

ARIZONA

MOTOR VEHICLE CRASH FACTS

2018



2018 Motor Vehicle Crash Facts for the State of Arizona

Prepared by:
The Arizona Department of Transportation
Transportation Systems Management and Operations

Publication Date: June 18, 2019



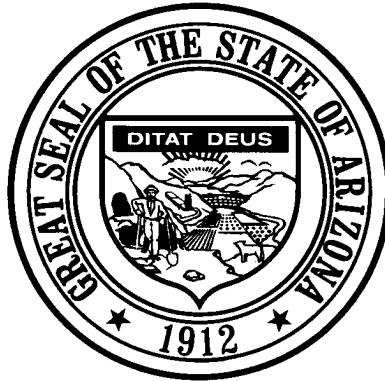
This publication is an annual statistical review of the motor vehicle crashes in the State of Arizona for the calendar year 2018. The results are compiled from Arizona Traffic Crash Reports submitted to the Arizona Department of Transportation by state, county, city, tribal, and other law enforcement agencies. Specific inquiries regarding the data in this report should be directed to:

The Arizona Department of Transportation
Transportation Systems Management and Operations
Traffic Safety Section
1615 West Jackson Street
Phoenix, AZ 85007

E-mail: azcrashfacts@azdot.gov

In order to provide the most current information, preliminary data is utilized when necessary. For this reason, previous or future reports may differ slightly and we encourage you to refer to the latest issue of Motor Vehicle Crash Facts.

This issue as well as previous issues of this publication may be viewed and downloaded from the ADOT Web Site:
www.azdot.gov/crashfacts



Douglas A. Ducey
Governor

Arizona Department of Transportation

John S. Halikowski
Director

State Transportation Board

Jack Sellers – District 1
Chairman

Michael S. Hammond – District 2
Vice Chairman

Members

Sam Elters – District 1
Steve Stratton – District 4
Jesse Thompson – District 5
Gary Knight – District 6

OVERVIEW

Section 1: – Highlights and Historical Trends 1

Section 2: – Geographic Location..... 9

Section 3: – Crash Descriptions 17

Section 4: – Safety Devices 23

Section 5: – Motor Vehicle and Driver Descriptions 26

Section 6: – Alcohol Related Crashes..... 33

Section 7: – Pedestrian and Pedalcyclist Crashes 42

Section 8: – Motorcycle (MC) Crashes 48

Acknowledgements 58

2018 Arizona Crash Facts Summary

Table of Contents

Section 1: Highlights and Historical Trends	1
Arizona Crash Facts Summary and Comparison	2
Arizona at a Glance – 2018	2
Licensed Drivers, Motor Vehicle Registration and Crash History in Arizona	3
Historical Trends – VMT and Rates	3
Statewide Economic Loss Due to Motor Vehicle Crashes	4
State Adjusted Crash Costs	4
Traffic Crashes in Arizona by Year	5
Victims of Motor Vehicle Crashes	6
Suspected Serious Injuries by Person Type 2014-2018	6
Young Drivers (age 15-24) killed in crashes 2014-2018	6
Vehicle Miles Traveled	7
Arizona Fatality Rate vs. Injury Rate	7
Traffic Fatalities by Geographic Region	7
Traffic Injuries by Geographic Region	7
Holiday Crash Statistics	8
Section 2: Geographic Location	9
Crash Severity by First Harmful Event Statewide	10
Crashes by County	10
Crash Severity by First Harmful Event in Urban Areas	11
Crash Severity by First Harmful Event in Rural Areas	11
Analysis by Jurisdiction	12
Total Fatalities by County for 2017 and 2018	15
Urban and Rural Crashes by Day of Week	16
Urban and Rural Fatal Crashes by Day of Week	16
All Urban and Rural Crashes vs. Urban and Rural Fatal Crashes by Month	16
Section 3: Crash Descriptions	17
Manner of Collision in Multi-Vehicle Crashes	18
Lighting Conditions	18
Weather Conditions	18
Road Surface Conditions	19
Roadway Grade	19
Roadway Alignment	19
All Crashes vs. Fatal Crashes by Time of Day - Weekdays	20
All Crashes vs. Fatal Crashes by Time of Day - Weekends	20
Crashes by Day of Week	21
Fatal Crashes by Day of Week	21
All Crashes vs. Fatal Crashes by Month	21
Crashes by Hour and Day of Week	22
Section 4: Safety Devices	23
Child Safety Device Usage (less than five years old)	24
Driver Safety Device Usage	24
Passenger Safety Device Usage	24
Driver Safety Device Usage by Gender	25
Driver Safety Device Usage by Age	25
Section 5: Motor Vehicle and Driver Descriptions	26
Arizona Motor Vehicle Registrations	27
Motor Vehicle Crash Involvement by Vehicle Type	27
Hit and Run Drivers Involved in Crashes	28

2018 Arizona Crash Facts Summary

Gender of Drivers Involved in Crashes.....	28
License Status of Drivers Involved in Crashes.....	28
Passengers Killed and Injured by Age and Gender.....	28
Drivers and Passengers Killed and Injured by Vehicle Type.....	29
Drivers Killed and Injured by Age and Gender.....	29
Licensed Drivers in Arizona by Age.....	30
Driver Involvement by Age.....	30
Driver Violations.....	31
Driver Physical Condition.....	31
Distracted Driving Behavior.....	32
Secondary Crashes.....	32
Section 6: Alcohol Related Crashes.....	33
Economic Loss Due to Alcohol Related Crashes in Arizona for 2018.....	34
Alcohol Related Crash History.....	34
Manner of Collision in Alcohol Related Crashes.....	34
Alcohol Related Crashes by First Harmful Event.....	35
Alcohol Related Crashes by Vehicle Type.....	35
Lighting Conditions in Alcohol Related Crashes.....	36
Road Surface Conditions in Alcohol Related Crashes.....	36
Gender of Drivers Involved in Alcohol Related Crashes.....	36
Driver Involvement by Age in Alcohol Related Crashes.....	37
When Alcohol Related Crashes Occurred in 2018.....	37
Safety Device Usage for Drinking Drivers.....	37
Persons Killed and Injured in Alcohol Related Crashes.....	38
Alcohol Related Crashes by County.....	38
All Alcohol Related Crashes vs. Fatal Alcohol Related Crashes by Day of Week.....	39
All Alcohol Related Crashes vs. Fatal Alcohol Related Crashes by Month.....	39
All Alcohol Related Crashes vs. Fatal Alcohol Related Crashes - Weekdays.....	40
All Alcohol Related Crashes vs. Fatal Alcohol Related Crashes - Weekends.....	40
Alcohol Related Crashes by Hour and Day of Week.....	41
Section 7: Pedestrian and Pedalcyclist Crashes.....	42
Pedestrians Killed and Injured By Age and Gender.....	43
Pedestrian Crashes by Geographic Location.....	43
Pedestrian Crash History.....	43
Pedestrians Killed by Age and Action.....	44
Pedestrians Injured by Age and Action.....	44
Pedestrian Physical Condition in Motor Vehicle Crashes.....	44
Lighting Conditions in Pedestrian Crashes.....	45
Weather Conditions in Pedestrian Crashes.....	45
Pedalcyclists Killed and Injured by Age and Gender.....	45
Pedalcycle Crashes by Geographic Location.....	46
Pedalcycle Crash History.....	46
Lighting Conditions in Pedalcyclist Crashes.....	46
Weather Conditions in Pedalcyclist Crashes.....	46
Pedestrian Crashes by County.....	47
Pedalcyclist Crashes by County.....	47
Section 8: Motorcycle (MC) Crashes.....	48
MC Fatalities by Year.....	49
MC Registrations in Arizona.....	49
Fatality Rate per Registered MC.....	49
Percent of MC Crashes to All Crashes.....	49
MC Crashes by First Harmful Event.....	50
Lighting Conditions in MC Crashes.....	50
Road Surface Conditions in MC Crashes.....	50
MC Crashes by Geographic Location.....	51

2018 Arizona Crash Facts Summary

Operator Involvement by Age in MC Crashes.....	51
MC Operator Physical Condition.....	51
Helmet Use by Gender.....	52
MC Operator’s Helmet Use.....	52
MC Passenger’s Helmet Use.....	52
MC Operators and Passengers Killed and Injured.....	53
MC Operator Violations.....	53
All MC Crashes vs. Fatal MC Crashes by Time of Day - Weekdays.....	54
All MC Crashes vs. Fatal MC Crashes by Time of Day - Weekends.....	54
All MC Crashes vs. Fatal MC Crashes by Day of Week.....	55
Alcohol Related MC Crashes vs. Fatal Alcohol Related MC Crashes by Day of Week.....	55
MC Crashes by Hour and Day of Week.....	56
MC Crashes by County.....	57
Manner of Collision in MC Crashes.....	57
Acknowledgements.....	58

2018 Arizona Crash Facts Summary

BREAKDOWN OF ALL CRASHES IN ARIZONA

TOTAL	127,056
FATAL	916
INJURY	36,507
PROPERTY DAMAGE ONLY	89,633
URBAN	104,404
RURAL	22,652
ALCOHOL RELATED	4,651
PEDESTRIAN	1,764
PEDALCYCLE	1,279
MOTORCYCLE	2,738
SINGLE VEHICLE	18,730
MULTI-VEHICLE	108,326

BREAKDOWN OF FATAL CRASHES IN ARIZONA

TOTAL	916
ALCOHOL RELATED	242
URBAN	536
RURAL	380
SINGLE VEHICLE	298
MULTI-VEHICLE	618
ALCOHOL RELATED SINGLE VEHICLE	76
ALCOHOL RELATED MULTI-VEHICLE	166

BREAKDOWN OF PERSONS KILLED AND INJURED

TYPE	KILLED	INJURED
IN ALL CRASHES	1,010	53,376
IN ALCOHOL RELATED CRASHES	261	2,951
IN URBAN CRASHES	562	43,513
IN RURAL CRASHES	448	9,863
SPEED RELATED*	281	20,800
USING SAFETY DEVICE	280	43,967
NOT USING SAFETY DEVICE	290	2,984
DRIVERS AGE 24 OR YOUNGER	87	8,207
DRINKING DRIVERS AGE 24 OR YOUNGER	18	353

BREAKDOWN OF CRASHES BY TIME

PEAK MONTH FOR ALL CRASHES	OCTOBER
PEAK DAY FOR ALL CRASHES	FRIDAY
PEAK HOUR FOR ALL CRASHES	4 PM - 5 PM
PEAK HOUR FOR FATAL CRASHES	8 PM - 9 PM
PEAK DAY FOR FATAL CRASHES	SATURDAY
PEAK DATE FOR ALL CRASHES IN 2018	FEBRUARY 14TH (611 CRASHES)
PEAK DATE FOR FATAL CRASHES IN 2018	OCTOBER 9TH AND DECEMBER 10TH (8 CRASHES)
PEAK HOUR FOR ALCOHOL RELATED CRASHES	2 AM - 3 AM
PEAK DAY FOR FATAL MOTORCYCLE CRASHES	SATURDAY
PEAK HOUR FOR ALL MOTORCYCLE CRASHES	5 PM - 6 PM

OTHER FACTS

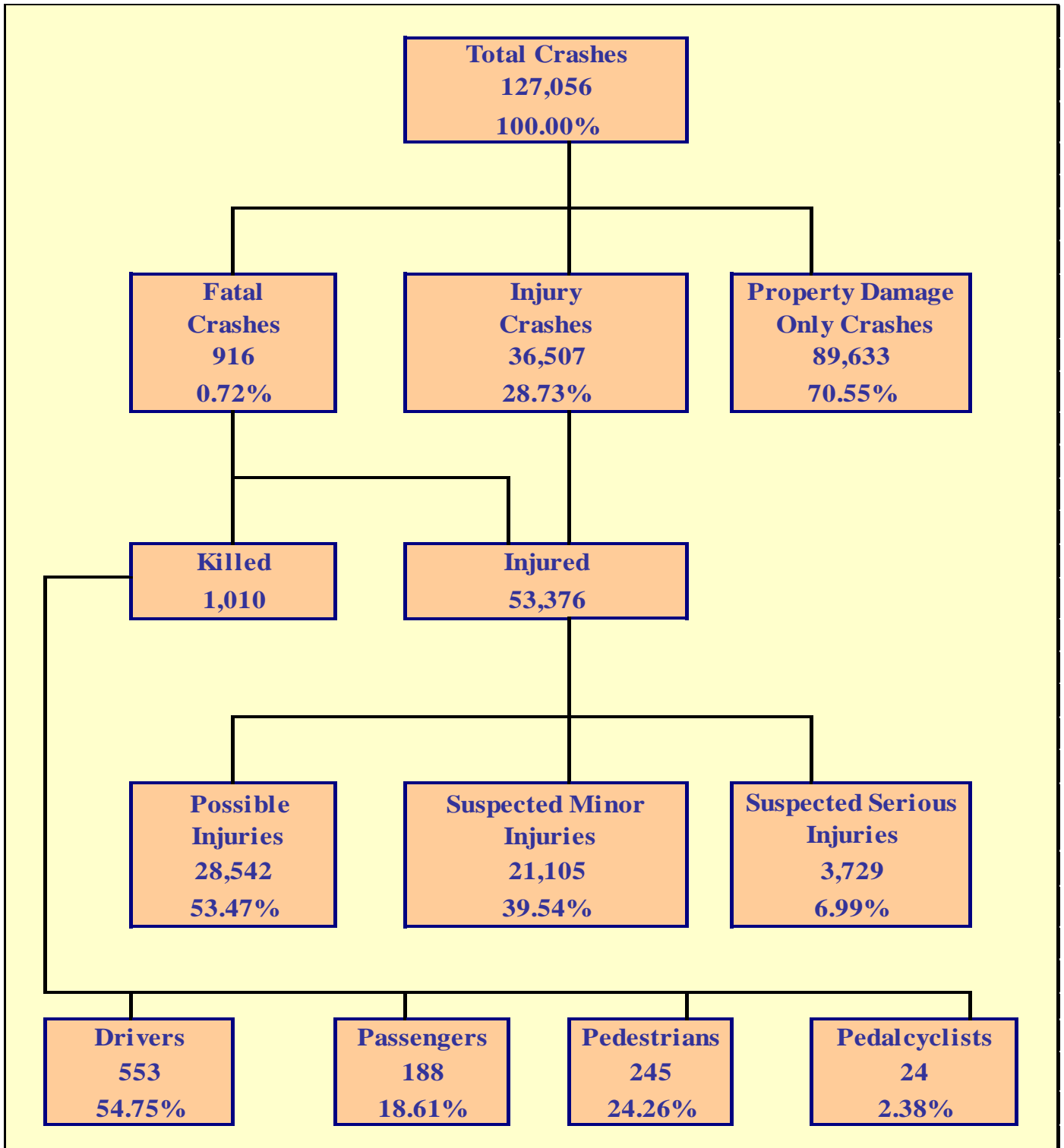
MOST COMMON MANNER OF COLLISION	REAR END
MOST COMMON DRIVER VIOLATION	SPEED TOO FAST FOR CONDITIONS

*Note: These numbers represent the total number of fatalities and injuries in crashes where the violation "speed too fast for conditions" or "exceeded lawful speed" was marked on the crash report.

2018 Arizona Crash Facts Summary

Fatalities in Arizona since 1925

Year	Total Fatalities	Year	Total Fatalities
1925	76	1972	812
1926	120	1973	975
1927	147	1974	751
1928	130	1975	670
1929	157	1976	739
1930	190	1977	933
1931	159	1978	1,027
1932	166	1979	1,029
1933	154	1980	947
1934	205	1981	916
1935	217	1982	724
1936	244	1983	675
1937	258	1984	869
1938	200	1985	893
1939	215	1986	1,007
1940	228	1987	939
1941	272	1988	944
1942	230	1989	879
1943	168	1990	869
1944	180	1991	816
1945	283	1992	811
1946	236	1993	799
1947	256	1994	904
1948	301	1995	1,035
1949	281	1996	997
1950	325	1997	950
1951	415	1998	981
1952	396	1999	1,028
1953	397	2000	1,037
1954	402	2001	1,057
1955	358	2002	1,132
1956	486	2003	1,125
1957	461	2004	1,159
1958	509	2005	1,193
1959	517	2006	1,301
1960	513	2007	1,071
1961	510	2008	938
1962	510	2009	806
1963	513	2010	759
1964	588	2011	827
1965	550	2012	821
1966	643	2013	849
1967	574	2014	774
1968	695	2015	897
1969	750	2016	952
1970	762	2017	998
1971	755	2018	1,010



Section 1: – Highlights and Historical Trends

Table 1 – 1

Arizona Crash Facts Summary and Comparison

Category	2017	2018	Percent Change
Total Crashes	127,805	127,056	-0.59%
Total Fatalities	998	1,010	1.20%
Total Injuries	55,879	53,376	-4.48%
Alcohol Related Fatalities	324	261	-19.44%
Alcohol Related Injuries	3,176	2,951	-7.08%
Urban Fatalities	530	562	6.04%
Urban Injuries	45,837	43,513	-5.07%
Rural Fatalities	468	448	-4.27%
Rural Injuries	10,042	9,863	-1.78%
MC Operator and Passenger Fatalities	161	150	-6.83%
MC Operator and Passenger Injuries	2,432	2,248	-7.57%
Pedestrians Fatalities	226	245	8.41%
Pedestrians Injuries	1,523	1,537	0.92%
Pedalcyclist Fatalities	32	24	-25.00%
Pedalcyclist Injuries	1,380	1,182	-14.35%
Millions of vehicle miles traveled (VMT)	65,069	66,145	1.65%
Fatalities per 100 million VMT	1.53	1.53	-0.44%
Injuries per 100 million VMT	85.88	80.70	-6.03%

Arizona at a Glance – 2018

- Approximately **2.77** persons were killed each day.
- One person was killed every **8** hours and **39** minutes.
- There were **146** persons injured every day.
- One person was injured every **9** minutes and **51** seconds.
- Alcohol Related crashes accounted for **3.66%** of all crashes and **26.30%** of all fatal crashes.
- Of all alcohol related crashes, **79.06%** occurred in Urban areas and **20.94%** occurred in Rural areas, while **62.40%** of all alcohol related fatal crashes occurred in Urban areas and **37.60%** occurred in Rural areas.
- Single vehicle crashes accounted for **14.74%** of all crashes and **32.53%** of all fatal crashes.
- Of all Pedestrian crashes, **13.72%** were fatal while **1.88%** of Pedalcycle crashes were fatal.
- Crashes which occurred during daylight hours (6:00 a.m. to 6:00 p.m.) accounted for **72.9%** of all crashes.
- Motor vehicle crashes resulted in **\$19.349** billion in economic losses to Arizona.
- Children age 14 and younger accounted for **32** fatalities and **3,134** injuries in motor vehicle crashes.

Section 1: – Highlights and Historical Trends

Table 1 – 2
Licensed Drivers, Motor Vehicle Registration
and Crash History in Arizona

Calendar Year	Total Crashes	Fatal Crashes	Injury Crashes	Property Damage Only Crashes	Total Persons Killed	Total Persons Injured	Total Licensed Drivers	Total Registered Vehicles
2004	138,898	998	46,788	91,112	1,159	73,686	3,784,365	4,364,857
2005	140,574	1,049	45,826	93,699	1,193	71,083	3,963,005	4,556,448
2006	143,504	1,126	45,395	96,983	1,301	70,013	4,091,789	4,748,957
2007	141,193	952	43,560	96,681	1,071	66,062	4,212,393	4,848,162
2008	120,557	843	37,515	82,199	938	56,539	4,360,711	4,842,188
2009	107,149	709	33,506	72,934	806	50,809	4,434,719	4,787,350
2010	106,900	695	33,419	72,786	759	50,463	4,537,653	4,805,904
2011	103,958	756	33,223	69,979	827	49,856	4,634,405	4,855,014
2012	103,940	738	33,595	69,607	821	50,089	4,736,517	4,969,620
2013	107,576	782	34,137	72,657	849	50,440	4,826,903	5,130,780
2014	109,872	709	34,578	74,585	774	51,103	4,922,676	5,300,980
2015	117,054	811	36,304	79,939	897	53,854	5,025,811	5,487,058
2016	127,277	856	38,708	87,713	952	56,933	5,135,262	5,677,208
2017	127,805	917	38,053	88,835	998	55,879	5,221,403	5,843,368
2018	127,056	916	36,507	89,633	1,010	53,376	5,308,307	6,009,850

Table 1 – 3
Historical Trends – VMT and Rates

Calendar Year	Arizona Fatality Rate	Arizona Injury Rate	Arizona Traffic Fatalities	Estimated Motor Vehicle Miles Traveled	Arizona Fatal Crash Rate
2014	1.24	81.59	774	62,631	1.13
2015	1.38	82.79	897	65,045	1.25
2016	1.45	86.78	952	65,606	1.30
2017	1.53	85.88	998	65,069	1.41
2018	1.53	80.70	1,010	66,145	1.38

Vehicle miles traveled are shown in million miles and rates per 100 million miles

Section 1: – Highlights and Historical Trends

Statewide Economic Loss Due to Motor Vehicle Crashes

Fatalities	\$9,638,070,440
Suspected Serious Injuries	\$2,012,858,265
Suspected Minor Injuries	\$3,790,331,370
Possible Injuries	\$2,935,858,662
Property Damage Only	\$971,532,087
TOTAL	\$19,348,650,824

Table 1 – 4

Estimated Economic Loss by County

County	Cost of Traffic Crashes			
	Fatalities	Injuries	PDO	Total
Apache	\$ 238,566,100	\$ 31,405,657	\$ 2,742,267	\$ 272,714,024
Cochise	\$ 209,938,168	\$ 87,719,791	\$ 10,058,592	\$ 307,716,551
Coconino	\$ 467,589,556	\$ 242,635,040	\$ 31,834,143	\$ 742,058,739
Gila	\$ 238,566,100	\$ 88,342,744	\$ 7,034,511	\$ 333,943,355
Graham	\$ 57,255,864	\$ 27,464,850	\$ 2,915,691	\$ 87,636,405
Greenlee	\$ 0	\$ 7,140,824	\$ 531,111	\$ 7,671,935
La Paz	\$ 190,852,880	\$ 38,791,956	\$ 2,384,580	\$ 232,029,416
Maricopa	\$ 4,685,438,204	\$ 5,958,274,927	\$ 730,299,303	\$ 11,374,012,434
Mohave	\$ 410,333,692	\$ 269,183,545	\$ 22,057,365	\$ 701,574,602
Navajo	\$ 486,674,844	\$ 94,657,778	\$ 8,801,268	\$ 590,133,890
Pima	\$ 1,183,287,856	\$ 1,027,666,250	\$ 70,030,779	\$ 2,280,984,885
Pinal	\$ 687,070,368	\$ 347,266,318	\$ 32,798,814	\$ 1,067,135,500
Santa Cruz	\$ 66,798,508	\$ 22,580,302	\$ 3,566,031	\$ 92,944,841
Yavapai	\$ 419,876,336	\$ 305,630,794	\$ 28,940,130	\$ 754,447,260
Yuma	\$ 295,821,964	\$ 190,287,521	\$ 17,537,502	\$ 503,646,987
TOTALS	\$ 9,638,070,440	\$ 8,739,048,297	\$ 971,532,087	\$ 19,348,650,824

Table 1 – 5

State Adjusted Crash Costs

1.	Fatality	\$9,542,644
2.	Suspected Serious Injury	\$539,785
3.	Suspected Minor Injury	\$179,594
4.	Possible Injury	\$102,861
5.	Property Damage Only	\$10,839

Source: www.safety.fhwa.dot.gov/hsip/docs/fhwasa17071.pdf

Section 1: – Highlights and Historical Trends

Traffic Crashes in Arizona by Year

Chart 1 – 1
Total Crashes

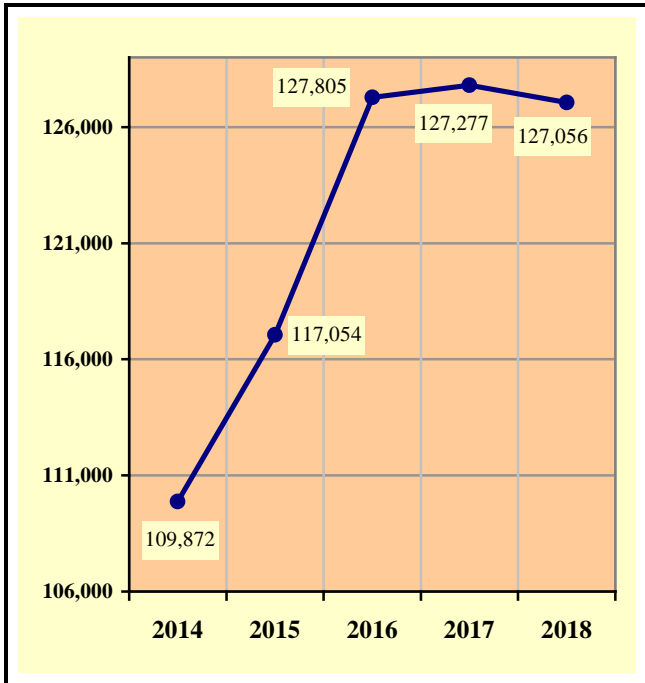


Chart 1 – 2
Fatal Crashes

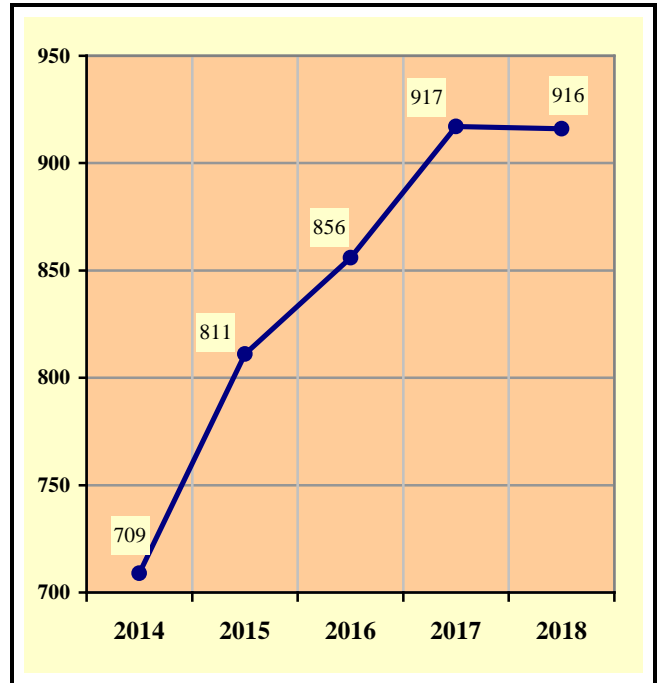


Chart 1 – 3
Injury Crashes

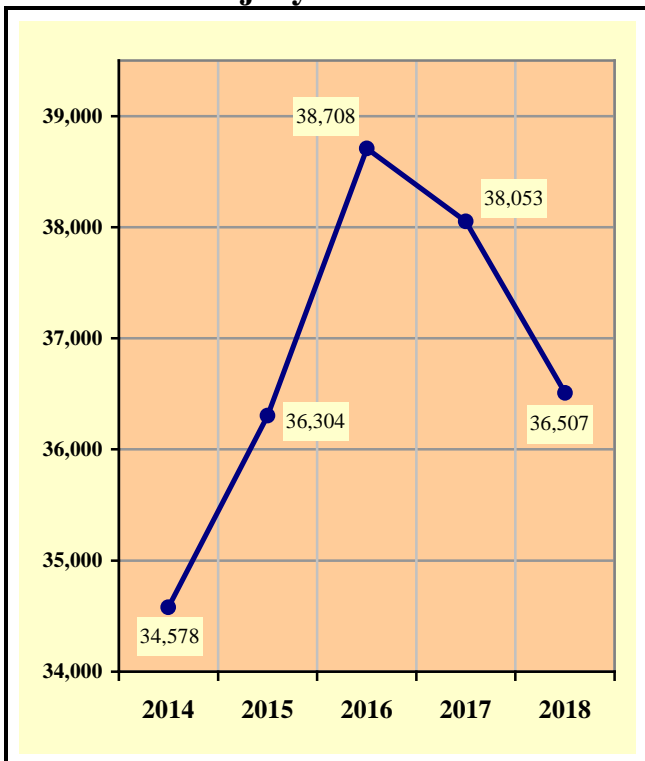
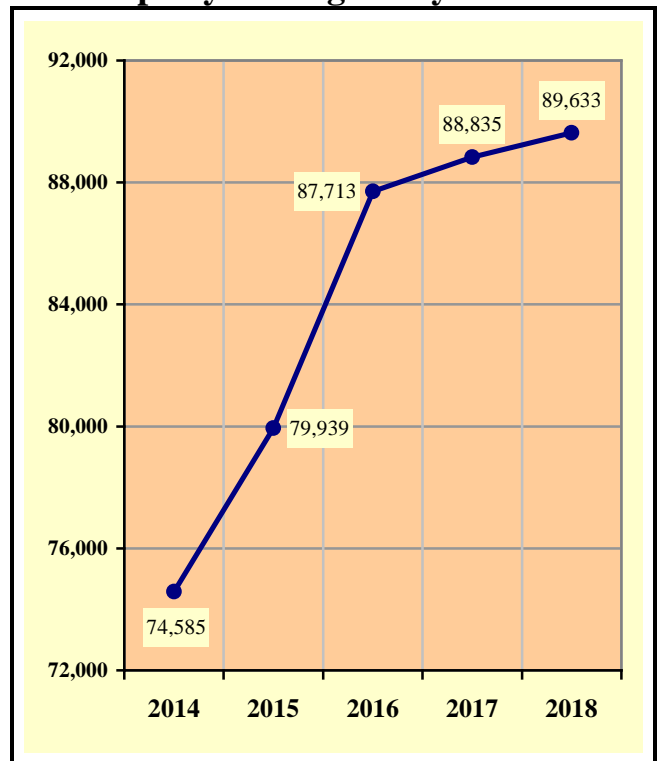


Chart 1 – 4
Property Damage Only Crashes



Section 1: – Highlights and Historical Trends

Table 1 – 6

Victims of Motor Vehicle Crashes

Age of Victim	Persons Killed				Persons Injured			
	Total	Male	Female	Gender Unknown	Total	Male	Female	Gender Unknown
0-4	12	7	5	0	704	332	372	0
5-9	9	7	2	0	1,011	497	514	0
10-14	11	6	5	0	1,419	658	761	0
15-19	64	33	31	0	5,260	2,506	2,754	0
20-24	100	74	26	0	6,803	3,279	3,524	0
25-34	180	132	48	0	10,470	5,088	5,382	0
35-44	128	93	35	0	7,973	3,735	4,238	0
45-54	127	95	32	0	7,288	3,514	3,774	0
55-64	166	116	50	0	6,035	2,913	3,122	0
65-74	135	103	32	0	3,754	1,823	1,931	0
75 & Older	69	50	19	0	2,042	941	1,101	0
Unknown	9	2	1	6	617	263	266	88
TOTAL	1,010	718	286	6	53,376	25,549	27,739	88

Table 1 – 7

Suspected Serious Injuries by Person Type 2014-2018

Year	Drivers	Passengers	Pedestrians	Pedalcyclists	Total
2014	2,557	925	323	161	3,966
2015	2,777	950	303	183	4,213
2016	2,908	1,053	425	218	4,604
2017	2,639	984	388	181	4,192
2018	2,396	780	381	172	3,729
TOTAL	13,277	4,692	1,820	915	20,704

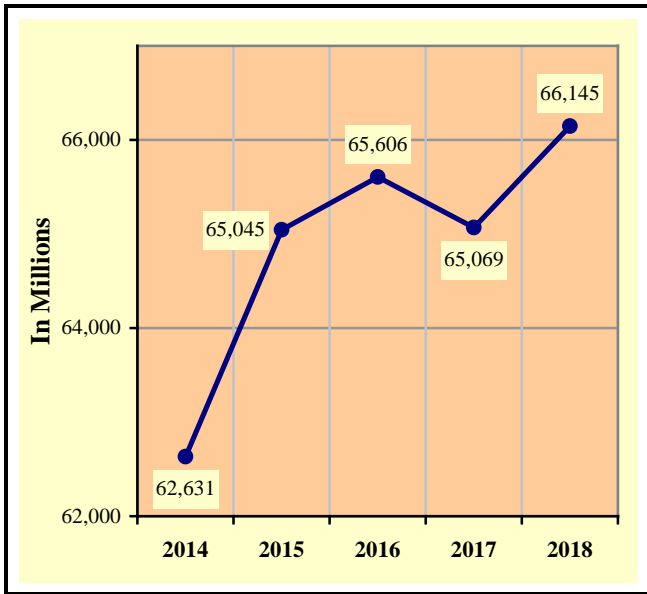
Table 1 – 8

Young drivers (age 15-24) killed in crashes 2014-2018

Year	Age of Driver										Total
	15	16	17	18	19	20	21	22	23	24	
2014	0	0	1	14	8	5	9	10	13	10	70
2015	1	2	4	7	7	13	15	15	10	10	84
2016	2	2	1	13	12	11	9	18	15	14	97
2017	1	0	2	8	9	10	14	18	10	10	82
2018	1	2	4	13	6	12	10	13	12	14	87
TOTAL	5	6	12	55	42	51	57	74	60	58	420

Section 1: – Highlights and Historical Trends

**Chart 1 – 5
Vehicle Miles Traveled**

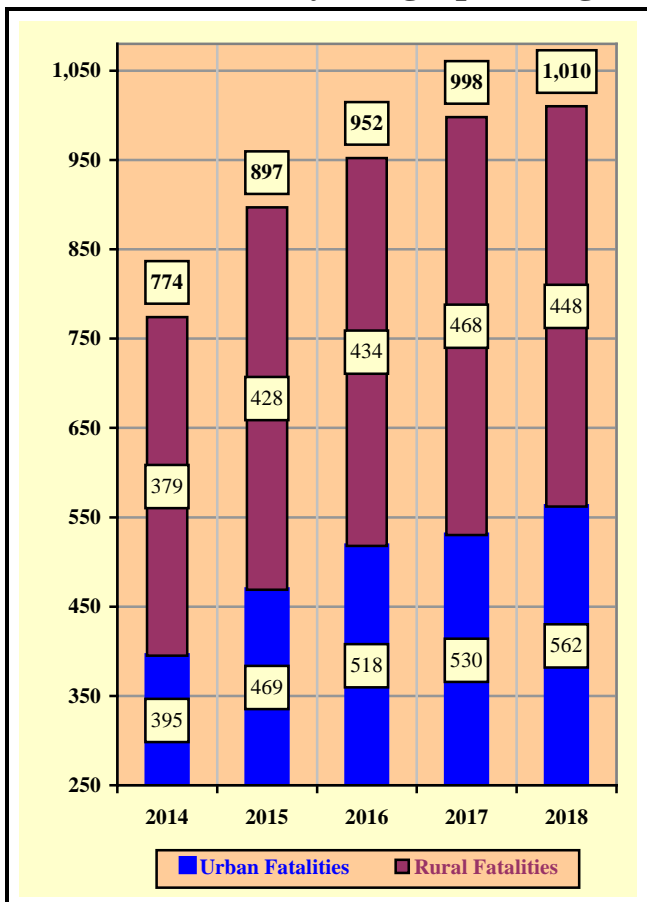


**Chart 1 – 6
Arizona Fatality Rate vs. Injury Rate**

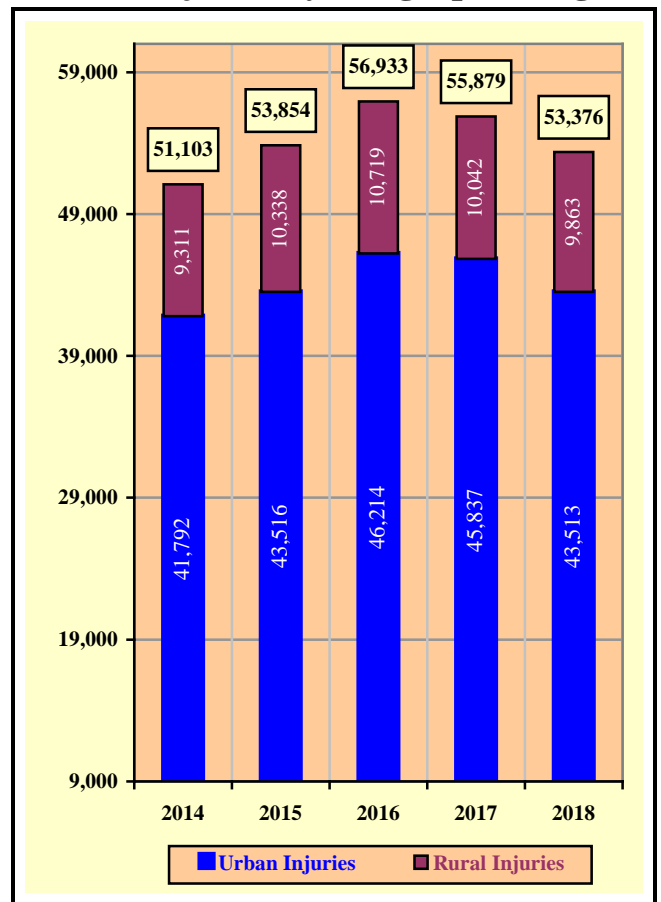


Source: ADOT – Multimodal Planning Division

**Chart 1 – 7
Traffic Fatalities by Geographic Region**



**Chart 1 – 8
Traffic Injuries by Geographic Region**



Section 1: – Highlights and Historical Trends

Table 1 – 9

Holiday Crash Statistics

Holidays such as Memorial Day, Labor Day, and Thanksgiving are regarded as three or four day weekend holidays for statistical purposes. Holidays such as Christmas, New Year’s Day, and the Fourth of July are celebrated on specific dates; which make the holiday period range from two to five days in length.

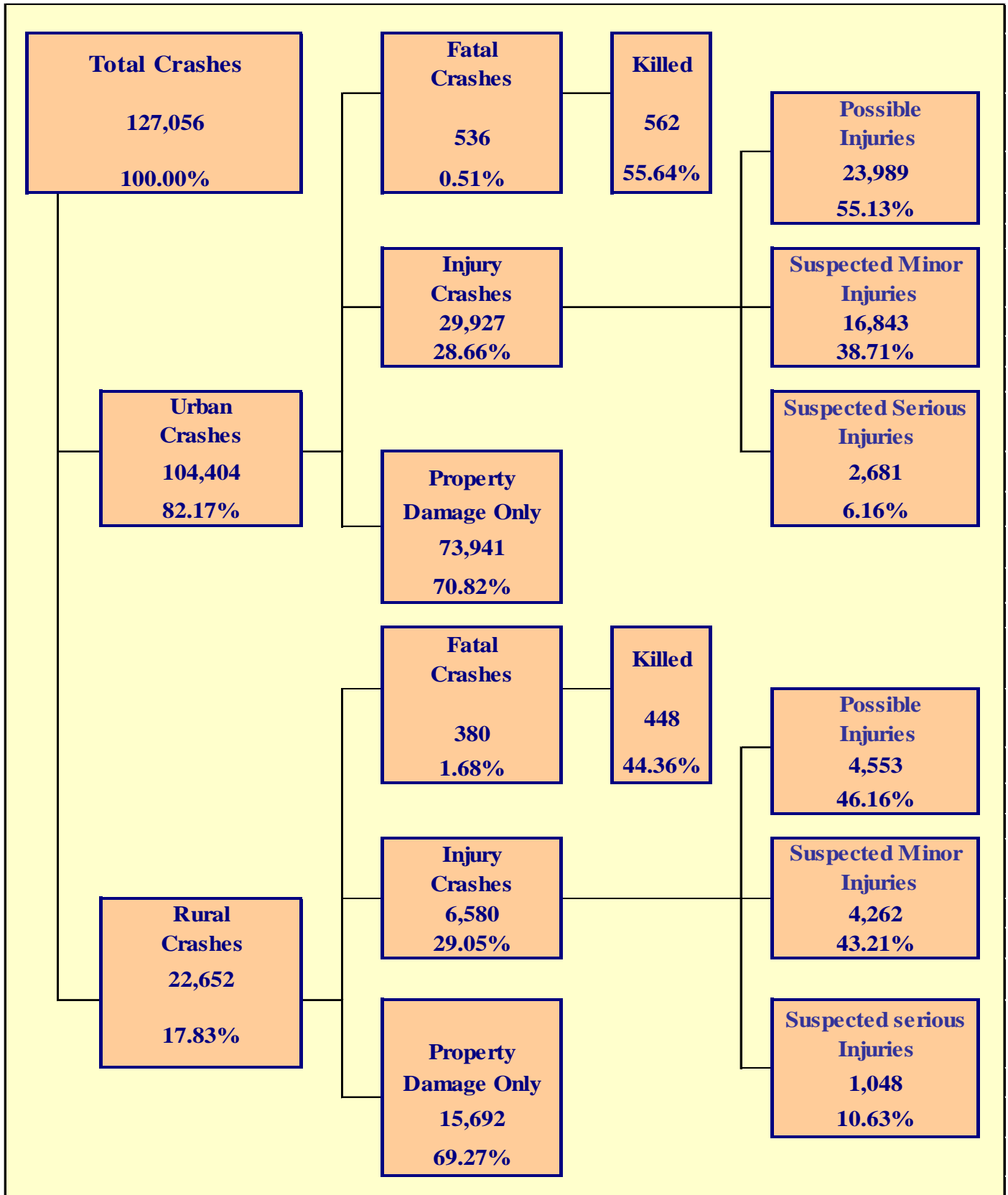
Holiday fatality statistics are based on fatal crashes occurring from 6:00 p.m. on the last working day prior to the holiday through 5:59 a.m. the day following the holiday period. Example: Thanksgiving fatalities are counted from Wednesday evening at 6:00 p.m. through 5:59 a.m. of the following Monday.

2018 Holidays	Beginning at 6:00 p.m.	Ending at 5:59 a.m.	Number of Days	Fatal Crashes	Persons Killed	Alcohol Related Fatal Crashes	Alcohol Related Fatalities
New Year’s Day	Friday	Tuesday	4	10	10	3	3
	12/29/2017	1/2/2018					
Memorial Day	Friday	Tuesday	4	7	8	2	2
	5/25/2018	5/29/2018					
July 4th	Tuesday	Thursday	2	4	4	1	1
	7/3/2018	7/5/2018					
Labor Day	Friday	Tuesday	4	8	9	4	4
	8/31/2018	9/4/2018					
Thanksgiving Day	Wednesday	Monday	5	6	6	2	2
	11/21/2018	11/26/2018					
Christmas Day	Friday	Wednesday	5	10	11	5	5
	12/21/2018	12/26/2018					

Fatal Crashes by Year	New Year’s Day	Memorial Day	July 4th	Labor Day	Thanksgiving	Christmas Day	Total
2014	3	7	7	4	14	7	42
2015	7	10	11	10	10	4	52
2016	6	7	13	7	11	4	48
2017	12	5	4	9	16	10	56
2018	10	7	4	8	6	10	45

Persons Killed	New Year’s Day	Memorial Day	July 4th	Labor Day	Thanksgiving	Christmas Day	Total
2014	3	8	9	6	18	8	52
2015	7	11	11	10	16	6	61
2016	6	7	15	8	11	6	53
2017	13	7	4	9	17	10	60
2018	10	8	4	9	6	11	48

Number of Days	New Year’s Day	Memorial Day	July 4th	Labor Day	Thanksgiving	Christmas Day	Total
2014	2	4	4	4	5	5	24
2015	5	4	4	4	5	4	26
2016	4	4	4	4	5	4	25
2017	4	4	2	4	5	4	23
2018	4	4	2	4	5	5	24



Section 2: – Geographic Location

Fatal Crashes in Arizona (916) accounted for 0.72% of all crashes, Injury Crashes (36,507) accounted for 28.73%, and Property Damage Only (PDO) Crashes (89,633) accounted for 70.55%.

**Table 2 – 1
Crash Severity by First Harmful Event Statewide**

First Harmful Event Type	Number of Crashes				Number of Persons	
	Total	Fatal	Injury	PDO	Killed	Injured
Collision with Motor Vehicle in Transport	97,081	328	27,076	69,677	385	41,829
Overtuning	2,606	116	1,624	866	127	2,134
Collision with Pedestrian	1,595	230	1,329	36	234	1,425
Collision with Pedalcyclist	1,220	24	1,123	73	24	1,150
Collision with Animal	2,247	2	202	2,043	2	249
Collision with Fixed Object	12,065	186	3,423	8,456	203	4,223
Collision with Non-fixed Object*	5,649	5	561	5,083	8	687
Vehicle Fire or Explosion	354	0	12	342	0	15
Other Non-collision**	376	10	29	337	10	35
Unknown	3,863	15	1,128	2,720	17	1,629
TOTAL	127,056	916	36,507	89,633	1,010	53,376
*Includes Collision with Parked Vehicles, Trains, Railway Vehicles, and Work Zone Equipment						
**Includes Vehicle Immersion, Jackknife, and Cargo Loss or Shift						

**Table 2 – 2
Crashes by County**

County	Number of Crashes				Number of Persons	
	Total	Fatal	Injury	PDO	Killed	Injured
Apache	375	22	100	253	25	153
Cochise	1,253	21	304	928	22	462
Coconino	3,863	37	889	2,937	49	1,345
Gila	945	22	274	649	25	425
Graham	366	6	91	269	6	142
Greenlee	78	0	29	49	0	32
La Paz	353	15	118	220	20	186
Maricopa	93,813	467	25,969	67,377	491	37,646
Mohave	2,975	39	901	2,035	43	1,311
Navajo	1,179	40	327	812	51	524
Pima	10,739	116	4,162	6,461	124	6,197
Pinal	4,368	56	1,286	3,026	72	2,009
Santa Cruz	438	6	103	329	7	139
Yavapai	3,823	40	1,113	2,670	44	1,592
Yuma	2,488	29	841	1,618	31	1,213
TOTAL	127,056	916	36,507	89,633	1,010	53,376

Section 2: – Geographic Location

Table 2 – 3
Crash Severity by First Harmful Event in Urban Areas

First Harmful Event Type	Number of Crashes				Number of Persons	
	Total	Fatal	Injury	PDO	Killed	Injured
Collision with Motor Vehicle in Transport	84,088	206	23,240	60,642	219	35,565
Overturning	846	20	608	218	23	713
Collision with Pedestrian	1,457	182	1,244	31	186	1,326
Collision with Pedalcyclist	1,131	18	1,045	68	18	1,069
Collision with Animal	309	0	28	281	0	29
Collision with Fixed Object	7,990	101	2,195	5,694	107	2,654
Collision with Non-fixed Object*	4,443	1	423	4,019	1	514
Vehicle Fire or Explosion	99	0	5	94	0	5
Other Non-collision**	225	6	21	198	6	23
Unknown	3,816	2	1,118	2,696	2	1,615
TOTAL	104,404	536	29,927	73,941	562	43,513
*Includes Collision with Parked Vehicles, Trains, Railway Vehicles, and Work Zone Equipment						
**Includes Vehicle Immersion, Jackknife, and Cargo Loss or Shift						

Table 2 – 4
Crash Severity by First Harmful Event in Rural Areas

First Harmful Event Type	Number of Crashes				Number of Persons	
	Total	Fatal	Injury	PDO	Killed	Injured
Collision with Motor Vehicle in Transport	12,993	122	3,836	9,035	166	6,264
Overturning	1,760	96	1,016	648	104	1,421
Collision with Pedestrian	138	48	85	5	48	99
Collision with Pedalcyclist	89	6	78	5	6	81
Collision with Animal	1,938	2	174	1,762	2	220
Collision with Fixed Object	4,075	85	1,228	2,762	96	1,569
Collision with Non-fixed Object*	1,206	4	138	1,064	7	173
Vehicle Fire or Explosion	255	0	7	248	0	10
Other Non-collision**	151	4	8	139	4	12
Unknown	47	13	10	24	15	14
TOTAL	22,652	380	6,580	15,692	448	9,863
*Includes Collision with Parked Vehicles, Trains, Railway Vehicles, and Work Zone Equipment						
**Includes Vehicle Immersion, Jackknife, and Cargo Loss or Shift						

While Urban Crashes in Arizona (104,404) accounted for 82.17% of all crashes, they accounted for 58.52% of all Fatal Crashes (536) occurring in 2018.

While Rural Crashes in Arizona (22,652) accounted for 17.83% of all crashes, they accounted for 41.48% of all Fatal Crashes (380) occurring in 2018.

Section 2: – Geographic Location

Table 2 – 5

Analysis by Jurisdiction

COUNTIES Cities	Number of Crashes				No. of Persons		Alcohol Related		
	Total	Fatal	Injury	PDO	Killed	Injured	Crashes	Killed	Injured
Apache County	339	21	86	232	24	133	14	2	8
Eagar	19	0	7	12	0	11	2	0	0
St. Johns	6	0	2	4	0	2	0	0	0
Springerville	11	1	5	5	1	7	1	0	1
TOTAL	375	22	100	253	25	153	17	2	9

Cochise County	498	13	122	363	13	187	22	3	21
Benson	92	0	18	74	0	33	5	0	5
Bisbee	3	2	0	1	2	0	0	0	0
Douglas	105	0	26	79	0	39	8	0	1
Huachuca City	1	0	0	1	0	0	0	0	0
Sierra Vista	528	6	132	390	7	194	19	2	15
Tombstone	1	0	0	1	0	0	0	0	0
Willcox	25	0	6	19	0	9	1	0	2
TOTAL	1,253	21	304	928	22	462	55	5	44

Coconino County	1,551	32	386	1,133	43	608	74	6	72
Flagstaff	1,865	4	412	1,449	4	600	77	2	70
Fredonia	1	0	0	1	0	0	0	0	0
Williams	107	0	15	92	0	16	3	0	2
Page	117	1	34	82	2	66	15	0	10
Sedona	222	0	42	180	0	55	3	0	5
TOTAL	3,863	37	889	2,937	49	1,345	172	8	159

Gila County	578	18	175	385	20	266	33	1	29
Globe	112	2	32	78	3	61	3	0	1
Hayden	0	0	0	0	0	0	0	0	0
Miami	31	0	7	24	0	9	2	0	0
Payson	224	2	60	162	2	89	7	0	8
Winkelman	0	0	0	0	0	0	0	0	0
TOTAL	945	22	274	649	25	425	45	1	38

Graham County	145	5	40	100	5	66	9	0	7
Pima	1	0	0	1	0	0	0	0	0
Safford	148	1	33	114	1	48	6	0	2
Thatcher	72	0	18	54	0	28	1	0	0
TOTAL	366	6	91	269	6	142	16	0	9

Greenlee County	45	0	19	26	0	20	0	0	0
Clifton	32	0	10	22	0	12	2	0	2
Duncan	1	0	0	1	0	0	0	0	0
TOTAL	78	0	29	49	0	32	2	0	2

Section 2: – Geographic Location

Table 2 – 5

Analysis by Jurisdiction

COUNTIES Cities	Number of Crashes				No. of Persons		Alcohol Related		
	Total	Fatal	Injury	PDO	Killed	Injured	Crashes	Killed	Injured
La Paz County	279	12	95	172	17	153	12	5	14
Parker	33	0	11	22	0	15	1	0	0
Quartzite	41	3	12	26	3	18	3	1	1
TOTAL	353	15	118	220	20	186	16	6	15

Maricopa County	6,588	59	2,047	4,482	65	2,940	219	23	154
Avondale	1,666	7	469	1,190	7	706	58	3	38
Buckeye	685	6	211	468	6	334	29	1	24
Cave Creek	49	0	16	33	0	28	1	0	0
Chandler	4,715	15	1,362	3,338	15	2,091	132	3	90
El Mirage	416	1	102	313	1	148	22	0	8
Gila Bend	49	2	14	33	2	21	0	0	0
Gilbert	2,815	8	476	2,331	8	655	86	2	34
Glendale	5,265	24	1,229	4,012	25	1,692	165	7	89
Goodyear	1,097	8	298	791	9	464	26	2	16
Mesa	7,730	39	2,212	5,479	40	3,023	288	6	165
Paradise Valley	8	0	1	7	0	1	0	0	0
Peoria	2,678	11	895	1,772	12	1,264	89	4	62
Phoenix	43,976	234	11,823	31,919	246	17,265	1,253	86	707
Scottsdale	4,077	20	1,297	2,760	20	1,859	196	5	141
Surprise	1,566	4	440	1,122	4	663	71	1	55
Tempe	8,809	21	2,677	6,111	21	3,938	277	8	147
Tolleson	459	1	119	339	1	174	8	0	7
Wickenburg	172	1	27	144	1	38	3	1	3
Youngtown	50	0	10	40	0	10	4	0	0
Guadalupe	198	2	48	148	2	62	5	0	4
Litchfield Park	40	0	12	28	0	19	2	0	7
Queen Creek	511	1	122	388	1	164	13	0	2
Fountain Hills	153	2	49	102	4	68	6	0	4
Carefree	41	1	13	27	1	19	5	1	4
TOTAL	93,813	467	25,969	67,377	491	37,646	2,958	153	1,761

Mohave County	1,309	26	427	856	30	651	71	5	42
Kingman	648	4	155	489	4	221	27	0	11
Lake Havasu City	591	3	189	399	3	256	48	1	24
Bullhead City	412	6	123	283	6	175	29	2	16
Colorado City	15	0	7	8	0	8	1	0	1
TOTAL	2,975	39	901	2,035	43	1,311	176	8	94

Crashes in Maricopa County accounted for 73.84% of all crashes and 50.98% of fatal crashes.

Section 2: – Geographic Location

Table 2 – 5

Analysis by Jurisdiction

COUNTIES Cities	Number of Crashes				No. of Persons		Alcohol Related		
	Total	Fatal	Injury	PDO	Killed	Injured	Crashes	Killed	Injured
Navajo County	598	34	164	400	45	278	45	11	25
Holbrook	23	0	5	18	0	11	1	0	1
Show Low	296	3	86	207	3	125	18	1	11
Snowflake	39	0	13	26	0	16	3	0	2
Taylor	43	0	11	32	0	18	2	0	1
Winslow	88	2	15	71	2	29	15	0	13
Pinetop-Lakeside	92	1	33	58	1	47	5	0	5
TOTAL	1,179	40	327	812	51	524	89	12	58

Pima County	3,219	40	973	2,206	45	1,494	169	20	105
South Tucson	59	0	26	33	0	44	2	0	2
Tucson	6,001	67	2,797	3,137	70	4,137	402	13	294
Sahuarita	223	3	61	159	3	93	5	1	9
Oro Valley	489	0	142	347	0	200	10	0	5
Marana	748	6	163	579	6	229	23	3	12
TOTAL	10,739	116	4,162	6,461	124	6,197	611	37	427

Pinal County	2,223	41	641	1,541	56	1,013	99	13	80
Casa Grande	847	3	257	587	3	383	30	0	21
Coolidge	178	1	60	117	2	117	16	0	9
Eloy	152	4	43	105	4	86	5	0	9
Florence	97	0	28	69	0	37	4	0	3
Kearny	7	0	1	6	0	2	1	0	0
Mammoth	2	0	1	1	0	1	0	0	0
Superior	2	0	1	1	0	1	0	0	0
Apache Junction	511	7	172	332	7	248	25	1	17
Maricopa	349	0	82	267	0	121	24	0	15
TOTAL	4,368	56	1,286	3,026	72	2,009	204	14	154

Santa Cruz County	280	6	62	212	7	82	10	2	2
Nogales	157	0	41	116	0	57	4	0	2
Patagonia	1	0	0	1	0	0	0	0	0
TOTAL	438	6	103	329	7	139	14	2	4

Yavapai County	1,876	34	575	1,267	38	854	71	5	54
Clarkdale	31	0	8	23	0	9	5	0	2
Cottonwood	251	2	78	171	2	100	13	2	10
Jerome	4	0	0	4	0	0	0	0	0
Prescott	810	2	220	588	2	293	40	0	15
Prescott Valley	462	1	134	327	1	196	16	0	17
Chino Valley	197	0	49	148	0	73	9	0	5
Camp Verde	158	1	42	115	1	59	5	0	4
Dewey-Humboldt	34	0	7	27	0	8	2	0	1
TOTAL	3,823	40	1,113	2,670	44	1,592	161	7	108

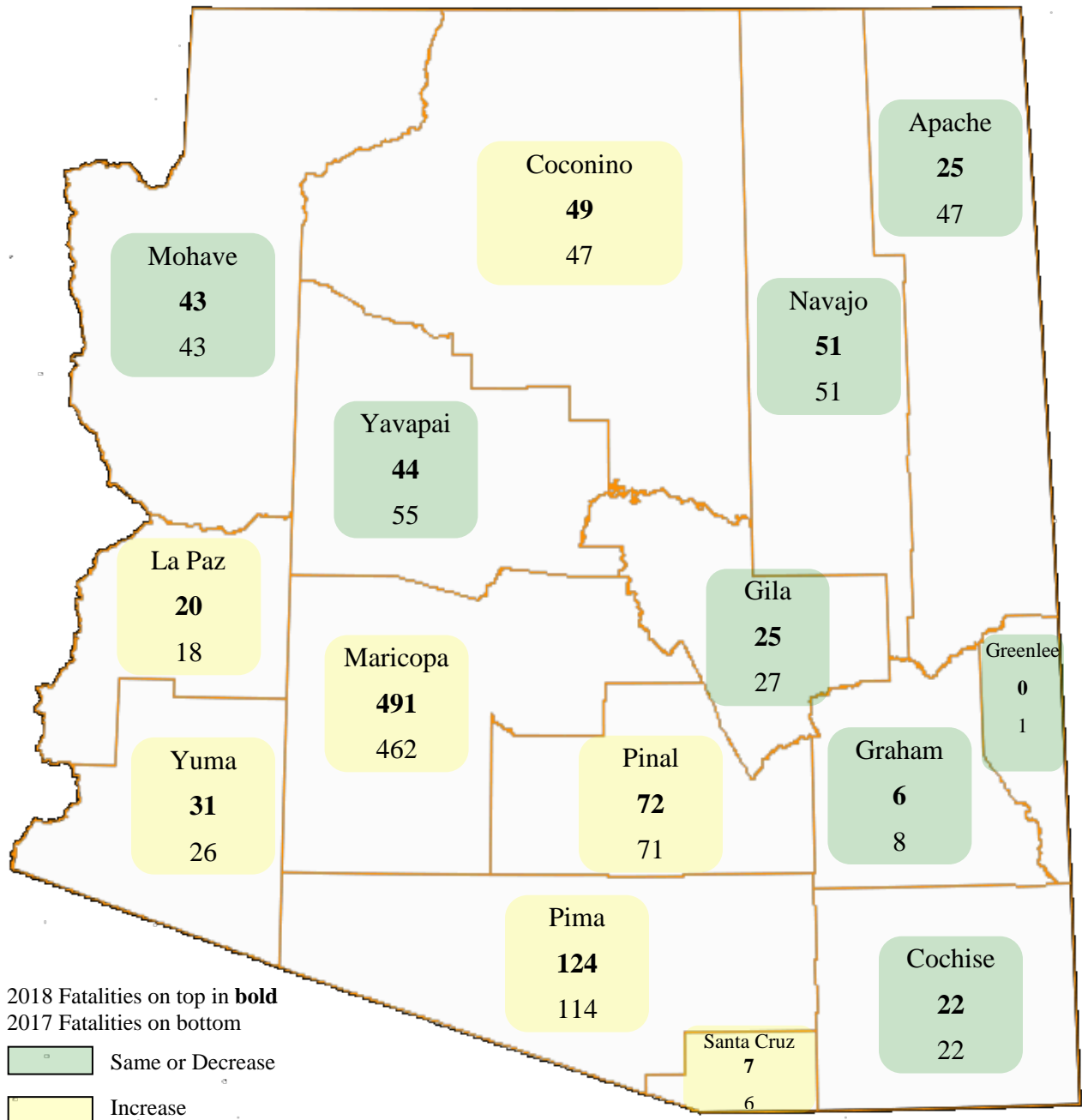
Section 2: – Geographic Location

Table 2 – 5
Analysis by Jurisdiction

COUNTIES Cities	Number of Crashes				No. of Persons		Alcohol Related		
	Total	Fatal	Injury	PDO	Killed	Injured	Crashes	Killed	Injured
Yuma County	749	20	209	520	21	309	32	4	16
Somerton	66	0	19	47	0	31	1	0	1
Yuma	1,428	7	566	855	8	803	74	1	48
Wellton	22	1	7	14	1	13	0	0	0
San Luis	223	1	40	182	1	57	8	1	4
TOTAL	2,488	29	841	1,618	31	1,213	115	6	69

Note: Some individual city data may be incomplete due to lack of timely reporting or changes in crash reporting procedures.

Total Fatalities by County for 2017 and 2018



Section 2: – Geographic Location

Chart 2 – 1

Urban and Rural Crashes by Day of Week

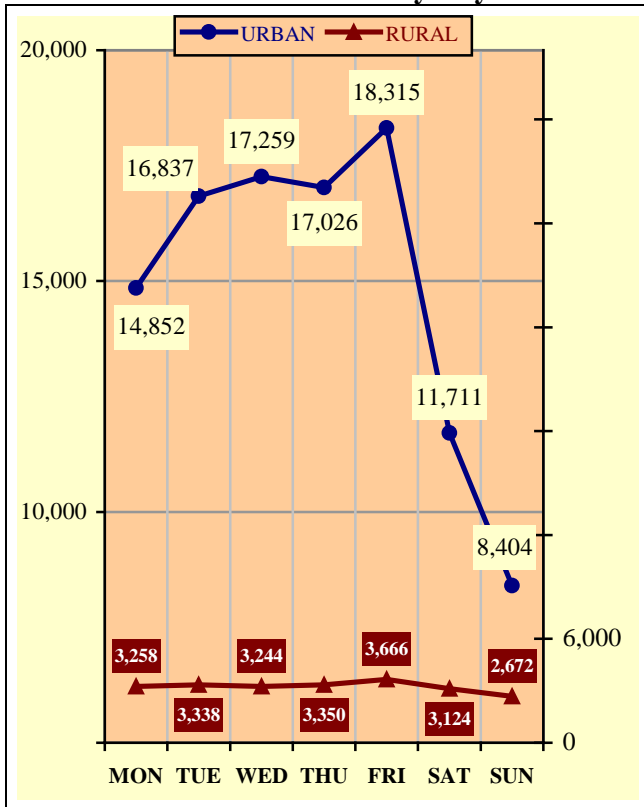


Chart 2 – 2

Urban and Rural Fatal Crashes by Day of Week

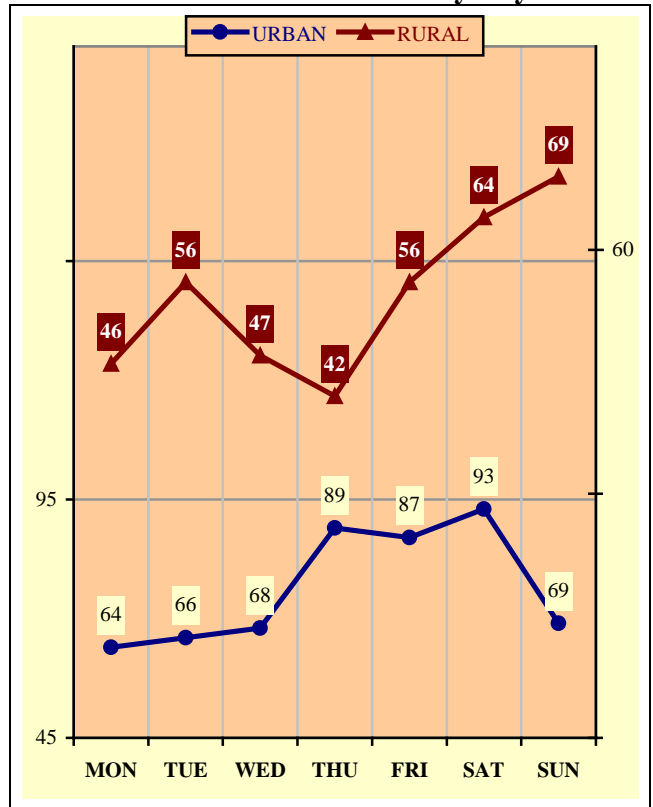
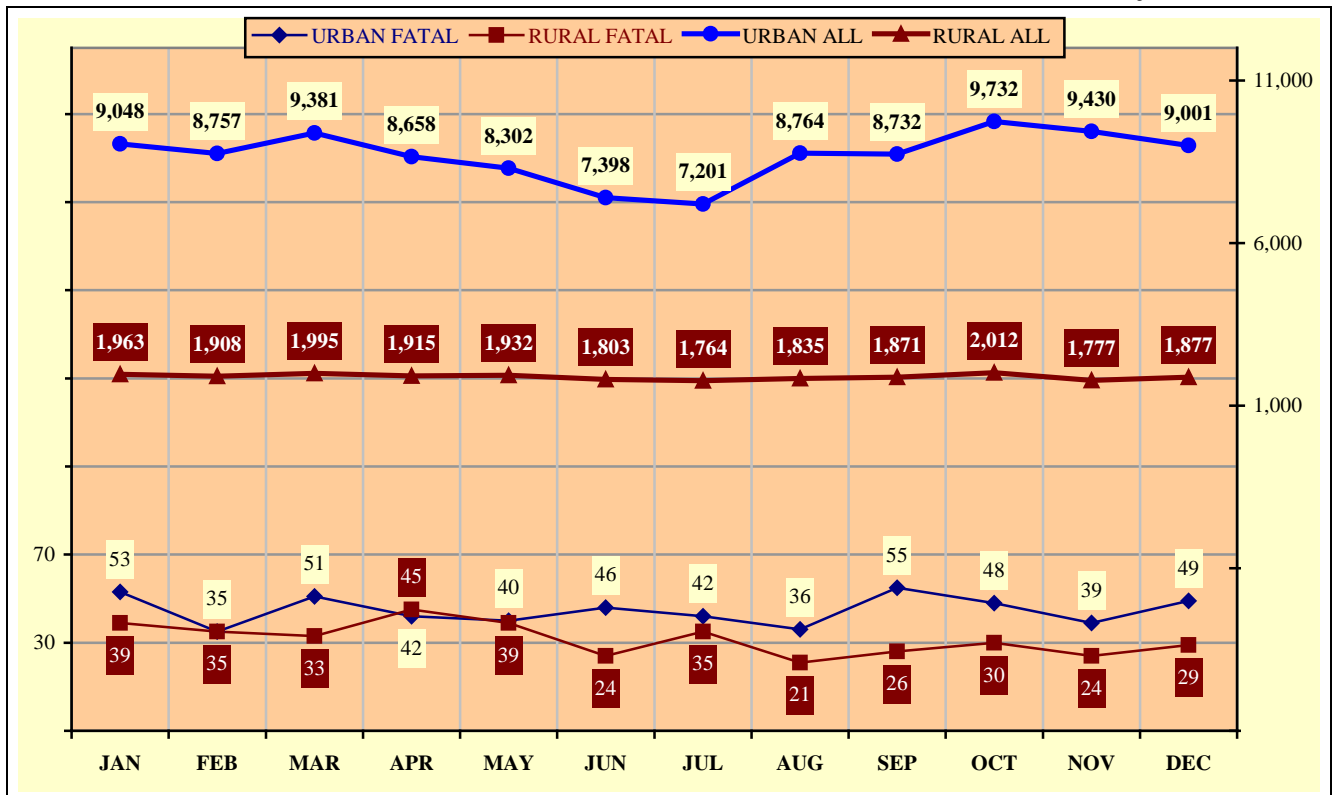


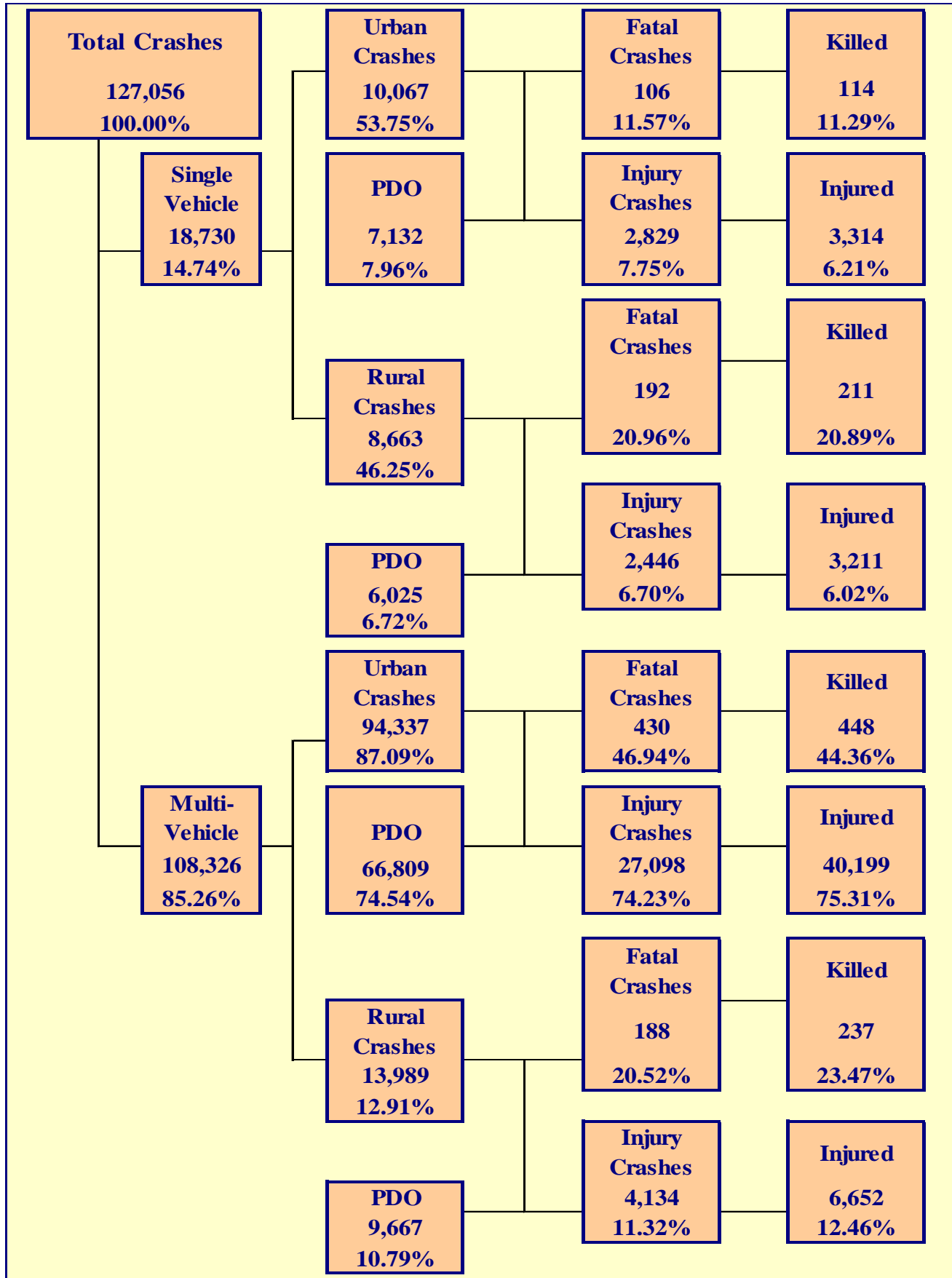
Chart 2 – 3

All Urban and Rural Crashes vs. Urban and Rural Fatal Crashes by Month



Section 3

Crash Descriptions



Section 3: – Crash Descriptions

Table 3 – 1
Manner of Collision in Multi-Vehicle Crashes

Manner of Collision Type	Number of Crashes							
	Total	Percent of Total Crashes	Fatal	Percent of Fatal Crashes	Injury	Percent of Injury Crashes	PDO	Percent of PDO Crashes
Angle	15,729	14.52%	76	12.30%	5,523	17.68%	10,130	13.25%
Left Turn	17,857	16.48%	74	11.97%	6,733	21.56%	11,050	14.45%
Rear End	48,073	44.38%	62	10.03%	13,528	43.31%	34,483	45.09%
Head-On	1,875	1.73%	67	10.84%	788	2.52%	1,020	1.33%
Sideswipe (same)	16,767	15.48%	18	2.91%	1,974	6.32%	14,775	19.32%
Sideswipe (opposite)	1,493	1.38%	14	2.27%	325	1.04%	1,154	1.51%
U-Turn	168	0.16%	2	0.32%	47	0.15%	119	0.16%
Other*	5,634	5.20%	288	46.60%	2,205	7.06%	3,141	4.11%
Unknown	730	0.67%	17	2.75%	109	0.35%	604	0.79%
TOTAL	108,326	100.00%	618	100.00%	31,232	100.00%	76,476	100.00%

*Other includes pedestrian and pedalcyclist crashes

Table 3 – 2
Lighting Conditions

Type of Lighting Conditions	Number of Crashes				Number of Persons	
	Total	Fatal	Injury	PDO	Killed	Injured
Daylight	90,127	382	26,007	63,738	428	38,053
Dawn	2,229	15	635	1,579	16	874
Dusk	3,243	23	949	2,271	28	1,413
Dark - Lighted	23,685	250	6,848	16,587	263	10,010
Dark - Not Lighted	6,793	151	1,901	4,741	174	2,777
Dark - Unknown Lighting	461	43	71	347	44	98
Unknown	518	52	96	370	57	151
TOTAL	127,056	916	36,507	89,633	1,010	53,376

Table 3 – 3
Weather Conditions

Type of Weather Conditions	Number of Crashes				Number of Persons	
	Total	Fatal	Injury	PDO	Killed	Injured
Clear	109,989	660	31,851	77,478	725	46,615
Cloudy	10,701	62	3,091	7,548	72	4,456
Sleet/Hail	128	0	35	93	0	49
Rain	4,215	19	1,134	3,062	23	1,644
Snow or Blowing Snow	606	2	110	494	2	146
Severe Crosswinds	76	1	21	54	1	24
Blowing Sand, Soil, Dirt	150	0	52	98	0	86
Fog, Smog, Smoke	40	1	10	29	1	13
Other	94	1	28	65	1	38
Unknown	1,057	170	175	712	185	305
TOTAL	127,056	916	36,507	89,633	1,010	53,376

Section 3: – Crash Descriptions

Table 3 – 4
Road Surface Conditions

Type of Road Surface Condition	Number of Drivers				Number of Persons	
	Total	In Fatal Crashes	In Injury Crashes	In PDO Crashes	Killed	Injured
Dry	234,578	1,136	69,116	164,326	779	50,530
Wet	9,759	44	2,708	7,007	32	2,090
Snow/Slush	876	6	153	717	2	129
Ice/Frost	406	2	73	331	3	81
Water (standing or moving)	331	3	97	231	2	93
Mud, Dirt, Gravel, Sand	480	5	201	274	9	246
Other	112	1	38	73	1	27
Unknown	2,868	229	384	2,255	182	180
TOTAL	249,410	1,426	72,770	175,214	1,010	53,376

Table 3 – 5
Roadway Grade

Type of Roadway Grade	Number of Drivers				Number of Persons	
	Total	In Fatal Crashes	In Injury Crashes	In PDO Crashes	Killed	Injured
Level	232,063	1,013	67,798	163,252	683	49,323
Downhill	7,893	100	2,444	5,349	84	2,146
Uphill	6,321	81	1,974	4,266	56	1,612
Hillcrest	235	1	86	148	3	59
Sag/Dip/Bottom	147	4	55	88	4	46
Unknown	2,751	227	413	2,111	180	190
TOTAL	249,410	1,426	72,770	175,214	1,010	53,376

Table 3 – 6
Roadway Alignment

Type of Roadway Alignment	Number of Drivers				Number of Persons	
	Total	In Fatal Crashes	In Injury Crashes	In PDO Crashes	Killed	Injured
Straight	233,300	1,023	68,648	163,629	682	49,785
Curve Left	6,178	87	1,687	4,404	70	1,640
Curve Right	6,386	90	1,796	4,500	78	1,606
Unknown	3,546	226	639	2,681	180	345
TOTAL	249,410	1,426	72,770	175,214	1,010	53,376

Section 3: – Crash Descriptions

Chart 3 – 1

All Crashes vs. Fatal Crashes by Time of Day - Weekdays

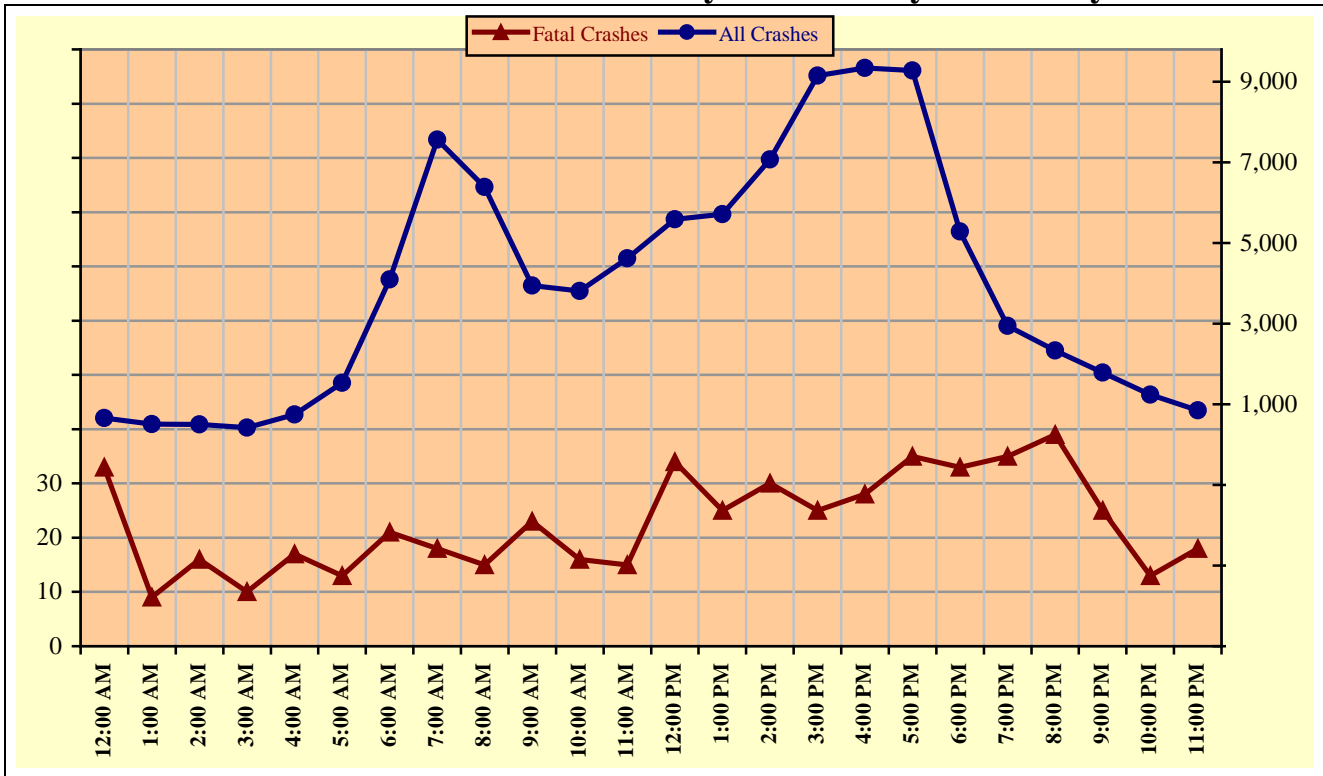
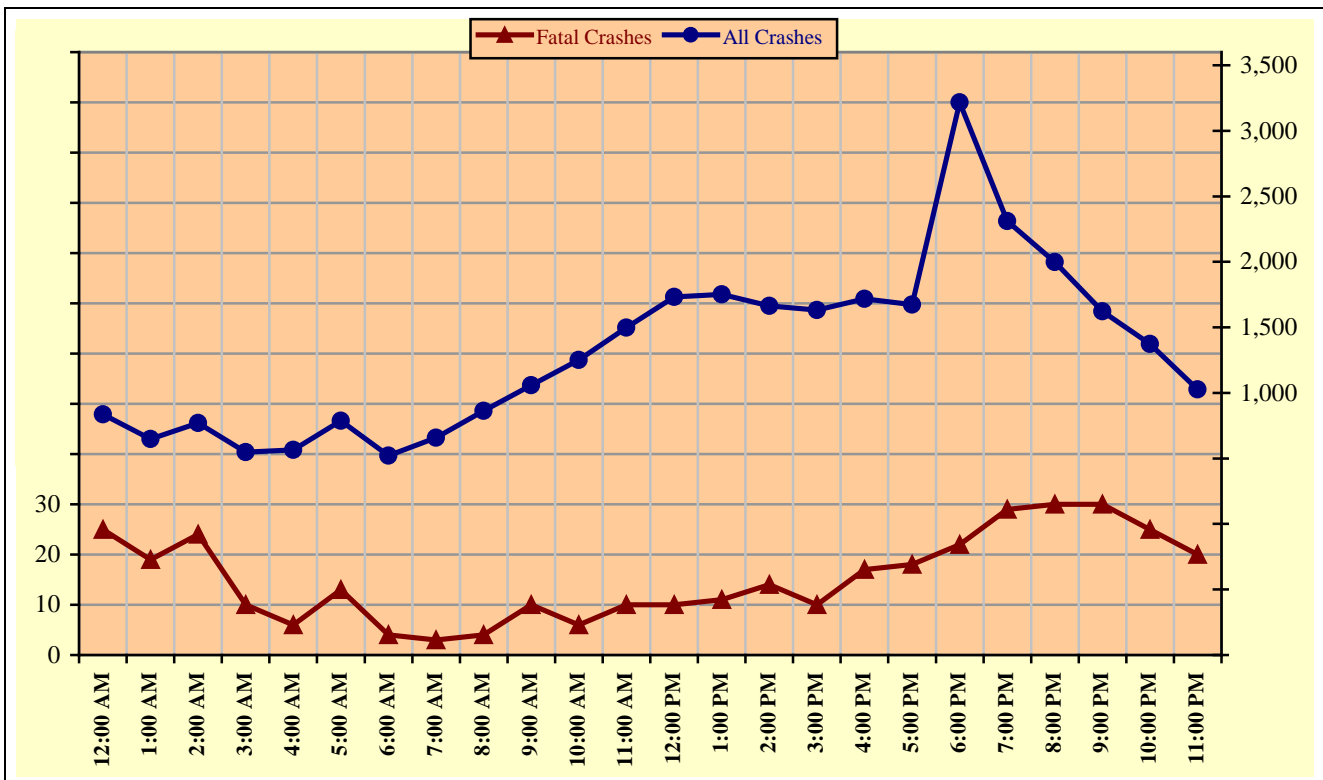


Chart 3 – 2

All Crashes vs. Fatal Crashes by Time of Day - Weekends



Section 3: – Crash Descriptions

Chart 3 – 3
Crashes by Day of Week

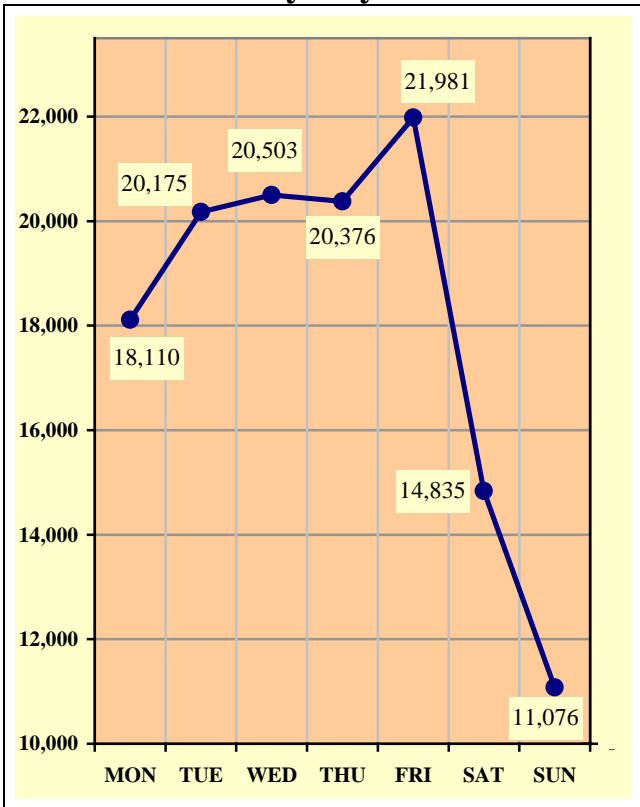


Chart 3 – 4
Fatal Crashes by Day of Week

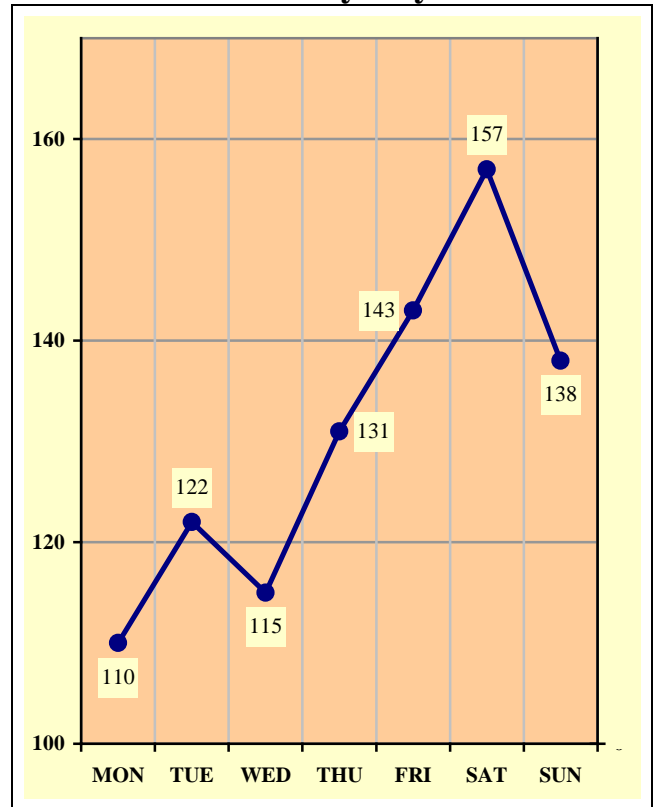
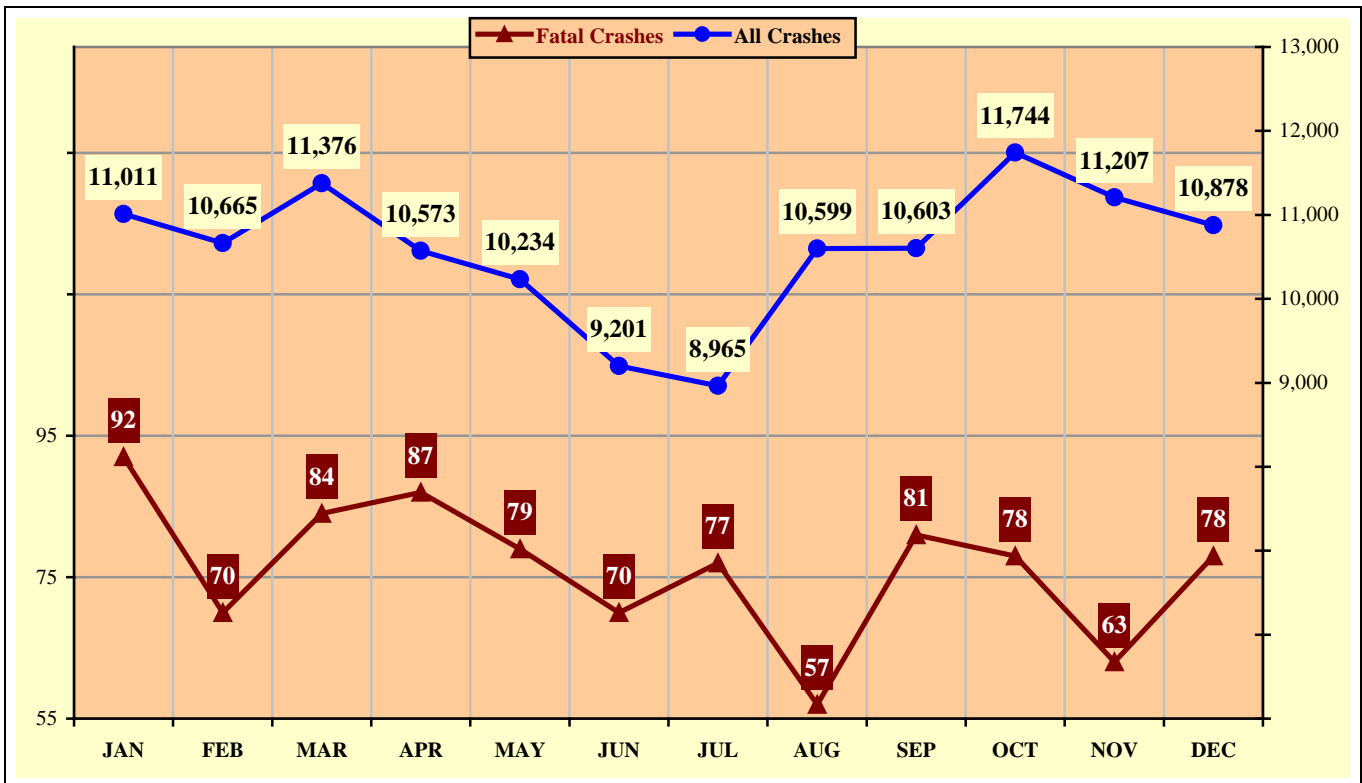


Chart 3 – 5
All Crashes vs. Fatal Crashes by Month

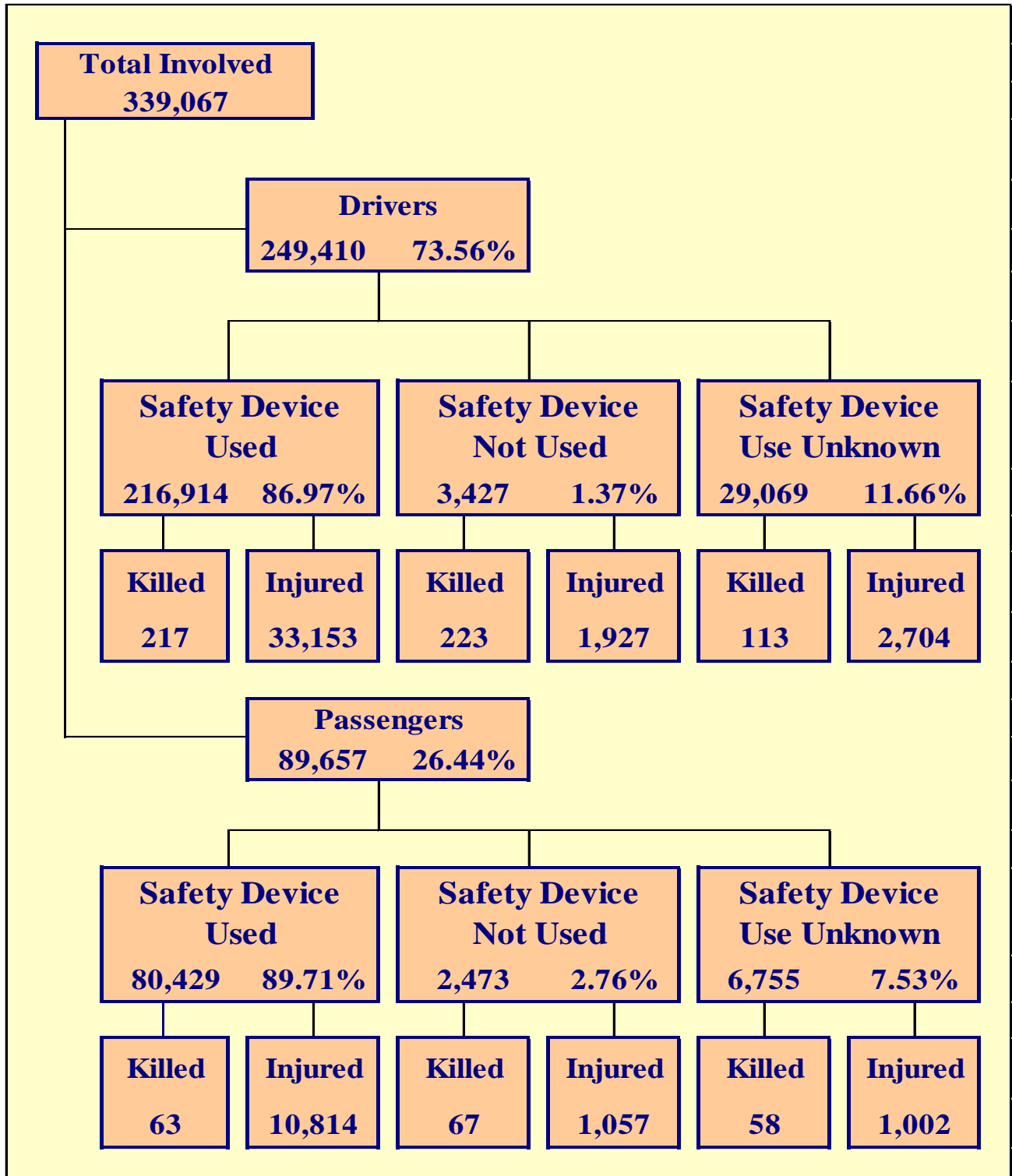


Section 3: – Crash Descriptions

**Table 3 – 7
Crashes by Hour and Day of Week**

Hour Beginning	Total Crashes		Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Sunday		Weekdays		Weekends	
	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal
12:00 AM	1,491	58	194	6	139	9	161	5	158	7	198	12	316	9	325	10	656	33	835	25
1:00 AM	1,158	28	113	6	106	2	130	2	107	3	166	2	262	8	274	5	509	9	649	19
2:00 AM	1,270	40	128	2	124	4	108	3	110	5	158	4	320	10	322	12	500	16	770	24
3:00 AM	970	20	107	2	99	1	80	2	108	2	135	5	215	5	226	3	422	10	548	10
4:00 AM	1,311	23	174	1	177	5	159	5	207	1	203	6	196	1	195	4	746	17	565	6
5:00 AM	2,320	26	359	3	383	3	392	3	406	2	352	5	237	6	191	4	1,533	13	787	13
6:00 AM	4,616	25	730	7	909	6	872	2	807	0	778	6	287	0	233	4	4,096	21	520	4
7:00 AM	8,221	21	1,326	2	1,669	2	1,608	7	1,647	4	1,312	3	395	1	264	2	7,562	18	659	3
8:00 AM	7,253	19	1,148	3	1,385	6	1,381	3	1,340	1	1,137	2	520	3	342	1	6,391	15	862	4
9:00 AM	5,000	33	747	2	813	9	817	4	781	5	784	3	648	6	410	4	3,942	23	1,058	10
10:00 AM	5,057	22	712	6	793	4	726	2	758	3	817	1	718	3	533	3	3,806	16	1,251	6
11:00 AM	6,114	25	914	2	923	2	877	4	916	5	986	2	939	5	559	5	4,616	15	1,498	10
12:00 PM	7,317	44	1,026	6	1,021	3	1,104	8	1,122	11	1,311	6	1,000	5	733	5	5,584	34	1,733	10
1:00 PM	7,465	36	1,007	3	1,058	7	1,138	2	1,061	8	1,449	5	1,036	4	716	7	5,713	25	1,752	11
2:00 PM	8,733	44	1,333	10	1,323	5	1,425	3	1,362	6	1,625	6	986	8	679	6	7,068	30	1,665	14
3:00 PM	10,778	35	1,606	1	1,874	8	1,818	6	1,814	7	2,035	3	951	6	680	4	9,147	25	1,631	10
4:00 PM	11,056	45	1,641	5	1,840	7	1,964	6	1,890	5	2,003	5	943	13	775	4	9,338	28	1,718	17
5:00 PM	10,951	53	1,665	5	1,948	4	1,910	5	1,958	9	1,797	12	945	8	728	10	9,278	35	1,673	18
6:00 PM	8,498	55	1,119	7	1,371	9	1,433	7	1,359	10	1,472	6	963	13	781	3	5,282	33	3,216	22
7:00 PM	5,254	64	654	10	714	6	741	13	835	6	984	8	748	12	578	9	2,944	35	2,310	29
8:00 PM	4,328	69	551	11	558	7	621	6	599	15	713	11	709	10	577	9	2,329	39	1,999	30
9:00 PM	3,406	55	397	5	430	4	486	9	471	7	611	10	571	8	440	12	1,784	25	1,622	30
10:00 PM	2,613	38	266	1	317	5	337	4	320	3	544	14	512	5	317	6	1,240	13	1,373	25
11:00 PM	1,876	38	193	4	201	4	215	4	240	6	411	6	418	8	198	6	849	18	1,027	20
TOTAL	127,056	916	18,110	110	20,175	122	20,503	115	20,376	131	21,981	143	14,835	157	11,076	138	95,335	546	31,721	370

Crashes during Weekends accounted for 24.97% of all crashes and 40.39% of Fatal Crashes.



Section 4: – Safety Devices

**Table 4 – 1
Child Safety Device Usage (less than five years old)**

Severity of Injury	Safety Device Used	Percent of Safety Device Used	Safety Device Not Used	Percent of Safety Device Not Used	Safety Device Use Unknown	Percent of Unknown
No Injury	10,617	91.55%	98	69.50%	193	74.23%
Unknown Injury	158	1.36%	2	1.42%	42	16.15%
Possible Injury	556	4.79%	18	12.77%	11	4.23%
Suspected Minor Injury	233	2.01%	13	9.22%	4	1.54%
Suspected Serious Injury	26	0.22%	6	4.26%	6	2.31%
Fatal Injury	7	0.06%	4	2.84%	4	1.54%
TOTALS	11,597	100.00%	141	100.00%	260	100.00%

**Table 4 – 2
Driver Safety Device Usage**

Severity of Injury	Safety Device Used	Percent of Safety Device Used	Safety Device Not Used	Percent of Safety Device Not Used	Safety Device Use Unknown	Percent of Unknown
No Injury	181,587	83.71%	1,218	35.54%	15,876	54.61%
Unknown Injury	1,957	0.90%	59	1.72%	10,376	35.69%
Possible Injury	18,700	8.62%	515	15.03%	1,162	4.00%
Suspected Minor Injury	12,940	5.97%	922	26.90%	1,149	3.95%
Suspected Serious Injury	1,513	0.70%	490	14.30%	393	1.35%
Fatal Injury	217	0.10%	223	6.51%	113	0.39%
TOTALS	216,914	100.00%	3,427	100.00%	29,069	100.00%

**Table 4 – 3
Passenger Safety Device Usage**

Severity of Injury	Safety Device Used	Percent of Safety Device Used	Safety Device Not Used	Percent of Safety Device Not Used	Safety Device Use Unknown	Percent of Unknown
No Injury	68,574	85.26%	1,321	53.42%	4,592	67.98%
Unknown Injury	978	1.22%	28	1.13%	1,103	16.33%
Possible Injury	6,546	8.14%	331	13.38%	500	7.40%
Suspected Minor Injury	3,825	4.76%	520	21.03%	371	5.49%
Suspected Serious Injury	443	0.55%	206	8.33%	131	1.94%
Fatal Injury	63	0.08%	67	2.71%	58	0.86%
TOTALS	80,429	100.00%	2,473	100.00%	6,755	100.00%

Section 4: – Safety Devices

**Table 4 – 4
Driver Safety Device Usage by Gender**

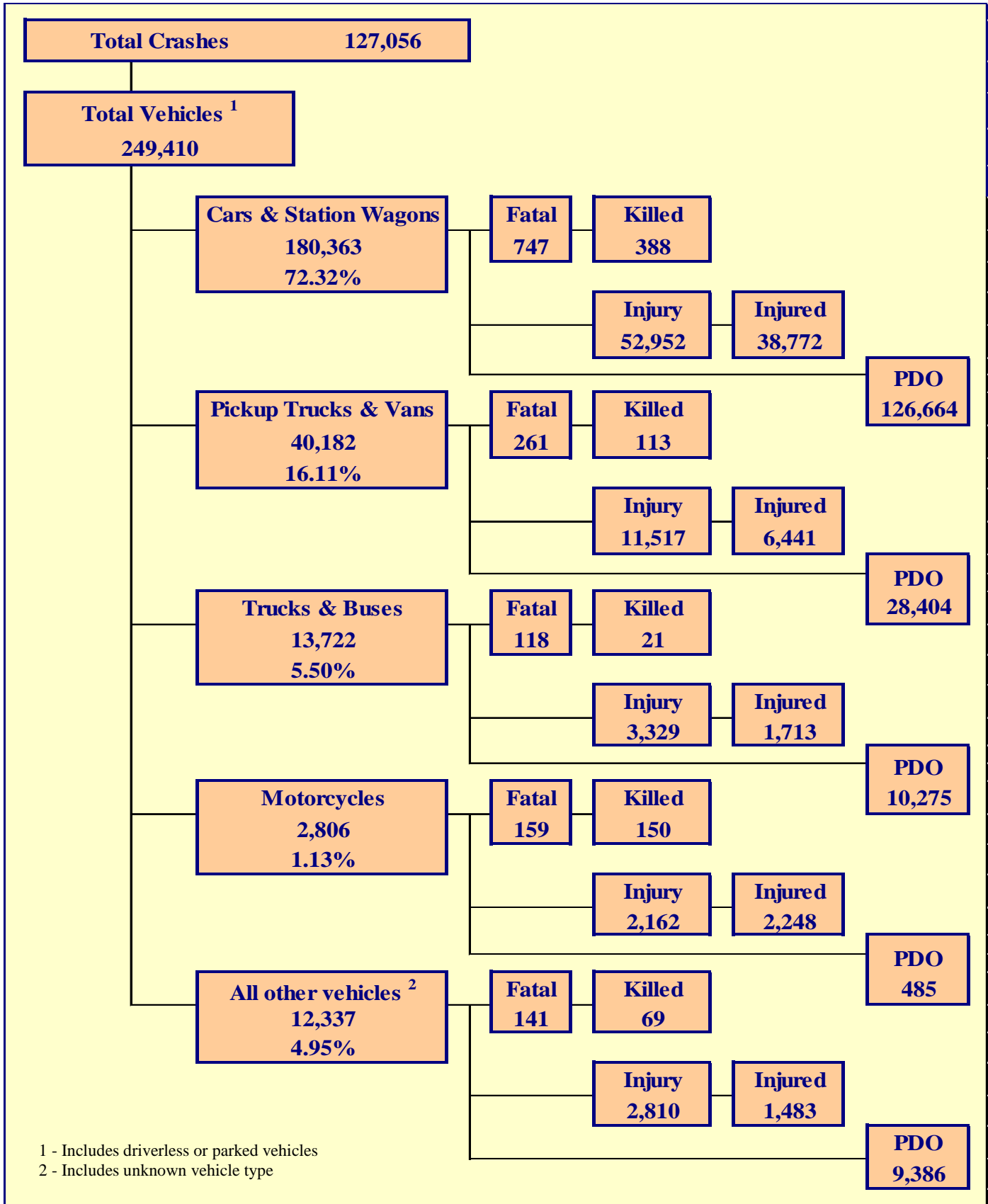
Gender of Driver	Number of Drivers						Total	Percent of Total
	Safety Device Used	Percent of Safety Device Used	Safety Device Not Used	Percent of Safety Device Not Used	Safety Device Use Unknown	Percent of Unknown		
Male	121,723	56.12%	2,465	71.93%	9,270	31.89%	133,458	53.51%
Female	95,045	43.82%	929	27.11%	4,704	16.18%	100,678	40.37%
Unknown	146	0.07%	33	0.96%	15,095	51.93%	15,274	6.12%
TOTAL	216,914	100.00%	3,427	100.00%	29,069	100.00%	249,410	100.00%

**Table 4 – 5
Driver Safety Device Usage by Age**

Driver Age Group	Number of Drivers						Total	Percent of Total
	Safety Device Used	Percent of Safety Device Used	Safety Device Not Used	Percent of Safety Device Not Used	Safety Device Use Unknown	Percent of Unknown		
15 & Under	253	0.12%	24	0.70%	42	0.14%	319	0.13%
16	2,915	1.34%	28	0.82%	152	0.52%	3,095	1.24%
17	4,424	2.04%	66	1.93%	224	0.77%	4,714	1.89%
18	5,758	2.65%	118	3.44%	302	1.04%	6,178	2.48%
19	6,152	2.84%	118	3.44%	340	1.17%	6,610	2.65%
20	6,108	2.82%	110	3.21%	343	1.18%	6,561	2.63%
21	6,239	2.88%	110	3.21%	372	1.28%	6,721	2.69%
22	6,123	2.82%	116	3.38%	388	1.33%	6,627	2.66%
23	6,072	2.80%	140	4.09%	375	1.29%	6,587	2.64%
24	5,642	2.60%	104	3.03%	366	1.26%	6,112	2.45%
25-34	49,178	22.67%	858	25.04%	3,000	10.32%	53,036	21.26%
35-44	37,348	17.22%	528	15.41%	2,103	7.23%	39,979	16.03%
45-54	31,874	14.69%	432	12.61%	1,766	6.08%	34,072	13.66%
55-64	25,663	11.83%	349	10.18%	1,354	4.66%	27,366	10.97%
65-74	14,756	6.80%	179	5.22%	787	2.71%	15,722	6.30%
75 & Older	7,737	3.57%	87	2.54%	416	1.43%	8,240	3.30%
Unknown	672	0.31%	60	1.75%	16,739	57.58%	17,471	7.00%
TOTAL	216,914	100.00%	3,427	100.00%	29,069	100.00%	249,410	100.00%

Section 5

Motor Vehicle and Driver Descriptions



Section 5: – Motor Vehicle and Driver Descriptions

Table 5 – 1

Arizona Motor Vehicle Registrations

Privately Owned Vehicles	5,240,597
Commercial Vehicles	557,718
Buses and Taxis	829
Motorcycles	210,427
Mopeds	279
TOTAL	6,009,850
Source: MVD - MV988 MV630419, Currently Registered Vehicles by County Listing, dated 12/31/2018.	

Table 5 – 2

Motor Vehicle Crash Involvement by Vehicle Type

Motor Vehicle Type	Number of Vehicles				
	Total	Percent of Total	In Fatal Crashes	In Injury Crashes	In PDO Crashes
Passenger Cars (Sedans, Convertibles, etc.)	126,236	50.614%	475	37,016	88,745
Station Wagons	54,127	21.702%	272	15,936	37,919
Pickup Trucks	36,741	14.731%	250	10,460	26,031
Vans	3,441	1.380%	11	1,057	2,373
Truck Tractor (with or without Semi-Trailer)	2,247	0.901%	58	536	1,653
Concrete Mixer Trucks	58	0.023%	2	13	43
Dump Trucks	220	0.088%	1	46	173
Garbage Trucks	144	0.058%	3	32	109
Tanker Trucks	44	0.018%	0	9	35
Wrecker or Tow Trucks	117	0.047%	2	28	87
Other Truck Combinations	9,869	3.957%	41	2,408	7,420
School Bus	148	0.059%	4	38	106
Commercial or Non-Commercial Bus	875	0.351%	7	219	649
Motorcycle (two or three wheel)	2,806	1.125%	159	2,162	485
All Terrain Vehicle or Cycle	204	0.082%	15	121	68
Moped	32	0.013%	2	27	3
Recreational Vehicle	188	0.075%	2	34	152
Motor Home or House Car	102	0.041%	2	24	76
Fire Trucks	49	0.020%	0	10	39
Ambulances	38	0.015%	0	10	28
Other Types Of Vehicles	148	0.059%	0	70	78
Vehicle Type Unknown	11,576	4.641%	120	2,514	8,942
TOTAL	249,410	100.00%	1,426	72,770	175,214

Section 5: – Motor Vehicle and Driver Descriptions

Table 5 – 3

Hit and Run Drivers Involved in Crashes

Hit and Run	Number of Crashes				Number of Persons	
	Total	Fatal	Injury	PDO	Killed	Injured
Yes	14,536	70	2,646	11,820	73	3,348
No	112,520	846	33,861	77,813	937	50,028
TOTAL	127,056	916	36,507	89,633	1,010	53,376

Table 5 – 4

Gender of Drivers Involved in Crashes

Gender of Driver	Number of Drivers							
	Total	Percent of Total	In Fatal Crashes	Percent of Fatal	In Injury Crashes	Percent of Injury	In PDO Crashes	Percent of PDO
Male	133,458	53.51%	948	66.48%	39,113	53.75%	93,397	53.30%
Female	100,678	40.37%	340	23.84%	31,342	43.07%	68,996	39.38%
Unknown	15,274	6.12%	138	9.68%	2,315	3.18%	12,821	7.32%
TOTAL	249,410	100.00%	1,426	100.00%	72,770	100.00%	175,214	100.00%

Table 5 – 5

License Status of Drivers Involved in Crashes

License Status of Driver	Number of Drivers							
	Total	Percent of Total	In Fatal Crashes	Percent of Fatal	In Injury Crashes	Percent of Injury	In PDO Crashes	Percent of PDO
Arizona License	193,131	77.44%	1,014	71.11%	58,714	80.68%	133,403	76.14%
All Others*	56,279	22.56%	412	28.89%	14,056	19.32%	41,811	23.86%
TOTAL	249,410	100.00%	1,426	100.00%	72,770	100.00%	175,214	100.00%

*Includes drivers that have a suspended, revoked, out-of-state or country license, as well as drivers with no license or unknown license type

Table 5 – 6

Passengers Killed and Injured by Age and Gender

Age of Passenger	Passengers Killed				Passengers Injured			
	Total	Male	Female	Gender Unknown	Total	Male	Female	Gender Unknown
0-4	11	6	5	0	693	324	369	0
5-9	9	7	2	0	969	472	497	0
10-14	7	4	3	0	1,216	517	699	0
15-19	28	11	17	0	1,893	782	1,111	0
20-24	22	12	10	0	1,359	536	823	0
25-34	30	21	9	0	1,664	678	986	0
35-44	18	12	6	0	1,224	435	789	0
45-54	13	4	9	0	1,129	339	790	0
55-64	20	8	12	0	1,008	267	741	0
65-74	17	5	12	0	748	197	551	0
75 & Older	9	3	6	0	516	139	377	0
Unknown	4	1	0	3	454	179	231	44
TOTAL	188	94	91	3	12,873	4,865	7,964	44

Section 5: – Motor Vehicle and Driver Descriptions

Table 5 – 7

Drivers and Passengers Killed and Injured by Vehicle Type

Motor Vehicle Type	Number of Drivers		Number of Passengers	
	Killed	Injured	Killed	Injured
Passenger Cars (Sedans, Convertibles, etc.)	182	20,623	74	6,781
Station Wagons	87	8,222	45	3,146
Pickup Trucks	82	4,256	24	1,489
Vans	4	457	3	239
Truck Tractor (with or without Semi-Trailer)	10	157	1	38
Concrete Mixer Trucks	0	5	0	0
Dump Trucks	0	12	0	2
Garbage Trucks	1	9	0	3
Tanker Trucks	0	3	0	0
Wrecker or Tow Trucks	0	1	0	0
Other Truck Combinations	5	857	4	407
School Bus	0	11	0	20
Commercial or Non-Commercial Bus	0	33	0	155
Motorcycle (two or three wheel)	143	2,106	7	142
All Terrain Vehicle or Cycle	13	100	5	44
Moped	2	26	0	1
Recreational Vehicle	0	15	2	12
Motor Home or House Car	0	8	0	3
Fire Trucks	0	0	0	1
Ambulances	0	2	0	5
Other Types Of Vehicles	0	47	0	13
Vehicle Type Unknown	24	834	23	372
TOTAL	553	37,784	188	12,873

Table 5 – 8

Drivers Killed and Injured by Age and Gender

Age of Driver	Drivers Killed				Drivers Injured			
	Total	Male	Female	Gender Unknown	Total	Male	Female	Gender Unknown
0-4	0	0	0	0	0	0	0	0
5-9	0	0	0	0	1	1	0	0
10-14	0	0	0	0	22	18	4	0
15-19	26	15	11	0	3,029	1,506	1,523	0
20-24	61	48	13	0	5,155	2,551	2,604	0
25-34	109	83	26	0	8,298	4,053	4,245	0
35-44	72	58	14	0	6,379	3,055	3,324	0
45-54	68	57	11	0	5,772	2,898	2,874	0
55-64	95	70	25	0	4,700	2,410	2,290	0
65-74	80	71	9	0	2,831	1,497	1,334	0
75 & Older	41	33	8	0	1,470	756	714	0
Unknown	1	0	0	1	127	62	25	40
TOTAL	553	435	117	1	37,784	18,807	18,937	40

Section 5: – Motor Vehicle and Driver Descriptions

Table 5 – 9
Licensed Drivers in Arizona by Age

Driver Age Group	Male Number	Percent of Male	Female Number	Percent of Female	Total Number	Percent of Total	Cumulative Percent
16	11,580	0.44%	12,173	0.46%	23,753	0.45%	0.45%
17	20,848	0.79%	20,320	0.77%	41,168	0.78%	1.22%
18	29,359	1.11%	27,661	1.04%	57,020	1.07%	2.30%
19	34,027	1.28%	31,787	1.20%	65,814	1.24%	3.54%
20	36,663	1.38%	34,373	1.30%	71,036	1.34%	4.88%
21	39,550	1.49%	36,514	1.38%	76,064	1.43%	6.31%
22	40,692	1.53%	38,651	1.46%	79,343	1.49%	7.80%
23	41,723	1.57%	40,148	1.51%	81,871	1.54%	9.35%
24	43,175	1.63%	41,725	1.57%	84,900	1.60%	10.94%
25-34	469,599	17.68%	463,675	17.48%	933,274	17.58%	28.53%
35-44	470,395	17.71%	462,177	17.42%	932,572	17.57%	46.09%
45-54	470,381	17.71%	451,141	17.01%	921,522	17.36%	63.45%
55-64	454,327	17.11%	466,621	17.59%	920,948	17.35%	80.80%
65-74	305,644	11.51%	328,618	12.39%	634,262	11.95%	92.75%
75 & older	187,827	7.07%	196,933	7.42%	384,760	7.25%	100.00%
TOTALS	2,655,790	100.00%	2,652,517	100.00%	5,308,307	100.00%	100.00%

Source: MVD - MV708 MV650653-1, Point-in-Time Driver Credential Report/All Driver Licenses by Age, Gender, & Class (page 19), dated 1/2/2019.

Table 5 – 10
Driver Involvement by Age

Driver Age Group	Number of Drivers							
	Total	Percent of Total	In Fatal Crashes	Percent of Fatal	In Injury Crashes	Percent of Injury	In PDO Crashes	Percent of PDO
15 & Under	319	0.13%	1	0.07%	107	0.15%	211	0.12%
16	3,095	1.24%	8	0.56%	822	1.13%	2,265	1.29%
17	4,714	1.89%	12	0.84%	1,253	1.72%	3,449	1.97%
18	6,178	2.48%	30	2.10%	1,845	2.54%	4,303	2.46%
19	6,610	2.65%	25	1.75%	1,973	2.71%	4,612	2.63%
20	6,561	2.63%	29	2.03%	1,937	2.66%	4,595	2.62%
21	6,721	2.69%	36	2.52%	1,949	2.68%	4,736	2.70%
22	6,627	2.66%	32	2.24%	1,934	2.66%	4,661	2.66%
23	6,587	2.64%	32	2.24%	2,006	2.76%	4,549	2.60%
24	6,112	2.45%	34	2.38%	1,832	2.52%	4,246	2.42%
25-34	53,035	21.26%	248	17.39%	15,777	21.68%	37,010	21.12%
35-44	39,979	16.03%	194	13.60%	12,087	16.61%	27,698	15.81%
45-54	34,072	13.66%	193	13.53%	10,390	14.28%	23,489	13.41%
55-64	27,366	10.97%	203	14.24%	8,505	11.69%	18,658	10.65%
65-74	15,722	6.30%	131	9.19%	4,936	6.78%	10,655	6.08%
75 & Older	8,240	3.30%	69	4.84%	2,606	3.58%	5,565	3.18%
Unknown	17,472	7.01%	149	10.45%	2,811	3.86%	14,512	8.28%
TOTAL	249,410	100.00%	1,426	100.00%	72,770	100.00%	175,214	100.00%

Section 5: – Motor Vehicle and Driver Descriptions

Table 5 – 11
Driver Violations

Type of Violation or Behavior	Number of Drivers							
	Total	Percent of Total	In Fatal Crashes	Percent of Fatal	In Injury Crashes	Percent of Injury	In PDO Crashes	Percent of PDO
No Improper Action	124,138	49.77%	515	36.12%	36,899	50.71%	86,724	49.50%
Speed too Fast for Conditions	41,650	16.70%	138	9.68%	12,538	17.23%	28,974	16.54%
Exceeded Lawful Speed	1,002	0.40%	34	2.38%	443	0.61%	525	0.30%
Failed to Yield Right-Of-Way	21,755	8.72%	84	5.89%	7,784	10.70%	13,887	7.93%
Followed Too Closely	8,801	3.53%	4	0.28%	2,278	3.13%	6,519	3.72%
Ran Stop Sign	1,070	0.43%	14	0.98%	443	0.61%	613	0.35%
Disregarded Traffic Signal	5,344	2.14%	41	2.88%	2,323	3.19%	2,980	1.70%
Made Improper Turn	4,804	1.93%	7	0.49%	1,144	1.57%	3,653	2.08%
Drove in Opposing Lane	759	0.30%	40	2.81%	271	0.37%	448	0.26%
Drove Left of Center Line	462	0.19%	24	1.68%	204	0.28%	234	0.13%
Passed in No-Passing Zone	94	0.04%	3	0.21%	19	0.03%	72	0.04%
Unsafe Lane Change	8,753	3.51%	11	0.77%	1,253	1.72%	7,489	4.27%
Failed to Keep in Proper Lane	5,391	2.16%	80	5.61%	1,307	1.80%	4,004	2.29%
Crossed Median	65	0.03%	11	0.77%	31	0.04%	23	0.01%
Aggressive Driving	157	0.06%	2	0.14%	42	0.06%	113	0.06%
Wrong Way Driving	23	0.01%	1	0.07%	12	0.02%	10	0.01%
Other	7,559	3.03%	61	4.28%	1,862	2.56%	5,636	3.22%
Unknown	17,583	7.05%	356	24.96%	3,917	5.38%	13,310	7.60%
TOTAL	249,410	100.00%	1,426	100.00%	72,770	100.00%	175,214	100.00%

Table 5 – 12
Driver Physical Condition

Type of Condition	Number of Drivers							
	Total	Percent of Total	In Fatal Crashes	Percent of Fatal	In Injury Crashes	Percent of Injury	In PDO Crashes	Percent of PDO
No Apparent Influence	219,566	88.03%	683	47.90%	64,470	88.59%	154,413	88.13%
Alcohol	4,484	1.80%	178	12.48%	1,835	2.52%	2,471	1.41%
Illegal Drugs	704	0.28%	98	6.87%	302	0.42%	304	0.17%
Medications	213	0.09%	13	0.91%	97	0.13%	103	0.06%
Marijuana	56	0.02%	8	0.56%	20	0.03%	28	0.02%
Illness or Physical Impairment	920	0.37%	5	0.35%	476	0.65%	439	0.25%
Fell Asleep or Fatigued	1,743	0.70%	11	0.77%	688	0.95%	1,044	0.60%
Other	1,589	0.64%	14	0.98%	392	0.54%	1,183	0.68%
Unknown	20,135	8.07%	416	29.17%	4,490	6.17%	15,229	8.69%
TOTAL	249,410	100.00%	1,426	100.00%	72,770	100.00%	175,214	100.00%

Section 5: – Motor Vehicle and Driver Descriptions

Table 5 – 13

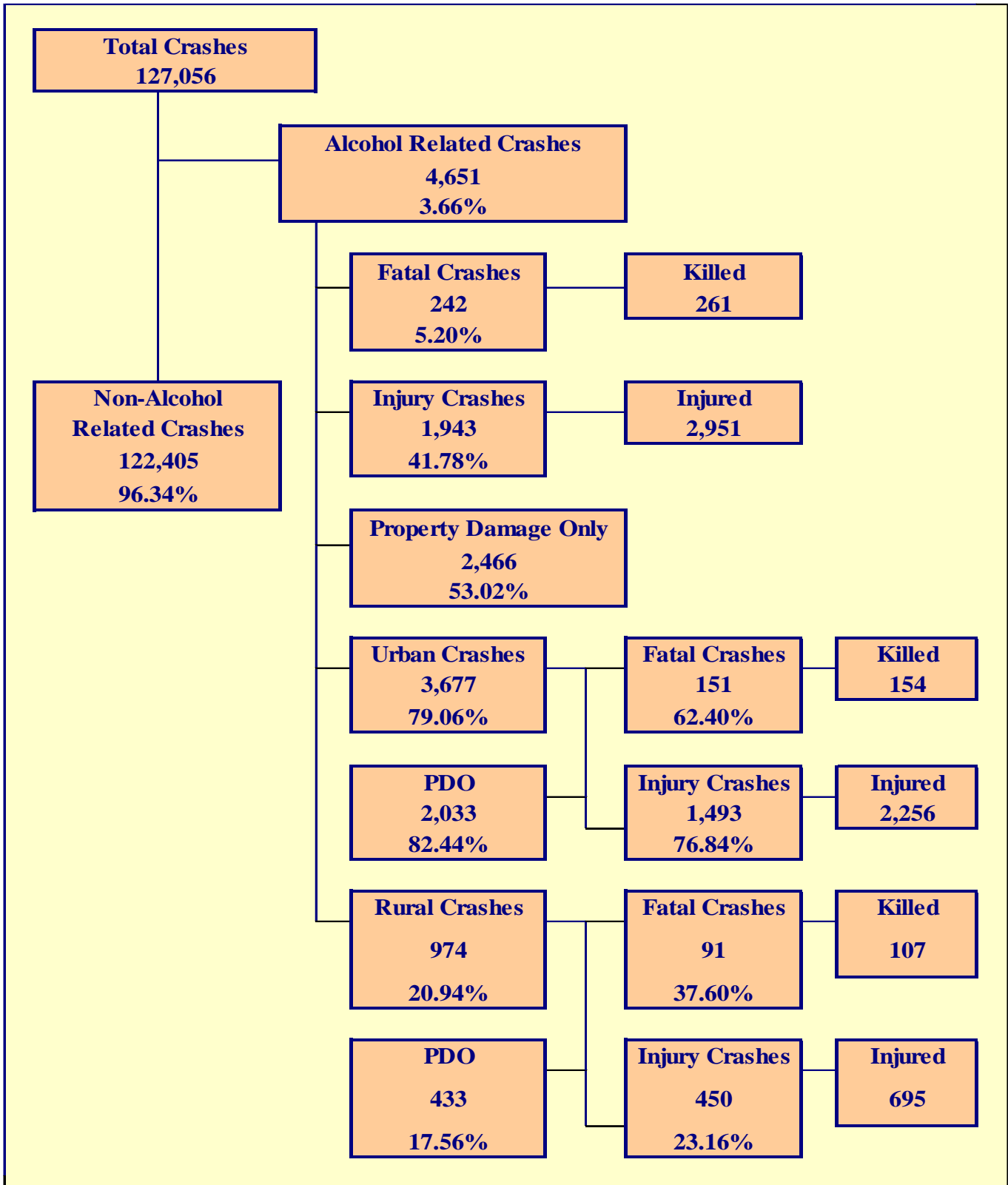
Distracted Driving Behavior

Type of Distraction	Number of Drivers							
	Total	Percent of Total	In Fatal Crashes	Percent of Fatal	In Injury Crashes	Percent of Injury	In PDO Crashes	Percent of PDO
Not Distracted	191,896	76.94%	601	42.15%	55,912	76.83%	135,383	77.27%
Talking on Hands Free Device	204	0.08%	0	0.00%	58	0.08%	146	0.08%
Talking on Hand Held Device	431	0.17%	2	0.14%	131	0.18%	298	0.17%
Passenger	955	0.38%	4	0.28%	323	0.44%	628	0.36%
Other Activity with an Electronic Device	1,425	0.57%	8	0.56%	459	0.63%	958	0.55%
Manually Operating an Electronic Device	814	0.33%	3	0.21%	263	0.36%	548	0.31%
Other Inside the Vehicle (eating, drinking, etc.)	3,190	1.28%	9	0.63%	1,056	1.45%	2,125	1.21%
Outside the Vehicle (includes unspecified distractions)	2,740	1.10%	11	0.77%	846	1.16%	1,883	1.07%
Distracted Unknown Reason	2,139	0.86%	5	0.35%	698	0.96%	1,436	0.82%
Unknown	45,616	18.29%	783	54.91%	13,024	17.90%	31,809	18.15%
TOTAL	249,410	100.00%	1,426	100.00%	72,770	100.00%	175,214	100.00%

Table 5 – 14

Secondary Crashes

Secondary Crash	Number of Crashes				Number of Persons	
	Total	Fatal	Injury	PDO	Killed	Injured
Yes	2,812	19	877	1,916	20	1,446
No	110,834	835	31,793	78,206	926	46,193
Unknown	13,410	62	3,837	9,511	64	5,737
TOTAL	127,056	916	36,507	89,633	1,010	53,376



Section 6: – Alcohol Related Crashes

The statistics in the Alcohol Related section represent those crashes where the investigating officer indicated that a driver, pedestrian, or pedalcyclist had been drinking an alcoholic beverage and may or may not be substantiated by a blood or breath test. No assumption is to be made that the person was legally intoxicated (blood alcohol content of 0.08% or higher) at the time of the crash.

**Table 6 – 1
Economic Loss Due to Alcohol Related Crashes in Arizona for 2018**

Fatalities	\$2,490,630,084
Suspected Serious Injuries	\$274,210,780
Suspected Minor Injuries	\$238,860,020
Possible Injuries	\$114,484,293
Property Damage Only	\$26,728,974
TOTAL	\$3,144,914,151

Refer to note on Page 4 for Economic Loss Estimates

**Table 6 – 2
Alcohol Related Crash History**

Year	Alcohol Related Crashes	Percent of all Crashes	Persons Killed	Percent of all Fatalities	Persons Injured	Percent of all Injuries
2014	4,932	4.49%	275	35.53%	3,206	6.27%
2015	5,016	4.29%	329	36.68%	3,285	6.10%
2016	4,960	3.90%	302	31.72%	3,345	5.88%
2017	4,916	3.85%	324	32.46%	3,176	5.68%
2018	4,651	3.66%	261	25.84%	2,951	5.53%

**Table 6 – 3
Manner of Collision in Alcohol Related Crashes**

Manner of Collision Type	Number of Crashes							
	Total	Percent of All Crashes	Fatal	Percent of Fatal Crashes	Injury	Percent of Injury Crashes	PDO	Percent of PDO Crashes
Angle	410	14.68%	14	8.43%	215	17.99%	181	12.64%
Left Turn	288	10.31%	11	6.63%	155	12.97%	122	8.52%
Rear End	1,144	40.96%	17	10.24%	450	37.66%	677	47.28%
Head-On	186	6.66%	21	12.65%	91	7.62%	74	5.17%
Sideswipe (same)	327	11.71%	5	3.01%	95	7.95%	227	15.85%
Sideswipe (opposite)	95	3.40%	4	2.41%	25	2.09%	66	4.61%
U-Turn	5	0.18%	0	0.00%	4	0.33%	1	0.07%
Other*	325	11.64%	91	54.82%	153	12.80%	81	5.66%
Unknown	13	0.47%	3	1.81%	7	0.59%	3	0.21%
TOTAL	2,793	100.00%	166	100.00%	1,195	100.00%	1,432	100.00%

Note: Includes only multi-vehicle alcohol related crashes

*Other includes pedestrian and pedalcyclist crashes

Section 6: – Alcohol Related Crashes

Table 6 – 4
Alcohol Related Crashes by First Harmful Event

First Harmful Event Type	Number of Crashes				Number of Persons	
	Total	Fatal	Injury	PDO	Killed	Injured
Collision with Motor Vehicle in Transport	2,112	77	925	1,110	89	1,687
Overturning	229	27	164	38	31	216
Collision with Pedestrian	194	74	119	1	74	133
Collision with Pedalcyclist	28	5	22	1	5	25
Collision with Animal	8	0	3	5	0	5
Collision with Fixed Object	1,623	56	590	977	59	737
Collision with Non-fixed Object*	360	0	87	273	0	107
Vehicle Fire or Explosion	0	0	0	0	0	0
Other Non-collision**	2	1	1	0	1	1
Unknown	95	2	32	61	2	40
TOTAL	4,651	242	1,943	2,466	261	2,951
*Includes Collision with Parked Vehicles, Trains, Railway Vehicles, and Work Zone Equipment						
**Includes Vehicle Immersion, Jackknife, and Cargo Loss or Shift						

Table 6 – 5
Alcohol Related Crashes by Vehicle Type

Motor Vehicle Type	Number of Vehicles				
	Total	Percent of Total	In Fatal Crashes	In Injury Crashes	In PDO Crashes
Passenger Cars (Sedans, Convertibles, etc.)	2,486	55.442%	62	975	1,449
Station Wagons	836	18.644%	30	357	449
Pickup Trucks	739	16.481%	38	301	400
Vans	37	0.825%	0	14	23
Truck Tractor (with or without Semi-Trailer)	7	0.156%	0	1	6
Concrete Mixer Trucks	0	0.000%	0	0	0
Dump Trucks	0	0.000%	0	0	0
Garbage Trucks	0	0.000%	0	0	0
Tanker Trucks	1	0.022%	0	1	0
Wrecker or Tow Trucks	2	0.045%	1	0	1
Other Truck Combinations	99	2.208%	0	36	63
School Bus	0	0.000%	0	0	0
Commercial or Non-Commercial Bus	1	0.022%	0	1	0
Motorcycle (two or three wheel)	152	3.390%	40	97	15
All Terrain Vehicle or Cycle	18	0.401%	2	13	3
Moped	1	0.022%	0	1	0
Recreational Vehicle	0	0.000%	0	0	0
Motor Home or House Car	0	0.000%	0	0	0
Fire Trucks	0	0.000%	0	0	0
Ambulances	0	0.000%	0	0	0
Other Types Of Vehicles	5	0.112%	0	4	1
Vehicle Type Unknown	100	2.230%	5	34	61
TOTAL	4,484	100.00%	178	1,835	2,471

Section 6: – Alcohol Related Crashes

Table 6 – 6
Lighting Conditions in Alcohol Related Crashes

Type of Lighting Conditions	Number of Crashes				Number of Persons	
	Total	Fatal	Injury	PDO	Killed	Injured
Daylight	1,344	62	595	687	68	952
Dawn	72	1	35	36	1	50
Dusk	124	8	52	64	9	79
Dark - Lighted	2,345	99	908	1,338	105	1,333
Dark - Not Lighted	698	46	336	316	52	500
Dark - Unknown Lighting	31	11	5	15	11	12
Unknown	37	15	12	10	15	25
TOTAL	4,651	242	1,943	2,466	261	2,951

Table 6 – 7
Road Surface Conditions in Alcohol Related Crashes

Type of Road Surface Condition	Number of Drivers				Number of Persons	
	Total	In Fatal Crashes	In Injury Crashes	In PDO Crashes	Killed	Injured
Dry	4,203	141	1,733	2,329	195	2,744
Wet	177	8	76	93	12	136
Snow/Slush	12	0	2	10	0	2
Ice/Frost	5	0	1	4	0	1
Water (standing or moving)	4	0	3	1	0	5
Mud, Dirt, Gravel, Sand	34	2	16	16	2	29
Other	3	0	1	2	0	1
Unknown	46	27	3	16	52	33
TOTAL	4,484	178	1,835	2,471	261	2,951

Table 6 – 8
Gender of Drivers Involved in Alcohol Related Crashes

Gender of Driver	Number of Drivers							
	Total	Percent of Total	In Fatal Crashes	Percent of Fatal	In Injury Crashes	Percent of Injury	In PDO Crashes	Percent of PDO
Male	3,238	72.21%	145	81.46%	1,330	72.48%	1,763	71.35%
Female	1,220	27.21%	33	18.54%	504	27.47%	683	27.64%
Unknown	26	0.58%	0	0.00%	1	0.05%	25	1.01%
TOTAL	4,484	100.00%	178	100.00%	1,835	100.00%	2,471	100.00%

*In total crashes across the state, 53.51% of the drivers were males.
When alcohol was involved, males accounted for 72.21% of the drivers.*

Section 6: – Alcohol Related Crashes

**Table 6 – 9
Driver Involvement by Age in Alcohol Related Crashes**

Driver Age Group	Number of Drivers							
	Total	Percent of Total	In Fatal Crashes	Percent of Fatal	In Injury Crashes	Percent of Injury	In PDO Crashes	Percent of PDO
15 & Under	1	0.02%	0	0.00%	0	0.00%	1	0.04%
16	11	0.25%	1	0.56%	5	0.27%	5	0.20%
17	25	0.56%	1	0.56%	14	0.76%	10	0.40%
18	47	1.05%	1	0.56%	23	1.25%	23	0.93%
19	77	1.72%	2	1.12%	35	1.91%	40	1.62%
20	96	2.14%	2	1.12%	48	2.62%	46	1.86%
21	181	4.04%	5	2.81%	73	3.98%	103	4.17%
22	188	4.19%	6	3.37%	78	4.25%	104	4.21%
23	201	4.48%	10	5.62%	88	4.80%	103	4.17%
24	186	4.15%	4	2.25%	73	3.98%	109	4.41%
25-34	1,425	31.78%	55	30.90%	545	29.70%	825	33.39%
35-44	829	18.49%	28	15.73%	349	19.02%	452	18.29%
45-54	569	12.69%	23	12.92%	250	13.62%	296	11.98%
55-64	411	9.17%	21	11.80%	173	9.43%	217	8.78%
65-74	164	3.66%	15	8.43%	66	3.60%	83	3.36%
75 & Older	34	0.76%	2	1.12%	11	0.60%	21	0.85%
Unknown	39	0.87%	2	1.12%	4	0.22%	33	1.34%
TOTAL	4,484	100.00%	178	100.00%	1,835	100.00%	2,471	100.00%

**Table 6 – 10
When Alcohol Related Crashes Occurred in 2018**

Time of Day	Total	Weekday	Weekend*
Daytime**	1,305	791	514
Nighttime	3,346	1,321	2,025
Total	4,651	2,112	2,539
*Weekend begins at 6:00 p.m. on Friday and continues until 6:00 a.m. Monday. All other times and days are considered Weekdays.			
**Daytime refers to the hours between 6:00 a.m. and 6:00 p.m.			

**Table 6 – 11
Safety Device Usage for Drinking Drivers**

Severity of Injury	Safety Device Not Used	Lap Belt	Lap & Shoulder Belt	Protective Helmet	Other	Unknown	Totals
No Injury	138	38	1,888	6	2	771	2,843
Unknown Injury	2	1	36	0	0	118	157
Possible Injury	55	4	254	4	0	122	439
Suspected Minor Injury	112	3	354	13	1	184	667
Suspected Serious Injury	104	1	57	12	0	71	245
Fatal Injury	73	0	24	14	0	22	133
TOTALS	484	47	2,613	49	3	1,288	4,484

Section 6: – Alcohol Related Crashes

Table 6 – 12

Persons Killed and Injured in Alcohol Related Crashes

Age of Victim	Persons Killed			Persons Injured			
	Total	Male	Female	Total	Male	Female	Gender Unknown
0-4	0	0	0	41	19	22	0
5-9	1	1	0	47	27	20	0
10-14	2	2	0	44	21	23	0
15-19	8	3	5	187	100	87	0
20-24	25	17	8	499	310	189	0
25-34	77	61	16	715	471	244	0
35-44	44	35	9	495	310	185	0
45-54	38	34	4	400	265	135	0
55-64	35	25	10	292	186	106	0
65-74	25	20	5	137	78	59	0
75 & Older	4	4	0	44	21	23	0
Unknown	2	2	0	50	21	21	8
TOTAL	261	204	57	2,951	1,829	1,114	8

Table 6 – 13

Alcohol Related Crashes by County

County	Number of Crashes				Number of Persons	
	Total	Fatal	Injury	PDO	Killed	Injured
Apache	17	2	7	8	2	9
Cochise	55	4	27	24	5	44
Coconino	172	6	96	70	8	159
Gila	45	1	24	20	1	38
Graham	16	0	7	9	0	9
Greenlee	2	0	2	0	0	2
La Paz	16	4	9	3	6	15
Maricopa	2,958	147	1,167	1,644	153	1,761
Mohave	176	8	72	96	8	94
Navajo	89	9	38	42	12	58
Pima	611	34	274	303	37	427
Pinal	204	13	95	96	14	154
Santa Cruz	14	2	4	8	2	4
Yavapai	161	6	75	80	7	108
Yuma	115	6	46	63	6	69
TOTAL	4,651	242	1,943	2,466	261	2,951

Section 6: – Alcohol Related Crashes

Chart 6 – 1

All Alcohol Related Crashes vs. Fatal Alcohol Related Crashes by Day of Week

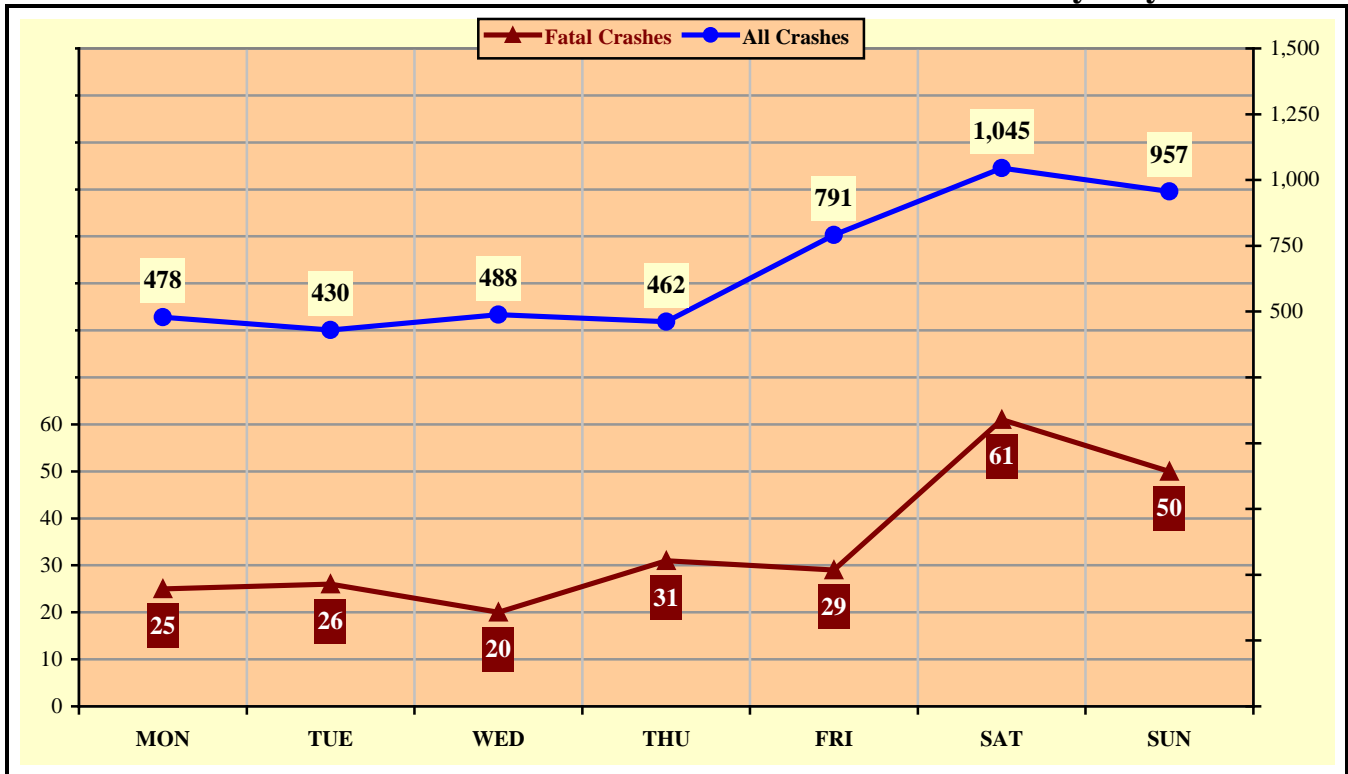
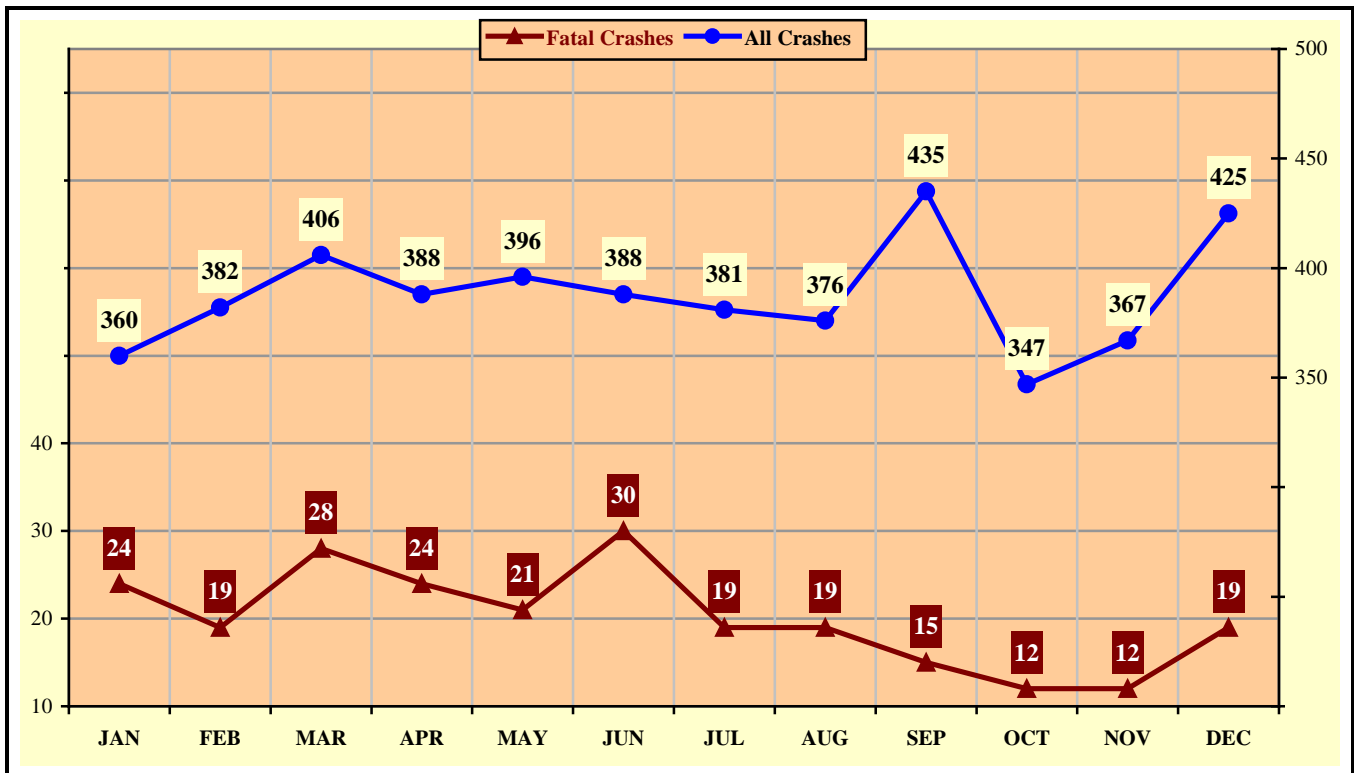


Chart 6 – 2

All Alcohol Related Crashes vs. Fatal Alcohol Related Crashes by Month



Section 6: – Alcohol Related Crashes

Chart 6 – 3

All Alcohol Related Crashes vs. Fatal Alcohol Related Crashes - Weekdays

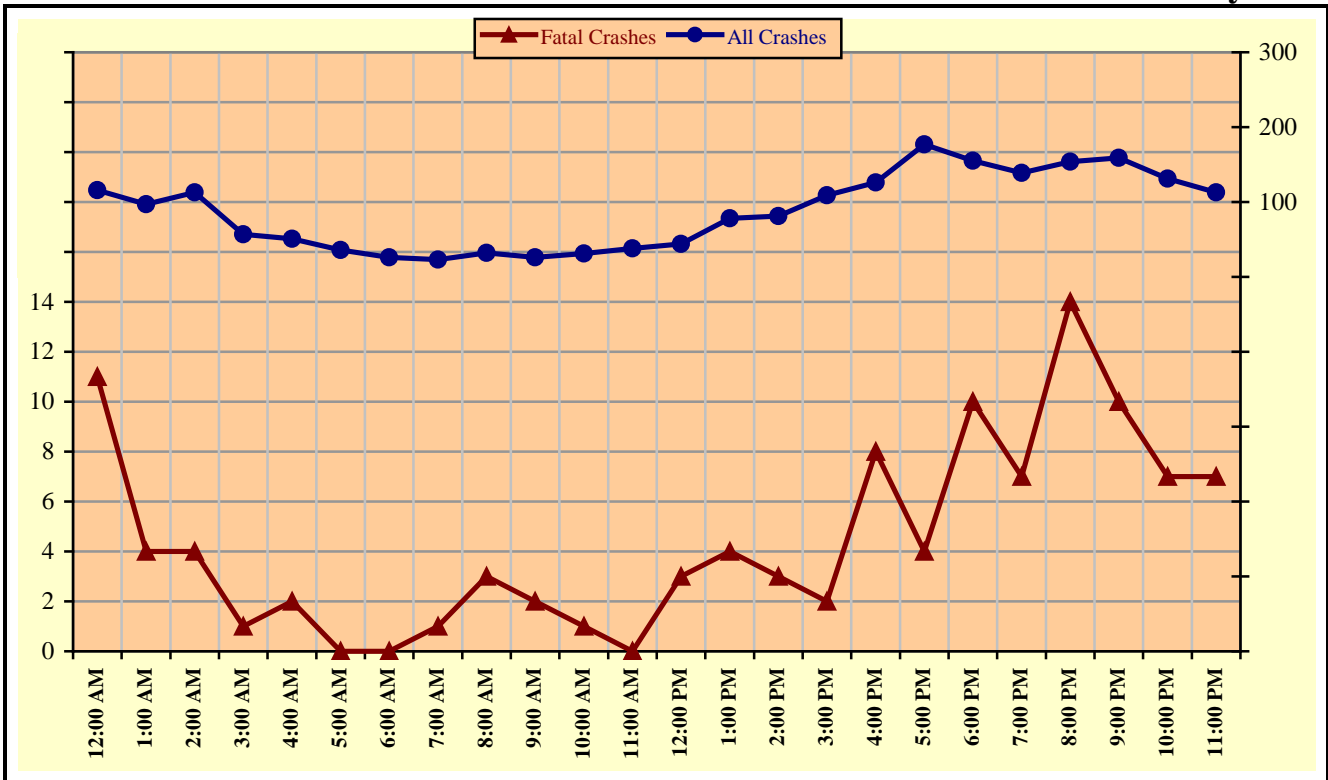
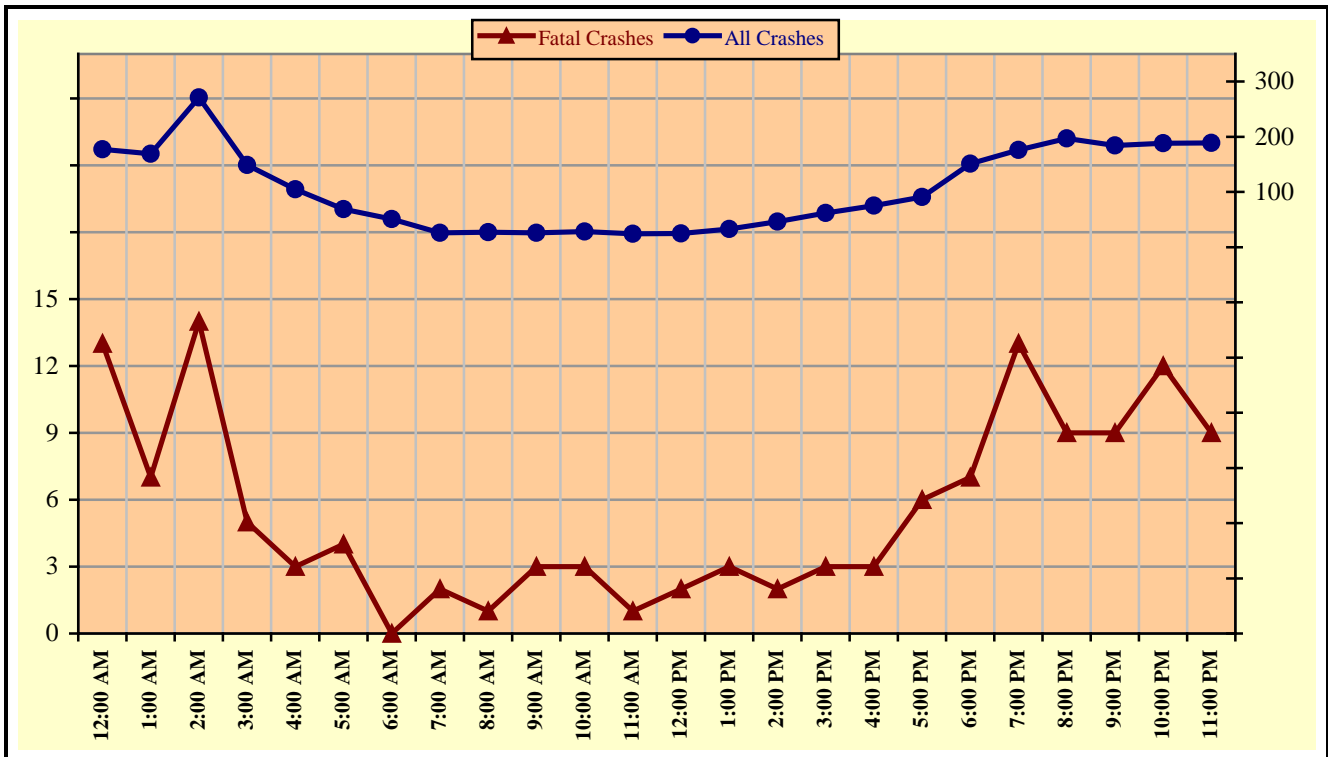


Chart 6 – 4

All Alcohol Related Crashes vs. Fatal Alcohol Related Crashes - Weekends



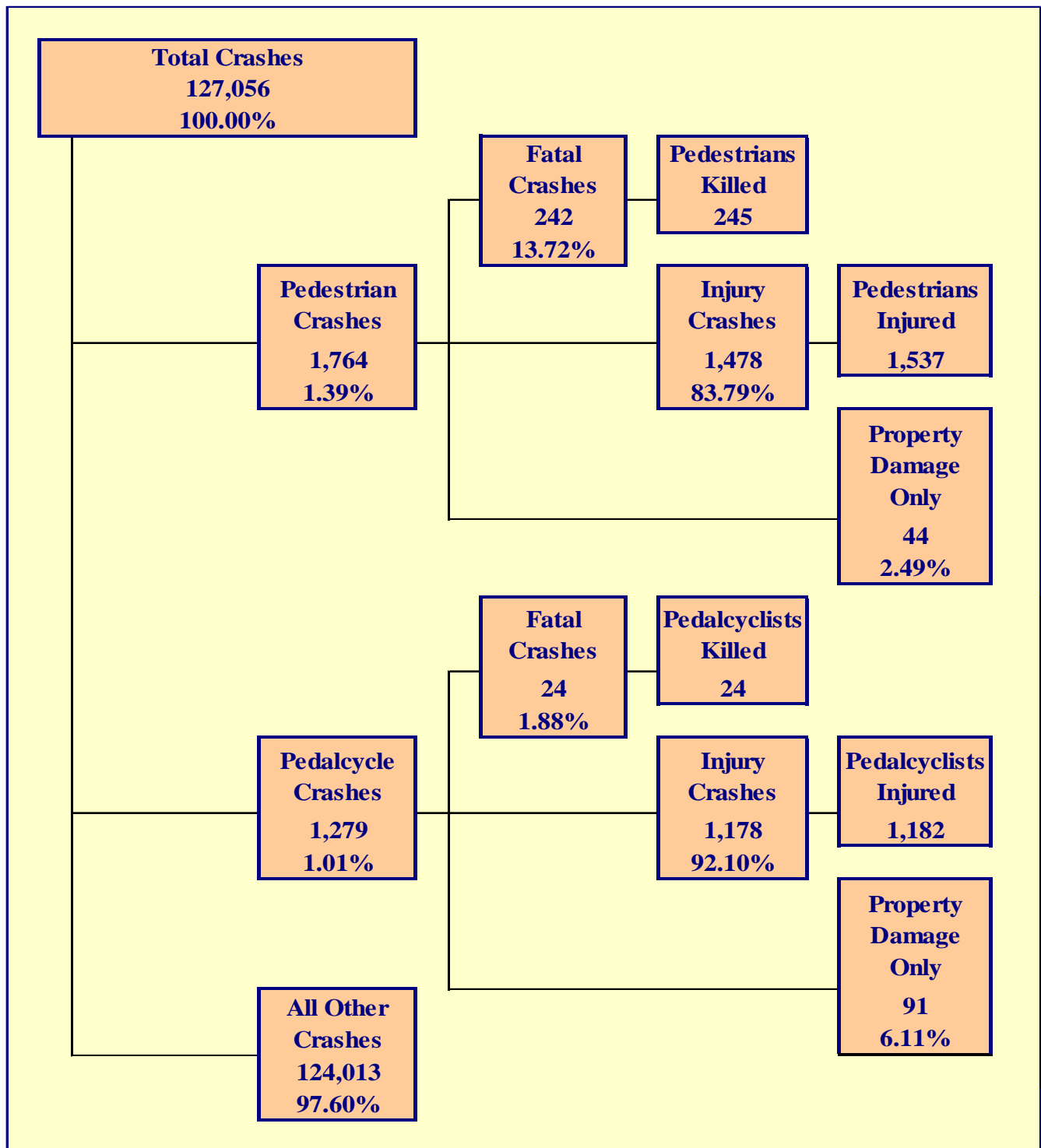
Section 6: – Alcohol Related Crashes

Table 6 – 14

Alcohol Related Crashes by Hour and Day of Week

Hour Beginning	Total Crashes		Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Sunday		Weekdays		Weekends	
	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal
12:00 AM	293	24	32	2	22	3	28	1	32	3	34	4	78	6	67	5	116	11	177	13
1:00 AM	266	11	20	1	16	0	23	2	24	1	34	1	69	3	80	3	97	4	169	7
2:00 AM	384	18	40	1	24	1	20	0	21	2	48	1	108	5	123	8	113	4	271	14
3:00 AM	206	6	16	1	7	0	10	0	15	0	25	1	68	3	65	1	57	1	149	5
4:00 AM	156	5	16	1	5	0	6	1	17	0	23	1	44	1	45	1	51	2	105	3
5:00 AM	105	4	10	0	5	0	12	0	4	0	15	0	32	2	27	2	36	0	69	4
6:00 AM	77	0	3	0	8	0	5	0	3	0	7	0	20	0	31	0	26	0	51	0
7:00 AM	49	3	8	0	2	0	4	1	3	0	6	0	15	1	11	1	23	1	26	2
8:00 AM	59	4	10	1	5	0	4	1	5	0	8	1	13	1	14	0	32	3	27	1
9:00 AM	52	5	7	0	3	0	8	0	4	2	4	0	13	2	13	1	26	2	26	3
10:00 AM	59	4	6	1	4	0	7	0	9	0	5	0	11	2	17	1	31	1	28	3
11:00 AM	62	1	8	0	5	0	5	0	10	0	10	0	16	0	8	1	38	0	24	1
12:00 PM	69	5	6	1	6	0	14	2	8	0	10	0	15	1	10	1	44	3	25	2
1:00 PM	111	7	12	0	14	0	11	1	14	2	27	1	11	1	22	2	78	4	33	3
2:00 PM	127	5	16	1	19	1	8	0	16	1	22	0	23	1	23	1	81	3	46	2
3:00 PM	171	5	16	0	23	1	25	1	16	0	29	0	30	2	32	1	109	2	62	3
4:00 PM	201	11	26	1	25	3	25	2	17	1	33	1	34	2	41	1	126	8	75	3
5:00 PM	268	10	32	2	38	0	32	0	27	1	48	1	47	4	44	2	177	4	91	6
6:00 PM	306	17	36	4	34	4	49	0	36	2	52	2	53	3	46	2	155	10	151	7
7:00 PM	315	20	29	2	35	3	40	1	35	1	58	1	64	7	54	5	139	7	176	13
8:00 PM	351	23	35	2	30	2	38	2	51	8	58	2	79	5	60	2	154	14	197	9
9:00 PM	343	19	29	2	42	3	48	3	40	2	71	2	64	3	49	4	159	10	184	9
10:00 PM	319	19	36	0	27	3	39	2	29	2	79	8	64	2	45	2	131	7	188	12
11:00 PM	302	16	29	2	31	2	27	0	26	3	85	2	74	4	30	3	113	7	189	9
TOTAL	4,651	242	478	25	430	26	488	20	462	31	791	29	1,045	61	957	50	2,112	108	2,539	134

Crashes during Weekends accounted for 54.59% of all Alcohol Related crashes and 55.37% of Alcohol Related Fatal Crashes.



Section 7: – Pedestrian and Pedalcyclist Crashes

**Table 7 – 1
Pedestrians Killed and Injured By Age and Gender**

Age Group	Pedestrians Killed				Pedestrians Injured			
	Total	Male	Female	Gender Unknown	Total	Male	Female	Gender Unknown
0-4	1	1	0	0	11	8	3	0
5-9	0	0	0	0	30	17	13	0
10-14	4	2	2	0	96	54	42	0
15-19	8	5	3	0	204	120	84	0
20-24	15	12	3	0	158	99	59	0
25-34	38	26	12	0	278	184	94	0
35-44	33	19	14	0	207	128	79	0
45-54	44	32	12	0	213	136	77	0
55-64	46	34	12	0	185	121	64	0
65-74	35	24	11	0	96	57	39	0
75 & Older	17	12	5	0	36	26	10	0
Unknown	4	1	1	2	23	13	8	2
TOTAL	245	168	75	2	1,537	963	572	2

**Table 7 – 2
Pedestrian Crashes by Geographic Location**

Category	Total	Urban	Percent of Total	Rural	Percent of Total
Total Crashes	1,764	1,617	91.67%	147	8.33%
Fatal Crashes	242	192	79.34%	50	20.66%
Injury Crashes	1,478	1,386	93.78%	92	6.22%
PDO Crashes	44	39	88.64%	5	11.36%
Pedestrians Killed	245	195	79.59%	50	20.41%
Pedestrians Injured	1,537	1,441	93.75%	96	6.25%

**Table 7 – 3
Pedestrian Crash History**

Year	Pedestrian Crashes	Percent of all Crashes	Pedestrians Killed	Percent of all Fatalities	Pedestrians Injured	Percent of all Injuries
2014	1,570	1.43%	155	20.03%	1,358	2.66%
2015	1,412	1.21%	163	18.17%	1,248	2.32%
2016	1,650	1.30%	193	20.27%	1,465	2.57%
2017	1,711	1.34%	226	22.65%	1,523	2.73%
2018	1,764	1.39%	245	24.26%	1,537	2.88%

Section 7: – Pedestrian and Pedalcyclist Crashes

Table 7 – 4
Pedestrians Killed by Age and Action

Pedestrian Action	Total	Age Group of Pedestrian											
		0-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75 & Older	Unknown
Crossing Road	132	1	0	3	5	4	17	19	21	26	24	12	0
Walking With Traffic	12	0	0	1	0	2	2	1	2	3	1	0	0
Walking Against Traffic	7	0	0	0	0	0	2	0	2	1	2	0	0
Standing	10	0	0	0	1	0	1	2	3	1	1	1	0
Lying	7	0	0	0	0	0	3	1	1	1	1	0	0
Getting on/off Vehicle	0	0	0	0	0	0	0	0	0	0	0	0	0
Working on/pushing Veh	0	0	0	0	0	0	0	0	0	0	0	0	0
Working on Road	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	20	0	0	0	1	1	5	2	1	4	3	3	0
Unknown	57	0	0	0	1	8	8	8	14	10	3	1	4
TOTAL	245	1	0	4	8	15	38	33	44	46	35	17	4

Table 7 – 5
Pedestrians Injured by Age and Action

Pedestrian Action	Total	Age Group of Pedestrian											
		0-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75 & Older	Unknown
Crossing Road	978	5	23	69	129	89	169	120	143	126	66	24	15
Walking With Traffic	111	2	1	8	6	16	27	16	12	13	7	3	0
Walking Against Traffic	93	1	0	5	10	10	21	16	8	11	7	2	2
Standing	102	0	2	0	13	10	22	22	15	11	5	1	1
Lying	10	0	0	0	0	1	2	3	3	1	0	0	0
Getting on/off Vehicle	8	0	0	0	2	1	2	0	2	1	0	0	0
Working on/pushing Veh	6	0	0	0	1	0	2	0	2	1	0	0	0
Working on Road	10	0	0	0	2	3	1	2	1	1	0	0	0
Other	153	1	1	12	32	26	22	18	16	13	7	4	1
Unknown	66	2	3	2	9	2	10	10	11	7	4	2	4
TOTAL	1,537	11	30	96	204	158	278	207	213	185	96	36	23

Table 7 – 6
Pedestrian Physical Condition in Motor Vehicle Crashes

Type of Condition	Number of Pedestrians							
	Total	Percent of Total	In Fatal Crashes	Percent of Fatal	In Injury Crashes	Percent of Injury	In PDO Crashes	Percent of PDO
No Apparent Influence	1,190	64.36%	42	16.67%	1,111	71.82%	37	74.00%
Alcohol	173	9.36%	70	27.78%	101	6.53%	2	4.00%
Illegal Drugs	60	3.24%	45	17.86%	15	0.97%	0	0.00%
Medications	2	0.11%	2	0.79%	0	0.00%	0	0.00%
Marijuana	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Illness or Physical Impairment	8	0.43%	0	0.00%	8	0.52%	0	0.00%
Fell Asleep or Fatigued	3	0.16%	1	0.40%	2	0.13%	0	0.00%
Other	8	0.43%	2	0.79%	6	0.39%	0	0.00%
Unknown	405	21.90%	90	35.71%	304	19.65%	11	22.00%
TOTAL	1,849	100.00%	252	100.00%	1,547	100.00%	50	100.00%

Section 7: – Pedestrian and Pedalcyclist Crashes

Table 7 – 7

Lighting Conditions in Pedestrian Crashes

Type of Lighting Conditions	Number of Crashes			
	Total	Fatal	Injury	PDO
Daylight	818	42	749	27
Dawn	44	3	38	3
Dusk	38	4	34	0
Dark - Lighted	644	116	516	12
Dark - Not Lighted	172	39	132	1
Dark - Unknown Lighting	29	21	7	1
Unknown	19	17	2	0
TOTAL	1,764	242	1,478	44

Table 7 – 8

Weather Conditions in Pedestrian Crashes

Type of Weather Conditions	Number of Crashes			
	Total	Fatal	Injury	PDO
Clear	1,533	153	1,338	42
Cloudy	93	12	79	2
Sleet/Hail	0	0	0	0
Rain	52	5	47	0
Snow or Blowing Snow	2	0	2	0
Severe Crosswinds	2	1	1	0
Blowing Sand, Soil, Dirt	2	0	2	0
Fog, Smog, Smoke	1	0	1	0
Other	3	1	2	0
Unknown	76	70	6	0
TOTAL	1,764	242	1,478	44

Table 7 – 9

Pedalcyclists Killed and Injured by Age and Gender

Age Group	Pedalcyclists Killed			Pedalcyclists Injured			
	Total	Male	Female	Total	Male	Female	Gender Unknown
0-4	0	0	0	0	0	0	0
5-9	0	0	0	11	7	4	0
10-14	0	0	0	85	69	16	0
15-19	2	2	0	134	98	36	0
20-24	2	2	0	131	93	38	0
25-34	3	2	1	230	173	57	0
35-44	5	4	1	163	117	46	0
45-54	2	2	0	174	141	33	0
55-64	5	4	1	142	115	27	0
65-74	3	3	0	79	72	7	0
75 & Older	2	2	0	20	20	0	0
Unknown	0	0	0	13	9	2	2
TOTAL	24	21	3	1,182	914	266	2

Section 7: – Pedestrian and Pedalcyclist Crashes

Table 7 – 10

Pedalcycle Crashes by Geographic Location

Category	Total	Urban	Percent of Total	Rural	Percent of Total
Total Crashes	1,279	1,190	93.04%	89	6.96%
Fatal Crashes	24	18	75.00%	6	25.00%
Injury Crashes	1,178	1,100	93.38%	78	6.62%
PDO Crashes	77	72	93.51%	5	6.49%
Pedalcyclists Killed	24	18	75.00%	6	25.00%
Pedalcyclists Injured	1,182	1,104	93.40%	78	6.60%

Table 7 – 11

Pedalcycle Crash History

Year	Pedalcycle Crashes	Percent of all Crashes	Pedalcyclists Killed	Percent of all Fatalities	Pedalcyclists Injured	Percent of all Injuries
2014	1,746	1.59%	29	3.75%	1,469	2.87%
2015	1,437	1.23%	28	3.12%	1,279	2.37%
2016	1,482	1.16%	31	3.26%	1,353	2.38%
2017	1,498	1.17%	32	3.21%	1,380	2.47%
2018	1,279	1.01%	24	2.38%	1,182	2.21%

Table 7 – 12

Lighting Conditions in Pedalcyclist Crashes

Type of Lighting Conditions	Number of Crashes			
	Total	Fatal	Injury	PDO
Daylight	954	14	885	55
Dawn	27	0	22	5
Dusk	39	3	34	2
Dark - Lighted	205	4	188	13
Dark - Not Lighted	45	2	41	2
Dark - Unknown Lighting	3	0	3	0
Unknown	6	1	5	0
TOTAL	1,279	24	1,178	77

Table 7 – 13

Weather Conditions in Pedalcyclist Crashes

Type of Weather Conditions	Number of Crashes			
	Total	Fatal	Injury	PDO
Clear	1,150	20	1,064	66
Cloudy	100	1	90	9
Sleet/Hail	0	0	0	0
Rain	19	1	16	2
Snow or Blowing Snow	0	0	0	0
Severe Crosswinds	0	0	0	0
Blowing Sand, Soil, Dirt	0	0	0	0
Fog, Smog, Smoke	0	0	0	0
Other	0	0	0	0
Unknown	10	2	8	0
TOTAL	1,279	24	1,178	77

Section 7: – Pedestrian and Pedalcyclist Crashes

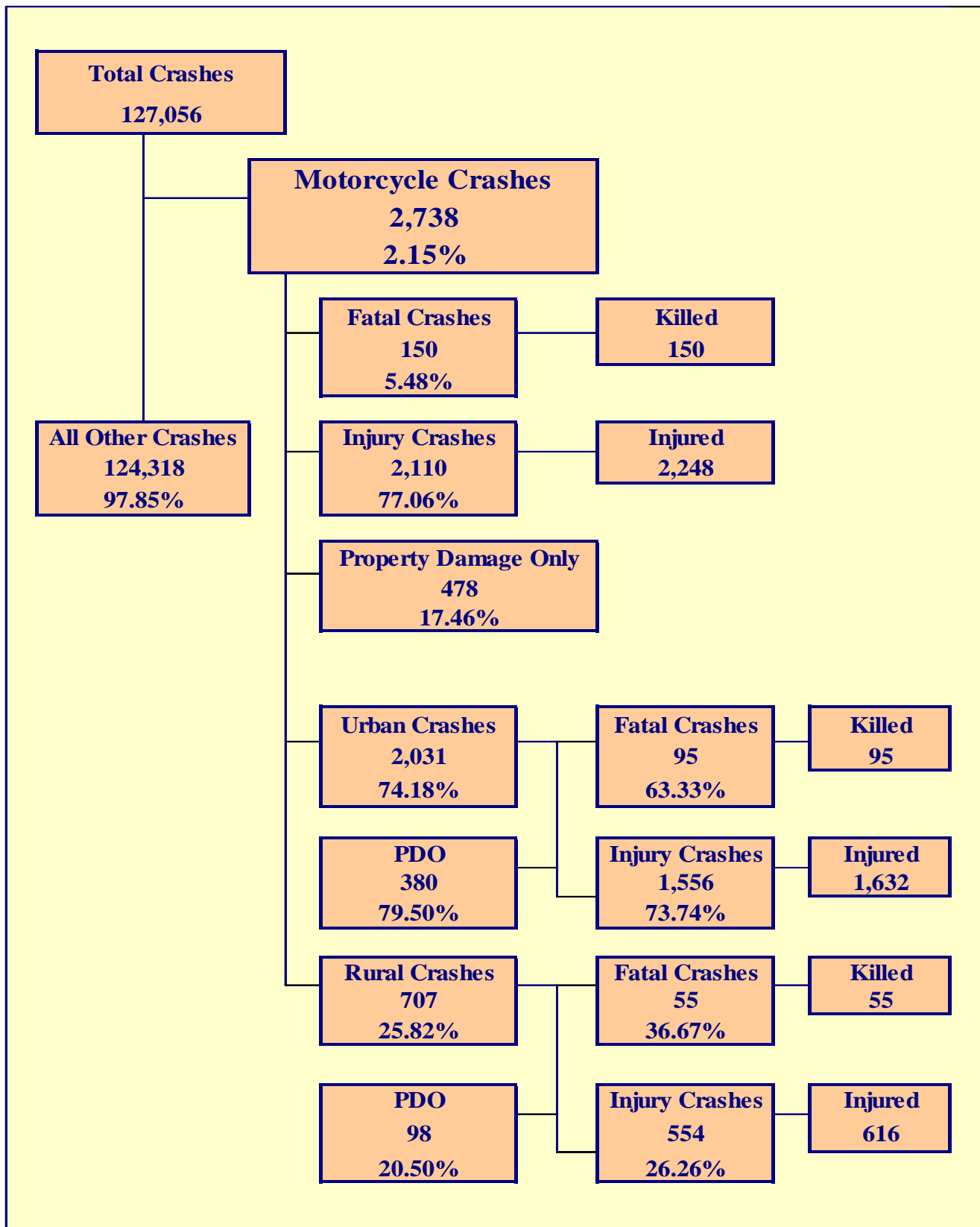
Table 7 – 14
Pedestrian Crashes by County

County	Number of Crashes				Number of Pedestrians	
	Total	Fatal	Injury	PDO	Killed	Injured
Apache	2	2	0	0	2	0
Cochise	6	1	5	0	1	5
Coconino	35	9	25	1	10	24
Gila	11	3	8	0	3	8
Graham	1	1	0	0	1	0
Greenlee	0	0	0	0	0	0
La Paz	2	2	0	0	2	0
Maricopa	1,321	164	1,126	31	166	1,176
Mohave	27	4	21	2	4	20
Navajo	22	10	11	1	10	12
Pima	244	31	207	6	31	215
Pinal	27	6	19	2	6	21
Santa Cruz	3	0	3	0	0	3
Yavapai	27	5	22	0	5	22
Yuma	36	4	31	1	4	31
TOTAL	1,764	242	1,478	44	245	1,537

Maricopa and Pima Counties accounted for 80.41% of pedestrian fatalities.

Table 7 – 15
Pedalcyclist Crashes by County

County	Number of Crashes				Number of Pedalcyclists	
	Total	Fatal	Injury	PDO	Killed	Injured
Apache	1	0	1	0	0	1
Cochise	5	2	3	0	2	3
Coconino	34	0	31	3	0	32
Gila	2	0	2	0	0	2
Graham	1	0	1	0	0	1
Greenlee	0	0	0	0	0	0
La Paz	1	0	1	0	0	1
Maricopa	954	12	890	52	12	893
Mohave	21	1	20	0	1	20
Navajo	1	1	0	0	1	0
Pima	188	6	165	17	6	165
Pinal	21	1	18	2	1	18
Santa Cruz	1	0	1	0	0	1
Yavapai	17	0	16	1	0	16
Yuma	32	1	29	2	1	29
TOTAL	1,279	24	1,178	77	24	1,182



Section 8: – Motorcycle (MC) Crashes

Chart 8 – 1
MC Fatalities by Year

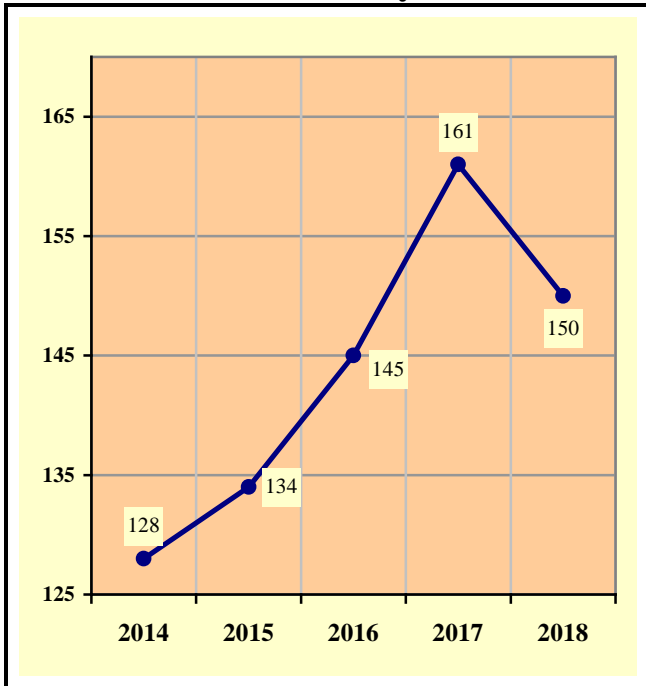
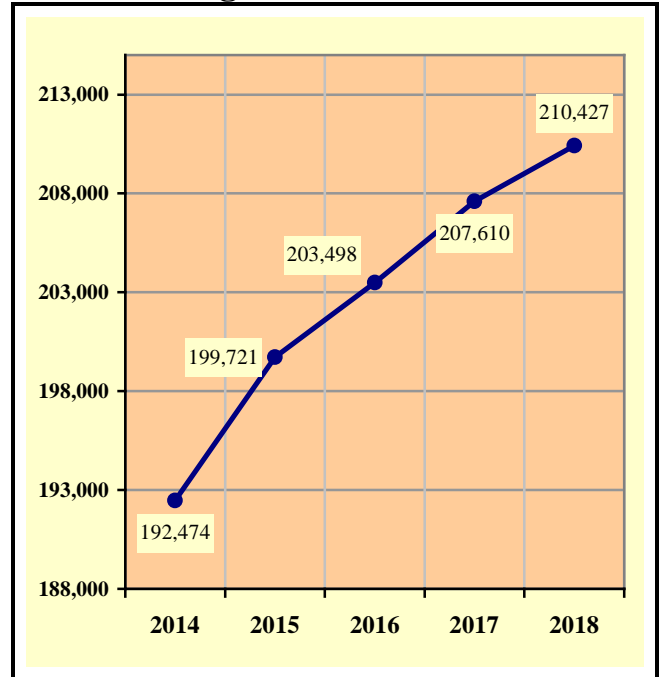


Chart 8 – 2
MC Registrations in Arizona



Total Point-in-Time of Registered Motorcycles at the end of
Calendar year 2018.
(Source: MVD - MV988 MV630419 Currently Registered Vehicles by County
Listing (motorcycle sub category), reports dated 12/31/18.)

Chart 8 – 3
Fatality Rate per Registered MC

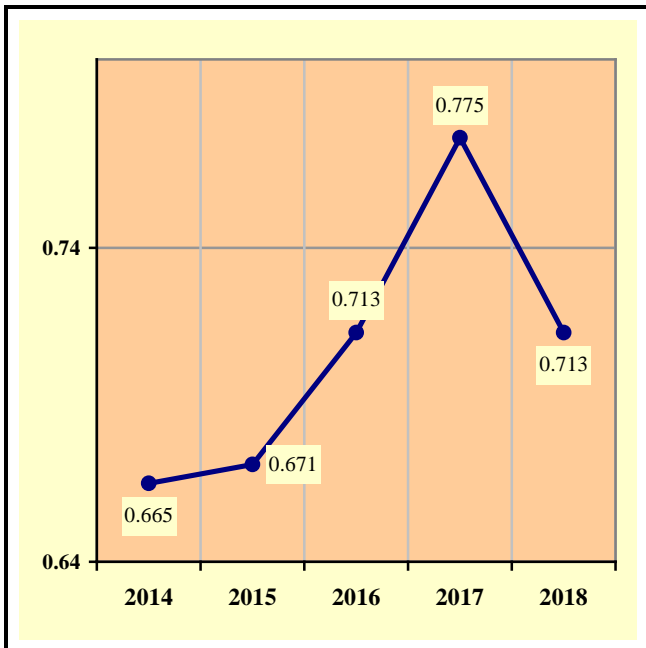
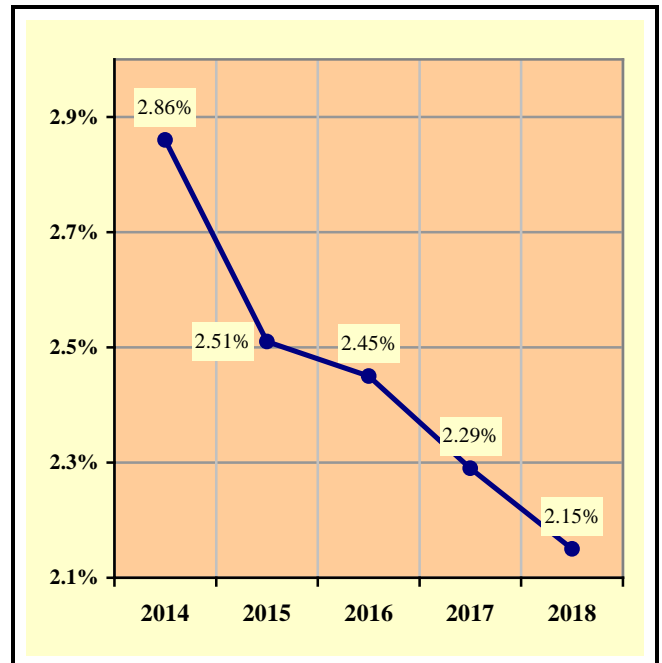


Chart 8 – 4
Percent of MC Crashes to All Crashes



Section 8: – Motorcycle (MC) Crashes

Table 8 – 1
MC Crashes by First Harmful Event

First Harmful Event Type	Number of Crashes			
	Total	Fatal	Injury	PDO
Collision with Motor Vehicle in Transport	1,557	80	1,117	360
Overturning	671	22	601	48
Collision with Pedestrian	15	2	13	0
Collision with Pedalcyclist	7	0	7	0
Collision with Animal	29	2	23	4
Collision with Fixed Object	296	41	237	18
Collision with Non-fixed Object*	78	0	43	35
Vehicle Fire or Explosion	6	0	2	4
Other Non-collision**	4	0	3	1
Unknown	75	3	64	8
TOTAL	2,738	150	2,110	478
*Includes Collision with Parked Vehicles, Trains, Railway Vehicles, and Work Zone Equipment				
**Includes Vehicle Immersion, Jackknife, and Cargo Loss or Shift				

Table 8 – 2
Lighting Conditions in MC Crashes

Type of Lighting Conditions	Number of Crashes			
	Total	Fatal	Injury	PDO
Daylight	1,861	80	1,464	317
Dawn	31	3	24	4
Dusk	92	2	73	17
Dark - Lighted	583	43	420	120
Dark - Not Lighted	151	13	120	18
Dark - Unknown Lighting	10	3	6	1
Unknown	10	6	3	1
TOTAL	2,738	150	2,110	478

Table 8 – 3
Road Surface Conditions in MC Crashes

Type of Road Surface Condition	Number of Operators			
	Total	In Fatal Crashes	In Injury Crashes	In PDO Crashes
Dry	2,654	141	2,056	457
Wet	67	1	54	12
Snow/Slush	2	0	2	0
Ice/Frost	1	0	1	0
Water (standing or moving)	5	0	3	2
Mud, Dirt, Gravel, Sand	38	0	34	4
Other	10	0	10	0
Unknown	29	17	2	10
TOTAL	2,806	159	2,162	485

Section 8: – Motorcycle (MC) Crashes

Table 8 – 4

MC Crashes by Geographic Location

Category	Total	Urban	Percent of Total	Rural	Percent of Total
Total Crashes	2,738	2,031	74.18%	707	25.82%
Fatal Crashes	150	95	63.33%	55	36.67%
Injury Crashes	2,110	1,556	73.74%	554	26.26%
PDO Crashes	478	380	79.50%	98	20.50%
Persons Killed	150	95	63.33%	55	36.67%
Persons Injured	2,248	1,632	72.60%	616	27.40%

Table 8 – 5

Operator Involvement by Age in MC Crashes

Operator Age Group	Number of Operators							
	Total	Percent of Total	In Fatal Crashes	Percent of Fatal	In Injury Crashes	Percent of Injury	In PDO Crashes	Percent of PDO
15 & Under	14	0.50%	0	0.00%	11	0.51%	3	0.62%
16	11	0.39%	0	0.00%	9	0.42%	2	0.41%
17	12	0.43%	0	0.00%	10	0.46%	2	0.41%
18	39	1.39%	1	0.63%	29	1.34%	9	1.86%
19	76	2.71%	1	0.63%	64	2.96%	11	2.27%
20	60	2.14%	3	1.89%	48	2.22%	9	1.86%
21	70	2.49%	1	0.63%	61	2.82%	8	1.65%
22	88	3.14%	4	2.52%	70	3.24%	14	2.89%
23	69	2.46%	2	1.26%	61	2.82%	6	1.24%
24	83	2.96%	5	3.14%	67	3.10%	11	2.27%
25-34	646	23.02%	35	22.01%	505	23.36%	106	21.86%
35-44	438	15.61%	26	16.35%	340	15.73%	72	14.85%
45-54	501	17.85%	24	15.09%	402	18.59%	75	15.46%
55-64	389	13.86%	33	20.75%	295	13.64%	61	12.58%
65-74	188	6.70%	19	11.95%	147	6.80%	22	4.54%
75 & Older	37	1.32%	3	1.89%	28	1.30%	6	1.24%
Unknown	85	3.03%	2	1.26%	15	0.69%	68	14.02%
TOTAL	2,806	100.00%	159	100.00%	2,162	100.00%	485	100.00%

Table 8 – 6

MC Operator Physical Condition

Type of Condition	Number of Operators							
	Total	Percent of Total	In Fatal Crashes	Percent of Fatal	In Injury Crashes	Percent of Injury	In PDO Crashes	Percent of PDO
No Apparent Influence	2,341	83.43%	49	30.82%	1,893	87.56%	399	82.27%
Alcohol	152	5.42%	40	25.16%	97	4.49%	15	3.09%
Illegal Drugs	32	1.14%	21	13.21%	10	0.46%	1	0.21%
Medications	1	0.04%	0	0.00%	1	0.05%	0	0.00%
Marijuana	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Illness or Physical Impairment	7	0.25%	0	0.00%	6	0.28%	1	0.21%
Fell Asleep or Fatigued	6	0.21%	0	0.00%	5	0.23%	1	0.21%
Other	17	0.61%	1	0.63%	8	0.37%	8	1.65%
Unknown	250	8.91%	48	30.19%	142	6.57%	60	12.37%
TOTAL	2,806	100.00%	159	100.00%	2,162	100.00%	485	100.00%

Section 8: – Motorcycle (MC) Crashes

Table 8 – 7

MC Operator’s Helmet Use

Severity of Injury	Helmet Used	Percent of Total	Helmet Not Used	Percent of Total	Unknown	Percent of Total	Total	Percent of Total
No Injury	229	16.42%	70	11.86%	205	24.97%	504	17.96%
Unknown Injury	7	0.50%	9	1.53%	37	4.51%	53	1.89%
Possible Injury	216	15.48%	72	12.20%	160	19.49%	448	15.97%
Suspected Minor Injury	618	44.30%	226	38.31%	281	34.23%	1,125	40.09%
Suspected Serious Injury	262	18.78%	152	25.76%	119	14.49%	533	19.00%
Fatal Injury	63	4.52%	61	10.34%	19	2.31%	143	5.10%
TOTALS	1,395	100.00%	590	100.00%	821	100.00%	2,806	100.00%

Table 8 – 8

MC Passenger’s Helmet Use

Severity of Injury	Helmet Used	Percent of Total	Helmet Not Used	Percent of Total	Unknown	Percent of Total	Total	Percent of Total
No Injury	12	16.44%	7	10.77%	10	23.81%	29	16.11%
Unknown Injury	0	0.00%	1	1.54%	1	2.38%	2	1.11%
Possible Injury	9	12.33%	13	20.00%	12	28.57%	34	18.89%
Suspected Minor Injury	31	42.47%	22	33.85%	17	40.48%	70	38.89%
Suspected Serious Injury	17	23.29%	19	29.23%	2	4.76%	38	21.11%
Fatal Injury	4	5.48%	3	4.62%	0	0.00%	7	3.89%
TOTALS	73	100.00%	65	100.00%	42	100.00%	180	100.00%

Table 8 – 9

Helmet Use by Gender

Gender	Number of Operators and Passengers							
	Helmet Used	Percent of Helmet Used	Helmet Not Used	Percent of Helmet Not Used	Helmet Use Unknown	Percent of Unknown	Total	Percent of Total
Male	1,307	89.03%	566	86.41%	733	84.94%	2,606	87.27%
Female	158	10.76%	84	12.82%	78	9.04%	320	10.72%
Unknown	3	0.20%	5	0.76%	52	6.03%	60	2.01%
TOTAL	1,468	100.00%	655	100.00%	863	100.00%	2,986	100.00%

Section 8: – Motorcycle (MC) Crashes

Table 8 – 10
MC Operators and Passengers Killed and Injured

Age of Victim	Persons Killed			Persons Injured		
	Total	Male	Female	Total	Male	Female
0-4	0	0	0	1	0	1
5-9	0	0	0	1	1	0
10-14	0	0	0	11	8	3
15-19	3	2	1	119	111	8
20-24	14	14	0	323	292	31
25-34	32	31	1	521	474	47
35-44	26	23	3	349	311	38
45-54	23	20	3	427	362	65
55-64	28	22	6	308	266	42
65-74	20	19	1	152	135	17
75 & Older	4	3	1	28	27	1
Unknown	0	0	0	8	6	2
TOTAL	150	134	16	2,248	1,993	255

Table 8 – 11
MC Operator Violations

Type of Violation or Behavior	Number of Operators							
	Total	Percent of Total	In Fatal Crashes	Percent of Fatal	In Injury Crashes	Percent of Injury	In PDO Crashes	Percent of PDO
No Improper Action	1,348	48.04%	42	26.42%	1,062	49.12%	244	50.31%
Speed too Fast for Conditions	663	23.63%	38	23.90%	536	24.79%	89	18.35%
Exceeded Lawful Speed	41	1.46%	8	5.03%	32	1.48%	1	0.21%
Failed to Yield Right-Of-Way	64	2.28%	1	0.63%	50	2.31%	13	2.68%
Followed Too Closely	90	3.21%	2	1.26%	63	2.91%	25	5.15%
Ran Stop Sign	8	0.29%	3	1.89%	5	0.23%	0	0.00%
Disregarded Traffic Signal	30	1.07%	4	2.52%	21	0.97%	5	1.03%
Made Improper Turn	20	0.71%	0	0.00%	16	0.74%	4	0.82%
Drove in Opposing Lane	12	0.43%	1	0.63%	9	0.42%	2	0.41%
Drove Left of Center Line	14	0.50%	4	2.52%	10	0.46%	0	0.00%
Passed in No-Passing Zone	9	0.32%	2	1.26%	5	0.23%	2	0.41%
Unsafe Lane Change	44	1.57%	0	0.00%	33	1.53%	11	2.27%
Failed to Keep in Proper Lane	85	3.03%	11	6.92%	62	2.87%	12	2.47%
Crossed Median	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Aggressive Driving	5	0.18%	0	0.00%	3	0.14%	2	0.41%
Wrong Way Driving	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Other	112	3.99%	5	3.14%	85	3.93%	22	4.54%
Unknown	261	9.30%	38	23.90%	170	7.86%	53	10.93%
TOTAL	2,806	100.00%	159	100.00%	2,162	100.00%	485	100.00%

Section 8: – Motorcycle (MC) Crashes

Chart 8 – 5

All MC Crashes vs. Fatal MC Crashes by Time of Day - Weekdays

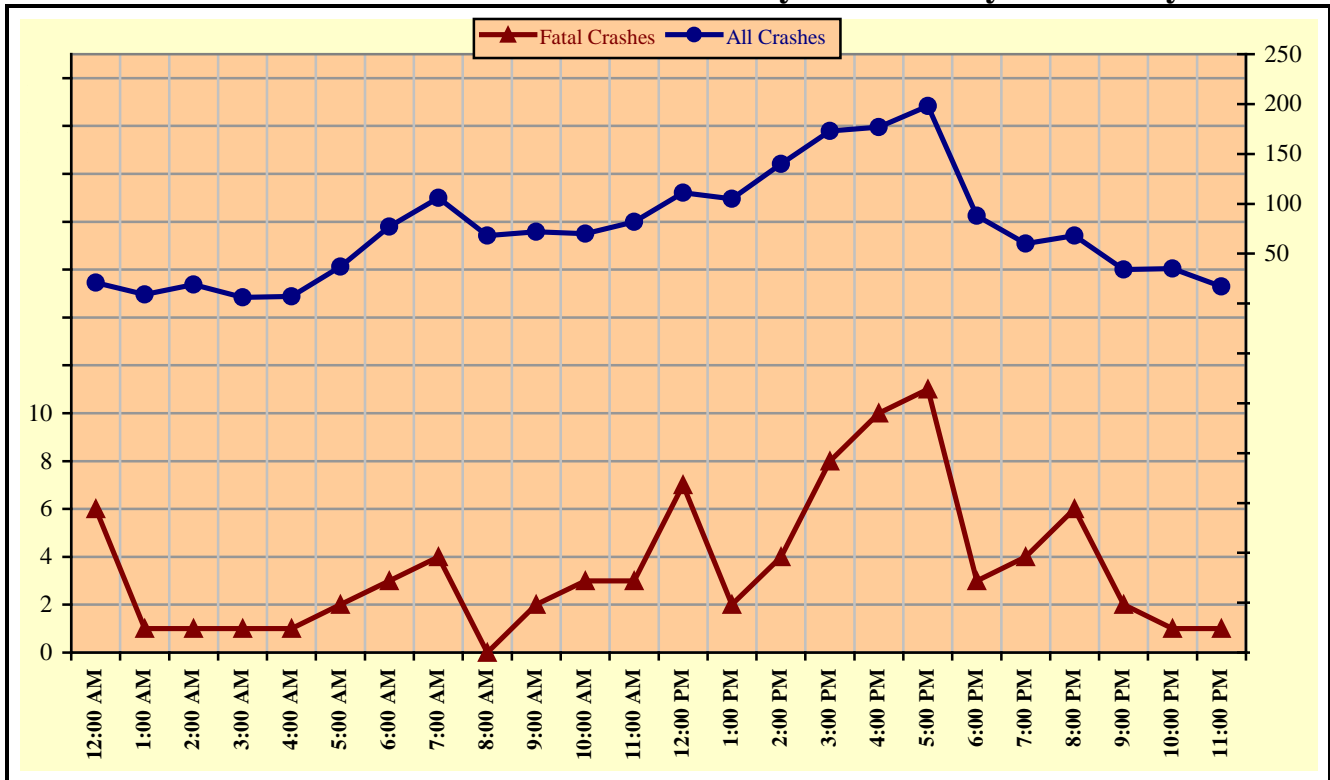
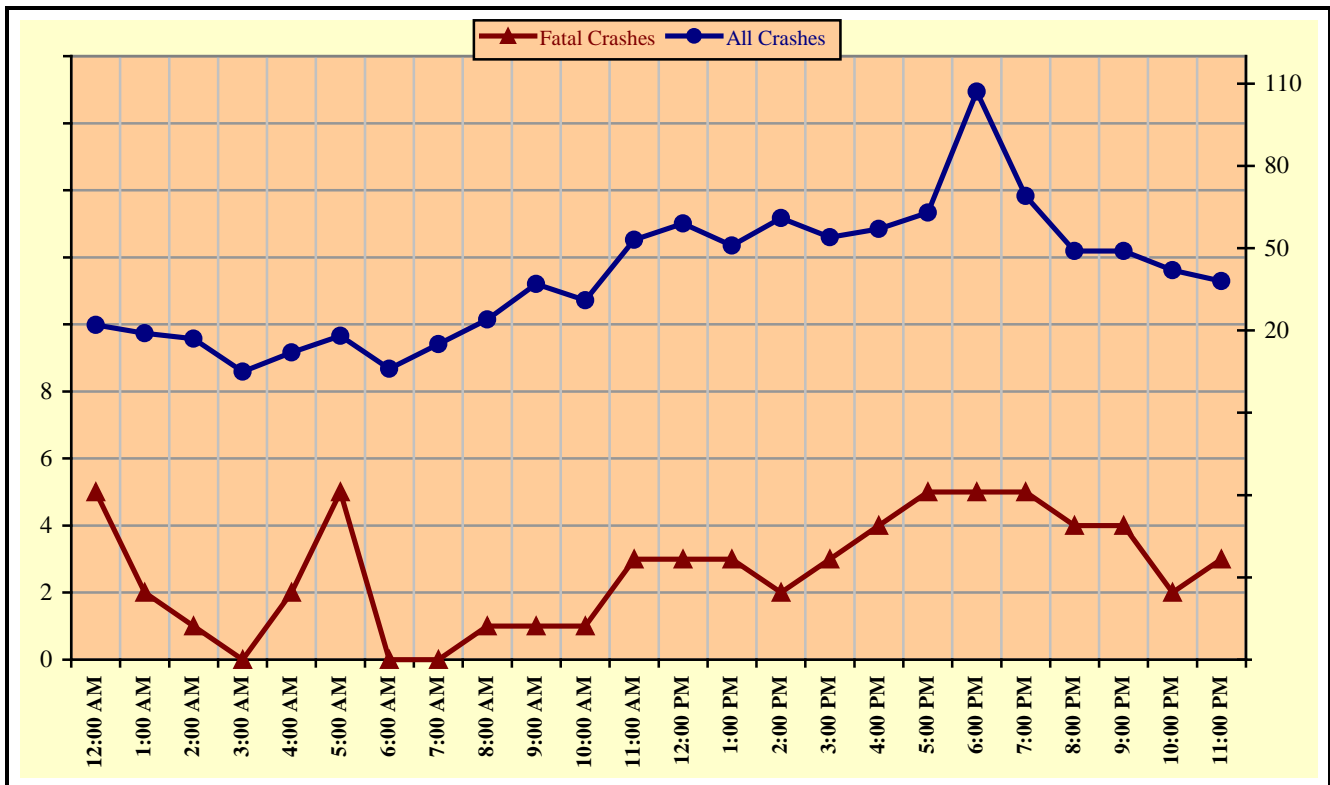


Chart 8 – 6

All MC Crashes vs. Fatal MC Crashes by Time of Day - Weekends



Section 8: – Motorcycle (MC) Crashes

Chart 8 – 7
All MC Crashes vs. Fatal MC Crashes by Day of Week

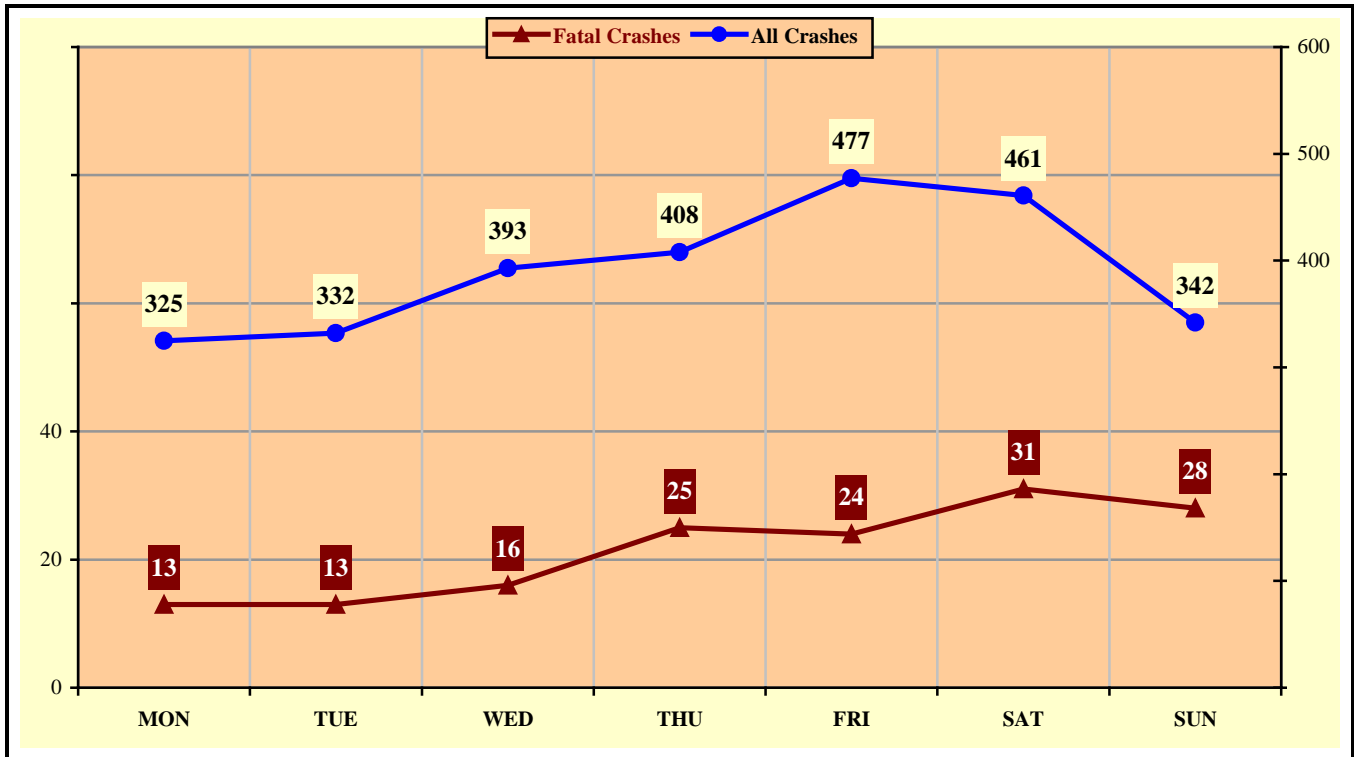
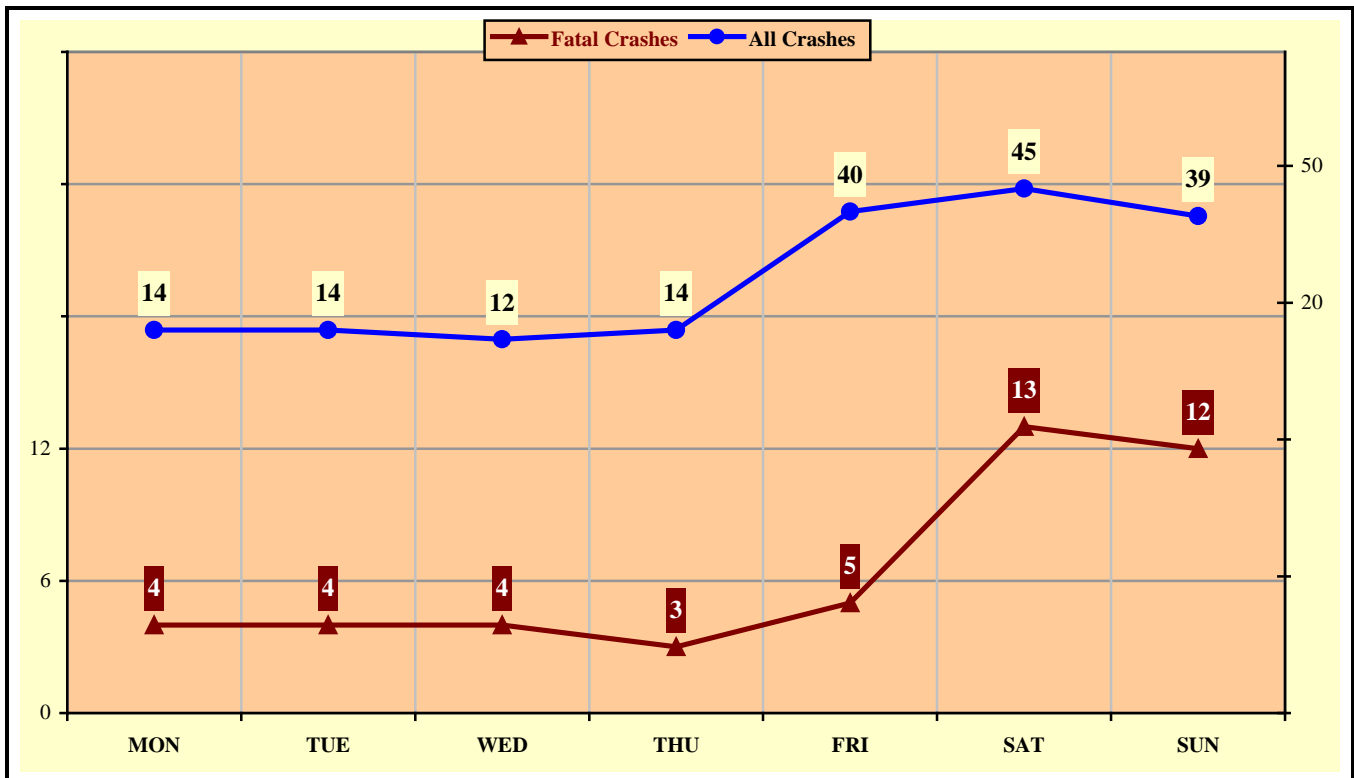


Chart 8 – 8
Alcohol Related MC Crashes vs. Fatal Alcohol Related MC Crashes by Day of Week



Section 8: – Motorcycle (MC) Crashes

Table 8 – 12
MC Crashes by Hour and Day of Week

Hour Beginning	Total Crashes		Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Sunday		Weekdays		Weekends	
	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal
12:00 AM	43	11	4	0	5	1	4	1	7	2	5	2	7	2	11	3	21	6	22	5
1:00 AM	28	3	4	0	2	0	3	1	1	0	3	0	7	2	8	0	9	1	19	2
2:00 AM	36	2	1	0	3	0	1	0	4	1	11	0	7	0	9	1	19	1	17	1
3:00 AM	11	1	0	0	1	0	1	0	0	0	4	1	2	0	3	0	6	1	5	0
4:00 AM	19	3	7	0	2	1	0	0	2	0	3	0	3	0	2	2	7	1	12	2
5:00 AM	55	7	8	1	5	0	11	0	13	1	8	1	9	4	1	0	37	2	18	5
6:00 AM	83	3	10	0	13	1	27	1	15	0	12	1	3	0	3	0	77	3	6	0
7:00 AM	121	4	15	0	15	0	27	1	30	2	19	1	8	0	7	0	106	4	15	0
8:00 AM	92	1	8	0	16	0	9	0	16	0	19	0	13	0	11	1	68	0	24	1
9:00 AM	109	3	9	0	19	1	12	0	16	1	16	0	20	1	17	0	72	2	37	1
10:00 AM	101	4	13	1	7	0	21	1	15	0	14	1	17	0	14	1	70	3	31	1
11:00 AM	135	6	19	0	16	0	6	1	18	1	23	1	32	2	21	1	82	3	53	3
12:00 PM	170	10	19	0	22	0	17	1	24	4	29	2	31	1	28	2	111	7	59	3
1:00 PM	156	5	21	0	17	1	22	0	18	0	27	1	26	2	25	1	105	2	51	3
2:00 PM	201	6	26	1	27	0	26	0	26	2	35	1	35	2	26	0	140	4	61	2
3:00 PM	227	11	33	1	23	2	35	2	40	2	42	1	31	3	23	0	173	8	54	3
4:00 PM	234	14	33	2	30	2	46	2	30	2	38	2	35	3	22	1	177	10	57	4
5:00 PM	261	16	34	2	37	1	40	1	49	2	38	5	40	1	23	4	198	11	63	5
6:00 PM	195	8	26	1	15	0	22	0	25	2	39	1	35	2	33	2	88	3	107	5
7:00 PM	129	9	8	1	19	1	15	1	18	1	23	0	27	3	19	2	60	4	69	5
8:00 PM	117	10	9	2	19	1	23	1	17	2	18	0	18	1	13	3	68	6	49	4
9:00 PM	83	6	10	1	8	0	11	1	5	0	16	1	22	0	11	3	34	2	49	4
10:00 PM	77	3	5	0	6	1	10	0	14	0	21	2	19	0	2	0	35	1	42	2
11:00 PM	55	4	3	0	5	0	4	1	5	0	14	0	14	2	10	1	17	1	38	3
TOTAL	2,738	150	325	13	332	13	393	16	408	25	477	24	461	31	342	28	1,780	86	958	64

Crashes during Weekends accounted for 34.99% of all MC crashes and 42.67% of Fatal MC Crashes.

Section 8: – Motorcycle (MC) Crashes

Table 8 – 13

MC Crashes by County

County	Number of Crashes				Number of Persons	
	Total	Fatal	Injury	PDO	Killed	Injured
Apache	8	0	7	1	0	7
Cochise	34	4	25	5	4	28
Coconino	65	3	51	11	3	59
Gila	40	5	30	5	5	30
Graham	16	2	13	1	2	14
Greenlee	13	0	12	1	0	12
La Paz	6	1	5	0	1	7
Maricopa	1,781	85	1,345	351	83	1,411
Mohave	128	9	97	22	9	109
Navajo	18	3	14	1	3	16
Pima	299	17	249	33	17	264
Pinal	113	8	81	24	9	92
Santa Cruz	4	0	4	0	0	4
Yavapai	152	7	131	14	8	145
Yuma	61	6	46	9	6	50
TOTAL	2,738	150	2,110	478	150	2,248

Table 8 – 14

Manner of Collision in MC Crashes

Manner of Collision Type	Number of Crashes							
	Total	Percent of All Crashes	Fatal	Percent of Fatal Crashes	Injury	Percent of Injury Crashes	PDO	Percent of PDO Crashes
Angle	272	15.90%	13	13.68%	215	17.58%	44	11.20%
Left Turn	450	26.30%	38	40.00%	358	29.27%	54	13.74%
Rear End	534	31.21%	11	11.58%	362	29.60%	161	40.97%
Head-On	47	2.75%	3	3.16%	36	2.94%	8	2.04%
Sideswipe (same)	260	15.20%	6	6.32%	167	13.65%	87	22.14%
Sideswipe (opposite)	30	1.75%	3	3.16%	14	1.14%	13	3.31%
U-Turn	6	0.35%	1	1.05%	3	0.25%	2	0.51%
Other*	95	5.55%	15	15.79%	62	5.07%	18	4.58%
Unknown	17	0.99%	5	5.26%	6	0.49%	6	1.53%
TOTAL	1,711	100.00%	95	100.00%	1,223	100.00%	393	100.00%
Note: Includes only multi-vehicle MC crashes								
*Other includes pedestrian and pedalcyclist crashes								

Acknowledgements

Special gratitude to our other providers of data and information including:

The Information Technology Group, Arizona Department of Transportation

Motor Vehicle Division, Arizona Department of Transportation

Multimodal Planning Division, Arizona Department of Transportation

The Federal Highway Administration, U.S. Department of Transportation

National Highway Transportation Safety Administration

Arizona Motor Vehicle **CRASH FACTS**

2018



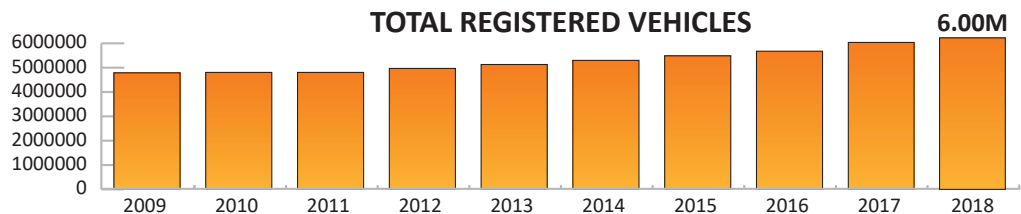
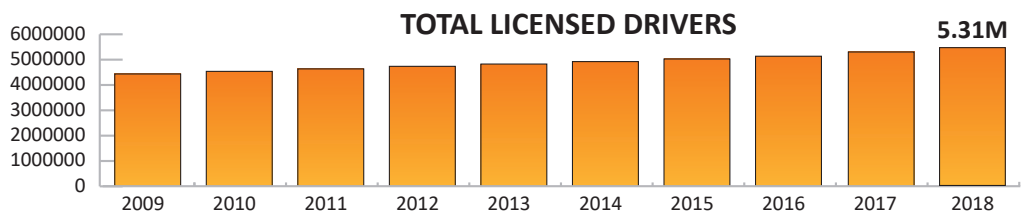
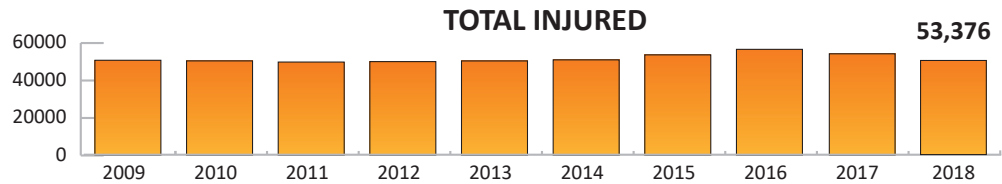
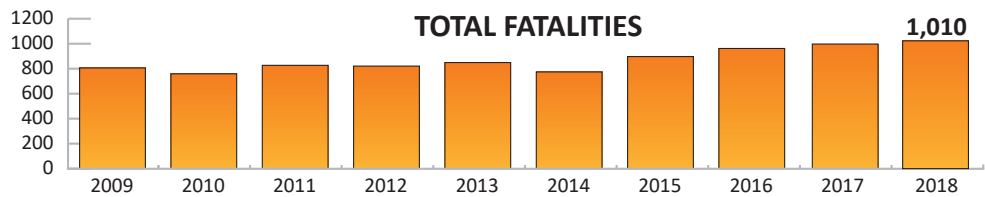
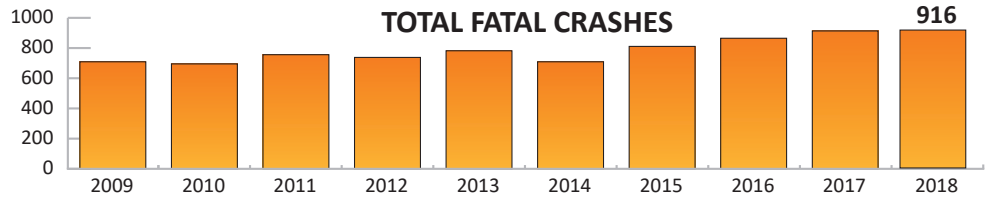
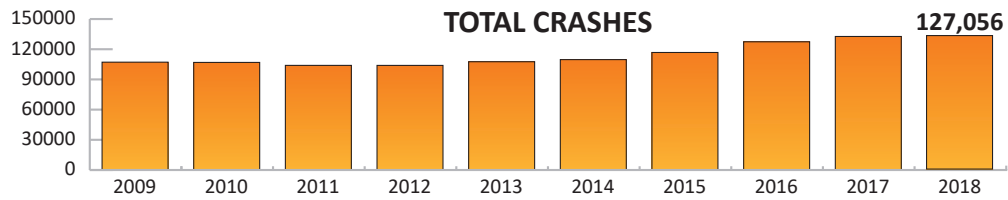
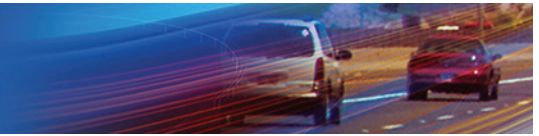
ROAD CONDITIONS
DIAL 511

azdot.gov/crashfacts



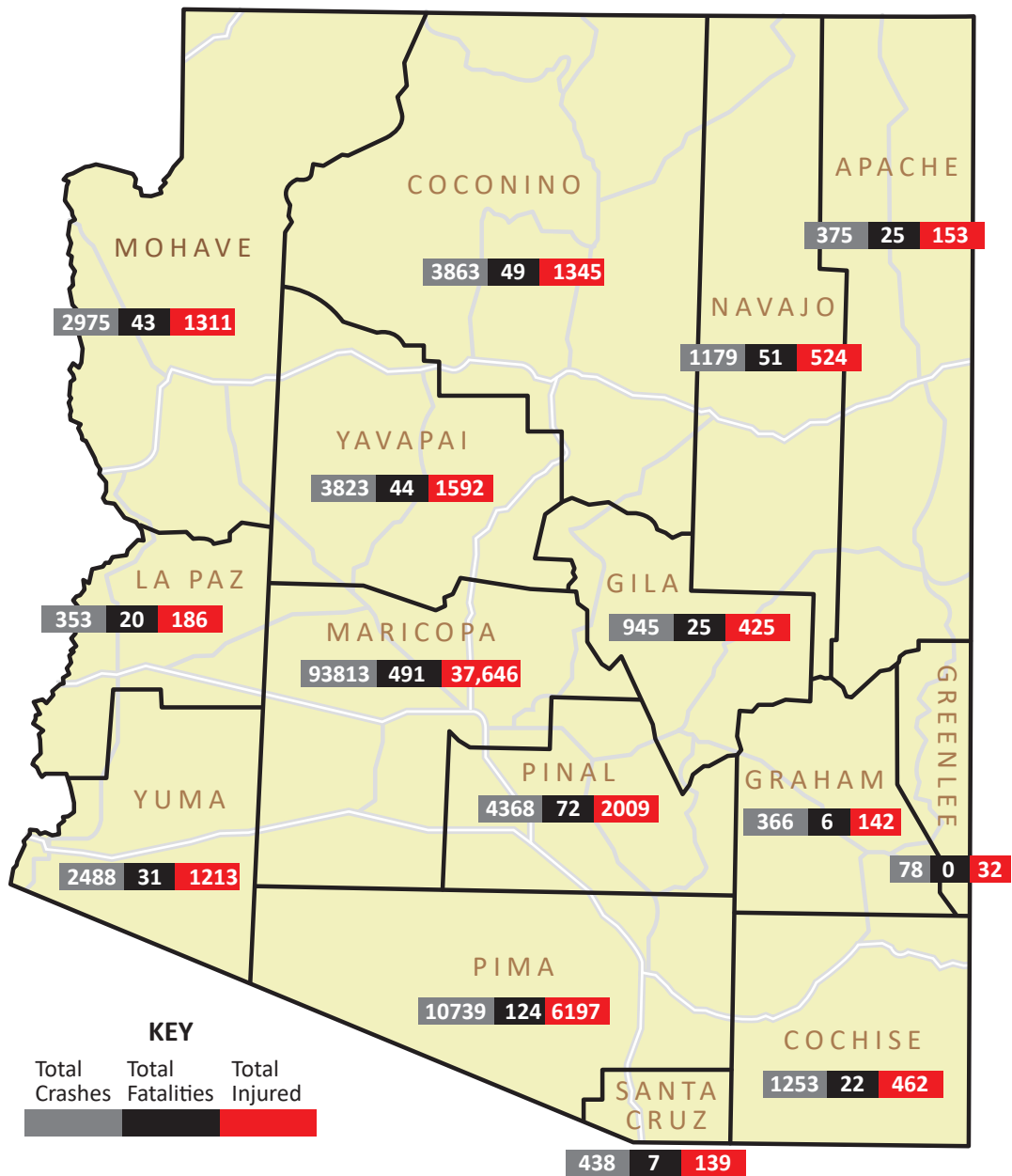
ADOT

HISTORICAL TRENDS



Reducing the number of crashes, serious injuries and fatalities begins with drivers choosing to make safer decisions. Driver behavior is a leading factor in more than 90 percent of crashes. Speeding, impairment, aggressive driving and distracted driving are primary contributors to the rising number of traffic fatalities and those are all actions drivers can choose not to engage in.

TOTAL CRASHES, FATALITIES AND INJURED BY COUNTY



KEY
 Total Crashes Total Fatalities Total Injured

Crashes occur on all kinds of roadways, from heavily-traveled freeways to back-country switchbacks. Of the 127,056 collisions in 2018, 32 percent happened on the state highway system, while 68 percent occurred on other roadways, such as city streets and county roads.

DRIVER BEHAVIOR BREAKDOWN



281

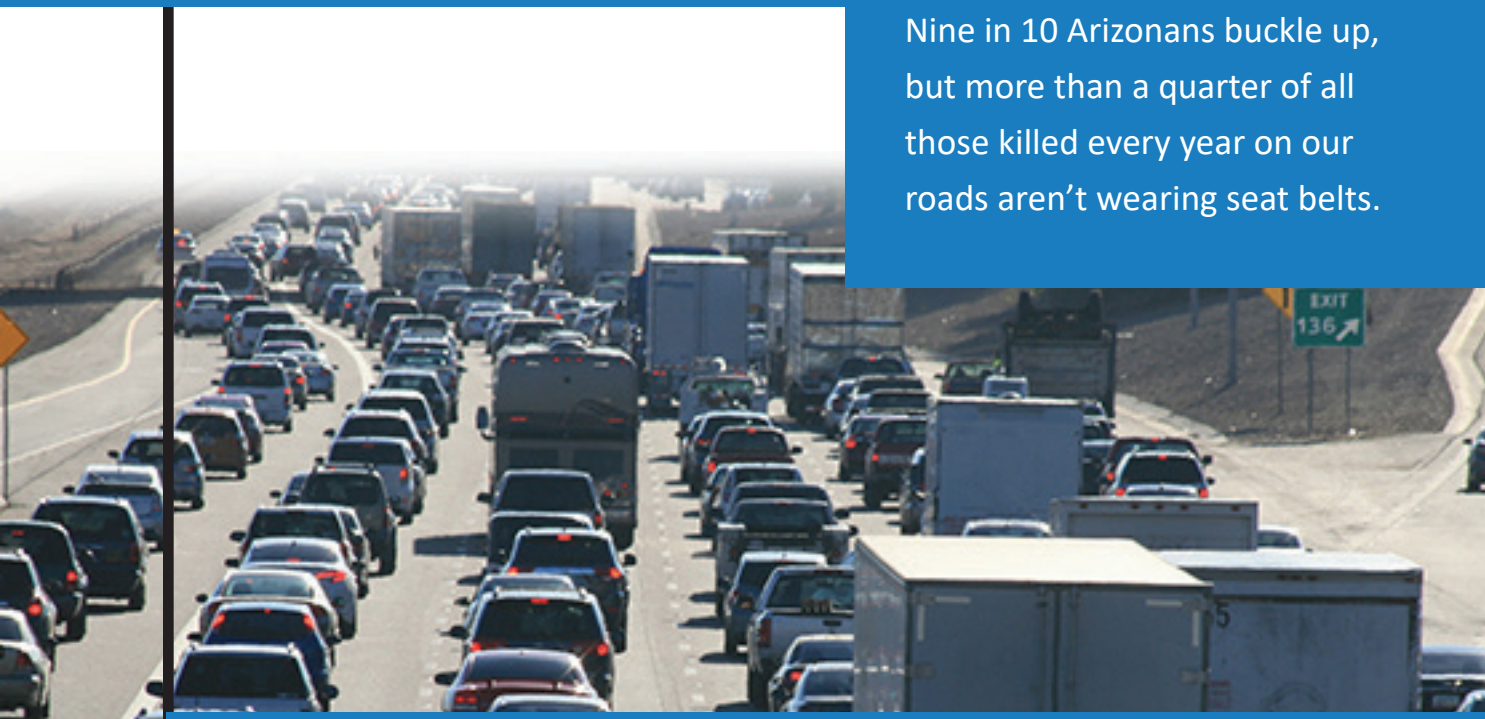
281 people were killed in speed-related crashes.

Speeding is the most common driver violation and rear-end collisions are the most common manner of crash.

216

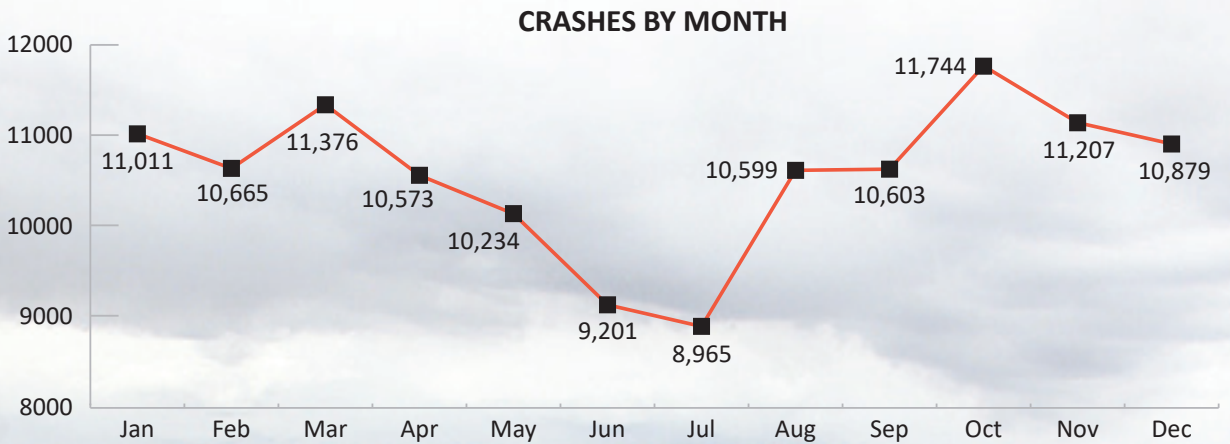
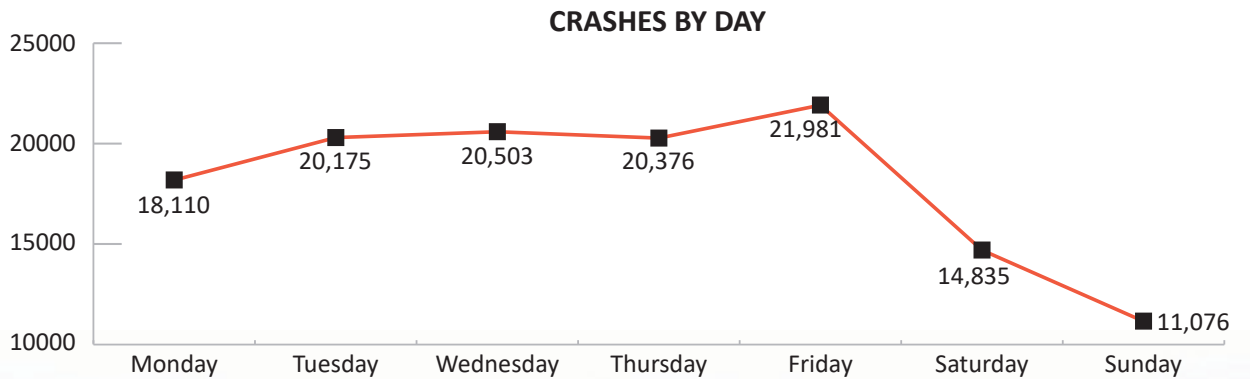
216 people killed in crashes were not wearing seat belts.

Nine in 10 Arizonans buckle up, but more than a quarter of all those killed every year on our roads aren't wearing seat belts.



In 2018, 127,056 motor vehicle crashes killed 1,010 people and left 53,376 people injured. Poor decisions made by drivers – speeding, impairment, reckless driving and not wearing a seat belt – are leading factors in traffic fatalities. Drivers hold the key to reducing these figures – choose to make smart decisions behind the wheel, making roads safer for everyone.

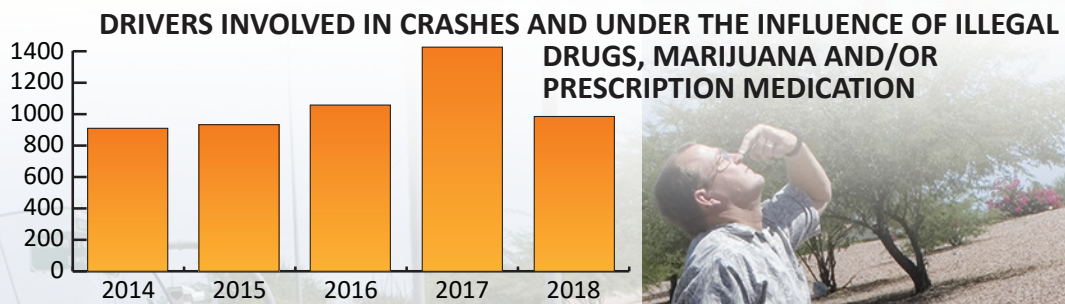
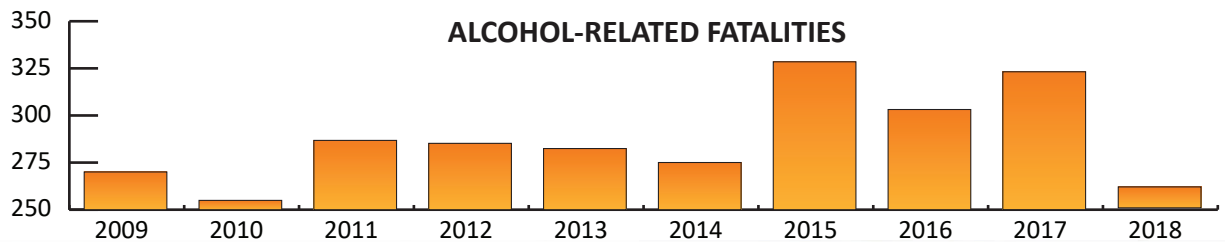
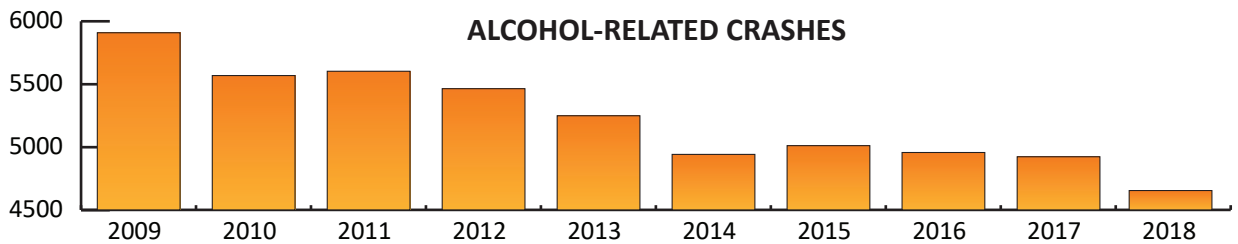
CRASH BREAKDOWN



In 2018, more crashes happened in October than any other month of the year and Fridays saw more crashes than any other day of the week. February 14, 2018, had the most crashes on Arizona roads with 611 crashes and October 9, 2018, and December 10, 2018, had the most number of fatal crashes with 8 on those days.

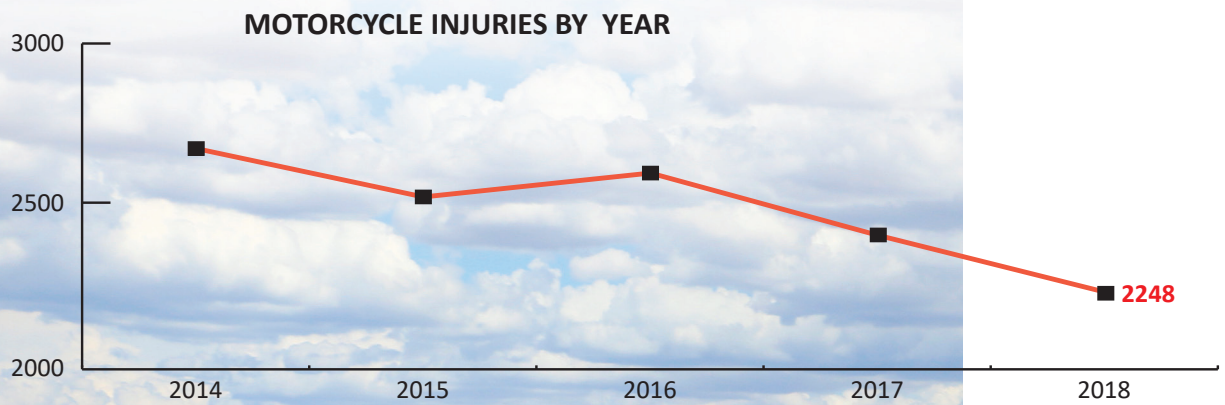
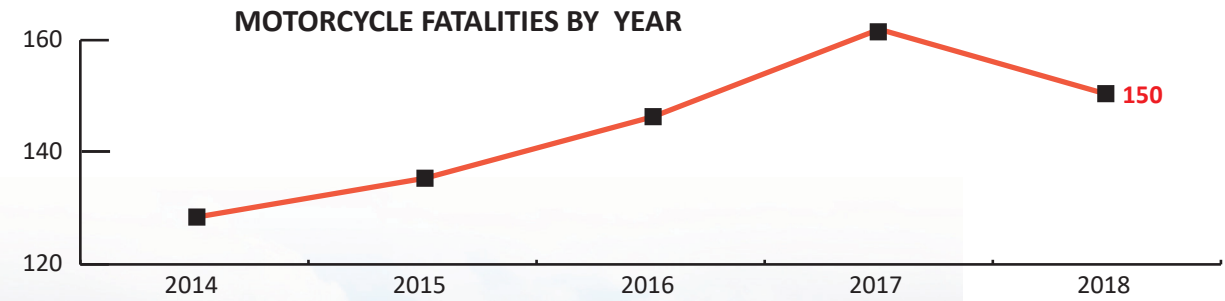
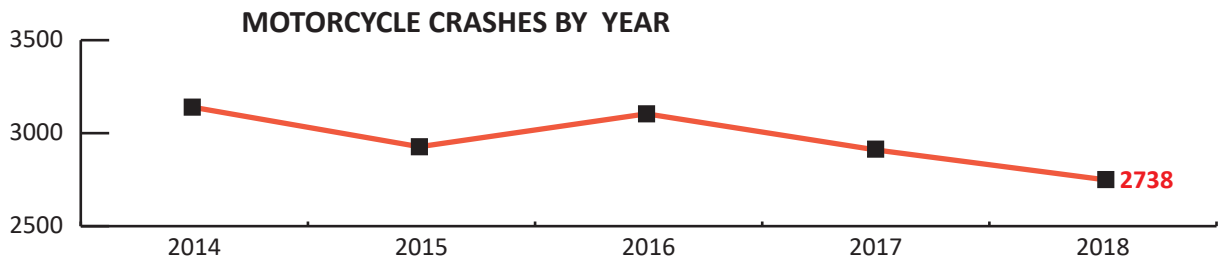
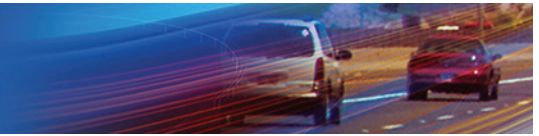
During weekdays, crashes spike during morning and afternoon commutes. On weekends, most crashes occur between 6-9 p.m.

IMPAIRED DRIVING



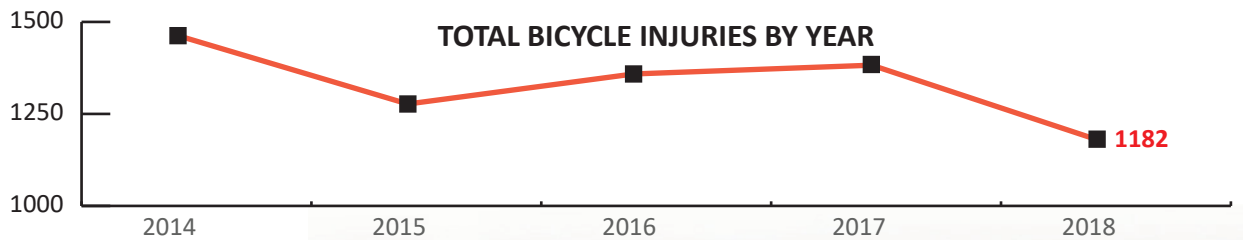
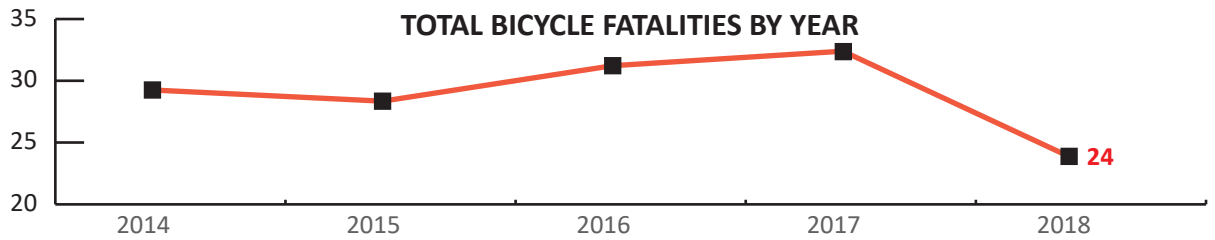
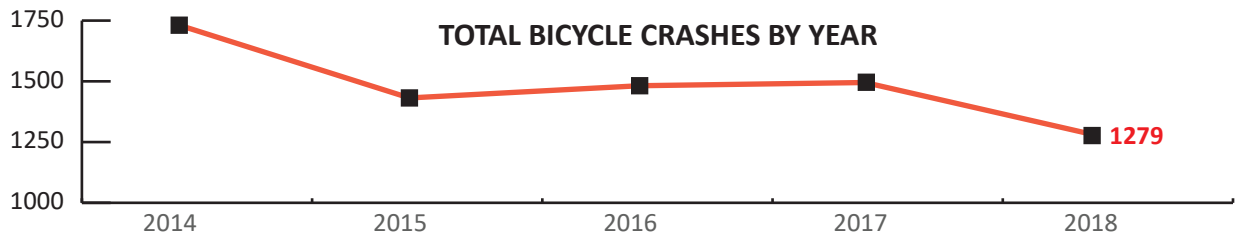
In 2018, 420 people were killed in impaired driving-related crashes. Annually, crashes involving alcohol, illegal drugs or prescription medication account for about 4 percent of all collisions, and about one-third of all fatal crashes. Don't let impaired drivers get behind the wheel.

MOTORCYCLES



At least 64 of the 150 motorcycles operators or passengers killed in 2018 were not wearing a helmet.

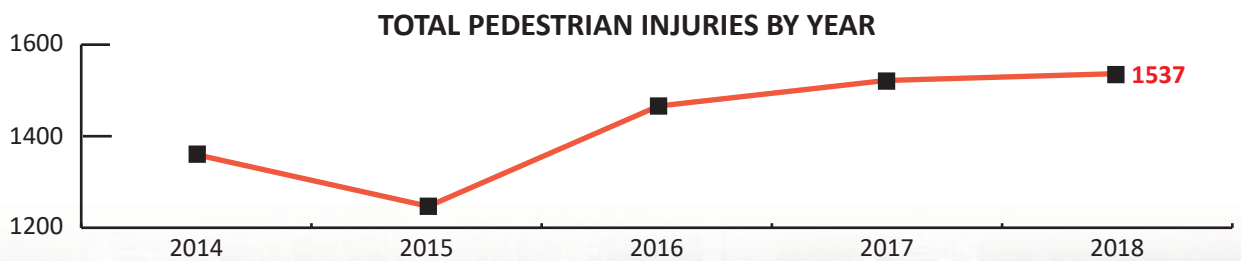
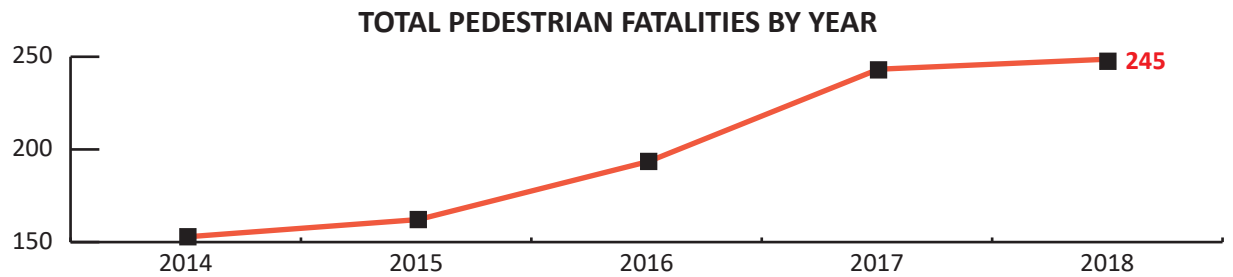
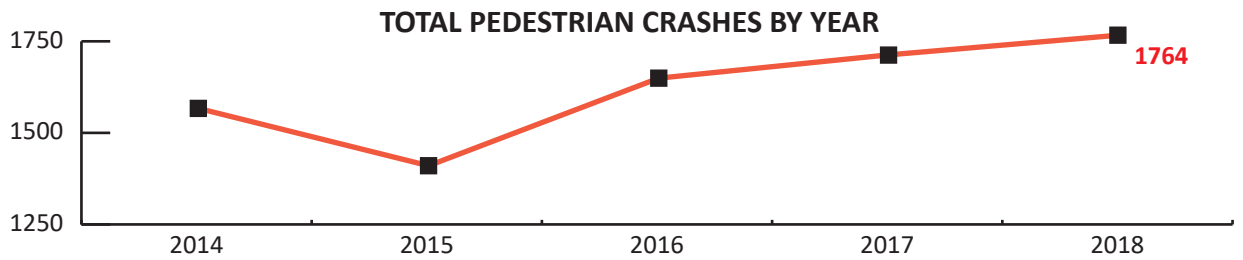
BICYCLISTS



Ninety-three percent of bicycle crashes occurred in urban areas and 4 out of 5 occurred during the day. Drivers should watch for bikes, especially bikes traveling against traffic on sidewalks, and bicyclists should watch for turning vehicles.



PEDESTRIANS



Half of pedestrian crashes occur during daylight, dawn or dusk conditions, but about 73 percent of the pedestrians killed on Arizona roads in 2018 were struck at night when vehicle speeds are typically faster and pedestrians are harder to see.



FOR INQUIRIES AND MORE INFORMATION



The information in this publication is compiled from Arizona Traffic Crash Reports submitted to the Arizona Department of Transportation by state, county, city, tribal and other law enforcement agencies. Specific inquiries regarding this data should be directed to: azcrashfacts@azdot.gov



The complete 2018 Arizona Motor Vehicle Crash Facts report can be viewed at azdot.gov/crashfacts