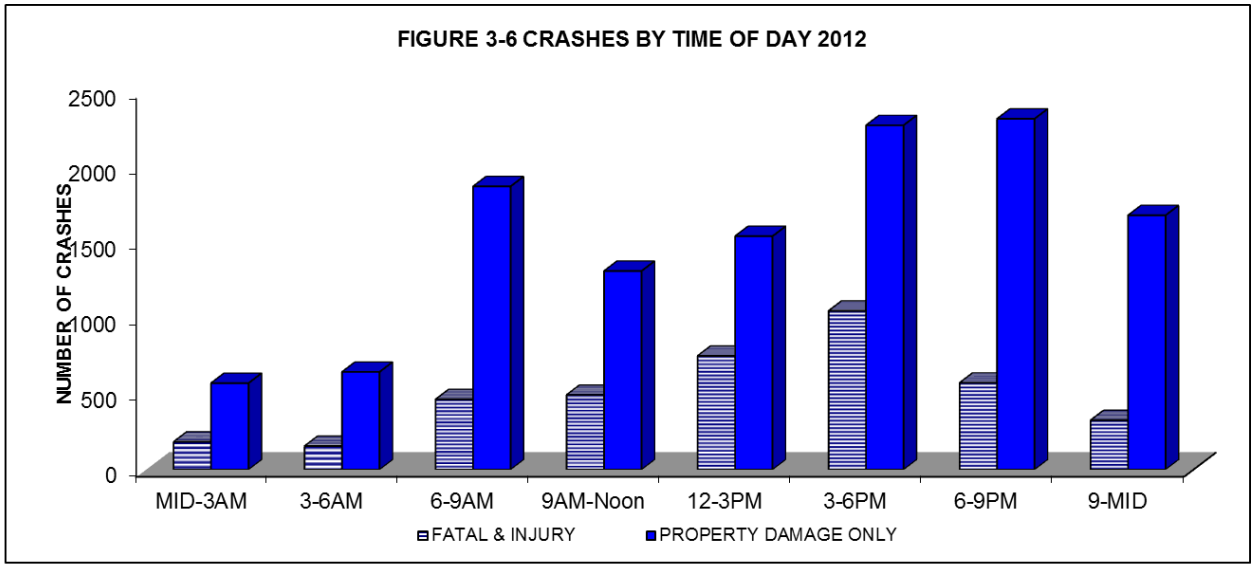


FIGURE 3-6 CRASHES BY TIME OF DAY 2012
NUMBER OF CRASHES
2500
2000
1500
1000
500
0
MID-3AM
3-6AM
6-9AM
9AM-Noon
12-3PM
3-6PM
6-9PM
9-MID
FATAL & INJURY
PROPERTY DAMAGE ONLY

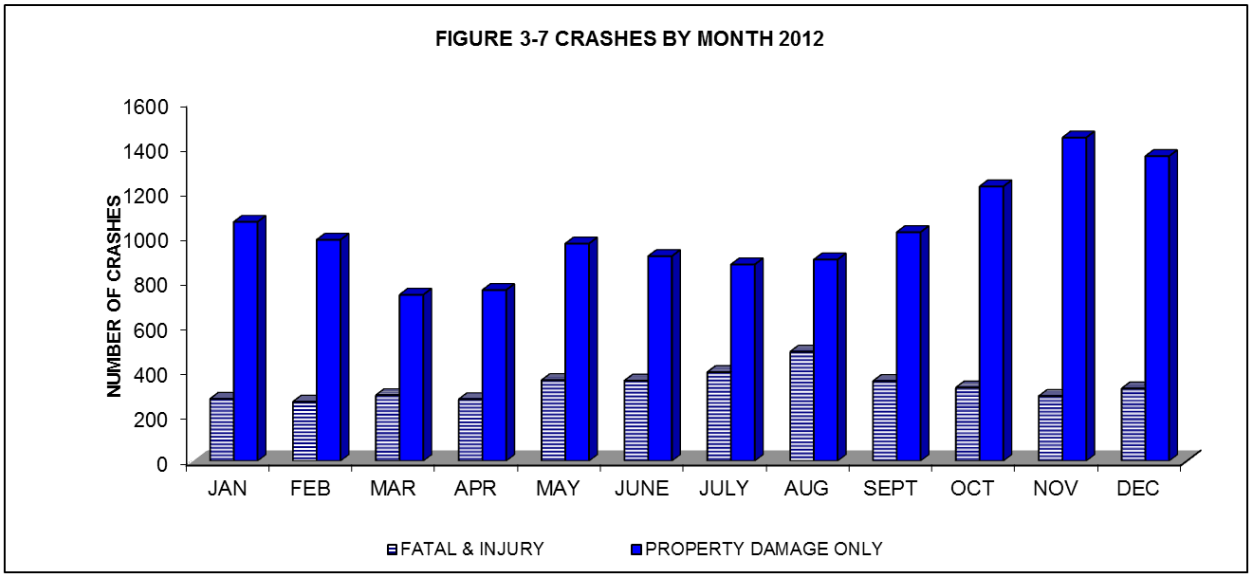


FIGURE 3-7 CRASHES BY MONTH 2012
NUMBER OF CRASHES
1600
1400
1200
1000
800
600
400
200
0
JAN
FEB
MAR
APR
MAY
JUNE
JULY
AUG
SEPT
OCT
NOV
DEC
FATAL & INJURY
PROPERTY DAMAGE ONLY

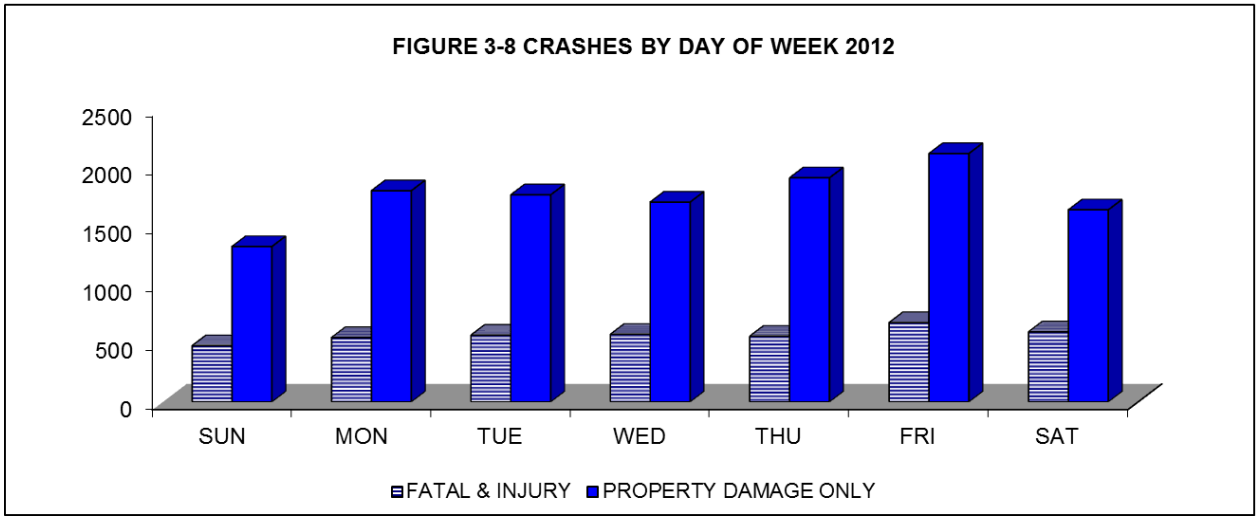


FIGURE 3-8 CRASHES BY DAY OF WEEK 2012
2500
2000
1500
1000
500
0
SUN
MON
TUE
WED
THU
FRI
SAT
FATAL & INJURY
PROPERTY DAMAGE ONLY

Drivers

In the 16,261 reported motor vehicle crashes there were 23,379 motor vehicle drivers involved, including 176 drivers in fatal crashes and 6,265 drivers in injury crashes. Of these drivers 92 were killed, which is 69.2 percent of all persons killed in motor vehicle crashes and 70.1 percent or 3,808 of the 5,432 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, 28.4 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 18.8 percent of the drivers involved in fatal crashes and 30.9 percent of the drivers in injury crashes. Drivers under the age of 35 make up 37.5 percent of the drivers in fatal crashes and 49.7 percent of the drivers in injury crashes. Forty-six or 26.1 percent of the drivers in fatal crashes were 21-34 years of age (see TABLE 3-15).

TABLE 3-15
AGE OF DRIVERS IN CRASHES
2012

Age	Drivers In All Crashes No.	%	Drivers In Fatal Crashes No.	%	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	15	0.1	1	0.6	7	0.1	7	0.0
14 - 15	613	2.6	2	1.1	179	2.9	432	2.6
16 - 17	1,342	5.7	5	2.8	378	6.0	959	5.7
18	718	3.1	1	0.6	212	3.4	505	3.0
19	739	3.2	6	3.4	223	3.6	510	3.0
20	687	2.9	5	2.8	204	3.3	478	2.8
21 - 24	2,517	10.8	13	7.4	732	11.7	1,772	10.5
25 - 34	4,359	18.6	33	18.8	1,178	18.8	3,148	18.6
35 - 44	3,305	14.1	24	13.6	855	13.6	2,426	14.3
45 - 54	3,468	14.8	37	21.0	898	14.3	2,533	15.0
55 - 64	3,059	13.1	27	15.3	736	11.7	2,296	13.6
65 - Over	2,333	10.0	21	11.9	615	9.8	1,697	10.0
Unknown	224	1.0	1	0.6	48	0.8	175	1.0
Total	**23,379**	**100**	**176**	**100**	**6,265**	**100**	**16,938**	**100**

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

TABLE 3-16 provides information on the age of drinking drivers in motor vehicle crashes. There were a reported 980 drinking drivers in all crashes which is 4.2 percent of all drivers in crashes. Forty-Six or 26.1 percent of drivers in fatal crashes had been drinking while 473 or 7.5 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 21.7 percent of the drinking drivers in fatal crashes and 35.1 percent of the drinking drivers in injury crashes. Those drivers under 35 years of age accounted for 45.7 percent of the drinking drivers in fatal crashes and 66.0 percent of the drinking drivers in all crashes.

TABLE 3-16
AGE OF DRINKING DRIVERS IN CRASHES
2012

Age	Drivers In All Crashes No.	%	Drivers In Fatal Crashes No.	%	Drivers In Injury Crashes No.	%	Drivers In PDO Crashes No.	%
6 – 13	0	0.0	0	0.0	0	0.0	0	0.0
14 - 15	3	0.3	0	0.0	1	0.2	2	0.4
16 - 17	22	2.2	0	0.0	11	2.3	11	2.4
18	23	2.3	1	2.2	9	1.9	13	2.8
19	40	4.1	3	6.5	15	3.2	22	4.8
20	49	5.0	2	4.3	18	3.8	29	6.3
21 - 24	226	23.1	4	8.7	112	23.7	110	23.9
25 - 34	284	29.0	11	23.9	145	30.7	128	27.8
35 - 44	142	14.5	8	17.4	64	13.5	70	15.2
45 - 54	121	12.3	11	23.9	63	13.3	47	10.2
55 - 64	48	4.9	5	10.9	27	5.7	16	3.5
65 - Over	19	1.9	1	2.2	6	1.3	12	2.6
Unknown	3	0.3	0	0.0	2	0.4	1	0.2
Total	**980**	**100**	**46**	**100**	**473**	**100**	**461**	**100**

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

TABLE 3-17 compares age of drivers in fatal and injury crashes, drinking drivers in fatal and injury crashes, and speeding drivers in fatal and injury crashes with licensed drivers by age. The young driver is over represented as those drivers in fatal and injury crashes, drinking drivers in fatal and injury crashes, and speeding drivers in fatal and injury crashes. In South Dakota, licensed drivers under 25 years of age represent 15.5 percent of the total licensed drivers, 34.0 percent of the drinking drivers in fatal and injury crashes and 51.3 percent of the speeding drivers in fatal and injury crashes. Drivers under 35 years of age constitute 32.4 percent of all licensed drivers, with 64.0 percent of the drinking drivers and 72.8 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
2012

Age	Licensed Drivers %	Drivers In Fatal & Injury Crashes No.	%	Drinking Drivers In Fatal & Injury Crashes No.	%	Speeding Drivers In Fatal & Injury Crashes No.	%
0 - 13	0.0	8	0.1	0	0.0	1	0.2
14 - 15	1.7	181	2.8	1	0.2	27	5.1
16 - 17	2.7	383	5.9	11	2.1	49	9.2
18	1.5	213	3.3	10	1.9	39	7.4
19	1.5	229	3.6	18	3.5	29	5.5
20	1.6	209	3.2	20	3.9	34	6.4
21 - 24	6.6	745	11.6	116	22.4	93	17.5
25 - 34	16.9	1,211	18.8	156	30.1	114	21.5
35 - 44	14.4	879	13.6	72	13.9	52	9.8
45 - 54	17.0	935	14.5	74	14.3	42	7.9
55 - 64	17.3	763	11.8	32	6.2	33	6.2
65 - Over	18.8	636	9.9	7	1.3	17	3.2
Unknown	0.0	49	0.8	2	0.4	0	0.0
TOTAL	**100**	**6,441**	**100**	**519**	**100**	**530**	**100**

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

FIGURE 3-9 DRIVERS BY AGE GROUP 2012
Fatal and Injury Crash Involved Drivers

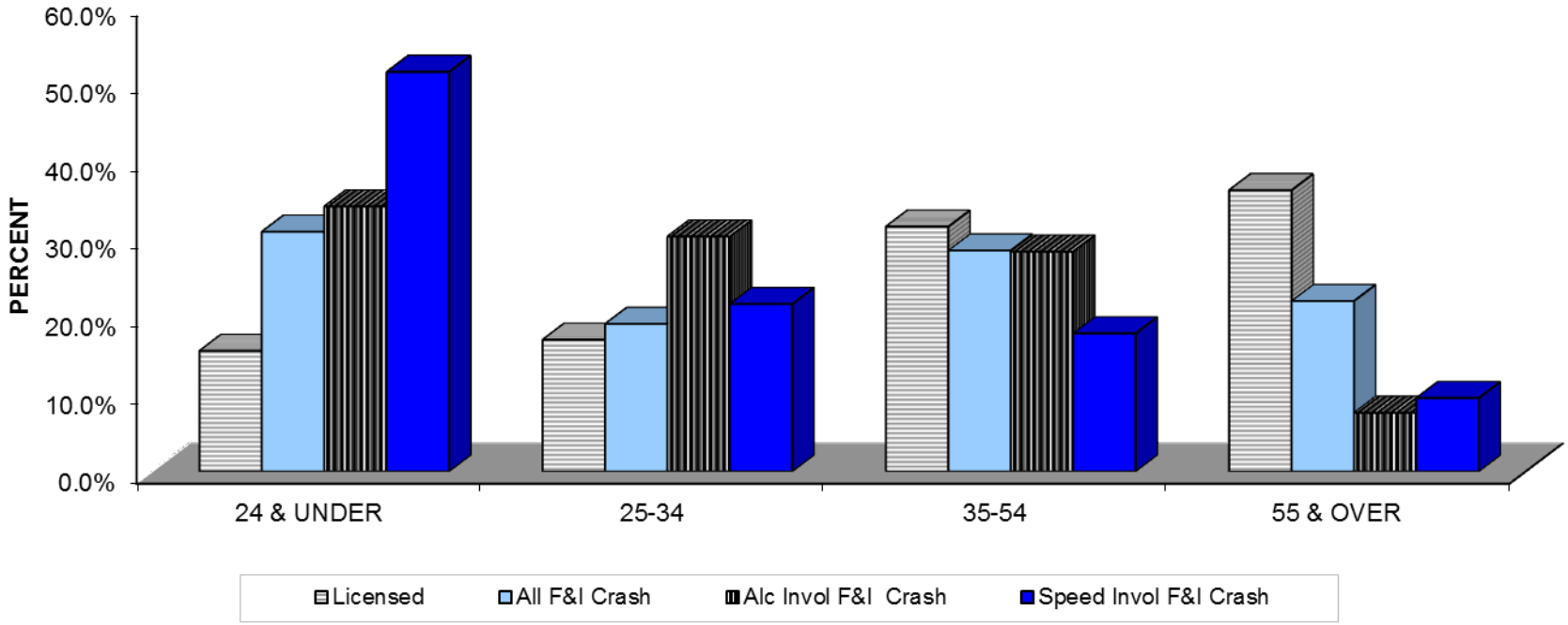
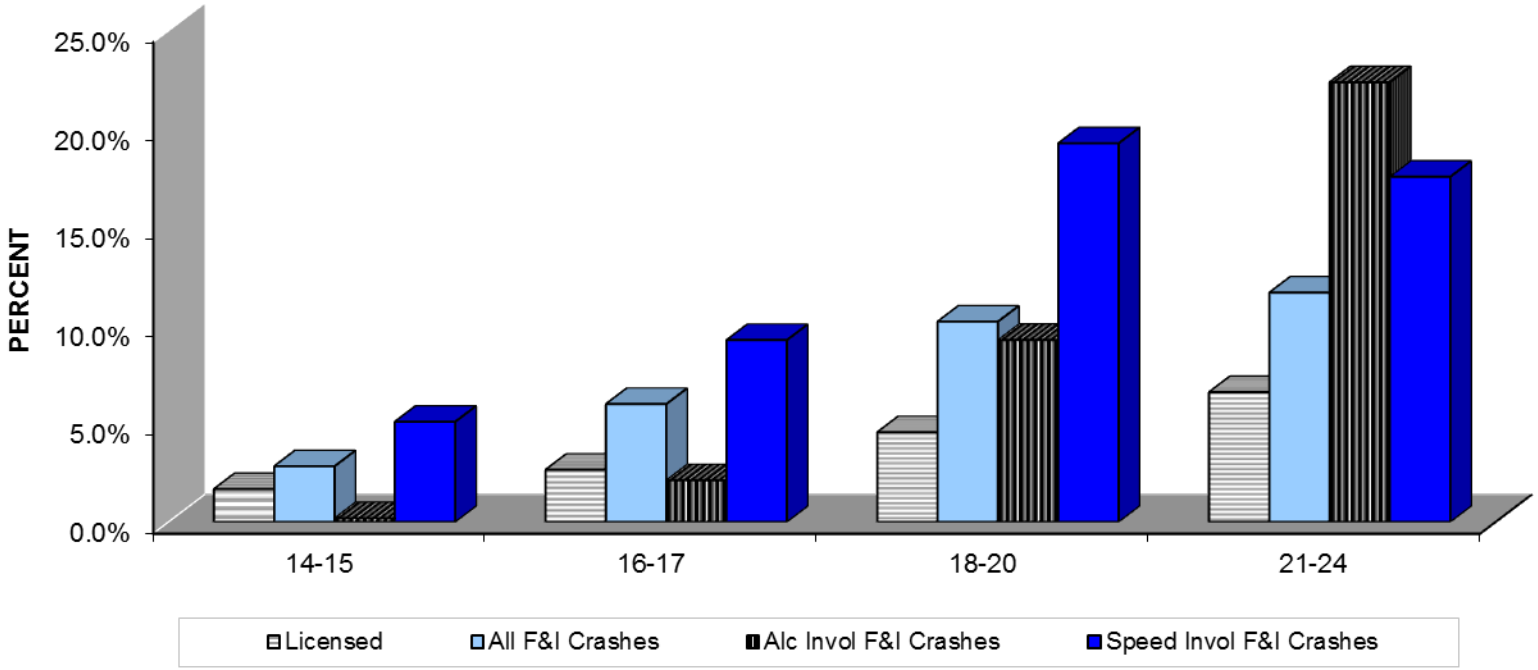


FIGURE 3-10 YOUNG DRIVERS 2012
Fatal & Injury Crash Involved Drivers



Contributing Circumstances (Vision Obscurement and Road)

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

Vision Obscurement - refers to conditions such as: weather condition; physical obstruction; windshield or window obscured by frost, snow, mud, etc.; snow bank; trees, crops, bushes or other vegetation; guardrail barrier; motor vehicle; building; signs, billboards, etc.; glare; and other. Weather condition was the most frequently reported vision obscurement and was indicated as a problem in 2.5 percent of all crashes.

Road Contributing Circumstances - These contributing circumstances include road surface condition (wet, icy, snow, slush, etc.); road shoulder conditions; objects or animals in the road; phantom vehicle; pedestrians, bicyclists, other non-occupant in roadway; work zone conditions, rough roads; and faulty or missing traffic control devices. The most common condition reported was road surface condition, and it was reported as a factor in 13.5 percent of all crashes.

Motor Vehicle Driver Contributing Circumstances

Driver actions are reported to indicate possible factors that may have contributed to the crashes. These factors are referred to as driver contributing circumstances. Drinking and speeding were leading driver contributing circumstances in fatal crashes during 2012. It was indicated that the drinking of 31 or 17.6 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. Running off Road, Driving too Fast for Conditions and Following Too Close were other leading driver contributing circumstances in injury crashes (see TABLE 3-18).

TABLE 3-18
MOTOR VEHICLE DRIVER CONTRIBUTING CIRCUMSTANCES
2012

	Drivers in All Crashes		Drivers in Fatal Crashes		Drivers in Injury Crashes		Drivers in PDO Crashes	
	No.	%	No.	%	No.	%	No.	%
Disregarded Traffic Signs or Signals	629	2.7	11	6.3	240	3.8	378	2.2
Distracted*	1,142	4.9	3	1.7	460	7.3	679	4.0
Drinking	609	2.6	31	17.6	290	4.6	288	1.7
Driving Too Fast for Condition	1,333	5.7	15	8.5	336	5.4	982	5.8
Exceeded Speed Limit	375	1.6	22	12.5	191	3.0	162	1.0
Fail to Yield to Vehicle	2,806	12.0	18	10.2	930	14.8	1,858	11.0
Failure to Keep in Proper Lane	457	2.0	15	8.5	152	2.4	290	1.7
Fatigued/Fell Asleep	242	1.0	3	1.7	101	1.6	138	0.8
Following Too Closely	1,250	5.3	1	0.6	465	7.4	784	4.6
Improper Backing	353	1.5	0	0.0	15	0.2	338	2.0
Improper Passing	114	0.5	2	1.1	36	0.6	76	0.4
Improper Turn	316	1.4	2	1.1	72	1.1	242	1.4
Not Stated**	4,697	20.1	0	0.0	0	0.0	4,697	27.7
Other***	1,019	4.4	7	4.0	380	6.1	632	3.7
Over-correcting/Over-steering	411	1.8	12	6.8	191	3.0	208	1.2
Running Off Road	971	4.2	26	14.8	429	6.8	516	3.0
Swerving or Avoiding due to: *wind, slippery surface, vehicle, object, non-motorist, etc.*	343	1.5	4	2.3	111	1.8	228	1.3
Unknown	692	3.0	10	5.7	173	2.8	509	3.0
Wrong Side of Road	99	0.4	8	4.5	33	0.5	58	0.3
Total Drivers	**23,379**		**176**		**6,265**		**16,938**	

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

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

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

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

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

Motorcycles

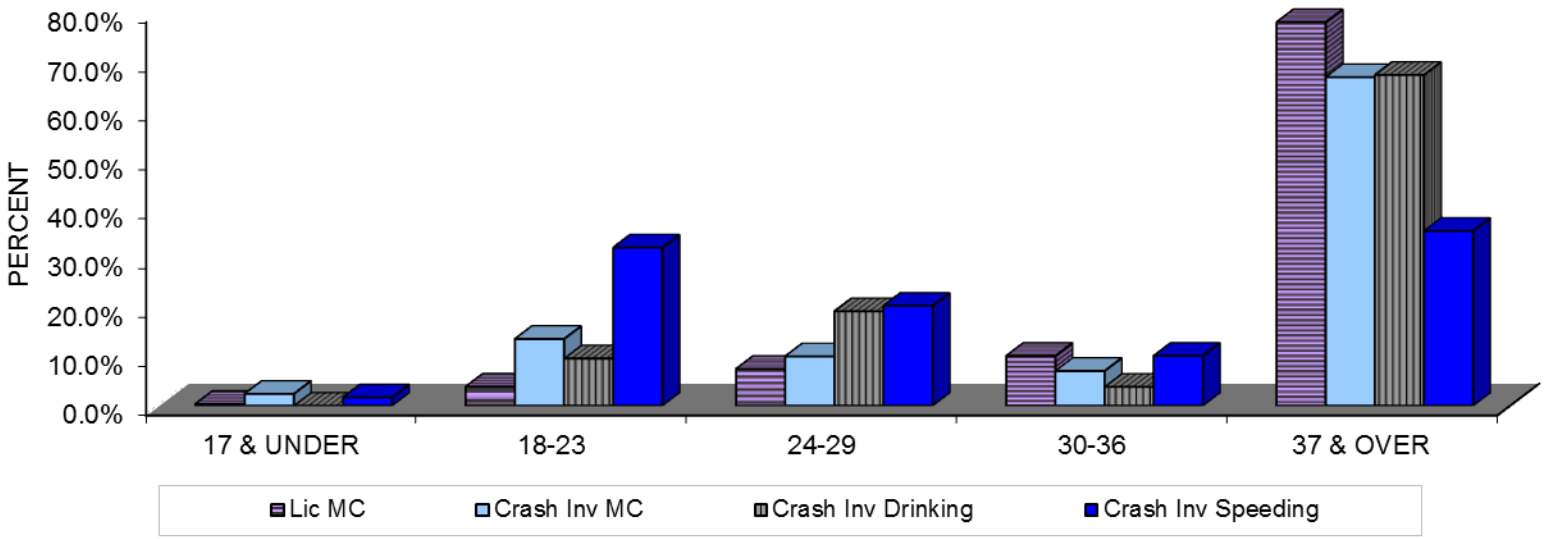
Motorcycle crashes constitute 3.1 percent of all crashes, 20.3 percent of all fatal crashes, and 7.8 percent of all injury crashes. There were 25 people killed and 501 injured on motorcycles in the 501 reported motorcycle crashes during 2012 (see TABLE 2-7). The young motorcycle driver is over represented in crashes when compared to their portion of licensed motorcycle operators. The licensed drivers under 20 years of age represent 1.2 percent of the licensed motorcycle drivers, 7.1 percent of drivers involved in motorcycle crashes, and 11.9 percent of the speeding drivers involved in motorcycle crashes (see TABLE 3-19 and FIGURE 3-11).

TABLE 3-19
MOTORCYCLISTS BY AGE GROUP
2012

Age Group	Licensed Motorcyclists No.	%	Motorcycle Drivers In Crashes No.	%	Drinking Motorcycle Drivers In Crashes No.	%	Speeding Motorcycle Drivers In Crashes No.	%
0 - 13	0	0.0	1	0.2	0	0.0	0	0.0
14 - 15	35	0.0	1	0.2	0	0.0	0	0.0
16 - 17	278	0.3	11	2.0	0	0.0	1	1.7
18 - 19	640	0.8	25	4.6	0	0.0	6	10.2
20 - 21	1,007	1.3	28	5.2	1	1.9	8	13.6
22 - 23	1,487	1.8	20	3.7	4	7.7	5	8.5
24 - 25	1,802	2.2	18	3.3	3	5.8	3	5.1
26 - 27	2,011	2.5	17	3.2	2	3.8	3	5.1
28 - 29	2,222	2.8	19	3.5	5	9.6	6	10.2
30 - 31	2,289	2.8	12	2.2	2	3.8	3	5.1
32 - 36	5,879	7.3	26	4.8	0	0.0	3	5.1
37 - 41	6,560	8.2	41	7.6	6	11.5	5	8.5
42 - 51	18,656	23.2	108	20.1	14	26.9	4	6.8
52 - Over	37,544	46.7	210	39.0	15	28.8	12	20.3
Unknown	0	0.0	1	0.2	0	0.0	0	0.0
Total	**80,410**	**100**	**538**	**100**	**52**	**100**	**59**	**100**

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

FIGURE 3-11 MOTORCYCLISTS 2012
Crash Involved Motorcycle & Moped Drivers



There were 25 motorcyclist fatalities during 2012. Twenty were motorcycle drivers and five were passengers. Three drivers and one passenger wore helmet and eye protection, eleven drivers and two passengers wore eye protection only, six drivers and two passengers did not use safety equipment. Helmets were used by 160 or 30.9 percent of the motorcycle drivers in crashes while 358 or 69.1 percent did not wear a helmet (see TABLE 3-20).

TABLE 3-20
HELMET USE BY MOTORCYCLE DRIVERS IN CRASHES
2012

	Helmet Used		Helmet Not Used	
Age	No.	%	No.	%
06 – 13	0	0.0	1	100.0
14 - 15	1	100.0	0	0.0
16 - 17	4	36.4	7	63.6
18 - 20	13	37.1	22	62.9
21 - 24	13	28.3	33	71.7
25 - 34	16	22.9	54	77.1
35 - 44	14	19.2	59	80.8
45 - Over	99	35.4	181	64.6
Unknown	0	0.0	1	0.0
Total	**160**	**30.9**	**358**	**69.1**

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.

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

Pedestrians

There were two pedestrian deaths and 116 injuries in motor vehicle crashes during 2012 (see TABLE 3-21). The youngest pedestrian killed was twenty-eight years old, while the oldest was sixty-seven years old. Of the injured pedestrians, 15.5 percent were between the ages of 5-13. Cities accounted for 93.1 percent of the pedestrian injuries, while 50.0 percent of the fatalities were rural (see TABLE 3-23). Of the two pedestrians killed, 1 was male and 1 was female. Of the 116 pedestrians injured, 69 were male and 47 female.

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

TABLE 3-21
AGE OF PEDESTRIANS IN TRAFFIC CRASHES
2012

	Fatalities		Injuries	
Age	No.	%	No.	%
0 - 4	0	0.0	7	6.0
5 - 13	0	0.0	18	15.5
14 - 19	0	0.0	10	8.6
20 - 24	0	0.0	14	12.1
25 - 34	1	50.0	11	9.5
35 - 44	0	0.0	17	14.7
45 - 54	0	0.0	18	15.5
55 - 64	0	0.0	14	12.1
65 - Over	1	50.0	7	6.0
Total	**2**	**100**	**116**	**100**

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

TABLE 3-22
ALCOHOL INVOLVEMENT BY PEDESTRIANS
2012

Alcohol Involvement	Fatalities No.	Fatalities %	Injuries No.	Injuries %
Alcohol or Drugs	1	50.0	20	17.2
No Alcohol	1	50.0	96	82.8
Unknown	0	0.0	0	0.0
Total	**2**	**100**	**116**	**100**

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

TABLE 3-23
RURAL vs. CITY PEDESTRIAN CRASHES
2012

	Fatalities	%	Injuries	%
Rural	0	0.0	8	6.9
City	2	100.0	108	93.1
Total	**2**	**100**	**116**	**100**

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

Bicycles

During 2012 there was no bicyclist killed (see TABLE 2-9). There were 110 bicycle drivers injured in reported motor vehicle crashes during 2012 (see TABLE 3-24). The leading factor in bicycle-involved crashes was improper crossing which was reported for 17.0 percent of the injured bicycle drivers. Ninety-seven of the injured bicycle drivers in crashes had no contributing circumstances. The yearly 1992-2012 trend of bicycle fatalities and injuries is provided in TABLE 2-9.

TABLE 3-24
AGE OF BICYCLE DRIVERS IN TRAFFIC CRASHES
2012

Age	Fatalities Number	Injuries Number	%
0 - 4	0	0	0.0
5 - 13	0	32	29.1
14 - 19	0	19	17.3
20 – 24	0	9	8.2
25 - 34	0	17	15.5
35 - 44	0	12	10.9
45 - 54	0	15	13.6
55 - 64	0	4	3.6
65 - Over	0	2	1.8
Total	**0**	**110**	**100**

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

IV. IMPORTANT EVENTS AND DATES

March 1, 1974 - Speed limit lowered to 55 miles per hour.

July 1, 1976 - Right turn on red is allowed unless prohibited by a sign reading "No right turn on red".

July 1, 1977 - Helmet law repealed for motorcycle drivers and passengers age 18 and over.

April 1, 1979 - Motor Vehicle Safety Inspection repealed.

March 1, 1982 - Driving While Intoxicated Enforcement campaign began.

July 1, 1984 - Child safety restraints became a law for children under age 5.

April 15, 1987 - Speed limit on rural interstate 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: Estimating the Costs of Unintentional Injuries, 2009, National Safety Council)

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

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