# 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

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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 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:

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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 the ADOT Web Site: www.azdot.gov/crashfacts



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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	
PEDES TRIAN	1,764	
PEDALCYCLE	1,279	
MOTORCYCLE	2,738	
S INGLE VEHICLE	18,730	
MULTI-VEHICLE	108,326	

### BREAKDOWN OF FATAL CRASHES IN ARIZONA

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

### BREAKDOWN OF PERSONS KILLED AND INJURED

ТҮРЕ	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
S PEED 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 CR			
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 report.

# **Fatalities in Arizona since 1925**

Year	Total Fatalities	Year	<b>Total Fatalities</b>
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

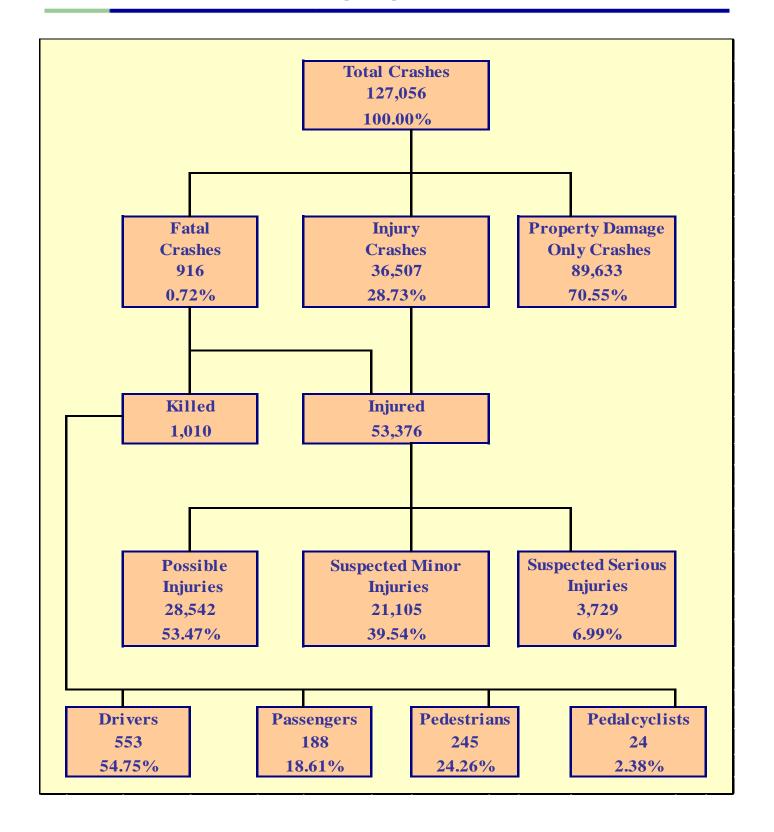


Table 1 – 1

Arizona Crash Facts Summary and Comparison

Catagory	2017	2010	Percent
Category	2017	2018	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.

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

Calendar	Total	Fatal	Injury	Property Damage Only	Total Persons	Total Persons	Total Licensed	Total Registered
Year	Crashes	Crashes	Crashes	Crashes	Killed	Injured	Drivers	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	Fatality Injury Traffic		Estimated Motor Vehicle Miles Traveled	Arizona Fatal Crash Rate
2014	1.24	81.59	774	62,631	1.13
2015	1.38		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	80.70 1,010 66,145		1.38
Vehicle miles trave	oled are shown in	million miles an	d rates per 100 i	million miles	

# **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

Country				Cost of Traffic	Cr	ashes						
County		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

Traffic Crashes in Arizona by Year

Chart 1 – 1 **Total Crashes** 

Chart 1 – 2 **Fatal Crashes** 



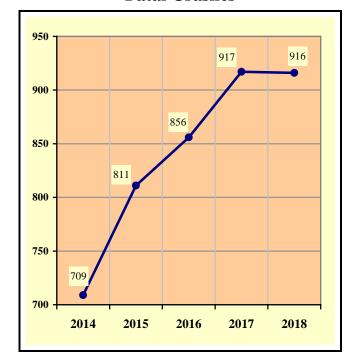


Chart 1 – 3
Injury Crashes

39,000 38,708 38,053 38,000 37,000 36,304 36,507 36,000 35,000 34,578 34,000 -2014 2015 2016 2017 2018

Chart 1 – 4
Property Damage Only Crashes

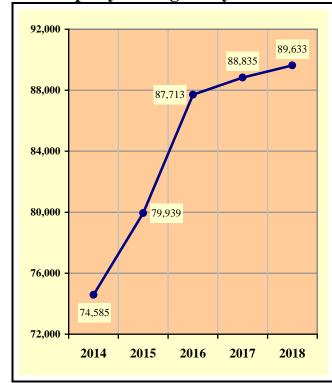


Table 1 – 6
Victims of Motor Vehicle Crashes

Age of		Person	ns Killed			Person	s Injured	
Victim	Total	Male	Female	Gender Unknown	Total	Male	Female	Gender Unknown
0-4	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

			<u> </u>		
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

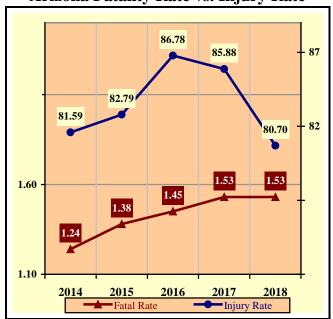
 $\begin{array}{c} {\rm Table}\ 1-8 \\ {\rm Young\ drivers\ (age\ 15\text{-}24)\ killed\ in\ crashes\ 2014\text{-}2018} \end{array}$ 

Year		Age of Driver												
rear	15	16	17	18	19	20	21	22	23	24	Total			
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			

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

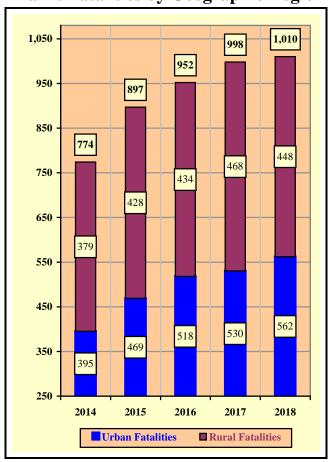
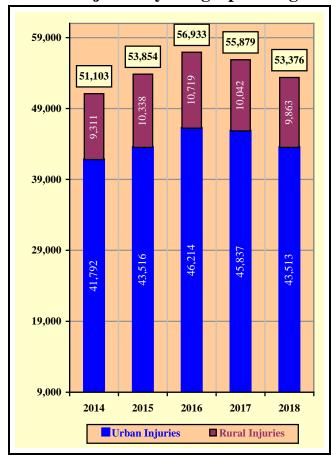


Chart 1 – 8
Traffic Injuries by Geographic Region



# 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.

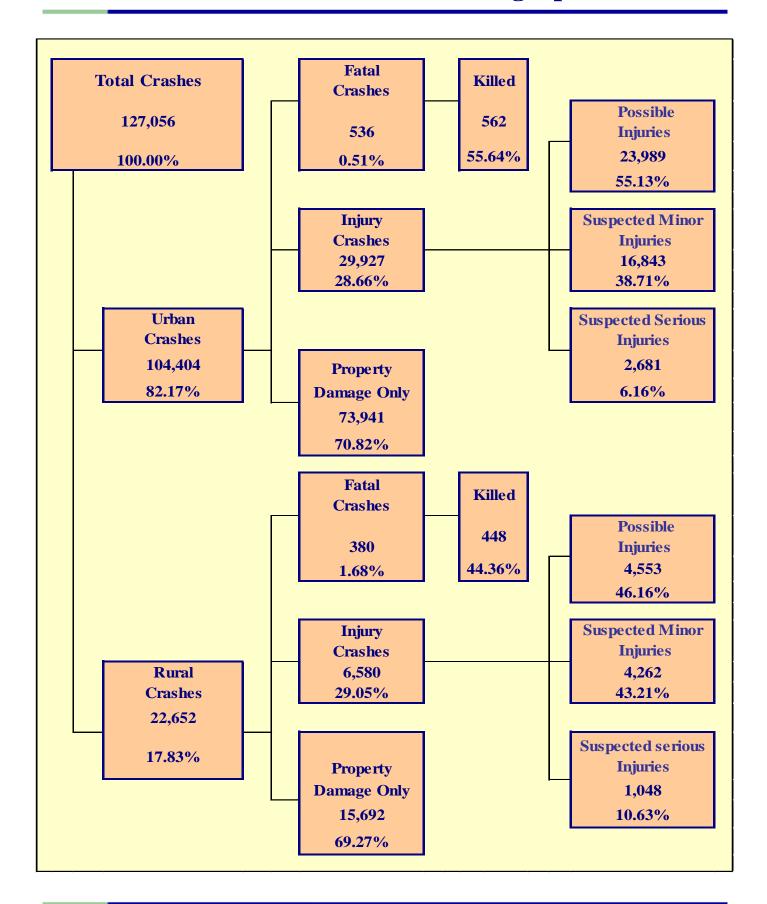
Holiday fatality statistics are based on fatal crashes occurring from 6:00 p.m. on the last working day prior to the holiday through 5:59 a.m. the day following the holiday period. Example: Thanksgiving fatalities are counted from Wednesday evening at 6:00 p.m. through 5:59 a.m. of the following Monday.

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 12/29/2017	Tuesday 1/2/2018	4	10	10	3	3
Memorial Day	Friday 5/25/2018	Tuesday 5/29/2018	4	7	8	2	2
July 4th	Tuesday 7/3/2018	Thursday 7/5/2018	2	4	4	1	1
Labor Day	Friday 8/31/2018	Tuesday 9/4/2018	4	8	9	4	4
Thanksgiving Day	Wednesday 11/21/2018	Monday 11/26/2018	5	6	6	2	2
Christmas Day	Friday 12/21/2018	Wednesday 12/26/2018	5	10	11	5	5

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



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

Eine II and El En and Toma		Number o	of Crashes		Number o	of Persons
First Harmful Event Type	Total	Fatal	Injury	PDO	Killed	Injured
Collision with Motor Vehicle in Transport	97,081	328	27,076	69,677	385	41,829
Overturning	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

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

Table 2 – 2
Crashes by County

		Ciusii	es by C	ounty		
Country		Number o	f Crashes		Number	of Persons
County	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

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

Eine Hannell Enach Three		Number o	of Crashes		Number o	of Persons
First Harmful Event Type	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 Darked Vehicles Trains Daily	17-1-1-1	J.Wl. 7.	E:	-4		

<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 Evant Tuna		Number o	of Crashes		Number o	of Persons
First Harmful Event Type	Total	Fatal	Injury	PDO	Killed	Injured
Collision with Motor Vehicle in Transport	12,993	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
Collision with Non-fixed Object*  Vehicle Fire or Explosion  Other Non-collision**  Unknown	1,206 255 151 47	4 0 4 13	138 7 8 10	1,064 248 139 24	7 0 4 15	17: 10 12

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

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.

<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** 

	Number of Crashes No. of Persons Alcohol Related								
COUNTIES								ohol Rela	
Cities	Total	Fatal	Injury	PDO	Killed	- V	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
-	1,865	4	412		43	600	77	2	70
Fredonia	1,005	0	0	1,449 1	0	0	0	0	0
Williams	107	0	15	92	0	16	3	0	2
	117	1	34	82	2	66	15	0	10
Page Sedona	222	0	42	o∠ 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
				_ 30			. •		
One and a Country	4.5	-	40	00		00	-	-	
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	N	Number of Crashes			No. of I	Persons	Alcohol Related		
Cities	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
<b>Bullhead City</b>	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.

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	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		
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		1,100	0,101		,					
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		
TOTAL	430	0	103	323		100	17	L	7		
V	4.070	0.4	F 7.5	4.007	00	054	74		<b>5</b> 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 Proceeds	910	0	0	4 500	0	0	0	0	0		
Prescott Valley	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 Dewey-Humboldt	158 34	1	42 7	115	1	59	5	0	4		
		0		27	0	8	2		1		
TOTAL	3,823	40	1,113	2,670	44	1,592	161	7	108		

Table 2 – 5 **Analysis by Jurisdiction** 

COUNTIES	N	Number of Crashes				Persons	Alc	Alcohol Related		
Cities	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 Apache Coconino 25 49 47 Mohave 47 Navajo 43 51 43 51 Yavapai 44 55 La Paz Gila **20** 25 Greenlee 18 Maricopa 27 0 491 462 Graham Pinal Yuma 6 **72** 31 8 71 26 Pima Cochise 124 2018 Fatalities on top in **bold** 22 114 2017 Fatalities on bottom Santa Cruz 22 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

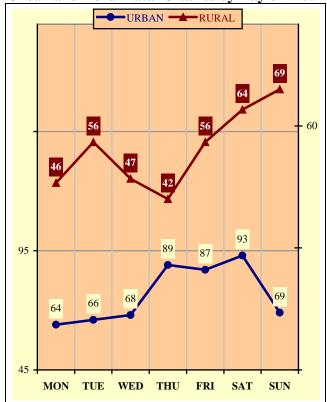
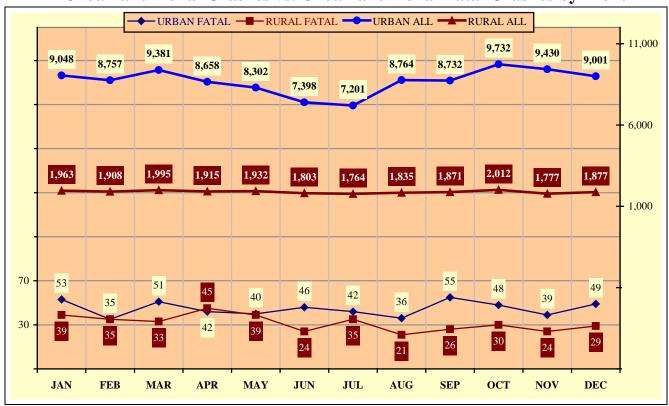
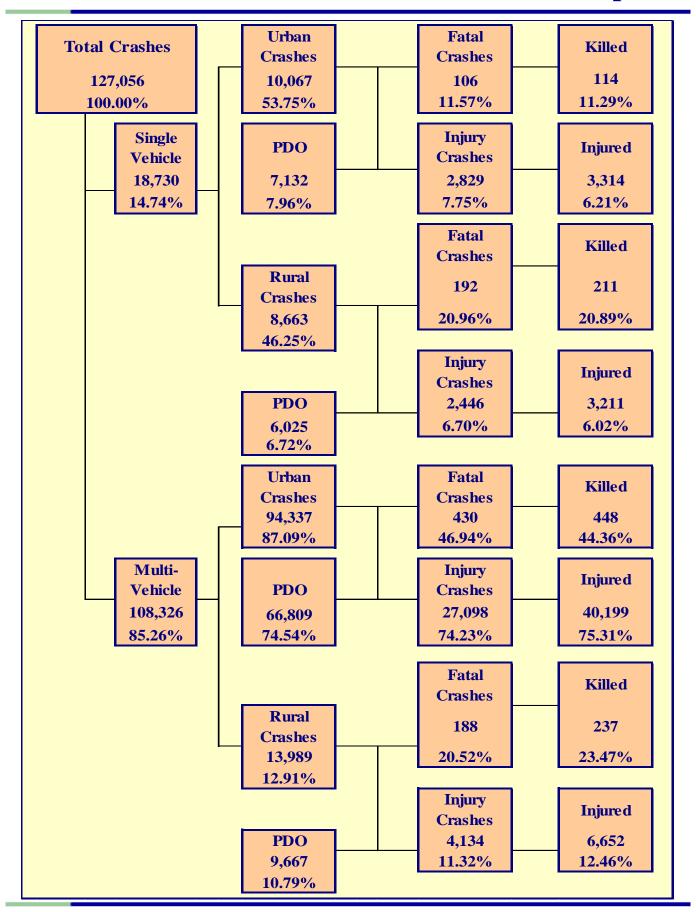


Chart 2 – 3
All Urban and Rural Crashes vs. Urban and Rural Fatal Crashes by Month





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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	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 nedestrian and	nedalcyclist	crashes						

\*Other includes pedestrian and pedalcy clist crashes

Table 3 – 2 **Lighting Conditions** 

Type of Lighting		Number o	of Crashes		Number of Persons						
Conditions	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		Number o	of Crashes		Number (	of Persons
Conditions	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

Table 3 – 4 **Road Surface Conditions** 

Type of Road Surface		Number o	of Drivers		Number o	of Persons
Condition	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

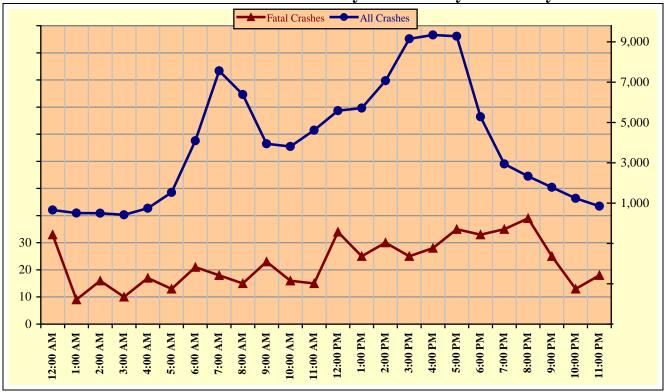
Table 3 – 5
Roadway Grade

		Number	of Drivers		Number of Persons		
Type of Roadway Grade	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

210000711007 12118-12110												
Type of		Number (	of Drivers		Number of Persons							
Roadway Alignment	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						

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



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

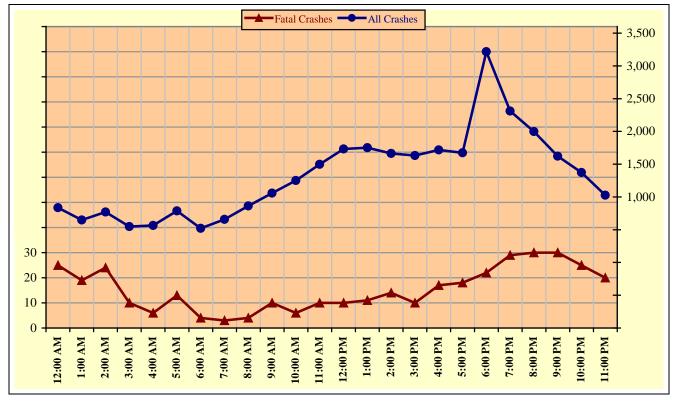


Chart 3 – 3
Crashes by Day of Week



Chart 3 – 4
Fatal Crashes by Day of Week

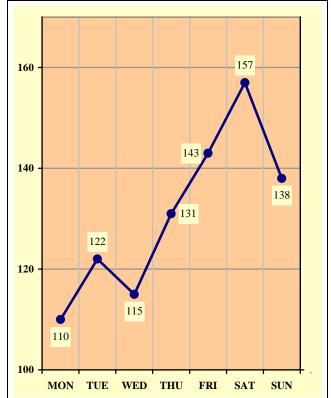


Chart 3 – 5
All Crashes vs. Fatal Crashes by Month



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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	esday	Thur	sday	Fric	lay	Satur	day	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	1,491	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.

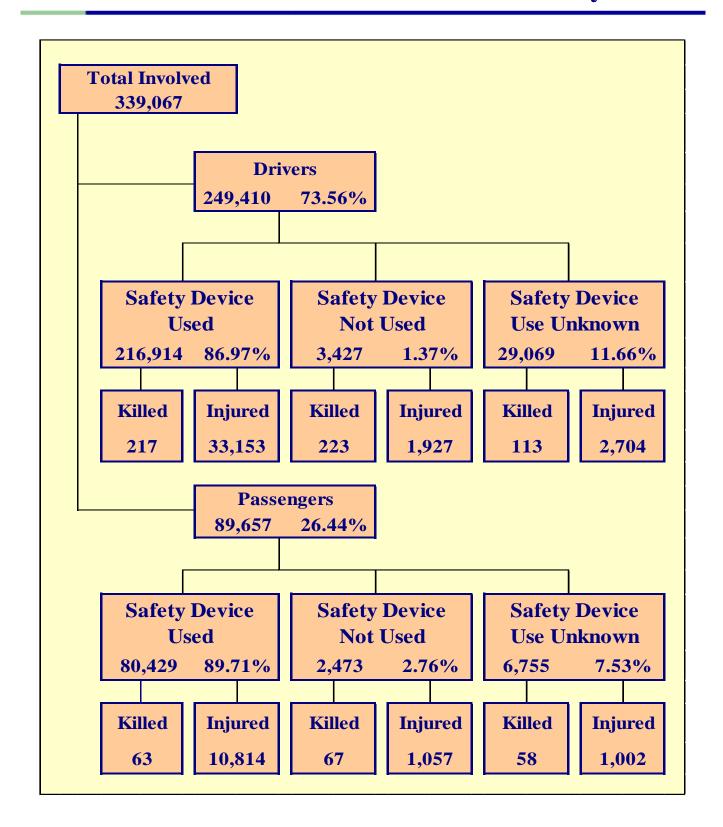


Table 4 – 1
Child Safety Device Usage (less than five years old)

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%	

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	121,723	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** 

				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	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**

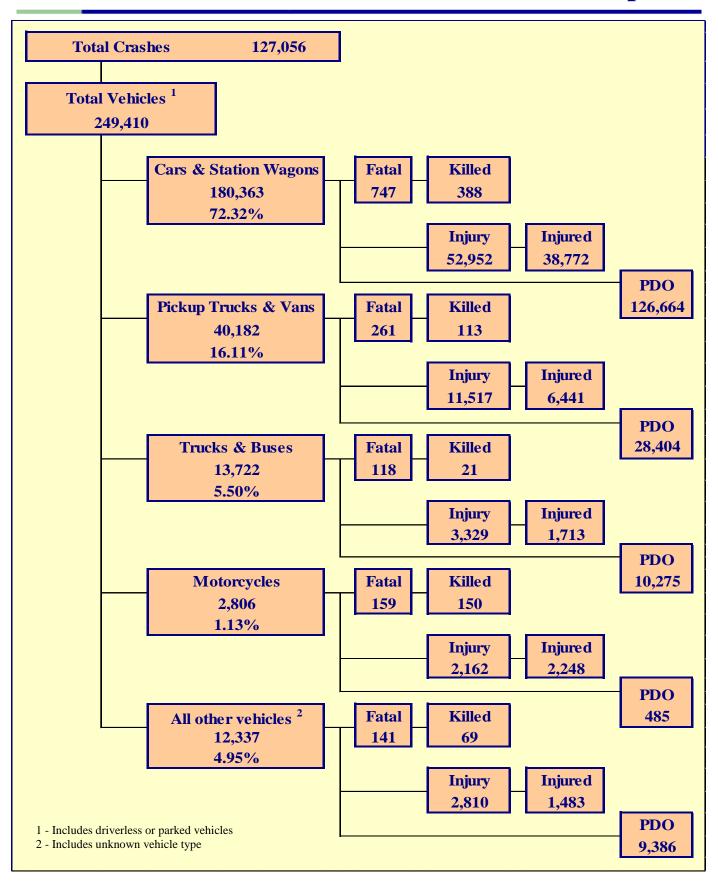


Table 5 – 1 **Arizona Motor Vehicle Registrations** 

	0
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.

		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.)	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

Table 5 – 3
Hit and Run Drivers Involved in Crashes

Hit and Run		Number o	Number of Persons			
	Total	Fatal	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		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	133,458	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

Electific Status of Billyons Involved in Chapter													
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	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

	Tussengers ramed und right ed by rige und Gender												
Age of		Passenge	ers Killed		Passengers Injured								
Passenger	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					

		of Drivers		Passengers
Motor Vehicle Type	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

		Driver	s Killed	-30-20-	) 11 <b>g</b> 0 00	Drivers	Injured	
Age of Driver	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

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	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

	Diver 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	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%			

Table 5 – 11 **Driver Violations** 

	_	11761 7						
				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	124,138	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** 

				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	219,566	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%

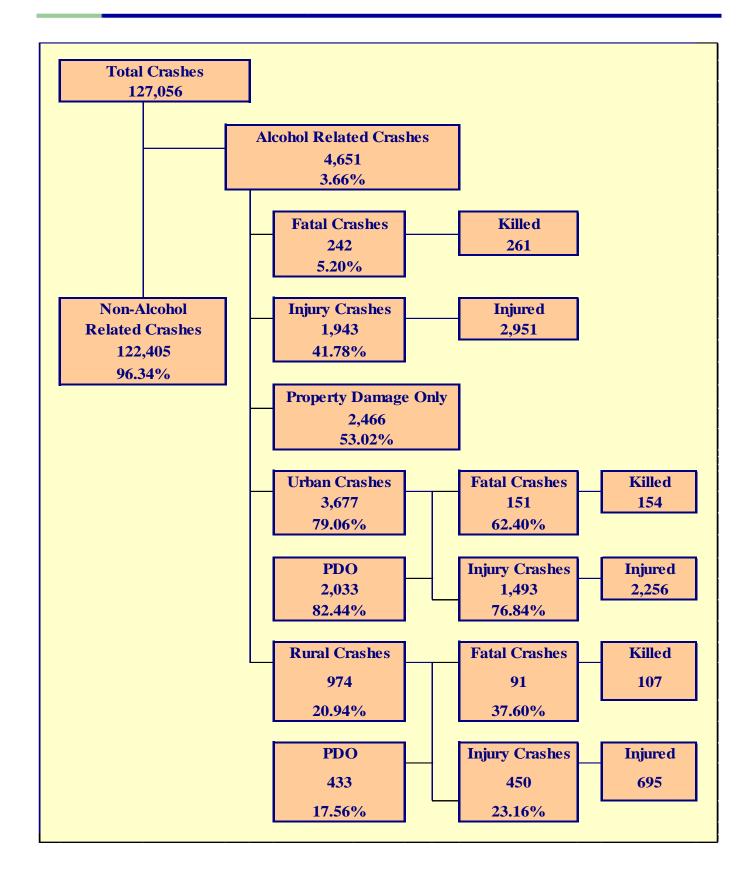
Table 5 – 13

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	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		Number o	f Crashes		Number o	of Persons
Crash	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



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 Injurie	s \$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

1114111	Training of Comploi in Theorem Relation Claping								
				Number o	of Crashe	s			
Manner of Collision Type	Total	Percent of All	Fatal	Percent of Fatal	Injury	Percent of Injury	PDO	Percent of PDO	
		Crashes		Crashes		Crashes		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 pedalcy clist crashes

Einet Harmaful Evant True		Number o		Number of Persons		
First Harmful Event Type	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

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

Table 6 – 5
Alcohol Related Crashes by Vehicle Type

THEOROT RELATED			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.)	2,486	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

<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	f Crashes		Number o	Number of Persons			
Conditions	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** 

		Number (	of Drivers		Number of Persons			
Type of Road Surface Condition	Total	In Fatal Crashes	In Injury Crashes	In PDO Crashes	Killed	Injured		
Dry	4,203	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 Drivers involved in fineducti Related Crushes								
Candon of				Number of	f Drivers			
Gender of Driver	Total	Percent of Total	In Fatal Crashes	Percent of Fatal	In Injury Crashes	Percent of Injury	In PDO Crashes	Percent of PDO
Male	3,238	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.

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

		JI V CIIICII	t by rig			uteu ei	usiics	
Driver		I		Number (	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	- 1		0					
	1	0.02%		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%

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

<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	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

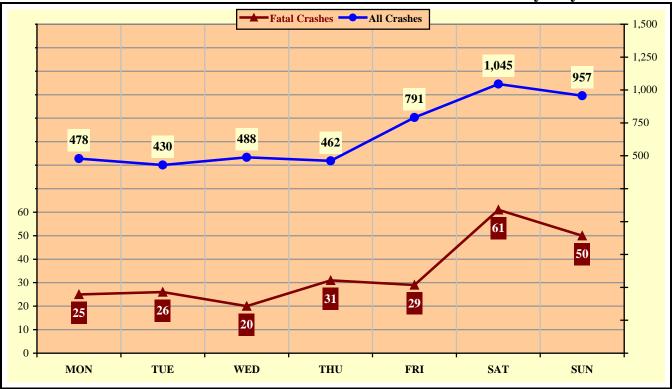
<sup>\*\*</sup>Daytime refers to the hours between 6:00 a.m. and 6:00 p.m.

Age of		rsons Kill	•			ns Injured	
Victim	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

Theorem Related Crushes by County												
Country		Number o	of Crashes		Number	of Persons						
County	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						

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



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



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

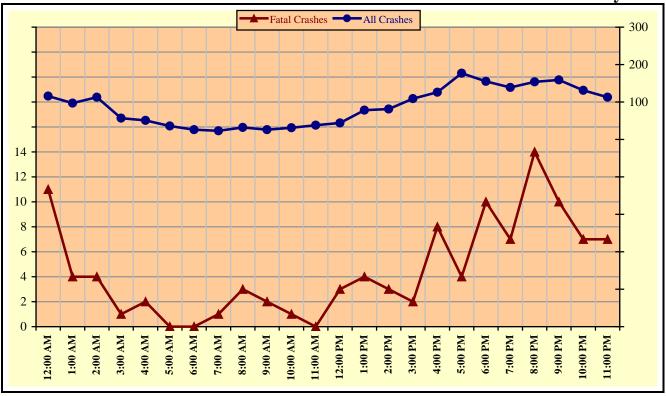
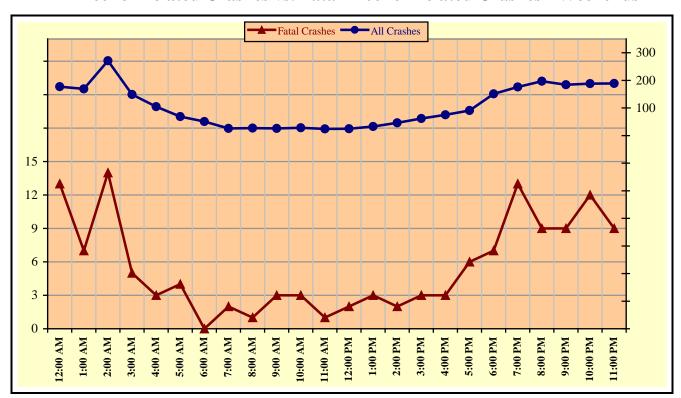


Chart 6 – 4
All Alcohol Related Crashes vs. Fatal Alcohol Related Crashes - Weekends



### **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	sday	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	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.

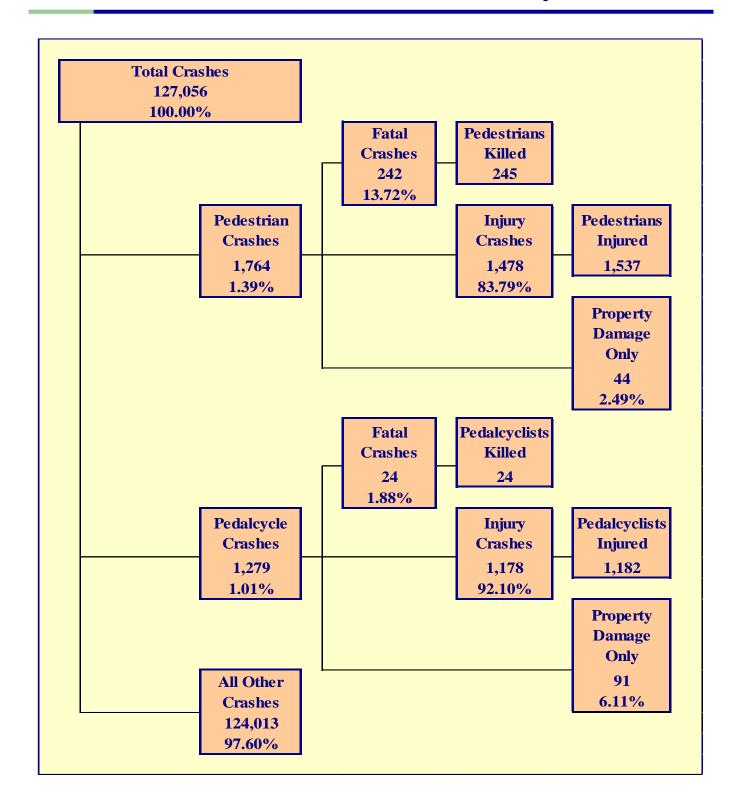


Table 7 – 1
Pedestrians Killed and Injured By Age and Gender

	Tedestrans Timed and Injured by Tige and Gender											
Age		Pedestria	ans Killed		Pedestrians Injured							
Group	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%

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

<b>D</b> 1						1.00		of Doc	logtnion				
Pedestrian						Age	Group	of Ped	estriai	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	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** 

	1 cucsi ians injured 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	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** 

1 cuestian i hysical condition in whotor venice 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	1,190	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%					

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

Type of Lighting	Number of Crashes								
Conditions	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		Number o	f Crashes	S
Conditions	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

<u> </u>	chsis Kineu and Injureu by Age and Gender						
Age	Peda	lcyclists I	Killed	Pedalcyclists Injured			
Group	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

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

Lighting Conditions in I causey chapter								
Type of Lighting	Number of Crashes							
Conditions	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 o	f Crashes	S
Type of Weather Conditions	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

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

1 caestrain crashes by country										
Country		Number o	f Crashes		Number o	f Pedestrians				
County	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** 

C4			of Crashes			Pedalcyclists
County	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

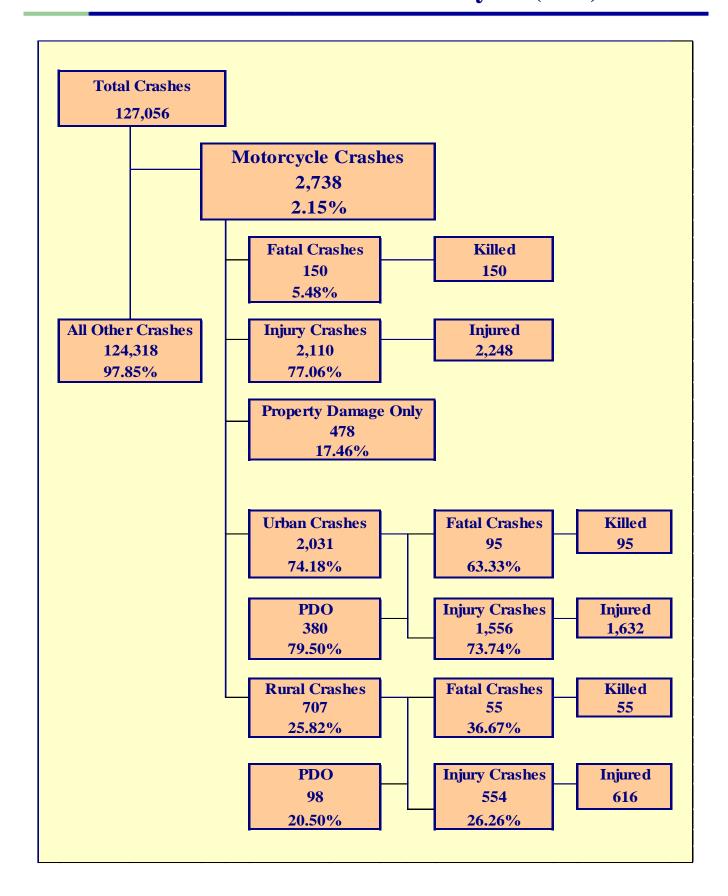


Chart 8 – 1
MC Fatalities by Year

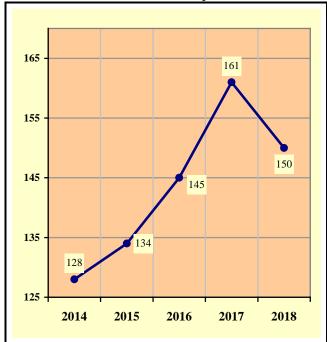


Chart 8 – 2
MC Registrations in Arizona



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** 

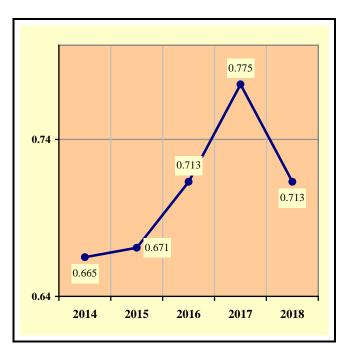


Chart 8 – 4
Percent of MC Crashes to All Crashes

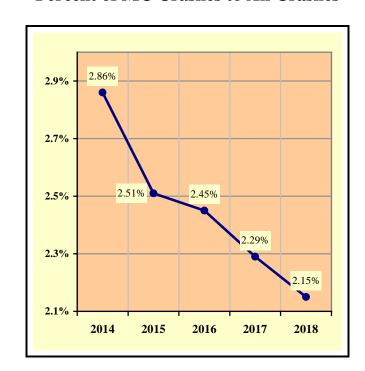


Table 8 – 1
MC Crashes by First Harmful Event

First Harmeful Event True	Number of Crashes					
First Harmful Event Type	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		

<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	8	Number of C	Crashes	
Conditions	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

		Number of	Operators	
Type of Road Surface Condition	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

<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	2,738	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 involvement by Age in MC Crasnes									
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	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** 

	<u> </u>	ciutoi i						
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	2,341	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

		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	1,307	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%						

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

Age of	Po	ersons Kill	ed	Pe	rsons Inju	red
Victim	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

WIC Operator Violations													
0				Number of	f Operators	S							
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	1,348	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%					
<b>Drove in Opposing Lane</b>	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%					

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

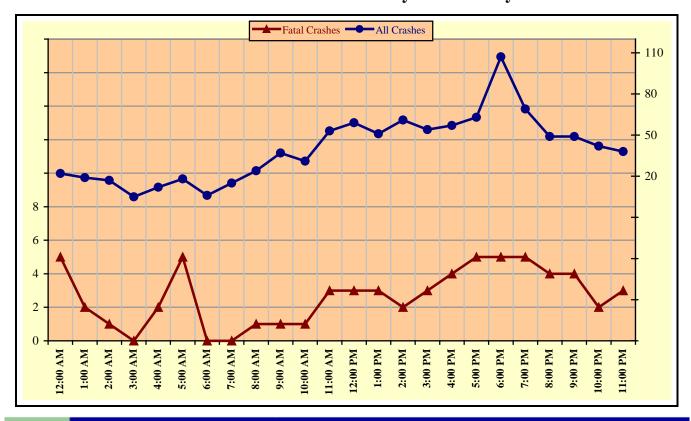
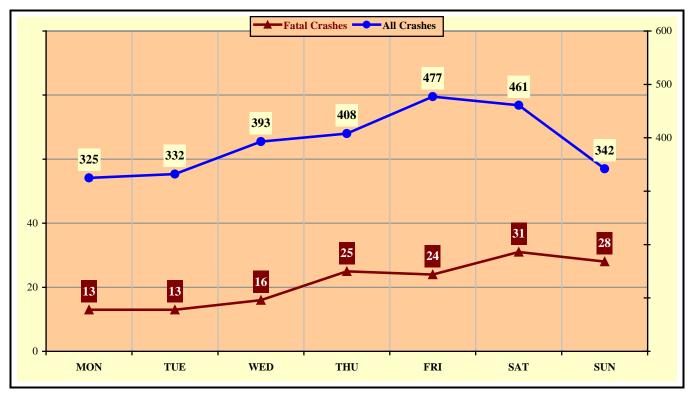
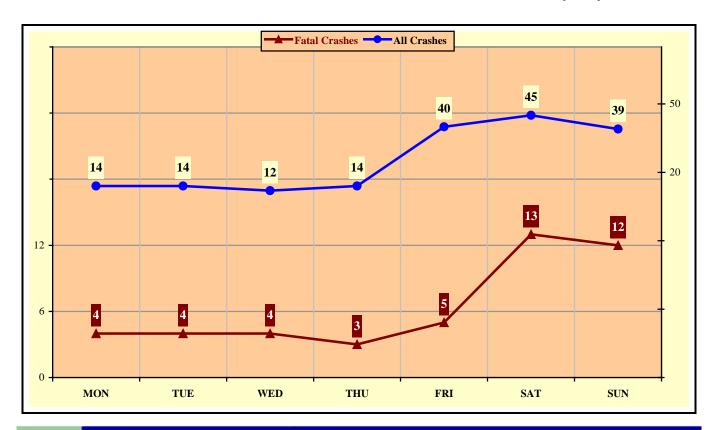


Chart 8 – 7
All MC Crashes vs. Fatal MC Crashes by Day of Week



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



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

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

Hour	Total Cr	ashes	Mon	day	Tues	sday	Wedn	esday	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	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.

Table 8 – 13
MC Crashes by County

<b>C</b> 4			of Crashes		Number o	f Persons
County	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

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	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 crash	nes						

Note: Includes only multi-vehicle MC crashes

\*Other includes pedestrian and pedalcy clist crashes

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