# ARIZONA MOTOR VEHICLE CRASH FACTS 2017



# 2017 Motor Vehicle Crash Facts for the State of Arizona

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

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This publication is an annual statistical review of the motor vehicle crashes in the State of Arizona for the calendar year 2017. 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:

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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 ADOT's Web Site at: www.azdot.gov/crashfacts



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# 2017 Arizona Crash Facts Summary

BREAKDOWN OF ALL CRASHES IN ARIZONA			
TOTAL	127,064		
FATAL	919		
INJURY	37,823		
PROPERTY DAMAGE ONLY	88,322		
URBAN	104,810		
RURAL	22,254		
ALCOHOL RELATED	4,854		
PEDES TRIAN	1,702		
PEDALCYCLE	1,490		
MOTORCYCLE	2,907		
SINGLE VEHICLE	18,870		
MULTI-VEHICLE	108,194		

### BREAKDOWN OF FATAL CRASHES IN ARIZONA

TOTAL	919
ALCOHOL RELATED	286
URBAN	505
RURAL	414
S INGLE VEHICLE	303
MULTI-VEHICLE	616
ALCOHOL RELATED SINGLE VEHICLE	103
ALCOHOL RELATED MULTI-VEHICLE	183

### BREAKDOWN OF PERSONS KILLED AND INJURED

ТҮРЕ	KILLED	INJURED
IN ALL CRASHES	1,000	55,474
IN ALCOHOL RELATED CRASHES	320	3,095
IN URBAN CRASHES	532	45,678
IN RURAL CRASHES	468	9,796
SPEED RELATED*	285	22,158
USING SAFETY DEVICE	284	45,547
NOT USING SAFETY DEVICE	312	3,104
DRIVERS AGE 24 OR YOUNGER	82	8,479
DRINKING DRIVERS AGE 24 OR YOUNGER	26	349

### **BREAKDOWN OF CRASHES BY TIME**

PEAK MONTH FOR ALL CRASHES	MARCH		
PEAK DAY FOR ALL CRASHES	FRIDAY		
PEAK HOUR FOR ALL CRASHES	5 PM - 6 PM		
PEAK HOUR FOR FATAL CRASHES	8 PM - 9 PM		
PEAK DAY FOR FATAL CRASHES	FRIDAY		
PEAK DATE FOR ALL CRASHES IN 2017	JANUARY 20TH (640 CRASHES)		
PEAK DATE FOR FATAL CRASHES IN 2017	DECEMBER 22ND (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

<sup>\*</sup>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 form.

2017 Arizona Crash Facts Summary
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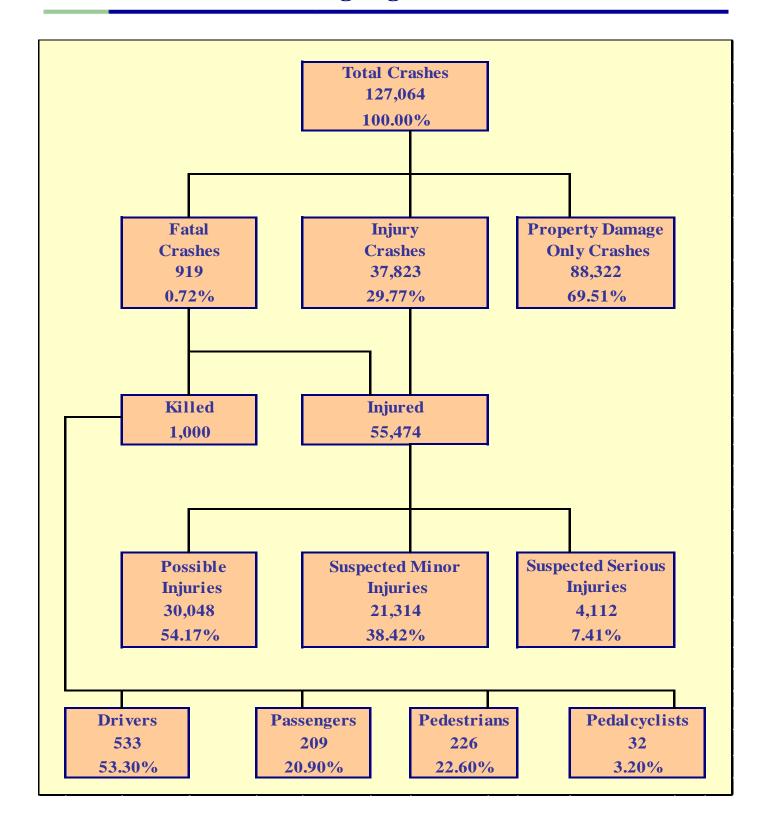


Table 1 – 1

Arizona Crash Facts Summary and Comparison

v 1			
Category	2016	2017	Percent Change
Total Crashes	127,039	127,064	0.02%
Total Fatalities	952	1,000	5.04%
Total Injuries	56,785	55,474	-2.31%
Alcohol Related Fatalities	302	320	5.96%
Alcohol Related Injuries	3,327	3,095	-6.97%
Urban Fatalities	518	532	2.70%
Urban Injuries	46,202	45,678	-1.13%
Rural Fatalities	434	468	7.83%
Rural Injuries	10,583	9,796	-7.44%
MC Operator and Passenger Fatalities	145	161	11.03%
MC Operator and Passenger Injuries	2,603	2,413	-7.30%
Pedestrians Fatalities	193	226	17.10%
Pedestrians Injuries	1,462	1,510	3.28%
Pedalcyclist Fatalities	31	32	3.23%
Pedalcyclist Injuries	1,352	1,371	1.41%
Millions of vehicle miles traveled (VMT)	65,606	65,069	-0.82%
Fatalities per 100 million VMT	1.45	1.54	5.91%
Injuries per 100 million VMT	86.55	85.25	-1.50%

### Arizona at a Glance – 2017

- Approximately **2.74** persons were killed each day.
- One person was killed every 8 hours and 46 minutes.
- There were **152** persons injured every day.
- One person was injured every 9 minutes and 29 seconds.
- Alcohol Related crashes accounted for 3.82% of all crashes and 31.09% of all fatal crashes.
- Of all alcohol related crashes, 78.88% occurred in Urban areas and 21.12% occurred in Rural areas, while 60.49% of all alcohol related fatal crashes occurred in Urban areas and 39.51% occurred in Rural areas.
- Single vehicle crashes accounted for 14.85% of all crashes and 32.97% of all fatal crashes.
- Of all Pedestrian crashes, 13.04% were fatal while 2.21% of Pedalcycle crashes were fatal.
- Crashes which occurred during daylight hours (6:00 a.m. to 6:00 p.m.) accounted for **72.7%** of all crashes.
- Motor vehicle crashes resulted in \$10.765 billion in economic losses to Arizona.
- Children age 14 and younger accounted for **30** fatalities and **3,489** injuries in motor vehicle crashes.

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

Calandan	T-4-1	E-4-1		Property	Total	Total	Total	Total
Calendar Year	Total Crashes	Fatal Crashes	Injury Crashes	<b>Damage Only</b>	Persons	Persons	Licensed	Registered
				Crashes	Killed	Injured	Drivers	Vehicles
2003	131,207	978	45,293	84,936	1,125	72,113	3,819,823	4,193,262
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	33,594	69,608	821	50,086	4,736,517	4,969,620
2013	107,575	782	34,136	72,657	849	50,439	4,826,903	5,130,780
2014	109,684	709	34,524	74,451	774	51,022	4,922,676	5,300,980
2015	116,824	811	36,232	79,781	897	53,719	5,025,811	5,487,058
2016	127,039	856	38,634	87,549	952	56,785	5,135,262	5,677,208
2017	127,064	919	37,823	88,322	1,000	55,474	5,221,403	5,843,368

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
2013	1.40	83.25	849	60,586	1.29
2014	1.24	81.46	774	62,631	1.13
2015	1.38	82.59	897	65,045	1.25
2016	1.45	86.55	952	65,606	1.30
2017	1.54	85.25	1,000	65,069	1.41
Vahiala milas trava	lad ana aharrin in	million miles on	d matag man 100 m	millian milas	

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

# **Statewide Economic Loss Due to Motor Vehicle Crashes**

Fatalities	\$5,800,000,000
Suspected Serious Injuries	\$1,644,800,000
Suspected Minor Injuries	\$1,705,120,000
Possible Injuries	\$1,262,016,000
Property Damage Only	\$353,288,000
TOTAL	\$10,765,224,000

Table 1 – 4
Estimated Economic Loss by County

County				Cost of Traffic	Cr	ashes					
County	Fatalities		Injuries		PDO			Total			
Apache	\$	272,600,000	\$	21,346,000	\$	956,000	\$	294,902,000			
Cochise	\$	127,600,000	\$	48,430,000	\$	3,668,000	\$	179,698,000			
Coconino	\$	266,800,000	\$	143,848,000	\$	11,560,000	\$	422,208,000			
Gila	\$	168,200,000	\$	44,388,000	\$	2,104,000	\$	214,692,000			
Graham	\$	46,400,000	\$	15,774,000	\$	824,000	\$	62,998,000			
Greenlee	\$	5,800,000	\$	4,032,000	\$	192,000	\$	10,024,000			
La Paz	\$	104,400,000	\$	26,364,000	\$	868,000	\$	131,632,000			
Maricopa	\$	2,685,400,000	\$	3,115,590,000	\$	265,236,000	\$	6,066,226,000			
Mohave	\$	249,400,000	\$	161,928,000	\$	8,516,000	\$	419,844,000			
Navajo	\$	295,800,000	\$	55,676,000	\$	2,976,000	\$	354,452,000			
Pima	\$	661,200,000	\$	544,708,000	\$	27,896,000	\$	1,233,804,000			
Pinal	\$	411,800,000	\$	160,920,000	\$	10,888,000	\$	583,608,000			
Santa Cruz	\$	34,800,000	\$	13,666,000	\$	1,452,000	\$	49,918,000			
Yavapai	\$	319,000,000	\$	160,812,000	\$	9,808,000	\$	489,620,000			
Yuma	\$	150,800,000	\$	94,454,000	\$	6,344,000	\$	251,598,000			
TOTALS	\$	5,800,000,000	\$	4,611,936,000	\$	353,288,000	\$	10,765,224,000			

Table 1 – 5 **Average Economic Cost per Incident** 

1.	Fatality	\$5,800,000	
2.	Suspected Serious Injury	\$400,000	
3.	Suspected Minor Injury	\$80,000	
4.	Possible Injury	\$42,000	
5.	Property Damage Only	\$4,000	

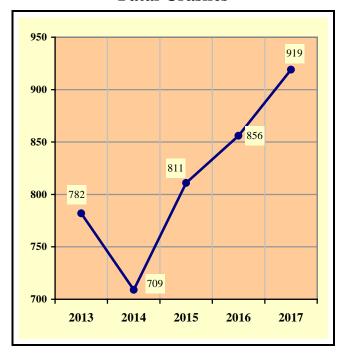
Source: www.cmfclearinghouse.org/resources\_servlifecrashcostguide.cfm

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** 

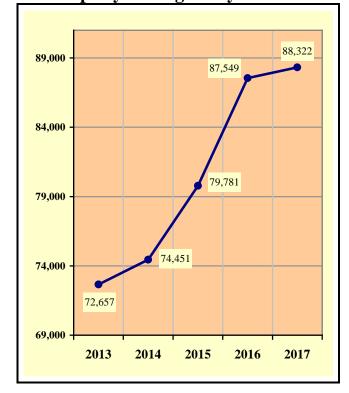


Table 1 – 6
Victims of Motor Vehicle Crashes

Age of		Person	ns Killed			Person	s Injured	
Victim	Total	Male	Female	Gender Unknown	Total	Male	Female	Gender Unknown
0-4	6	4	2	0	832	437	395	0
5-9	13	7	6	0	1,141	581	560	0
10-14	11	5	6	0	1,516	697	819	0
15-19	59	40	19	0	5,468	2,486	2,982	0
20-24	105	82	23	0	7,128	3,430	3,698	0
25-34	174	127	47	0	11,149	5,398	5,751	0
35-44	141	92	49	0	8,064	3,811	4,253	0
45-54	159	124	35	0	7,605	3,631	3,974	0
55-64	150	111	39	0	6,083	2,982	3,101	0
65-74	93	67	26	0	3,636	1,710	1,926	0
75 & Older	86	59	27	0	2,227	1,000	1,227	0
Unknown	3	1	1	1	625	268	283	74
TOTAL	1,000	719	280	1	55,474	26,431	28,969	74

Table 1 – 7
Suspected Serious Injuries by Person Type 2013-2017

			, <u>J</u>		
Year	Drivers	Passengers	Pedestrians	Pedalcyclists	Total
2013	2,799	1,027	314	188	4,328
2014	2,553	923	322	161	3,959
2015	2,761	929	302	182	4,174
2016	2,892	1,043	422	218	4,575
2017	2,595	957	379	181	4,112
TOTAL	13,600	4,879	1,739	930	21,148

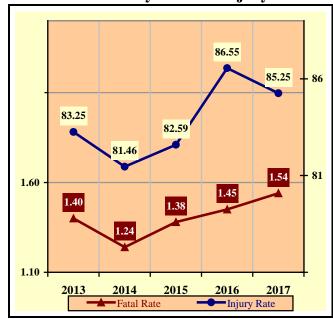
 $\begin{array}{c} {}^{Table\,1\,-\,8}\\ Young\;drivers\;(age\;15\text{-}24)\;killed\;in\;crashes\;2013\text{-}2017 \end{array}$ 

Year		Age of Driver												
1 Cai	15	16	17	18	19	20	21	22	23	24	Total			
2013	2	2	7	7	12	12	17	9	13	9	90			
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			
TOTAL	6	6	15	49	48	51	64	70	61	53	423			

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

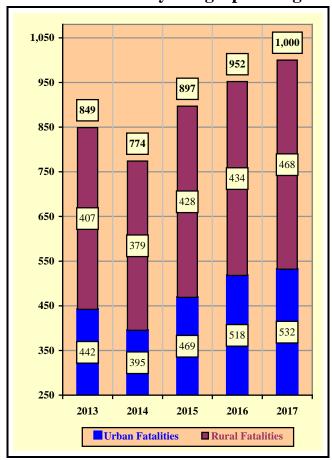
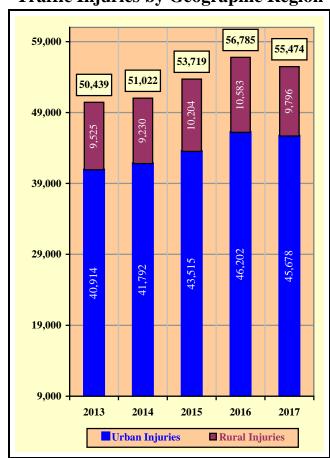


Chart 1 – 8 **Traffic Injuries by Geographic Region** 



# 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.

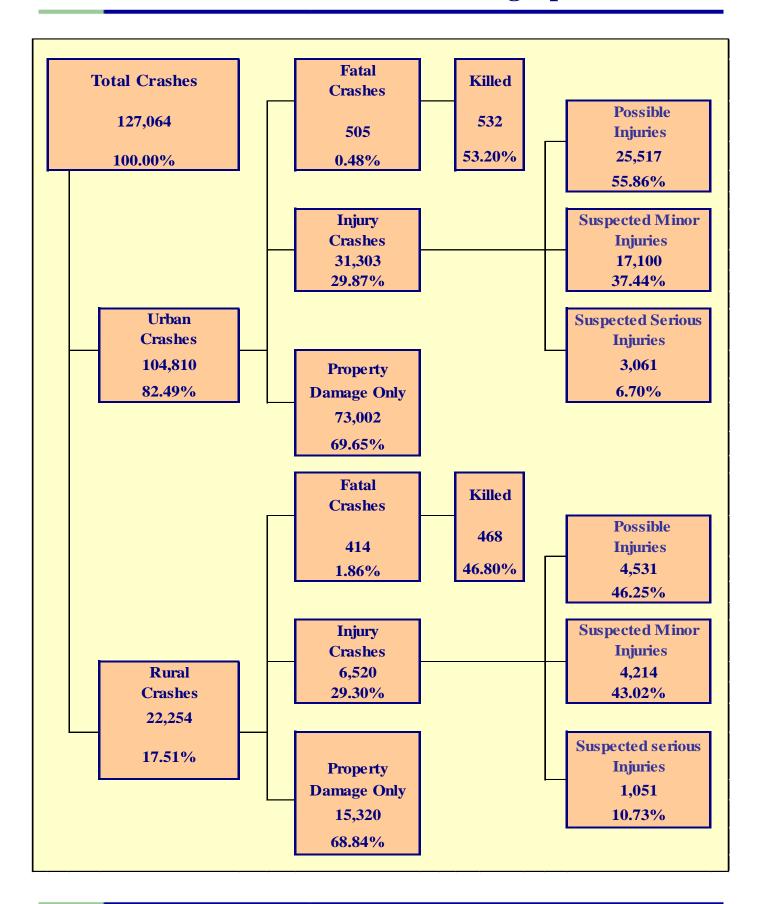
Holiday fatality statistics are based on fatal crashes occurring from 6:00 p.m. on the last working day prior to the holiday through 5:59 a.m. the day following the holiday period. Example: Thanksgiving fatalities are counted from Wednesday evening at 6:00 p.m. through 5:59 a.m. of the following Monday.

2017 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 12/30/2016	Tuesday 1/3/2017	4	12	13	5	5
Memorial Day	Friday 5/26/2017	Tuesday 5/30/2017	4	5	7	1	1
July 4th	Monday 7/3/2017	Wednesday 7/5/2017	2	4	4	3	3
Labor Day	Friday 9/1/2017	Tuesday 9/5/2017	4	9	9	3	3
Thanksgiving Day	Wednesday 11/22/2017	Monday 11/27/2017	5	16	17	5	6
Christmas Day	Friday 12/22/2017	Tuesday 12/26/2017	4	11	11	3	3

Fatal Crashes by Year	New Year's Day	Memorial Day	July 4th	Labor Day	Thanksgiving	Christmas Day	Total
2013	3	9	15	8	11	1	47
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	11	57

Persons Killed	New Year's Day	Memorial Day	July 4th	Labor Day	Thanksgiving	Christmas Day	Total
2013	4	10	16	8	14	1	53
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	11	61

Number of Days	New Year's Day	Memorial Day	July 4th	Labor Day	Thanksgiving	Christmas Day	Total
2013	5	4	5	4	5	2	25
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



Fatal Crashes in Arizona (919) accounted for 0.72% of all crashes, Injury Crashes (37,823) accounted for 29.77%, and Property Damage Only (PDO) Crashes (88,322) accounted for 69.51%.

Table 2 – 1
Crash Severity by First Harmful Event Statewide

Eine Hannell Enant Tons		Number o	of Crashes		Number o	of Persons
First Harmful Event Type	Total	Fatal	Injury	PDO	Killed	Injured
Collision with Motor Vehicle in Transport	94,752	337	27,427	66,988	393	42,370
Overturning	2,625	118	1,661	846	131	2,249
Collision with Pedestrian	1,471	212	1,227	32	216	1,313
Collision with Pedalcyclist	1,407	31	1,291	85	31	1,313
Collision with Animal	2,110	3	198	1,909	3	258
Collision with Fixed Object	12,160	181	3,407	8,572	186	4,197
Collision with Non-fixed Object*	5,461	12	575	4,874	13	678
Vehicle Fire or Explosion	380	1	11	368	1	11
Other Non-collision**	507	6	38	463	6	45
Unknown	6,191	18	1,988	4,185	20	3,040
TOTAL	127,064	919	37,823	88,322	1,000	55,474

<sup>\*</sup>Includes Collision with Parked Vehicles, Trains, Railway Vehicles, and Work Zone Equipment

Table 2 – 2
Crashes by County

Country		Number o	f Crashes	j	Number	of Persons
County	Total	Fatal	Injury	PDO	Killed	Injured
Apache	385	39	107	239	47	180
Cochise	1,291	19	355	917	22	518
Coconino	3,818	37	891	2,890	46	1,346
Gila	812	27	259	526	29	388
Graham	320	8	106	206	8	157
Greenlee	84	1	35	48	1	42
La Paz	364	15	132	217	18	226
Maricopa	93,596	435	26,852	66,309	463	39,131
Mohave	3,107	39	939	2,129	43	1,417
Navajo	1,133	42	347	744	51	561
Pima	11,707	111	4,622	6,974	114	6,733
Pinal	3,977	64	1,191	2,722	71	1,802
Santa Cruz	446	6	77	363	6	120
Yavapai	3,565	51	1,062	2,452	55	1,592
Yuma	2,459	25	848	1,586	26	1,261
TOTAL	127,064	919	37,823	88,322	1,000	55,474

<sup>\*\*</sup>Includes Vehicle Immersion, Jackknife, and Cargo Loss or Shift

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

Eine Hannell Enant Time		Number o	of Crashes		Number o	of Persons
First Harmful Event Type	Total	Fatal	Injury	PDO	Killed	Injured
Collision with Motor Vehicle in Transport	82,184	194	23,676	58,314	213	36,280
Overturning	843	29	619	195	30	734
Collision with Pedestrian	1,341	163	1,150	28	167	1,230
Collision with Pedalcyclist	1,297	25	1,194	78	25	1,209
Collision with Animal	265	0	20	245	0	25
Collision with Fixed Object	8,119	80	2,216	5,823	82	2,648
Collision with Non-fixed Object*	4,279	9	438	3,832	10	518
Vehicle Fire or Explosion	103	0	4	99	0	4
Other Non-collision**	275	2	22	251	2	26
Unknown	6,104	3	1,964	4,137	3	3,004
TOTAL	104,810	505	31,303	73,002	532	45,678
*Includes Collision with Darked Vehicles Trains Daily	av Vahialaa	l Wl- 7 -	na Equipma		<del>-</del>	

<sup>\*</sup>Includes Collision with Parked Vehicles, Trains, Railway Vehicles, and Work Zone Equipment

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

Einet Harmaful Event Tune		Number o	of Crashes		Number o	of Persons
First Harmful Event Type	Total	Fatal	Injury	PDO	Killed	Injured
Collision with Motor Vehicle in Transport	12,568	143	3,751	8,674	180	6,090
Overturning	1,782	89	1,042	651	101	1,515
Collision with Pedestrian	130	49	77	4	49	83
Collision with Pedalcyclist	110	6	97	7	6	104
Collision with Animal	1,845	3	178	1,664	3	233
Collision with Fixed Object	4,041	101	1,191	2,749	104	1,549
Collision with Non-fixed Object*	1,182	3	137	1,042	3	160
Vehicle Fire or Explosion	277	1	7	269	1	7
Other Non-collision**	232	4	16	212	4	19
Unknown	87	15	24	48	17	36
TOTAL	22,254	414	6,520	15,320	468	9,796

<sup>\*</sup>Includes Collision with Parked Vehicles, Trains, Railway Vehicles, and Work Zone Equipment

While Urban Crashes in Arizona (104,810) accounted for 82.49% of all crashes, they accounted for 54.95% of all Fatal Crashes (505) occurring in 2017.

While Rural Crashes in Arizona (22,254) accounted for 17.51% of all crashes, they accounted for 45.05% of all Fatal Crashes (414) occurring in 2017.

<sup>\*\*</sup>Includes Vehicle Immersion, Jackknife, and Cargo Loss or Shift

<sup>\*\*</sup>Includes Vehicle Immersion, Jackknife, and Cargo Loss or Shift

Table 2 – 5 **Analysis by Jurisdiction** 

COUNTIES         Number of Crashes         No. of Persons         Alcohol R           Cities         Total         Fatal         Injury         PDO         Killed         Injured         Crashes         Killed           Apache County         334         38         91         205         46         155         32         12           Eagar         25         1         9         15         1         11         1         0           St. Johns         13         0         2         11         0         3         0         0           Springerville         13         0         5         8         0         11         0         0           TOTAL         385         39         107         239         47         180         33         12           Cochise County         590         12         158         420         13         246         18         6           Benson         84         1         20         63         1         28         3         0           Bisbee         1         0         1         0         0         1         0         0 <th></th>	
Apache County         334         38         91         205         46         155         32         12           Eagar         25         1         9         15         1         11         1         0           St. Johns         13         0         2         11         0         3         0         0           Springerville         13         0         5         8         0         11         0         0            TOTAL         385         39         107         239         47         180         33         12           Cochise County         590         12         158         420         13         246         18         6           Benson         84         1         20         63         1         28         3         0           Bisbee         1         0         1         0         0         1         0         0           Douglas         91         1         20         70         1         24         0         0           Huachuca City         3         0         1         2         0         1         0         0	25 2 0 0 27 12 4 0 0 0 9
Eagar   25	2 0 0 27 12 4 0 0 0 9
St. Johns         13         0         2         11         0         3         0         0           Springerville         13         0         5         8         0         11         0         0           TOTAL         385         39         107         239         47         180         33         12           Cochise County         590         12         158         420         13         246         18         6           Benson         84         1         20         63         1         28         3         0           Bisbee         1         0         1         0         0         1         0         0           Douglas         91         1         20         70         1         24         0         0           Huachuca City         3         0         1         2         0         1         0         0           Sierra Vista         496         5         148         343         7         207         15         3           Tombstone         2         0         1         1         0         1         0         0	0 0 27 12 4 0 0 0 9
Springerville         13         0         5         8         0         11         0         0           TOTAL         385         39         107         239         47         180         33         12           Cochise County         590         12         158         420         13         246         18         6           Benson         84         1         20         63         1         28         3         0           Bisbee         1         0         1         0         0         1         0         0           Douglas         91         1         20         70         1         24         0         0           Huachuca City         3         0         1         2         0         1         0         0           Sierra Vista         496         5         148         343         7         207         15         3           Tombstone         2         0         1         1         0         1         0         0           Willcox         24         0         6         18         0         10         2         0	0 27 12 4 0 0 0 0 9
TOTAL         385         39         107         239         47         180         33         12           Cochise County         590         12         158         420         13         246         18         6           Benson         84         1         20         63         1         28         3         0           Bisbee         1         0         1         0         0         1         0         0           Douglas         91         1         20         70         1         24         0         0           Huachuca City         3         0         1         2         0         1         0         0           Sierra Vista         496         5         148         343         7         207         15         3           Tombstone         2         0         1         1         0         1         0         0           Willcox         24         0         6         18         0         10         2         0           TOTAL         1,431         29         373         1,029         37         607         71         17	12 4 0 0 0 0 9
Cochise County         590         12         158         420         13         246         18         6           Benson         84         1         20         63         1         28         3         0           Bisbee         1         0         1         0         0         1         0         0           Douglas         91         1         20         70         1         24         0         0           Huachuca City         3         0         1         2         0         1         0         0           Sierra Vista         496         5         148         343         7         207         15         3           Tombstone         2         0         1         1         0         1         0         0           Willcox         24         0         6         18         0         10         2         0           TOTAL         1,291         19         355         917         22         518         38         9           Coconino County         1,431         29         373         1,029         37         607         71         17	12 4 0 0 0 0 9 0
Benson         84         1         20         63         1         28         3         0           Bisbee         1         0         1         0         0         1         0         0           Douglas         91         1         20         70         1         24         0         0           Huachuca City         3         0         1         2         0         1         0         0           Sierra Vista         496         5         148         343         7         207         15         3           Tombstone         2         0         1         1         0         1         0         0           Willcox         24         0         6         18         0         10         2         0           TOTAL         1,291         19         355         917         22         518         38         9           Coconino County         1,431         29         373         1,029         37         607         71         17	4 0 0 0 0 9 0
Benson         84         1         20         63         1         28         3         0           Bisbee         1         0         1         0         0         1         0         0           Douglas         91         1         20         70         1         24         0         0           Huachuca City         3         0         1         2         0         1         0         0           Sierra Vista         496         5         148         343         7         207         15         3           Tombstone         2         0         1         1         0         1         0         0           Willcox         24         0         6         18         0         10         2         0           TOTAL         1,291         19         355         917         22         518         38         9           Coconino County         1,431         29         373         1,029         37         607         71         17	4 0 0 0 0 9 0
Benson         84         1         20         63         1         28         3         0           Bisbee         1         0         1         0         0         1         0         0           Douglas         91         1         20         70         1         24         0         0           Huachuca City         3         0         1         2         0         1         0         0           Sierra Vista         496         5         148         343         7         207         15         3           Tombstone         2         0         1         1         0         1         0         0           Willcox         24         0         6         18         0         10         2         0           TOTAL         1,291         19         355         917         22         518         38         9           Coconino County         1,431         29         373         1,029         37         607         71         17	0 0 0 9 0
Douglas         91         1         20         70         1         24         0         0           Huachuca City         3         0         1         2         0         1         0         0           Sierra Vista         496         5         148         343         7         207         15         3           Tombstone         2         0         1         1         0         1         0         0           Willcox         24         0         6         18         0         10         2         0           TOTAL         1,291         19         355         917         22         518         38         9           Coconino County         1,431         29         373         1,029         37         607         71         17	0 0 9 0
Huachuca City         3         0         1         2         0         1         0         0           Sierra Vista         496         5         148         343         7         207         15         3           Tombstone         2         0         1         1         0         1         0         0           Willcox         24         0         6         18         0         10         2         0           TOTAL         1,291         19         355         917         22         518         38         9           Coconino County         1,431         29         373         1,029         37         607         71         17	0 9 0 1
Huachuca City         3         0         1         2         0         1         0         0           Sierra Vista         496         5         148         343         7         207         15         3           Tombstone         2         0         1         1         0         1         0         0           Willcox         24         0         6         18         0         10         2         0           TOTAL         1,291         19         355         917         22         518         38         9           Coconino County         1,431         29         373         1,029         37         607         71         17	9 0 1
Sierra Vista         496         5         148         343         7         207         15         3           Tombstone         2         0         1         1         0         1         0         0           Willcox         24         0         6         18         0         10         2         0           TOTAL         1,291         19         355         917         22         518         38         9           Coconino County         1,431         29         373         1,029         37         607         71         17	0
Tombstone         2         0         1         1         0         1         0         0           Willcox         24         0         6         18         0         10         2         0           TOTAL         1,291         19         355         917         22         518         38         9           Coconino County         1,431         29         373         1,029         37         607         71         17	0
TOTAL         1,291         19         355         917         22         518         38         9           Coconino County         1,431         29         373         1,029         37         607         71         17	1
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Williams         113         0         18         95         0         25         3         0           Parts         20         20         40         20         24         44         20	0
Page         89         2         18         69         2         31         11         2           2 stars         2 stars         4 stars         4 stars         4 stars         4 stars         7 stars         2 stars	2
Sedona         222         1         35         186         1         49         7         0	5
TOTAL 3,818 37 891 2,890 46 1,346 180 21	126
Gila County 541 22 165 354 24 251 41 6	41
<b>Globe</b> 60 3 17 40 3 29 5 0	7
Hayden         1         0         1         0         0         1         0	0
Miami         21         0         10         11         0         14         0         0	0
Payson         189         2         66         121         2         93         13         1	6
Winkelman         0         0         0         0         0         0         0	0
TOTAL 812 27 259 526 29 388 59 7	54
<b>Graham County</b> 124 8 33 83 8 57 8 1	6
Pima 2 0 0 2 0 0 0 0	0
Safford 128 0 50 78 0 68 12 0	13
Thatcher 66 0 23 43 0 32 3 0	1
TOTAL 320 8 106 206 8 157 23 1	20
320 0 100 200 0 137 23 1	20
Greenlee County         51         0         21         30         0         24         2         0	3
Clifton         30         0         13         17         0         16         4         0	4
Duncan         3         1         1         1         2         1         1	0
TOTAL 84 1 35 48 1 42 7 1	7

# **Section 2: – Geographic Location**

Table 2 – 5 **Analysis by Jurisdiction** 

COUNTIES	1	Number of Crashes			No. of Persons		Alcohol Related		
Cities	Total	Fatal	Injury	PDO	Killed	Injured	Crashes	Killed	Injured
La Paz County	283	11	103	169	14	189	13	1	8
Parker	36	3	10	23	3	16	1	0	0
Quartzite	45	1	19	25	1	21	1	0	1
TOTAL	364	15	132	217	18	226	15	1	9

						r -		1	
Maricopa County	6,380	66	1,918	4,396	76	2,750	233	21	154
Avondale	1,517	3	452	1,062	3	652	56	0	42
Buckeye	691	5	184	502	5	282	29	1	17
Cave Creek	59	0	19	40	0	25	6	0	5
Chandler	4,488	9	1,259	3,220	9	1,827	141	3	79
El Mirage	456	3	111	342	3	167	24	1	27
Gila Bend	49	0	9	40	0	13	0	0	0
Gilbert	2,955	7	473	2,475	7	645	88	2	41
Glendale	5,483	21	1,376	4,086	23	2,017	199	10	120
Goodyear	1,010	2	290	718	2	450	46	0	25
Mesa	7,740	36	2,316	5,388	37	3,153	279	13	160
Paradise Valley	159	0	32	127	0	45	9	0	0
Peoria	2,809	8	948	1,853	8	1,424	112	2	86
Phoenix	43,986	230	12,968	30,788	243	19,155	1,308	89	779
Scottsdale	4,149	13	1,247	2,889	13	1,764	179	4	102
Surprise	1,387	4	352	1,031	4	510	49	0	33
Tempe	8,686	24	2,517	6,145	26	3,739	268	14	161
Tolleson	447	1	96	350	1	138	15	0	8
Wickenburg	151	0	25	126	0	33	1	0	1
Youngtown	55	0	19	36	0	23	1	0	0
Guadalupe	248	2	70	176	2	86	14	1	5
Litchfield Park	39	0	10	29	0	13	1	0	1
Queen Creek	497	0	107	390	0	144	12	0	3
Fountain Hills	127	1	45	81	1	65	4	1	3
Carefree	28	0	9	19	0	11	4	0	4
TOTAL	93,596	435	26,852	66,309	463	39,131	3,078	162	1,856

Mohave County	1,318	30	427	861	33	667	59	9	58
Kingman	627	2	154	471	2	224	35	1	18
Lake Havasu City	649	2	204	443	2	288	54	0	37
Bullhead City	502	5	148	349	6	229	36	3	24
Colorado City	11	0	6	5	0	9	0	0	0
TOTAL	3,107	39	939	2,129	43	1,417	184	13	137

Table 2 – 5 **Analysis by Jurisdiction** 

Analysis by Jurisdiction									
COUNTIES	N	lumber o	f Crashe	S	No. of I	Persons	Alc	ohol Rela	ated
Cities	Total	Fatal	Injury	PDO	Killed	Injured	Crashes	Killed	Injured
Navajo County	635	35	199	401	44	341	44	14	48
Holbrook	57	1	19	37	1	26	9	1	5
Show Low	260	4	81	175	4	127	12	0	18
Snowflake	39	0	8	31	0	10	4	0	1
Taylor	34	0	9	25	0	11	1	0	1
Winslow	20	2	4	14	2	7	1	0	0
Pinetop-Lakeside	88	0	27	61	0	39	2	0	1
TOTAL	1,133	42	347	744	51	561	73	15	74
Pima County	3,477	39	1,069	2,369	39	1,561	173	11	106
South Tucson	52	1	19	32	1	24	2	0	1
Tucson	6,680	62	3,180	3,438	65	4,645	462	21	344
Sahuarita	187	5	56	126	5	80	9	2	5
Oro Valley	463	0	136	327	0	187	5	0	2
Marana	848	4	162	682	4	236	21	2	0
TOTAL	11,707	111	4,622	6,974	114	6,733	672	36	458
	,		1,022	-,		- ,			
Pinal County	2,087	47	602	1,438	52	932	101	14	43
Casa Grande	761	3	238	520	3	357	26	1	13
Coolidge	136	2	46	88	2	74	9	0	17
Eloy	135	1	38	96	1	64	6	0	2
Florence	100	3	33	64	3	46	6	2	4
Kearny	2	0	0	2	0	0	1	0	0
Mammoth	0	0	0	0	0	0	0	0	0
Superior	2	0	0	2	0	0	0	0	0
Apache Junction	456	7	147	302	9	212	21	1	15
Maricopa	298	1	87	210	1	117	25	0	10
TOTAL	3,977	64	1,191	2,722	71	1,802	195	18	104
-	- /-	-	, -	,		,		-	-
Santa Cruz County	277	5	49	223	5	67	8	1	5
Nogales	166	1	28	137	1	53	3	0	3
Patagonia	3	0	0	3	0	0	0	0	0
TOTAL	446	6	77	363	6	120	11	1	8
TOTAL	770	U		303		120		•	U
V	4.700	00	F40	4.450	00	700	00	40	00
Yavapai County	1,708	36	513	1,159	39	796	80	10	63
Clarkdale	11	0	7	4	0	8	3	0	4
Cottonwood	260	1	85	174	1	129	15	0	15
Jerome Prospett	6 759	0	100	6	0	0 275	1 27	0	12
Prescott Valley	758	6 3	199	553	6	275	37 17	2	12
Prescott Valley	481 168	1	162 41	316 126	1	238 59	17 9	0	12 2
Chino Valley Camp Verde	139	3	41	92	3		5	0	2
Dewey-Humboldt	34	1	11	22	2	69 18	3	2	2
TOTAL									
IOIAL	3,565	51	1,062	2,452	55	1,592	170	14	112

Table 2 – 5 **Analysis by Jurisdiction** 

COUNTIES	Number of Crashes			No. of Persons		Alcohol Related			
Cities	Total	Fatal	Injury	PDO	Killed	Injured	Crashes	Killed	Injured
Yuma County	657	14	221	422	15	337	39	7	23
Somerton	57	1	12	44	1	16	0	0	0
Yuma	1,527	8	578	941	8	840	75	2	53
Wellton	12	0	4	8	0	5	0	0	0
San Luis	206	2	33	171	2	63	2	0	1
TOTAL	2,459	25	848	1,586	26	1,261	116	9	77

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 2016 and 2017 Apache Coconino **47** 46 36 Mohave 50 Navajo 43 51 53 30 Yavapai 55 40 La Paz Gila 18 29 Greenlee 18 Maricopa 19 1 463 479 Graham Pinal Yuma 8 **71 26** 5 62 18 Pima Cochise 114 2017 Fatalities on top in **bold** 22 112 2016 Fatalities on bottom Santa Cruz 26 Same or Decrease Increase

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Chart 2 – 1 Urban and Rural Crashes by Day of Week



Chart 2 – 2 Urban and Rural Fatal Crashes by Day of Week

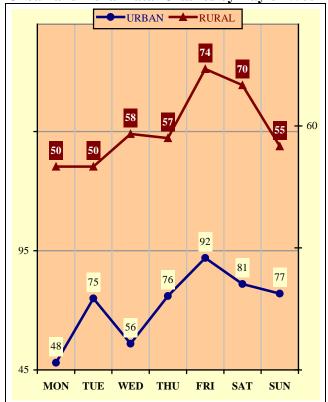
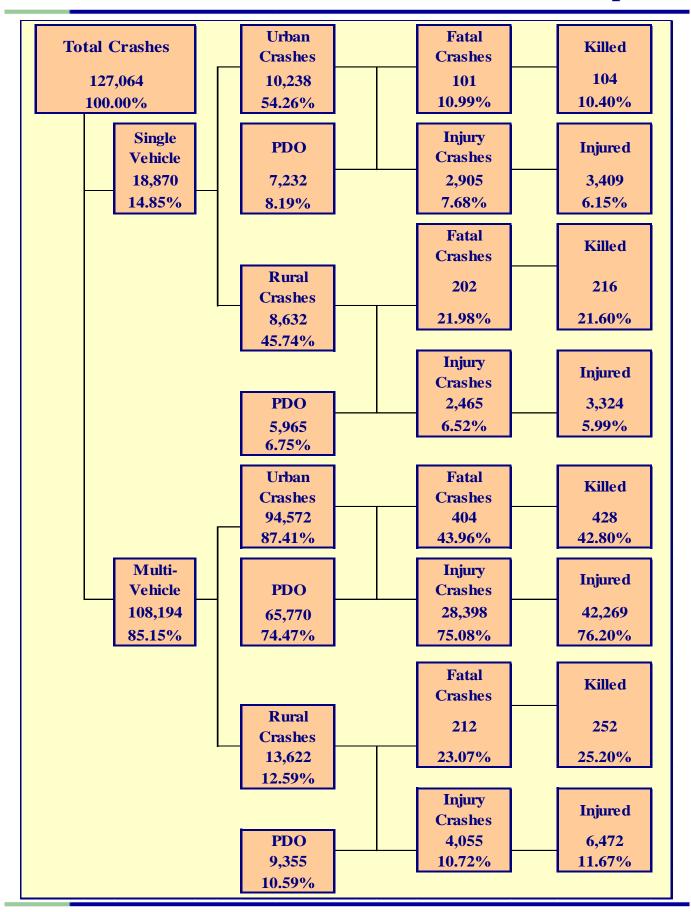


Chart 2 – 3
All Urban and Rural Crashes vs. Urban and Rural Fatal Crashes by Month





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

				Number o	of Crashes			
Manner of Collision Type	Total	Percent of Total Crashes	Fatal	Percent of Fatal Crashes	Injury	Percent of Injury Crashes	PDO	Percent of PDO Crashes
Angle	16,255	15.02%	83	13.47%	5,882	18.12%	10,290	13.70%
Left Turn	17,792	16.44%	63	10.23%	6,880	21.20%	10,849	14.44%
Rear End	48,187	44.54%	79	12.82%	13,859	42.70%	34,249	45.59%
Head-On	1,834	1.70%	71	11.53%	794	2.45%	969	1.29%
Sideswipe (same)	15,774	14.58%	15	2.44%	1,871	5.77%	13,888	18.49%
Sideswipe (opposite)	1,489	1.38%	16	2.60%	350	1.08%	1,123	1.49%
U-Turn	1	0.00%	0	0.00%	0	0.00%	1	0.00%
Other*	6,178	5.71%	279	45.29%	2,693	8.30%	3,206	4.27%
Unknown	684	0.63%	10	1.62%	124	0.38%	550	0.73%
TOTAL	108,194	100.00%	616	100.00%	32,453	100.00%	75,125	100.00%
*Other includes nedestrian and	nedalcyclist	crashes						

\*Other includes pedestrian and pedalcy clist crashes

Table 3 – 2 **Lighting Conditions** 

Type of Lighting		Number o	Number of Persons							
Conditions	Total	Fatal	Injury	PDO	Killed	Injured				
Daylight	90,444	417	26,894	63,133	459	39,379				
Dawn	2,167	28	671	1,468	28	943				
Dusk	3,434	19	1,050	2,365	22	1,601				
Dark - Lighted	23,615	213	7,188	16,214	223	10,551				
Dark - Not Lighted	6,794	151	1,940	4,703	170	2,869				
Dark - Unknown Lighting	606	90	79	437	97	130				
Unknown	4	1	1	2	1	1				
TOTAL	127,064	919	37,823	88,322	1,000	55,474				

Table 3 – 3 **Weather Conditions** 

Type of Weather		Number o	of Crashes		Number of Persons		
Conditions	Total	Fatal	Injury	PDO	Killed	Injured	
Clear	113,225	649	33,836	78,740	708	49,602	
Cloudy	9,517	86	2,908	6,523	89	4,255	
Sleet/Hail	80	2	29	49	3	41	
Rain	3,056	17	842	2,197	20	1,207	
Snow or Blowing Snow	301	2	62	237	2	88	
Severe Crosswinds	85	3	25	57	4	36	
Blowing Sand, Soil, Dirt	83	1	26	56	1	38	
Fog, Smog, Smoke	26	1	6	19	1	8	
Other	51	0	17	34	0	27	
Unknown	640	158	72	410	172	172	
TOTAL	127,064	919	37,823	88,322	1,000	55,474	

Table 3 – 4 **Road Surface Conditions** 

Type of Road Surface		Number o	of Drivers		Number of Persons		
Condition	Total	In Fatal Crashes	In Injury Crashes	In PDO Crashes	Killed	Injured	
Dry	238,052	1,143	72,574	164,335	775	53,200	
Wet	6,804	54	1,906	4,844	36	1,553	
Snow/Slush	459	0	88	371	0	83	
Ice/Frost	254	0	71	183	0	76	
Water (standing or moving)	177	2	54	121	2	50	
Mud, Dirt, Gravel, Sand	564	17	196	351	15	269	
Other	98	2	32	64	2	27	
Unknown	2,715	211	386	2,118	170	216	
TOTAL	249,123	1,429	75,307	172,387	1,000	55,474	

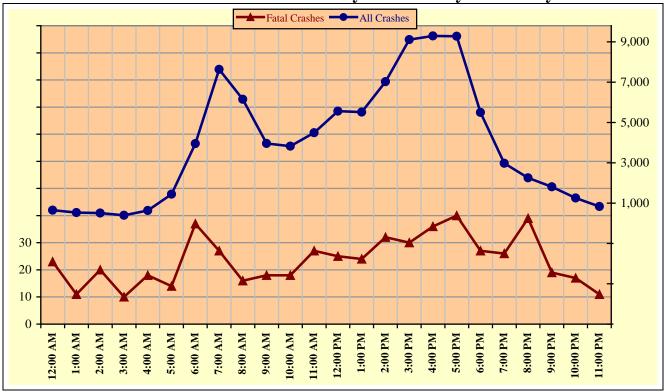
Table 3 – 5
Roadway Grade

V											
Type of		Number (	of Drivers		Number of Persons						
Type of Roadway Grade	Total	In Fatal Crashes	In Injury Crashes	In PDO Crashes	Killed	Injured					
Level	232,214	1,041	70,304	160,869	682	51,218					
Downhill	7,358	91	2,380	4,887	73	2,164					
Uphill	6,405	77	1,989	4,339	65	1,649					
Hillcrest	419	5	145	269	5	123					
Sag/Dip/Bottom	198	4	73	121	4	80					
Unknown	2,529	211	416	1,902	171	240					
TOTAL	249,123	1,429	75,307	172,387	1,000	55,474					

Table 3 – 6
Roadway Alignment

21000011001 12118-11110-10												
Type of		Number (	of Drivers		Number of Persons							
Roadway Alignment	Total	In Fatal Crashes	In Injury Crashes	In PDO Crashes	Killed	Injured						
Straight	232,732	1,039	70,935	160,758	697	51,604						
Curve Left	5,796	102	1,713	3,981	67	1,666						
Curve Right	6,111	73	1,686	4,352	62	1,545						
Unknown	4,484	215	973	3,296	174	659						
TOTAL	249,123	1,429	75,307	172,387	1,000	55,474						

Chart 3 – 1
All Crashes vs. Fatal Crashes by Time of Day - Weekdays



 $\begin{array}{c} \text{Chart 3-2} \\ \text{All Crashes vs. Fatal Crashes by Time of Day - Weekends} \end{array}$ 

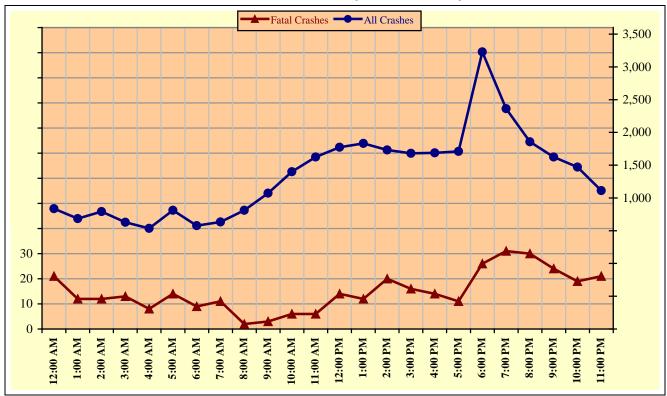


Chart 3 – 3
Crashes by Day of Week



Chart 3 – 4
Fatal Crashes by Day of Week

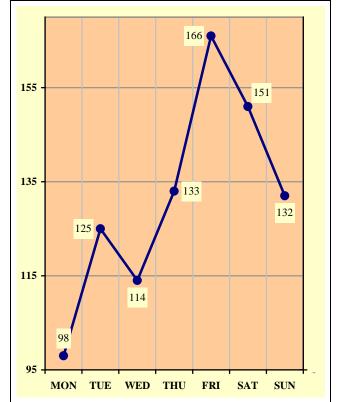
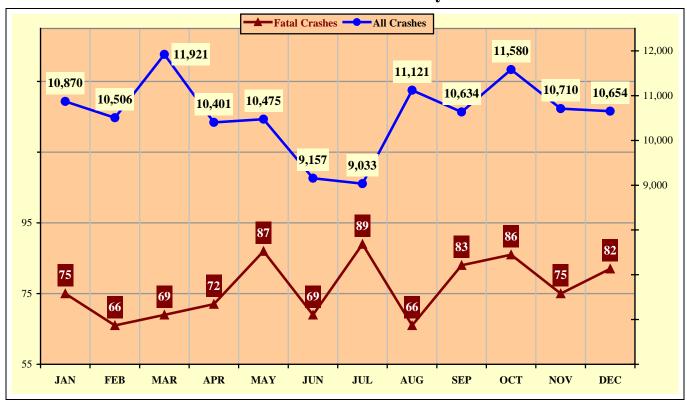


Chart 3 – 5
All Crashes vs. Fatal Crashes by Month



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# **Section 3: – Crash Descriptions**

Table 3 – 7
Crashes by Hour and Day of Week

Hour	Total Cr	ashes	Mon	day	Tues	day	Wedne	es day	Thur	sday	Fric	lay	Satur	rday	Sun	day	Week	days	Week	ends
Beginning	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal
12:00 AM	1,485	44	160	8	143	11	147	2	167	3	191	7	313	8	364	5	648	23	837	21
1:00 AM	1,220	23	134	3	101	1	141	4	135	5	158	1	246	4	305	5	535	11	685	12
2:00 AM	1,297	32	147	1	111	6	100	2	128	5	165	7	281	3	365	8	504	20	793	12
3:00 AM	1,024	23	119	3	98	2	77	1	109	3	112	4	233	4	276	6	396	10	628	13
4:00 AM	1,173	26	167	1	156	0	167	5	146	7	168	6	179	5	190	2	637	18	536	8
5:00 AM	2,252	28	344	2	362	3	342	3	373	3	363	5	253	7	215	5	1,440	14	812	14
6:00 AM	4,532	46	774	3	859	10	822	7	803	11	696	6	308	4	270	5	3,954	37	578	9
7:00 AM	8,269	38	1,402	8	1,746	4	1,670	6	1,590	6	1,227	3	365	4	269	7	7,635	27	634	11
8:00 AM	6,960	18	1,131	2	1,384	5	1,425	1	1,188	4	1,020	4	518	1	294	1	6,148	16	812	2
9:00 AM	5,035	21	690	2	853	2	831	5	797	2	790	7	638	0	436	3	3,961	18	1,074	3
10:00 AM	5,225	24	714	3	737	3	801	4	754	4	819	4	852	3	548	3	3,825	18	1,400	6
11:00 AM	6,119	33	833	3	873	5	874	4	869	10	1,045	5	976	3	649	3	4,494	27	1,625	6
12:00 PM	7,334	39	969	1	1,079	8	1,063	4	1,119	4	1,331	8	1,068	7	705	7	5,561	25	1,773	14
1:00 PM	7,348	36	932	6	949	5	1,164	5	1,077	2	1,393	6	1,062	6	771	6	5,515	24	1,833	12
2:00 PM	8,752	52	1,269	5	1,352	8	1,366	8	1,370	4	1,662	7	996	9	737	11	7,019	32	1,733	20
3:00 PM	10,792	46	1,644	5	1,811	3	1,779	7	1,868	3	2,008	12	993	10	689	6	9,110	30	1,682	16
4:00 PM	10,981	50	1,586	4	1,844	8	1,881	4	1,982	12	2,001	8	970	10	717	4	9,294	36	1,687	14
5:00 PM	10,987	51	1,610	5	1,912	8	1,938	9	1,958	6	1,858	12	989	7	722	4	9,276	40	1,711	11
6:00 PM	8,726	52	1,161	5	1,338	11	1,453	4	1,545	6	1,496	11	1,000	9	733	6	5,497	26	3,229	26
7:00 PM	5,341	57	680	7	708	5	775	5	815	9	988	17	762	8	613	6	2,978	26	2,363	31
8:00 PM	4,113	69	505	11	540	8	584	11	628	9	704	9	626	9	526	12	2,257	39	1,856	30
9:00 PM	3,431	43	416	3	420	5	485	8	486	3	599	6	595	11	430	7	1,807	19	1,624	24
10:00 PM	2,722	36	252	3	303	3	315	4	381	7	565	6	576	7	330	6	1,251	17	1,471	19
11:00 PM	1,946	32	181	4	197	1	212	1	243	5	443	5	406	12	264	4	833	11	1,113	21
TOTAL	127,064	919	17,820	98	19,876	125	20,412	114	20,531	133	21,802	166	15,205	151	11,418	132	94,575	564	32,489	355

Crashes during Weekends accounted for 25.57% of all crashes and 38.59% of Fatal Crashes.

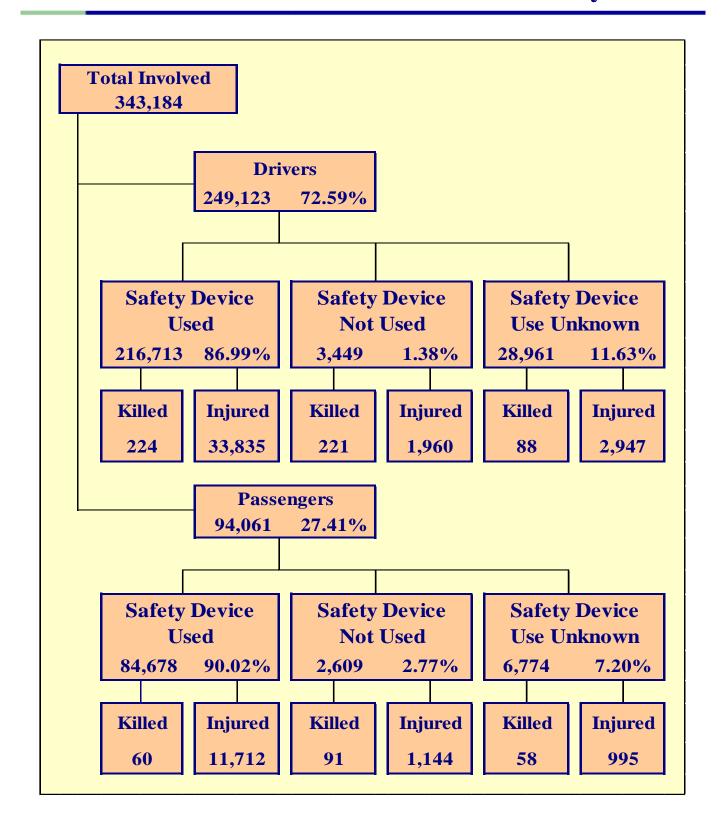


Table 4 – 1
Child Safety Device Usage (less than five years old)

Severity of Injury	Safety Device Used	Device Safety Device		Percent of Safety Device Not Used	Safety Device Use Unknown	Percent of Unknown
No Injury	11,378	91.02%	111	65.29%	199	67.69%
Unknown Injury	199	1.59%	2	1.18%	62	21.09%
Possible Injury	592	4.74%	16	9.41%	15	5.10%
Suspected Minor Injury	286	2.29%	27	15.88%	16	5.44%
Suspected Serious Injury	44	0.35%	12	7.06%	2	0.68%
Fatal Injury	2	0.02%	2	1.18%	0	0.00%
TOTALS	12,501	100.00%	170	100.00%	294	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	180,823	83.44%	1,217	35.29%	14,845	51.26%
Unknown Injury	1,831	0.84%	51	1.48%	11,081	38.26%
Possible Injury	19,517	9.01%	549	15.92%	1,249	4.31%
Suspected Minor Injury	12,590	5.81%	955	27.69%	1,289	4.45%
Suspected Serious Injury	1,728	0.80%	456	13.22%	409	1.41%
Fatal Injury	224	0.10%	221	6.41%	88	0.30%
TOTALS	216,713	100.00%	3,449	100.00%	28,961	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	71,940	84.96%	1,325	50.79%	4,501	66.45%
Unknown Injury	966	1.14%	49	1.88%	1,220	18.01%
Possible Injury	7,011	8.28%	353	13.53%	464	6.85%
Suspected Minor Injury	4,095	4.84%	572	21.92%	398	5.88%
Suspected Serious Injury	606	0.72%	219	8.39%	133	1.96%
Fatal Injury	60	0.07%	91	3.49%	58	0.86%
TOTALS	84,678	100.00%	2,609	100.00%	6,774	100.00%

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

		Number of Drivers											
Gender of Driver	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	Total	Percent of Total					
Male	121,105	55.88%	2,435	70.60%	9,476	32.72%	133,016	53.39%					
Female	95,427	44.03%	992	28.76%	4,651	16.06%	101,070	40.57%					
Unknown	181	0.08%	22	0.64%	14,834	51.22%	15,037	6.04%					
TOTAL	216,713	100.00%	3,449	100.00%	28,961	100.00%	249,123	100.00%					

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

			<b>v</b>	Number of		,		
Driver Age Group	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	Total	Percent of Total
15 & Under	246	0.11%	30	0.87%	34	0.12%	310	0.12%
16	2,797	1.29%	45	1.30%	152	0.52%	2,994	1.20%
17	4,568	2.11%	76	2.20%	246	0.85%	4,890	1.96%
18	5,937	2.74%	119	3.45%	346	1.19%	6,402	2.57%
19	6,248	2.88%	122	3.54%	347	1.20%	6,717	2.70%
20	6,246	2.88%	113	3.28%	355	1.23%	6,714	2.70%
21	6,467	2.98%	138	4.00%	377	1.30%	6,982	2.80%
22	6,134	2.83%	112	3.25%	326	1.13%	6,572	2.64%
23	6,117	2.82%	110	3.19%	387	1.34%	6,614	2.65%
24	5,768	2.66%	118	3.42%	382	1.32%	6,268	2.52%
25-34	48,734	22.49%	897	26.01%	3,049	10.53%	52,680	21.15%
35-44	37,027	17.09%	507	14.70%	2,118	7.31%	39,652	15.92%
45-54	32,535	15.01%	451	13.08%	1,821	6.29%	34,807	13.97%
55-64	24,864	11.47%	305	8.84%	1,265	4.37%	26,434	10.61%
65-74	14,482	6.68%	167	4.84%	650	2.24%	15,299	6.14%
75 & Older	7,637	3.52%	90	2.61%	371	1.28%	8,098	3.25%
Unknown	906	0.42%	49	1.42%	16,735	57.78%	17,690	7.10%
TOTAL	216,713	100.00%	3,449	100.00%	28,961	100.00%	249,123	100.00%

# **Section 5 Motor Vehicle and Driver Descriptions**

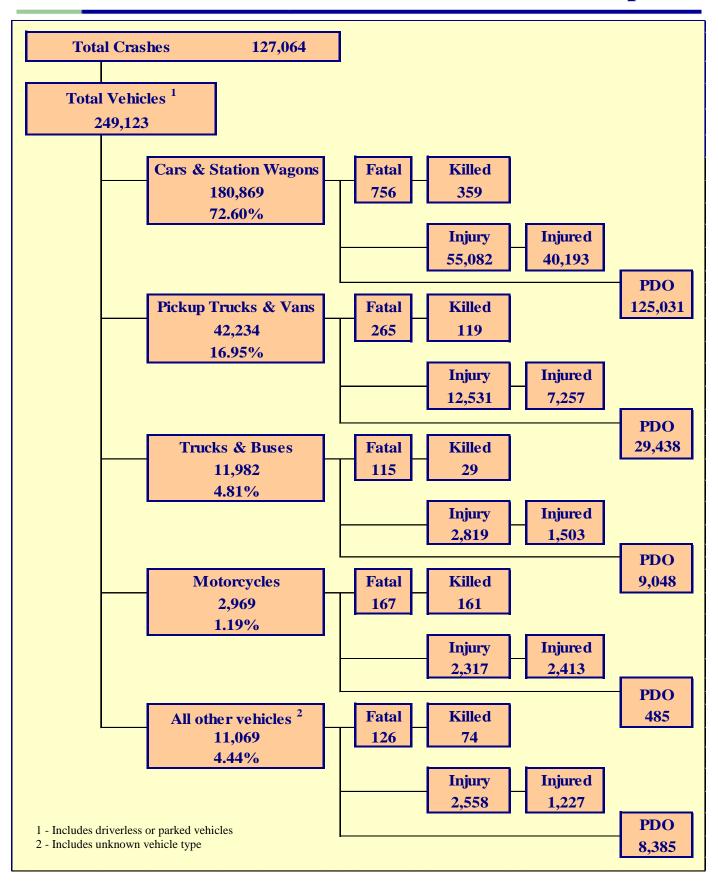


Table 5 – 1 **Arizona Motor Vehicle Registrations** 

	· · · · · · · · · · · · · · · · · · ·			
Privately Owned Vehicles	5,096,093			
Commercial Vehicles	537,364			
Buses and Taxis	2,009			
Motorcycles	207,610			
Mopeds	292			
TOTAL	5,843,368			
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Source: MVD - MV988 MV630419, Currently Registered Vehicles by County Listing, dated 12/31/2017.

		Nun	nber of Vehi	icles	
Motor Vehicle Type	Total	Percent of Total	In Fatal Crashes	In Injury Crashes	In PDO Crashes
Passenger Cars (Sedans, Convertibles, etc.)	127,980	51.372%	464	38,997	88,519
Station Wagons	52,889	21.230%	292	16,085	36,512
Pickup Trucks	38,332	15.387%	253	11,228	26,851
Vans	3,902	1.566%	12	1,303	2,587
Truck Tractor (with or without Semi-Trailer)	2,525	1.014%	66	567	1,892
Concrete Mixer Trucks	55	0.022%	0	14	41
Dump Trucks	223	0.090%	2	50	171
Garbage Trucks	112	0.045%	0	27	85
Tanker Trucks	46	0.018%	1	8	37
Wrecker or Tow Trucks	163	0.065%	0	51	112
Other Truck Combinations	7,904	3.173%	38	1,862	6,004
School Bus	189	0.076%	4	43	142
Commercial or Non-Commercial Bus	765	0.307%	4	197	564
Motorcycle (two or three wheel)	2,969	1.192%	167	2,317	485
All Terrain Vehicle or Cycle	192	0.077%	21	109	62
Moped	21	0.008%	3	18	0
Recreational Vehicle	210	0.084%	2	56	152
Motor Home or House Car	126	0.051%	4	28	94
Fire Trucks	41	0.016%	0	7	34
Ambulances	49	0.020%	0	12	37
Other Types Of Vehicles	195	0.078%	5	91	99
Vehicle Type Unknown	10,235	4.108%	91	2,237	7,907
TOTAL	249,123	100.00%	1,429	75,307	172,387

Table 5 – 3
Hit and Run Drivers Involved in Crashes

Hit and Run		Number o	Number of Persons			
	Total	Fatal	Injury	PDO	Killed	Injured
Yes	15,014	64	2,900	12,050	65	3,683
No	112,050	855	34,923	76,272	935	51,791
TOTAL	127,064	919	37,823	88,322	1,000	55,474

Table 5 – 4 **Gender of Drivers Involved in Crashes** 

Gender of	Number of Drivers										
Driver	Total	Percent of Total	In Fatal Crashes	Percent of Fatal	In Injury Crashes	Percent of Injury	In PDO Crashes	Percent of PDO			
Male	133,013	53.39%	949	66.41%	40,574	53.88%	91,490	53.07%			
Female	101,072	40.57%	360	25.19%	32,382	43.00%	68,330	39.64%			
Unknown	15,038	6.04%	120	8.40%	2,351	3.12%	12,567	7.29%			
TOTAL	249,123	100.00%	1,429	100.00%	75,307	100.00%	172,387	100.00%			

Table 5 – 5
License Status of Drivers Involved in Crashes

Electific Status of Billyers Involved in Clashes												
License		Number of Drivers										
Status of Driver	Total	Percent of Total	In Fatal Crashes	Percent of Fatal	In Injury Crashes	Percent of Injury	In PDO Crashes	Percent of PDO				
Arizona License	195,914	78.64%	1,045	73.13%	61,249	81.33%	133,620	77.51%				
All Others*	53,209	21.36%	384	26.87%	14,058	18.67%	38,767	22.49%				
TOTAL	249,123	100.00%	1,429	100.00%	75,307	100.00%	172,387	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

Tubbengerb Timed and Injured by Tige and Gender											
Age of		Passenge	ers Killed		Passengers Injured						
Passenger	Total	Male	Female	Gender Unknown	Total	Male	Female	Gender Unknown			
0-4	4	2	2	0	812	430	382	0			
5-9	9	4	5	0	1,072	533	539	0			
10-14	9	4	5	0	1,293	549	744	0			
15-19	26	17	9	0	1,990	763	1,227	0			
20-24	25	14	11	0	1,492	578	914	0			
25-34	34	26	8	0	1,909	728	1,181	0			
35-44	21	8	13	0	1,234	388	846	0			
45-54	18	9	9	0	1,241	406	835	0			
55-64	22	9	13	0	1,015	258	757	0			
65-74	16	3	13	0	793	195	598	0			
75 & Older	23	11	12	0	579	148	431	0			
Unknown	2	0	1	1	421	153	234	34			
TOTAL	209	107	101	1	13,851	5,129	8,688	34			

		of Drivers		Passengers
Motor Vehicle Type	Killed	Injured	Killed	Injured
Passenger Cars (Sedans, Convertibles, etc.)	155	21,368	81	7,175
Station Wagons	78	8,107	45	3,543
Pickup Trucks	79	4,680	35	1,673
Vans	3	560	2	344
Truck Tractor (with or without Semi-Trailer)	11	170	1	39
Concrete Mixer Trucks	0	7	0	0
Dump Trucks	1	14	0	5
Garbage Trucks	0	11	0	1
Tanker Trucks	0	1	0	0
Wrecker or Tow Trucks	0	10	0	5
Other Truck Combinations	11	690	3	332
School Bus	1	5	0	19
Commercial or Non-Commercial Bus	1	30	0	164
Motorcycle (two or three wheel)	150	2,261	11	152
All Terrain Vehicle or Cycle	15	86	5	57
Moped	3	18	0	0
Recreational Vehicle	0	19	0	11
Motor Home or House Car	1	9	0	8
Fire Trucks	0	0	0	0
Ambulances	0	1	0	6
Other Types Of Vehicles	3	66	0	7
Vehicle Type Unknown	21	629	26	310
TOTAL	533	38,742	209	13,851

Age of		rivers Kill				Injured	
Age of Driver	Total	Male	Female	Total	Male	Female	Gender Unknown
0-4	0	0	0	0	0	0	0
5-9	0	0	0	0	0	0	0
10-14	0	0	0	20	13	7	0
15-19	20	18	2	3,158	1,496	1,662	0
20-24	62	52	10	5,301	2,624	2,677	0
25-34	97	70	27	8,716	4,304	4,412	0
35-44	86	68	18	6,435	3,147	3,288	0
45-54	86	76	10	5,972	2,966	3,006	0
55-64	91	72	19	4,718	2,481	2,237	0
65-74	49	40	9	2,686	1,389	1,297	0
75 & Older	42	32	10	1,581	805	776	0
Unknown	0	0	0	155	89	30	36
TOTAL	533	428	105	38,742	19,314	19,392	36

Table 5 – 9
Licensed Drivers in Arizona by Age

		iccliscu			v S		
Driver	Male	Percent of	Female	Percent of	Total	Percent of	Cumulative
Age Group	Number	Male	Number	Female	Number	Total	Percent
16	10,940	0.42%	11,139	0.43%	22,079	0.42%	0.42%
17	20,388	0.78%	19,599	0.75%	39,987	0.77%	1.19%
18	28,289	1.08%	26,053	1.00%	54,342	1.04%	2.23%
19	33,212	1.27%	30,770	1.18%	63,982	1.23%	3.45%
20	36,366	1.39%	33,184	1.27%	69,550	1.33%	4.79%
21	38,550	1.47%	36,352	1.40%	74,902	1.43%	6.22%
22	39,949	1.53%	38,001	1.46%	77,950	1.49%	7.71%
23	41,434	1.58%	39,880	1.53%	81,314	1.56%	9.27%
24	42,634	1.63%	41,179	1.58%	83,813	1.61%	10.88%
25-34	465,735	17.80%	459,941	17.65%	925,676	17.73%	28.61%
35-44	469,633	17.95%	458,357	17.59%	927,990	17.77%	46.38%
45-54	473,233	18.09%	453,473	17.40%	926,706	17.75%	64.13%
55-64	445,606	17.03%	460,217	17.66%	905,823	17.35%	81.47%
65-74	294,330	11.25%	314,349	12.06%	608,679	11.66%	93.13%
75 & older	175,541	6.71%	183,069	7.03%	358,610	6.87%	100.00%
TOTALS	2,615,840	100.00%	2,605,563	100.00%	5,221,403	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 1/2/2018.

Table 5 – 10 **Driver Involvement by Age** 

Direct involvement by Age										
D				Number of	f Drivers					
Driver Age Group	Total	Percent of Total	In Fatal Crashes	Percent of Fatal	In Injury Crashes	Percent of Injury	In PDO Crashes	Percent of PDO		
15 & Under	310	0.12%	5	0.35%	118	0.16%	187	0.11%		
16	2,994	1.20%	6	0.42%	845	1.12%	2,143	1.24%		
17	4,890	1.96%	16	1.12%	1,418	1.88%	3,456	2.00%		
18	6,402	2.57%	29	2.03%	1,922	2.55%	4,451	2.58%		
19	6,717	2.70%	30	2.10%	2,076	2.76%	4,611	2.67%		
20	6,714	2.70%	27	1.89%	2,061	2.74%	4,626	2.68%		
21	6,982	2.80%	36	2.52%	2,061	2.74%	4,885	2.83%		
22	6,572	2.64%	29	2.03%	1,982	2.63%	4,561	2.65%		
23	6,615	2.66%	35	2.45%	2,099	2.79%	4,481	2.60%		
24	6,269	2.52%	36	2.52%	1,947	2.59%	4,286	2.49%		
25-34	52,675	21.14%	269	18.82%	16,242	21.57%	36,164	20.98%		
35-44	39,651	15.92%	205	14.35%	12,264	16.29%	27,182	15.77%		
45-54	34,807	13.97%	200	14.00%	11,074	14.71%	23,533	13.65%		
55-64	26,434	10.61%	189	13.23%	8,538	11.34%	17,707	10.27%		
65-74	15,301	6.14%	115	8.05%	4,887	6.49%	10,299	5.97%		
75 & Older	8,099	3.25%	72	5.04%	2,740	3.64%	5,287	3.07%		
Unknown	17,691	7.10%	130	9.10%	3,033	4.03%	14,528	8.43%		
TOTAL	249,123	100.00%	1,429	100.00%	75,307	100.00%	172,387	100.00%		

## Section 5: - Motor Vehicle and Driver Descriptions

Table 5 – 11 **Driver Violations** 

				Number	of Drive	rs		
Type of Violation or Behavior	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	124,012	49.78%	532	37.23%	38,230	50.77%	85,250	49.45%
Speed too Fast for Conditions	43,653	17.52%	173	12.11%	13,603	18.06%	29,877	17.33%
Exceeded Lawful Speed	1,041	0.42%	32	2.24%	422	0.56%	587	0.34%
Failed to Yield Right-Of-Way	21,981	8.82%	101	7.07%	8,154	10.83%	13,726	7.96%
Followed Too Closely	7,794	3.13%	8	0.56%	1,995	2.65%	5,791	3.36%
Ran Stop Sign	1,136	0.46%	10	0.70%	510	0.68%	616	0.36%
Disregarded Traffic Signal	5,555	2.23%	30	2.10%	2,516	3.34%	3,009	1.75%
Made Improper Turn	5,003	2.01%	13	0.91%	1,278	1.70%	3,712	2.15%
Drove in Opposing Lane	1,242	0.50%	72	5.04%	484	0.64%	686	0.40%
Drove Left of Center Line	7	0.00%	1	0.07%	2	0.00%	4	0.00%
Passed in No-Passing Zone	100	0.04%	2	0.14%	26	0.03%	72	0.04%
Unsafe Lane Change	8,513	3.42%	13	0.91%	1,165	1.55%	7,335	4.25%
Failed to Keep in Proper Lane	5,335	2.14%	73	5.11%	1,382	1.84%	3,880	2.25%
Crossed Median	2	0.00%	0	0.00%	2	0.00%	0	0.00%
Aggressive Driving	1	0.00%	0	0.00%	1	0.00%	0	0.00%
Other	7,341	2.95%	64	4.48%	1,787	2.37%	5,490	3.18%
Unknown	16,407	6.59%	305	21.34%	3,750	4.98%	12,352	7.17%
TOTAL	249,123	100.00%	1,429	100.00%	75,307	100.00%	172,387	100.00%

Table 5 – 12 **Driver Physical Condition** 

		•		Number	of Driver	S		
Type of Condition	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	219,803	88.23%	788	55.14%	66,819	88.73%	152,196	88.29%
Alcohol	4,675	1.88%	225	15.75%	1,924	2.55%	2,526	1.47%
Illegal Drugs	845	0.34%	81	5.67%	371	0.49%	393	0.23%
Medications	167	0.07%	0	0.00%	65	0.09%	102	0.06%
Marijuana	3	0.00%	1	0.07%	0	0.00%	2	0.00%
Illness or Physical Impairment	969	0.39%	6	0.42%	505	0.67%	458	0.27%
Fell Asleep or Fatigued	1,782	0.72%	10	0.70%	678	0.90%	1,094	0.63%
Other	1,485	0.60%	19	1.33%	387	0.51%	1,079	0.63%
Unknown	19,394	7.78%	299	20.92%	4,558	6.05%	14,537	8.43%
TOTAL	249,123	100.00%	1,429	100.00%	75,307	100.00%	172,387	100.00%

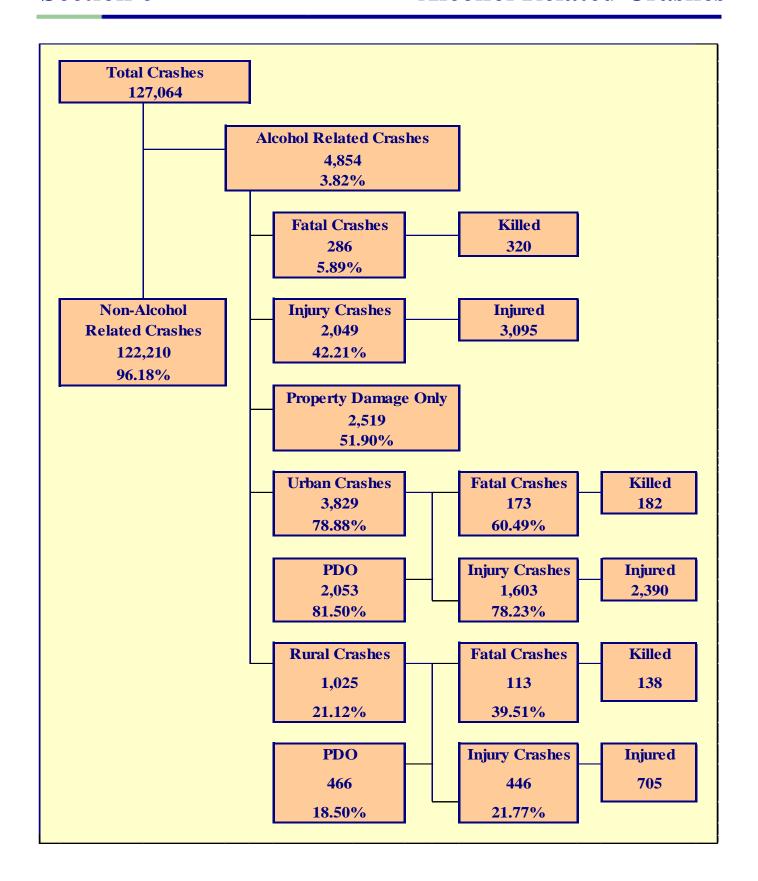
Table 5 – 13

Distracted Driving Behavior

				Number (	of Drivers			
Type of Distraction	Total	Percent of Total	In Fatal Crashes	Percent of Fatal	In Injury Crashes	Percent of Injury	In PDO Crashes	Percent of PDO
Not Distracted	190,257	76.37%	655	45.84%	57,465	76.31%	132,137	76.65%
Talking on Hands Free Device	199	0.08%	1	0.07%	65	0.09%	133	0.08%
Talking on Hand Held Device	454	0.18%	3	0.21%	148	0.20%	303	0.18%
Passenger	944	0.38%	7	0.49%	372	0.49%	565	0.33%
Other Activity with an Electronic Device	1,416	0.57%	3	0.21%	476	0.63%	937	0.54%
Manually Operating an Electronic Device	846	0.34%	1	0.07%	271	0.36%	574	0.33%
Other Inside the Vehicle (eating, drinking, etc.)	3,109	1.25%	8	0.56%	1,002	1.33%	2,099	1.22%
Outside the Vehicle (includes unspecified distractions)	2,712	1.09%	10	0.70%	793	1.05%	1,909	1.11%
Distracted Unknown Reason	13	0.01%	0	0.00%	3	0.00%	10	0.01%
Unknown	49,173	19.74%	741	51.85%	14,712	19.54%	33,720	19.56%
TOTAL	249,123	100.00%	1,429	100.00%	75,307	100.00%	172,387	100.00%

Table 5 – 14 **Secondary Crashes** 

Secondary		Number o	f Crashes		Number of Persons			
Crash	Total	Fatal	Injury	PDO	Killed	Injured		
Yes	3,052	12	1,053	1,987	14	1,728		
No	110,692	707	32,643	77,342	769	47,375		
Unknown	13,320	200	4,127	8,993	217	6,371		
TOTAL	127,064	919	37,823	88,322	1,000	55,474		



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 2017** 

Fatalities	\$1,856,000,000
Suspected Serious Injurie	s \$195,200,000
Suspected Minor Injuries	\$106,000,000
Possible Injuries	\$53,844,000
Property Damage Only	\$10,076,000
TOTAL	\$2,221,120,000

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
2013	5,250	4.88%	282	33.22%	3,529	7.00%
2014	4,918	4.48%	275	35.53%	3,193	6.26%
2015	4,991	4.27%	329	36.68%	3,245	6.04%
2016	4,943	3.89%	302	31.72%	3,327	5.86%
2017	4,854	3.82%	320	32.00%	3,095	5.58%

Table 6 – 3
Manner of Collision in Alcohol Related Crashes

				Number o	of Crashe	S		
Manner of Collision Type	Total	Percent of All Crashes	Fatal	Percent of Fatal Crashes	Injury	Percent of Injury Crashes	PDO	Percent of PDO Crashes
Angle	468	16.07%	21	11.48%	247	19.10%	200	13.92%
Left Turn	334	11.47%	8	4.37%	188	14.54%	138	9.60%
Rear End	1,180	40.51%	22	12.02%	485	37.51%	673	46.83%
Head-On	191	6.56%	22	12.02%	84	6.50%	85	5.92%
Sideswipe (same)	283	9.72%	7	3.83%	78	6.03%	198	13.78%
Sideswipe (opposite)	88	3.02%	3	1.64%	35	2.71%	50	3.48%
U-Turn	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Other*	354	12.15%	99	54.10%	170	13.15%	85	5.92%
Unknown	15	0.51%	1	0.55%	6	0.46%	8	0.56%
TOTAL	2,913	100.00%	183	100.00%	1,293	100.00%	1,437	100.00%

Note: Includes only multi-vehicle alcohol related crashes

\*Other includes pedestrian and pedalcy clist crashes

Table 6 – 4 **Alcohol Related Crashes by First Harmful Event** 

Einst Harmaful Evant Tuna		Number o	of Crashes		Number of Persons	
First Harmful Event Type	Total	Fatal	Injury	PDO	Killed	Injured
Collision with Motor Vehicle in Transport	2,214	81	997	1,136	106	1,787
Overturning	242	35	158	49	41	223
Collision with Pedestrian	204	84	120	0	84	127
Collision with Pedalcyclist	27	5	21	1	5	24
Collision with Animal	6	1	4	1	1	5
Collision with Fixed Object	1,665	72	593	1,000	74	730
Collision with Non-fixed Object*	330	5	88	237	6	105
Vehicle Fire or Explosion	1	0	0	1	0	0
Other Non-collision**	6	2	1	3	2	1
Unknown	159	1	67	91	1	93
TOTAL	4,854	286	2,049	2,519	320	3,095

<sup>\*</sup>Includes Collision with Parked Vehicles, Trains, Railway Vehicles, and Work Zone Equipment

Table 6 – 5
Alcohol Related Crashes by Vehicle Type

THEOROT REMITED			er of Vehicl	es	
Motor Vehicle Type	Total	Percent of Total	In Fatal Crashes	In Injury Crashes	In PDO Crashes
Passenger Cars (Sedans, Convertibles, etc.)	2,572	55.016%	80	1,006	1,486
Station Wagons	847	18.118%	31	360	456
Pickup Trucks	857	18.332%	50	358	449
Vans	44	0.941%	3	16	25
Truck Tractor (with or without Semi-Trailer)	3	0.064%	1	0	2
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	0	0.000%	0	0	0
Wrecker or Tow Trucks	1	0.021%	0	1	0
Other Truck Combinations	74	1.583%	5	30	39
School Bus	0	0.000%	0	0	0
Commercial or Non-Commercial Bus	1	0.021%	0	1	0
Motorcycle (two or three wheel)	154	3.294%	44	102	8
All Terrain Vehicle or Cycle	24	0.513%	5	18	1
Moped	0	0.000%	0	0	0
Recreational Vehicle	2	0.043%	0	1	1
Motor Home or House Car	1	0.021%	1	0	0
Fire Trucks	0	0.000%	0	0	0
Ambulances	0	0.000%	0	0	0
Other Types Of Vehicles	2	0.043%	1	1	0
Vehicle Type Unknown	93	1.989%	4	30	59
TOTAL	4,675	100.00%	225	1,924	2,526

<sup>\*\*</sup>Includes Vehicle Immersion, Jackknife, and Cargo Loss or Shift

Table 6 – 6
Lighting Conditions in Alcohol Related Crashes

Type of Lighting		Number o	of Crashes		Number o	of Persons
Conditions	Total	Fatal	Injury	PDO	Killed	Injured
Daylight	1,398	69	621	708	78	962
Dawn	63	6	34	23	6	48
Dusk	149	4	65	80	6	103
Dark - Lighted	2,469	112	995	1,362	119	1,478
Dark - Not Lighted	728	67	327	334	82	485
Dark - Unknown Lighting	47	28	7	12	29	19
Unknown	0	0	0	0	0	0
TOTAL	4,854	286	2,049	2,519	320	3,095

Table 6 – 7

Road Surface Conditions in Alcohol Related Crashes

		Number (	of Drivers		Number of Persons			
Type of Road Surface Condition	Total	In Fatal Crashes	In Injury Crashes	In PDO Crashes	Killed	Injured		
Dry	4,404	177	1,830	2,397	259	2,902		
Wet	178	7	67	104	15	131		
Snow/Slush	3	0	1	2	0	3		
Ice/Frost	0	0	0	0	0	0		
Water (standing or moving)	3	0	2	1	0	3		
Mud, Dirt, Gravel, Sand	37	6	19	12	6	34		
Other	1	0	1	0	0	1		
Unknown	49	35	4	10	40	21		
TOTAL	4,675	225	1,924	2,526	320	3,095		

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

Gender of				Number of	f Drivers									
Driver	Total	Percent of Total	In Fatal Crashes	Percent of Fatal	In Injury Crashes	Percent of Injury	In PDO Crashes	Percent of PDO						
Male	3,314	70.89%	187	83.11%	1,372	71.31%	1,755	69.48%						
Female	1,329	28.43%	35	15.56%	544	28.27%	750	29.69%						
Unknown	32	0.68%	3	1.33%	8	0.42%	21	0.83%						
TOTAL	4,675	100.00%	225	100.00%	1,924	100.00%	2,526	100.00%						

In total crashes across the state, 53.39% of the drivers were males. When alcohol was involved, males accounted for 70.89% of the drivers.

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

Driver		<u> </u>			of Drivers			
Age Group	Total	Percent of Total	In Fatal Crashes	Percent of Fatal	In Injury Crashes	Percent of Injury	In PDO Crashes	Percent of PDO
15 & Under	2	0.04%	0	0.00%	0	0.00%	2	0.08%
16	7	0.15%	1	0.44%	0	0.00%	6	0.24%
17	34	0.73%	3	1.33%	15	0.78%	16	0.63%
18	65	1.39%	3	1.33%	30	1.56%	32	1.27%
19	91	1.95%	5	2.22%	36	1.87%	50	1.98%
20	100	2.14%	1	0.44%	41	2.13%	58	2.30%
21	178	3.81%	8	3.56%	71	3.69%	99	3.92%
22	204	4.36%	7	3.11%	86	4.47%	111	4.39%
23	210	4.49%	4	1.78%	89	4.63%	117	4.63%
24	220	4.71%	10	4.44%	84	4.37%	126	4.99%
25-34	1,486	31.79%	63	28.00%	595	30.93%	828	32.78%
35-44	829	17.73%	43	19.11%	359	18.66%	427	16.90%
45-54	635	13.58%	35	15.56%	270	14.03%	330	13.06%
55-64	374	8.00%	26	11.56%	152	7.90%	196	7.76%
65-74	143	3.06%	8	3.56%	68	3.53%	67	2.65%
75 & Older	36	0.77%	2	0.89%	15	0.78%	19	0.75%
Unknown	61	1.30%	6	2.67%	13	0.68%	42	1.66%
TOTAL	4,675	100.00%	225	100.00%	1,924	100.00%	2,526	100.00%

Time of Day	Total	Weekday	Weekend*
Daytime**	1,387	866	521
Nighttime	3,467	1,404	2,063
Total	4,854	2,270	2,584

<sup>\*</sup>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.

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	119	36	1,953	3	4	853	2,968
Unknown Injury	8	2	37	0	1	136	184
Possible Injury	51	4	267	4	0	167	493
Suspected Minor Injury	134	3	318	18	1	188	662
Suspected Serious Injury	84	3	58	8	1	65	219
Fatal Injury	90	0	23	11	0	25	149
TOTALS	486	48	2,656	44	7	1,434	4,675

<sup>\*\*</sup>Daytime refers to the hours between 6:00 a.m. and 6:00 p.m.

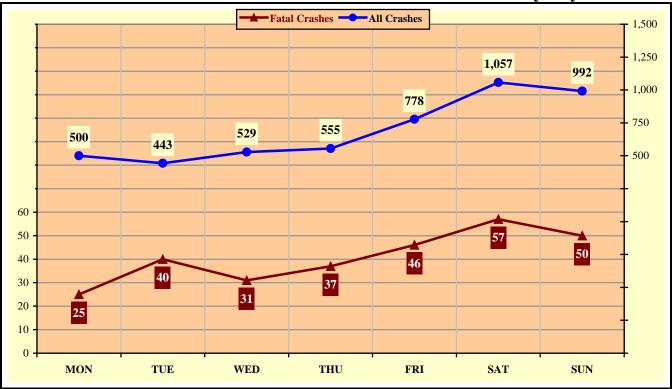
Table 6 – 12
Persons Killed and Injured in Alcohol Related Crashes

Age of		ersons Kill	•			ns Injured	
Victim	Total	Male	Female	Total	Male	Female	Gender Unknown
0-4	1	1	0	27	12	15	0
5-9	3	3	0	39	20	19	0
10-14	1	1	0	55	18	37	0
15-19	16	11	5	229	136	93	0
20-24	40	31	9	492	301	191	0
25-34	71	57	14	792	520	272	0
35-44	54	36	18	525	312	213	0
45-54	66	54	12	430	254	176	0
55-64	42	36	6	285	167	118	0
65-74	21	17	4	124	81	43	0
75 & Older	5	3	2	45	23	22	0
Unknown	0	0	0	52	25	19	8
TOTAL	320	250	70	3,095	1,869	1,218	8

Table 6 – 13
Alcohol Related Crashes by County

Theorem Related Crushes by County											
Country		Number o	of Crashes		Number	of Persons					
County	Total	Fatal	Injury	PDO	Killed	Injured					
Apache	33	8	12	13	12	27					
Cochise	38	8	16	14	9	26					
Coconino	180	16	83	81	21	126					
Gila	59	6	35	18	7	54					
Graham	23	1	13	9	1	20					
Greenlee	7	1	6	0	1	7					
La Paz	15	1	7	7	1	9					
Maricopa	3,078	149	1,250	1,679	162	1,856					
Mohave	184	12	90	82	13	137					
Navajo	73	10	37	26	15	74					
Pima	672	36	305	331	36	458					
Pinal	195	17	68	110	18	104					
Santa Cruz	11	1	6	4	1	8					
Yavapai	170	12	71	87	14	112					
Yuma	116	8	50	58	9	77					
TOTAL	4,854	286	2,049	2,519	320	3,095					

 $\begin{array}{c} {\rm Chart}\, 6-1 \\ {\rm All} \,\, {\bf Alcohol} \,\, {\bf Related} \,\, {\bf Crashes} \,\, {\bf vs.} \,\, {\bf Fatal} \,\, {\bf Alcohol} \,\, {\bf Related} \,\, {\bf Crashes} \,\, {\bf by} \,\, {\bf Day} \,\, {\bf of} \,\, {\bf Week} \end{array}$ 



 $\begin{array}{c} {\bf Chart~6-2} \\ {\bf All~Alcohol~Related~Crashes~vs.~Fatal~Alcohol~Related~Crashes~by~Month} \end{array}$ 



 $\begin{array}{c} {\rm Chart}\, 6-3 \\ {\rm All}\, \, {\rm Alcohol}\, \, {\rm Related}\, \, {\rm Crashes} \, \, {\rm \textbf{-}} \, \, {\rm Weekdays} \end{array}$ 

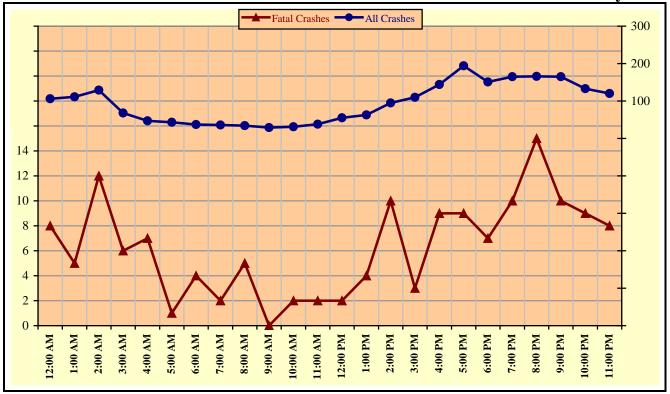
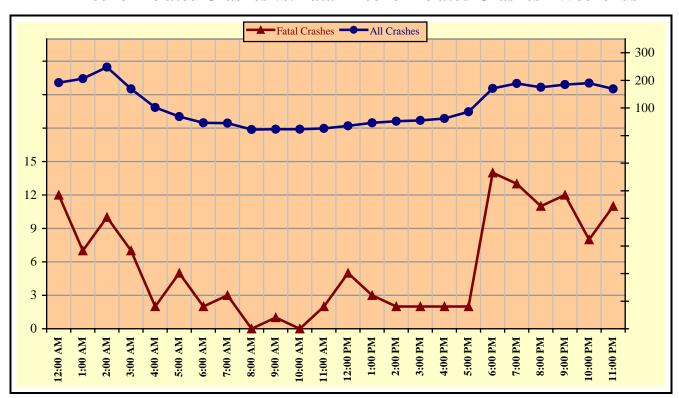


Chart 6 – 4
All Alcohol Related Crashes vs. Fatal Alcohol Related Crashes - Weekends



### **Section 6: – Alcohol Related Crashes**

 $\begin{array}{c} {\rm Table}\ 6-14 \\ {\bf Alcohol}\ {\bf Related}\ {\bf Crashes}\ {\bf by}\ {\bf Hour}\ {\bf and}\ {\bf Day}\ {\bf of}\ {\bf Week} \end{array}$ 

Hour	Total Cr	ashes	Mon	day	Tues	day	Wedn	es day	Thur	sday	Frie	day	Satu	rday	Sun	day	Week	days	Week	ends
Beginning	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal
12:00 AM	296	20	32	5	21	3	29	0	25	3	31	2	84	4	74	3	106	8	190	12
1:00 AM	317	12	28	1	16	0	23	2	36	2	36	1	80	3	98	3	111	5	206	7
2:00 AM	377	22	40	0	21	4	30	2	32	4	46	2	95	3	113	7	129	12	248	10
3:00 AM	237	13	20	1	13	2	12	0	14	1	29	3	67	3	82	3	68	6	169	7
4:00 AM	149	9	9	0	2	0	16	2	14	3	15	2	45	1	48	1	47	7	102	2
5:00 AM	112	6	7	0	4	0	9	0	13	0	17	1	31	2	31	3	43	1	69	5
6:00 AM	83	6	7	0	6	1	9	1	4	0	11	2	22	2	24	0	37	4	46	2
7:00 AM	81	5	4	0	10	1	7	0	3	0	12	1	17	1	28	2	36	2	45	3
8:00 AM	56	5	6	1	2	1	6	0	10	2	10	1	8	0	14	0	34	5	22	0
9:00 AM	52	1	5	0	5	0	9	0	6	0	4	0	11	0	12	1	29	0	23	1
10:00 AM	54	2	5	0	5	1	8	0	8	0	5	1	13	0	10	0	31	2	23	0
11:00 AM	64	4	11	1	8	0	3	0	6	0	10	1	19	1	7	1	38	2	26	2
12:00 PM	90	7	9	0	15	0	8	0	13	1	10	1	17	2	18	3	55	2	35	5
1:00 PM	109	7	14	0	12	2	10	0	9	2	18	0	24	1	22	2	63	4	46	3
2:00 PM	147	12	23	2	12	4	17	3	19	0	24	1	21	1	31	1	95	10	52	2
3:00 PM	165	5	28	0	22	1	20	0	15	0	25	2	31	1	24	1	110	3	55	2
4:00 PM	206	11	29	1	24	4	21	1	28	1	42	2	35	2	27	0	144	9	62	2
5:00 PM	280	11	45	0	38	5	33	3	44	0	34	1	43	1	43	1	194	9	86	2
6:00 PM	322	21	33	1	37	1	40	2	41	3	56	5	63	7	52	2	151	7	171	14
7:00 PM	354	23	40	4	32	3	41	3	52	0	71	8	63	3	55	2	165	10	189	13
8:00 PM	341	26	31	3	41	4	50	3	44	5	63	4	65	2	47	5	166	15	175	11
9:00 PM	350	22	30	1	44	2	52	5	39	2	67	3	66	6	52	3	165	10	185	12
10:00 PM	323	17	23	1	31	1	38	3	41	4	86	1	63	3	41	4	133	9	190	8
11:00 PM	289	19	21	3	22	0	38	1	39	4	56	1	74	8	39	2	120	8	169	11
TOTAL	4,854	286	500	25	443	40	529	31	555	37	778	46	1,057	57	992	50	2,270	150	2,584	136

Crashes during Weekends accounted for 53.23% of all Alcohol Related crashes and 47.55% of Alcohol Related Fatal Crashes.

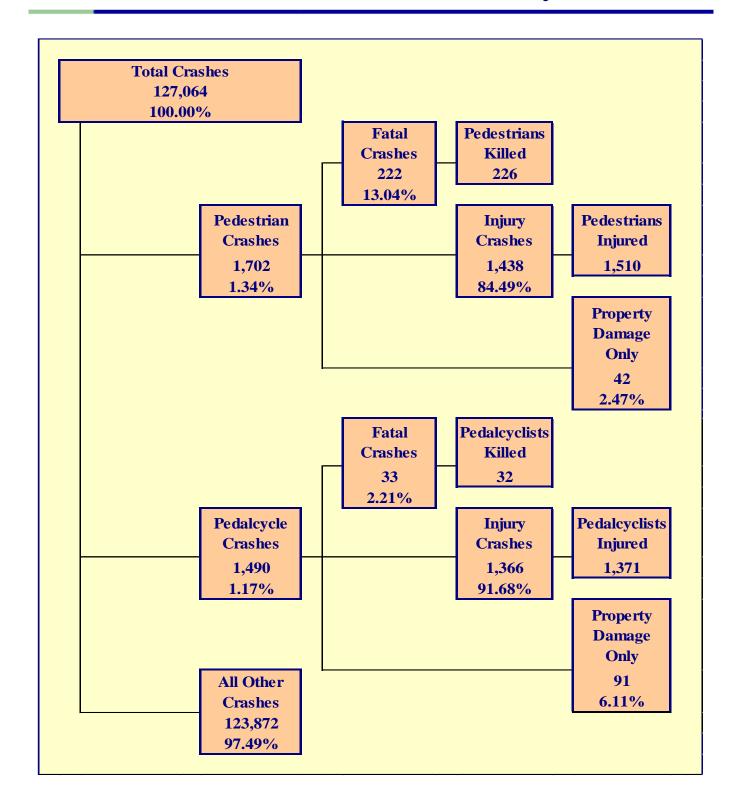


Table 7 – 1
Pedestrians Killed and Injured By Age and Gender

redestrians isincu and injured by rige and Gender											
Age	Ped	estrians K	illed	Pedestrians Injured							
Group	Total	Male	Female	Total	Male	Female	Gender Unknown				
0-4	2	2	0	20	7	13	0				
5-9	4	3	1	46	33	13	0				
10-14	1	0	1	99	56	43	0				
15-19	13	5	8	162	107	55	0				
20-24	16	14	2	159	98	61	0				
25-34	37	26	11	265	166	99	0				
35-44	32	15	17	215	134	81	0				
45-54	48	34	14	203	116	87	0				
55-64	31	25	6	172	104	68	0				
65-74	23	19	4	84	60	24	0				
75 & Older	18	14	4	49	32	17	0				
Unknown	1	1	0	36	16	16	4				
TOTAL	226	158	68	1,510	929	577	4				

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

Category	Total	Urban	Percent of Total	Rural	Percent of Total
Total Crashes	1,702	1,565	91.95%	137	8.05%
Fatal Crashes	222	172	77.48%	50	22.52%
Injury Crashes	1,438	1,355	94.23%	83	5.77%
PDO Crashes	42	38	90.48%	4	9.52%
Pedestrians Killed	226	176	77.88%	50	22.12%
Pedestrians Injured	1,510	1,423	94.24%	87	5.76%

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
2013	1,608	1.49%	160	18.85%	1,366	2.71%
2014	1,569	1.43%	155	20.03%	1,357	2.66%
2015	1,410	1.21%	163	18.17%	1,246	2.32%
2016	1,647	1.30%	193	20.27%	1,462	2.57%
2017	1,702	1.34%	226	22.60%	1,510	2.72%

Table 7 – 4 **Pedestrians Killed by Age and Action** 

Pedestrian				•		Age	Group	of Ped	lestriar	1			
Action	Total	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	124	1	3	1	5	6	11	18	25	19	20	15	0
Walking With Traffic	6	0	0	0	0	1	2	1	1	1	0	0	0
Walking Against Traffic	7	0	0	0	0	2	3	0	1	0	1	0	0
Standing	11	0	0	0	0	0	3	2	3	2	1	0	0
Lying	7	0	0	0	0	1	1	2	1	2	0	0	0
Getting on/off Vehicle	0	0	0	0	0	0	0	0	0	0	0	0	0
Working on/pushing Veh	3	0	0	0	1	1	1	0	0	0	0	0	0
Working on Road	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	17	0	0	0	0	1	6	3	4	0	1	2	0
Unknown	51	1	1	0	7	4	10	6	13	7	0	1	1
TOTAL	226	2	4	1	13	16	37	32	48	31	23	18	1

Table 7 – 5 **Pedestrians Injured by Age and Action** 

Pedestrian						Age		of Ped	lestriar	1			
Action	Total	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	939	13	35	73	101	99	155	121	125	111	52	36	18
Walking With Traffic	94	2	0	6	15	9	22	13	10	8	6	2	1
Walking Against Traffic	102	0	1	5	11	15	17	13	13	13	10	3	1
Standing	95	2	1	2	3	11	20	21	15	13	4	1	2
Lying	7	0	0	0	1	0	0	4	2	0	0	0	0
Getting on/off Vehicle	13	0	1	2	0	2	1	1	2	3	1	0	0
Working on/pushing Veh	17	0	0	0	2	2	3	2	5	2	1	0	0
Working on Road	16	0	0	0	0	0	7	5	1	1	0	1	1
Other	165	2	6	11	24	16	26	22	23	15	8	5	7
Unknown	62	1	2	0	5	5	14	13	7	6	2	1	6
TOTAL	1,510	20	46	99	162	159	265	215	203	172	84	49	36

Table 7 – 6
Pedestrian Physical Condition in Motor Vehicle Crashes

Tymo of			N	umber of	Pedestria	ns		
Type of Condition	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	1,174	65.40%	53	21.90%	1,093	72.43%	28	63.64%
Alcohol	197	10.97%	76	31.40%	121	8.02%	0	0.00%
Illegal Drugs	44	2.45%	30	12.40%	14	0.93%	0	0.00%
Medications	1	0.06%	0	0.00%	1	0.07%	0	0.00%
Marijuana	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Illness or Physical Impairment	11	0.61%	2	0.83%	9	0.60%	0	0.00%
Fell Asleep or Fatigued	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Other	6	0.33%	0	0.00%	6	0.40%	0	0.00%
Unknown	362	20.17%	81	33.47%	265	17.56%	16	36.36%
TOTAL	1,795	100.00%	242	100.00%	1,509	100.00%	44	100.00%

Table 7 – 7 **Lighting Conditions in Pedestrian Crashes** 

Type of Lighting	Number of Crashes								
Conditions	Total	Fatal	Injury	PDO					
Daylight	807	38	749	20					
Dawn	34	10	24	0					
Dusk	41	2	38	1					
Dark - Lighted	615	91	510	14					
Dark - Not Lighted	154	42	105	7					
Dark - Unknown Lighting	51	39	12	0					
Unknown	0	0	0	0					
TOTAL	1,702	222	1,438	42					

Table 7 – 8
Weather Conditions in Pedestrian Crashes

Type of Weather	,	Number o	f Crashes	S
Conditions	Total	Fatal	Injury	PDO
Clear	1,477	138	1,300	39
Cloudy	117	24	91	2
Sleet/Hail	1	1	0	0
Rain	44	4	39	1
Snow or Blowing Snow	3	0	3	0
Severe Crosswinds	0	0	0	0
Blowing Sand, Soil, Dirt	2	1	1	0
Fog, Smog, Smoke	1	0	1	0
Other	1	0	1	0
Unknown	56	54	2	0
TOTAL	1,702	222	1,438	42

Table 7 – 9
Pedalcyclists Killed and Injured by Age and Gender

· ·		lcyclists I	•	Pedalcyclists Injured			
Age Group	Total	Male	Female	Total	Male	Female	
0-4	0	0	0	0	0	0	
5-9	0	0	0	23	15	8	
10-14	1	1	0	104	79	25	
15-19	0	0	0	158	120	38	
20-24	2	2	0	176	130	46	
25-34	6	5	1	259	200	59	
35-44	2	1	1	180	142	38	
45-54	7	5	2	189	143	46	
55-64	6	5	1	178	139	39	
65-74	5	5	0	73	66	7	
75 & Older	3	2	1	18	15	3	
Unknown	0	0	0	13	10	3	
TOTAL	32	26	6	1,371	1,059	312	

Table 7 – 10 **Pedalcycle Crashes by Geographic Location** 

Category	Total	Urban	Percent of Total	Rural	Percent of Total
Total Crashes	1,490	1,379	92.55%	111	7.45%
Fatal Crashes	33	26	78.79%	7	21.21%
Injury Crashes	1,366	1,269	92.90%	97	7.10%
PDO Crashes	91	84	92.31%	7	7.69%
Pedalcyclists Killed	32	26	81.25%	6	18.75%
Pedalcyclists Injured	1,371	1,272	92.78%	99	7.22%

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
2013	2,039	1.90%	29	3.42%	1,680	3.33%
2014	1,746	1.59%	29	3.75%	1,469	2.88%
2015	1,435	1.23%	28	3.12%	1,278	2.38%
2016	1,481	1.17%	31	3.26%	1,352	2.38%
2017	1,490	1.17%	32	3.20%	1,371	2.47%

Table 7 – 12 Lighting Conditions in Pedalcyclist Crashes

Type of Lighting	Number of Crashes							
Conditions	Total	Fatal	Injury	PDO				
Daylight	1,105	22	1,018	65				
Dawn	23	1	20	2				
Dusk	37	1	34	2				
Dark - Lighted	273	5	250	18				
Dark - Not Lighted	43	2	39	2				
Dark - Unknown Lighting	9	2	5	2				
Unknown	0	0	0	0				
TOTAL	1,490	33	1,366	91				

Table 7 – 13
Weather Conditions in Pedalcyclist Crashes

Type of Weether Conditions	Number of Crashes						
Type of Weather Conditions	Total	Fatal	Injury	PDO			
Clear	1,351	22	1,245	84			
Cloudy	110	6	100	4			
Sleet/Hail	1	0	1	0			
Rain	18	0	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	5	4	1			
TOTAL	1,490	33	1,366	91			

Table 7 – 14 **Pedestrian Crashes by County** 

redestrian crushes by county										
Country		Number o	f Crashes		Number o	f Pedestrians				
County	Total	Fatal	Injury	PDO	Killed	Injured				
Apache	10	9	1	0	9	1				
Cochise	11	4	6	1	4	8				
Coconino	40	3	36	1	3	38				
Gila	13	5	7	1	5	8				
Graham	4	0	4	0	0	4				
Greenlee	0	0	0	0	0	0				
La Paz	6	3	3	0	3	4				
Maricopa	1,226	138	1,056	32	141	1,108				
Mohave	22	2	18	2	2	18				
Navajo	15	7	8	0	7	9				
Pima	274	34	238	2	35	249				
Pinal	26	11	12	3	11	12				
Santa Cruz	1	0	1	0	0	1				
Yavapai	25	3	22	0	3	22				
Yuma	29	3	26	0	3	28				
TOTAL	1,702	222	1,438	42	226	1,510				

Table 7 – 15 **Pedalcyclist Crashes by County** 

T causey ensites by country									
Country		Number o		Number of	f Pedalcyclists				
County	Total	Fatal	Injury	PDO	Killed	Injured			
Apache	0	0	0	0	0	0			
Cochise	5	0	5	0	0	5			
Coconino	44	1	35	8	0	36			
Gila	1	0	1	0	0	1			
Graham	4	1	3	0	1	3			
Greenlee	0	0	0	0	0	0			
La Paz	2	0	2	0	0	2			
Maricopa	1,083	22	997	64	22	1,000			
Mohave	13	1	11	1	1	11			
Navajo	3	0	3	0	0	3			
Pima	245	4	233	8	4	234			
Pinal	29	3	21	5	3	21			
Santa Cruz	1	0	1	0	0	1			
Yavapai	25	1	22	2	1	22			
Yuma	35	0	32	3	0	32			
TOTAL	1,490	33	1,366	91	32	1,371			

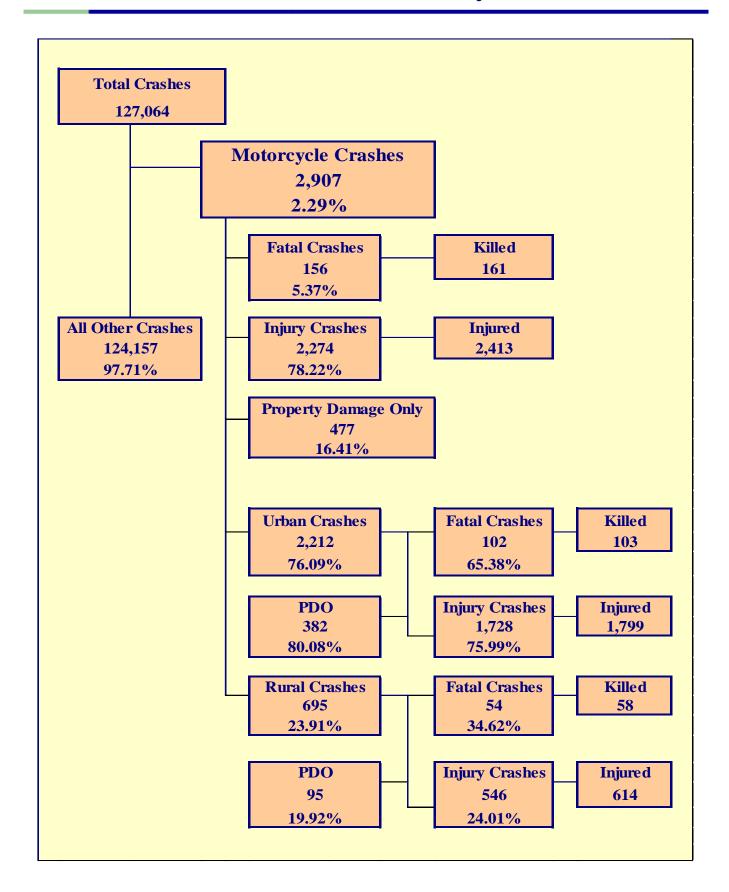


Chart 8 – 1
MC Fatalities by Year

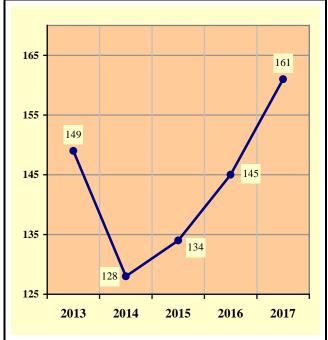
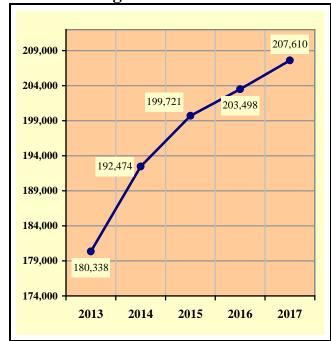


Chart 8 – 2
MC Registrations in Arizona



Total Point-in-Time of Registered Motorcycles at the end of Calendar year 2017.

(Source: MVD - MV988 MV630419 Currently Registered Vehicles by County Listing (motorcycle sub category), reports dated 12/31/17.)

Chart 8 – 3 **Fatality Rate per Registered MC** 

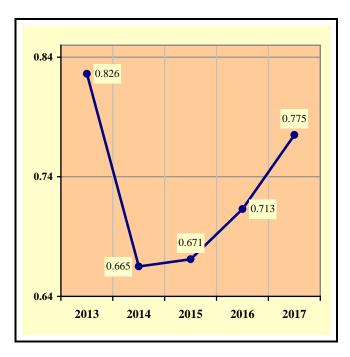


Chart 8 – 4
Percent of MC Crashes to All Crashes

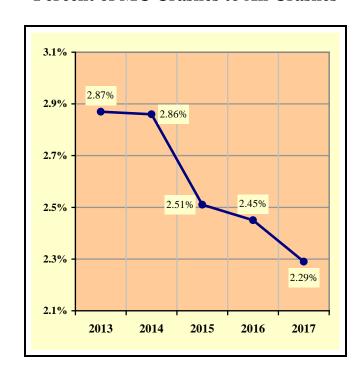


Table 8 – 1
MC Crashes by First Harmful Event

Einet Harmaful Errant True	Number of Crashes					
First Harmful Event Type	Total	Fatal	Injury	PDO		
Collision with Motor Vehicle in Transport	1,710	88	1,275	347		
Overturning	673	28	591	54		
Collision with Pedestrian	15	1	13	1		
Collision with Pedalcyclist	8	0	8	0		
Collision with Animal	41	2	32	7		
Collision with Fixed Object	292	31	236	25		
Collision with Non-fixed Object*	71	5	39	27		
Vehicle Fire or Explosion	4	0	1	3		
Other Non-collision**	5	0	4	1		
Unknown	88	1	75	12		
TOTAL	2,907	156	2,274	477		

<sup>\*</sup>Includes Collision with Parked Vehicles, Trains, Railway Vehicles, and Work Zone Equipment

Table 8 – 2 **Lighting Conditions in MC Crashes** 

Type of Lighting	Number of Crashes								
Conditions	Total	Fatal	Injury	PDO					
Daylight	1,956	90	1,555	311					
Dawn	46	3	36	7					
Dusk	98	4	73	21					
Dark - Lighted	642	38	497	107					
Dark - Not Lighted	148	13	107	28					
Dark - Unknown Lighting	17	8	6	3					
Unknown	0	0	0	0					
TOTAL	2,907	156	2,274	477					

Table 8 – 3
Road Surface Conditions in MC Crashes

	Number of Operators						
Type of Road Surface Condition	Total	In Fatal Crashes	In Injury Crashes	In PDO Crashes			
Dry	2,842	151	2,232	459			
Wet	48	2	40	6			
Snow/Slush	1	0	1	0			
Ice/Frost	0	0	0	0			
Water (standing or moving)	2	0	1	1			
Mud, Dirt, Gravel, Sand	25	0	20	5			
Other	16	1	15	0			
Unknown	35	13	8	14			
TOTAL	2,969	167	2,317	485			

<sup>\*\*</sup>Includes Vehicle Immersion, Jackknife, and Cargo Loss or Shift

Table 8 – 4
MC Crashes by Geographic Location

Category	Total	Urban	Percent of Total	Rural	Percent of Total
Total Crashes	2,907	2,212	76.09%	695	23.91%
Fatal Crashes	156	102	65.38%	54	34.62%
Injury Crashes	2,274	1,728	75.99%	546	24.01%
PDO Crashes	477	382	80.08%	95	19.92%
Persons Killed	161	103	63.98%	58	36.02%
Persons Injured	2,413	1,799	74.55%	614	25.45%

**Table 8 – 5** 

#### **Operator Involvement by Age in MC Crashes**

	Operator involvement by Age in MC Crashes									
Operator			N	Number of Ope	erators					
Age Group	Total	Percent of Total	In Fatal Crashes	Percent of Fatal	In Injury Crashes	Percent of Injury	In PDO Crashes	Percent of PDO		
15 & Under	9	0.30%	0	0.00%	8	0.35%	1	0.21%		
16	8	0.27%	0	0.00%	6	0.26%	2	0.41%		
17	19	0.64%	0	0.00%	17	0.73%	2	0.41%		
18	53	1.79%	2	1.20%	43	1.86%	8	1.65%		
19	58	1.95%	3	1.80%	49	2.11%	6	1.24%		
20	83	2.80%	5	2.99%	68	2.93%	10	2.06%		
21	81	2.73%	6	3.59%	61	2.63%	14	2.89%		
22	85	2.86%	4	2.40%	67	2.89%	14	2.89%		
23	90	3.03%	6	3.59%	70	3.02%	14	2.89%		
24	82	2.76%	3	1.80%	65	2.81%	14	2.89%		
25-34	688	23.17%	26	15.57%	558	24.08%	104	21.44%		
35-44	455	15.33%	21	12.57%	363	15.67%	71	14.64%		
45-54	526	17.72%	41	24.55%	420	18.13%	65	13.40%		
55-64	415	13.98%	35	20.96%	322	13.90%	58	11.96%		
65-74	191	6.43%	11	6.59%	154	6.65%	26	5.36%		
75 & Older	32	1.08%	4	2.40%	25	1.08%	3	0.62%		
Unknown	94	3.17%	0	0.00%	21	0.91%	73	15.05%		
TOTAL	2,969	100.00%	167	100.00%	2,317	100.00%	485	100.00%		

Table 8 – 6 **MC Operator Physical Condition** 

into operator i hysicar condition													
Type of				Number of	Operator	S							
Condition	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	2,496	84.07%	60	35.93%	2,038	87.96%	398	82.06%					
Alcohol	154	5.19%	44	26.35%	102	4.40%	8	1.65%					
Illegal Drugs	21	0.71%	17	10.18%	3	0.13%	1	0.21%					
Medications	0	0.00%	0	0.00%	0	0.00%	0	0.00%					
Marijuana	1	0.03%	1	0.60%	0	0.00%	0	0.00%					
Illness or Physical Impairment	13	0.44%	1	0.60%	12	0.52%	0	0.00%					
Fell Asleep or Fatigued	3	0.10%	0	0.00%	3	0.13%	0	0.00%					
Other	10	0.34%	0	0.00%	6	0.26%	4	0.82%					
Unknown	271	9.13%	44	26.35%	153	6.60%	74	15.26%					
TOTAL	2,969	100.00%	167	100.00%	2,317	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	227	15.13%	65	10.28%	197	23.54%	489	16.47%
Unknown Injury	9	0.60%	7	1.11%	53	6.33%	69	2.32%
Possible Injury	270	18.00%	94	14.87%	155	18.52%	519	17.48%
Suspected Minor Injury	641	42.73%	237	37.50%	305	36.44%	1,183	39.85%
Suspected Serious Injury	283	18.87%	167	26.42%	109	13.02%	559	18.83%
Fatal Injury	70	4.67%	62	9.81%	18	2.15%	150	5.05%
TOTALS	1,500	100.00%	632	100.00%	837	100.00%	2,969	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	10	11.11%	6	10.91%	12	25.53%	28	14.58%
Unknown Injury	0	0.00%	0	0.00%	1	2.13%	1	0.52%
Possible Injury	18	20.00%	3	5.45%	8	17.02%	29	15.10%
Suspected Minor Injury	47	52.22%	26	47.27%	14	29.79%	87	45.31%
Suspected Serious Injury	14	15.56%	11	20.00%	11	23.40%	36	18.75%
Fatal Injury	1	1.11%	9	16.36%	1	2.13%	11	5.73%
TOTALS	90	100.00%	55	100.00%	47	100.00%	192	100.00%

Table 8 – 9 Helmet Use by Gender

Tiemer ese of General														
		Number of Operators and Passengers												
Gender	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	1,412	88.81%	600	87.34%	741	83.82%	2,753	87.09%						
Female	175	11.01%	86	12.52%	86	9.73%	347	10.98%						
Unknown	3	0.19%	1	0.15%	57	6.45%	61	1.93%						
TOTAL	1,590	100.00%	687	100.00%	884	100.00%	3,161	100.00%						

 $\begin{array}{c} \text{Table 8-10} \\ \text{MC Operators and Passengers Killed and Injured} \end{array}$ 

Age of	Po	ersons Kill	ed		Persons	Injured	
Victim	Total	Male	Female	Total	Male	Female	Gender Unknown
0-4	0	0	0	0	0	0	0
5-9	0	0	0	4	3	1	0
10-14	0	0	0	12	9	3	0
15-19	5	5	0	122	109	13	0
20-24	23	21	2	346	319	27	0
25-34	23	21	2	572	512	60	0
35-44	25	21	4	381	322	59	0
45-54	40	35	5	443	372	71	0
55-64	31	27	4	337	302	35	0
65-74	10	9	1	153	136	17	0
75 & Older	4	4	0	27	25	2	0
Unknown	0	0	0	16	12	1	3
TOTAL	161	143	18	2,413	2,121	289	3

Table 8 – 11 MC Operator Violations

WIC Operator Violations													
				Number of	f Operators	5							
Type of Violation or Behavior	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	1,434	48.30%	47	28.14%	1,156	49.89%	231	47.63%					
Speed too Fast for Conditions	699	23.54%	31	18.56%	577	24.90%	91	18.76%					
Exceeded Lawful Speed	47	1.58%	10	5.99%	35	1.51%	2	0.41%					
Failed to Yield Right-Of-Way	76	2.56%	4	2.40%	58	2.50%	14	2.89%					
Followed Too Closely	77	2.59%	2	1.20%	53	2.29%	22	4.54%					
Ran Stop Sign	15	0.51%	0	0.00%	13	0.56%	2	0.41%					
Disregarded Traffic Signal	26	0.88%	2	1.20%	17	0.73%	7	1.44%					
Made Improper Turn	18	0.61%	0	0.00%	14	0.60%	4	0.82%					
Drove in Opposing Lane	27	0.91%	3	1.80%	17	0.73%	7	1.44%					
Drove Left of Center Line	1	0.03%	1	0.60%	0	0.00%	0	0.00%					
Passed in No-Passing Zone	6	0.20%	1	0.60%	3	0.13%	2	0.41%					
Unsafe Lane Change	62	2.09%	4	2.40%	40	1.73%	18	3.71%					
Failed to Keep in Proper Lane	78	2.63%	12	7.19%	60	2.59%	6	1.24%					
Crossed Median	0	0.00%	0	0.00%	0	0.00%	0	0.00%					
Aggressive Driving	0	0.00%	0	0.00%	0	0.00%	0	0.00%					
Other	141	4.75%	10	5.99%	109	4.70%	22	4.54%					
Unknown	262	8.82%	40	23.95%	165	7.12%	57	11.75%					
TOTAL	2,969	100.00%	167	100.00%	2,317	100.00%	485	100.00%					

Chart 8 – 5
All MC Crashes vs. Fatal MC Crashes by Time of Day - Weekdays

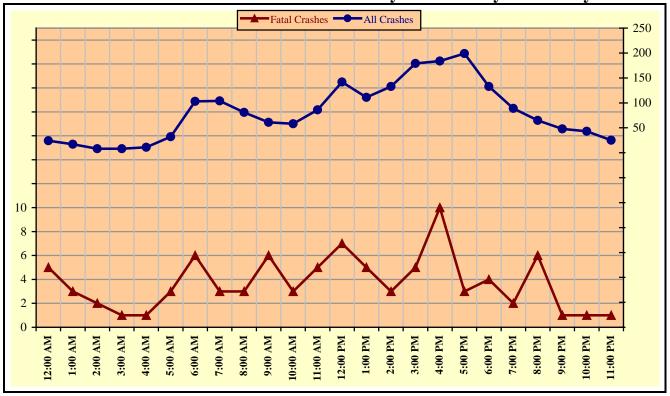
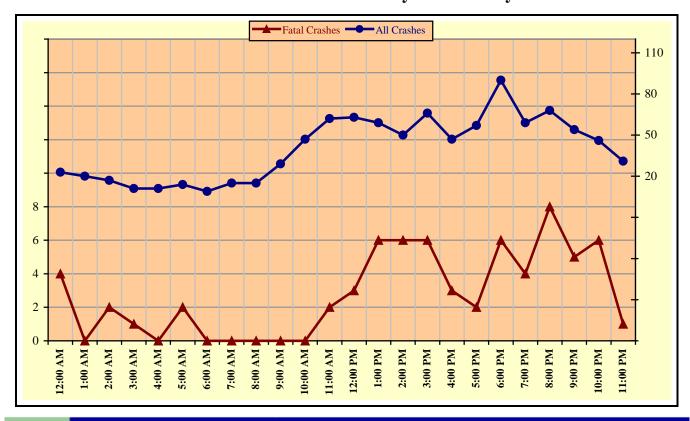


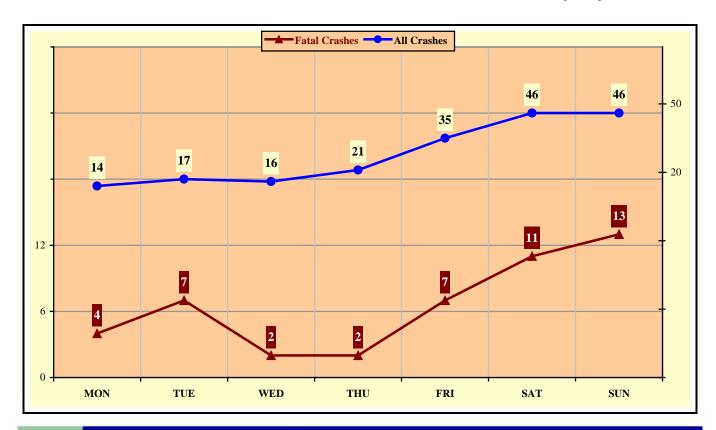
Chart 8 – 6
All MC Crashes vs. Fatal MC Crashes by Time of Day - Weekends



 $\begin{array}{c} \textbf{Chart 8-7} \\ \textbf{All MC Crashes vs. Fatal MC Crashes by Day of Week} \end{array}$ 



 ${\color{blue} Chart\,8-8} \\ \textbf{Alcohol Related MC Crashes vs. Fatal Alcohol Related MC Crashes by Day of Week} \\$ 



## **Section 8: – Motorcycle (MC) Crashes**

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

Hour	Total Cr	ashes	Mon	day	Tues	day	Wedn	es day	Thur	sday	Frie	day	Satu	rday	Sun	day	Week	days	Week	cends
Beginning	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal
12:00 AM	47	9	4	2	6	3	5	0	8	0	5	2	6	1	13	1	24	5	23	4
1:00 AM	37	3	2	0	2	0	4	1	5	1	6	1	8	0	10	0	17	3	20	0
2:00 AM	25	4	3	0	5	1	1	0	1	1	1	0	7	0	7	2	8	2	17	2
3:00 AM	19	2	2	0	2	1	2	0	3	0	1	0	5	0	4	1	8	1	11	1
4:00 AM	22	1	6	0	1	0	2	0	4	0	4	1	3	0	2	0	11	1	11	0
5:00 AM	46	5	8	0	7	0	7	1	10	0	8	2	5	2	1	0	32	3	14	2
6:00 AM	112	6	22	1	17	1	25	1	22	3	17	0	6	0	3	0	103	6	9	0
7:00 AM	119	3	12	1	18	1	27	0	24	1	23	0	11	0	4	0	104	3	15	0
8:00 AM	96	3	11	0	19	2	16	0	15	0	20	1	8	0	7	0	81	3	15	0
9:00 AM	90	6	4	0	8	0	14	2	15	1	20	3	17	0	12	0	61	6	29	0
10:00 AM	105	3	7	1	13	1	15	0	14	1	9	0	25	0	22	0	58	3	47	0
11:00 AM	148	7	14	1	16	0	14	0	21	3	21	1	34	0	28	2	86	5	62	2
12:00 PM	205	10	19	0	29	3	24	0	34	2	36	2	43	1	20	2	142	7	63	3
1:00 PM	170	11	20	1	18	1	26	1	18	0	29	2	26	2	33	4	111	5	59	6
2:00 PM	183	9	30	0	23	2	32	1	20	0	28	0	28	5	22	1	133	3	50	6
3:00 PM	245	11	37	1	32	0	36	2	31	0	43	2	44	6	22	0	179	5	66	6
4:00 PM	231	13	35	2	34	0	40	2	36	4	39	2	33	3	14	0	184	10	47	3
5:00 PM	256	5	38	0	37	0	44	2	39	0	41	1	35	2	22	0	199	3	57	2
6:00 PM	223	10	35	1	34	1	31	0	33	2	34	1	37	4	19	1	133	4	90	6
7:00 PM	148	6	18	1	18	0	29	1	24	0	19	1	19	1	21	2	89	2	59	4
8:00 PM	133	14	13	1	19	2	21	2	12	1	26	3	33	2	9	3	65	6	68	8
9:00 PM	102	6	9	0	11	0	15	1	13	0	21	1	18	2	15	2	48	1	54	5
10:00 PM	89	7	11	1	8	0	11	0	13	0	18	3	20	1	8	2	43	1	46	6
11:00 PM	56	2	8	0	5	0	5	0	7	1	13	1	11	0	7	0	25	1	31	1
TOTAL	2,907	156	368	14	382	19	446	17	422	21	482	30	482	32	325	23	1,944	89	963	67

Crashes during Weekends accounted for 33.13% of all MC crashes and 42.95% of Fatal MC Crashes.

Table 8 – 13
MC Crashes by County

<b>a</b> .			of Crashes		Number o	f Persons	
County	Total	Fatal	Injury	PDO	Killed	Injured	
Apache	6	2	4	0	2	5	
Cochise	44	4	37	3	5	39	
Coconino	71	0	53	18	0	63	
Gila	34	6	26	2	6	31	
Graham	8	1	6	1	1	9	
Greenlee	16	1	14	1	1	14	
La Paz	6	1	5	0	1	6	
Maricopa	1,922	82	1,513	327	84	1,560	
Mohave	125	8	87	30	8	104	
Navajo	18	4	12	2	4	14	
Pima	365	20	287	58	21	309	
Pinal	115	15	82	18	17	96	
Santa Cruz	7	1	6	0	1	8	
Yavapai	116	8	100	8	7	109	
Yuma	54	3	42	9	3	46	
TOTAL	2,907	156	2,274	477	161	2,413	

Table 8 – 14

Manner of Collision in MC Crashes

7.5				Number o	of Crashe	S		
Manner of Collision Type	Total	Percent of All Crashes	Fatal	Percent of Fatal Crashes	Injury	Percent of Injury Crashes	PDO	Percent of PDO Crashes
Angle	298	16.03%	20	19.80%	230	16.65%	48	12.73%
Left Turn	490	26.36%	29	28.71%	397	28.75%	64	16.98%
Rear End	640	34.43%	22	21.78%	446	32.30%	172	45.62%
Head-On	48	2.58%	6	5.94%	38	2.75%	4	1.06%
Sideswipe (same)	238	12.80%	8	7.92%	176	12.74%	54	14.32%
Sideswipe (opposite)	25	1.34%	3	2.97%	14	1.01%	8	2.12%
U-Turn	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Other*	100	5.38%	12	11.88%	66	4.78%	22	5.84%
Unknown	20	1.08%	1	0.99%	14	1.01%	5	1.33%
TOTAL	1,859	100.00%	101	100.00%	1,381	100.00%	377	100.00%
Note: Includes only multi vehicle	MC grack	200						

Note: Includes only multi-vehicle MC crashes

\*Other includes pedestrian and pedalcy clist crashes

# **Acknowledgements**

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