## 2002 Motor Vehicle Crash Facts for Arizona

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This publication is a statistical review of the motor vehicle crashes in the State of Arizona for calendar year 2002. The results are compiled from Arizona Traffic Accident Reports submitted to the Arizona Department of Transportation by state, county, city, tribal, and other law enforcement agencies.

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Motor Vehicle Crash Facts is an annual report published by the Traffic Engineering Group of the Arizona Department of Transportation. 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.

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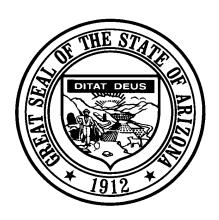
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## **Section 1:**

## **Highlights and Historical Trends**

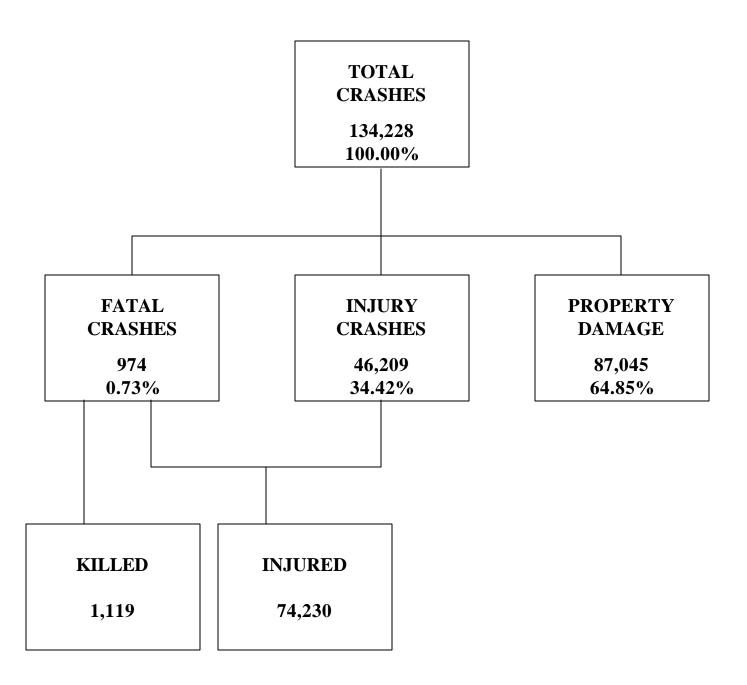


Table 1-1 Arizona Crash Facts											
Category	2001	2002	Pct Change								
Reported crashes	131,899	134,228	+2.02%								
Total killed	1,052	1,119	+6.88%								
Total injured	74,110	74,230	+0.36%								
Pedestrians killed	166	158	-4.82%								
Pedestrians injured	1,506	1,481	-1.66%								
Motorcyclists killed	77	95	+23.34%								
Motorcyclists injured	1,925	1,999	+3.84%								
Pedalcyclists killed	29	15	-48.28%								
Pedalcyclists injured	1,710	1,618	-5.38%								
Millions of vehicle miles traveled (VMT	50,861	53,404	+5.00%								
Deaths per 100 million VMT	2.07	2.09	+1.46%								
Injuries per 100 million VMT	145.29	139.00	-4.33%								

## 2002 At a Glance

- ⇒Approximately **3.1** persons were killed each day.
- ⇒One person was killed every **7.8** hours.
- ⇒There were 203 persons injured every day.
- ⇒One person was injured every **7.1** minutes.
- ightharpoonup Drinking drivers were involved in 6.03% of all crashes.
- ⇒ Drinking drivers were involved in **25.46%** of all fatalities.
- ⇔Over **80.5%** of all drinking drivers involved in crashes were males.
- ightharpoonup Rural crashes accounted for 19.9% of all crashes, and over 53.5% of all fatal crashes.
- ⇒71.4% of all crashes occurred during daylight.
- ⇒ Motor vehicle crashes resulted in \$3.01 billion in economic losses to Arizona.
- ⇒ Motor vehicle crashes killed **59** children and injured **6,984** children through age 14.

#### The Nation In 2002

An estimated **42,850** persons were killed in motor vehicle crashes in the United States.

An estimated **2,914,000** persons were injured.

There were an estimated **6,279,356** crashes.

The population of the United States was estimated at **288,368,698**.

Estimated vehicle miles traveled totaled **2,829 billion** miles.

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

				Property	Total	Total	Total	Total
Calendar	Total	Fatal	Injury	Damage	Persons	Persons	Licensed	Registered
Year	Crashes	Crashes	Crashes	Crashes	Killed	Injured	Drivers	Vehicles
1998	120,293	858	43,348	76,087	980	70,828	3,598,325	3,683,891
1999	125,764	907	45,541	79,316	1,024	73,514	3,372,187	3,731,126
2000	131,368	891	47,485	82,992	1,036	76,626	3,529,732	3,983,860
2001	131,899	939	46,234	84,726	1,052	74,110	3,550,766	4,037,359
2002	134,228	974	46,209	87,045	1,119	74,230	3,668,704	4,089,662

Table 1-3
Historical Trends
Arizona and the United States

	U.S.	Arizona	Arizona	Estimated Motor	AZ Fatal
Calendar	Fatality	Fatality	Traffic	Vehicle Miles	Crash
Year	Rate*	Rate*	Deaths	Traveled*	Rate*
1998	1.58	2.15	980	45,485	1.89
1999	1.55	2.18	1,024	47,014	1.90
2000	1.55	2.08	1,036	48,568	1.83
2001	1.50	2.07	1,052	50,861	1.84
2002	1.51	2.09	1,119	53,404	1.82

<sup>\*</sup>vehicle miles traveled are shown per million miles and rates per 100 million miles

Due to refinements in the method used for the calculation of vehicle miles traveled and the use of preliminary data in some cases, the Arizona crash and fatality rates may differ slightly from previous reports. The most current data is always used at the time of publication, but it may change as new information is received.

#### Section 1: Highlights and Historical Trends

During 2002, an average of 117 persons died each day in motor vehicle crashes across the United States - one every 12.3 minutes.

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

In 2002, the economic impact of motor vehicle crashes was \$549.18 for every man, woman, and child in the state of Arizona.

Fatalities \$ 1,219,710,000. Injuries 1,246,170,400. Property Damage Only 539,679,000.

TOTAL. \$3,005,559,400.

Table 1-4
Estimated Economic Loss by County

		Cost of Traffic Crashes								
Counties	Fatalities	Injuries	PDOs	Total						
Apache	\$40,330,000.	\$8,825,900.	\$3,416,200.	\$52,572,100.						
Cochise	32,700,000.	18,523,900.	9,424,000.	60,647,900.						
Coconino	62,130,000.	32,992,700.	19,604,400.	114,727,100.						
Gila	23,980,000.	11,093,100.	4,333,800.	39,406,900.						
Graham	7,630,000.	4,009,400.	1,171,800.	12,811,200.						
Greenlee	2,180,000.	547,200.	241,800.	2,969,000.						
La Paz	27,250,000.	8,721,900.	2,256,800.	38,228,700.						
Maricopa	533,010,000.	776,626,900.	351,143,200.	1,660,780,100.						
Mohave	66,490,000.	38,915,300.	12,071,400.	117,476,700.						
Navajo	49,050,000.	17,554,400.	6,187,600.	72,792,000.						
Pima	176,580,000.	209,764,600.	86,601,600.	472,946,200.						
Pinal	88,290,000.	38,713,400.	14,179,400.	141,182,800.						
Santa Cruz	5,450,000.	4,062,800.	2,697,000.	12,209,800.						
Yavapai	59,950,000.	33,987,900.	16,368,000.	110,305,900.						
Yuma	44,690,000.	41,831,000.	9,982,000.	96,503,000.						
TOTALS	\$1,219,710,000.	1,246,170,400.	539,679,000.	\$3,005,559,400.						

Cost estimates are based on the 2002 National Safety Council estimates of the average cost of motor vehicle crashes, deaths and injuries. These costs are an estimate of wage and productivity losses, medical expenses, administrative expenses, motor vehicle damage, and employer costs. Effective in 1993, new components were added and new benchmarks andinflation factors adopted. For this reason, the cost estimates for 2002 are not comparable to those published prior to 1993. The following factors were used to approximate the value of the loss for crashes occurring in Arizona.

1.	Fatality	\$1,090,000.
2.	Incapacitating Injury	52,100.
3.	Non-incapacitating Injury	17,200.
4.	Possible Injury	9.800.
5.	Property Damage Only	6,200.

## Traffic Crashes in Arizona by Year

Figure 1-1: All Crashes

Year

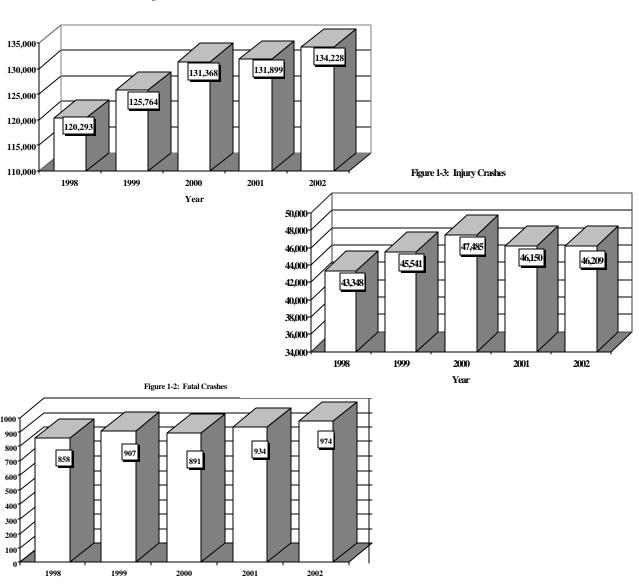
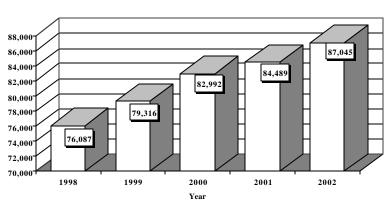


Figure 1-4: Property Damage Only Crashes



#### Section 1: Highlights and Historical Trends

Table 1-5
Victims of Motor Vehicle Crashes\*

Age of Victim	Total Killed	Male	Female	Total Injured	Male	Female	Sex Unk.
0 - 4	16	11	5	1,856	914	937	5
5 - 9	12	5	7	2,282	1,142	1,134	6
10 - 14	31	16	15	2,846	1,413	1,407	26
15 - 19	116	79	37	10,587	4,869	5,704	14
20 - 24	139	104	35	10,527	5,366	5,152	9
25 - 34	181	134	47	14,146	7,136	6,997	13
35 - 44	176	126	50	11,371	5,527	5,833	11
45 - 54	168	120	48	8,732	4,167	4,560	5
55 - 64	93	58	35	5,143	2,323	2,818	2
65 - 74	83	47	36	2,830	1,261	1,569	0
75 & Older	102	51	51	1,295	1,051	1,691	19
Age Unknown	2	1	1	2,615	782	342	25
Totals	1,119	752	367	74,230	35,951	38,144	135

<sup>\*</sup>Includes all reported injuries and fatalities occurring on Arizona roadways.

Arizona's Estimated Population									
	Population Percentage	Traffic Crash Fatality Percentage	Population Estimate						
White	71.61%	53.93%	3,919,036						
Hispanic	18.77%	25.72%	1,027,235						
African American	2.86%	2.09%	156,521						
Native American	5.18%	17.34%	283,488						
Asian	1.41%	0.79%	77,165						
Other	0.17%	0.09%	9,304						
	2002 populat	tion 5,472,750							

Sources: Arizona State Data Center, Arizona Department of Economic Security and The Arizona Department of Health Services, Office of Planning, Evaluation and Public Health Statistics. Population ratios are based on 2000 U.S. Census Data.

Table 1-6
Victims of Motor Vehicle Crashes (Arizona Residents Only)\*\*\*

Age of Victim	Total Killed	Male	Female	White	Hispanic	African American	Asian	Native American
Less than 1	4	2	2	0	3	0	0	1
1-14	55	30	25	12	19	2	0	22
15-19	110	76	34	43	39	4	0	24
20-44	433	317	116	197	132	11	2	90
45-64	234	162	72	150	45	3	4	32
65+	167	97	70	139	20	1	2	5
Unknown								
Total	1,003	684	319	541	258	21	8	174

Source: The Arizona Department of Health Services, Office of Planning, Evaluation and Public Health Statistics

\*\*\*includes victims of crashes occurring outside Arizona.

Figure 1-5, Vehicle Moles Traveled

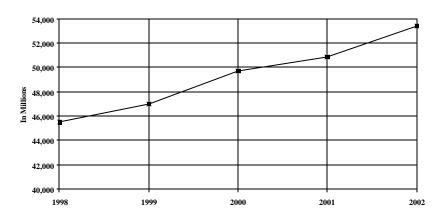


Figure 1-6, Arizona versus U.S. Fatality Rate

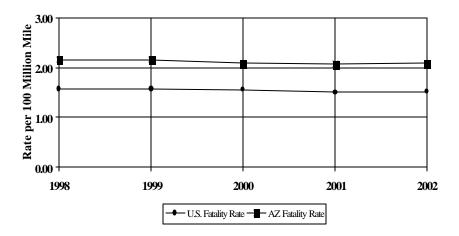
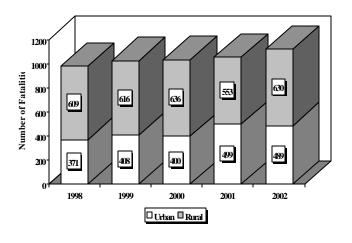
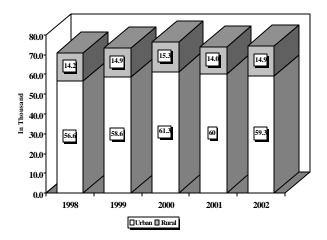


Figure 1-7, Traffic Fatalities by Land Use

Figure 1-8, Traffic Injuries by and Use





#### Section 1: Highlights and Historical Trends

## Table 1-7 Holiday Crash Statistics

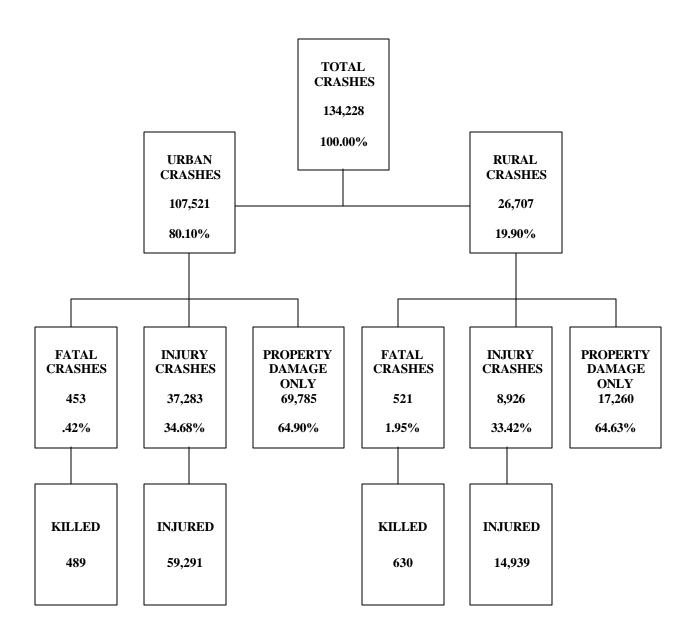
Holidays such as Memorial Day, Labor Day, and Thanksgiving are regarded as a 3 or 4 day weekend holiday for statistical purposes. Holidays such as Christmas, New Years, and the Fourth of July are celebrated on specific dates; which also make the holiday period range from two to five days in length.

Holiday fatality statistics are based on fatal crashes occurring between 6:00 p.m. on the last working day prior to the holiday and 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.

2000 Holidays	Beginning at 6 p.m.	Ending at 5:59 a.m.	Number of Days	Fatal Crashes	Persons Killed	Alcohol- Related Crashes	Alcohol- Related Fatalities
New Years	Monday 12/31/01	Wednesday 1/2/02	2	9	9	1	1
Memorial Day	Friday 5/24/02	Tuesday 5/28/02	4	7	11	4	5
July 4th	Wednesday 7/03/02	Friday 7/5/02	2	14	18	2	2
Labor Day	Friday 8/30/02	Tuesday 9/3/02	4	14	20	5	5
Thanksgiving Day	Wednesday 11/27/02	Monday 12/02/02	5	15	19	5	5
Christmas	Tuesday 12/24/02	Thursday 12/26/02	2	9	12	2	3

Fatal	New Years	Memorial	July 4th	Labor	Thanks-	Christmas	Total
Crashes		Day		Day	giving		
by Year							
1998	10	10	6	3	13	10	52
1999	6	13	5	13	13	5	49
2000	10	11	17	16	19	10	80
2001	10	16	4	15	11	15	71
2002	9	7	14	14	15	9	68
Persons	New Years	Memorial	July 4th	Labor	Thanks-	Christmas	Total
Killed		Day		Day	Giving		
1998	10	13	7	3	14	13	60
1999	7	16	7	13	14	9	58
2000	11	16	21	19	24	12	99
2001	13	18	4	15	14	15	79
2002	9	11	18	20	19	12	95
Number	New Years	Memorial	July 4th	Labor	Thanks-	Christmas	Total
of Days		Day		Day	giving		
1998	4	3	3	3	4	3	20
1999	3	3	3	3	4	2	18
2000	3	3	4	3	4	3	20
2001	4	4	2	4	5	4	23
2002	2	4	2	4	5	2	19

Section 2: Geographic Location



Tables 2-1, 2-2, and 2-3 Severity by First Harmful Event Statewide

Statewide		Number of	Number of Persons			
	Total	Fatal	Injury	PDO	Killed	Injured
Overturning	3,339	256	1,906	1,177	302	3,402
Other Non-Collision	4,350	22	456	3,872	23	582
Pedestrian	1,608	147	1,337	124	150	1,462
Motor Veh. In Transit	102,580	377	35,473	66,730	450	60,020
Motor Veh. Other Roadway	30	7	15	8	11	38
Pedalcyclist	1,893	15	1,610	268	15	1,652
Animal	1,791	2	216	1,573	3	314
Fixed Object	13,147	108	3,827	9,212	119	5,005
Other Object	47	0	9	38	0	13
Misc.	5,443	40	1,360	4,043	46	1,742
TOTALS	134,228	974	46,209	87,045	1119	74,230

## **Severity by First Harmful Event in Urban Areas**

Urban		Number of		Number of Persons			
	Total	Fatal	Injury	PDO	Killed	Injured	
Overturning	685	46	390	249	54	607	
Other Non-Collision	3,677	9	369	3,299	10	456	
Pedestrian	1,386	102	1,186	98	105	1,293	
Motor Veh. In Transit	88,379	218	30,723	57,438	237	51,471	
Motor Veh. Other Roadway	16	4	6	6	4	18	
Pedalcyclist	1,720	13	1,467	240	13	1,508	
Animal	223	0	26	197	0	36	
Fixed Object	8,845	52	2,441	6,352	57	3,100	
Other Object	16	0	3	13	0	4	
Misc.	2,572	9	672	1,891	9	798	
TOTALS	107,519	453	37,283	69,783	489	59,291	

## **Severity by First Harmful Event in Rural Areas**

Rural		Number of	Number of Persons			
	Total	Fatal	Injury	PDO	Killed	Injured
Overturning	2,654	210	1,516	928	248	2,795
Other Non-Collision	673	13	87	573	13	126
Pedestrian	222	45	151	26	45	169
Motor Veh. In Transit	14,201	159	4,750	9,292	213	8,549
Motor Veh. Other Roadway	14	3	9	2	7	20
Pedalcyclist	173	2	143	28	2	144
Animal	1,568	2	190	1,376	3	278
Fixed Object	4,302	56	1,386	2,860	62	1,905
Other Object	31	0	6	25	0	9
Misc.	2,871	31	688	2,152	37	944
TOTALS	26,709	521	8,926	17,262	630	14,939

Table 2-4
Crashes by County

		Number o	of Crashes		Number o	of Persons
County	Total	Fatal	Injury	PDOs	Fatalities	Injuries
Apache	852	33	268	551	37	496
Cochise	2,153	29	604	1,520	30	1,002
Coconino	4,373	48	1,163	3,162	57	1,916
Gila	1,059	16	344	699	22	552
Graham	318	4	125	189	7	223
Greenlee	61	2	20	39	2	28
La Paz	590	20	206	364	25	352
Maricopa	87,606	441	30,529	56,636	489	48,955
Mohave	3,118	45	1,126	1,947	61	1,827
Navajo	1,516	42	476	998	45	860
Pima	21,854	135	7,751	13,968	162	12,232
Pinal	3,546	68	1,191	2,287	81	1,974
Santa Cruz	592	5	152	435	5	225
Yavapai	3,886	51	1,195	2,640	55	1,818
Yuma	2,704	35	1,059	1,610	41	1,770
Total	134,228	974	46,209	87,045	1119	74,230

While rural crashes in Arizona accounted for only 19.90% of all crashes, they were responsible for 53.50% of all fatal crashes occurring in 2002.

Table 2-5
Analysis by Jurisdiction

		Number of Crashes		No. of Persons		Alcohol-Related		ed	
COUNTIES Cities	Total	Fatal	Injury	Property Damage	Killed	Injured	Crashes	Killed	Injured
APACHE COUNTY									
Eagar	47	0	12	35	0	21	3	0	1
St. Johns	37	0	10	27	0	24	3	0	8
Springerville	47	1	10	36	1	21	6	1	5
State Rural Roads	609	16	198	395	18	370	43	3	54
Other Rural Roads	112	16	38	58	18	60	15	3	22
TOTAL	852	33	268	551	37	496	70	7	90

**Section 2: Geographic Location** 

		Number of Crashes		No. of P	Persons	Alcohol-Related			
COUNTIES Cities	Total	Fatal	Injury	Property Damage	Killed	Injured	Crashes	Killed	Injured
COCHISE COUNTY									
Benson	101	0	24	77	0	35	5	0	2
Bisbee	53	1	17	35	1	26	3	0	2
Douglas	252	0	62	190	0	92	9	0	3
Huachuca City	13	0	3	10	0	3	0	0	0
Sierra Vista	747	0	206	541	0	309	25	0	17
Tombstone	14	1	2	11	1	3	2	1	0
Willcox	46	1	9	36	1	15	1	0	0
State Rural Roads	643	21	190	432	22	362	35	5	31
Other Rural Roads	284	5	91	188	5	157	25	2	14
TOTAL	2,153	29	604	1,520	30	1,002	105	8	69
COCONINO COUNTY									
Flagstaff	1,985	2	434	1,549	2	693	97	0	62
Fredonia	· ·	2 0		·	0				02
	2 113		1 36	1 76		2 61	0 10	0	10
Page Sedona	309	1	36 74		1			0	10
Williams		1		234	1	103	25	0	
	123	0	21	102	0	33	9	0	9
State Rural Roads	1,465	34	474	957	42	833	70	5	71
Other Rural Roads	376	10	123	243	11	191	32	1	32
TOTAL	4,373	48	1,163	3,162	57	1,916	243	6	194
GILA COUNTY									
Globe	192	1	64	127	1	111	12	0	8
Hayden	1	0	1	0	0	2	0	0	0
Miami	25	0	7	18	0	16	0	0	0
Payson	188	0	64	124	0	100	6	0	6
Winkelman	0	0	0	0	0	0	0	0	0
State Rural Roads	520	12	169	339	16	266	35	3	35
Other Rural Roads	133	3	39	91	5	57	15	1	9
TOTAL	1,059	16	344	699	22	552	68	4	58
GRAHAM COUNTY									
Pima	0	0	0	0	0	0	0	0	0
Safford	80	0	29	51	0	56	5	0	8
Thatcher	70	0	28	42	0	45	3	0	2
State Rural Roads	102	4	40	58	7	74	7	1	4
Other Rural Roads	66	0	28	38	0	48	11	0	11
TOTAL	318	4	125	189	7	223	26	1	25
TOTAL	310	<b>-</b>	123	109			20	-	

		Number of Crashes		No. of F	Persons	Alcohol-Related			
COUNTIES Cities	Total	Fatal	Injury	Property Damage	Killed	Injured	Crashes	Killed	Injured
GREENLEE									
COUNTY									
Clifton	2	1	0	1	1	1	0	0	0
Duncan	0	0	0	0	0	0	0	0	0
State Rural Roads	59	1	20	38	1	27	3	0	3
Other Rural Roads	0	0	0	0	0	0	0	0	0
TOTAL	61	0	20	39	2	28	3	0	0
LA PAZ COUNTY									
Parker	81	3	13	65	5	18	5	1	4
Quartzite	66	2	21	43	3	36	2	0	1
State Rural Roads	380	12	151	217	13	262	20	1	15
Other Rural Roads	63	3	21	39	4	36	14	3	13
TOTAL	590	20	206	364	25	352	41	5	33
MARICOPA COUNTY									
Avondale	815	4	236	575	4	377	37	2	35
Buckeye	219	3	82	134	4	140	11	1	18
Carefree	45	2	16	27	2	21	6	1	4
Cave Creek	71	0	20	51	0	24	5	0	3
Chandler	4,303	13	1,266	3,024	13	1,954	241	3	151
El Mirage	155	3	41	111	3	60	7	1	5
Fountain Hills	156	2	38	116	3	57	6	0	2
Gila Bend	45	1	16	28	1	22	4	0	4
Gilbert	1,673	2	532	1,139	2	821	97	0	70
Glendale	5,230	18	1,610	3,602	18	2,568	286	5	223
Goodyear	520	6	170	344	7	284	32	0	25
Guadalupe	151	0	46	105	0	65	4	0	3
Litchfield Park	51	2	18	31	4	37	4	0	1
Mesa	11,144	30	3,498	7,616	32	5,392	568	7	399
Paradise Valley	211	0	76	135	0	102	20	0	4
Peoria	2,081	9	589	1,483	10	937	97	5	65
Phoenix	41,235	223	15,809	25,203	233	26,029	2,586	76	2,323
Queen Creek	44	1	12	31	2	22	2	0	2
Scottsdale	4,410	17	1,540	2,853	24	2,309	325	13	253
Surprise	385	3	138	244	3	232	15	0	8
Tempe	8,518	20	2,632	5,866	21	4,026	516	2	377
Tolleson	242	1	85	156	1	134	15	0	14
Wickenburg	63	1	19	43	1	29	3	0	3
Youngtown	24	0	7	17	0	13	3	0	4
State Rural Roads	2,587	41	852	1,694	57	1,417	154	7	136
Other Rural Roads	3,228	39	1,181	2,008	44	1,883	248	14	192
TOTAL	87,606	441	30,529	56,636	489	48,955	5,292	137	4,324

**Section 2: Geographic Location** 

		Number of Crashes		hes	No. of P	Persons	Alo	cohol-Relate	d
COUNTIES Cities	Total	Fatal	Injury	Property Damage	Killed	Injured	Crashes	Killed	Injured
MOHAVE COUNTY									
Bullhead City	832	8	266	558	11	415	92	1	72
Colorado City	19	0	7	12	0	11	0	0	0
Kingman	542	3	185	354	4	275	29	0	29
Lake Havasu City	593	2	227	354	2	353	64	0	45
State Rural Roads	794	26	308	460	37	574	54	6	56
Other Rural Roads	348	6	133	209	7	199	40	1	29
TOTAL	3,128	45	1,126	1,947	61	1,827	279	8	231
NAVAJO COUNTY									
Holbrook	105	5	27	73	5	44	3	0	2
Pinetop-Lakeside	128	1	40	87	1	63	12	0	9
Show Low	185	2	59	124	2	109	10	0	23
Snowflake	72	0	15	57	0	22	3	0	3
Taylor	23	0	8	15	0	19	1	0	0
Winslow	164	0	33	131	0	46	10	0	3
State Rural Roads	630	17	221	392	20	419	42	2	57
Other Rural Roads	209	17	73	119	17	138	32	6	43
TOTAL	1,516	42	476	998	45	860	113	8	140
PIMA COUNTY									
Marana	885	8	224	653	13	363	36	1	27
Oro Valley	322	1	82	239	1	140	9	0	1
Sahuarita	78	0	29	49	0	69	7	0	5
South Tucson	241	1	81	159	1	110	19	0	8
Tucson	15,306	51	5,655	9,600	55	8,799	761	17	609
State Rural Roads	1,154	35	412	707	50	781	701	14	86
Other Rural Roads	3,868	39	1,268	2,561	42	1,970	250	14	182
TOTAL	21,854	135	7,751	13,968	162	12,232	1,159	46	918
PINAL COUNTY									
Apache Junction	430	2	151	277	2	224	28	0	27
Casa Grande	774	3	241	530	6	361	29	0	23
Casa Grande Coolidge	112	0	27	330 85	0	40		0	1
Eloy	200	7	51	142	9	83	10	0	13
Florence	53	0	14	39	0	22	5	0	
Kearny	55	0	3	2	0	5		0	4 0
Mammoth		0	2	3	0	5	0	0	
	5		13	3 17		5 19		-	0
Superior State Purel Boods	1 176	0			0		2	0	2
State Rural Roads Other Rural Roads	1,176 761	29 27	414 275	733 459	33 31	752 463	74 98	5 14	78 78
TOTAL	3,546	68	1,191	2,287	81	1,974	258	19	226

About 60.2% of Arizona's population resides in Maricopa county, but only 45.3% of all fatal crashes occurred there in 2002.

		Num	ber of Cras	hes	No. of I	Persons	A	lcohol-Relate	ed
COUNTIES Cities	Total	Fatal	Injury	Property Damage	Killed	Injured	Crashes	Killed	Injured
SANTA CRUZ									
COUNTY									
Nogales	361	1	82	278	1	112	12	0	3
Patagonia	1	0	1	0	0	1	0	0	0
State Rural Roads	222	3	68	151	3	111	16	1	14
Other Rural Roads	8	1	1	6	1	1	1	1	0
				~					Ť
TOTAL	592	5	152	435	5	225	29	2	17
TATAL DATE COLUMNA									
YAVAPAI COUNTY	120		477	0.1	2	7.4	10	0	1.1
Camp Verde	139	1	47	91	2	74 52	12	0	11
Chino Valley	107	1	36	70	1	52	8	1	6
Clarkdale	15	0	3	12	0	6	2	0	0
Cottonwood	283	1	111	171	1	176 9	16	1 0	12 0
Jerome	18 1,069	0 5	3 289	15 775	0 5	407	0 55	0	30
Prescott Prescott Valley	510	5	131	374	5	192	39	1	27
State Rural Roads	1,246	26	404	816	29	655	67	6	56
Other Rural Roads	499	12	171	316	12	247	50	5	36
Other Kurai Koaus	422	12	1/1	310	12	241	30	3	30
TOTAL	3,886	51	1,195	2,640	55	1,818	249	14	178
YUMA COUNTY									
San Luis	56	2	11	43	4	14	6	3	3
Somerton	26	0	7	19	0	10	1	0	0
Wellton	2	0	1	1	0	1	0	0	0
Yuma	1,720	11	719	990	12	1,189	99	1	78
State Rural Roads	365	13	133	219	14	241	16	1	15
Other Rural Roads	535	9	188	338	11	315	43	4	42
TOTAL	2,704	35	1,059	1,610	41	1,770	165	9	138
STATEWIDE TOTAL	134,228	974	46,209	87,045	1,119	74,230	8,100	274	6,644

Some individual city data may be incomplete due to lack of timely reporting.

Totals within city and town jurisdictions include all State Highways

Section 3: Crash Descriptions

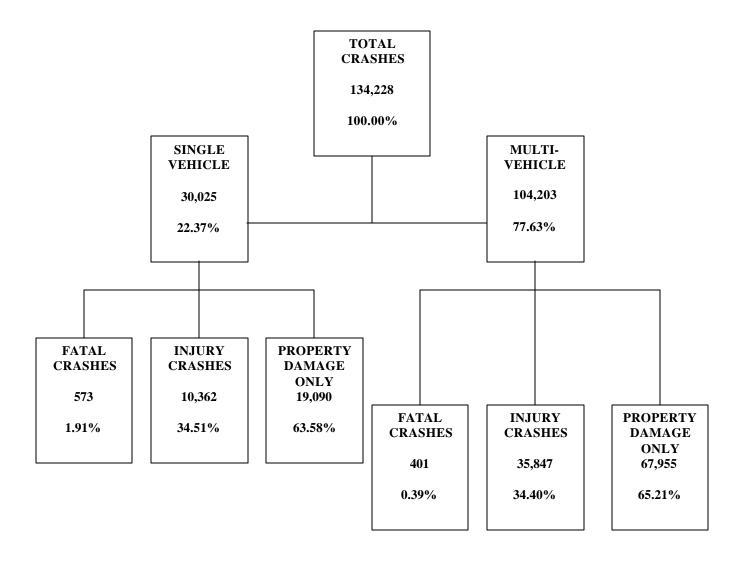


Table 3-1
Manner of Collision in Multi-Vehicle Crashes

		Percent of		Percent of		Percent of
Manner of Collision	Total	All	Fatal	Fatal	Injury	Injury
		Crashes		Crashes		Crashes
Head On	811	0.78%	85	21.20%	450	1.26%
Rear End	48,153	46.21%	58	14.46%	16,659	46.47%
Side Swipe Opposite Direction	982	0.94%	9	2.24%	303	0.85%
Side Swipe Same Direction	12,870	12.35%	30	7.48%	2,073	5.78%
Left Turn	12,159	11.67%	71	17.71%	5,999	16.74%
Other Angle	22,597	21.69%	112	27.93%	8,985	25.06%
Backed Into	2,160	2.07%	0	0.0%	145	0.40%
U-Turn	1,497	1.44%	9	2.24%	482	1.34%
Other	2,974	2.85%	27	6.73%	751	2.10%
TOTAL	104,203	100.00%	401	100.00%	35,847	100.00%

Table 3-2 Unusual Road Conditions

		Number of	Number of Victims			
Unusual Road Conditions	Total	Fatal	Injury	PDO	Killed	Injured
No Unusual Condition	127,833	940	44,218	82,675	1,082	71,111
<b>Under Construction Thru Traffic Allowed</b>	4,437	11	1,351	3,075	11	2,115
<b>Under Construction Traffic Detoured</b>	98	0	36	62	0	49
Under Repairs	120	0	38	82	0	68
Holes,Ruts,Bumps	338	7	125	206	7	199
Obstruction Protected	35	1	11	23	1	14
Obstruction Unprotected	120	0	25	95	0	39
Obstruction Unlighted at Night	110	4	38	68	4	56
<b>Defective Shoulders</b>	20	2	7	11	3	11
Changing Road Width	292	0	86	206	0	140
Flooded	362	7	129	226	8	204
Temporary Lane Closure	463	2	145	316	3	224
TOTALS	134,228	974	46,209	87,045	1,119	74,230

Table 3-3
Weather Conditions

		Number o	Number	Number of Persons		
Weather	Total	Fatal	Injury	PDO	Killed	Injured
Clear	117,924	778	40,802	76,344	899	65,435
Raining	3,054	18	962	2,074	19	1,558
Cloudy	11,393	94	3,961	7,338	99	6,438
Snow,Sleet	976	5	245	726	7	397
Strong Wind	155	2	53	100	2	89
Blowing Sand	187	2	70	115	2	128
Fog,Smoke,Smog	73	1	25	47	1	37
Not Reported	466	74	91	301	90	148
TOTALS	134,228	974	46,209	87,045	1119	74,230

Table 3-4 Lighting Conditions

		Number o	Number of Persons			
Lighting	Total	Fatal	Injury	PDO	Killed	Injured
Daylight	95,782	459	32,903	62,423	538	52,254
Dawn or Dusk	6,769	71	2,286	4,412	79	3,644
Darkness	31,344	444	10,957	19,945	497	18,234
Not Reported	333	0	63	265	5	98
_						
TOTALS	134,228	974	46,209	87,045	1,119	74,230

Table 3-5
Road Surface

		Number o	of Crashes		Number of Persons		
Surface	Total Fatal		Injury	PDO	Killed	Injured	
Asphalt	118,586	815	41,388	76,383	932	66,847	
Concrete	13,326	57	4,091	9,178	67	6,213	
Gravel	369	6	113	250	7	167	
Dirt	1,464	24	505	935	25	816	
Other	80	1	23	56	1	42	
Not Reported	403	71	89	243	87	145	
_							
TOTALS	134,228	974	46,209	87,045	1119	74,230	

Table 3-6
Road Surface Conditions

		Number		Number of Persons		
Surface	Total	Fatal	Injury	PDO	Killed	Injured
Wet	4,493	26	1,452	3,015	28	2,358
Loose Dirt, Sand, Etc.	807	10	283	514	13	432
Snowy or Icy	1,243	12	322	909	14	539
Other	101	1	33	67	1	45
Unknown	555	3	141	411	3	215
Dry, No Unusual Cond.	127,029	922	43,978	82,129	1,060	70,641
TOTALS	134,228	974	46,209	87,045	1,119	74,230

# The USDOT estimates that 67% of traffic fatalities are caused by Aggressive Drivers.

Table 3-7 Road Grade

		Number o	f Crashes		Number of Persons			
Road Grade	Total	Fatal	Injury	PDO	Killed	Injured		
Level	120,474	747	41,600	78,127	849	67,027		
Downgrade	7,393	104	2,574	4,715	128	4,015		
Upgrade	5,052	52	1,634	3,366	58	2,544		
Hill Crest	404	9	141	254	9	246		
Dip	164	6	52	106	6	88		
Not Reported	741	56	208	477	69	310		
_								
TOTALS	134,228	974	46,209	87,045	1,119	74,230		

Figure 3-1 Crashes by Time of Day Weekdays

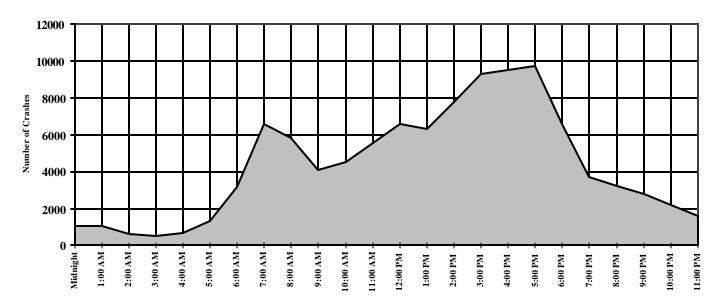


Figure 3-2 Crashes by Time of Day Weekends

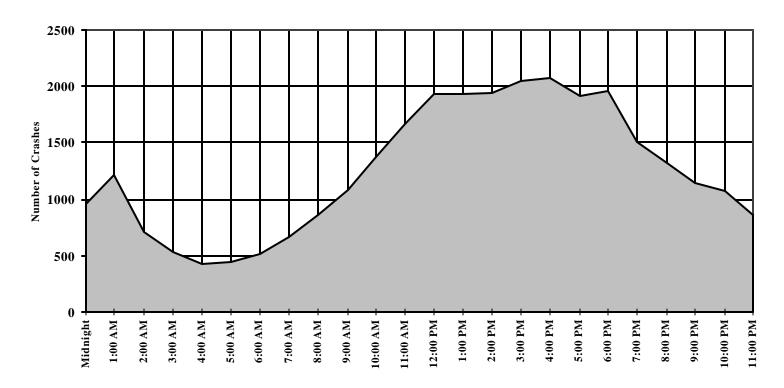
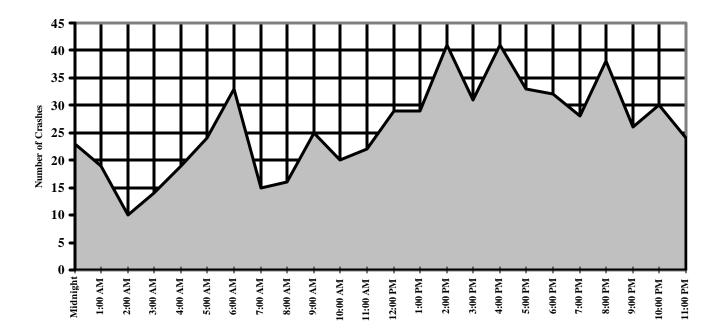
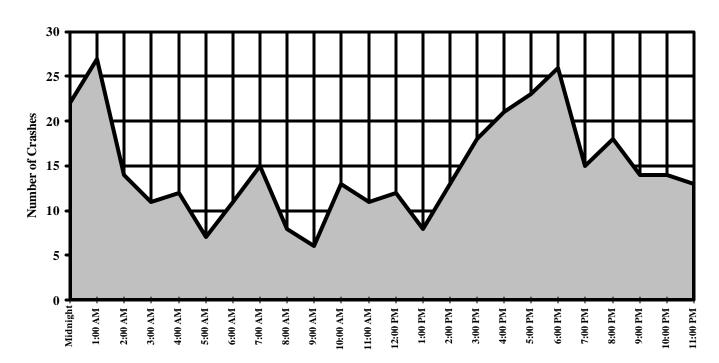


Figure 3-3
Fatal Crashes by Time of Day
Weekdays
Figure 3-4



Fatal Crashes by Time of Day Weekends



#### **Section 3: Crash Descriptions**

Figure 3-5 Crashes by Day of Week

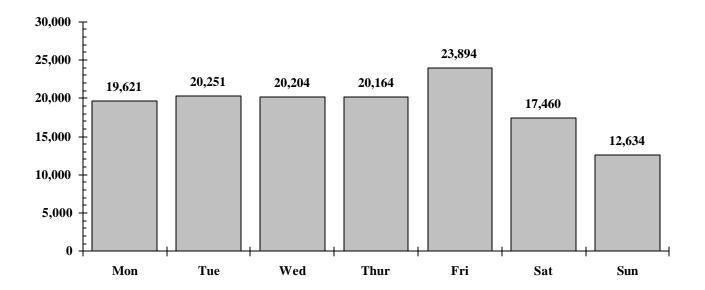


Figure 3-6
Fatal Crashes by Day of Week

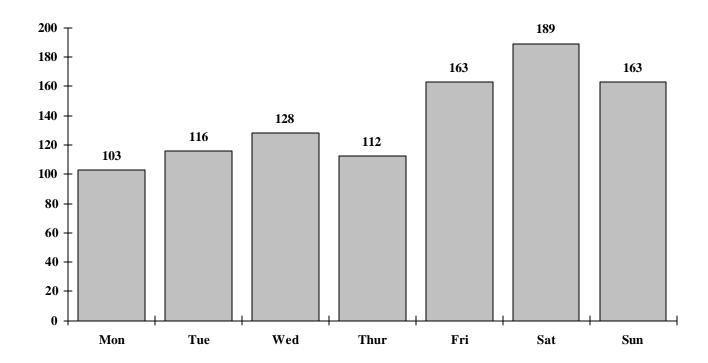


Figure 3-7 Crashes by Month

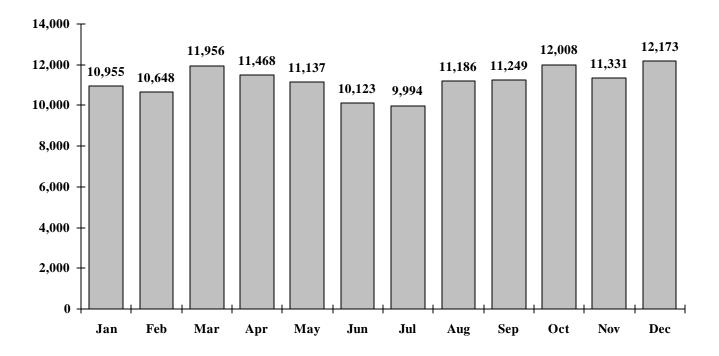


Figure 3-8
Fatal Crashes by Month

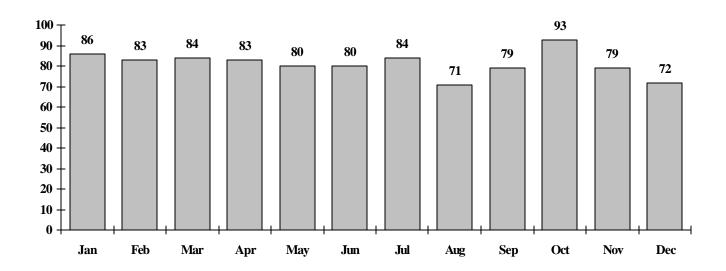
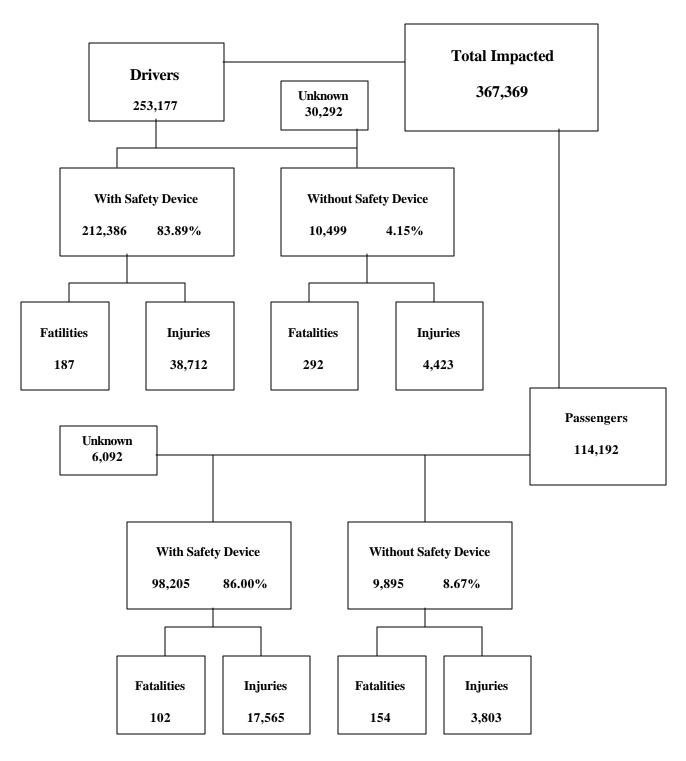


Table 3-9 Crashes by Hour and Day of Week

	Total		Mond	ay	Tueso	lay	Wedne	sday	Thursd	lay	Frida	y	Saturd	lay	Sund	ay
Hour Beginning	Crash All	es Fatal	All	Fatal												
Midnight	2,003	45	230	4	176	3	184	6	201	2	255	8	470	13	487	9
1:00	2,263	46	205	3	181	3	174	3	213	4	284	6	592	11	614	16
2:00	1,346	24	129	0	102	1	128	5	120	1	155	3	359	12	353	2
3:00	1,049	25	132	3	93	1	91	3	84	3	118	4	262	3	269	8
4:00	1,112	31	130	3	132	4	107	1	138	7	177	4	227	7	201	5
5:00	1,734	31	266	5	274	6	217	1	275	3	261	9	238	6	203	1
6:00	3,700	44	620	7	646	7	697	6	626	6	592	7	281	5	238	6
7:00	7,219	30	1,258	1	1,374	3	1,394	6	1,329	1	1,197	4	414	10	253	5
8:00	6,696	24	1,176	3	1,318	2	1,137	4	1,147	5	1,058	2	543	5	317	3
9:00	5,187	31	,817	3	860	7	800	5	778	2	854	8	686	3	392	3
10:00	5,899	33	947	4	936	5	858	4	844	5	946	2	833	5	535	8
11:00	7,201	33	1,108	3	1,064	3	1,077	5	1,056	5	1,234	6	1,065	5	597	6
Noon	8,510	41	1,240	9	1,342	7	1,251	2	1,230	6	1,518	5	1,179	7	750	5
1:00	8,209	37	1,245	4	1,213	8	1,230	5	1,129	5	1,464	7	1,132	4	796	4
2:00	9,724	54	1,511	7	1,458	15	1,522	4	1,533	6	1,764	9	1,166	3	770	10
3:00	11,357	49	1,752	4	1,838	6	1,775	6	1,779	5	2,168	10	1,185	7	860	11
4:00	11,585	62	1,815	8	1,811	4	1,844	15	1,767	5	2,276	9	1,192	10	880	11
5:00	11,626	56	1,797	6	1,879	6	1,946	6	1,973	7	2,114	8	1,065	13	852	10
6:00	8,520	58	1,110	7	1,232	5	1,308	10	1,321	6	1,590	4	1,062	12	897	14
7:00	5,191	43	642	2	691	3	678	9	703	4	976	10	846	9	655	6
8:00	4,504	56	560	4	570	6	599	8	652	8	807	12	724	10	592	8
9:00	3,918	40	419	5	481	4	521	6	568	4	792	7	664	10	473	4
10:00	3,219	44	297	5	331	1	402	5	407	8	717	11	687	10	378	4
11:00	2,456	37	215	3	249	6	264	3	291	4	577	8	588	9	272	4
TOTALS	134,228	974	19,621	103	20,251	116	20,204	128	20,164	112	23,894	163	17,460	189	12,634	163
TOTALS	134,220	7/4	17,021	103	20,231	110	20,204	120	20,104	112	23,074	103	17,400	109	12,034	103

## Section 4: Safety Devices



In this chart, "Unknown" represents incidents where the reporting officer could not discern whether a safety device was in use at the time of the crash. For this reason fatalities and injuries occurring where use was unknown are not included. Motorcycle operators are included in this chart under "Drivers." "Safety devices" refer to the use of helmets or safety belts depending on the mode of transportation. For a detailed analysis of motorcycle helmet use, see Section 8: Motorcycle Crashes.

#### **Section 4: Safety Devices**

#### Arizona law requires young children to be restrained when riding in a motor vehicle.

A.R.S. Title 28-907 states "...a person shall not operate a motor vehicle on the highways in this state when transporting a child who is under five years of age unless that child is properly secured in a child passenger restraint system."

Table 4-1
Child Restraint Usage (less than five years old)

China Treserante Coage (1000 than 11, 0 years ora)											
Severity of Injury	Restraint	Percent of	No	Percent of	Not	Percent of					
	Used	Restraint	Restraint	No	Reported	Unknown					
		Used	Used	Restraint							
No injury	12,523	89.02%	528	63.31%	419	75.77%					
Possible injury	972	6.91%	126	15.11%	55	9.95%					
Injury	434	3.09%	166	19.90%	40	7.23%					
Fatality	5	0.04%	7	0.84%	2	0.36%					
Unknown	133	0.95%	7	0.84%	37	6.69%					
Totals	14,067	100.00%	834	100.00%	553	100.00%					

The most dangerous place for a child to travel in a car is in your lap. This is often called the "child crusher position." In a crash of approximately 30 mph, a 10 lb infant will be ripped from a belted adult's arms with a force of almost 200 pounds. If the adult is unbelted, the child is likely to be crushed between the adult's body and the dashboard.

## Wearing a seat belt isn't just good idea, in Arizona it's the law

Table 4-2
Driver Restraint Usage

Severity of Injury	Restraint	Percent of	No Restraint	Percent of	Not	Percent of
	Used	Restraint	Used	No Restraint	Reported	Unknown
		Used				
No injury	173,488	80.96%	5,784	53.89%	9,708	34.47%
Possible injury	23,738	11.08%	1,349	12.57%	1,433	5.09%
Injury	14,974	6.99%	3,074	28.64%	2,228	7.91%
Fatality	187	0.09%	292	2.72%	112	0.40%
Unknown	1,896	0.88%	234	2.18%	14,680	52.13%
Total	214,283	100.00%	10,733	100.00%	28,161	100.00%

Excludes all motorcycle, motor scooter, moped, and golf cart operators.

Table 4-3 Front-Seat Passenger Restraint Usage

Severity of Injury	Restraint	Percent of	No Restraint	Percent of	Not	Percent of				
	Used	Restraint	Used	No Restraint	Reported	Unknown				
		Used								
No injury	47,030	79.20%	2,668	54.39%	1,917	64.16%				
Possible injury	7,409	12.48%	771	15.72%	326	10.91%				
Injury	4,505	7.59%	1,339	27.30%	498	16.67%				
Fatality	81	0.14%	89	1.81%	20	0.67%				
Unknown	355	0.60%	38	0.77%	227	7.60%				
Total	59,380	100.00%	4,905	100.00%	2,988	100.00%				

According to NHTSA, "Safety belts, when used, reduce the risk of fatal injury to front seat passenger car occupants by 45%, and the risk of Moderate -to- critical injury by 50%."



NHTSA surveys show that in 2002, nationwide seatbelt usage was approximately 75 %.

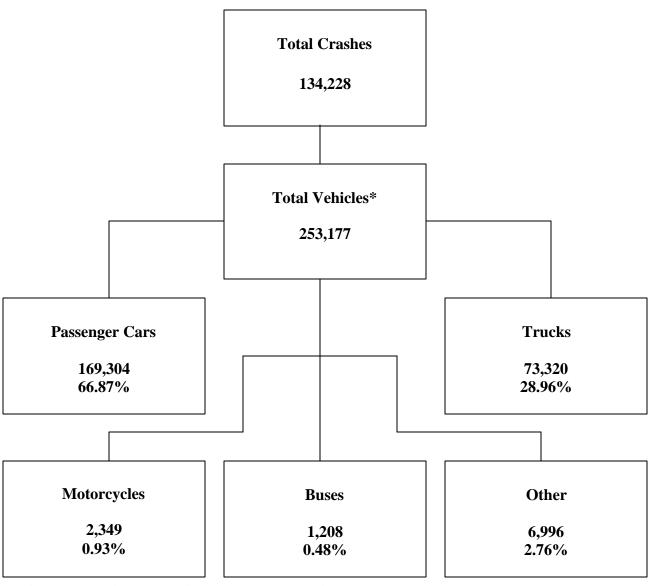
Table 4-4
Rear-Seat Passenger Restraint Usage

			8	8		
Severity of Injury	Restraint	Percent of	No Restraint	Percent of	Not	Percent of
	Used	Restraint	Used	No Restraint	Reported	Unknown
		Used			•	
No injury	24,114	84.46%	2,741	64.84%	1,313	72.98%
Possible injury	2,766	9.69%	554	13.10%	169	9.40%
Injury	1,464	5.13%	847	20.03%	231	12.84%
Fatality	16	0.06%	58	1.37%	11	0.61%
Unknown	191	0.67%	28	0.66%	75	4.17%
Total	28,551	100.00%	4,228	100.00%	1,799	100.00%

Regionally, the highest usage rate was in the West, at 78%.

Lowest usage rate was the Northeast, at 69%.

Section 5: Motor Vehicle and Driver Characteristics



<sup>\*</sup>Includes driverless or illegally parked vehicles.

#### **Section 5: Motor Vehicle and Driver Characteristics**

Table 5-1
Arizona Motor Vehicle Registrations

Privately Owned Vehicles	3,608,907
Commercial Vehicles	360,326
Buses and Taxis	3,326
Motorcycles*	116,669
Mopeds	434
Total	4,089,662

\*Includes 3 & 4 wheel ATVs and golf carts.

Data provided by, and inquiries should be directed to, Motor Vehicles Division.

Table 5-2 Motor Vehicle Crash Involvement by Vehicle Type

Motor Vehicle Type	Total	Percent	Fatal	Injury	PDOs
Passenger Car (Includes cars with trailer)	169,306	66.87%	824	62,105	106,377
Pickup Truck (Incl. Panel & Mini Bus)	66,025	26.08%	368	22,653	43,004
Pickup Truck With Camper	28	0.01%	2	8	18
Other Vehicle With Camper	1	0.00%	0	1	0
Truck or Truck Tractor (Excl. P/U)	110	0.04%	2	31	77
Truck Tractor and Semi-Trailer	3,956	1.56%	67	937	2,952
Other Truck Combination	3,201	1.26%	25	895	2,281
Farm Tractor and/or Farm Equipment	41	0.02%	0	12	29
Taxicab	52	0.02%	0	23	29
Bus	803	0.32%	5	209	589
School Bus	405	0.16%	3	94	308
Motorcycle	2,349	0.93%	97	1,852	400
Motor Scooter or Motor Bicycle	9	0.00%	0	9	0
Moped	5	0.00%	0	4	1
Recreational Vehicle	113	0.04%	4	61	48
Motor Home or House Car	354	0.14%	6	78	270
<b>Vehicle With Special Controls (Dual, Etc.)</b>	4	0.00%	0	0	4
<b>Emergency Veh. (Inc. Privately Owned)</b>	123	0.05%	2	43	78
Military Vehicles	2	0.00%	0	0	2
Other Types Of Vehicles	175	0.07%	3	69	103
Vehicle Type Not Reported	6,115	2.42%	73	1,271	4,771
TOTALS	253,177	100.00%	1,481	90,355	161,341

Table 5-3 Hit and Run Drivers

		Number o	Number of Persons			
Hit And Run?	Total	Fatal	Injury	PDOs	Killed	Injured
Yes	15,721	50	3,783	11,888	55	5,415
No	118,507	924	42,426	75,157	1,064	68,815
TOTALS	134,228	974	1,119	74,230		

Table 5-4 Gender of Drivers Involved in Crashes

Gender of Driver						
	Total	Percent	Fatal	Percent	Injury	Percent
Male	146,435	57.84%	1,022	69.01%	51,535	57.04%
Female	96,136	37.97%	390	26.33%	36,902	40.84%
Not Reported	10,604	4.19%	69	4.66%	1,916	2.12%
TOTALS	253,175	100.00%	1,481	100.00%	90,353	100.00%

Table 5-5
Residence of Drivers Involved in Crashes

Residence of Driver								
	Total	Percent	Fatal	Percent	Injury	Percent	PDOs	Percent
Arizona	203,873	80.53%	1,075	72.59%	74,363	82.30%	128,435	79.61%
Non-Resident	35,861	14.16%	310	20.93%	11,120	12.31%	24,431	15.14%
Not Reported	13,441	5.31%	96	6.48%	4,870	5.39%	8,475	5.25%
TOTALS	253,175	100.00%	1,481	100.00%	90,353	100.00%	161,341	100.00%

Table 5-6
Drivers and Occupants Killed and Injured by Vehicle Type

Directs and Occupants	ranied and	injured by	venicie Type		
	Driv	vers	Occupa	nts	
Type of Motor Vehicle	Killed	Injured	Killed	Injured	
Passenger Car (Includes Cars With	329	34,093	247	17,751	
Trailer)					
Pickup Truck (Incl. Panel & Mini Bus)	123	10,118	71	5,729	
Pickup Truck With Camper	1	4	0	10	
Other Vehicle With Camper	0	0	0	0	
Truck or Truck Tractor (Excl. P/U)	0	7	0	6	
Truck Tractor and Semi-Trailer	10	241	2	70	
Other Truck Combination	2	252	5	97	
Farm Tractor and/or Farm Equipment	0	1	0	1	
Taxicab	0	16	0	3	
Bus	0	33	1	210	
School Bus	1	20	0	81	
Motorcycle	90	1,777	5	222	
Motor Scooter or Motor Bicycle	0	8	0	0	
Moped	0	4	0	1	
Recreational Vehicle	2	34	1	14	
Motor Home or House Car	1	20	2	26	
Vehicle With Special Controls (Dual, Etc.)	0	0	0	0	
<b>Emergency Veh. (Inc. Privately Owned)</b>	0	21	0	10	
Military Vehicles	0	0	0	0	
Other Types Of Vehicles	1	40	1	8	
Vehicle Type Not Reported	32	106	18	85	
TOTALS	592	46,795	353	24,324	

### **Section 5: Motor Vehicle and Driver Characteristics**

Table 5-7 Licensed Drivers in Arizona by Age

Driver	Male		Female	Ĭ	Total		Cumulative
Age Group	Number	Percent	Number	Percent	Number	Percent	Percent
16	10,489	0.56%	9,642	0.48%	20,131	0.55%	0.55%
17	17,442	0.94%	15,960	0.88%	33,402	0.91%	1.46%
18	21,811	1.17%	19,695	1.09%	41,506	1.13%	2.59%
19	25,744	1.38%	23,185	1.28%	48,929	1.33%	3.92%
20	27,706	1.49%	25,094	1.39%	52,800	1.44%	5.36%
21	29,077	1.56%	27,065	1.50%	56,142	1.53%	6.89%
22	30,513	1.64%	27,821	1.54%	58,334	1.59%	8.48%
23	31,257	1.68%	29,030	1.60%	60,287	1.64%	10.12%
24	33,001	1.77%	30,067	1.66%	63,068	1.71%	11.83%
25-34	368,058	19.79%	336,285	18.59%	704,343	19.20%	31.03%
35-44	399,269	21.47%	385,354	21.30%	784,623	21.39%	52.42%
45-54	355,043	19.09%	358,693	19.83%	713,736	19.46%	71.88%
55-64	245,169	13.18%	250,309	13.84%	495,478	13.51%	85.39%
65-74	154,132	8.29%	153,531	8.49%	307,663	8.39%	93.78%
75 & Older	110,803	5.96%	117,459	6.49%	228,262	6.22%	100.00%
TOTALS	1,859,514	100.00%	1,809,190	100.00%	3,668,704	100.00%	100.00%

Source, Motor Vehicle Division.

Drivers 65 years old and older represent 14.6 % of the licensed driver population, but only 7.05% of the total drivers involved in crashes.

Table 5-8
Driver Involvement by Age

			DIIVEI IIIV	31, 311131	<del> </del>			
Driver								
Age Group	Total	Percent	Fatal	Percent	Injury	Percent	PDOs	Percent
15 & Younger	922	0.36%	9	0.61%	382	0.42%	531	0.33%
16	5,257	2.08%	26	1.76%	1,832	2.03%	3,399	2.11%
17	6,865	2.71%	34	2.30%	2,440	2.70%	4,391	2.72%
18	8,505	3.36%	49	3.31%	3,223	3.57%	5,233	3.24%
19	8,641	3.41%	40	2.70%	3,175	3.51%	5,426	3.36%
20	7,861	3.10%	42	2.84%	2,858	3.16%	4,961	3.07%
21	7,773	3.07%	37	2.50%	2,931	3.24%	4,805	2.98%
22	7,447	2.94%	50	3.38%	2,754	3.05%	4,643	2.88%
23	6,750	2.67%	41	2.77%	2,506	2.77%	4,203	2.61%
24	6,263	2.47%	34	2.30%	2,238	2.48%	3,991	2.47%
25-34	53,420	21.10%	287	19.38%	19,660	21.76%	33,473	20.75%
35-44	45,052	17.79%	255	17.22%	16,460	18.22%	28,337	17.56%
45-54	32,842	12.97%	192	12.96%	11,883	13.15%	20,767	12.87%
55-64	18,846	7.44%	140	9.45%	6,903	7.64%	11,803	7.32%
65-74	10,179	4.02%	80	5.40%	3,676	4.07%	6,423	3.98%
75 & Older	7,681	3.03%	83	5.60%	6,538	7.24%	1,060	0.66%
Not Reported	18,871	7.45%	82	5.54%	894	0.99%	17,895	11.09%
TOTALS	253,175	100.00%	1,481	100.00%	90,353	100.00%	161,341	100.00%

#### **2002 Arizona Crash Facts Summary**

Table 5-9
Driver Errors

Contributing	Total	Percent	Fatal	Percent	Injury	Percent	PDO	Percent
Circumstances	Drivers	of Total	Drivers	of Fatal	Drivers	of Injury	Drivers	of PDO
		Drivers		Drivers		Drivers		Drivers
Exceeded Lawful Speed	1,474	0.58%	99	6.68%	657	0.73%	718	0.45%
Speeding *	47,864	18.91%	283	19.11%	17,569	19.44%	30,012	18.60%
Failed to Yield	26,384	10.42%	112	7.56%	10,838	11.99%	15,434	9.57%
Ran Stop Sign	1,484	0.59%	25	1.69%	681	0.75%	778	0.48%
Disregarded Signal	5,431	2.15%	35	2.36%	2,884	3.19%	2,512	1.56%
Opposing Lane	1,419	0.56%	57	3.85%	582	0.64%	780	0.48%
Followed too Closely	5,004	1.98%	1	0.07%	1,516	1.68%	3,487	2.16%
Improper Turn	3,952	1.56%	6	0.41%	1,008	1.12%	2,938	1.82%
<b>Driver Inattention</b>	13,397	5.29%	54	3.65%	3,799	4.20%	9,544	5.92%
Other Improper Driving	7,066	2.79%	68	4.59%	1,955	2.16%	5,043	3.13%
Faulty Equipment	291	0.11%	0	0.00%	93	0.10%	198	0.12%
<b>Unsafe Lane Change</b>	6,572	2.60%	9	0.61%	1,123	1.24%	5,440	3.37%
<b>Unsafe Passing</b>	1,219	0.48%	11	0.74%	268	0.29%	940	0.58%
No Improper Driving	117,531	46.42%	526	35.52%	43,403	48.04%	73,602	45.62%
Not stated	14,089	5.56%	195	13.17%	3,979	4.40%	9,915	6.15%
TOTALS	253,177	100.00	1,481	100.00%	90,355	100.00%	161,341	100.00%
		%						

<sup>\*</sup> Speeding too fast for conditions

Table 5-10 Driver Physical Condition

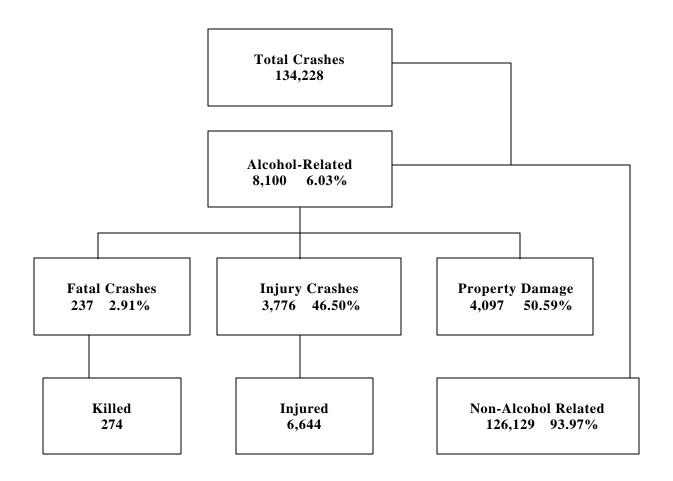
Driver Condition		% of		% of		% of		% of			
	Total	Total	Fatal	Fatal	Injury	Injury	PDO	PDO			
	Drivers	Drivers	Drivers	Drivers	<b>Drivers</b>	<b>Drivers</b>	<b>Drivers</b>	Drivers			
No Apparent Influence	217,265	85.82%	836	56.45%	78,068	86.40%	138,361	85.76%			
Impaired Had Been Drinking	8,224	3.25%	248	16.75%	3,831	4.24%	4,146	2.57%			
Other Physical Impairment	400	0.16%	6	0.41%	202	0.22%	192	0.12%			
Ill, Ability Influenced	384	0.15%	5	0.34%	234	0.26%	145	0.10%			
Sleepy, Fatigued	1,571	0.62%	35	2.36%	734	0.81%	802	0.50%			
<b>Under Influence Of Drugs*</b>	622	0.25%	27	1.82%	300	0.33%	295	0.18%			
Not Reported/Unknown	24,711	9.76%	324	21.88%	6,986	7.73%	17,400	10.78%			
				•	•						
TOTALS	253,177	100.00%	1,481	100.0%	90,355	100.0%	161,341	100.00%			

<sup>\*</sup>Narcotic or Prescription

According to the Bureau of Transportation Statistics there are more cars, trucks, and SUVs registered in the US than there are licensed drivers. The average American household has 1.9 vehicles and 1.8 drivers. That equals 204 million registered vehicles and 191 million drivers.

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

## Section 6: Alcohol Related Crashes



The statistics in the Alcohol-Related section represent those crashes where the investigating officer indicated that a driver 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 the crash took place.

Economic Loss due to Alcohol-Rela	nted Crashes in Arizona for 2002
<b>Fatalities</b>	\$298,660,000.
Injuries	<b>\$137,271,400.</b>
Property Damage	\$ 25,401,400.
Total \$4	61,332,800.

## 2002 Arizona Crash Facts Summary

Table 6-1 1997 to 2002 - Alcohol-Related Crashes

Year	Alcohol-Related Crashes	Percent of all Crashes	Victims Killed	Percent of all Fatalities
1997	7,348	6.44%	249	26.24%
1998	7,610	6.33%	268	27.35%
1999	7,756	6.16%	267	26.07%
2000	8,048	6.13%	266	25.67%
2001	8,095	6.15%	258	24.64%
2002	8,100	6.03%	274	28.13%

Table 6-2 Manner of Collision in Alcohol-Related Crashes

	Number of Crashes						
		Percent of		Percent of		Percent of	
Manner Of Collision	Total	all Crashes	Fatal	Fatal	Injury	Injury	
				Crashes		Crashes	
a						10.0.00	
Single Vehicle	3,630	44.81%	137	57.80%	1,543	40.96%	
Head On	168	2.07%	24	10.13%	107	2.84%	
Rear End	1,959	24.19%	11	4.64%	915	24.30%	
Sideswipe Opposite Direction	136	1.68%	1	0.42%	65	1.73%	
Sideswipe Same Direction	434	5.36%	9	3.80%	131	3.47%	
Left Turn	560	6.91%	15	6.33%	354	9.40%	
Other Angle	952	11.75%	32	13.50%	556	14.75%	
Backing Into	50	0.62%	0	0.00%	4	0.11%	
U Turn	71	0.88%	3	1.27%	30	0.82%	
Other	140	1.73%	5	2.11%	61	1.62%	
TOTALS	8,100	100.00%	237	100.00%	3,766	100.00%	

Table 6-3
Alcohol-Related Crashes by First Harmful Event/

		Number of	Crashes Number of Persons		f Persons	
First Harmful Event	Total	Fatal	Injury	PDO	Killed	Injured
Overturning	482	66	332	84	74	566
Pedestrian	46	6	38	2	6	48
Motor Veh. In Transit	4,365	97	2,170	2,098	118	4,417
Motor Veh. Other Roadway	5	1	4	0	2	12
Pedalcylist	26	2	20	4	2	21
Animal	17	1	7	9	2	10
Fixed Object	2,356	46	908	1,402	50	1,183
Other Object	491	5	142	344	6	197
Miscellaneouus	312	13	145	154	14	190
TOTALS	8,100	237	3,766	4,097	274	6,644

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

Table 6-4 Alcohol-Related Crashes by Vehicle Type

	Total		Number of Vehicles		
Motor Vehicle Type	Number of Vehicles	Percent	Fatal	Injury	PDO
Passenger Car	5,687	69.14%	146	2,611	2,930
Motor Home or House Car	9	0.11%	0	4	5
Pickup Truck (Incl. Panel & Mini Bus)	2,273	27.64%	68	1,055	1,150
Truck Tractor and Semi-Trailer	6	0.07%	0	2	4
Other Truck Combination	18	0.22%	0	5	13
RV (all wheel drive, dune buggy)	7	0.09%	1	6	0
Farm Tractor and/or Farm Equipment	0	0.00%	0	0	0
Taxicab	0	0.00%	0	0	0
Bus	3	0.04%	0	0	3
School Bus	1	0.01%	1	0	0
Motorcycle	166	2.02%	28	127	11
Motor Scooter or Motor Bicycle	1	0.01%	0	1	0
Other Special Vehicles	3	0.04%	1	2	0
Vehicle Type Not Reported	50	0.62%	3	18	30
TOTALS	8,224	100.00%	248	3,831	4,146

Table 6-5 Light Conditions - Alcohol-Related Crashes

	Number of Crashes						
Light Condition	Total	Fatal	Injury	PDO			
Daylight	2,292	60	1,097	1,135			
Dawn or Dusk	385	15	194	176			
Darkness	5,414	161	2,472	2,781			
Not Reported	9	1	3	5			
TOTALS	8,100	237	3,766	4,097			

Table 6-6
Road Surface Conditions - Alcohol-Related Crashes

	ee committees	inconor remove crasmes				
	Number of Crashes					
	Total	Fatal	Injury	PDO		
Dry	7,699	231	3,587	3,881		
Wet	265	2	117	146		
Snowy or Icy	24	0	10	14		
Other	83	4	40	39		
Not Reported	29	0	12	17		
TOTALS	8,100	237	3,766	4,097		

# 2002 Arizona Crash Facts Summary

Table 6-7
Age of Driver - Alcohol-Related Crashes

	Tetal	Damas and	D I	D	D I	Damasud of
	Total	Percent	Drivers In	Percent of	Drivers In	Percent of
Driver Age	Drivers	of all	Fatal	all Fatal	Injury	all Injury
		Drivers	Crashes	Drivers	Crashes	Drivers
15	23	0.28%	1	0.40%	14	0.37%
16	75	0.91%	6	2.42%	31	0.81%
17	144	1.75%	4	1.61%	73	1.91%
18	255	3.10%	10	4.03%	120	3.13%
19	293	3.56%	5	2.02%	134	3.50%
20	338	4.11%	9	3.63%	166	4.33%
21	425	5.17%	8	3.23%	193	5.04%
22	400	4.86%	15	6.05%	183	4.78%
23	369	4.49%	10	4.03%	174	4.54%
24	318	3.87%	9	3.63%	126	3.29%
25-34	2,248	27.33%	62	25.00%	1,079	28.17%
35-44	1,597	19.42%	56	22.58%	733	19.14%
45-54	911	11.08%	35	14.11%	431	11.25%
55-64	370	4.50%	12	4.84%	183	4.78%
65-74	124	1.51%	3	1.21%	59	1.54%
75 & Older	116	1.41%	1	0.40%	105	2.74%
Not Reported	218	2.65%	2	0.81%	26	0.68%
TOTALS	8,224	100.00%	248	100.00%	3,830	100.00%

In total crashes across the state, 49.8% of the drivers were males. When alcohol was involved, males accounted for 70.8% of the drivers.

Table 6-8
Driver Gender - Alcohol-Related Crashes

Driver Gender	Total Drivers	Percent of All	Drivers In Fatal	Percent of Fatal	Drivers in Injury	Percent of Injury
		Drivers	Crashes	Drivers	Crashes	Drivers
Male	6,622	80.52%	211	85.08%	3,093	80.76%
Female	1,516	18.43%	37	14.92%	712	18.59%
Not Reported	86	1.05%	0	0.00%	25	0.65%
TOTALS	8,224	100.00%	248	100.00%	3,830	100.00%

Table 6-9
Safety Restraints - Drinking Drivers

	Number of Drinking Drivers							
Drivers	No Injury	Possible Injury	Non- Incapacitating Injury	Incapacitating Injury	Fatal			
Restraint Used	3,157	385	576	183	23			
No restraint Used	595	201	374	232	109			
Restraint Use Unknown	1,452	222	297	136	18			
TOTALS	5,204	808	1,247	551	150			

Table 6-10
Persons Killed and Injured in Alcohol-Related Crashes

	Total	<u> </u>		Total			Sex
Victims Age	Killed	Male	Female	Injured	Male	Female	Unk.
0 - 4	4	3	1	116	47	69	0
5 - 9	0	0	0	126	58	68	0
10 - 14	4	3	1	189	91	98	0
15 - 19	38	27	11	885	556	328	1
20 - 24	54	44	10	1,338	918	420	0
25 - 34	57	48	9	1,579	1,080	497	2
35 - 44	52	38	14	1,083	691	390	2
45 - 54	40	33	7	674	411	262	1
55 - 64	17	13	4	297	175	122	0
65 - 74	4	3	1	133	79	54	0
75 & Older	5	1	2	31	7	24	2
Not Reported	0	0	1	193	127	64	0
TOTALS	274	213	61	6,644	4,240	2,396	8

Table 6-11 When Alcohol-Related Crashes Occurred in 2002

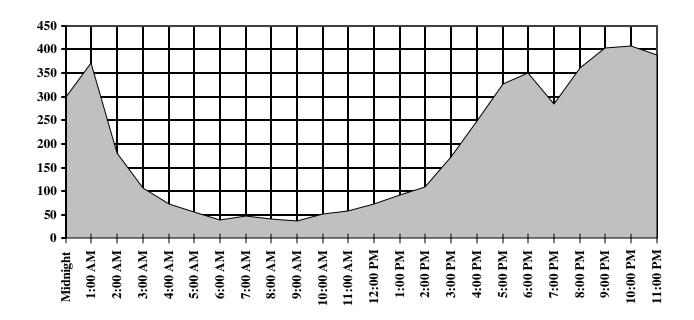
	Total	Weekday**	Weekend
Daytime***	2,172	1,297	875
Nighttime	5,928	2,315	3,613
Total	8,100	3,612	4,488

<sup>\*\*</sup>Weekend begins at 6:00 p.m. on Friday and continues through 6:00 a.m. Monday. All other times and days are considered Weekdays.

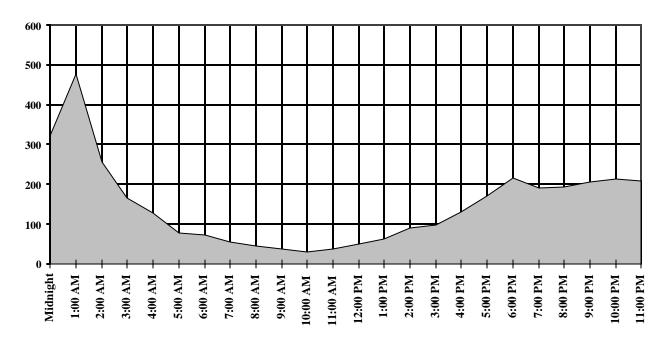
According to the NHTSA, about 3 in every 10 Americans will be involved in an alcohol-related crash as some time in their lives.

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

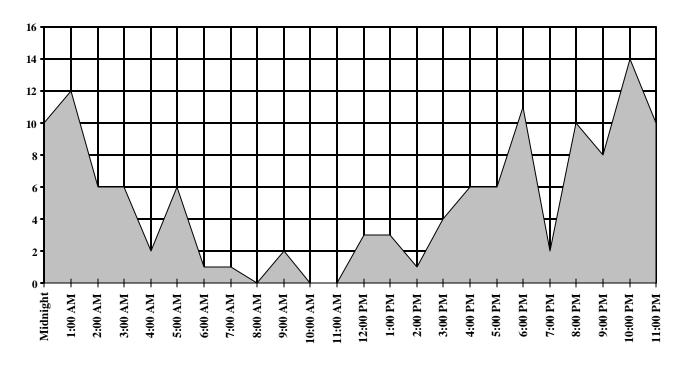
Figures 6-1 and 6-2 Alcohol-Related Crashes Weekdays



## Weekends



Figures 6-3 and 6-4
Fatal Alcohol-Related Crashes
Weekdays



## Weekends

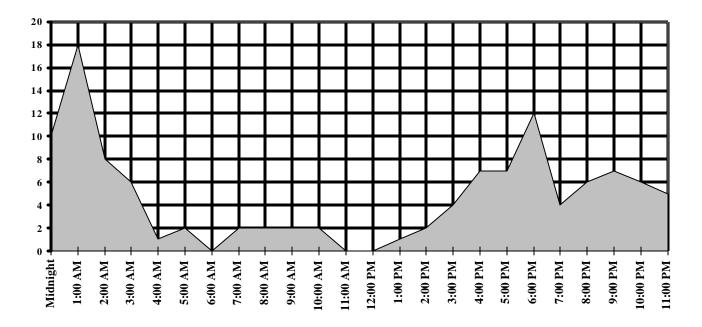
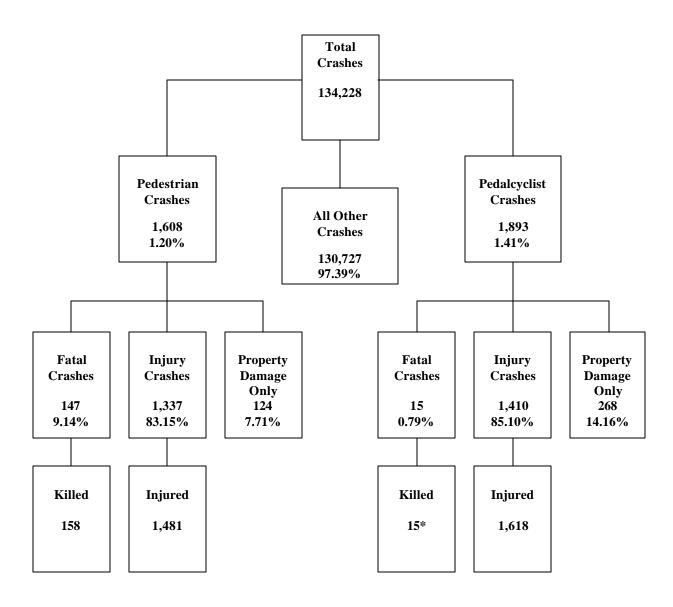


Table 6-13
Alcohol-Related Crashes
By Hour and Day of Week

	Total		Mon	day	Tues	sday	Wedn	esday	Thurs	sday	Frid	lay	Satur	rday	Sun	day
Hour	Crashe	s														
Beginning	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal
								_								
Midnight	621	20	58	2	47	1	51	3	63	1	80	3	151	7	171	3
1:00	847	30	72	3	49	2	61	2	79	2	109	3	257	6	220	12
2:00	435	14	29	0	24	1	36	3	40	1	51	1	136	7	119	1
3:00	272	12	19	2	17	1	17	1	19	1	34	1	69	1	97	5
4:00	201	3	14	1	12	0	13	0	16	0	18	1	70	1	58	0
5:00	133	8	10	1	11	1	14	0	7	2	14	2	36	1	41	1
6:00	111	1	5	0	9	1	8	0	7	0	10	0	30	0	42	0
7:00	103	3	12	0	10	0	14	0	3	0	9	1	29	1	26	1
8:00	85	2	7	0	11	0	8	0	4	0	11	0	24	1	20	1
9:00	75	4	10	0	8	0	6	0	6	0	7	2	22	0	16	2
10:00	82	2	11	0	4	0	19	0	7	0	11	0	21	2	9	0
11:00	96	0	13	0	10	0	11	0	9	0	15	0	30	0	8	0
Noon	123	3	12	1	16	1	15	0	14	1	16	0	23	0	27	0
1:00	154	3	18	0	23	1	15	1	17	0	19	1	40	0	22	0
2:00	198	3	24	1	20	0	24	0	19	0	21	0	51	0	39	2
3:00	269	8	25	0	34	2	38	1	39	1	37	0	58	2	38	2
4:00	378	13	44	2	36	0	49	2	41	0	78	2	72	5	58	2
5:00	498	13	47	0	52	1	53	2	84	2	92	1	90	3	80	4
6:00	565	23	52	2	52	1	66	1	66	4	114	3	106	4	109	8
7:00	475	6	45	0	56	0	41	1	60	0	82	1	100	3	91	1
8:00	553	16	66	1	53	1	52	3	69	2	121	3	110	4	82	2
9:00	608	15	55	2	57	0	70	2	82	1	138	3	118	6	88	1
10:00	622	20	55	2	54	0	72	3	82	4	145	5	139	6	75	0
11:00	596	15	53	1	45	1	60	1	70	2	159	5	144	3	65	2
Not Reported	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	8,100	237	756	21	710	15	813	26	903	24	1,391	38	1,926	63	1,601	50

Section 7:
Pedestrian and Pedalcyclist Crashes



<sup>\*</sup>This is the lowest number of pedalcycle deaths in 20 years.

Table 7-1 Pedestrians By Age and Gender

			<u>, , , , , , , , , , , , , , , , , , , </u>				
	P	ersons Kille	d		Persons	Injured	
Age Group	Total	Male	Female	Total	Male	Female	Not
							Reported
0-4	2	2	0	54	34	20	0
5-9	3	2	1	95	63	32	0
10-14	4	2	2	178	105	72	1
15-19	6	3	3	180	101	79	0
20-24	7	6	1	135	97	38	0
25-34	22	17	5	176	121	55	0
35-44	31	24	7	198	140	58	0
45-54	38	30	8	198	139	59	0
55-64	12	8	4	83	55	28	0
65-74	13	8	5	54	33	21	0
75 & Older	19	10	9	43	17	25	1
Not Reported	1	0	1	87	44	37	6
Total	158	112	46	1,481	949	524	8

Nationally, on average, a pedestrian is killed by a motor vehicle every 109 minutes, and one is injured every 6.9 minutes.

Table 7-2 Pedestrian Crashes

Statewide	Total	Urban	Rural
Number of Crashes	1,608	1,386	222
Persons Killed	158	49	109
Persons Injured	1,481	170	1,311
Property Damage Only	124	98	26

Numb	Number of Pedestrians							
Year	Fatal	Injury						
1993	140	1,445						
1994	151	1,593						
1995	179	1,634						
1996	165	1,621						
1997	153	1,624						
1998	161	1,594						
1999	148	1,571						
2000	137	1,637						
2001	166	1,509						
2002	158	1,481						

Table 7-3
Pedestrian Crash History

Across the U.S., approximately 71,000 pedestrians were injured and 4,808 were killed in traffic crashes, representing 2.4 percent of all the people injured and 11.2 percent of all traffic fatalities.

Table 7-4
Pedestrians Killed

Pedestrian Action	Total	0-4	5-9	10-14	15-19	20-24	25-44	45-64	65 & Older	Not Reported
Crossing Road	96	2	2	1	2	2	33	29	25	0
Walking In Roadway With Traffic	7	0	0	0	0	0	4	2	1	0
Walking In Roadway Against Traffic	10	0	0	0	0	2	1	5	2	0
Standing In Roadway	14	0	1	1	2	0	4	5	1	0
Pushing or Working On Veh. In Roadway	0	0	0	0	0	0	0	0	0	0
Other Working In Roadway	0	0	0	0	0	0	0	0	0	0
Lying In Roadway	4	0	0	0	1	0	2	1	0	0
Getting On or Off Veh. In Roadway	1	0	0	0	0	0	0	0	1	0
Other In Actions In Roadway	10	0	0	1	0	0	4	3	2	0
Unknown	16	0	0	1	1	3	5	5	1	0
Not Reported	0	0	0	0	0	0	0	0	0	0
TOTALS	158	2	3	4	6	7	53	50	33	0

Table 7-5
Pedestrians Injured

Pedestrian Action	Total	0-4	5-9	10-14	15-19	20-24	25-44	45-64	65& Older	Not Reported
Crossing Road	869	39	64	105	106	73	202	176	104	0
Walking In Roadway With Traffic	69	3	2	5	11	6	21	15	6	0
Walking In Roadway Against Traffic	85	1	2	12	7	15	19	15	14	0
Standing In Roadway	92	5	1	4	11	9	36	20	6	0
Pushing or Working On Veh. In Roadway	10	0	0	1	0	3	2	3	1	0
Other Working In Roadway	5	0	0	0	0	1	3	1	0	0
Lying In Roadway	8	0	1	0	0	0	7	0	0	0
Getting On or Off Veh. In Roadway	11	0	1	1	0	2	2	1	4	0
Other In Actions In Roadway	235	4	19	37	31	16	57	36	35	0
Unkmown	97	2	5	13	14	10	25	14	14	0
Not Reported	0	0	0	0	0	0	0	0	0	0
TOTALS	1,481	54	95	178	180	135	374	281	184	0

Table 7-6
Pedestrian Physical Condition

Pedestrian Condition		% of		% of		% of		% of
		<b>Total Peds</b>		Fatal		Injury		PDO
	Total		Fatal	Peds	Injury	Peds	PDO	Peds
No Apparent Impairment	1,044	59.49%	40	25.32%	939	63.40%	65	56.03%
Impaired Had Been Drinking	264	15.04%	47	29.75%	209	14.11%	8	6.90%
Other Bodily Impairment	42	2.39%	2	1.27%	36	2.43%	4	3.45%
Ill, Ability Influenced	5	0.28%	0	0.00%	4	0.27%	1	0.86%
Sleepy, Fatigued	1	0.06%	1	0.63%	0	0.00%	0	0.00%
<b>Under Influence Of Drugs*</b>	8	0.46%	3	1.90%	5	0.34%	0	0.00%
Not Reported/Unknown	391	22.28%	65	41.14%	288	19.44%	38	32.76%
TOTALS	1,755	100.00%	158	100.0%	1,481	100.0%	116	100.0%

<sup>\*</sup>Narcotic or Prescription

Table 7-7 Lighting Conditions - Pedestrian Crashes

	Number of Pedestrian Crashes						
<b>Lighting Conditions</b>	Total	Fatal	Injury	PDOs			
Daylight	931	40	811	83			
Darkness	582	98	453	25			
Dawn or Dusk	92	9	71	15			
Not Reported	3	0	2	1			
TOTALS	1,608	147	1,337	124			

Table 7-8 Weather Conditions - Pedestrian Crashes

	Number of Pedestrian Crashes						
Weather Conditions	Total	Fatal	Injury	PDOs			
Clear	1,431	115	1,206	110			
Raining	26	5	18	3			
Cloudy	126	11	105	10			
Snowing	2	1	1	0			
Strong wind	1	0	1	0			
Dust	1	1	0	0			
Fog	1	1	0	0			
Other	2	0	2	0			
Not Reported	18	13	4	1			
TOTALS	1,608	147	1,337	124			

Table 7-9
Pedalcyclists by Age and Gender

	Pe	rsons Killed	l	Persons Injured				
							Not	
Age Group	Total	Male	Female	Total	Male	Female	Reported	
0-4	0	0	0	8	8	0	0	
5-9	0	0	0	79	56	22	1	
10-14	1	1	0	274	225	48	1	
15-19	1	0	1	218	163	55	0	
20-24	0	0	0	179	135	44	0	
25-34	2	2	0	239	194	44	1	
35-44	4	4	0	249	197	52	0	
45-54	4	4	0	169	139	30	0	
55-64	2	2	0	70	57	13	0	
65-74	1	0	1	31	26	5	0	
75 & Older	0	0	0	22	21	1	0	
Not Reported	0	0	0	80	57	23	0	
TOTALS	15	13	2	1,618	1,278	337	3	

Table 7-10 Pedalcycle Crashes

Statewide	Total	Urban	Rural
Number Of Crashes	1,893	1,720	173
Persons Killed	15	13	2
Persons Injured	1,618	1,474	144
Property Damage Only	268	240	28

NUMBER OF PEDALCYCLISTS							
Year	Total Killed	Total Injured					
1993	24	2,162					
1994	21	2,271					
1995	31	2,308					
1996	30	2,089					
1997	31	2,067					
1998	23	1,954					
1999	26	1,986					
2000	25	1,915					
2001	29	1,757					
2002	15	1,618					

# Table 7-11 Pedalcycle Crash History

In 2002, approximately 48,000 pedalcyclists were injured and 662 were killed in traffic crashes across the country. This represented 1.7 percent of all injuries and 1.5 percent of all fatalities from traffic crashes.

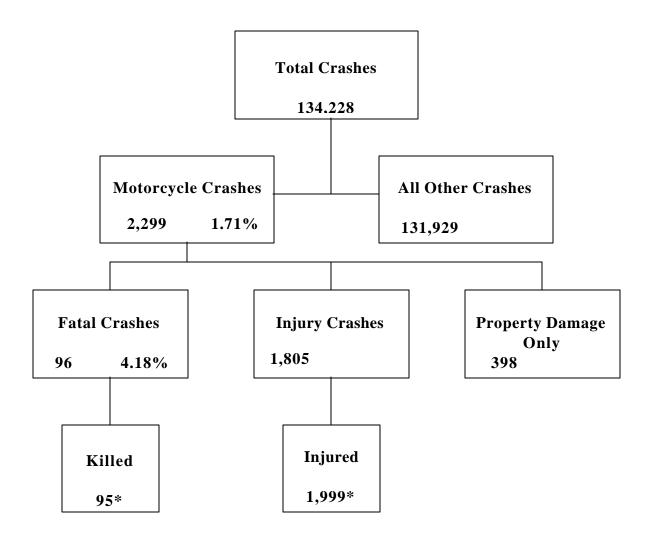
Table 7-12 Lighting Conditions - Pedalcyclist Crashes

	Number of Pedalcyclist Crashes							
<b>Lighting Conditions</b>	Total	Fatal	Injury	PDOs				
Daylight	1,481	10	1,266	205				
Darkness	313	4	257	52				
Dawn or Dusk	96	1	85	10				
Not Reported	3	0	2	1				
TOTALS	1,893	15	1,610	268				

Table 7-13
Weather Conditions - Pedalcyclist Crashes

	Number of Pedalcyclist Crashes								
Weather Conditions	Total	Fatal	Injury	PDOs					
Clear	1,706	12	1,454	240					
Raining	15	1	11	3					
Cloudy	156	2	132	22					
Snowing	0	0	0	0					
Strong wind	1	0	1	0					
Dust	2	0	2	0					
Fog	0	0	0	0					
Other	1	0	1	0					
Not Reported	12	0	9	3					
TOTALS	1,893	15	1,610	268					

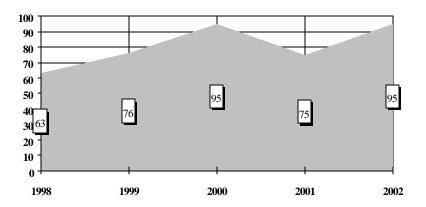
# Section 8: Motorcycle Crashes



<sup>\*</sup>Includes motorcycle drivers and/or passengers only.

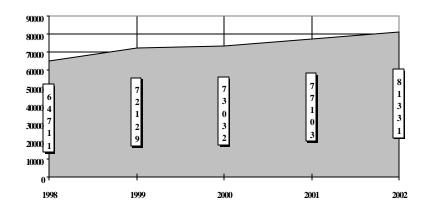
### **Section 8: Motorcycle Crashs**

Figure 8-1 Motorcycle Fatalities by Year



In 2002, over 3,244 motorcyclists were killed in traffic crashes in the United States, an increase of 177 over the previous year. Arizona's 95 fatalities were an increase of 20 from the previous year.

Figure 8-2 Motorcycle Registrations in Arizona



1997-2002 Totals include motorcycles only. Prior years included golf carts, atv's, etc. Source: The Motor Vehicle Division of the Arizona Department of Transportation

Figure 8-3 Motorcycle Fatality Rate per Registered Motorcycle

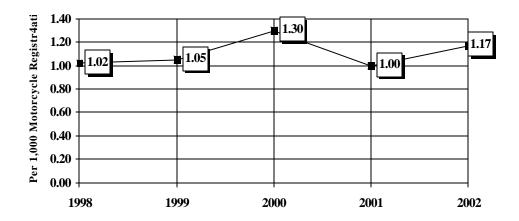


Figure 8-4
Percent of Motorcycle Crashes to All Crashes

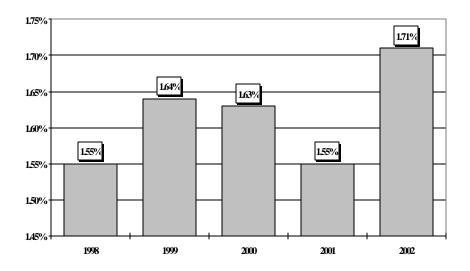


Table 8-1 Motorcycle Crashes by Type

2.200203		Number of Crashes					
Accident Type	Total	Fatal	Non-Fatal Injury	Property Damage Only			
Overturning	19	0	19	0			
Pedestrian	14	0	12	2			
Motor Vehicle In Transport	1,271	51	939	281			
Motor Vehicle On Other Roadway	0	0	0	0			
Pedalcyclist	8	0	5	3			
Animal	24	0	18	6			
Fixed Object	262	30	206	26			
Other Object	40	0	31	9			
Misc.	660	15	574	71			
Not Reported	1	0	1	0			
TOTALS	2,299	96	1,805	398			

**Table 8-2 Motorcycle Crashes - Lighting Conditions** 

	Number of Crashes						
Lighting							
Condition	Total	Fatal	Injury				
Daylight	1,545	53	1,222				
Dawn or Dusk	134	5	110				
Darkness	616	38	469				
Not Reported	4	0	4				
Totals	2,299	96	1,805				

Table 8-3 Motorcycle Crashes - Road Conditions

	Number of Crashes						
Road Surface	Total	Fatal	Injury				
Dry	2,067	87	1,615				
Wet	38	2	30				
Snowy/icy	8	0	6				
Other	75	1	68				
Not Reported	111	6	86				
Totals	2,299	96	1,805				

Table 8-4 Motorcycle Crashes - Land Use

	Number of Crashes and % of Total								
	Total	Rural	% of Total	Urban	% of Total				
Crashes	2,299	636	27.66%	1,663	72.34%				
Fatalities	96	45	46.88%	51	53.12%				
Injuries	1,805	506	28.03%	1,299	71.97%				

Table 8-5 Operators' Age - Motorcycle Crashes

_			Number of operators		
	Total No.	Percent	Fatal	Injury	
Age of Operator	of Operators	of Total	Crashes	Crashes	
15 & Younger	44		1	41	
16	15		0	13	
17	23		2	19	
18-19	106		2	90	
20-24	337		11	273	
25-34	516		27	406	
35-44	503		17	410	
45-54	453		22	352	
55-64	193		12	155	
65-74	46		1	36	
75 & Older	17		1	57	
Not Reported	96				
TOTALS	2,349		96	1,852	

Table 8-6							
Alcohol-Related Motorcycle Crashes							
Total number of impaired operators	201						
Total number of fatal crashes	35						
Total number of injury crashes	151						

Nationally, 32% of all fatally injured motorcycle operators were intoxicated.

In Arizona, alcohol was involved in 36% of all fatal motorcycle crashes.

Table 8-7
Motorcycle Operators Involved in Fatal Crashes by License Status\*

License	200	)0	200	)1	200	)2
Status	Total Fatal	Percent of	Total Fatal	Percent of	Total Fatal	Percent of
	Crashes	Fatal	Crashes	Fatal	Crashes	Fatal
		Crashes		Crashes		Crashes
No license	5	5.89%	5	6.02%	5	5.21%
Invalid	36	36.27%	26	31.33%	28	29.17%
Valid	58	56.86%	51	61.45%	62	64.58%
Unknown	1	0.98%	1	1.20%	1	1.04%
TOTALS	100	100.00%	83	100.00%	96	100.00%

<sup>\*</sup>Note: includes only motorcycle operators involved in fatal crashes.

Table 8-8

## **Motorcycle Operator's Helmet Use**

	Number of Motorcycle Crashes							
Severity of Injury	Helmet Used	% of Total	No Helmet	% of Total	Unknown	% of Total	Total	% of Total
No injury	112	16.30%	176	17.05%	142	22.54%	430	18.31%
Possible injury	110	16.01%	138	13.37%	102	16.19%	350	14.90%
Non-incapacitating	279	40.61%	392	37.98%	218	34.60%	889	37.85%
Incapacitating	160	23.29%	267	25.87%	111	17.62%	538	22.90%
Fatality	22	3.20%	53	5.14%	15	2.38%	90	3.83%
Unknown	4	0.58%	6	0.58%	42	6.67%	52	2.21%
TOTALS	687	100.00%	1,032	100.00%	630	100.00%	2,349	100.00%
						•		

Table 8-9 Motorcycle Passenger Helmet Use

	Number of Motorcycle Crashes								
Severity of Injury	Helmet Used	% of Total	No Helmet	% of Total	Use Unknown	% of Total	Total	% of Total	
No injury	11	15.07%	23	14.56%	15	30.00%	49	17.44%	
Possible injury	15	20.55%	15	9.49%	8	16.00%	38	13.52%	
Non-incapacitating	29	39.73%	77	48.73%	17	34.00%	123	43.77%	
Incapacitating	16	21.92%	37	23.42%	8	16.00%	61	21.71%	
Fatality	1	1.37%	4	2.53%	0	0.00%	5	1.78%	
Unknown	1	1.37%	2	1.27%	2	4.00%	5	1.78%	
TOTALS	73	100.00%	158	100.00%	50	100.00%	281	100.00%	

NHTSA estimates that helmets saved 692 motorcyclists' lives in 2002, and that 449 more could have saved if all motorcyclists had worn helmets.

Table 8-10 Motorcycle Operators and Passengers Killed and Injured

Age of Victims	Number Killed			Number Injured			
	Total	Male	Female	Total	Male	Female	Unk.
0 - 4	0	0	0	3	1	2	0
5-9	0	0	0	5	2	3	0
10 - 14	0	0	0	41	28	13	0
15 - 19	5	5	0	164	135	29	0
20 - 24	12	9	3	287	253	34	0
25 - 34	26	25	1	428	384	44	0
35 - 44	17	15	2	438	353	84	1
45 - 54	21	19	2	377	323	54	0
55 - 64	11	10	1	161	140	21	0
65 - 74	3	1	2	34	31	3	0
75 & Older	0	0	0	13	11	2	0
Not Reported	0	0	0	48	37	11	0
TOTALS	95	84	11	1,999	1,698	300	1

**Table 8-11 Motorcycle Operator Errors** 

	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
Contributing Circumstances	Number Of Cases	Percent Of Units	Number Of Cases	Percent Of Units	Number Of Cases	Percent Of Units
Exceeding lawful speed limit	53	2.26%	10	10.42%	41	2.21%
Speed too fast for conditions	629	26.78%	30	31.25%	513	27.70%
Failed to yield	96	4.09%	0	0.00%	77	4.16%
Passed stop sign	10	0.43%	3	3.13%	5	0.27%
Disregarded traffic signal	24	1.02%	2	2.08%	20	1.08%
Drove left of center	17	0.72%	2	2.08%	1	0.05%
Followed too closely	35	1.49%	0	0.00%	27	1.46%
Driver inattention	134	5.70%	3	3.13%	111	5.99%
Had been drinking	201	8.56%	35	37.50%	206	11.12%
Other improper driving	50	2.13%	2	2.08%	48	2.59%
Faulty or Missing Equip.	21	0.89%	0	0.00%	19	1.03%
Other	98	4.17%	3	3.13%	87	4.70%
No improper driving	980	41.72%	6	6.25%	696	37.58%
Not Reported	1	0.04%	0	0.00%	1	0.05%
TOTALS	2,349	100.00%	96	100.00%	1,852	100.00%

### **Section 8: Motorcycle Crashs**

Figure 8-5 Motorcycle Crashes by Time of Day Weekdays

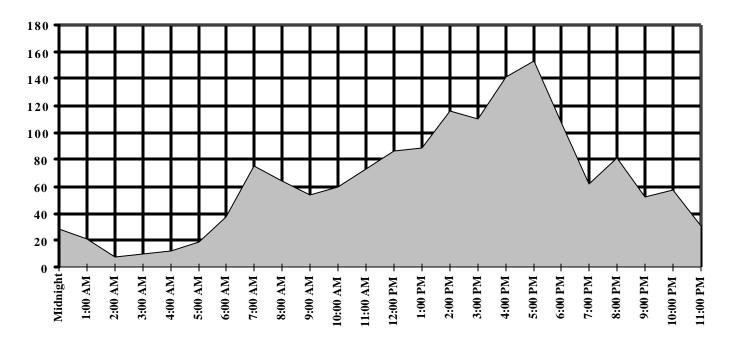


Figure 8-6 Weekends

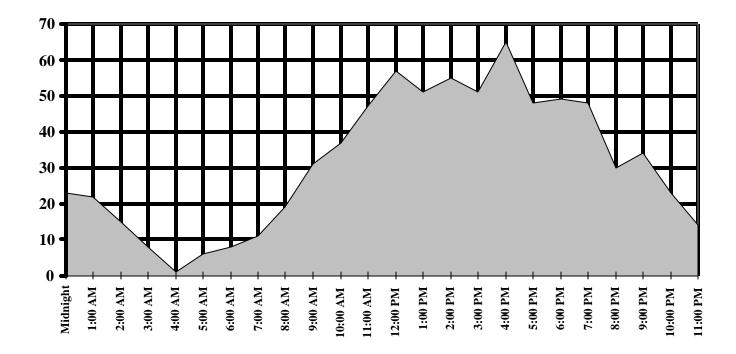


Figure 8-7
Fatal Motorcycle Crashes by Time of Day
Weekdays

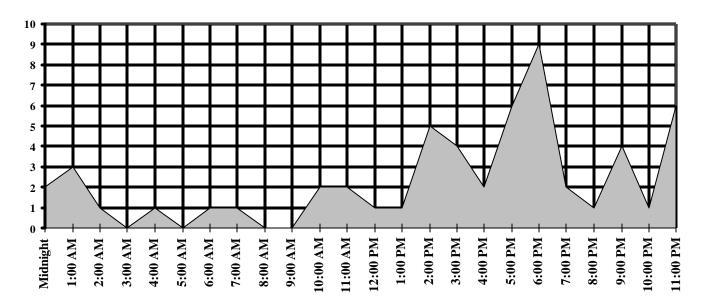


Figure 8-8
Fatal Motorcycle Crashes by Time of Day
Weekends

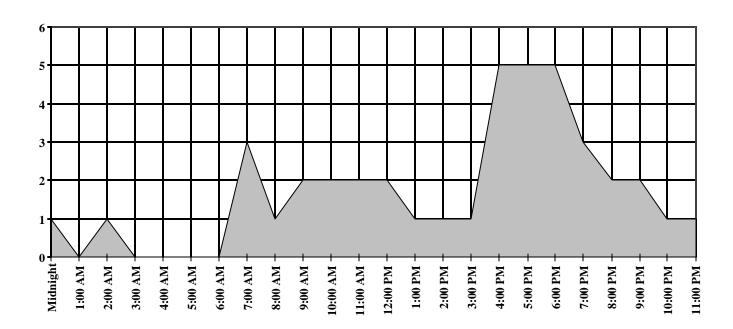
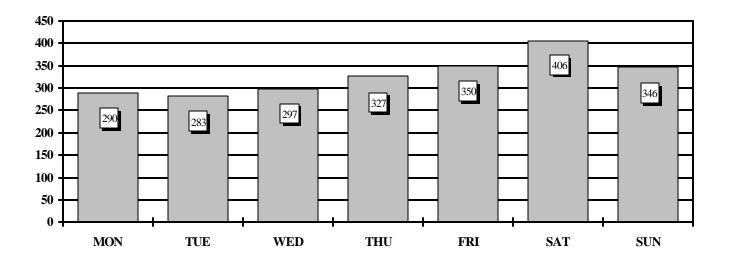


Figure 8-9 Motorcycle Crashes by Day of Week



# Section 9: School Bus Crashes

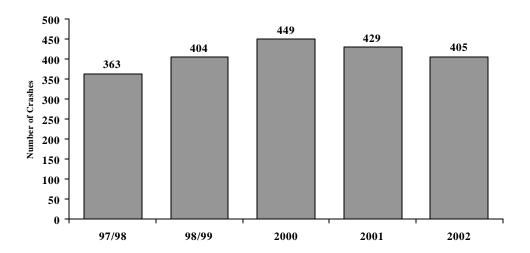


Table 9-1 School Bus Driver Errors

	Number of Drivers and % of Total			
	Total	%		
No Improper Driving	212	52.35%		
Speed not Reasonable & Proper	28	6.91%		
Failed to Yield	30	7.41%		
Following too Closely	6	1.48%		
Improper Turn	22	5.43%		
Drove in Opposing Lane	3	0.74%		
Other	9	2.22%		
Unknown	22	5.43%		
Inattention	64	15.80%		
No Passing Zone	3	0.74%		
Unsafe Lane Change	6	1.48%		
TOTAL DRIVERS	405	100.00%		

<sup>\*</sup> Beginning with the year 2000 school bus crash data is based upon the calendar year.

Prior issues were based on school session years.

Table 9-2 School Bus Crash History

	looi Bus Crush History					
	97/98	98/99	2000	2001	2002	
Injuries and Fatalities						
Pupils						
Killed	0	0	1	0	0	
Injured	98	95	139	128	81	
Bus Drivers						
Killed	0	0	0	0	1	
Injured	26	17	20	22	20	
·						
Property Damage Only Crashes	239	424	433	289	280	
Crash by Time of Day						
A.M.	163	179	208	199	169	
P.M.	200	225	241	230	236	
Weather Conditions:						
Not Reported	0	3	1	0	2	
Clear and Dry	293	346	380	355	356	
Rain	16	17	12	17	7	
Snow or Ice	10	2	4	16	2	
Dusty or Windy	1	2	1	1	1	
Fog	0	1	2	0	0	
Cloudy	43	27	49	40	37	

## Acknowledgements

The Crash Analysis Unit of the Arizona Department of Transportation would not be able to produce this report without the fine work of the following individuals who were responsible for the coding and keying-in of all our crash data for this publication. We wish to express our heartfelt thanks to each of you and keep up the good work!

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