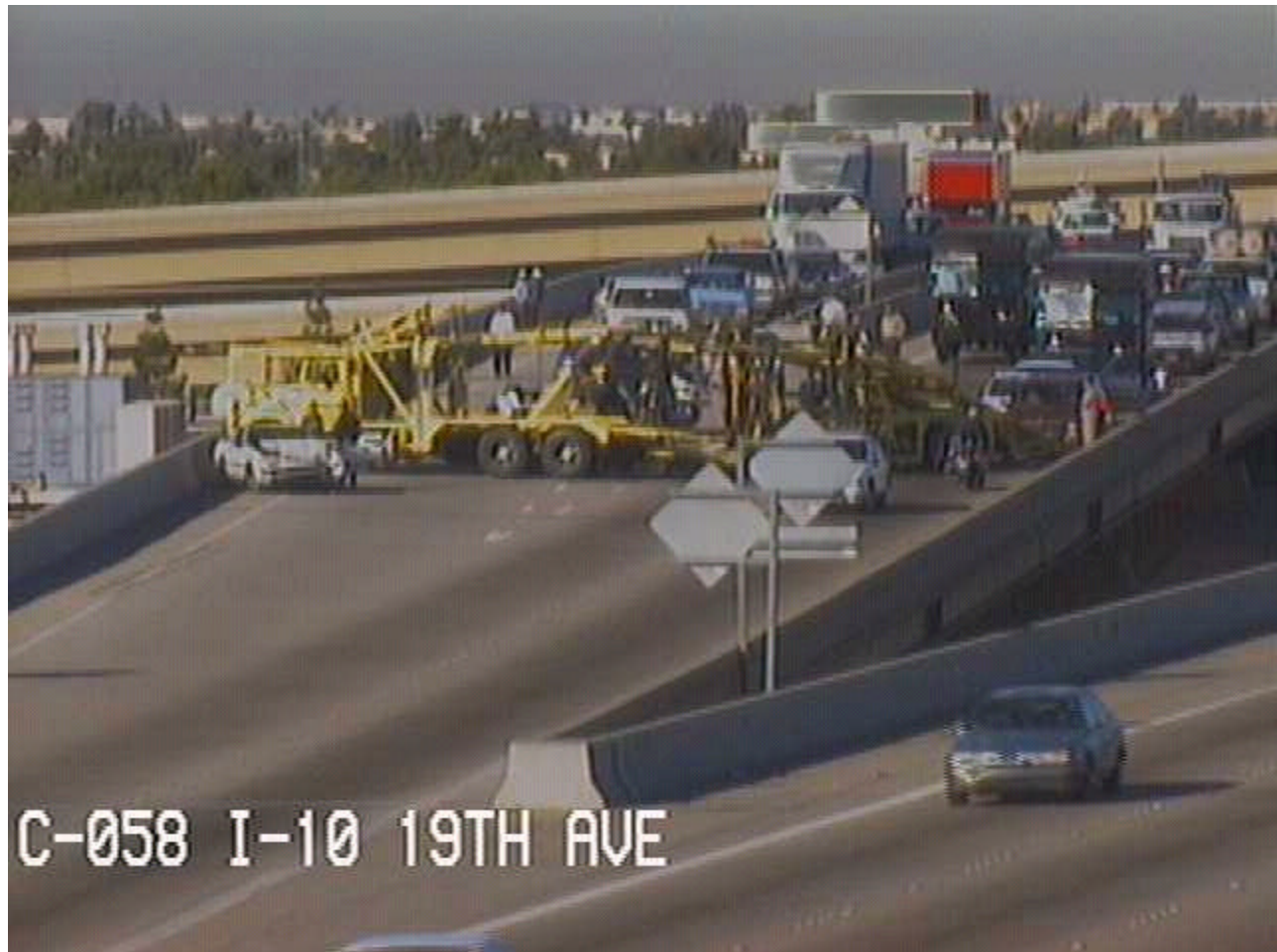


ARIZONA

MOTOR VEHICLE CRASH FACTS

1999



Traffic crashes are not accidents, but avoidable events caused by a single variable or chain of variables. We are dedicated to reducing traffic injuries and fatalities by addressing the factors that cause them.

1999 Motor Vehicle Crash Facts for Arizona

*Prepared by the:
Motor Vehicle Crash Statistics Unit
Traffic Records Section*

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This publication is a statistical review of the motor vehicle crashes in the State of Arizona for calendar year 1999. 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. Specific inquiries regarding the data in this report or requests for additional copies should be directed to:

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Traffic Engineering Group
Traffic Records Section
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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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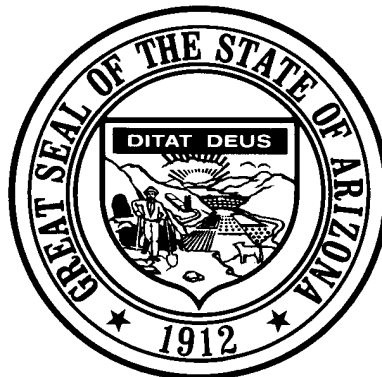
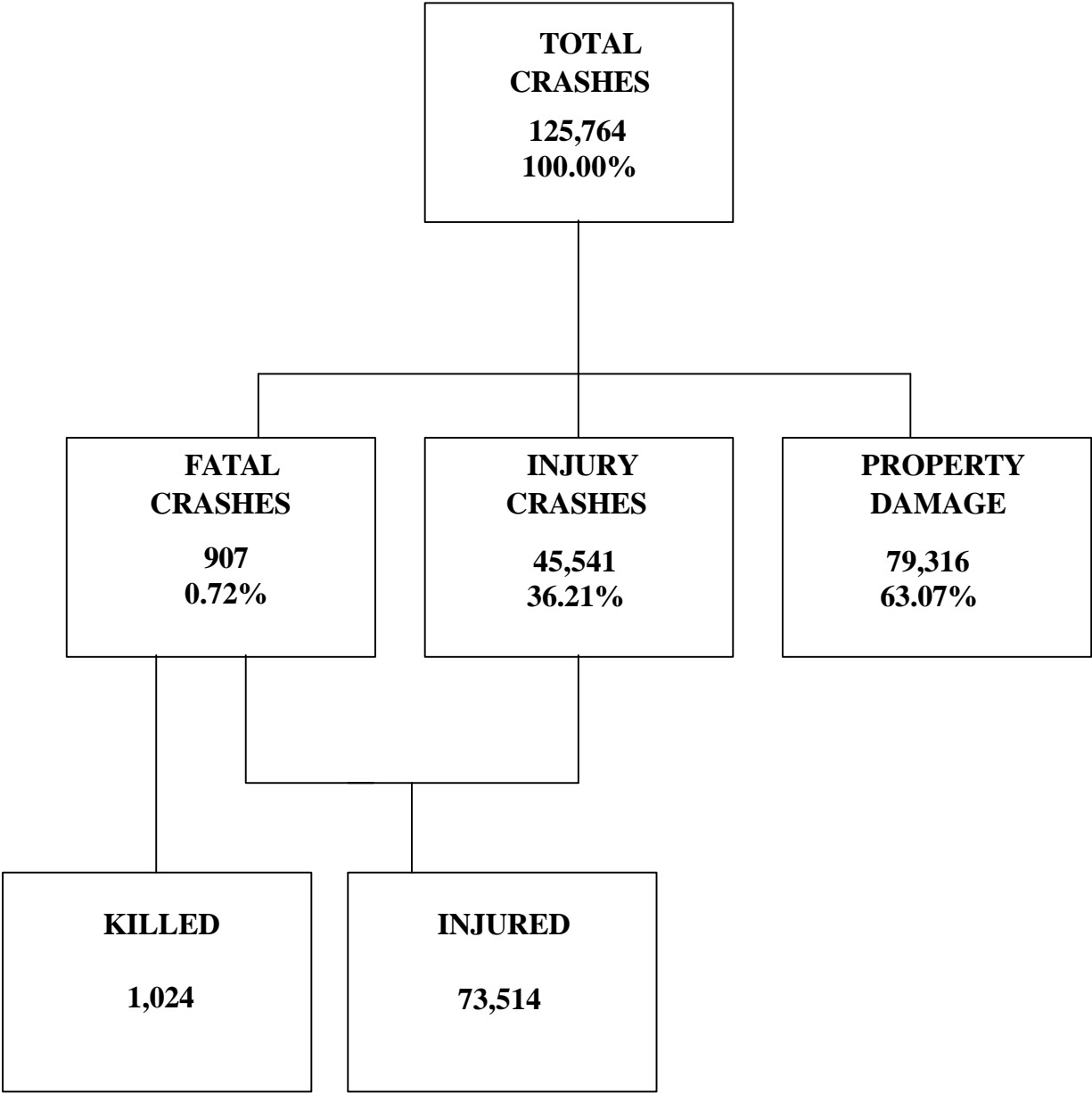


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Section 1: Highlights and Historical Trends



Section 1: Highlights and Historical Trends

**Table 1-1
Arizona Crash Facts**

Category	1998	1999	Pct Change
Reported crashes	120,293	125,764	+4.54%
Total killed	980	1,024	+4.48%
Total injured	70,828	73,514	+3.79%
Pedestrians killed	161	148	-8.78%
Pedestrians injured	1,594	1,571	-1.46%
Motorcyclists killed	63	76	+19.04%
Motorcyclists injured	1,438	1,808	+25.73%
Pedalcyclists killed	23	26	+13.04%
Pedalcyclists injured	1,954	1,986	+1.63%
Millions of vehicle miles traveled (VMT)	45,485	47,014	+3.36%
Deaths per 100 million VMT	2.15	2.18	+1.39%
Injuries per 100 million VMT	155.72	156.41	+0.44%

1999 At a Glance

- ⇒ Approximately **2.8** persons were killed each day.
- ⇒ One person was killed every **8.6** hours.
- ⇒ There were **201** persons injured every day.
- ⇒ One person was injured every **7.2** minutes.
- ⇒ Drinking drivers were involved in **6.16%** of all crashes.
- ⇒ Drinking drivers were involved in **25.91%** of all fatalities.
- ⇒ Over **71.2%** of all drinking drivers involved in crashes were males.
- ⇒ Rural crashes accounted for **19.5%** of all crashes, and over **57.8%** of all fatal crashes.
- ⇒ **77.6%** of all crashes occurred during daylight.
- ⇒ Motor vehicle crashes resulted in **\$2.58** billion in economic losses to Arizona.
- ⇒ Motor vehicle crashes killed **61** children and injured **7,006** children through age 14.

The Nation In 1999

An estimated **41,611** persons were killed in motor vehicle crashes in the United States.

An estimated **3,236,000** persons were injured.

There were an estimated **6,279,000** crashes.

The population of the United States was estimated at **270,298,524**.

Estimated vehicle miles traveled totaled **2,679 billion** miles.

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

Calendar Year	Total Crashes	Fatal Crashes	Injury Crashes	Property Damage Crashes	Total Persons Killed	Total Persons Injured	Total Licensed Drivers	Total Registered Vehicles
1985	92,921	782	37,841	54,298	893	59,650	2,106,559	2,283,832
1986	99,809	889	39,651	59,269	1,007	62,466	2,186,465	2,387,818
1987	99,172	811	40,115	58,246	939	63,278	2,296,741	2,438,960
1988	96,225	844	38,853	56,528	944	62,232	2,375,763	2,511,115
1989	92,144	770	37,850	53,524	879	61,597	2,416,057	2,546,530
1990	91,121	784	37,609	52,728	869	60,747	2,480,244	2,822,304
1991	85,728	727	34,277	50,724	816	55,625	2,517,836	2,842,475
1992	89,862	703	36,024	53,137	811	58,496	2,653,409	2,820,431
1993	97,903	704	38,434	58,765	801	63,037	2,855,184	2,910,175
1994	106,728	796	41,809	64,123	906	68,872	2,631,218	2,786,435
1995	113,888	919	43,721	69,248	1,035	71,994	2,776,877	2,945,574
1996	112,964	858	43,314	68,792	995	71,807	3,127,080	3,187,190
1997	114,174	843	41,802	71,529	949	68,297	3,187,150	3,393,170
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

Section 1: Highlights and Historical Trends

**Table 1-3
Historical Trends
Arizona and the United States**

Calendar Year	U.S. Fatality Rate*	Arizona Fatality Rate*	Arizona Traffic Deaths	Estimated Motor Vehicle Miles Traveled*	AZ Fatal Crash Rate*
1955	6.37	8.11	358	4,415	6.86
1960	5.31	7.85	513	6,536	9.15
1965	5.54	6.60	550	8,339	5.80
1970	4.91	6.29	762	12,122	5.27
1975	3.46	4.18	670	16,031	3.69
1976	3.25	4.36	737	16,895	3.75
1977	3.26	5.15	933	18,121	4.43
1978	3.26	5.33	1,027	19,277	4.71
1979	3.34	5.25	1,029	19,584	4.47
1980	3.35	5.03	947	18,816	4.43
1981	3.17	4.93	916	18,570	4.47
1982	2.76	3.67	724	19,729	3.22
1983	2.58	3.44	675	19,611	3.14
1984	2.57	4.22	869	20,613	3.82
1985	2.47	3.07	893	29,052	2.69
1986	2.51	3.23	1,007	31,143	2.85
1987	2.42	2.96	939	31,729	2.56
1988	2.32	2.76	944	34,153	2.47
1989	2.16	2.52	879	34,816	2.21
1990	2.44	2.45	869	35,455	2.21
1991	1.91	2.34	816	34,927	2.08
1992	1.80	2.31	811	35,048	2.00
1993	1.80	2.10	801	38,067	1.85
1994	1.73	2.34	906	38,776	2.05
1995	1.70	2.62	1,035	39,566	2.32
1996	1.70	2.37	995	42,007	2.04
1997	1.70	2.18	949	43,543	1.99
1998	1.58	2.15	980	45,485	1.89
1999	1.55	2.18	1,024	47,014	1.90

*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.

During 1999, an average of 114 persons died each day in motor vehicle crashes across the United States - one every 12.6 minutes.

Statewide Economic Loss Due to Motor Vehicle Crashes

In 1999, the economic impact of motor vehicle crashes accounted for \$481.14 for every man, woman, and child in the state of Arizona.

Fatalities	\$ 888,860,000.
Injuries	1,004,538,500.
Property Damage Only	475,896,000.
TOTAL.	\$2,369,294,500.

**Table 1-4
Estimated Economic Loss by County**

Counties	Cost of Traffic Crashes			Total
	Fatalities	Injuries	PDOs	
Apache	\$40,180,000	\$7,085,300	\$2,616,000	\$49,881,300
Cochise	42,140,000	16,825,400	8,754,000	67,719,400
Coconino	49,000,000	25,961,900	18,198,000	93,159,900
Gila	17,640,000	10,283,300	4,416,000	32,339,300
Graham	7,840,000	4,382,800	1,278,000	13,500,800
Greenlee	980,000	1,191,100	300,000	2,471,100
La Paz	10,780,000	4,597,200	1,464,000	16,841,200
Maricopa	386,120,000	631,923,400	314,070,000	1,332,113,400
Mohave	40,180,000	25,808,800	11,028,000	77,016,800
Navajo	32,340,000	10,603,300	4,680,000	47,623,300
Pima	113,680,000	172,790,600	71,922,000	358,392,600
Pinal	74,480,000	31,791,100	12,174,000	118,445,100
Santa Cruz	5,880,000	2,889,400	2,622,000	11,391,400
Yavapai	43,120,000	26,718,100	13,998,000	83,836,100
Yuma	24,500,000	31,686,800	8,376,000	64,562,800
TOTALS	\$888,860,000	\$1,004,538,500	\$475,896,000	\$2,369,294,500

Cost estimates are based on the 1999 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 and inflation factors adopted. For this reason, the cost estimates for 1999 are not comparable to those published in the past. The following factors were used to approximate the value of the loss for crashes occurring in Arizona.

- | | | |
|----|---------------------------|------------|
| 1. | Fatality | \$970,000. |
| 2. | Incapacitating Injury | 45,800. |
| 3. | Non-incapacitating Injury | 15,300. |
| 4. | Possible Injury | 8,700. |
| 5. | Property Damage Only | 6,400. |

Across our nation, the economic cost of motor vehicle crashes was estimated to be \$150.5 billion (NHTSA 1994 est).

Traffic Crashes in Arizona by Year

Figure 1-1: All Crashes

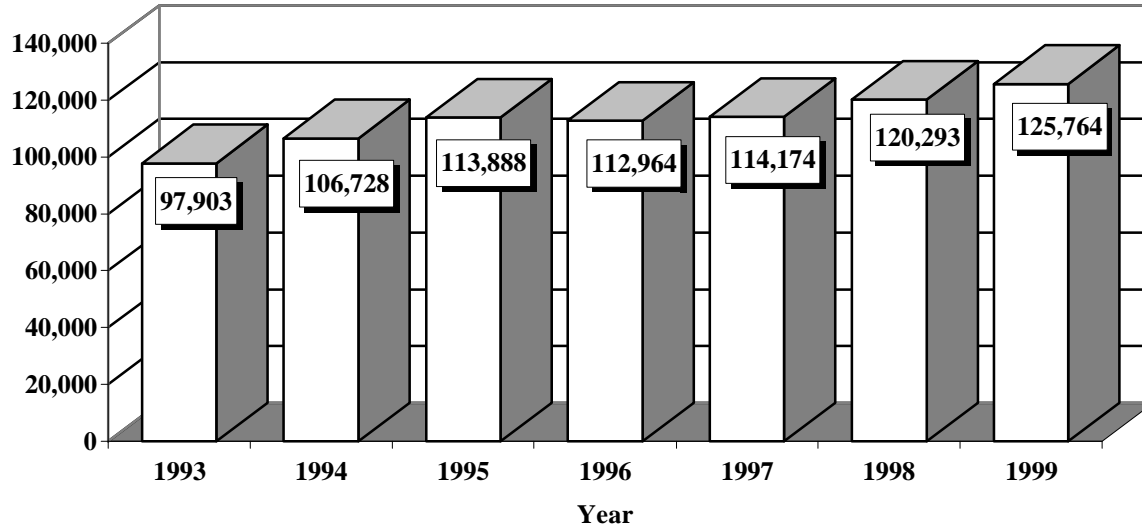


Figure 1-2: Fatal Crashes

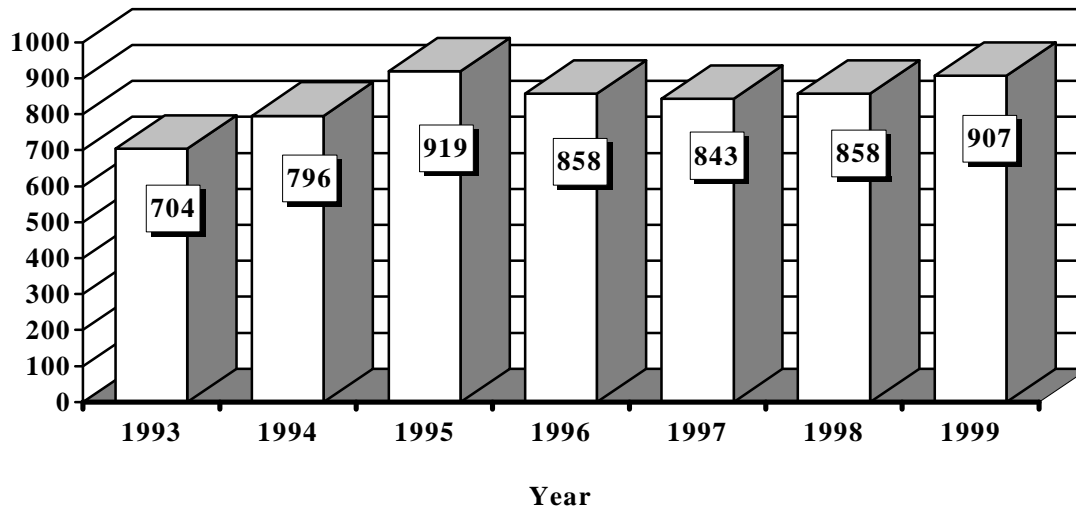


Figure 1-3: Injury Crashes

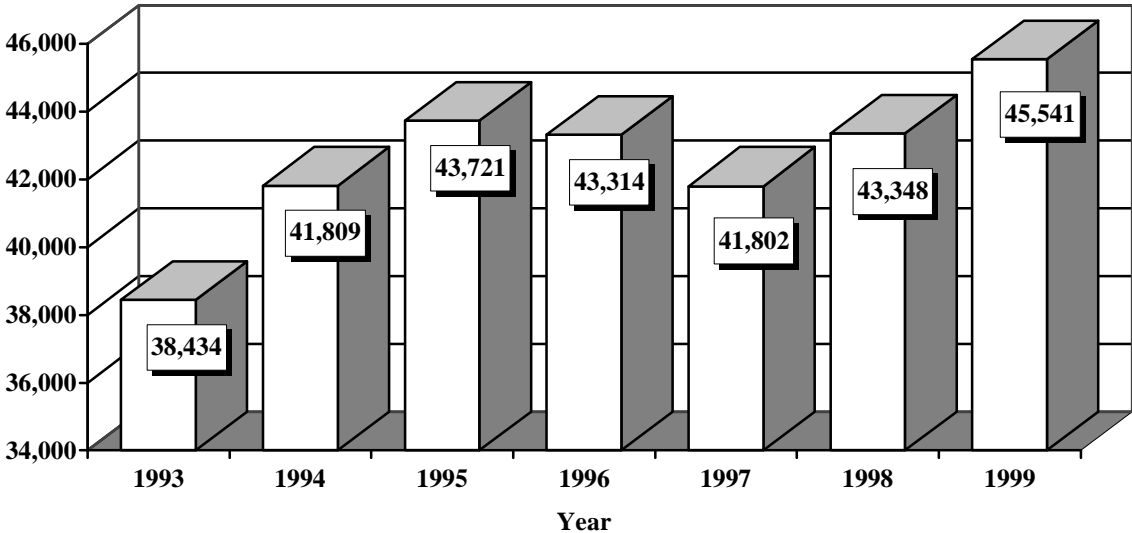
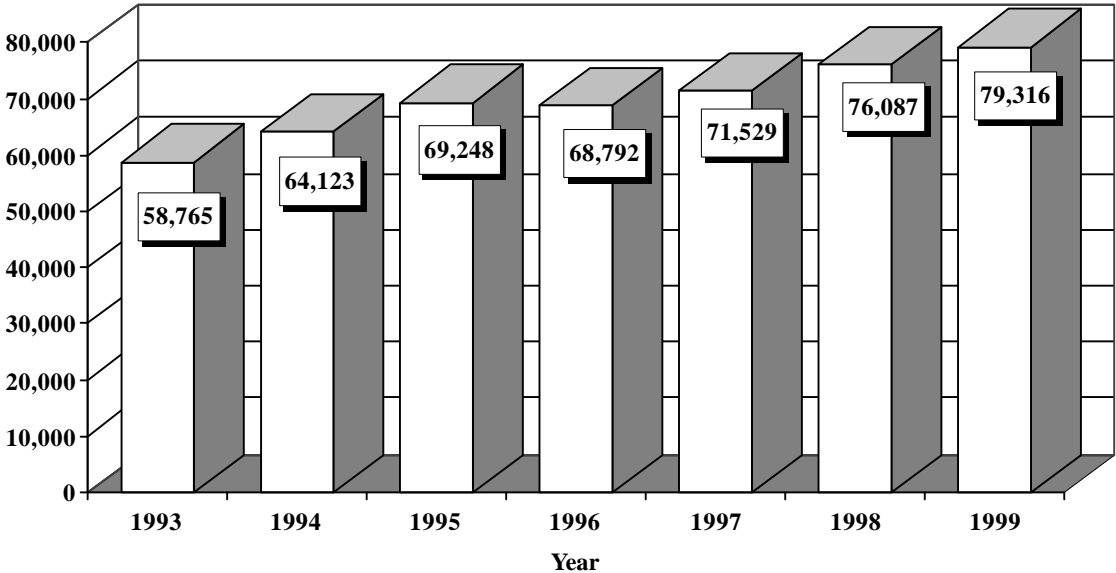


Figure 1-4: Property Damage Only Crashes



Section 1: Highlights and Historical Trends

Table 1-5
Victims of Motor Vehicle Crashes*

Age of Victim	Total Killed			Total Injured			Sex Unk.
	Male	Female		Male	Female		
0 - 4	24	12	12	1,759	871	885	3
5 - 9	19	13	6	2,398	1,217	1,181	0
10 - 14	18	11	7	2,849	1,436	1,407	6
15 - 19	104	75	29	10,842	5,254	5,583	5
20 - 24	130	99	31	9,985	5,150	4,828	7
25 - 34	154	107	47	14,384	7,311	7,064	9
35 - 44	172	122	50	11,787	5,707	6,076	4
45 - 54	138	98	40	8,404	3,926	4,476	2
55 - 64	83	49	34	4,643	2,095	2,546	2
65 - 74	76	46	30	3,107	1,403	1,704	0
75 & Older	90	50	40	2,366	1,068	1,296	2
Age Unknown	16	15	1	990	529	419	42
Totals	1,024	697	327	23,514	35,967	37,465	82

*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%	51.73%	3,526,327
Hispanic	18.77%	25.51%	924,301
African American	2.86%	3.06%	140,836
Native American	5.18%	17.35%	255,081
Asian	1.41%	1.63%	69,433
Other	0.12%	0.71%	5,909
Total estimated 1999 population		4,924,350**	

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 1990 U.S. Census Data.

**Numbers are based on estimates and may not total to exact number.

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

Age of Victim	Total Killed	Total Killed		Race				Native American
		Male	Female	White	Hispanic	African American	Asian	
Less than 1	7	5	2	4	3	0	0	0
1-14	59	42	17	16	21	6	0	16
15-19	100	73	27	44	28	6	1	21
20-44	439	315	124	181	140	12	11	91
45-64	214	154	60	129	41	5	3	33
65+	156	86	70	128	17	1	1	9
Unknown	5	5	0	5	0	0	0	0
Total	980	680	300	507	250	30	16	170

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 Miles Traveled

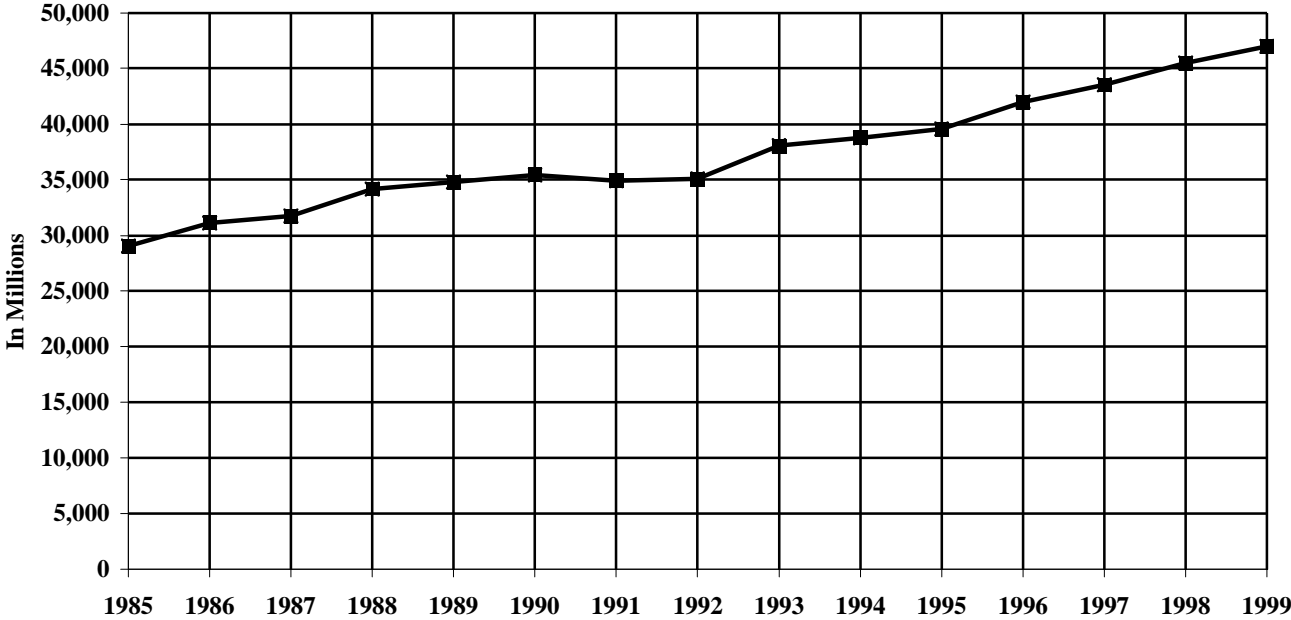
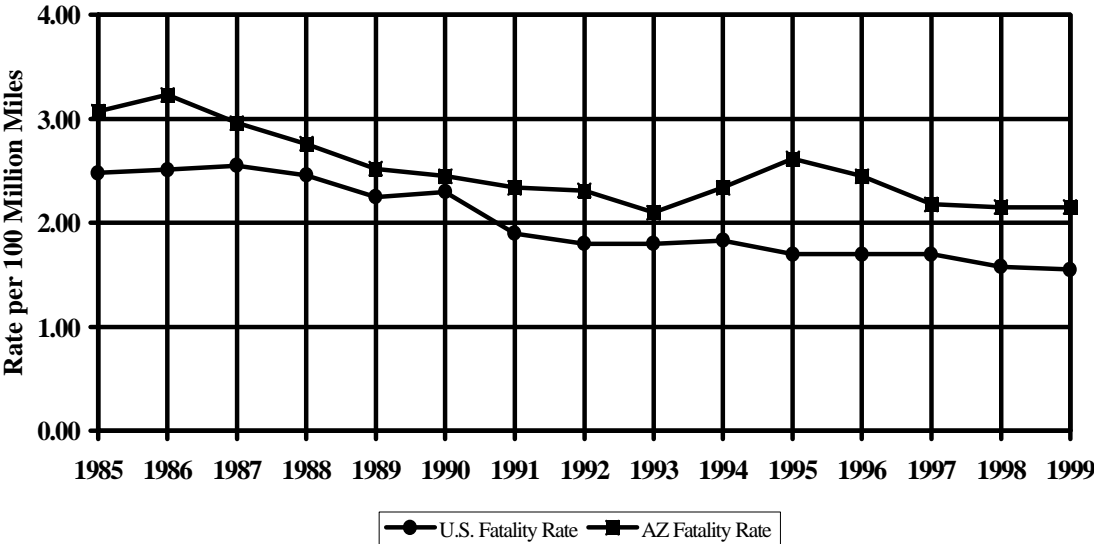


Figure 1-6
Arizona versus U.S. Fatality Rate



Section 1: Highlights and Historical Trends

Figure 1-7
Traffic Fatalities by Land Use

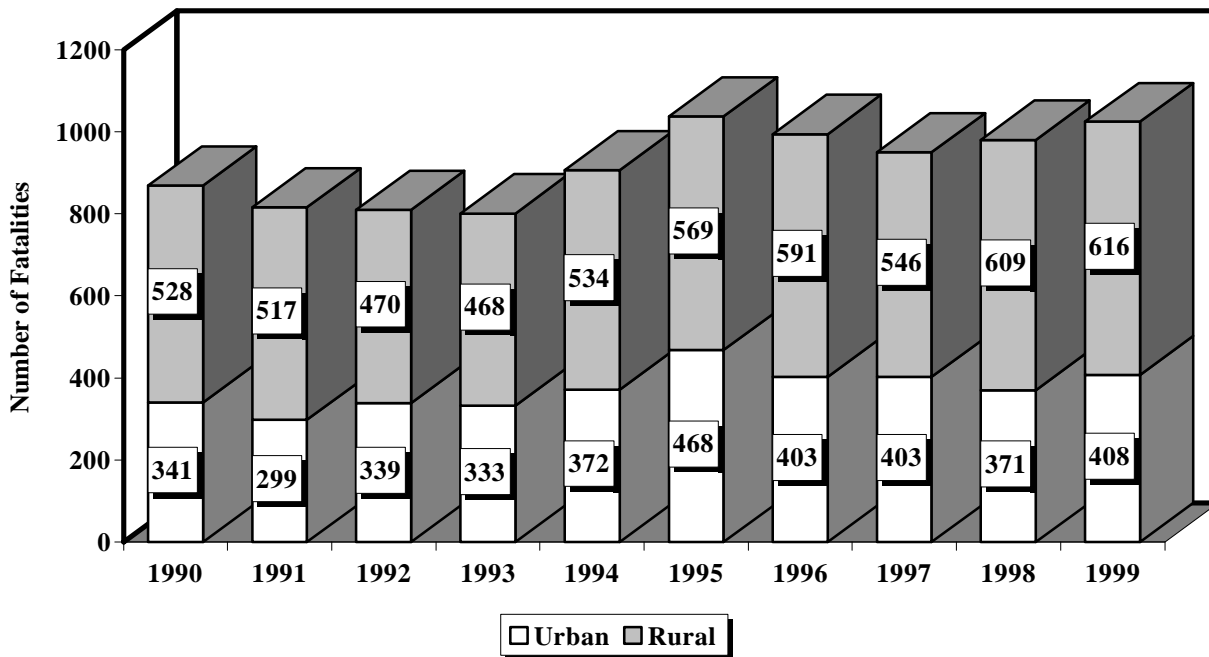
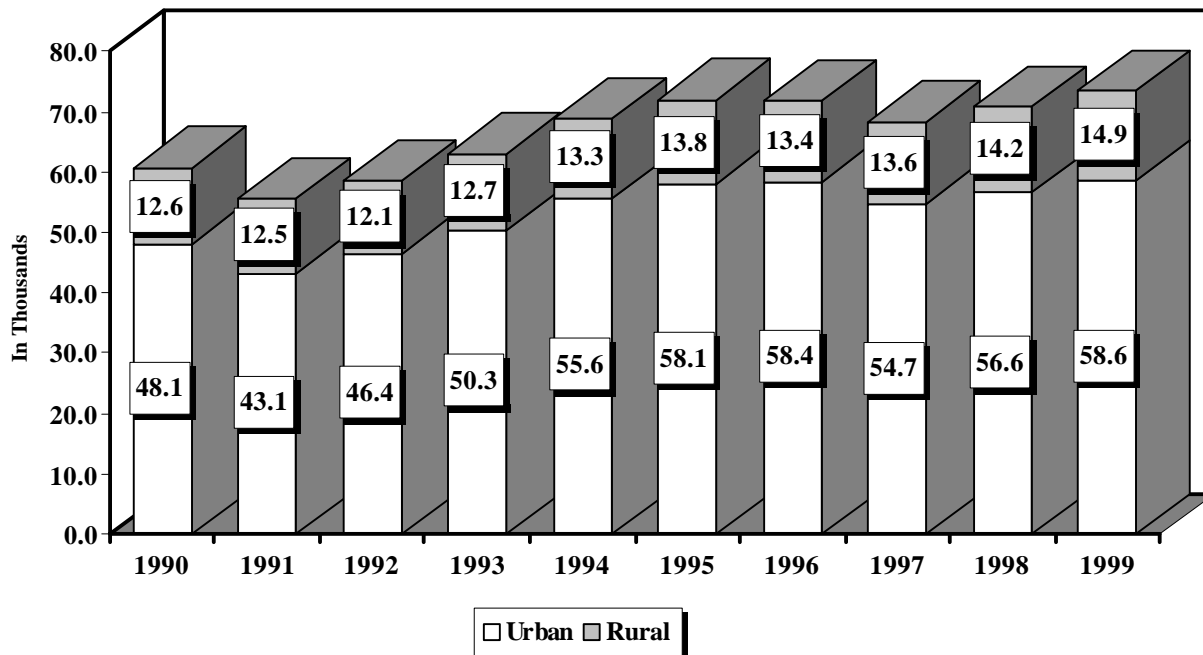


Figure 1-8
Traffic Injuries by Land Use



**Table 1-7
Holiday Crash Statistics**

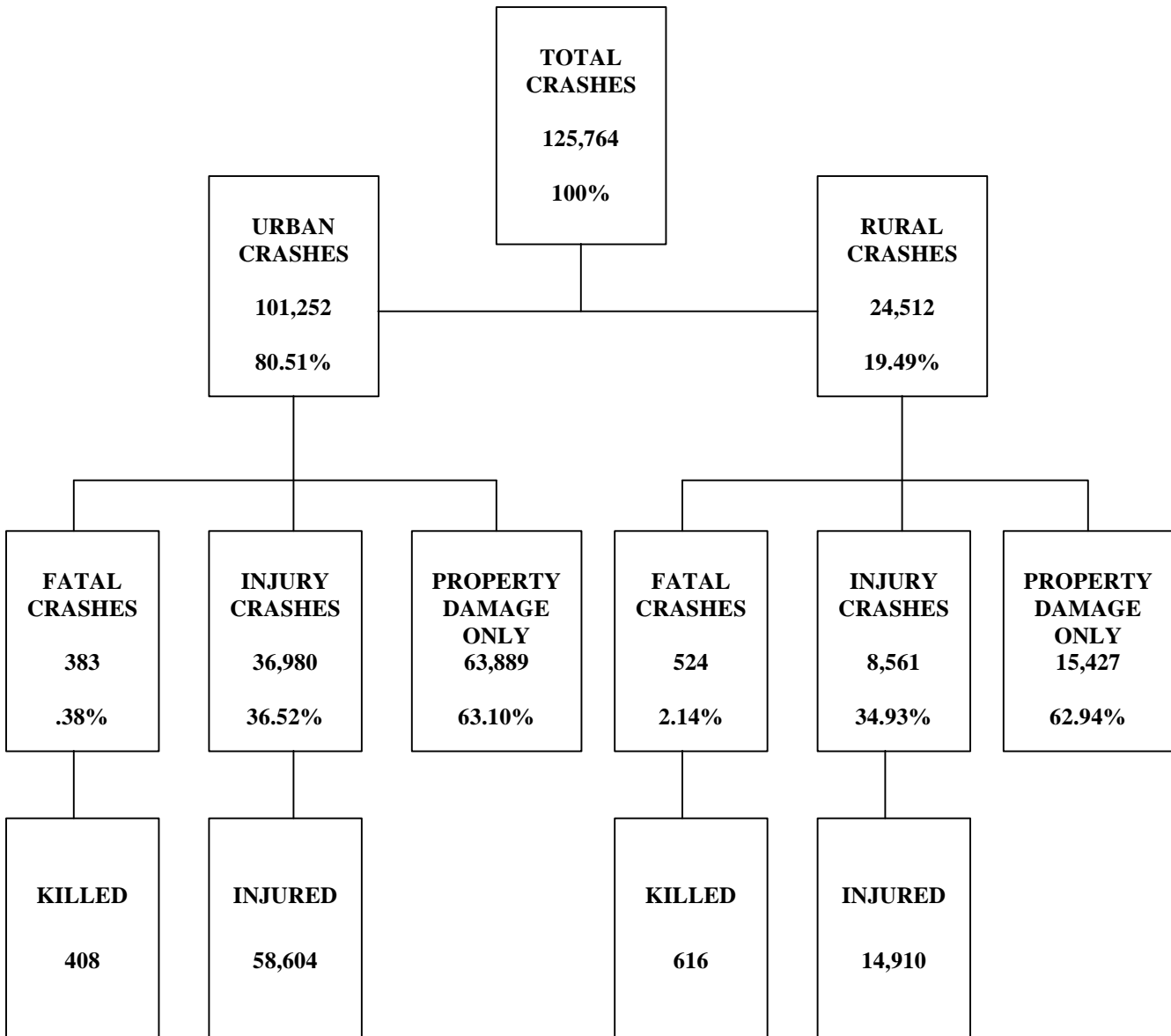
Holidays such as Memorial Day, Labor Day, and Thanksgiving are regarded as a 3 or 4 day weekend holiday for statistical purposes. Holidays such as Christmas, New Years, and the Fourth of July are celebrated on specific dates; which also make the holiday period range from one to four days in length.

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

1998 Holidays	Beginning at 6 p.m.	Ending at Midnight	Number of Days	Fatal Crashes	Persons Killed	Alcohol-Related Crashes	Alcohol-Related Fatalities
New Years	Thursday 12/31/98	Sunday 1/3/99	3	6	7	2	2
Memorial Day	Friday 5/28/99	Monday 5/31/99	3	13	16	5	5
July 4th	Friday 7/02/99	Monday 7/5/99	3	5	7	3	3
Labor Day	Friday 9/03/99	Monday 9/6/99	3	13	13	3	3
Thanksgiving Day	Wednesday 11/24/99	Sunday 11/28/99	4	13	14	3	3
Christmas	Thursday 12/23/99	Sunday 12/26/99	3	5	9	2	5

Fatal Crashes by Year	New Years	Memorial Day	July 4th	Labor Day	Thanks-giving	Christmas	Total
1995	7	10	10	13	11	10	62
1996	14	5	9	8	13	1	50
1997	3	9	9	4	22	11	65
1998	10	10	6	3	13	10	52
1999	6	13	5	13	13	5	49
Persons Killed	New Years	Memorial Day	July 4th	Labor Day	Thanks-Giving	Christmas	Total
1995	8	10	11	15	12	14	70
1996	16	6	14	8	16	1	61
1997	3	12	10	4	23	17	82
1998	10	13	7	3	14	13	60
1999	7	16	7	13	14	9	58
Number of Days	New Years	Memorial Day	July 4th	Labor Day	Thanks-giving	Christmas	Total
1995	3	3	1	3	4	3	17
1996	3	3	4	3	4	1	18
1997	1	3	3	3	4	4	18
1998	4	3	3	3	4	3	20
1999	3	3	3	3	4	2	18

Section 2: Geographic Location



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

Statewide	Number of Crashes				Number of Persons	
	Total	Fatal	Injury	PDO	Killed	Injured
Overturning	2,779	175	1,552	1,052	199	2,870
Other Non-Collision	3,880	19	420	3,441	22	525
Pedestrian	1,635	140	1,400	95	141	1,512
Motor Veh. In Transit	97,821	376	35,308	62,137	438	59,899
Motor Veh. Other Roadway	28	12	11	5	20	44
Pedalcyclist	2,323	26	1,975	322	26	2,037
Animal	1,480	2	188	1,290	2	260
Fixed Object	12,180	133	3,798	8,249	152	5,262
Other Object	73	0	16	57	0	22
Misc.	3,565	24	873	2,668	24	1,083
TOTALS	125,764	907	45,541	79,316	1,024	73,514

Severity by First Harmful Event in Urban Areas

Urban	Number of Crashes				Number of Persons	
	Total	Fatal	Injury	PDO	Killed	Injured
Overturning	434	20	252	162	21	395
Other Non-Collision	3,414	2	374	3,038	3	462
Pedestrian	1,420	94	1,241	85	94	1,337
Motor Veh. In Transit	84,654	186	30,611	53,857	202	51,112
Motor Veh. Other Roadway	11	3	4	4	6	17
Pedalcyclist	2,174	20	1,859	295	20	1,917
Animal	155	0	24	131	0	31
Fixed Object	7,433	47	2,143	5,243	51	2,802
Other Object	25	0	9	16	0	11
Misc.	1,532	11	463	1,058	11	520
TOTALS	101,252	383	36,980	63,889	408	58,604

Severity by First Harmful Event in Rural Areas

Rural	Number of Crashes				Number of Persons	
	Total	Fatal	Injury	PDO	Killed	Injured
Overturning	2,345	155	1,300	890	178	2,475
Other Non-Collision	466	17	46	403	19	63
Pedestrian	215	46	159	10	47	175
Motor Veh. In Transit	13,167	190	4,697	8,280	236	8,787
Motor Veh. Other Roadway	17	9	7	1	14	27
Pedalcyclist	149	6	116	27	6	120
Animal	1,325	2	164	1,159	2	229
Fixed Object	4,747	86	1,655	3,006	101	2,460
Other Object	48	0	7	41	0	11
Misc.	2,033	13	410	1,610	13	563
TOTALS	24,512	524	8,561	15,427	616	14,910

Section 2: Geographic Location

**Table 2-4
Crashes by County**

County	Number of Crashes				Number of Persons	
	Total	Fatal	Injury	PDOs	Fatalities	Injuries
Apache	749	41	272	436	53	521
Cochise	2,156	43	654	1,459	50	1,127
Coconino	4,203	50	1,120	3,033	54	1,802
Gila	1,163	18	409	736	24	683
Graham	356	8	135	213	9	253
Greenlee	90	1	39	50	1	64
La Paz	402	11	147	244	12	264
Maricopa	83,070	394	30,331	52,345	435	48,436
Mohave	2,856	41	977	1,838	44	1,654
Navajo	1,204	33	391	780	39	697
Pima	19,867	116	7,764	11,987	123	12,470
Pinal	3,130	76	1,025	2,029	89	1,816
Santa Cruz	602	6	159	437	6	247
Yavapai	3,514	44	1,137	2,333	58	1,840
Yuma	2,402	25	981	1,396	27	1,640
Total	125,764	907	45,541	79,316	1,024	73,514

While rural crashes in Arizona accounted for only 19.5% of all crashes, they were responsible for 57.8% of all fatal crashes occurring in 1999.

**Table 2-5
Analysis by Jurisdiction**

COUNTIES Cities	Total	Number of Crashes			No. of Persons		Alcohol-Related		
		Fatal	Injury	Property Damage	Killed	Injured	Crashes	Killed	Injured
APACHE COUNTY									
Eagar	42	1	11	30	1	19	3	0	0
St. Johns	24	1	5	18	1	10	2	1	1
Sanders	1	0	0	1	0	0	0	0	0
Ft. Apache Reserv.	15	1	7	7	2	14	3	0	3
Navajo Reservation	390	33	160	197	44	316	63	4	65
State Rural Roads	267	4	84	179	4	150	19	1	20
Other Rural Roads	10	1	5	4	1	12	1	0	4
TOTAL	749	41	272	436	53	521	91	6	93

1999 Arizona Crash Facts Summary

COUNTIES Cities	Total	Number of Crashes			No. of Persons		Alcohol-Related		
		Fatal	Injury	Property Damage	Killed	Injured	Crashes	Killed	Injured
COCHISE COUNTY									
Benson	10	0	5	5	0	8	0	0	0
Bisbee	50	1	20	29	1	28	7	0	7
Douglas	350	2	64	284	2	83	23	1	11
Huachuca City	11	0	4	7	0	9	1	0	0
Sierra Vista	680	3	208	469	3	326	24	0	22
Tombstone	16	0	5	11	0	6	2	0	0
Willcox	44	0	12	32	0	15	1	0	1
State Rural Roads	223	7	70	146	8	138	47	4	56
Other Rural Roads	772	30	266	476	36	514	21	1	20
TOTAL	2,156	43	654	1,459	50	1,127	126	6	117
COCONINO COUNTY									
Flagstaff	2,219	6	517	1,696	6	762	108	1	73
Fredonia	3	0	0	3	0	0	2	0	0
Page	91	0	30	61	0	58	9	0	3
Sedona	279	1	73	205	1	98	23	0	8
Williams	45	0	10	35	0	15	3	0	1
Hualapai Reservation	4	0	3	1	0	4	0	0	0
Navajo Reservation	103	17	28	58	19	74	10	1	15
State Rural Roads	1,285	23	415	847	25	721	58	3	42
Other Rural Roads	174	3	44	127	3	70	12	0	14
TOTAL	4,203	50	1,120	3,033	54	1,802	225	5	156
GILA COUNTY									
Globe	195	0	58	137	0	92	15	0	10
Hayden	4	0	2	2	0	2	1	0	1
Miami	30	0	8	22	0	8	2	0	1
Payson	156	0	54	102	0	96	9	0	9
Winkelman	1	0	0	1	0	0	0	0	0
Ft. Apache Reserv.	30	2	11	17	2	13	2	0	1
San Carlos Reserv.	46	7	11	28	11	24	9	4	8
State Rural Roads	556	8	215	333	10	352	45	4	44
Other Rural Roads	145	1	50	94	1	96	27	0	20
TOTAL	1,163	18	409	736	24	683	110	8	94
GRAHAM COUNTY									
Pima	12	0	5	7	0	9	1	0	1
Safford	85	1	35	49	1	64	9	0	9
Thatcher	51	0	19	32	0	38	1	0	2
San Carlos Reserv.	35	2	8	25	2	16	7	0	6
State Rural Roads	106	4	42	60	5	72	12	0	17
Other Rural Roads	67	1	26	40	1	54	12	0	11
TOTAL	356	8	135	213	9	253	42	0	46

Section 2: Geographic Location

COUNTIES Cities	Total	Number of Crashes			No. of Persons		Alcohol-Related		
		Fatal	Injury	Property Damage	Killed	Injured	Crashes	Killed	Injured
GREENLEE COUNTY									
Clifton	13	0	4	9	0	8	5	0	5
Duncan	1	0	0	1	0	0	1	0	0
State Rural Roads	75	1	34	40	1	55	7	0	7
Other Rural Roads	1	0	1	0	0	1	1	0	1
TOTAL	90	1	39	50	1	64	14	0	13
LA PAZ COUNTY									
Parker	2	0	2	0	0	3	0	0	0
Quartzite	35	0	7	28	0	9	2	0	1
Colo. River Resv.	11	0	5	6	0	7	10	0	0
State Rural Roads	330	10	125	195	11	231	29	1	25
Other Rural Roads	24	1	8	15	1	14	5	0	4
TOTAL	402	11	147	244	12	264	46	1	30
MARICOPA COUNTY									
Avondale	414	2	129	283	2	210	27	0	25
Buckeye	0	0	0	0	0	0	0	0	0
Carefree	7	0	1	6	0	1	1	0	0
Cave Creek	8	0	2	6	0	2	2	0	0
Chandler	3,390	4	1,097	2,289	4	1,715	182	1	149
El Mirage	56	3	19	34	3	39	4	1	7
Fountain Hills	26	1	8	17	1	11	1	0	0
Ft. McDowell Resv	0	0	0	0	0	0	0	0	0
Gila Bend	6	0	1	5	0	1	1	0	0
Gila River Reserv	65	2	34	29	3	87	8	0	8
Gilbert	1,183	4	400	779	5	613	76	0	54
Glendale	3,963	13	1,498	2,452	15	2,374	227	1	187
Goodyear	193	2	56	135	2	98	12	0	13
Guadalupe	38	0	11	27	0	17	4	0	1
Mesa	10,777	27	3,458	7,292	27	5,343	407	7	309
Paradise Valley	112	2	38	72	2	56	6	2	5
Peoria	1,266	7	388	871	7	623	66	2	38
Phoenix	42,961	181	16,508	26,272	197	26,566	2,722	63	2,547
Salt River Reserv	291	5	84	202	8	132	30	1	28
Scottsdale	4,843	18	1,799	3,026	18	2,796	266	1	222
Surprise	148	4	64	80	4	110	7	0	2
Tempe	7,845	15	2,671	5,159	18	4,111	438	2	348
Tolleson	136	0	34	102	0	61	5	0	9
Wickenburg	77	2	20	55	3	37	2	0	4
Youngtown	1	0	1	0	0	1	0	0	0
State Rural Roads	2,011	38	701	1,272	46	1,217	134	17	130
Other Rural Roads	3,253	64	1,309	1,880	70	2,215	261	30	263
TOTAL	83,070	394	30,331	52,345	435	48,436	4,889	128	4,349

1999 Arizona Crash Facts Summary

COUNTIES Cities	Total	Number of Crashes			No. of Persons		Alcohol-Related		
		Fatal	Injury	Property Damage	Killed	Injured	Crashes	Killed	Injured
MOHAVE COUNTY									
Bullhead City	738	1	221	516	1	339	66	0	46
Colorado City	16	0	4	12	0	9	0	0	0
Hualapai Reserv.	19	1	8	10	1	12	4	1	2
Kaibab-Paiute Resv.	7	0	2	5	0	6	1	0	0
Kingman	389	2	120	267	2	199	23	0	18
Lake Havasu City	483	1	204	278	1	310	59	1	39
State Rural Roads	862	31	298	533	34	570	79	8	104
Other Rural Roads	342	5	120	217	5	209	53	4	46
TOTAL	2,856	41	977	1,838	44	1,654	285	14	255
NAVAJO COUNTY									
Holbrook	96	2	17	77	2	23	7	0	1
Ft. Apache Reserv.	50	5	16	29	6	32	3	0	3
Hopi Reservation	7	2	2	3	2	2	1	0	0
Navajo Reservation	24	5	7	12	7	12	2	0	1
Pinetop-Lakeside	94	0	28	66	0	45	5	0	5
Show Low	174	0	64	110	0	109	10	0	7
Snowflake	60	1	16	43	1	37	3	1	2
Taylor	6	0	3	3	0	4	1	0	1
Winslow	162	4	33	125	6	63	10	4	13
State Rural Roads	411	11	164	236	12	298	26	2	34
Other Rural Roads	120	3	41	76	3	72	10	0	12
TOTAL	1,204	33	391	780	39	697	78	7	79
PIMA COUNTY									
Marana	487	2	138	347	3	207	20	0	10
Oro Valley	261	1	61	199	1	101	9	0	5
Papago Reservation	186	7	74	105	9	153	24	2	25
San Xavier Reserv,	36	0	13	23	0	21	8	0	7
Sahuarita	44	0	17	27	0	26	2	0	0
South Tucson	148	1	58	89	1	106	16	0	29
Tucson	13,888	55	5,718	8,115	56	9,055	729	17	696
State Rural Roads	1,354	21	428	905	23	726	85	6	76
Other Rural Roads	3,463	29	1,257	2,177	30	2,075	221	11	179
TOTAL	19,867	116	7,764	11,987	123	12,470	1,114	36	1,027
PINAL COUNTY									
Apache Junction	413	1	117	295	1	183	37	0	27
Casa Grande	580	5	176	399	5	285	47	0	41
Coolidge	89	0	26	63	0	34	7	0	7
Eloy	138	7	43	88	7	78	18	1	16
Florence	61	1	18	42	1	26	2	0	1
Gila River Reserv.	224	11	82	131	11	168	23	3	13
Kearny	2	0	1	1	0	3	0	0	0
Mammoth	9	0	4	5	0	4	1	0	0
Superior	20	0	5	15	0	5	4	0	2
State Rural Roads	1,022	34	365	623	44	704	78	14	98
Other Rural Roads	572	17	188	367	20	326	70	10	68
TOTAL	3,130	76	1,025	2,029	89	1,816	287	28	273

Section 2: Geographic Location

About 59.2% of Arizona's population reside in Maricopa county, but only 43.4% of all fatal crashes occurred there in 1999.

COUNTIES Cities	Total	Number of Crashes			No. of Persons		Alcohol-Related		
		Fatal	Injury	Property Damage	Killed	Injured	Crashes	Killed	Injured
SANTA CRUZ COUNTY									
Nogales	411	2	103	306	2	151	24	1	12
Patagonia	2	1	0	1	1	0	0	0	0
State Rural Roads	179	0	54	125	0	90	20	0	23
Other Rural Roads	10	3	2	5	3	6	3	1	5
TOTAL	602	6	159	437	6	247	47	2	40
YAVAPAI COUNTY									
Camp Verde	93	2	24	67	2	45	9	0	2
Chino Valley	111	2	35	74	4	61	9	0	8
Cottonwood	191	2	60	129	2	101	12	0	6
Jerome	1	0	1	0	0	1	1	0	1
Prescott	796	1	249	546	1	378	39	0	42
Prescott Valley	327	1	91	235	1	149	18	0	8
State Rural Roads	1,562	28	531	1,003	37	888	81	9	69
Other Rural Roads	433	8	146	279	11	217	65	9	48
TOTAL	3,514	44	1,137	2,333	58	1,840	234	18	184
YUMA COUNTY									
San Luis	47	0	9	38	0	14	3	0	0
Somerton	21	0	4	17	0	5	2	0	0
Wellton	0	0	0	0	0	0	0	0	0
Yuma	1,427	4	662	761	4	1,071	94	1	89
State Rural Roads	389	10	112	267	11	200	19	1	26
Other Rural Roads	518	11	194	313	12	350	59	6	50
TOTAL	2,402	25	981	1396	27	1,640	177	8	165
STATEWIDE TOTAL	125,764	907	45,541	79,316	1,024	73,514	7,756	267	6,921

Totals within city and town jurisdictions include all State Highways

During 1999, across the nation, total police-reported crashes increased 0.3 percent while vehicle miles traveled (VMT) increased by 2.3 percent since 1998.

Figure 2-1
Crash Rate per 100,000 People

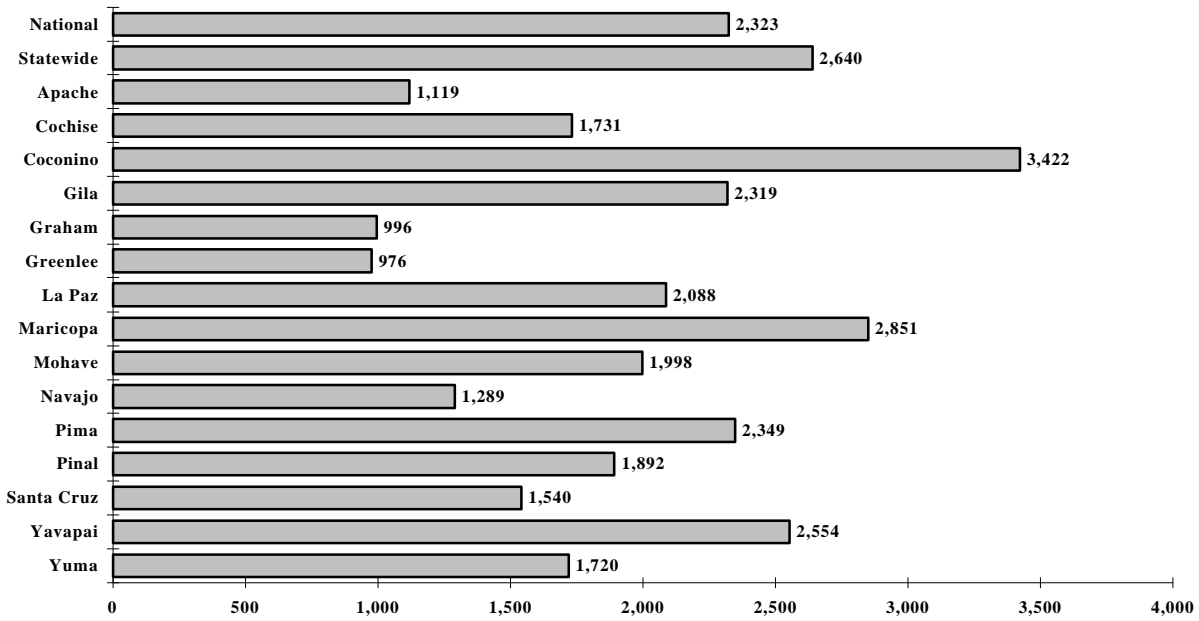
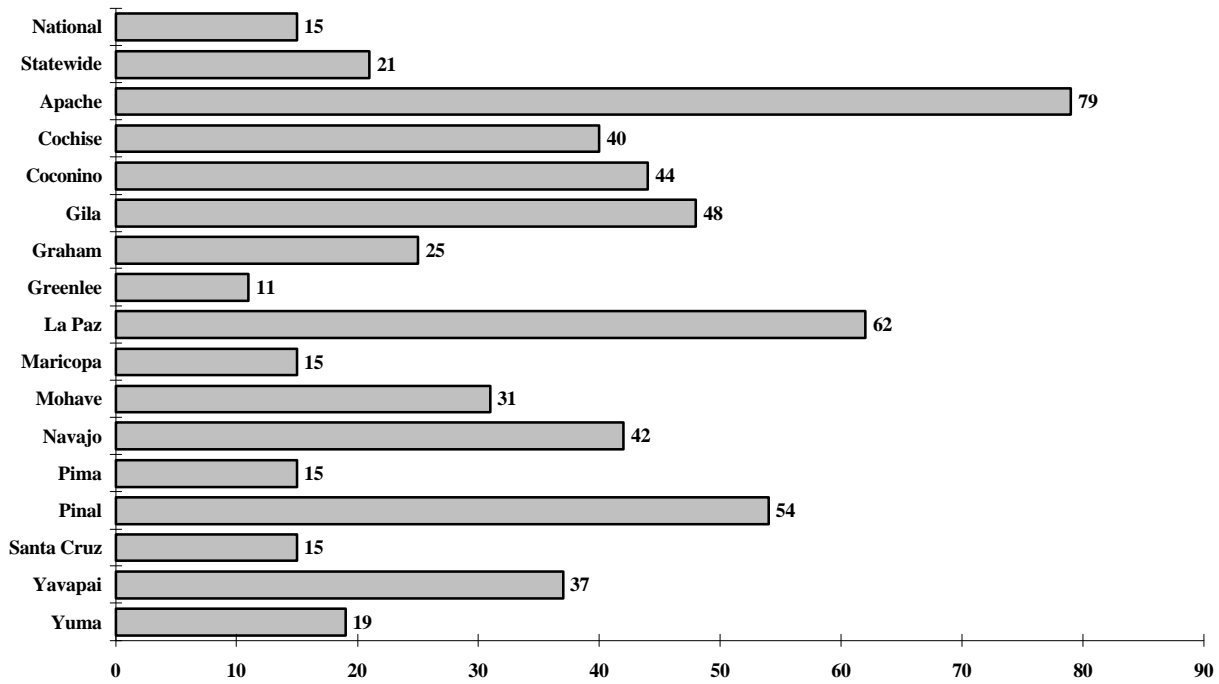


Figure 2-2
Fatality Rate per 100,000 People



Section 2: Geographic Location

Table 2-6
The State Highway System*

Route	Number of Crashes				Number of Persons				
	Total	Fatal	Injury	Property Damage	Total Killed	Total Injured	Possible Injury	Non-Incap Injury	Incap Injury
I 8	299	8	104	187	9	191	53	85	53
SB 8	57	2	17	38	3	32	9	9	14
I 10	6,105	80	1,796	4,229	95	3,048	1,547	1,046	455
SB 10	21	0	12	9	0	17	7	8	2
I 15	118	4	43	71	4	86	31	46	9
I 17	3,836	16	1,147	2,673	19	1,761	1,023	604	134
I 19	466	6	157	303	6	246	118	106	22
SB 19	62	0	24	38	0	33	17	11	5
I 40	1,327	36	441	850	41	774	253	381	140
SB 40	522	0	143	379	0	216	126	78	12
S 51	921	4	248	669	5	353	232	97	24
U 60	2,597	31	862	1,704	38	1,436	819	417	200
S 61	17	0	6	11	0	9	5	3	1
S 64	109	2	34	73	2	57	37	17	3
S 66	37	3	13	21	3	32	14	15	3
S 67	38	0	7	31	0	10	3	5	2
S 68	93	4	34	55	4	69	22	34	13
S 69	389	2	141	246	2	247	140	83	24
U 70	177	6	65	106	9	126	67	42	17
S 71	8	0	4	4	0	6	5	1	1
S 72	17	0	8	9	0	20	6	10	4
S 73	8	2	2	4	2	4	3	0	1
S 74	42	0	13	29	0	23	8	12	3
S 75	9	0	7	2	0	10	4	3	3
S 77	561	7	193	361	8	320	154	124	42
S 78	10	1	4	5	1	4	0	1	3
S 79	81	3	34	44	5	54	13	18	23
SB 79	4	0	2	2	0	2	0	2	0
S 80	152	4	49	99	4	75	35	31	9
S 81	0	0	0	0	0	0	0	0	0
S 82	49	1	14	34	1	27	12	12	3
S 83	40	0	16	24	0	35	25	9	1
S 84	73	1	28	44	1	63	28	21	14
S 85	109	7	36	66	10	92	31	38	23
S 86	167	6	68	93	6	147	47	77	23
S 87	765	14	298	453	18	515	177	234	104
S 88	127	0	59	68	0	104	33	62	9
S 89	308	3	110	195	5	195	78	79	38
SA 89	504	6	168	330	10	263	134	96	33
SL 89	2	0	1	1	0	1	0	0	1
U 89	286	16	84	186	17	191	58	90	43
UA 89	44	0	16	28	0	31	16	11	4
S 90	175	3	65	107	3	116	56	43	17
S 92	162	4	61	97	4	114	51	54	9
U 93	294	13	97	184	17	182	50	84	48

Legend:

In the route column, the first letter signifies the following: I=Interstate, S=State, U=U.S. Highway.

The second letter signifies: A=alternate, B=business, L=loop, S=spur, X=temporary.

1999 Arizona Crash Facts Summary

Route	Number of Crashes				Number of Persons				
	Total	Fatals	Injury	Property Damage	Killed	Total Injured	Possible Injury	Non-Incap Injury	Incap Injury
S 95	690	4	266	420	4	431	242	120	69
U 95	160	4	49	107	4	79	26	40	13
S 96	11	0	9	2	0	12	2	9	1
S 97	8	1	6	1	1	6	3	1	2
S 98	13	0	5	8	0	6	0	3	3
S 99	6	2	1	3	2	2	2	0	0
S 101	557	3	144	410	4	200	116	62	22
S 143	142	0	28	114	0	35	28	5	2
S 153	17	1	4	12	1	6	2	1	3
U 160	37	6	13	18	9	30	6	19	5
U 163	6	1	3	2	1	3	0	1	2
S 169	26	0	10	16	0	13	7	6	0
S 170	2	0	1	1	0	1	0	1	0
S 177	33	0	14	19	0	17	9	1	7
S 179	113	1	32	80	1	44	26	17	1
U 180	197	4	57	136	4	112	43	47	22
S 181	1	0	1	0	0	2	1	1	0
S 186	9	0	2	7	0	2	0	2	0
S 187	2	0	1	1	0	2	2	0	0
S 188	24	0	6	18	0	9	1	7	1
S 189	3	0	0	3	0	0	0	0	0
U 191	212	11	83	118	12	177	49	79	49
UB 191	1	0	0	1	0	0	0	0	0
UX 191	11	0	4	7	0	9	6	3	0
S 202	1,469	1	424	1,044	1	627	449	134	44
S 238	9	0	4	5	0	4	0	2	2
S 260	597	11	197	389	15	326	172	120	34
S 261	1	0	0	1	0	0	0	0	0
S 264	118	5	49	64	6	100	79	16	5
S 266	10	1	2	7	1	3	1	1	1
S 273	8	0	2	6	0	5	1	4	0
S 277	24	2	8	14	2	13	4	5	4
S 280	17	0	3	14	0	7	3	3	1
S 286	20	0	6	14	0	8	3	4	1
S 287	44	2	20	22	2	30	20	5	5
S 288	16	0	6	10	0	8	3	4	1
S 289	2	0	2	0	0	3	2	1	0
S 303	45	5	20	20	6	37	11	20	6
S 347	52	0	23	29	0	39	6	19	14
S 366	9	0	6	3	0	8	2	6	0
S 373	2	0	0	2	0	0	0	0	0
S 377	14	0	4	10	0	8	3	5	0
S 386	2	0	2	0	0	2	1	1	0
S 387	23	1	11	11	2	19	8	8	3
S 389	17	1	5	11	1	13	4	4	5
S 473	1	0	0	1	0	0	0	0	0
S 564	0	0	0	0	0	0	0	0	0
S 587	10	1	5	4	1	8	4	2	2
TOTAL	25,979	363	8,269	17,347	432	13,803	6,894	4,988	1,921

* This table does not include crashes on the state highway system where a local street name was used as a reference on the police accident report form.

Section 3: Crash Descriptions

Section 3: Crash Descriptions

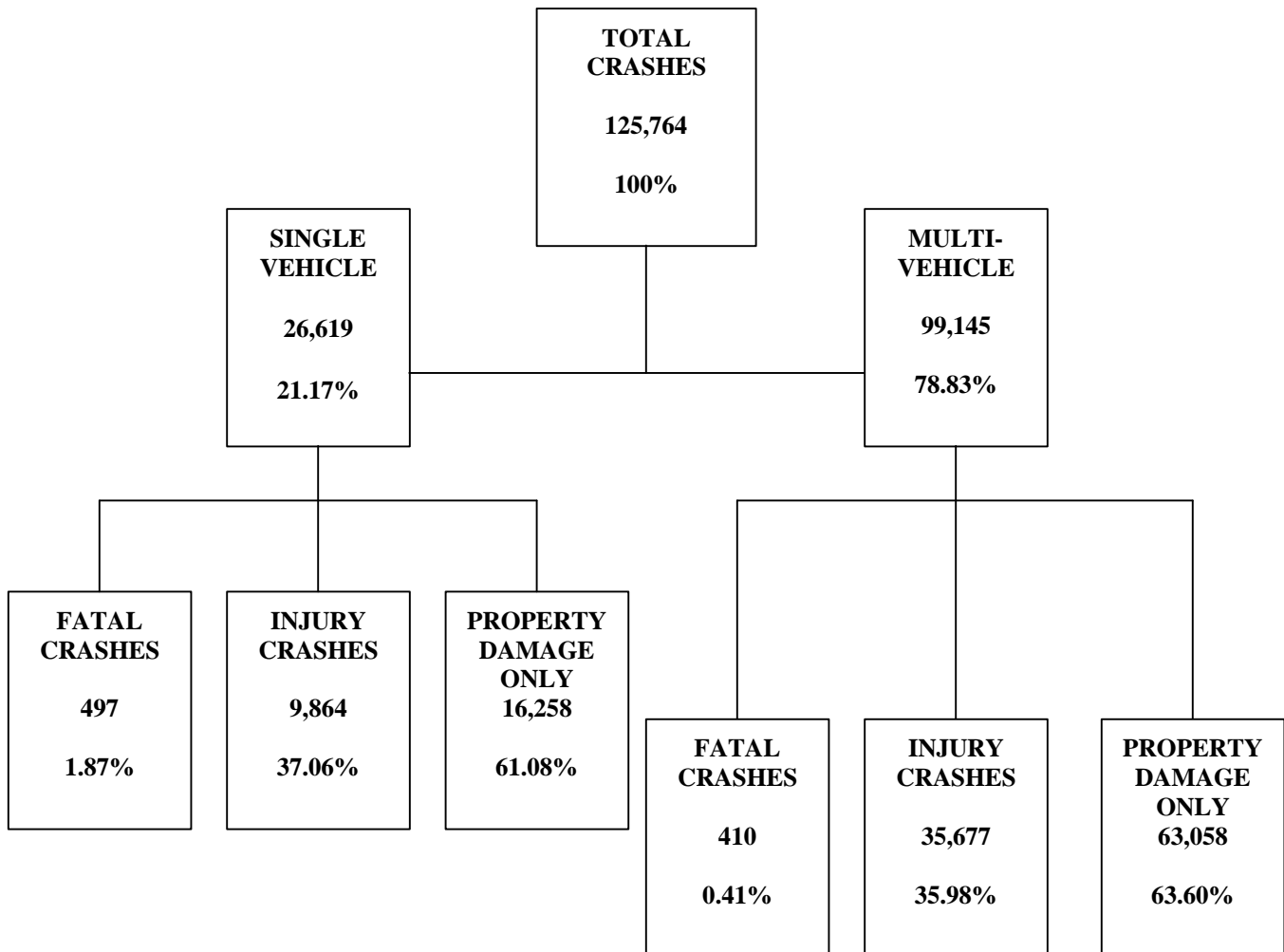


Table 3-1
Manner of Collision in Multi-Vehicle Crashes

Manner of Collision	Percent of		Percent of		Percent of	
	Total	All Crashes	Fatal	Fatal Crashes	Injury	Injury Crashes
Head On	752	0.76%	93	22.68%	400	1.12%
Rear End	43,696	44.07%	53	12.93%	16,233	45.50%
Side Swipe Opposite Direction	954	0.96%	15	3.66%	313	0.88%
Side Swipe Same Direction	12,865	12.98%	22	5.37%	2,149	6.02%
Left Turn	13,023	13.14%	74	18.05%	6,481	18.17%
Other Angle	21,542	21.73%	119	29.02%	8,766	24.57%
Backed Into	2,221	2.24%	0	0%	180	0.51%
U-Turn	1,469	1.48%	6	1.46%	459	1.29%
Other	2,623	2.65%	28	6.83%	696	1.95%
TOTAL	99,145	100.00%	410	100.00%	35,677	100.00%

Table 3-2
Unusual Road Conditions

Unusual Road Conditions	Number of Crashes				Number of Victims	
	Total	Fatal	Injury	PDO	Killed	Injured
No Unusual Condition	119,434	865	43,478	75,091	977	70,259
Under Construction Thru Traffic Allowed	4,523	23	1,477	3,023	24	2,301
Under Construction Traffic Detoured	59	0	22	37	0	33
Under Repairs	92	0	25	67	0	43
Holes,Ruts,Bumps	411	5	155	251	5	257
Obstruction Protected	41	0	13	28	0	16
Obstruction Unprotected	115	2	33	80	2	58
Obstruction Unlighted at Night	86	3	18	65	5	28
Defective Shoulders	26	1	8	17	1	16
Changing Road Width	338	5	106	227	7	177
Flooded	129	0	51	78	0	79
Temporary Lane Closure	510	3	155	352	3	247
TOTALS	125,764	907	45,541	79,316	1024	73,514

Section 3: Crash Descriptions

**Table 3-3
Weather Conditions**

Weather	Number of Crashes			Number of Persons		
	Total	Fatal	Injury	PDO	Killed	Injured
Clear	110,931	735	40,224	69,972	830	64,907
Raining	4,004	24	1,405	2,575	26	2,235
Cloudy	8,984	74	3,326	5,584	82	5,426
Snowing	469	3	146	320	3	226
Strong Wind	730	5	249	476	5	391
Dust	93	3	47	43	3	94
Fog	22	3	6	13	3	14
Not Reported	531	60	138	333	72	221
TOTALS	125,764	907	45,541	79,316	1,024	73,514

**Table 3-4
Lighting Conditions**

Lighting	Number of Crashes			Number of Persons		
	Total	Fatal	Injury	PDO	Killed	Injured
Daylight	91,649	451	32,830	58,368	521	52,252
Dawn or Dusk	5,919	59	2,165	3,695	64	3,508
Darkness	27,938	389	10,495	17,054	428	17,665
Not Reported	258	8	51	199	11	89
TOTALS	125,764	907	45,541	79,316	1,024	73,514

**Table 3-5
Road Surface**

Surface	Number of Crashes			Number of Persons		
	Total	Fatal	Injury	PDO	Killed	Injured
Asphalt	114,493	807	42,092	71,594	900	68,168
Concrete	9,011	31	2,768	6,212	40	4,189
Gravel	381	4	113	264	4	178
Dirt	1,439	11	443	985	12	763
Other	84	0	28	56	0	35
Not Reported	356	54	97	205	68	181
TOTALS	125,764	907	45,541	79,316	1,024	73,514

**Table 3-6
Road Surface Conditions**

Surface	Number of Crashes				Number of Persons	
	Total	Fatal	Injury	PDO	Killed	Injured
Wet	5,401	31	1,925	3,445	34	3,056
Loose Dirt, Sand, Etc.	1,644	9	529	1,106	10	822
Snowy or Icy	647	5	206	436	5	322
Fresh Oil	88	0	40	48	0	55
Other	363	4	128	231	6	214
Unknown	2,507	3	750	1,754	3	1,150
No Unusual Conditions	115,114	855	41,963	72,296	966	67,895
TOTALS	125,764	907	45,541	79,316	1,024	73,514

Nationally, traffic fatalities account for more than 90 percent of transportation-related fatalities.

**Table 3-7
Road Grade**

Road Grade	Number of Crashes				Number of Persons	
	Total	Fatal	Injury	PDO	Killed	Injured
Level	112,625	687	41,144	70,794	756	66,419
Downgrade	6,532	89	2,296	4,147	112	3,773
Upgrade	4,759	57	1,542	3,160	67	2,442
Hill crest	438	3	144	291	4	216
Dip	196	3	68	125	4	125
Not Reported	1,214	68	347	799	81	539
TOTALS	125,764	907	45,541	79,316	1,024	73,514

Section 3: Crash Descriptions

Figure 3-1
Crashes by Time of Day
Weekdays

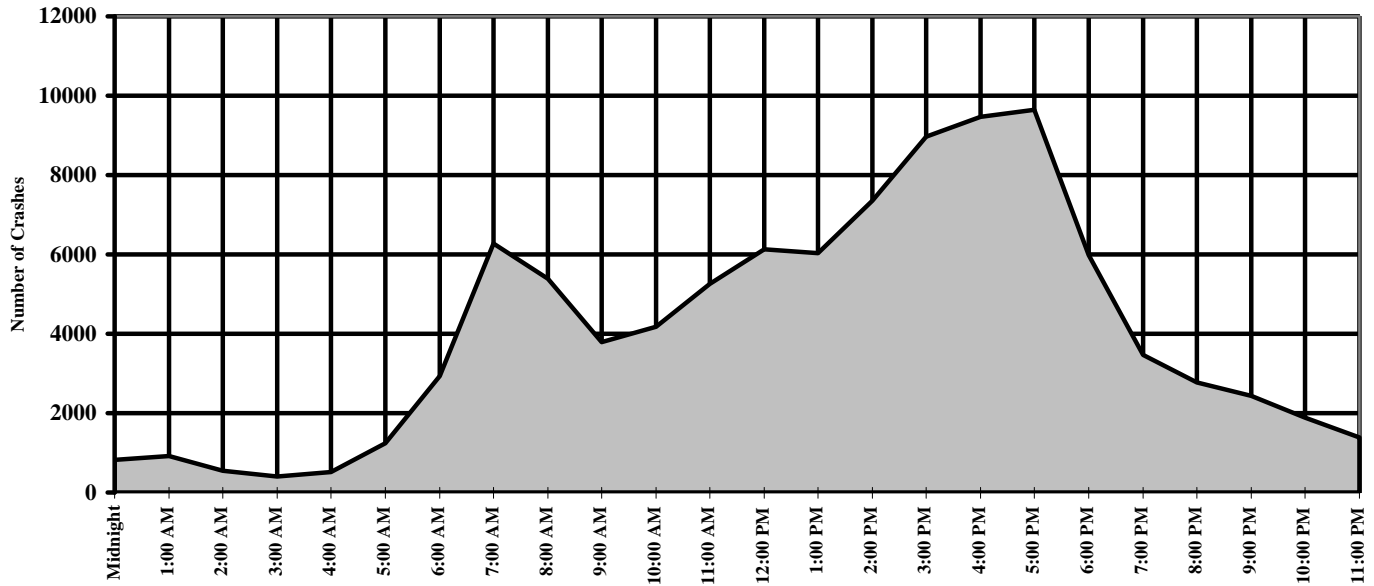
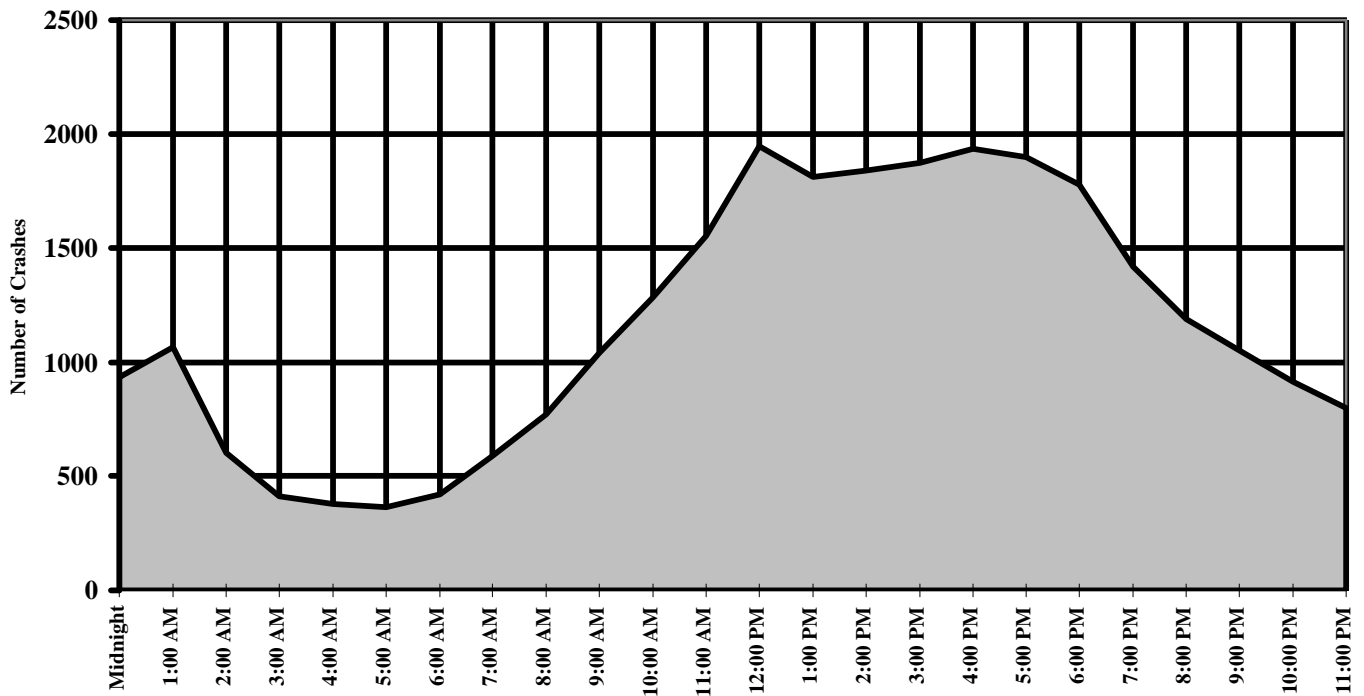
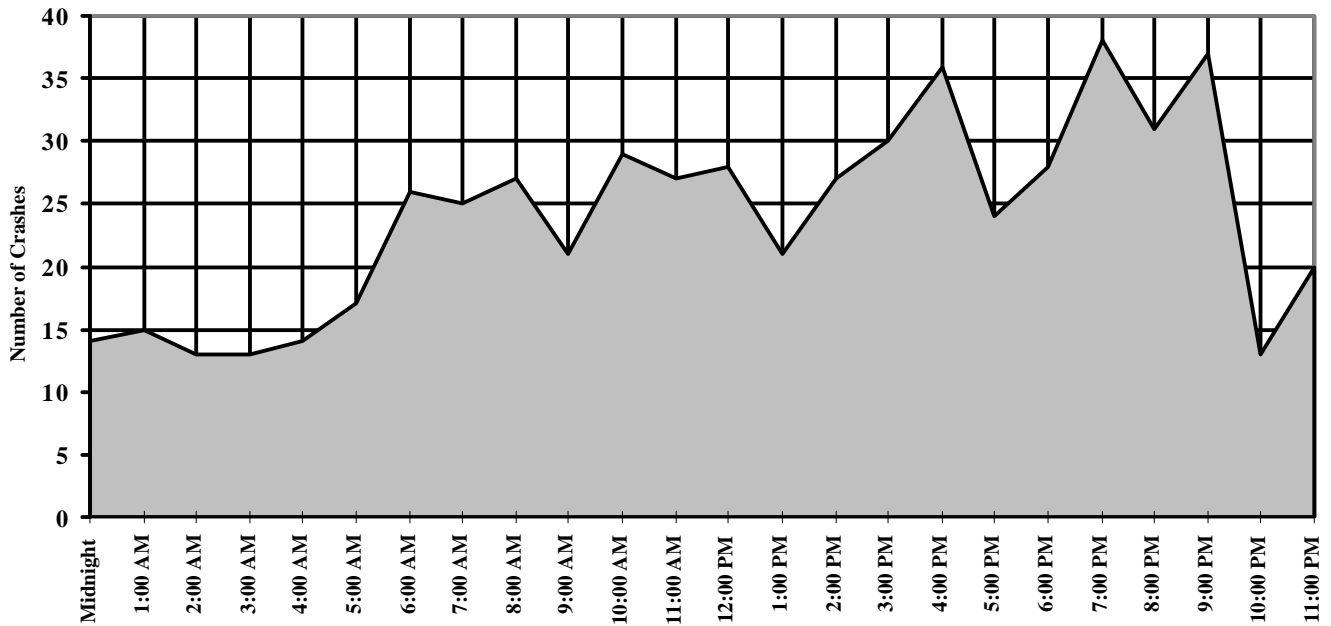


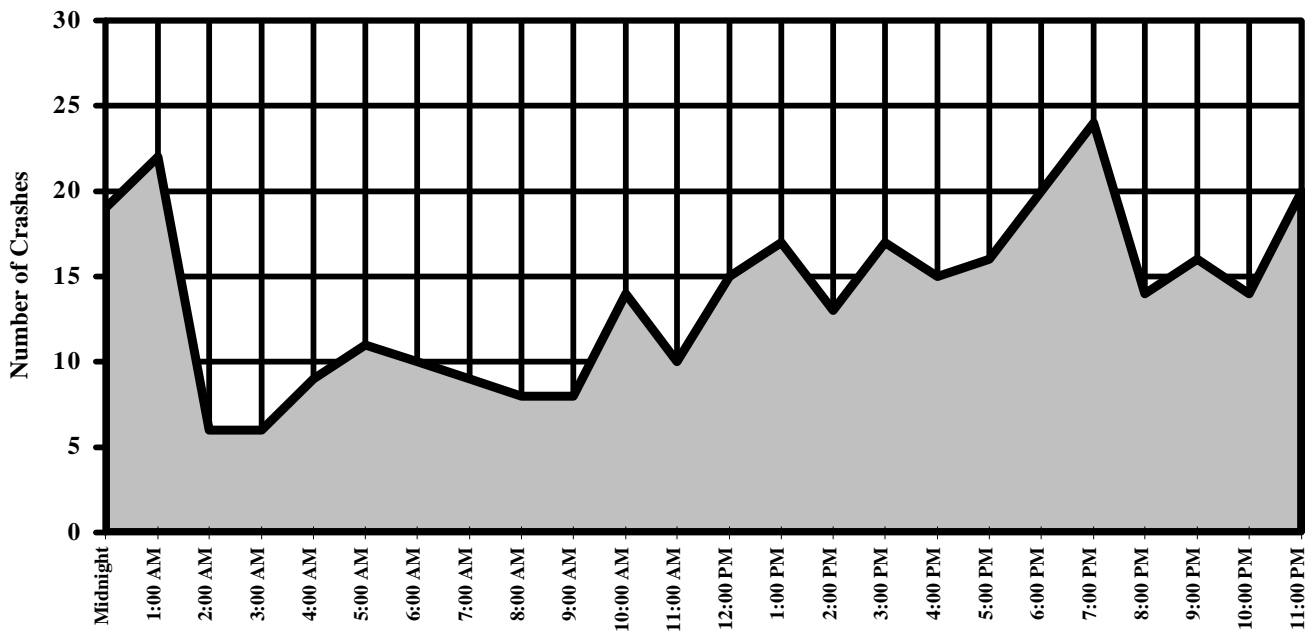
Figure 3-2
Crashes by Time of Day
Weekends



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

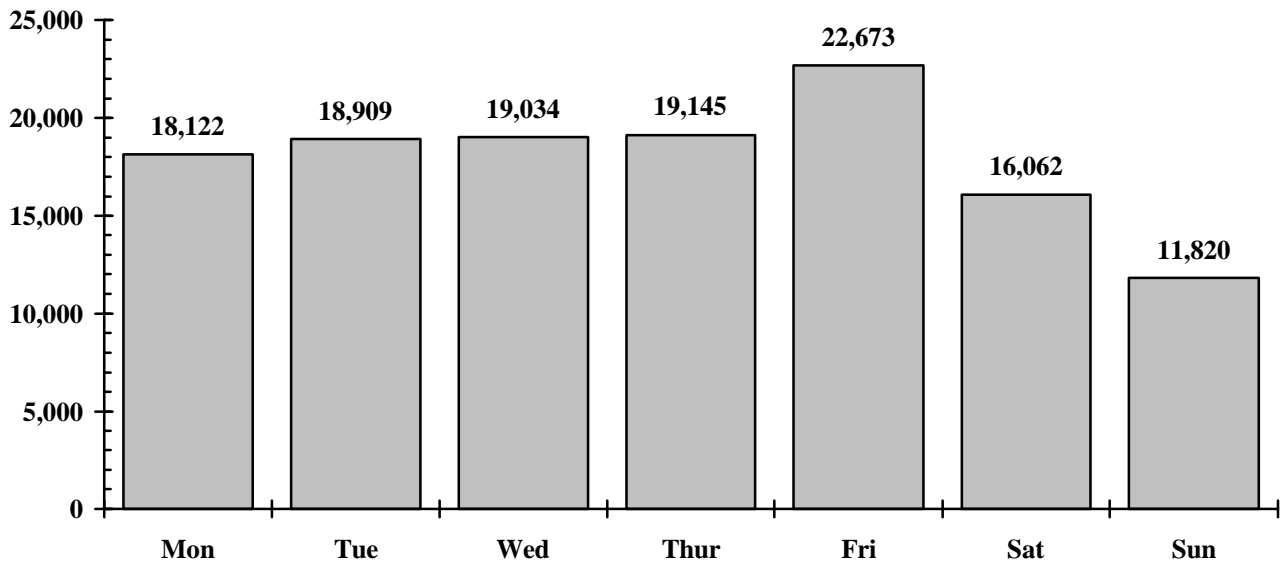


**Figure 3-4
Fatal Crashes by Time of Day
Weekends**

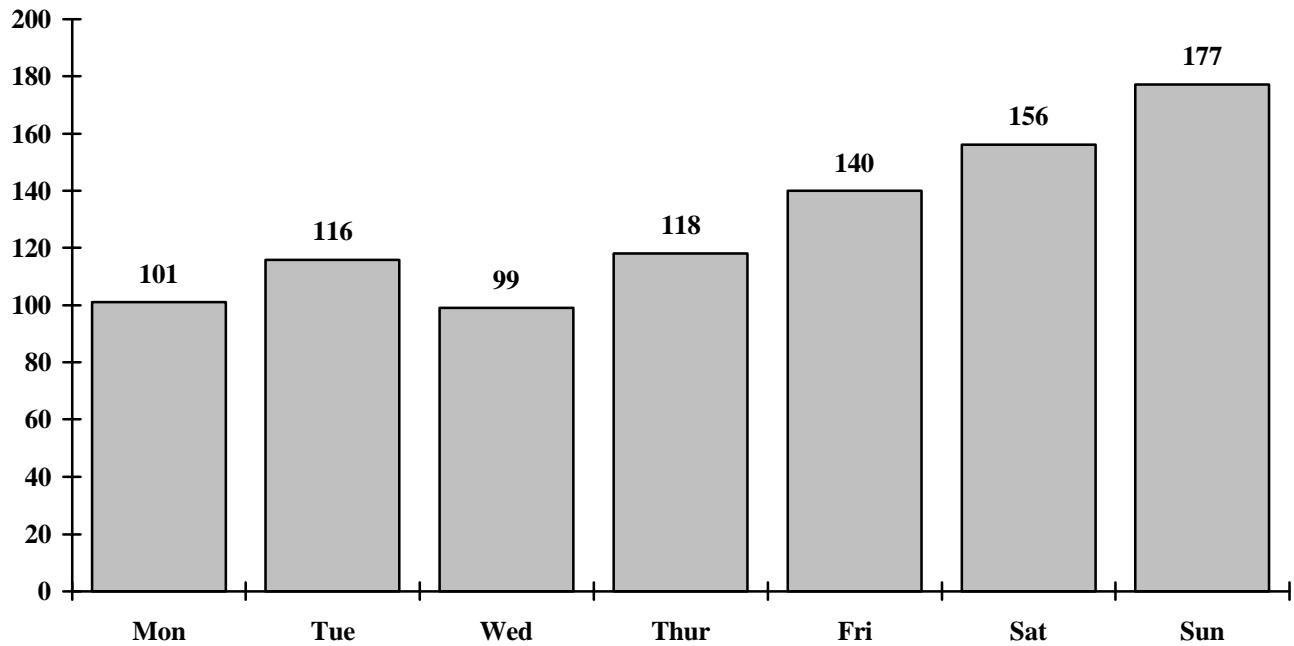


Section 3: Crash Descriptions

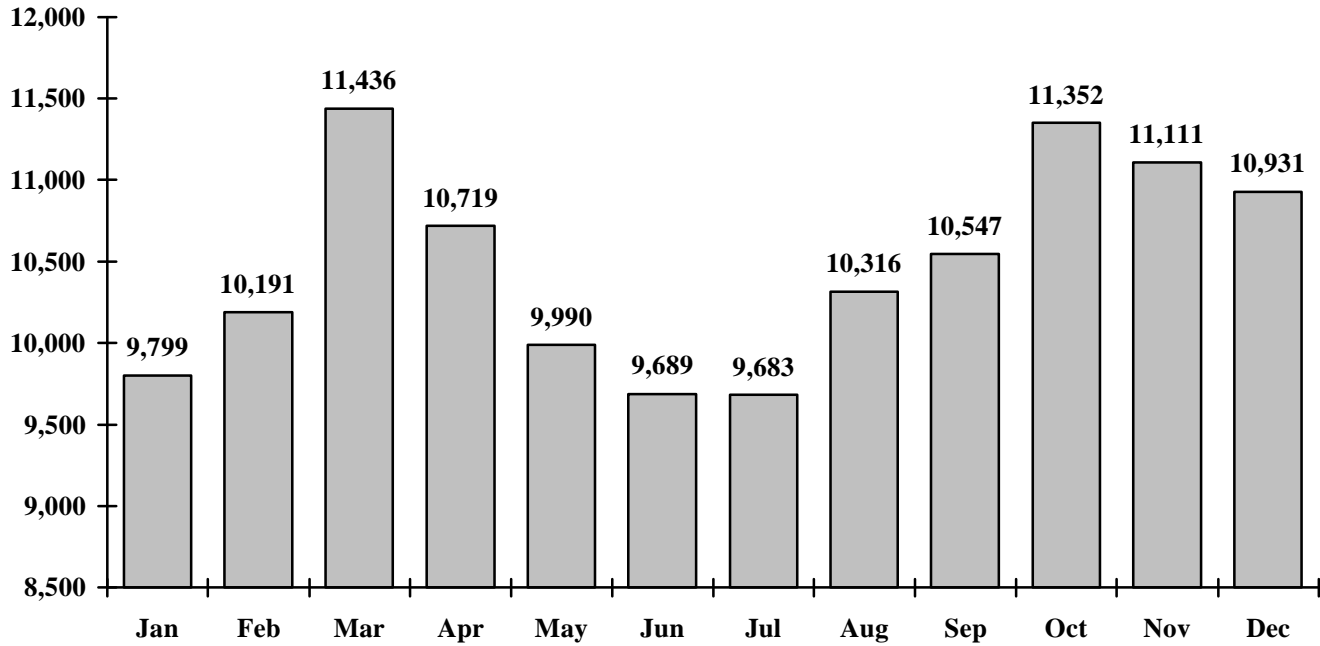
**Figure 3-5
Crashes by Day of Week**



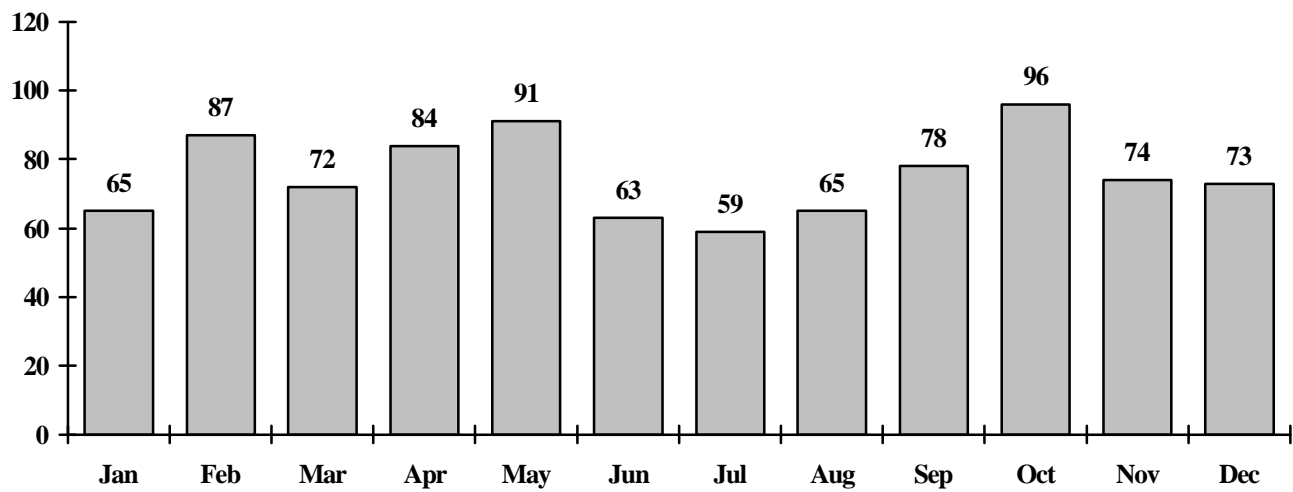
**Figure 3-6
Fatal Crashes by Day of Week**



**Figure 3-7
Crashes by Month**



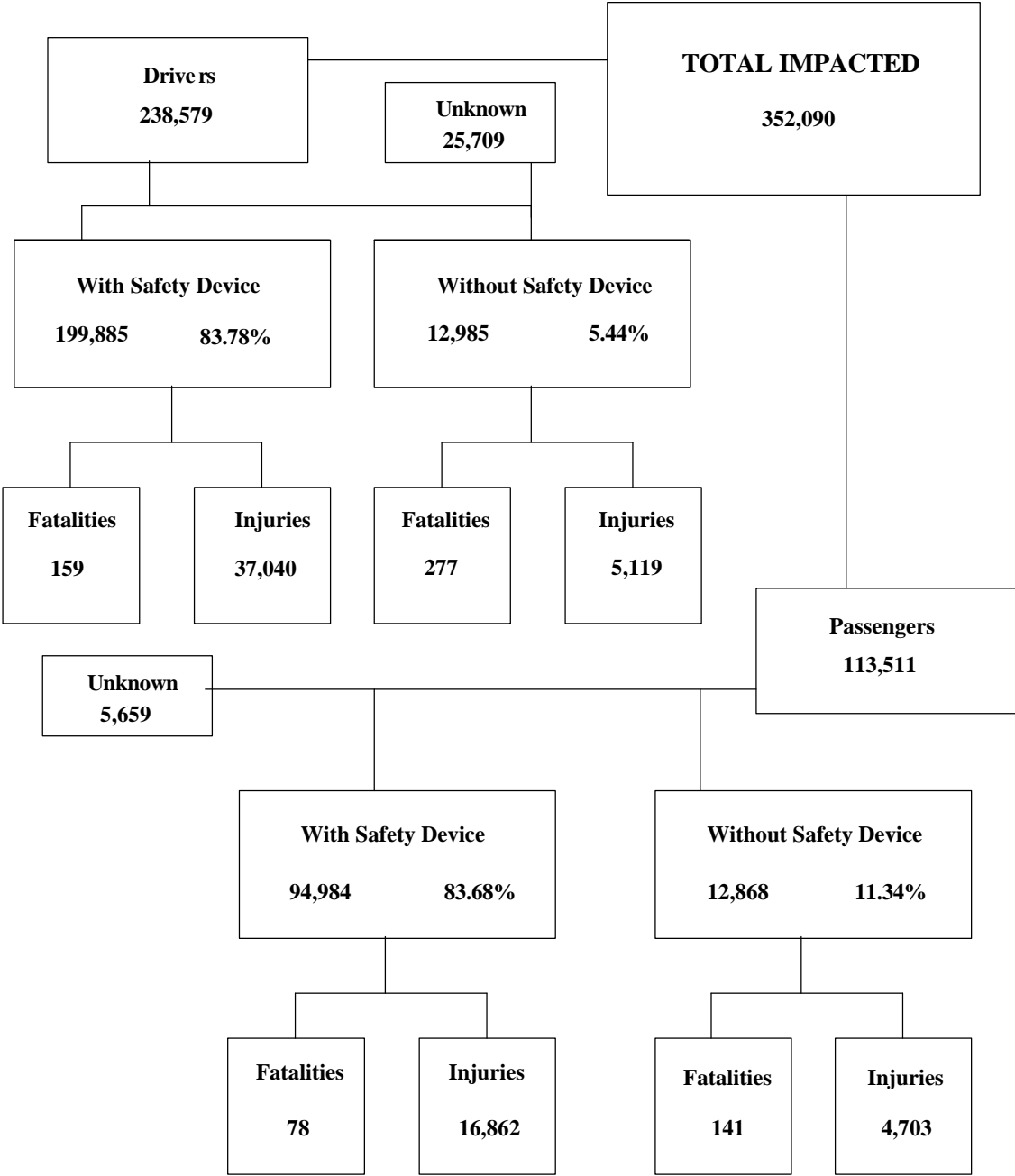
**Figure 3-8
Fatal Crashes by Month**



**Table 3-9
Crashes by Hour and Day of Week**

Hour Beginning	Total Crashes		Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Sunday	
	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal
Midnight	1,766	33	189	5	139	1	130	1	150	2	224	5	443	9	491	10
1:00	1,978	37	195	4	130	4	151	4	195	2	241	1	500	9	566	13
2:00	1,152	19	122	4	85	2	92	2	114	2	138	3	318	4	283	2
3:00	824	19	95	0	60	3	53	0	78	2	126	8	189	2	223	4
4:00	903	23	117	1	105	5	82	2	89	1	130	5	180	5	200	4
5:00	1,606	28	257	2	255	3	242	3	237	5	252	4	215	3	148	8
6:00	3,360	36	568	8	616	2	625	2	564	4	565	10	244	5	178	5
7:00	6,865	34	1,174	4	1,355	3	1,340	8	1,243	5	1,163	5	366	4	224	5
8:00	6,148	35	1,066	3	1,141	5	1,107	6	1,021	7	1,043	6	493	4	277	4
9:00	4,843	29	711	6	764	5	783	3	724	3	820	4	631	4	410	4
10:00	5,475	43	825	6	833	7	807	5	805	6	919	5	797	4	489	10
11:00	6,820	37	1,046	6	1,041	8	1,047	5	964	4	1,167	4	957	4	598	6
Noon	8,086	43	1,156	5	1,184	6	1,153	1	1,209	11	1,436	5	1,185	9	763	6
1:00	7,856	38	1,208	2	1,128	6	1,136	4	1,189	5	1,383	4	1,086	6	726	11
2:00	9,192	40	1,406	6	1,384	5	1,380	6	1,504	4	1,678	6	1,095	6	745	7
3:00	10,837	47	1,745	3	1,705	7	1,682	0	1,812	9	2,018	11	1,075	10	800	7
4:00	11,400	51	1,639	7	1,812	6	1,923	5	1,867	6	2,223	12	1,125	7	811	8
5:00	11,549	40	1,722	4	2,012	4	1,909	9	1,871	2	2,137	5	1,033	5	865	11
6:00	7,768	48	1,024	7	1,141	2	1,162	5	1,155	9	1,506	5	1,003	9	777	11
7:00	4,885	62	570	6	609	9	674	10	672	5	941	8	784	11	635	13
8:00	3,963	45	443	7	469	7	533	6	569	9	759	2	625	8	565	6
9:00	3,496	53	369	3	437	11	472	9	491	7	676	7	597	5	454	11
10:00	2,808	27	286	1	311	4	330	1	376	3	593	4	575	8	337	6
11:00	2,187	40	189	1	193	1	222	2	247	5	535	11	546	15	255	5
Not Reported	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	125,767	907	18,122	101	18,909	116	19,035	99	19,146	118	22,673	140	16,062	156	11,820	177

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)**

Severity of Injury	Restraint Used	Percent of Restraint Used	No Restraint Used	Percent of No Restraint	Not Reported	Percent of Unknown
No injury	11,220	88.93%	629	66.77%	352	83.61%
Possible injury	897	7.11%	119	12.63%	31	7.36%
Injury	428	3.39%	175	18.58%	22	5.23%
Fatality	5	0.04%	11	1.17%	1	0.24%
Unknown	67	0.53%	8	0.85%	15	3.56%
Totals	12,617	100.00%	942	100.00%	421	100.00%

A study conducted by Partners for Child Passenger Safety found that

“Fully 83 percent of children ages 4 through 8 are restrained in adult seat belts – an incorrect and dangerous practice. While seat belts are safer than no restraint at all, most children will not fit in them properly, putting them at risk for intestinal, liver, spleen and spinal cord injury in a crash.”

Arizona law requires the use of seat belts.

A.R.S. Title 28-909 states "...each front seat occupant of a motor vehicle which is manufactured for the model year 1972 and thereafter...shall have the lap and shoulder belt properly adjusted and fastened while the vehicle is in motion, or if only a lap belt is installed where the occupant is sitting, have the lap belt properly adjusted and fastened while the vehicle is in motion."

**Table 4-2
Driver Restraint Usage**

Severity of Injury	Restraint in Use	Percent of Restraint Used	No Restraint Used	Percent of No Restraint	Not Reported	Percent of Unknown
No injury	161,594	80.84%	7,336	56.50%	9,722	37.82%
Possible injury	23,466	11.74%	1,813	13.96%	1,371	5.33%
Injury	13,580	6.79%	3,306	25.46%	1,894	7.37%
Fatality	143	0.07%	277	2.13%	103	0.40%
Unknown	1,117	0.56%	253	1.95%	12,619	49.08%
Total	199,900	100.00%	12,985	100.00%	25,709	100.00%

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

In Arizona, 83.78% of all drivers involved in crashes in 1999 were reportedly wearing their safety belts. Of those drivers fatally injured, 29.5% were wearing seat belts.

**Table 4-3
Front-Seat Passenger Restraint Usage**

Severity of Injury	Restraint in Use	Percent of Restraint Used	No Restraint Used	Percent of No Restraint	Not Reported	Percent of Unknown
No injury	45,333	79.11%	3,665	55.85%	2,289	67.52%
Possible injury	7,459	13.02%	1,053	16.05%	384	11.32%
Injury	4,170	7.28%	1,706	26.00%	528	15.58%
Fatality	61	0.11%	82	1.25%	18	0.53%
Unknown	280	0.49%	56	0.85%	171	5.04%
Total	57,303	100.00%	6,562	100.00%	3,390	100.00%

Section 4: Safety Devices

NHTSA estimates that nationwide, seatbelt usage is approximately 00%.

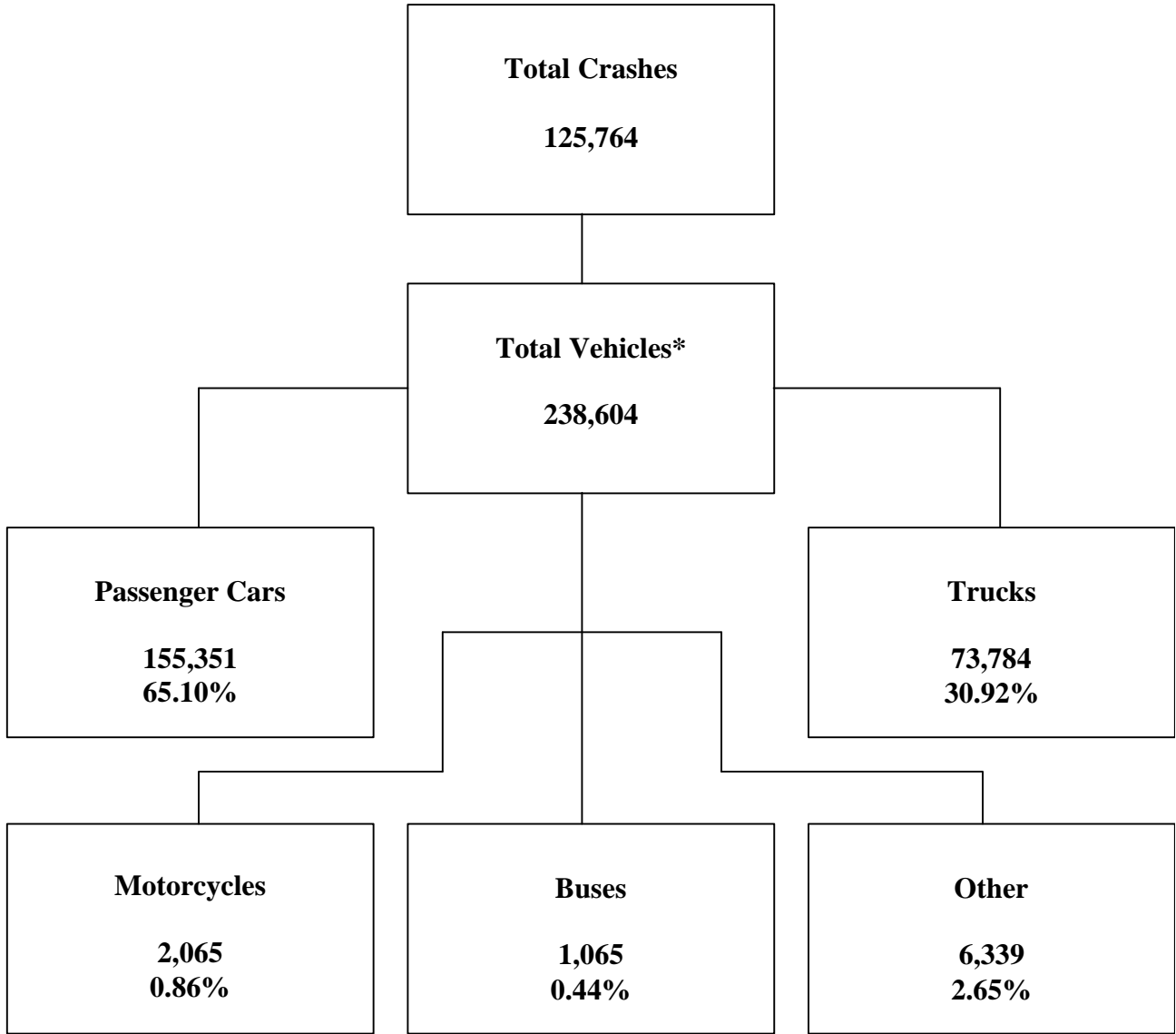
Seat belt usage in the United States lags far behind most industrialized countries that have strict seat belt use laws. For example, Canada, Australia, the United Kingdom, Germany and Sweden have usage rates of 90% or better.

**Table 4-4
Rear-Seat Passenger Restraint Usage**

Severity of Injury	Restraint Used	Percent of Restraint Used	No Restraint Used	Percent of No Restraint	Not Reported	Percent of Unknown
No injury	21,048	83.99%	3,638	67.82%	1,376	74.46%
Possible injury	2,598	10.37%	768	14.32%	202	10.93%
Injury	1,308	5.22%	882	16.44%	206	11.15%
Fatality	12	0.05%	48	0.89%	4	0.22%
Unknown	93	0.37%	28	0.52%	60	3.25%
Total	25,059	100.00%	5,364	100.00%	1,848	100.00%

Across the nation, over 10,000 lives were saved in 1999 by the use of safety belts.

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



*Includes driverless or illegally parked

Section 5: Motor Vehicle and Driver Characteristics

Table 5-1
Arizona Motor Vehicle Registrations

Privately Owned Vehicles	3,288,381
Commercial Vehicles	340,809
Buses and Taxis	3,686
Motorcycles*	97,922
Mopeds	328
Total	3,731,126

*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)	155,351	65.11%	731	60,104	94,516
Pickup Truck (Incl. Panel & Mini Bus)	65,702	27.54%	400	23,320	41,982
Pickup Truck With Camper	869	0.36%	13	324	532
Other Vehicle With Camper	2	0%	0	0	2
Truck or Truck Tractor (Excl. P/U)	69	0.03%	2	13	54
Truck Tractor and Semi-Trailer	4,004	1.68%	92	1,023	2,889
Other Truck Combination	3,140	1.32%	19	947	2,174
Farm Tractor and/or Farm Equipment	44	0.02%	1	17	26
Taxicab	160	0.07%	1	57	102
Bus	662	0.28%	3	171	488
School Bus	403	0.17%	3	106	294
Motorcycle	2,065	0.87%	77	1,674	314
Motor Scooter or Motor Bicycle	6	0%	0	4	2
Moped	13	0.01%	0	11	2
Recreational Vehicle	887	0.37%	3	319	565
Motor Home or House Car	424	0.18%	9	117	298
Vehicle With Special Controls (Dual, Etc.)	3	0%	0	0	3
Emergency Veh. (Inc. Privately Owned)	117	0.05%	0	31	86
Military Vehicles	5	0%	0	2	3
Other Types Of Vehicles	172	0.07%	5	72	95
Vehicle Type Unknown	4,506	1.89%	57	978	3,471
TOTALS	238,604	100.00%	1,416	89,290	147,898

Table 5-3
Hit and Run Drivers

Hit And Run?	Number of Crashes				Number of Persons	
	Total	Fatal	Injury	PDOs	Killed	Injured
Yes	13,272	49	3,335	9,888	53	4,802
No	112,492	858	42,206	69,428	971	68,712
TOTALS	125,764	907	45,541	79,316	1,024	73,514

Table 5-4

1999 Arizona Crash Facts Summary

Gender of Drivers Involved in Crashes

Gender of Driver	Total		Fatal		Injury	
	Total	Percent	Fatal	Percent	Injury	Percent
Male	140,896	59.05%	984	69.50%	51,634	57.83%
Female	88,945	37.28%	377	26.62%	35,898	40.20%
Not Reported	8,775	3.67%	55	3.88%	1,761	1.97%
TOTALS	238,616	100.00%	1,416	100.00%	89,293	100.00%

Table 5-5

Residence of Drivers Involved in Crashes

Residence of Driver	Total		Fatal		Injury		PDOs	
	Total	Percent	Fatal	Percent	Injury	Percent	PDOs	Percent
Arizona	194,954	81.70%	1,011	71.40%	74,544	83.48%	119,399	80.73%
Non-Resident	19,999	8.38%	228	16.10%	7,140	8.00%	12,631	8.54%
Not Reported	23,663	9.92%	177	12.50%	7,609	8.52%	15,877	10.73%
TOTALS	238,616	100.00%	1,416	100.00%	89,293	100.00%	147,907	100.00%

Table 5-6

Drivers and Occupants Killed and Injured by Vehicle Type

Type of Motor Vehicle	Drivers		Occupants	
	Killed	Injured	Killed	Injured
Passenger Car (Includes Cars With Trailer)	290	32,466	187	17488
Pickup Truck (Incl. Panel & Mini Bus)	130	10,168	85	5,965
Pickup Truck With Camper	7	156	2	140
Other Vehicle With Camper	0	0	0	0
Truck or Truck Tractor (Excl. P/U)	0	0	0	3
Truck Tractor and Semi-Trailer	12	261	1	86
Other Truck Combination	1	316	1	156
Farm Tractor and/or Farm Equipment	0	5	0	0
Taxicab	0	28	0	23
Bus	0	27	1	165
School Bus	1	22	0	69
Motorcycle	67	1,610	8	198
Motor Scooter or Motor Bicycle	0	4	0	0
Moped	0	11	0	3
Recreational Vehicle	1	164	3	89
Motor Home or House Car	1	36	1	38
Vehicle With Special Controls (Dual, Etc.)	0	0	0	0
Emergency Veh. (Inc. Privately Owned)	0	14	0	9
Military Vehicles	0	1	0	0
Other Types Of Vehicles	4	51	1	6
Vehicle Type Not Reported	25	90	21	52
TOTALS	539	45,430	311	24,490

Table 5-7

Section 5: Motor Vehicle and Driver Characteristics

Licensed Drivers in Arizona by Age

Driver Age Group	Male Number	Male Percent	Female Number	Female Percent	Total Number	Total Percent	Cumulative Percent
15-16	13,477	0.79%	11,542	0.69%	25,019	0.74%	0.74%
17	19,596	1.15%	17,320	1.04%	36,916	1.09%	1.84%
18	23,124	1.35%	20,831	1.25%	43,955	1.30%	3.14%
19	25,579	1.50%	22,913	1.38%	48,492	1.44%	4.58%
20	26,701	1.56%	24,071	1.45%	50,772	1.51%	6.08%
21	27,822	1.63%	24,963	1.50%	52,785	1.57%	7.65%
22	29,301	1.71%	26,249	1.58%	55,550	1.54%	9.30%
23	29,279	1.71%	26,503	1.59%	55,782	1.65%	10.95%
24	30,439	1.78%	27,436	1.65%	57,875	1.72%	12.67%
25-34	338,747	19.81%	309,541	18.63%	648,288	19.22%	31.89%
35-44	372,441	21.78%	365,978	22.02%	738,419	21.90%	53.79%
45-54	310,946	18.18%	312,807	18.82%	623,753	18.50%	72.29%
55-64	203,675	11.91%	207,142	12.46%	410,817	12.18%	84.47%
65-74	150,003	8.77%	150,628	9.06%	300,631	8.92%	93.39%
75 & Older	109,244	6.39%	113,889	6.85%	223,133	6.62%	100.00%
TOTALS	1,710,374	100.00%	1,661,813	100.00%	3,372,187	100.00%	100.00%

Driver license data provided by, and inquiries should be directed to, Motor Vehicle Division.

According to the National Safety Council, more than 5,800 teenagers died in 1999 in the United States from motor-vehicle crash injuries, and 36 percent of all deaths of 16 to 19 year olds are related to motor vehicles.

**Table 5-8
Driver Involvement by Age**

Driver Age Group	Total	Percent	Fatal	Percent	Injury	Percent	PDOs	Percent
15 & Younger	791	0.33%	11	0.78%	333	0.37%	447	0.30%
16	5,105	2.14%	24	1.69%	1,895	2.12%	3,186	2.15%
17	6,830	2.86%	37	2.61%	2,631	2.95%	4,162	2.81%
18	8,207	3.44%	39	2.75%	3,161	3.59%	5,007	3.39%
19	7,862	3.29%	50	3.53%	3,126	3.50%	4,686	3.17%
20	7,008	2.94%	46	3.25%	2,728	3.06%	4,234	2.86%
21	6,750	2.83%	40	2.82%	2,628	2.94%	4,082	2.76%
22	6,505	2.73%	31	2.19%	2,508	2.81%	3,966	2.68%
23	6,034	2.53%	34	2.40%	2,298	2.57%	3,702	2.50%
24	5,833	2.44%	33	2.33%	2,239	2.51%	3,561	2.41%
25-34	52,463	21.99%	276	19.49%	20,063	22.47%	32,124	21.72%
35-44	44,956	18.84%	259	18.29%	17,045	19.09%	27,652	18.70%
45-54	31,057	13.02%	189	13.35%	11,822	13.24%	19,046	12.88%
55-64	16,647	6.98%	103	7.27%	6,310	7.07%	10,234	6.92%
65-74	10,330	4.33%	83	5.86%	3,957	4.43%	6,290	4.25%
75 & Older	7,491	3.14%	88	6.21%	2,939	3.29%	4,464	3.02%
Not Reported	14,747	6.18%	73	5.16%	3,610	4.04%	11,064	7.48%
TOTALS	238,616	100.00%	1,416	100.00%	89,293	100.00%	147,907	100.00%

1999 Arizona Crash Facts Summary

Table 5-9 Driver Errors

Contributing Circumstances	Total Drivers	Percent of Total Drivers	Fatal Drivers	Percent of Fatal Drivers	Injury Drivers	Percent of Injury Drivers	PDO Drivers	Percent of PDO Drivers
Exceeded Lawful Speed	1,216	0.51%	77	5.44%	568	0.64%	571	0.39%
Speeding *	45,402	19.03%	291	20.55%	17,551	19.66%	27,560	18.63%
Failed to Yield	27,067	11.34%	118	8.33%	11,517	12.90%	15,432	10.43%
Ran Stop Sign	1,391	0.58%	19	1.34%	712	0.80%	660	0.45%
Disregarded Signal	5,204	2.18%	38	2.68%	2,793	3.13%	2,373	1.60%
Opposing Lane	1,331	0.56%	58	4.10%	526	0.59%	747	0.51%
Followed too Closely	3,959	1.66%	2	0.14%	1,338	1.50%	2,619	1.77%
Improper Turn	3,982	1.67%	9	0.64%	958	1.07%	3,015	2.04%
Driver Inattention	11,297	4.73%	47	3.32%	3,296	3.69%	7,954	5.38%
Other Improper Driving	6,524	2.73%	50	3.53%	1,866	2.09%	4,608	3.12%
Faulty Equipment	339	0.14%	5	0.35%	110	0.12%	224	0.15%
Unsafe Lane Change	6,046	2.53%	9	0.64%	994	1.11%	5,043	3.41%
Unsafe Passing	1,158	0.49%	2	0.14%	222	0.25%	934	0.63%
No Improper Driving	111,211	46.61%	532	37.57%	43,263	48.45%	67,416	45.58%
Not stated	12,477	5.23%	159	11.23%	3,576	4.00%	8,742	5.91%
TOTALS	238,604	100.00%	1,416	100.00%	89,290	100.00%	147,898	100.00%

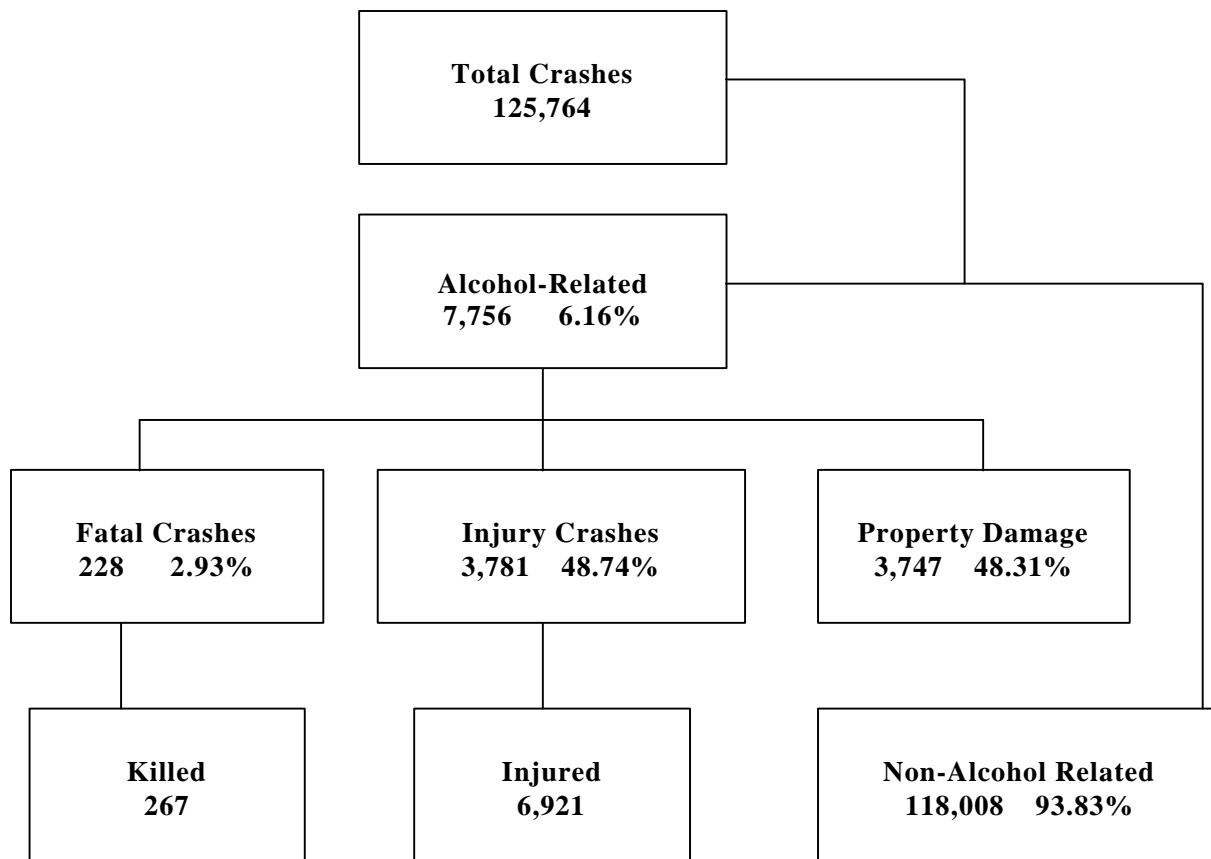
* Speeding too fast for conditions

Table 5-10 Driver Physical Condition

Driver Condition	Total Drivers	% of Total Drivers	Fatal Drivers	% of Fatal Drivers	Injury Drivers	% of Injury Drivers	PDO Drivers	% of PDO Drivers
No Apparent Defects	208,737	87.48%	832	58.76%	78,519	87.94%	129,386	87.48%
Impaired Had Been Drinking	7,871	3.30%	235	16.60%	3,856	4.32%	3,780	2.56%
Other Bodily Defects	534	0.22%	6	0.42%	275	0.31%	253	0.17%
Ill, Ability Influenced	389	0.16%	4	0.28%	221	0.25%	164	0.11%
Sleepy, Fatigued	1,542	0.65%	33	2.33%	738	0.83%	771	0.52%
Under Influence Of Narcotic Drug	476	0.20%	12	0.85%	253	0.28%	211	0.14%
Not Reported/Unknown	19,061	7.99%	294	20.76%	5,428	6.08%	13,339	9.10%
TOTALS	238,610	100.00%	1,416	100.0%	89,290	100.0%	147,904	100.00%

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 0.1% or higher) at the time the crash took place.

Economic Loss due to Alcohol-Related Crashes in Arizona for 1999	
Fatalities	\$221,160,000.
Injuries	\$127,199,100.
Property Damage	\$ 23,980,800.
Total	\$372,339,900.

1999 Arizona Crash Facts Summary

Table 6-1
1994 to 1999 - Alcohol-Related Crashes

Year	Alcohol-Related Crashes	Percent of all Crashes	Victims Killed	Percent of all Fatalities
1994	7,620	7.14%	242	26.71%
1995	7,947	6.98%	261	25.17%
1996	7,748	6.86%	272	27.34%
1997	7,348	6.44%	249	26.24%
1998	7,610	6.33%	268	27.35%
1999	7,756	6.16%	267	26.07%

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

Manner Of Collision	Number of Crashes					
	Total	Percent of all Crashes	Fatal	Percent of Fatal Crashes	Injury	Percent of Injury Crashes
Single Vehicle	3,343	42.47%	117	49.58%	1,523	38.17%
Head On	178	2.26%	41	17.37%	140	3.51%
Rear End	1,927	24.48%	18	7.63%	1,019	25.54%
Sideswipe Opposite Direction	147	1.87%	2	0.85%	75	1.88%
Sideswipe Same Direction	445	5.65%	8	3.39%	162	4.06%
Left Turn	625	7.94%	15	6.36%	416	10.43%
Other Angle	931	11.83%	29	12.29%	535	13.41%
Backing Into	51	0.65%	0	0%	3	0.08%
U Turn	66	0.84%	1	0.42%	29	0.73%
Other	159	2.02%	5	2.12%	88	2.21%
TOTALS	7,872	100.00%	236	100.00%	3,990	100.00%

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

First Harmful Event	Total	Number of Crashes			Number of Persons	
		Fatal	Injury	PDO	Killed	Injured
Overturning	396	53	248	95	60	449
Pedestrian	46	10	36	0	10	44
Motor Veh. In Transit	4,307	104	2,244	1,959	126	4,776
Motor Veh. Other Roadway	4	3	1	0	6	3
Pedalcyclist	19	4	14	1	4	18
Animal	17	0	7	10	0	10
Fixed Object	2,346	47	1,011	1,288	53	1,352
Other Object	439	1	121	317	2	143
Miscellaneous	182	6	99	77	6	126
TOTALS	7,756	228	3,781	3,747	267	6,921

Section 6: Alcohol-Related Crashes

Table 6-4
Alcohol-Related Crashes by Vehicle Type

Motor Vehicle Type	Total Number of Vehicles	Percent	Number of Vehicles		
			Fatal	Injury	PDO
Passenger Car	5,149	65.42%	129	2,502	2,518
Motor Home or House Car	9	0.11%	0	3	6
Pickup Truck (Incl. Panel & Mini Bus)	2,396	30.44%	76	1,137	1,183
Truck Tractor and Semi-Trailer	16	0.20%	2	7	7
Other Truck Combination	45	0.57%	2	23	20
RV (all wheel drive, dune buggy)	32	0.41%	1	17	14
Farm Tractor and/or Farm Equipment	1	0.01%	0	1	0
Taxicab	0	0%	0	0	0
Bus	2	0.03%	0	1	1
School Bus	1	0.01%	0	1	0
Motorcycle	185	2.35%	22	148	15
Motor Scooter or Motor Bicycle	0	0%	0	0	0
Other Special Vehicles	5	0.06%	0	4	1
Vehicle Type Not Reported	30	0.38%	3	12	15
TOTALS	7,871	100.00%	235	3,856	3,780

Table 6-5
Light Conditions - Alcohol-Related Crashes

Light Condition	Number of Crashes			
	Total	Fatal	Injury	PDO
Daylight	2,152	59	1,034	1,059
Dawn or Dusk	341	12	172	157
Darkness	5,251	157	2,570	2,524
Not Reported	12	0	5	7
TOTALS	7,756	228	3,781	3,747

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

	Number of Crashes			
	Total	Fatal	Injury	PDO
Dry	7,049	217	3,460	3,372
Wet	318	5	152	161
Snowy or Icy	17	0	6	11
Other	210	5	95	110
Not Reported	162	1	68	93
TOTALS	7,756	228	3,781	3,747

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

Driver Age	Total Drivers	Percent of all Drivers	Drivers In Fatal Crashes	Percent of all Fatal Drivers	Drivers In Injury Crashes	Percent of all Injury Drivers
15	21	0.27%	2	0.85%	9	0.23%
16	56	0.71%	0	0%	31	0.80%
17	115	1.46%	6	2.55%	51	1.32%
18	240	3.05%	6	2.55%	115	2.98%
19	273	3.47%	11	4.68%	133	3.45%
20	263	3.34%	15	6.38%	131	3.40%
21	394	5.01%	8	3.40%	178	4.62%
22	347	4.41%	10	4.26%	182	4.72%
23	306	3.89%	7	2.98%	150	3.89%
24	278	3.53%	5	2.13%	146	3.79%
25-34	2,258	28.69%	57	24.26%	1,132	29.36%
35-44	1,762	22.39%	49	20.85%	876	22.72%
45-54	886	11.26%	35	14.89%	422	10.94%
55-64	318	4.04%	9	3.83%	155	4.02%
65-74	133	1.69%	8	3.40%	54	1.40%
75 & Older	42	0.54%	1	0.43%	15	0.39%
Not Reported	179	2.27%	6	2.55%	76	1.97%
TOTALS	7,871	100.00%	235	100.00%	3,856	100.00%

The National Highway Traffic Safety Administration estimates that 38% of all fatal U.S. crashes involved alcohol. According to State records, alcohol was involved in 25.1% of the fatal crashes in Arizona during 1999.

Table 6-8
Driver Gender - Alcohol-Related Crashes

Driver Gender	Total Drivers	Percent of All Drivers	Drivers In Fatal Crashes	Percent of Fatal Drivers	Drivers in Injury Crashes	Percent of Injury Drivers
Male	6,397	81.27%	197	83.83%	3,146	81.59%
Female	1,407	17.88%	33	14.04%	690	17.89%
Not Reported	67	0.85%	5	2.13%	20	0.52%
TOTALS	7,871	100.00%	235	100.00%	3,856	100.00%

Section 6: Alcohol-Related Crashes

Table 6-9
Safety Restraints - Drinking Drivers

Drivers	Number of Drinking Drivers				
	No Injury	Possible Injury	Non-Incapacitating Injury	Incapacitating Injury	Fatal
Restraint Used	2,894	398	485	180	16
No restraint Used	746	236	421	273	106
Restraint Use Unknown	1,285	185	259	128	20
TOTALS	4,925	819	1,165	581	142

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

Victims Age	Total Killed			Total Injured			Sex Unk.
	Male	Female		Male	Female		
0 - 4	4	3	1	134	66	68	0
5 - 9	5	3	2	166	79	87	0
10 - 14	1	1	0	179	98	81	0
15 - 19	30	23	7	1,031	652	379	0
20 - 24	49	39	10	1,318	934	384	0
25 - 34	55	41	14	1,658	1,137	521	0
35 - 44	50	39	11	1,209	747	462	0
45 - 54	36	30	6	674	434	240	0
55 - 64	10	4	6	261	162	99	0
65 - 74	15	12	3	125	81	44	0
75 & Older	7	5	2	52	25	26	1
Not Reported	5	5	0	114	72	39	3
TOTALS	267	205	62	6,921	4,487	2,430	4

Table 6-11
When Alcohol-Related Crashes Occurred in 1999

	Total	Weekday**	Weekend
Daytime***	2,062	1,236	826
Nighttime	5,694	2,204	3,490
Total	7,756	3,440	4,316

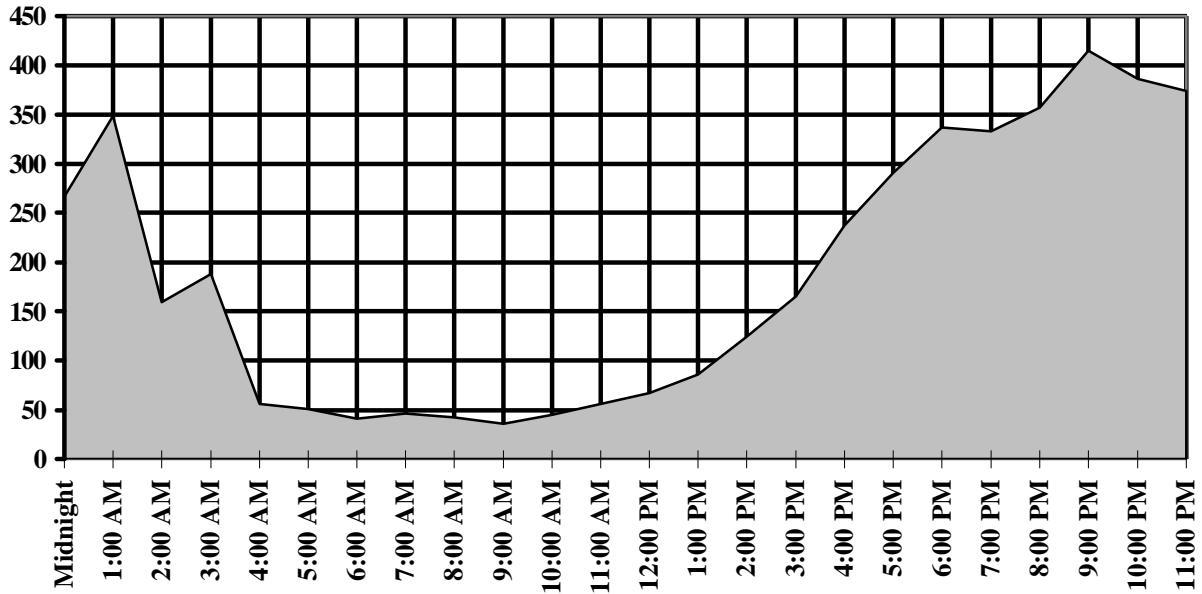
**Weekend begins at 6:00 p.m. on Friday and continues through 6:00 a.m. Monday. All other times and days are considered Weekdays.

***Daytime refers to the hours between 6:00 a.m. and 6:00 p.m.

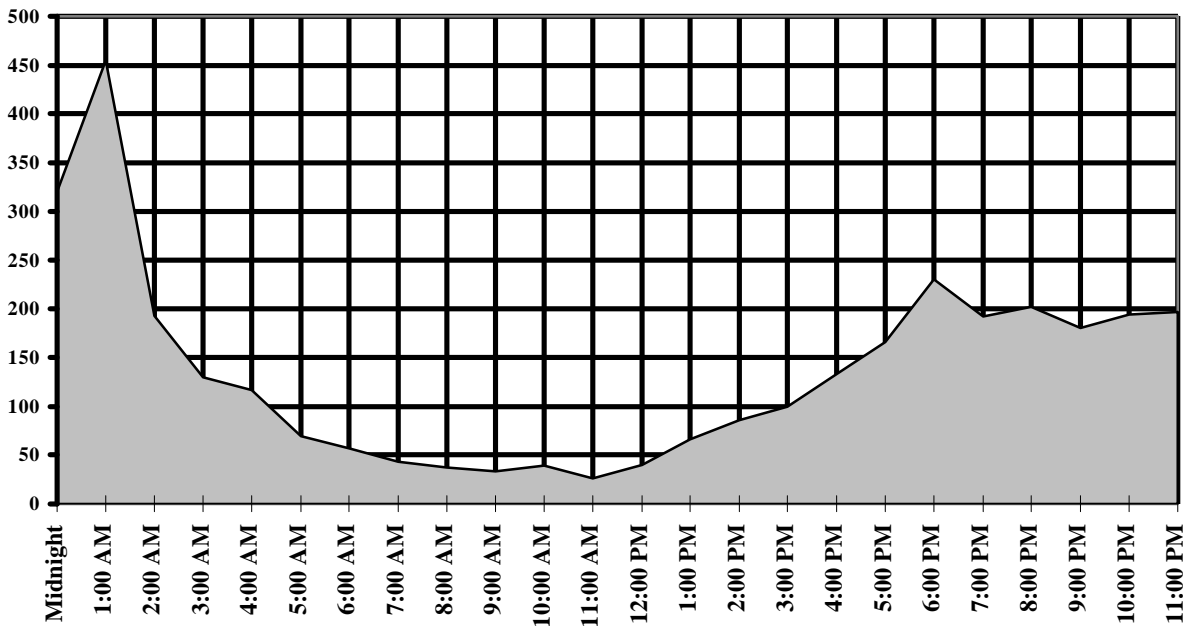
According to the NHTSA, about 3 in every 10 Americans will be involved in an alcohol-related crash as some time in their lives.

Section 6: Alcohol-Related Crashes

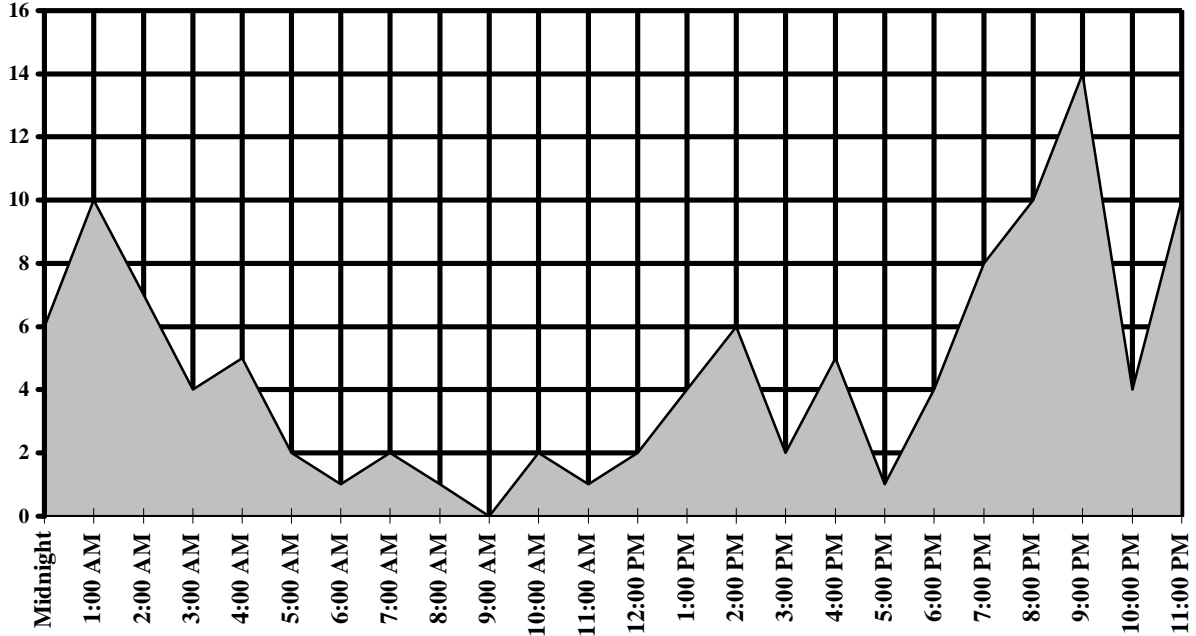
Figures 6-1 and 6-2
Alcohol-Related Crashes
Weekdays



Weekends



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



Weekends

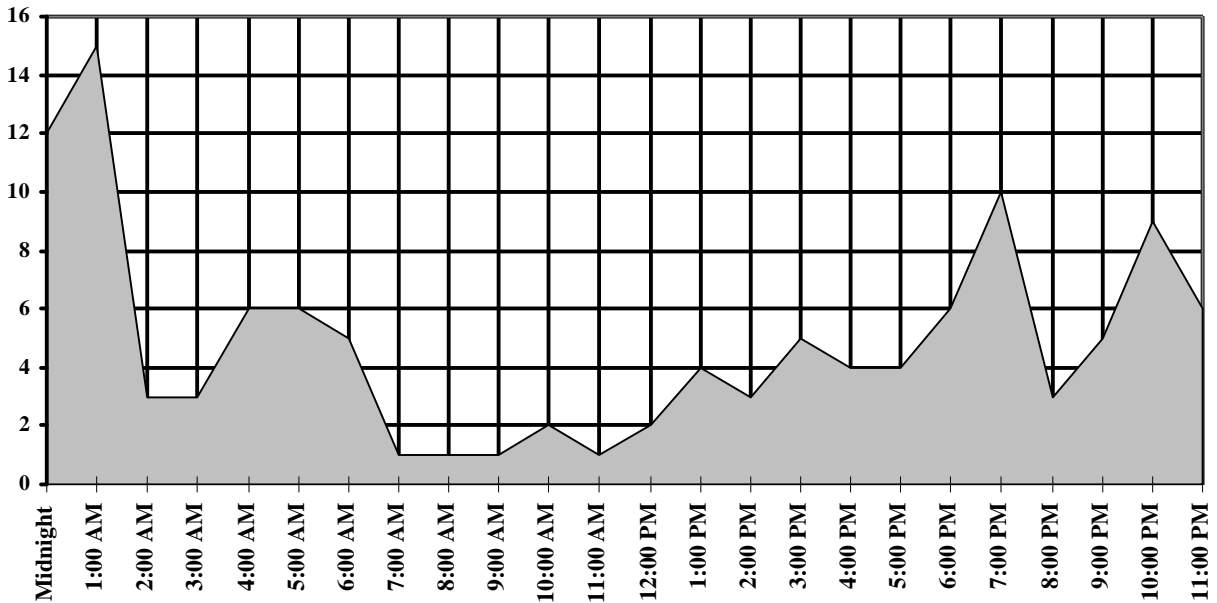
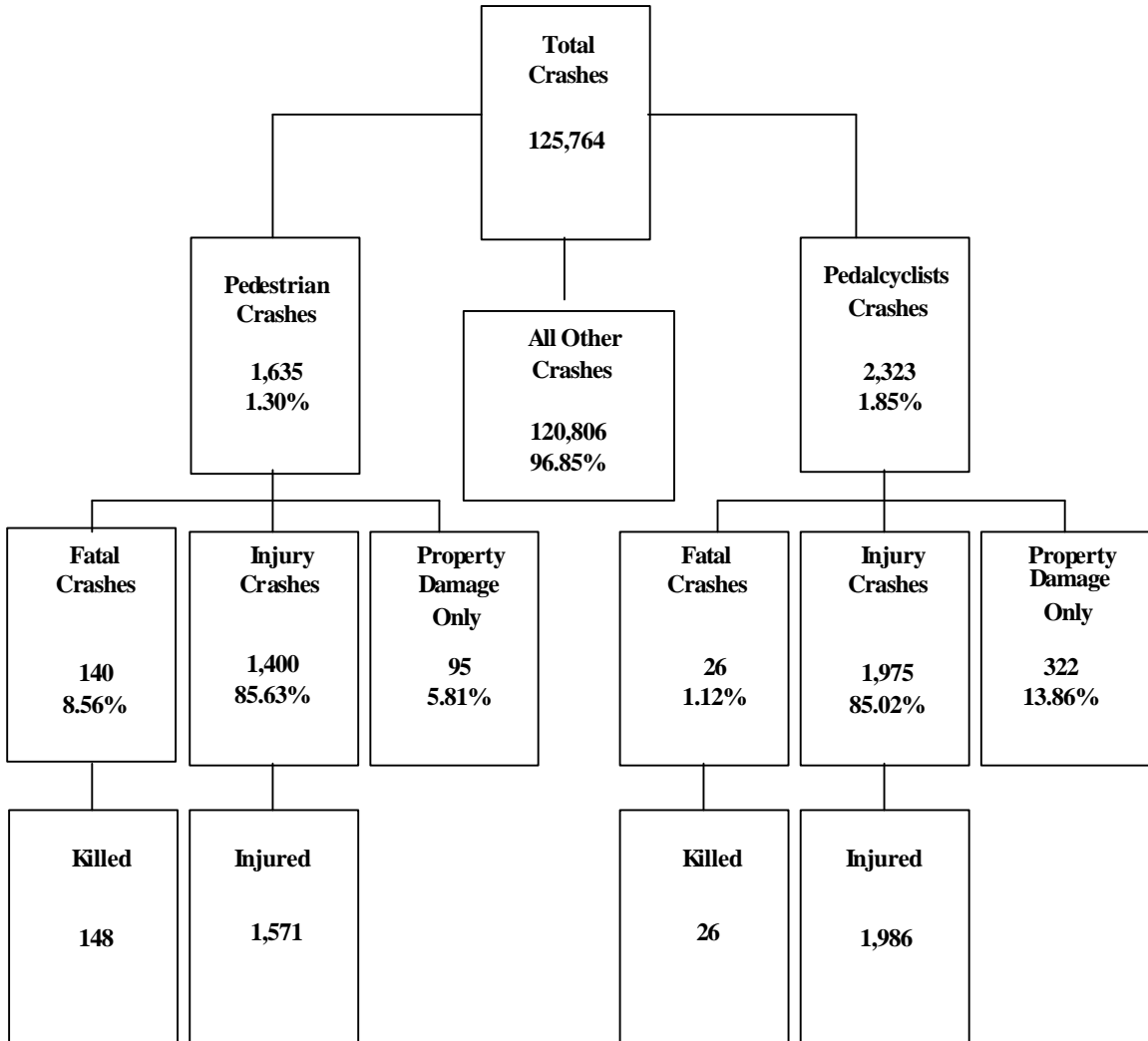


Table 6-13
Alcohol-Related Crashes
Injury Severity by Hour and Day of Week

Hour Beginning	Total Crashes		Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Sunday	
	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal	All	Fatal
Midnight	587	18	64	2	41	1	39	1	57	2	66	0	162	5	158	7
1:00	806	25	61	4	52	2	60	3	72	1	106	0	218	6	237	9
2:00	352	10	37	3	27	0	15	1	32	1	38	2	105	2	98	1
3:00	232	7	25	0	4	0	13	0	16	0	44	4	50	1	80	2
4:00	173	11	14	0	12	1	4	2	10	1	16	1	63	3	54	3
5:00	120	8	9	0	7	1	9	0	12	0	14	1	33	1	36	5
6:00	98	6	5	0	9	0	7	0	10	0	10	1	26	4	31	1
7:00	89	3	8	0	7	0	9	0	14	1	8	1	23	0	20	1
8:00	79	2	10	0	3	0	5	1	12	0	12	0	22	1	15	0
9:00	69	1	9	0	4	0	2	0	6	0	15	0	24	0	9	1
10:00	84	4	7	0	12	1	5	0	9	0	12	1	26	0	13	2
11:00	82	2	20	1	9	0	9	0	5	0	13	0	18	0	8	1
Noon	107	4	12	0	10	0	16	0	14	1	15	1	27	1	13	1
1:00	152	8	21	1	15	0	13	0	14	2	23	1	34	2	32	2
2:00	210	9	17	2	22	1	26	1	23	0	36	2	47	1	39	2
3:00	265	7	35	0	25	0	26	0	28	0	51	2	51	3	49	2
4:00	370	9	40	2	30	0	41	0	48	1	78	2	77	1	56	3
5:00	457	5	59	1	59	0	48	0	46	0	79	0	84	2	82	2
6:00	567	10	53	1	50	0	55	2	72	0	107	1	127	1	103	5
7:00	525	18	54	1	43	0	56	4	70	1	110	2	94	4	98	6
8:00	559	13	48	2	59	3	56	1	72	4	122	0	100	1	102	2
9:00	595	19	51	2	59	2	71	4	81	2	153	4	108	3	72	2
10:00	580	13	47	0	65	1	72	1	86	0	116	2	115	7	79	2
11:00	598	16	42	1	37	1	67	0	72	2	156	6	152	5	72	1
Not Reported	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	7,756	228	748	23	661	14	724	21	881	19	1,400	34	1,786	54	1,556	63

**Section 7:
Pedestrian and Pedalcyclist Crashes**



Section 7: Pedestrian and Pedalcyclist Crashes

**Table 7-1
Pedestrians By Age and Gender**

Age Group	Persons Killed			Persons Injured			
	Total	Male	Female	Total	Male	Female	Not Reported
0-4	7	3	4	70	42	28	0
5-9	2	2	0	141	92	49	0
10-14	6	5	1	164	109	54	1
15-19	6	5	1	173	101	71	1
20-24	10	7	3	142	87	55	0
25-34	15	12	3	192	118	73	1
35-44	34	27	7	241	170	71	0
45-54	25	22	3	163	100	63	0
55-64	16	9	7	87	54	33	0
65-74	10	9	1	66	34	32	0
75 & Older	11	9	2	58	34	24	0
Not Reported	6	6	0	74	47	24	3
Total	148	116	32	1,+571	988	577	6

Nationally, on average, a pedestrian is killed in a motor vehicle crash every 107 minutes, and one is injured every 6 minutes.

**Table 7-2
Pedestrian Crashes**

Statewide	Total	Urban	Rural
Number of Crashes	1,635	1,420	215
Persons Killed	148	98	50
Persons Injured	1,571	1,377	194
Property Damage Only	95	85	10

Year	Number of Pedestrians	
	Fatal	Injury
1990	137	1,444
1991	121	1,369
1992	141	1,420
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

**Table 7-3
Pedestrian Crash History**

Across the U.S., 85,000 pedestrians were injured and 4,906 were killed in traffic crashes, representing 2.6 percent of all the people injured and 11.8 percent of all traffic fatalities.

1999 Arizona Crash Facts Summary

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	87	5	2	3	4	2	27	26	13	5
Walking In Roadway With Traffic	12	1	0	0	0	1	4	3	2	1
Walking In Roadway Against Traffic	5	0	0	0	0	0	2	3	0	0
Standing In Roadway	4	0	0	0	0	2	1	1	0	0
Pushing or Working On Veh. In Roadway	2	0	0	0	0	0	0	1	1	0
Other Working In Roadway	1	0	0	0	0	0	1	0	0	0
Lying In Roadway	7	0	0	0	0	3	4	0	0	0
Getting On or Off Veh. In Roadway	0	0	0	0	0	0	0	0	0	0
Other In Actions In Roadway	20	1	0	3	0	2	6	4	4	0
Unknown	10	0	0	0	2	0	4	3	1	0
Not Reported	0	0	0	0	0	0	0	0	0	0
TOTALS	148	7	2	6	6	10	49	41	21	6

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	907	45	88	102	99	80	242	152	68	31
Walking In Roadway With Traffic	81	3	5	9	8	6	31	8	7	4
Walking In Roadway Against Traffic	70	3	7	6	7	4	19	13	7	4
Standing In Roadway	109	6	4	5	9	17	33	17	12	6
Pushing or Working On Veh. In Roadway	21	0	0	0	4	0	13	2	0	2
Other Working In Roadway	14	0	0	0	1	4	4	2	1	2
Lying In Roadway	9	0	1	0	0	0	5	2	0	1
Getting On or Off Veh. In Roadway	18	0	1	1	4	1	7	2	1	1
Other In Actions In Roadway	249	11	27	28	30	21	61	36	18	17
Unknown	93	2	8	13	11	9	18	16	10	6
Not Reported	0	0	0	0	0	0	0	0	0	0
TOTALS	1,571	70	141	164	173	142	433	250	124	74

Table 7-6 Pedestrian Physical Condition

Pedestrian Condition	% of Total		% of Fatal		% of Injury		% of PDO	
	Total	Peds	Fatal	Peds	Injury	Peds	PDO	Peds
No Apparent Defects	1,171	64.16%	39	26.35%	1,063	67.66%	69	65.09%
Impaired Had Been Drinking	286	15.64%	64	43.24%	217	13.81%	5	4.72%
Other Bodily Defects	31	1.70%	3	2.03%	27	1.72%	1	0.94%
Ill, Ability Influenced	3	0.16%	1	0.68%	2	0.13%	0	0%
Sleepy, Fatigued	2	0.11%	0	0%	2	0.13%	0	0%
Under Influence Of Narcotic Drug	17	0.93%	4	2.70%	13	0.83%	0	0%
Not Reported/Unknown	315	17.26%	37	25.00%	247	15.72%	31	29.25%
TOTALS	1,825	100.0%	148	100.0%	1,571	100.0%	106	100.0%

Section 7: Pedestrian and Pedalcyclist Crashes

**Table 7-7
Lighting Conditions - Pedestrian Crashes**

Lighting Conditions	Number of Pedestrian Crashes			
	Total	Fatal	Injury	PDOs
Daylight	1,027	32	937	58
Darkness	598	105	473	20
Dawn or Dusk	80	8	64	8
Not Reported	6	2	4	0
TOTALS	1,711	147	1,478	86

**Table 7-8
Weather Conditions - Pedestrian Crashes**

Weather Conditions	Number of Pedestrian Crashes			
	Total	Fatal	Injury	PDOs
Clear	1,527	120	1,326	81
Raining	37	4	31	2
Cloudy	122	13	107	2
Snowing	1	0	1	0
Strong wind	8	0	7	1
Dust	2	1	1	0
Fog	0	0	0	0
Other	0	0	0	0
Not Reported	14	9	5	0
TOTALS	1,711	147	1,478	86

1999 Arizona Crash Facts Summary

**Table 7-9
Pedalcyclists by Age and Gender**

Age Group	Persons Killed			Persons Injured			Not Reported
	Total	Male	Female	Total	Male	Female	
0-4	0	0	0	7	5	2	0
5-9	2	2	0	130	91	39	0
10-14	1	1	0	366	300	66	0
15-19	4	3	1	279	215	64	0
20-24	2	1	1	219	163	55	1
25-34	3	3	0	327	253	74	0
35-44	9	9	0	308	238	70	0
45-54	1	1	0	162	129	32	1
55-64	0	0	0	66	51	15	0
65-74	3	3	0	27	25	2	0
75 & Older	0	0	0	21	19	2	0
Not Reported	1	1	0	74	58	15	1
TOTALS	26	24	2	1,986	1,547	436	3

**Table 7-10
Pedalcycle Crashes**

Statewide	Total	Urban	Rural
Number Of Crashes	2,323	2,174	149
Persons Killed	26	20	6
Persons Injured	1,986	1,968	117
Property Damage Only	322	295	27

NUMBER OF PEDALCYCLISTS		
Year	Total Killed	Total Injured
1990	28	2,055
1991	30	2,121
1992	18	2,091
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

**Table 7-11
Pedalcycle Crash History**

In 1999, 51,000 pedalcyclists were injured and 750 were killed in traffic crashes across the country. This represented 1.6 percent of all injuries and 1.8 percent of all fatalities from traffic crashes.

Section 7: Pedestrian and Pedalcyclist Crashes

**Table 7-12
Lighting Conditions - Pedalcyclist Crashes**

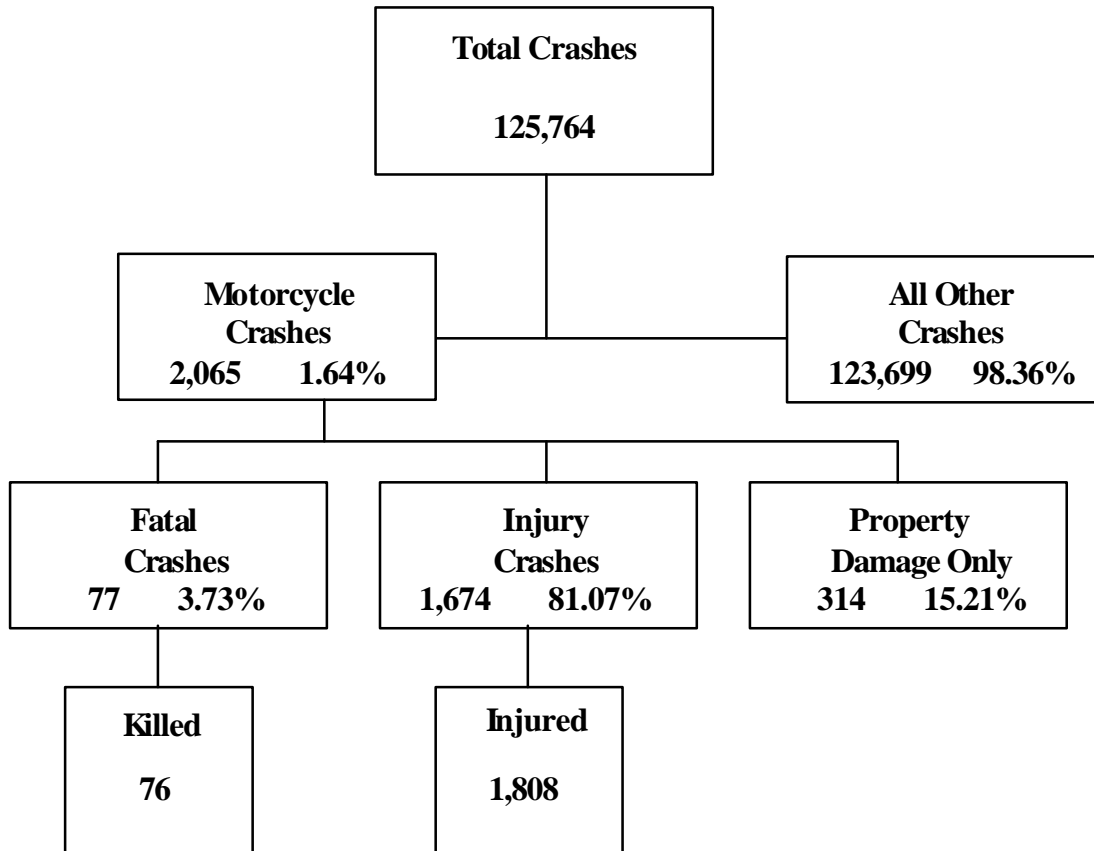
Lighting Conditions	Number of Pedalcyclist Crashes			
	Total	Fatal	Injury	PDOs
Daylight	1,842	13	1,580	249
Darkness	371	11	308	52
Dawn or Dusk	120	1	96	23
Not Reported	7	1	4	2
TOTALS	2,340	26	1,988	326

**Table 7-13
Weather Conditions - Pedalcyclist Crashes**

Weather Conditions	Number of Pedalcyclist Crashes			
	Total	Fatal	Injury	PDOs
Clear	2,131	20	1,816	295
Raining	25	1	20	4
Cloudy	154	2	128	24
Snowing	3	0	2	1
Strong wind	15	2	13	0
Dust	1	0	1	0
Fog	0	0	0	0
Other	0	0	0	0
Not Reported	11	1	8	2
TOTALS	2,340	26	1,988	326

The down side of our warmer climate is that Arizona is consistently among the top 5, and often the 2nd or 3rd, highest state in pedestrian and pedalcycle deaths per 100,000 population.

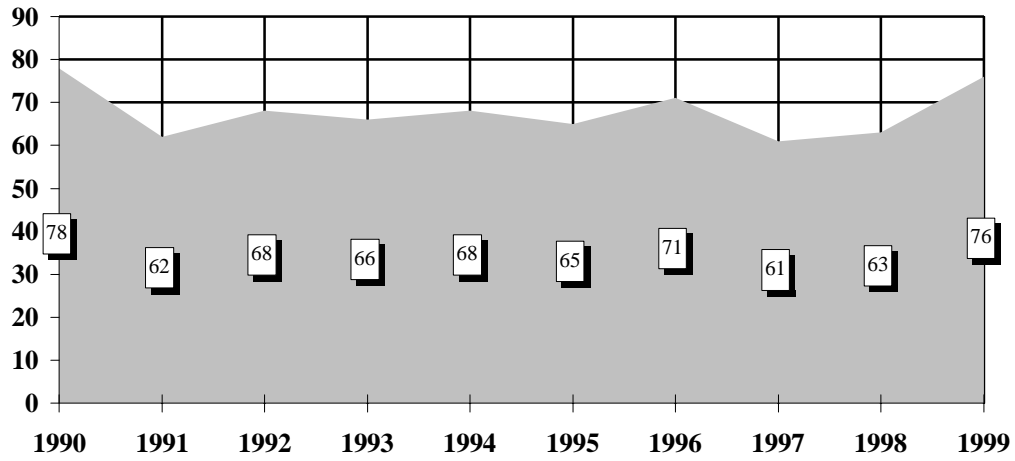
Section 8: Motorcycle Crashes



Includes motorcycle drivers and/or motorcycle passengers only

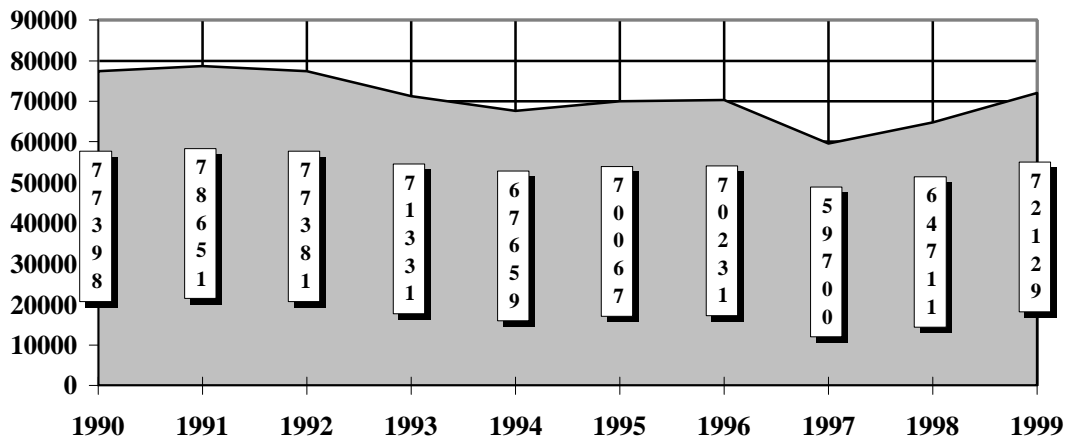
Section 8: Motorcycle Crashes

**Figure 8-1
Motorcycle Fatalities by Year**



In 1999, 2,472 motorcyclists were killed in traffic crashes in the United States, 76 of these occurred on Arizona roadways.

**Figure 8-2
Motorcycle Registrations in Arizona**



1997-99 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 Motorcycles

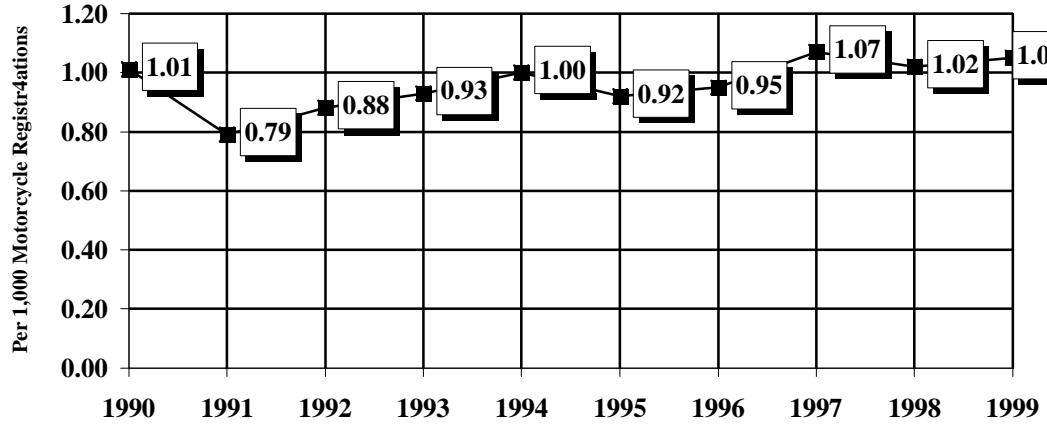
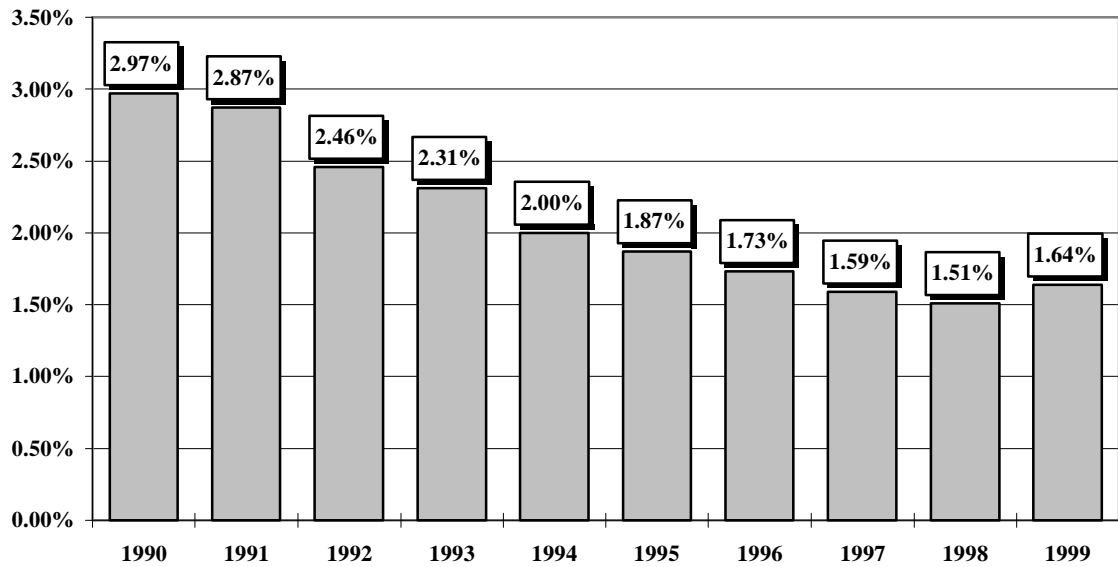


Figure 8-4
Percent of Motorcycle Crashes to All Crashes



Section 8: Motorcycle Crashes

**Table 8-1
Motorcycle Crashes by Type**

Accident Type	Number of Crashes			
	Total	Fatal	Non-Fatal Injury	Property Damage Only
Overturning	9	0	9	0
Pedestrian	9	1	8	0
Motor Vehicle In Transport	1,180	39	926	215
Motor Vehicle On Other Roadway	0	0	0	0
Pedalcyclist	5	0	4	1
Animal	41	2	31	8
Fixed Object	234	21	197	16
Other Object	22	2	16	4
Misc.	531	10	452	69
TOTALS	2,031	75	1,643	313

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

Lighting Condition	Number of Crashes		
	Total	Fatal	Injury
Daylight	1,345	42	1,080
Dawn or Dusk	105	2	86
Darkness	580	31	476
Not Reported	1	0	1
Totals	2,031	75	1,643

**Table 8-3
Motorcycle Crashes - Road Surface**

Road Surface	Number of Crashes		
	Total	Fatal	Injury
Dry	1,795	72	1,451
Wet	58	3	44
Snowy/icy	0	0	0
Other	130	0	109
Not Reported	48	0	39
Totals	2,031	75	1,643

**Table 8-4
Motorcycle Crashes - Land Use**

	Number of Crashes and % of Total				
	Total	Rural	% of Total	Urban	% of Total
Crashes	2,031	554	27.28%	1,477	72.72%
Fatalities	76	31	40.79%	45	59.21%
Injuries	1,945	541	27.81%	1,404	72.19%

**Table 8-5
Operators' Age - Motorcycle Crashes**

Age of Operator	Total No. of Operators	Percent of Total	Number of operators	
			Fatal Crashes	Injury Crashes
15 & Younger	28	1.36%	0	26
16	12	0.58%	0	10
17	21	1.02%	1	16
18-19	99	4.79%	1	83
20-24	338	16.37%	9	283
25-34	503	24.36%	14	418
35-44	462	22.37%	22	372
45-54	347	16.80%	17	282
55-64	151	7.31%	11	121
65-74	44	2.13%	0	38
75 & Older	7	0.34%	1	5
Not Reported	53	2.57%	1	20
TOTALS	2,065	100.00%	77	1,674

**Table 8-6
Alcohol-Related Motorcycle Crashes**

Total number of impaired operators	185
Total number of fatal crashes	22
Total number of injury crashes	148

Section 8: Motorcycle Crashes

Table 8-7

Motorcycle Operators Involved in Fatal Crashes by License Status*

License Status	1997		1998		1999	
	Total Fatal Crashes	Percent of Fatal Crashes	Total Fatal Crashes	Percent of Fatal Crashes	Total Fatal Crashes	Percent of Fatal Crashes
No license	4	6.67%	6	9.09%	3	3.95%
Invalid	18	30.00%	15	27.27%	23	30.26%
Valid	37	61.67%	40	63.64%	49	64.47%
Unknown	1	1.67%	0	0%	1	1.32%
TOTALS	60	100.00%	61	100.00%	76	100.00%

*Note: includes only motorcycle operators involved in fatal crashes.

Table 8-8

Motorcycle Operator's Helmet Use

Severity of Injury	Number of Motorcycle Crashes							
	Helmet Used	% of Total	No Helmet	% of Total	Unknown	% of Total	Total	% of Total
No injury	94	13.86%	156	16.08%	92	22.06%	342	16.56%
Possible injury	129	19.03%	161	16.60%	92	22.06%	382	18.50%
Non-incapacitating	278	41.00%	368	37.94%	122	29.26%	768	37.19%
Incapacitating	157	23.16%	233	24.02%	70	16.79%	460	22.28%
Fatality	16	2.36%	43	4.43%	9	1.92%	68	3.24%
Unknown	4	0.59%	9	0.93%	33	7.91%	46	2.23%
TOTALS	678	100.00%	970	100.00%	418	100.00%	2,066	100.00%

Table 8-9

Motorcycle Passenger Helmet Use

Severity of Injury	Number of Motorcycle Crashes							
	Helmet Used	% of Total	No Helmet	% of Total	Use Unknown	% of Total	Total	% of Total
No injury	9	16.67%	17	11.33%	12	26.67%	38	15.26%
Possible injury	9	16.67%	34	22.67%	12	26.67%	55	22.09%
Non-incapacitating	24	44.44%	63	42.00%	15	33.33%	102	40.96%
Incapacitating	8	14.81%	28	18.67%	5	11.11%	41	16.47%
Fatality	2	3.70%	5	3.33%	1	2.22%	8	3.21%
Unknown	2	3.70%	3	2.00%	0	0%	5	2.01%
TOTALS	54	100.00%	150	100.00%	45	100.00%	249	100.00%

1999 Arizona Crash Facts Summary

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	8	4	3	1
5 - 9	0	0	0	6	5	1	0
10 - 14	0	0	0	34	23	11	0
15 - 19	3	2	1	153	134	19	0
20 - 24	8	8	0	337	291	46	0
25 - 34	15	15	0	472	408	64	0
35 - 44	23	17	6	433	346	87	0
45 - 54	16	14	2	307	254	53	0
55 - 64	10	10	0	130	111	19	0
65 - 74	0	0	0	42	38	4	0
75 & Older	1	1	0	9	5	4	0
Not Reported	0	0	0	14	13	1	0
TOTALS	76	67	9	1,945	1,632	312	1

Table 8-11
Motorcycle Operator Errors

Contributing Circumstances	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number Of Cases	Percent Of Units	Number Of Cases	Percent Of Units	Number Of Cases	Percent Of Units
Exceeding lawful speed limit	43	2.08%	8	10.38%	34	2.03%
Speed too fast for conditions	567	27.46%	22	28.57%	460	27.48%
Failed to yield	63	3.05%	4	5.19%	48	2.87%
Passed stop sign	3	0.15%	0	0%	3	0.18%
Disregarded traffic signal	21	1.02%	3	3.90%	17	1.02%
Drove left of center	12	0.58%	2	2.60%	8	0.48%
Followed too closely	32	1.55%	0	0%	26	1.55%
Made improper turn	19	0.92%	0	0%	11	0.66%
Driver inattention	92	4.46%	3	3.90%	80	4.78%
Had been drinking	185	8.96%	22	28.57%	148	8.84%
Other improper driving	36	1.74%	0	0%	24	1.43%
Faulty or Missing Equip.	16	0.77%	0	0%	15	0.90%
Other	44	2.13%	0	0%	32	1.91%
No improper driving	932	45.13%	13	16.88%	768	45.88%
Not Reported	0	0%	0	0%	0	0%
TOTALS	2,065	100.00%	77	100.00%	1,674	100.00%

Section 8: Motorcycle Crashes

Figure 8-5
Motorcycle Crashes by Time of Day

Weekdays

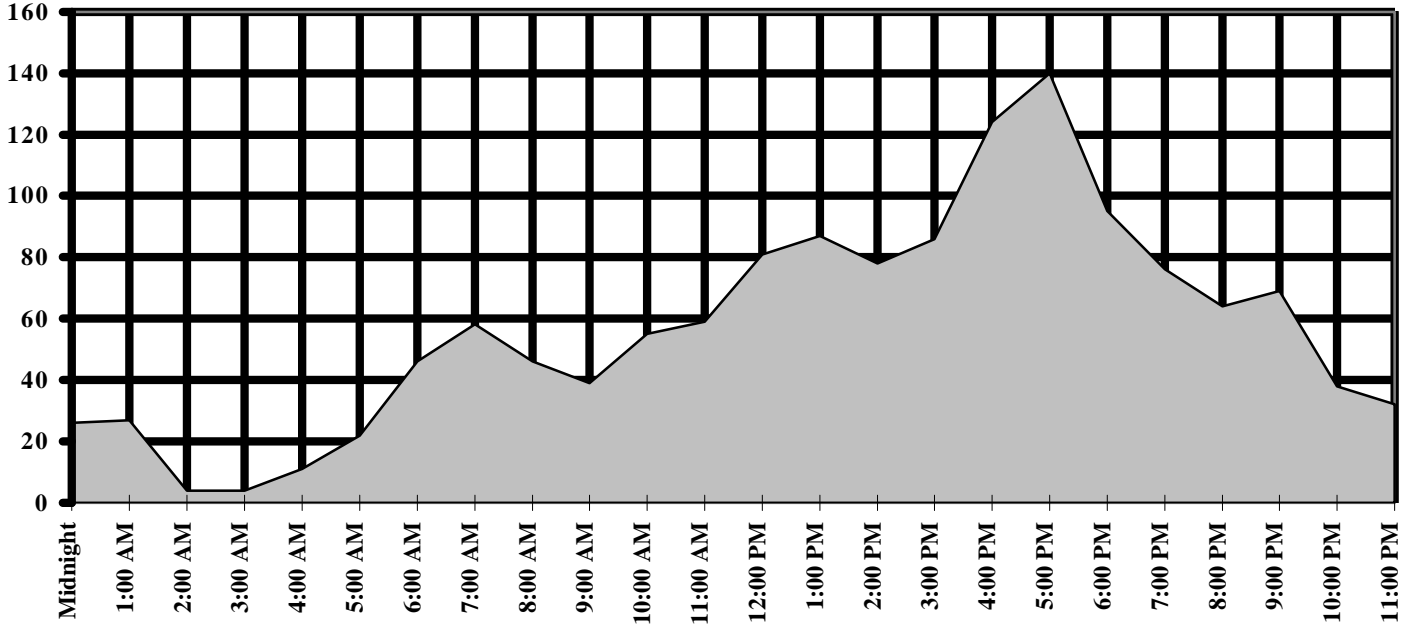
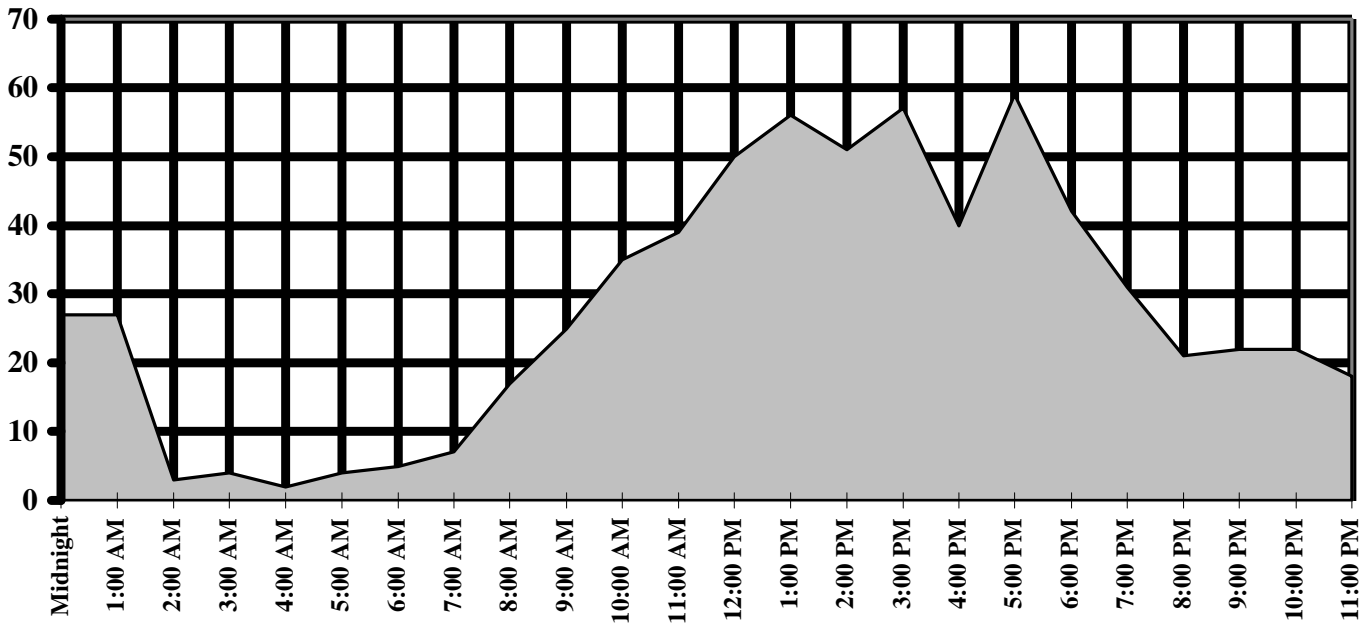


Figure 8-6
Weekends



1999 Arizona Crash Facts Summary

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

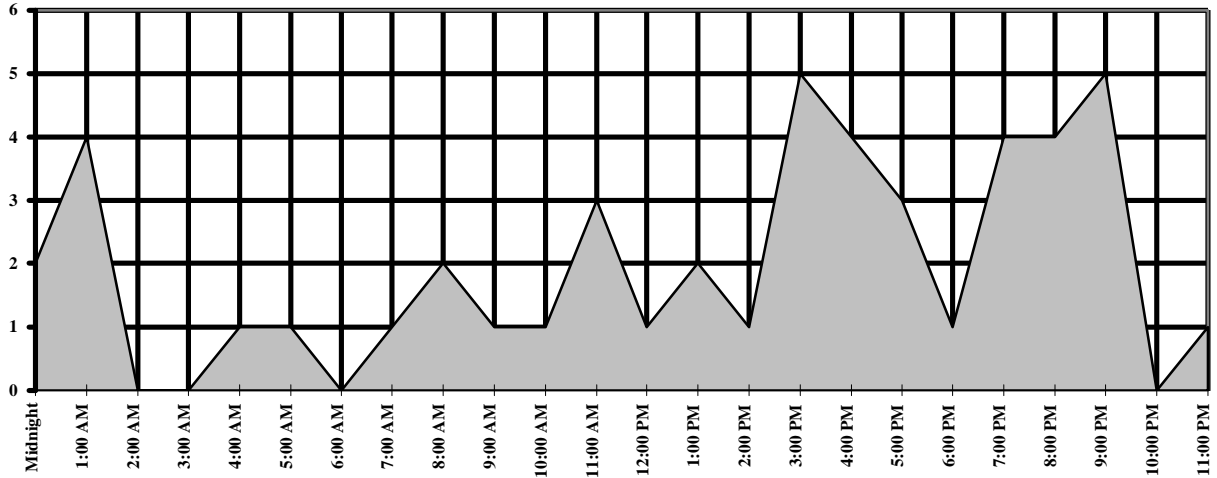
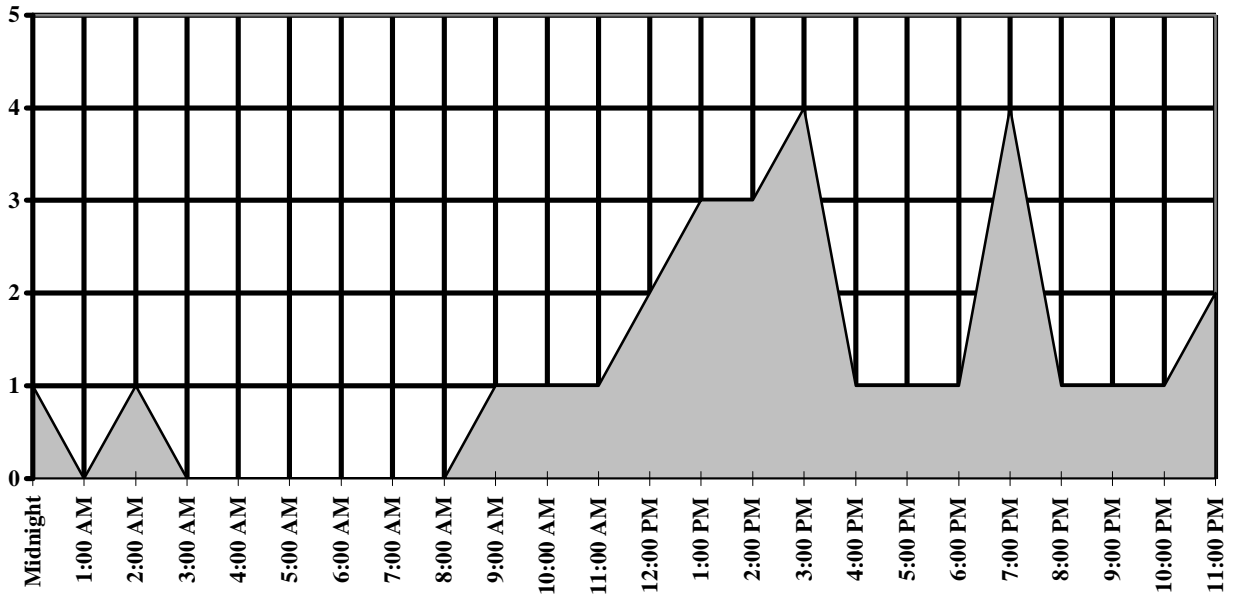
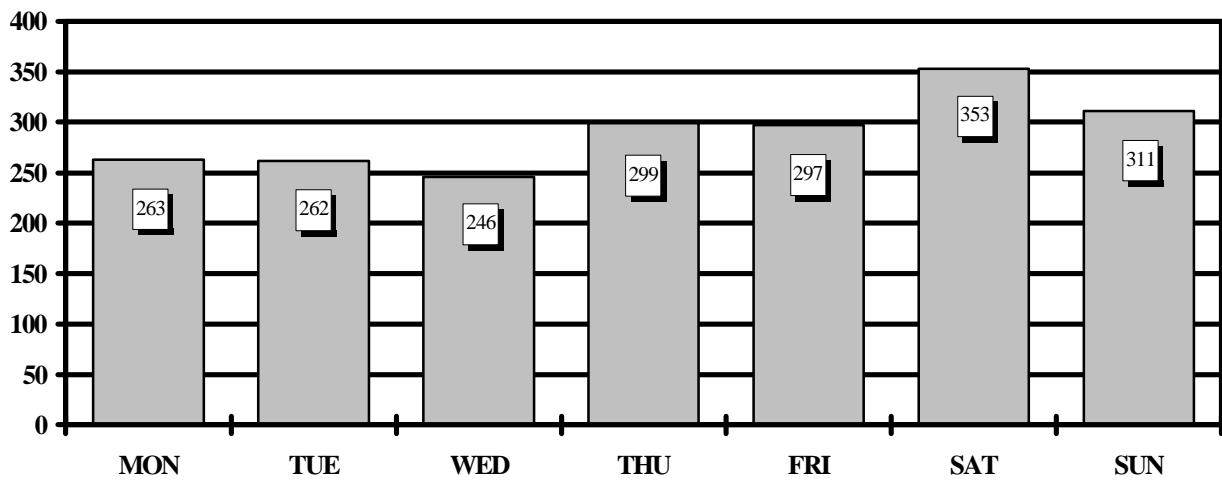


Figure 8-8
Fatal Motorcycle Crashes by Time of Day
Weekends

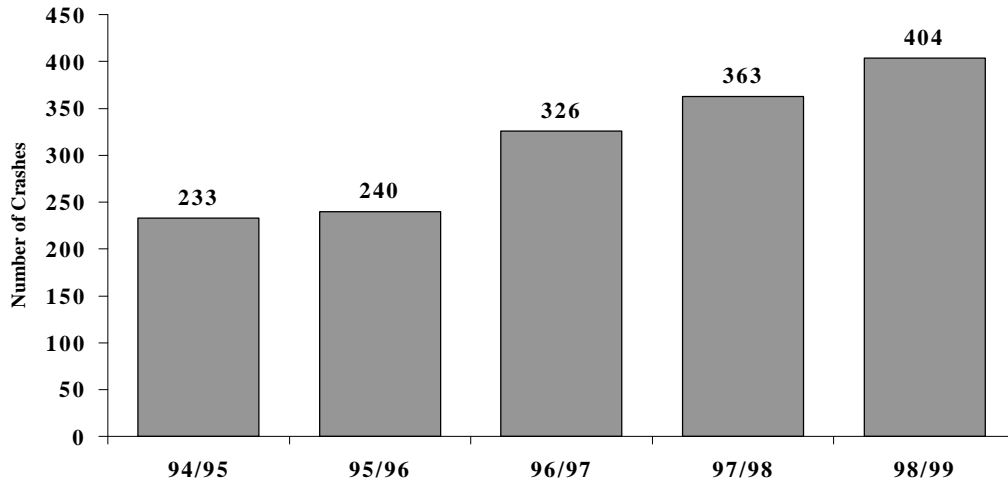


Section 8: Motorcycle Crashes

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	209	51.93%
Speed not Reasonable & Proper	44	10.89%
Failed to Yield	28	6.93%
Following too Closely	1	0.25%
Improper Turn	24	5.94%
Drove in Opposing Lane	3	0.74%
Other	30	7.43%
Unknown	24	5.94%
Inattention	35	8.66%
No Passing Zone	2	0.50%
Unsafe Lane Change	4	0.99%
TOTAL DRIVERS	404	100.00%

School bus crash data is based upon a school session year from August 17, 1998 to June 30, 1999. Beginning with the 2000 edition, all school bus statistics will be by calendar year.

Section 9: School Bus Accidents

**Table 9-2
School Bus Crash History**

	School Year				
	94/95	95/96	96/97	97/98	98/99
Injuries and Fatalities					
Pupils					
Killed	0	1	0	0	0
Injured	117	142	131	98	95
Bus Drivers					
Killed	0	0	0	0	0
Injured	15	19	25	26	17
Property Damage Only Crashes	216	173	213	239	424
Crash by Time of Day					
A.M.	111	108	139	163	179
P.M.	122	132	187	200	225
Weather Conditions:					
Not Reported	1	0	1	0	3
Clear and Dry	185	209	255	293	346
Rain	14	9	17	16	17
Snow or Ice	3	4	6	10	2
Dusty or Windy	0	0	4	1	2
Fog	0	0	0	0	1
Cloudy	30	18	43	43	27

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