# Utah Crash Summary 2004



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#### **Introduction**

Purpose:

The Utah Crash Summary, produced annually, identifies and describes the trends and effects of traffic crashes in Utah. The statistics within the Utah Crash Summary describe factors that contribute to the occurrence of crashes, and crash-related injuries and fatalities. This report is designed to heighten awareness about traffic safety by allowing safety program specialists, public health personnel, and other interested individuals to identify areas where programs may be focused in an effort to reduce traffic-related injuries and fatalities.

Crash Data:

The data for this summary is derived from Utah crash reports. These reports are completed by law enforcement officers throughout the state who collect data from crash scenes on public roadways. Information is collected when a crash involved injuries, fatalities, or at least \$1,000 property damage; when the jurisdiction in which the crash occurs requires it; or when the responding officer determines that a report is warranted.

Crash reports are forwarded to the Utah Department of Transportation (UDOT) for central collection. UDOT reviews the crash report forms and enters the data into a database called the Crash Analysis Reporting System (CARS).

Private Property Crashes:

Beginning in 1997, all private property crashes were excluded from CARS. Since private property crashes accounted for approximately 10% of crashes in previous years, the decrease in crashes since 1997 is due in part to the exclusion of private property crashes.

**Fatal Crashes:** 

Additional information is collected on fatal crashes and compiled into a separate database, the Fatality Analysis Reporting System (FARS). This database was used for the reporting of alcohol and other drug-related crashes and fatalities.

**Fact Sheets:** 

In order to provide information at a glance, each section of the crash summary is accompanied by a Utah Crash Fact Sheet. The fact sheets provide an overview of the section, and are useful when presenting information to others.

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**Available At:** 

Printed copies of the Utah Crash Summary are available at the Utah Highway Safety Office. The summary is also available on the internet at www.highwaysafety.utah.gov.

#### **Executive Summary**

Measurable progress has been made to reduce motor vehicle crashes in Utah, with a steady decline in the injury and fatal crash rates since 1971. These reductions can be attributed to a variety of factors, including:

- Statewide and local traffic safety programs that have increased awareness of traffic safety issues;
- Legislation mandating seatbelt use, graduated driver licensing, and enhanced penalties for impaired driving;
- Aggressive media and enforcement programs targeting driver behavior;
- Improved engineering of roadway infrastructure;
- Advanced engineering to provide safer motor vehicles and improve crash survivability.

The personal and socioeconomic effect of motor vehicle crashes is a continuing concern in the state of Utah, with special focus on reducing the tragedy of injury and death. In 2004, Utah made notable progress in the following areas when compared to 2003:

- Utah experienced an 8% decrease in the rate of motor vehicle crash fatalities, marking a new all-time low:
- The percentage of children (aged 0 to 8 years) involved in crashes that were restrained in child safety seats increased 3% overall, 6% for children aged 2 to 4 years, and 9% for children aged 5 to 8 years;
- The percentage of fatal teenage-driver crashes dropped to 16%, marking a ten-year low.

As improvements are made and progress continues, traffic safety needs to remain a top priority in Utah. In Utah during 2004:

- Rural crashes were 5 times more likely to result in a fatality than crashes in urban areas;
- More than half (53%) of the persons killed in a crash were unbelted, and unbelted occupants were 31 times more likely to be killed in a crash than belted occupants;
- Utah experienced a 16% increase in the rate of motorcycle crashes.

The 2004 Utah Crash Summary contains further details regarding motor vehicle crashes in Utah. In addition, each section of this Crash Summary begins with a colorful and informative Utah Crash Fact Sheet that quickly summarizes the detailed information in the section.

The Utah Department of Public Safety's Highway Safety Office invites users of this Crash Summary to help promote motor vehicle safety in our communities. As a partner in the highway safety community, your assistance will make Utah a safer place to drive, walk and bicycle.

#### **Utah Crash Clock 2004**

#### In Utah during 2004:

- A motor vehicle crash occurred every 10 minutes.
- A person was injured in a crash every 18 minutes.
- A person was killed in a crash every 30 hours.
- An unbelted crash occupant was killed every 2 days.
- An alcohol or other drug-related crash occurred every 4 1/2 hours.
- A person was killed in an alcohol or other drug-related crash every 5 days.
- A teenage-driver crash occurred every 35 minutes.
- A person was killed in a teenage-driver crash every 5 days.
- A speed-related crash occurred every hour.
- A person was killed in a speed-related crash every 5 days.
- A motorcyclist was involved in a crash every 8 hours.
- A motorcyclist was killed in a crash every 12 days.
- A pedestrian was involved in a crash every 12 hours.
- · A pedestrian was killed in a crash every 15 days.
- A bicyclist was involved in a crash every 12 1/2 hours.

# Persons and Crashes 2004

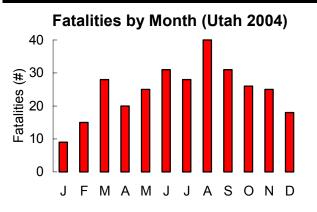
## PERSONS AND CRASHES



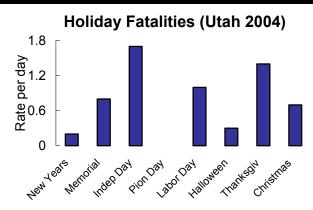
Motor vehicle crashes are the leading cause of death and disability for persons in the United States.

#### Did you know that in 2004 . . .

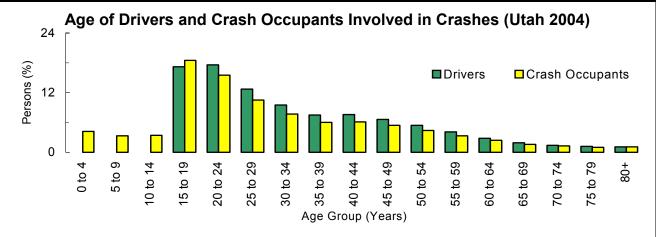
- 53,905 motor vehicle crashes occurred in Utah which resulted in 29,638 injured persons and 296 fatalities.
- Utah's total motor vehicle crash rate increased 4% from 2003, the injury crash rate increased 3%, and the fatal crash rate stayed the same.
- A motor vehicle crash occurred in Utah every 10 minutes, a person was injured in a crash every 18 minutes, and a person died in a crash every 30 hours.



 The majority (44%) of 2004 fatalities occurred during June, July, August and September.



In 2004, Independence Day had the highest rate of fatalities (1.7), while Pioneer Day had the lowest rate (0.0).



- Drivers aged 20 to 24 years represented the largest percentage of drivers involved in crashes (17.6%).
- The largest proportion of crash occupants were aged 15 to 19 years (18.5%).

#### **Leading Collision Descriptions (Utah 2004)**

#### **All Crashes**

- 1. Rear End (30.2%)
- 2. Broadside (20.9%)
- 3. Side Swipe (6.5%)
- 4. Single Vehicle Rollover (6.0%)
- 5. Pedestrian/Bicyclist (2.4%)

#### **Fatal Crashes**

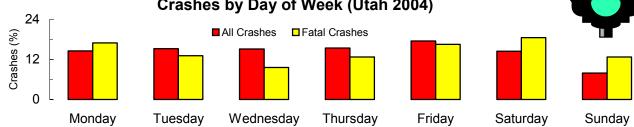
- 1. Single Vehicle Rollover (41.9%)
- 2. Head-On (14.2%)
- 3. Pedestrian/Bicyclist (10.8%)
- 4. Broadside (9.2%)
- 5. Side Swipe (6.9%)

Head-on collisions were 25 times more likely, and single vehicle rollovers were 12 times more likely to result in a fatality than other collisions.

# 

## ERSONS AND CRASHES

#### Crashes by Day of Week (Utah 2004)

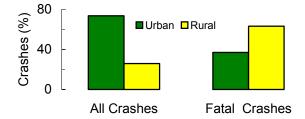


- The highest percentage of total crashes occurred on Friday (17.5%), while the highest percentage of fatal crashes occurred on Saturday (18.5%).
- Even though Sunday crashes represented 7.9% of total crashes, they accounted for 12.7% of fatal crashes. In fact, crashes occurring on Sunday were 1.7 times more likely to involve a fatality than crashes that occurred on other days of the week.

#### **Hour of Motor Vehicle Crashes (Utah 2004)** 10 Total Crashes 8 Crashes (%) **Fatal Crashes** 6

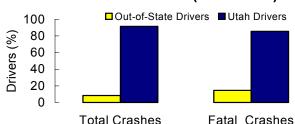
Total crashes and fatal crashes were more likely to occur between 2:00 pm and 6:00 pm. However, total crashes peaked at 5:00 pm, and fatal crashes peaked at 6:00 pm.

#### **Urban/Rural Location (Utah 2004)**



- While the majority of all crashes occurred in urban areas (73.5%), the majority of fatal crashes occurred in rural areas (63.1%).
- In fact, rural crashes were 5 times more likely to be fatal than urban crashes.

#### Out-Of-State Drivers (Utah 2004)



While out-of-state licensed drivers accounted for 8.3% of drivers involved in crashes, they represented 14.6% of drivers involved in fatal crashes.

#### **Leading Violations (Utah 2004)**

#### **All Crashes**

- 1. Following Too Close (17.5%)
- 2. Failure to Yield Right-of-Way (17.5%)
- 3. Improper Lookout (15.7%)

#### **Fatal Crashes**

- 1. Vehicle Homicide (23.3%)
- 2. Speeding (16.7%)
- 3. Driving Under the Influence (13.3%)
- Officers at the scene cited 34.4% of drivers involved in a crash for a traffic violation.
- Drivers cited for driving under the influence were 4 times more likely to be involved in a fatal crash than drivers cited for other violations.

#### **Section 1: Persons and Crashes**

Section 1: Persons and Crashes 2004	
Trends	
Injured Persons and Fatalities 1995-2004	
Crashes 1995-2004	
Fatalities by Month 1995-2004	
Holiday Crashes 1995-2004	
Counties	
Persons Involved in Crashes by County	20-2 <sup>-</sup>
Crashes by County	
Occupant Characteristics (Including Driver)	
Injury Severity	24
Occupant Placement	24
Age of Crash Occupants	
Gender of Crash Occupants	
Age and Gender of Fatalities	
Driver Characteristics	
Driver Age	2 <sup>.</sup>
Driver Gender	
Out-of-State Drivers	28
Crash Characteristics	
Crash Severity	29
Month of Year	
Day of Week	30
Hour of Day	3
Crash Type	32
Collision Description	
Urban/Rural Location	
Vehicle Type	3:
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Contributing Factors .......35

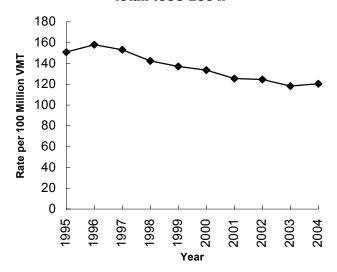
#### **Trends**

#### **Injured Persons and Fatalities (Utah 1995-2004)**

	Persons													
		lnj	jured	K	illed									
		Persons	Rate per	Persons	Rate per									
	Vehicle Miles	Injured	100 Million	Killed	100 Million									
Year	Traveled (VMT)	#	VMT	#	VMT									
1995	18,798,488,669	28,343	150.8	325	1.7									
1996	19,433,341,748	30,711	158.0	321	1.7									
1997	20,407,590,239	31,238	153.1	366	1.8									
1998	21,236,980,216	30,232	142.4	350	1.6									
1999	21,867,355,694	29,959	137.0	360	1.6									
2000	22,517,131,427	30,086	133.6	373	1.7									
2001	23,398,734,621	29,375	125.5	291	1.2									
2002	24,438,992,554	30,433	124.5	328	1.3									
2003	23,963,242,376	28,352	118.3	309	1.3									
2004	24,624,791,795	29,638	120.4	296	1.2									
Total	220,686,649,339	298,367	135.2	3,319	1.5									

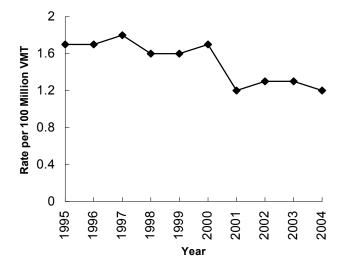
- During the last ten years, approximately 300,000 people have been injured and over 3,300 have been killed in motor vehicle crashes.
- In 2004, more people were injured in crashes. The 2004 injury rate was 120.4; a 2% increase from 2003.
- Utah experienced a decrease in the number of crash fatalities in 2003. There were 309 fatalities in 2003, which dropped to 296 in 2004. The 2004 fatality rate of 1.2 decreased 8% from the 2003 fatality rate.

# Injured Person Rates Per 100 Million Vehicle Miles Traveled (Utah 1995-2004)



- Overall, there has been a decreasing trend in the rate of people injured in crashes from 1995 to 2004.
- There has been a 20% decrease in the rate of people injured in crashes since 1995.

# Fatality Rates Per 100 Million Vehicle Miles Traveled (Utah 1995-2004)



- The rate of people killed in crashes has been decreasing over time, The 2004 fatality rate marks a new all-time low.
- There has been a 29% decrease in the rate of people killed in crashes since 1995.

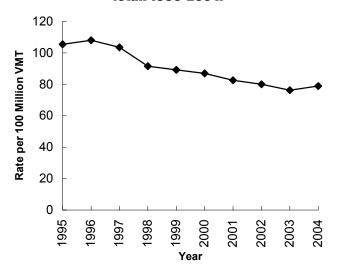
#### **Crashes (Utah 1995-2004)**

			(	Crashes					
	Property Dam	age Only (PDO)	Ir	njury	F	atal	Total		
	PDO	Injury	Rate per	Fatal	Rate per	All	Rate per		
	Crashes	100 Million	Crashes	100 Million	Crashes	100 Million	Crashes	100 Million	
Year	#	VMT	#	VMT	#	VMT	#	VMT	
1995	37,532	199.7	19,828	105.5	285	1.5	57,645	306.6	
1996	40,225	207.0	20,988	108.0	284	1.5	61,497	316.5	
1997	33,512	164.2	21,131	103.5	309	1.5	54,952	269.3	
1998	34,337	161.7	19,427	91.5	308	1.5	54,072	254.6	
1999	32,971	150.8	19,513	89.2	318	1.5	52,802	241.5	
2000	33,269	147.7	19,564	86.9	318	1.4	53,151	236.0	
2001	33,113	141.5	19,332	82.6	258	1.1	52,703	225.2	
2002	33,542	137.2	19,552	80.0	274	1.1	53,368	218.4	
2003	31,842	132.9	18,285	76.3	262	1.1	50,389	210.3	
2004	34,222	139.0	19,423	78.9	260	1.1	53,905	218.9	
Total	344,565	156.1	197,043	89.3	2,876	1.3	544,484	246.7	

NOTE: A crash may result in multiple injuries and/or fatalities.

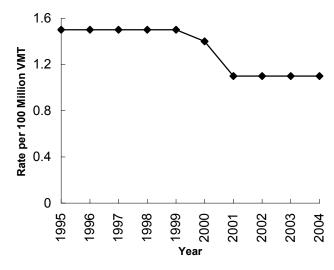
- During the last ten years, approximately 545,000 motor vehicle crashes occurred in Utah. Approximately 200,000 of the crashes involved injuries and nearly 3,000 involved fatalities.
- In 2004, the total crash rate in Utah was 218.9; a 4% increase from 2003. The injury crash rate was 78.9; a 3% increase from 2003. However, the 2004 fatal crash rate of 1.1 remained the same as 2003.

# Injury Crash Rates Per 100 Million Vehicle Miles Traveled (Utah 1995-2004)



- Overall, there has been a decreasing trend in injury crash rates from 1995 to 2004.
- There has been a 25% decrease in the injury crash rate since 1995.

# Fatal Crash Rates Per 100 Million Vehicle Miles Traveled (Utah 1995-2004)



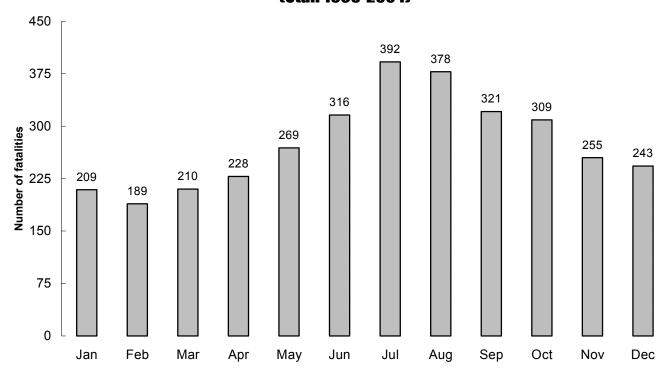
- The above graph reflects a decreasing trend in fatal crash rates from 1995 to 2004. The 2004 fatal crash rate remains at an all time low of 1.1.
- There has been a 27% decrease in the fatal crash rate since 1995.

#### Trends

#### **Fatalities by Month (Utah 1995-2004)**

						Fatal	lities	;					
							Mont	h					
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1995	15	19	18	26	20	30	37	50	32	28	26	24	325
1996	24	8	31	21	23	34	27	42	29	26	29	27	321
1997	19	34	23	20	31	37	38	37	37	31	26	33	366
1998	27	23	18	24	26	29	44	36	42	34	30	17	350
1999	19	16	25	34	37	35	46	29	32	39	25	23	360
2000	30	23	21	27	29	38	50	36	30	33	23	33	373
2001	22	19	12	14	30	24	40	33	21	29	27	20	291
2002	22	17	18	20	28	19	44	36	36	38	27	23	328
2003	22	15	16	22	20	39	38	39	31	25	17	25	309
2004	9	15	28	20	25	31	28	40	31	26	25	18	296
Total	209	189	210	228	269	316	392	378	321	309	255	243	3,319

#### Fatalities by Month (Utah 1995-2004)



- Since 1995, approximately 3,300 people have been killed in motor vehicle crashes, and those fatalities have varied from month to month.
- A look at the ten-year trend shows that one-third (32.9%) of the total fatalities occurred in July, August and September .
- In the last ten years, July has been the month with the highest number of motor vehicle crash fatalities (392), while February has had the fewest (189).
- In 2004, August (40) was the month with the highest number of fatalities, while January (9) had the fewest.

#### **Holiday Fatalities (Utah 1995-2004)**

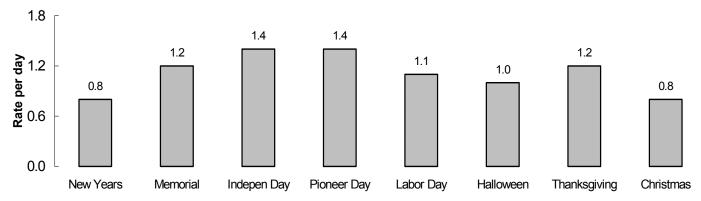
												F	ata	lities													
	New Years Memorial Independence			nce		Pione	er		Labo	r																	
		Day			Day			Day			Day			Day		Halloween		een	Thanksgiving			Christmas			Total		
			Rate			Rate			Rate			Rate			Rate			Rate			Rate			Rate	ı		Rate
			per			per			per			per			per			per			per			per			per
Year	#	Days	Day	#	Days	Day	#	Days	Day	#	Days	Day	#	Days	Day	#	Days	Day	#	Days	Day	#	Days	Day	#	Days	Day
1995	1	3	0.3	2	4	0.5	5	3	1.7	1	4	0.3	6	4	1.5	4	3	1.3	2	5	0.4	1	4	0.3	22	30	0.7
1996	10	4	2.5	2	4	0.5	2	5	0.4	4	3	1.3	3	4	0.8	4	5	0.8	7	5	1.4	1	3	0.3	33	33	1.0
1997	3	3	1.0	6	4	1.5	7	4	1.8	11	5	2.2	6	4	1.5	5	4	1.3	6	5	1.2	5	5	1.0	49	34	1.4
1998	2	5	0.4	4	4	1.0	4	3	1.3	2	4	0.5	4	4	1.0	2	3	0.7	10	5	2.0	2	4	0.5	30	32	0.9
1999	1	4	0.3	11	4	2.8	10	3	3.3	5	3	1.7	4	4	1.0	6	3	2.0	8	5	1.6	1	3	0.3	46	29	1.6
2000	2	3	0.7	3	4	0.8	2	3	0.7	5	4	1.3	3	4	0.8	2	3	0.7	2	5	0.4	5	4	1.3	24	30	0.8
2001	3	4	0.8	5	4	1.3	2	3	0.7	8	3	2.7	4	4	1.0	1	3	0.3	7	5	1.4	3	3	1.0	33	29	1.1
2002	2	3	0.7	9	4	2.3	8	5	1.6	9	3	3.0	3	4	0.8	6	5	1.2	7	5	1.4	0	3	0.0	44	32	1.4
2003	3	3	1.0	2	4	0.5	4	4	1.0	7	5	1.4	7	4	1.8	4	4	1.0	2	5	0.4	8	5	1.6	37	34	1.1
2004	1	5	0.2	3	4	0.8	5	3	1.7	0	3	0.0	4	4	1.0	1	3	0.3	7	5	1.4	2	3	0.7	23	30	0.8
Total	28	37	0.8	47	40	1.2	49	36	1.4	52	37	1.4	44	40	1.1	35	36	1.0	58	50	1.2	28	37	0.8	341	313	1.1

Note: Because of the differing lengths of holidays, the rate per day is provided and should be used for comparisons.

The above table shows the number of motor vehicle crash fatalities that occurred on holidays for the past ten years. The number of days included in a holiday varied per year. The following criteria was used to determine the number of days included:

- If a holiday occurred on Sunday, Tuesday, Wednesday or Saturday, it was considered a 3-day holiday (the day prior to the holiday, the holiday, and the day after the holiday.
- If a holiday occurred on Monday it was considered a 4-day holiday (the Friday, Saturday, Sunday prior to the holiday, and the Monday holiday).
- If a holiday occurred on Friday it was also considered a 4-day holiday (the Thursday prior to the holiday, the Friday holiday, and the Saturday, Sunday following the holiday).
- If a holiday occurred on Thursday it was considered a 5-day holiday (the Wednesday prior to the holiday, the Thursday holiday, and the Friday, Saturday, Sunday following the holiday).

#### Holiday Fatalities (Utah 1995-2004) (Rate Per Day)



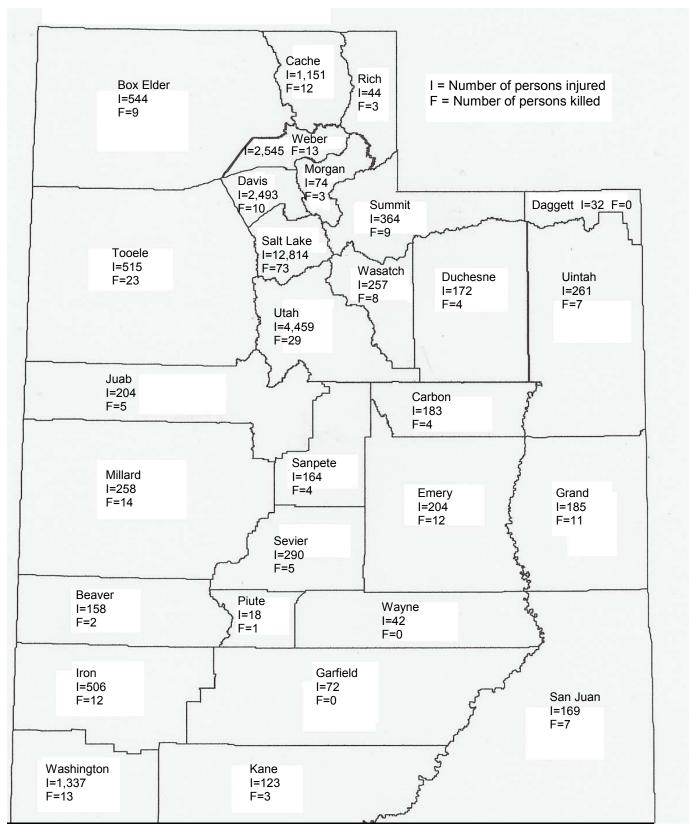
- Holiday fatalities are a concern due to increased motor vehicle travel combined with other possible risk factors (e.g., alcohol and other drug impaired driving, fatigue, speeding).
- Over the past ten years, Independence Day (1.4) and Pioneer Day (1.4) had the highest rates of fatalities, while Christmas (0.8) and New Year's (0.8) had the lowest rates.
- In 2004, Independence Day had the highest rate of fatalities (1.7), while Pioneer Day had the lowest rate (0.0).
- The 2004 rate per day for holiday fatalities was 0.8 which was the same as the rate per day for all 2004 fatalities (0.8).

#### **Persons Involved in Crashes by County (Utah 2004)**

						Persons						
	ı	Non-Injur	ed		Injured			Killed			Total	
	Non-	Rate	Rate		Rate	Rate		Rate	Rate		Rate	Rate
	Injured	per 100	per	Injured	per 100	per	Persons	per 100	per	All	per 100	per
	Persons	Million	10,000	Persons	Million	10,000	Killed	Million	10,000	Persons	Million	10,000
County	#	VMT	Population	#	VMT	Population	#	VMT	Population	#	VMT	Population
Beaver	491	202.5	778.4	158	65.2	250.5	2	0.8	3.2	651	268.5	1,032.0
Box Elder	1,678	189.4	375.8	544	61.4	121.8	9	1.0	2.0	2,231	251.9	499.6
Cache	4,829	559.3	482.0	1,151	133.3	114.9	12	1.4	1.2	5,992	694.1	598.1
Carbon	676	225.5	348.7	183	61.1	94.4	4	1.3	2.1	863	287.9	445.2
Daggett	86	309.8	901.5	32	115.3	335.4	0	0.0	0.0	118	425.0	1,236.9
Davis	10,883	473.2	404.7	2,493	108.4	92.7	10	0.4	0.4	13,386	582.1	497.8
Duchesne	602	291.1	403.1	172	83.2	115.2	4	1.9	2.7	778	376.1	521.0
Emery	475	134.3	452.7	204	57.7	194.4	12	3.4	11.4	691	195.4	658.5
Garfield	238	191.9	514.6	72	58.1	155.7	0	0.0	0.0	310	250.0	670.3
Grand	359	128.8	416.9	185	66.4	214.8	11	3.9	12.8	555	199.1	644.5
Iron	1,757	277.2	451.4	506	79.8	130.0	12	1.9	3.1	2,275	358.9	584.5
Juab	453	117.2	513.3	204	52.8	231.1	5	1.3	5.7	662	171.3	750.1
Kane	332	255.9	548.2	123	94.8	203.1	3	2.3	5.0	458	353.0	756.3
Millard	601	139.6	457.8	258	59.9	196.5	14	3.3	10.7	873	202.8	665.0
Morgan	220	188.1	266.7	74	63.3	89.7	3	2.6	3.6	297	254.0	360.0
Piute	47	154.4	344.1	18	59.1	131.8	1	3.3	7.3	66	216.8	483.2
Rich	160	304.1	773.3	44	83.6	212.7	3	5.7	14.5	207	393.4	1,000.5
Salt Lake	48,383	597.0	506.5	12,814	158.1	134.2	73	0.9	0.8	61,270	756.0	641.5
San Juan	371	132.1	258.5	169	60.2	117.7	7	2.5	4.9	547	194.7	381.1
Sanpete	508	209.8	202.9	164	67.7	65.5	4	1.7	1.6	676	279.2	269.9
Sevier	751	180.9	386.8	290	69.9	149.4	5	1.2	2.6	1,046	252.0	538.8
Summit	1,748	257.0	498.1	364	53.5	103.7	9	1.3	2.6	2,121	311.9	604.4
Tooele	1,572	191.1	313.9	515	62.6	102.8	23	2.8	4.6	2,110	256.5	421.4
Uintah	952	310.0	363.0	261	85.0	99.5	7	2.3	2.7	1,220	397.3	465.2
Utah	17,978	513.9	410.8	4,459	127.5	101.9	29	0.8	0.7	22,466	642.2	513.4
Wasatch	931	349.7	485.5	257	96.5	134.0	8	3.0	4.2	1,196	449.2	623.7
Washington	5,122	473.8	436.6	1,337	123.7	114.0	13	1.2	1.1	6,472	598.7	551.7
Wayne	82	214.0	325.7	42	109.6	166.8	0	0.0	0.0	124	323.6	492.5
Weber	8,939	585.7	426.6	2,545	166.8	121.5	13	0.9	0.6	11,497	753.3	548.7
Missing	1	0.0	0.0	0	0.0	0.0	0	0.0	0.0	1	0.0	0.0
Statewide	111,225	451.7	450.4	29,638	120.4	120.0	296	1.2	1.2	141,159	573.2	571.7

- Two different rates are given in the above table; one based on vehicle miles traveled in the county, and another based on the population of the county.
- Rate per 100 million vehicle miles traveled:
  - Weber (166.8), Salt Lake (158.1) and Cache (133.3) had the highest rates of persons injured per 100 million vehicle miles traveled.
  - Rich (5.7), Grand (3.9) and Emery (3.4) had the highest rates of persons killed per 100 million vehicle miles traveled.
- Rate per 10,000 population:
  - Daggett (335.4), Beaver (250.5) and Juab (231.1) had the highest rates of persons injured per 10,000 population.
  - Rich (14.5), Grand (12.8) and Emery (11.4) had the highest rates of persons killed per 10,000 population.

#### **Persons Involved in Crashes by County (Utah 2004)**



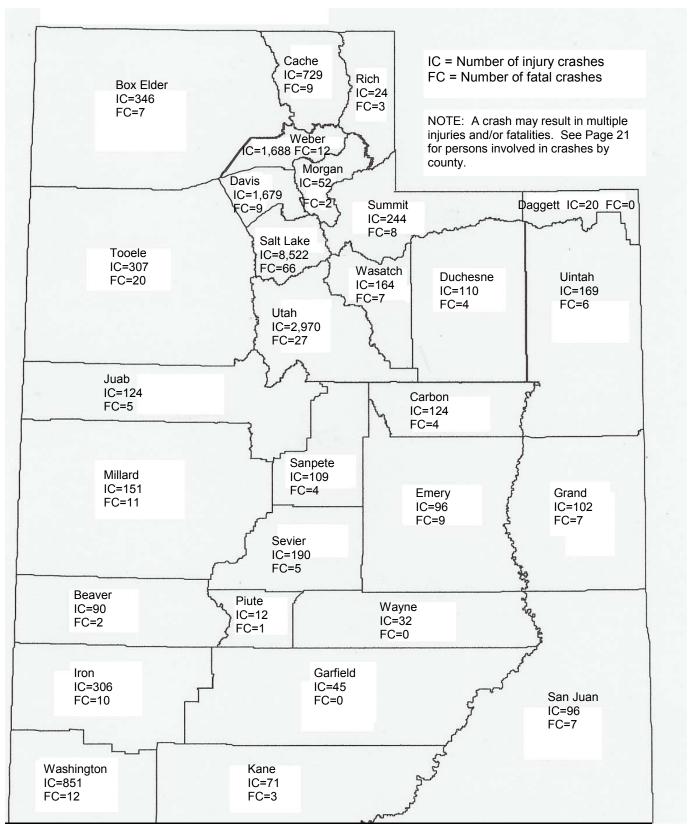
#### **Crashes by County (Utah 2004)**

						Crashes						
	Property	Damage	Only (PDO)		Injury			Fatal			Total	
		Rate	Rate		Rate	Rate		Rate	Rate		Rate	Rate
	PDO	per 100	per	Injury	per 100	per	Fatal	per 100	per	All	per 100	per
	Crashes	Million	10,000	Crashes	Million	10,000	Crashes	Million	10,000	Crashes	Million	10,000
County	#	VMT	Population	#	VMT	Population	#	VMT	Population	#	VMT	Population
Beaver	189	78.0	299.6	90	37.1	142.7	2	0.8	3.2	281	115.9	445.5
Box Elder	656	74.1	146.9	346	39.1	77.5	7	0.8	1.6	1,009	113.9	226.0
Cache	1,506	174.4	150.3	729	84.4	72.8	9	1.0	0.9	2,244	259.9	224.0
Carbon	277	92.4	142.9	124	41.4	64.0	4	1.3	2.1	405	135.1	208.9
Daggett	35	126.1	366.9	20	72.0	209.6	0	0.0	0.0	55	198.1	576.5
Davis	3,088	134.3	114.8	1,679	73.0	62.4	9	0.4	0.3	4,776	207.7	177.6
Duchesne	277	133.9	185.5	110	53.2	73.7	4	1.9	2.7	391	189.0	261.8
Emery	196	55.4	186.8	96	27.1	91.5	9	2.5	8.6	301	85.1	286.9
Garfield	103	83.1	222.7	45	36.3	97.3	0	0.0	0.0	148	119.4	320.0
Grand	133	47.7	154.5	102	36.6	118.5	7	2.5	8.1	242	86.8	281.0
Iron	543	85.7	139.5	306	48.3	78.6	10	1.6	2.6	859	135.5	220.7
Juab	190	49.2	215.3	124	32.1	140.5	5	1.3	5.7	319	82.6	361.4
Kane	136	104.8	224.6	71	54.7	117.2	3	2.3	5.0	210	161.8	346.8
Millard	232	53.9	176.7	151	35.1	115.0	11	2.6	8.4	394	91.5	300.1
Morgan	123	105.2	149.1	52	44.5	63.0	2	1.7	2.4	177	151.4	214.6
Piute	21	69.0	153.7	12	39.4	87.8	1	3.3	7.3	34	111.7	248.9
Rich	55	104.5	265.8	24	45.6	116.0	3	5.7	14.5	82	155.8	396.3
Salt Lake	14,393	177.6	150.7	8,522	105.2	89.2	66	0.8	0.7	22,981	283.6	240.6
San Juan	165	58.7	115.0	96	34.2	66.9	7	2.5	4.9	268	95.4	186.7
Sanpete	197	81.4	78.7	109	45.0	43.5	4	1.7	1.6	310	128.0	123.8
Sevier	299	72.0	154.0	190	45.8	97.9	5	1.2	2.6	494	119.0	254.4
Summit	775	114.0	220.9	244	35.9	69.5	8	1.2	2.3	1,027	151.0	292.7
Tooele	545	66.2	108.8	307	37.3	61.3	20	2.4	4.0	872	106.0	174.1
Uintah	353	115.0	134.6	169	55.0	64.4	6	2.0	2.3	528	171.9	201.3
Utah	5,268	150.6	120.4	2,970	84.9	67.9	27	0.8	0.6	8,265	236.3	188.9
Wasatch	391	146.9	203.9	164	61.6	85.5	7	2.6	3.7	562	211.1	293.1
Washington	1,370	126.7	116.8	851	78.7	72.5	12	1.1	1.0	2,233	206.6	190.3
Wayne	39	101.8	154.9	32	83.5	127.1	0	0.0	0.0	71	185.3	282.0
Weber	2,667	174.8	127.3	1,688	110.6	80.6	12	0.8	0.6	4,367	286.1	208.4
Statewide	34,222	139.0	138.6	19,423	78.9	78.7	260	1.1	1.1	53,905	218.9	218.3

NOTE: A crash may result in multiple injuries and/or fatalities.

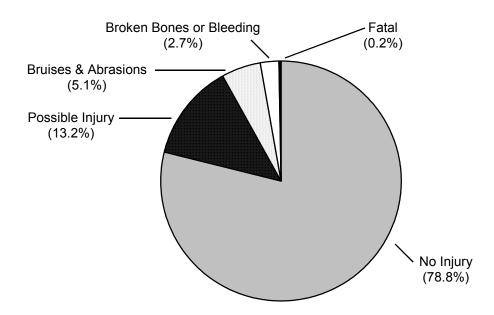
- Two different rates are given in the above table; one based on vehicle miles traveled in the county, and another
  based on the population of the county.
- Rate per 100 million vehicle miles traveled:
  - Weber (110.6), Salt Lake (105.2) and Utah (84.9) had the highest rates of injury crashes per 100 million vehicle miles traveled.
  - Rich (5.7), Piute (3.3) and Wasatch (2.6) had the highest rates of fatal crashes per 100 million vehicle miles traveled.
- Rate per 10,000 population:
  - Daggett (209.6), Beaver (142.7) and Juab (140.5) had the highest rates of injury crashes per 10,000 population.
  - Rich (14.5), Emery (8.6) and Millard (8.4) had the highest rates of fatal crashes per 10,000 population.

#### **Crashes by County (Utah 2004)**



#### **Occupant Characteristics (Including Driver)**

#### **Injury Severity (Utah 2004)**



- In the above graph, there were a total of 141,159 persons involved in crashes.
- Although many people were injured and killed in Utah's motor vehicle crashes, the majority (78.8%) of crash occupants did not sustain an injury.
- Even though 0.2% of crash occupants were killed, 0.5% of all crashes were fatal. This indicates that persons in the same crash event have different injury experiences. Many factors influence injury patterns including seatbelt use, seat position, and vehicle safety equipment.

#### **Occupant Placement (Utah 2004)**

	Persons										
	Non-Injured I	Persons	Injured F	ersons	Persons	Killed	Total Persons				
Occupant Placement	#	%	#	%	#	%	#	%			
Driver	76,990	69.2%	19,496	65.8%	173	58.4%	96,659	68.5%			
Front Seat Passenger	18,016	16.2%	5,519	18.6%	52	17.6%	23,587	16.7%			
Back Seat Passenger	15,749	14.2%	3,044	10.3%	33	11.1%	18,826	13.3%			
Pedestrian	45	0.0%	675	2.3%	25	8.4%	745	0.5%			
Bicyclist	49	0.0%	648	2.2%	6	2.0%	703	0.5%			
Cargo Area	354	0.3%	234	0.8%	6	2.0%	594	0.4%			
Other	22	0.0%	22	0.1%	1	0.3%	45	0.0%			
Total	111,225	100.0%	29,638	100.0%	296	100.0%	141,159	100.0%			

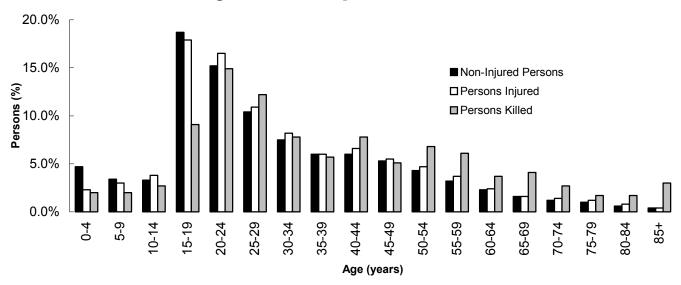
- The above table shows the injury levels by occupant placement in the crash.
- Pedestrians involved in a crash had the greatest risk of sustaining a fatal injury. In fact, pedestrians were 18
  times more likely than other crash occupants to sustain a fatal injury.

#### **Occupant Characteristics (Including Driver)**

#### **Age of Crash Occupants (Utah 2004)**

	Persons											
	Non-Injured	Persons	Injured F	Persons	Persons	s Killed	Total P	ersons				
Age	#	%	#	%	#	%	#	%				
0-4	5,209	4.7%	694	2.3%	6	2.0%	5,909	4.2%				
5-9	3,745	3.4%	903	3.0%	6	2.0%	4,654	3.3%				
10-14	3,644	3.3%	1,133	3.8%	8	2.7%	4,785	3.4%				
15-19	20,810	18.7%	5,293	17.9%	27	9.1%	26,130	18.5%				
20-24	16,959	15.2%	4,895	16.5%	44	14.9%	21,898	15.5%				
25-29	11,597	10.4%	3,236	10.9%	36	12.2%	14,869	10.5%				
30-34	8,346	7.5%	2,445	8.2%	23	7.8%	10,814	7.7%				
35-39	6,622	6.0%	1,791	6.0%	17	5.7%	8,430	6.0%				
40-44	6,687	6.0%	1,957	6.6%	23	7.8%	8,667	6.1%				
45-49	5,923	5.3%	1,643	5.5%	15	5.1%	7,581	5.4%				
50-54	4,817	4.3%	1,396	4.7%	20	6.8%	6,233	4.4%				
55-59	3,527	3.2%	1,092	3.7%	18	6.1%	4,637	3.3%				
60-64	2,608	2.3%	725	2.4%	11	3.7%	3,344	2.4%				
65-69	1,781	1.6%	488	1.6%	12	4.1%	2,281	1.6%				
70-74	1,362	1.2%	410	1.4%	8	2.7%	1,780	1.3%				
75-79	1,100	1.0%	358	1.2%	5	1.7%	1,463	1.0%				
80-84	708	0.6%	226	0.8%	5	1.7%	939	0.7%				
85+	443	0.4%	129	0.4%	9	3.0%	581	0.4%				
Missing	5,337	4.8%	824	2.8%	3	1.0%	6,164	4.4%				
Total	111,225	100.0%	29,638	100.0%	296	100.0%	141,159	100.0%				

#### **Age of Crash Occupants (Utah 2004)**



- Overall, the largest proportion of persons involved in crashes (18.5%) were aged 15 to 19 years. In addition, persons aged 15 to 19 years represented the highest proportion of persons injured (17.9%). The highest proportion of persons killed were aged 20 to 24 years (14.9%).
- While persons aged 65 years and older represented a small proportion of the persons involved in crashes (5.0%), individuals of this age group were 3 times more likely than all other age groups to sustain a fatal injury.

#### Occupant Characteristics (Including Driver)

#### **Gender of Crash Occupants (Utah 2004)**

	Persons											
	Non-Injured	Persons	Injured F	Injured Persons   Persons Killed			Total Persons					
Gender	#	%	#	%	#	%	#	%				
Female	47,261	42.5%	15,542	52.4%	104	35.1%	62,907	44.6%				
Male	61,405	55.2%	13,943	47.0%	192	64.9%	75,540	53.5%				
Missing	2,559	2.3%	153	0.5%	0	0.0%	2,712	1.9%				
Total	111,225	100.0%	29,638	100.0%	296	100.0%	141,159	100.0%				

- The above table shows that males comprised over half (53.5%) of all persons involved in crashes.
- While males had a higher percentage of fatal injuries (64.9%) than females, female occupants had a slightly higher percentage of injuries (52.4%) than males.

#### **Age and Gender of Fatalities (Utah 2004)**

		Fa	taliti	es		
	Fe	emale	ı	Male	1	<b>Total</b>
Age	#	%	#	%	#	%
0-4	2	1.9%	4	2.1%	6	2.0%
5-9	4	3.8%	2	1.0%	6	2.0%
10-14	2	1.9%	6	3.1%	8	2.7%
15-19	10	9.6%	17	8.9%	27	9.1%
20-24	17	16.3%	27	14.1%	44	14.9%
25-29	9	8.7%	27	14.1%	36	12.2%
30-34	6	5.8%	17	8.9%	23	7.8%
35-39	5	4.8%	12	6.3%	17	5.7%
40-44	11	10.6%	12	6.3%	23	7.8%
45-49	4	3.8%	11	5.7%	15	5.1%
50-54	3	2.9%	17	8.9%	20	6.8%
55-59	6	5.8%	12	6.3%	18	6.1%
60-64	5	4.8%	6	3.1%	11	3.7%
65-69	7	6.7%	5	2.6%	12	4.1%
70-74	2	1.9%	6	3.1%	8	2.7%
75-79	2	1.9%	3	1.6%	5	1.7%
80-84	3	2.9%	2	1.0%	5	1.7%
85+	5	4.8%	4	2.1%	9	3.0%
Missing	1	1.0%	2	1.0%	3	1.0%
Total	104	100.0%	192	100.0%	296	100.0%

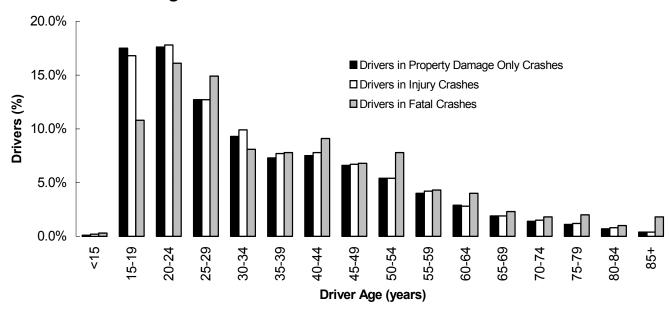
- Taking a closer look at the gender of crash fatalities shows that the highest percentage of fatalities involved males aged 20 to 24 years (14.1%) and 25 to 29 years (14.1%).
- For females, the highest percentage of fatalities also occurred in the 20 to 24 year (16.3%) age group.

#### **Driver Characteristics**

#### **Driver Age (Utah 2004)**

	Drivers										
	Drivers Invol	ved in	Drivers Inv	olved in	Drivers Inv	volved in	Total Dr	ivers			
	Property Damage C	only Crashes	Injury Cr	rashes	Fatal Cr	ashes	Involved in	Crashes			
Age	#	%	#	%	#	%	#	%			
<15	59	0.1%	80	0.2%	1	0.3%	140	0.1%			
15-19	10,538	17.5%	6,067	16.8%	43	10.8%	16,648	17.2%			
20-24	10,557	17.6%	6,423	17.8%	64	16.1%	17,044	17.6%			
25-29	7,633	12.7%	4,583	12.7%	59	14.9%	12,275	12.7%			
30-34	5,594	9.3%	3,577	9.9%	32	8.1%	9,203	9.5%			
35-39	4,406	7.3%	2,794	7.7%	31	7.8%	7,231	7.5%			
40-44	4,517	7.5%	2,834	7.8%	36	9.1%	7,387	7.6%			
45-49	3,975	6.6%	2,405	6.7%	27	6.8%	6,407	6.6%			
50-54	3,255	5.4%	1,937	5.4%	31	7.8%	5,223	5.4%			
55-59	2,393	4.0%	1,519	4.2%	17	4.3%	3,929	4.1%			
60-64	1,728	2.9%	1,008	2.8%	16	4.0%	2,752	2.8%			
65-69	1,140	1.9%	670	1.9%	9	2.3%	1,819	1.9%			
70-74	828	1.4%	545	1.5%	7	1.8%	1,380	1.4%			
75-79	683	1.1%	449	1.2%	8	2.0%	1,140	1.2%			
80-84	418	0.7%	274	0.8%	4	1.0%	696	0.7%			
85+	255	0.4%	160	0.4%	7	1.8%	422	0.4%			
Missing	2,137	3.6%		2.3%	5	1.3%	2,963	3.1%			
Total	60,116	100.0%	36,146	100.0%	397	100.0%	96,659	100.0%			

#### **Age of Drivers Involved in Crashes (Utah 2004)**



- The age distribution of drivers involved in property damage only crashes and injury crashes were similar.
   Drivers aged 15 to 24 years represented 35.1% of the drivers involved in property damage only crashes.
   Drivers aged 15 to 24 years represented 34.6% of the drivers involved in injury crashes.
- Drivers aged 20 to 29 represented the largest percentage of drivers involved in fatal crashes (31.0%).

#### **Driver Characteristics**

#### **Driver Gender (Utah 2004)**

	Drivers Drivers											
	Drivers Involv	ed in	Drivers Inv	olved in	Drivers Inv	olved in	Total Drivers					
	<b>Property Damage Or</b>	Injury Cr	ashes	Fatal Cr	ashes	Involved in	Crashes					
Gender	#	%	#	%	#	%	#	%				
Female	23,617	39.3%	15,960	44.2%	122	30.7%	39,699	41.1%				
Male	34,834	57.9%	19,656	54.4%	273	68.8%	54,763	56.7%				
Missing	1,665	2.8%	530	1.5%	2	0.5%	2,197	2.3%				
Total	60,116	100.0%	36,146	100.0%	397	100.0%	96,659	100.0%				

• The above table shows males represented 56.7% of all drivers involved in a crash, 68.8% of drivers involved in fatal crashes, and 54.4% of drivers involved in injury crashes.

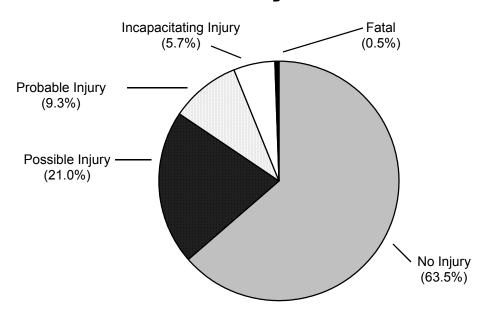
#### **Out-of-State Drivers (Utah 2004)**

Drivers												
		/ers		Drivers Drivers			Total					
		ved in rashes		Involved in Involved in njury Crashes Fatal Crashes			Drivers in Crashes					
	#	%	#	%	#	%	#	%				
Out-Of-State	5,013	8.3%	2,966	8.2%	58	14.6%	8,037	8.3%				
Utah	54,975	91.4%	33,102	91.6%	339	85.4%	88,416	91.5%				
Missing	128	0.2%	78	0.2%	0	0.0%	206	0.2%				
Total	60,116	100.0%	36,146	100.0%	397	100.0%	96,659	100.0%				

- Although out-of-state licensed drivers represented 8.3% of all drivers involved in crashes, they represented 14.6% of drivers involved in fatal crashes. This may be due in part to fatigued driving on out-of-state trips.
- There were several counties that had a disproportionate amount of outof-state drivers involved in crashes. Most notably, in Kane (45.6%), San
  Juan (44.4%), and Grand (43.3%) almost half of the drivers involved in
  crashes in these counties were out-of-state drivers. These drivers may
  place an extra burden on the residents and medical services in these
  counties.

	Drivers	3	
	All	Out-o	f-State
	<b>Drivers</b>	Driv	vers
County	#	#	%
Beaver	372	109	29.3%
Box Elder	1,437	248	17.3%
Cache	4,058	436	10.7%
Carbon	596	64	10.7%
Daggett	62	22	35.5%
Davis	9,089	559	6.2%
Duchesne	489	32	6.5%
Emery	377	138	36.6%
Garfield	179	69	38.5%
Grand	335	145	43.3%
Iron	1,313	276	21.0%
Juab	413	94	22.8%
Kane	270	123	45.6%
Millard	488	125	25.6%
Morgan	207	40	19.3%
Piute	35	7	20.0%
Rich	105	24	22.9%
Salt Lake	43,268	2,034	4.7%
San Juan	338	150	44.4%
Sanpete	447	15	3.4%
Sevier	645	173	26.8%
Summit	1,482	310	20.9%
Tooele	1,354	148	10.9%
Uintah	788	63	8.0%
Utah	15,357	1,497	9.7%
Wasatch	793	65	8.2%
Washington	4,126	562	13.6%
Wayne	76	14	18.4%
Weber	8,159	495	6.1%
Missing	1	0	0.0%
Total	96,659	8,037	8.3%

#### **Crash Severity (Utah 2004)**



NOTE: A crash may result in multiple injuries and/or fatalities.

- In the above graph, there were a total of 53,905 crashes.
- In 2004, 53,905 motor vehicle crashes occurred in Utah. Of those crashes, 63.5% resulted in property damage only, 36.0% resulted in some level of non-fatal injury, and 0.5% involved a fatality.

#### **Month of Year (Utah 2004)**

			Crashe	S					
		Property Damag	e Only (PDO)	Injur	у	Fata	ıl	Tota	al
	Days in	PDO	Rate	Injury	Rate	Fatal	Rate	All	Rate
	the Month	Crashes	per	Crashes	per	Crashes	per	Crashes	per
Month	#	#	Day	#	Day	#	Day	#	Day
January	31	3,111	100.4	1,386	44.7	9	0.29	4,506	145.4
February	29	3,201	110.4	1,434	49.4	14	0.48	4,649	160.3
March	31	2,385	76.9	1,396	45.0	26	0.84	3,807	122.8
April	30	2,387	79.6	1,556	51.9	17	0.57	3,960	132.0
May	31	2,362	76.2	1,625	52.4	23	0.74	4,010	129.4
June	30	2,504	83.5	1,644	54.8	27	0.90	4,175	139.2
July	31	2,582	83.3	1,674	54.0	25	0.81	4,281	138.1
August	31	2,640	85.2	1,741	56.2	34	1.10	4,415	142.4
September	30	2,839	94.6	1,749	58.3	27	0.90	4,615	153.8
October	31	3,210	103.5	1,757	56.7	20	0.65	4,987	160.9
November	30	3,329	111.0	1,699	56.6	20	0.67	5,048	168.3
December	31	3,672	118.5	1,762	56.8	18	0.58	5,452	175.9
Total	366	34,222	93.5	19,423	53.1	260	0.71	53,905	147.3

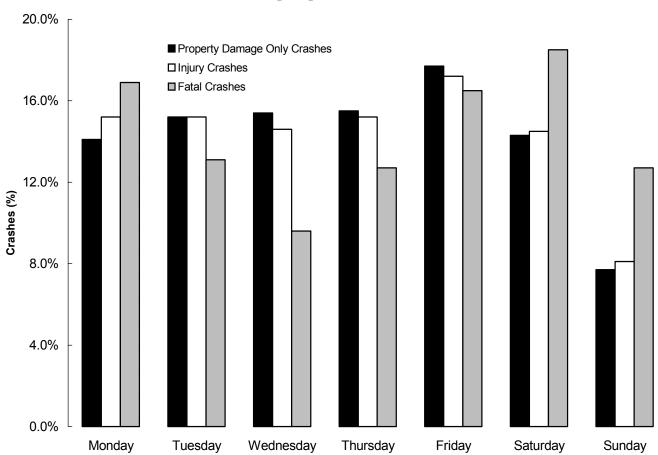
- The above table shows December had the highest rate of total crashes per day (175.9), while August (1.10), June (0.90) and September (0.90) had the highest rates of fatal crashes per day.
- September had the highest rate of injury crashes per day (58.3) followed closely by December (56.8).

#### Day of Week (Utah 2004)

	Crashes											
	Property Damag	ge Only Crashes	Injury (	Crashes	Fatal (	Crashes	Total C	crashes				
Day of Week	#	%	#	%	#	%	#	%				
Monday	4,833	14.1%	2,955	15.2%	44	16.9%	7,832	14.5%				
Tuesday	5,207	15.2%	2,951	15.2%	34	13.1%	8,192	15.2%				
Wednesday	5,285	15.4%	2,834	14.6%	25	9.6%	8,144	15.1%				
Thursday	5,297	15.5%	2,961	15.2%	33	12.7%	8,291	15.4%				
Friday	6,059	17.7%	3,339	17.2%	43	16.5%	9,441	17.5%				
Saturday	4,904	14.3%	2,809	14.5%	48	18.5%	7,761	14.4%				
Sunday	2,637	7.7%	1,574	8.1%	33	12.7%	4,244	7.9%				
Total	34,222	100.0%	19,423	100.0%	260	100.0%	53,905	100.0%				

NOTE: A crash may result in multiple injuries and/or fatalities.

#### **Crashes by Day of Week (Utah 2004)**



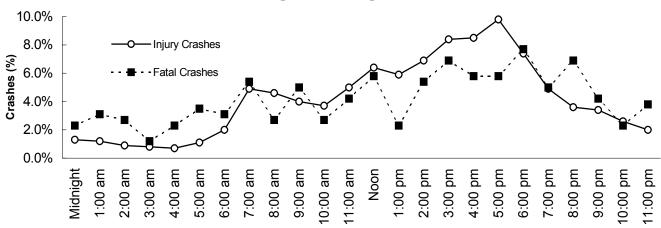
- The above table and graph show that the highest percentage of total crashes (17.5%), property damage only
  crashes (17.7%) and injury crashes (17.2%) occurred on Friday. The highest percentage of fatal crashes
  occurred on Saturday (18.5%).
- Sunday crashes represented 7.9% of all crashes, but accounted for 12.7% of fatal crashes. In fact, crashes
  occurring on Sunday were 1.7 times more likely to involve a fatality compared to crashes that occurred on
  other days of the week.

#### **Hour of Day (Utah 2004)**

Crashes										
	Property Damag	Injury (	Crashes	Fatal (	Crashes	Total Crashes				
Hour	#	%	#	%	#	%	#	%		
Midnight	461	1.3%	260	1.3%	6	2.3%	727	1.3%		
1:00 am	382	1.1%	238	1.2%	8	3.1%	628	1.2%		
2:00 am	322	0.9%	173	0.9%	7	2.7%	502	0.9%		
3:00 am	244	0.7%	149	0.8%	3	1.2%	396	0.7%		
4:00 am	230	0.7%	130	0.7%	6	2.3%	366	0.7%		
5:00 am	409	1.2%	222	1.1%	9	3.5%	640	1.2%		
6:00 am	826	2.4%	387	2.0%	8	3.1%	1,221	2.3%		
7:00 am	1,731	5.1%	945	4.9%	14	5.4%	2,690	5.0%		
8:00 am	1,738	5.1%	899	4.6%	7	2.7%	2,644	4.9%		
9:00 am	1,363	4.0%	777	4.0%	13	5.0%	2,153	4.0%		
10:00 am	1,367	4.0%	717	3.7%	7	2.7%	2,091	3.9%		
11:00 am	1,665	4.9%	974	5.0%	11	4.2%	2,650	4.9%		
Noon	2,005	5.9%	1,247	6.4%	15	5.8%	3,267	6.1%		
1:00 pm	2,003	5.9%	1,140	5.9%	6	2.3%	3,149	5.8%		
2:00 pm	2,340	6.8%	1,349	6.9%	14	5.4%	3,703	6.9%		
3:00 pm	2,687	7.9%	1,629	8.4%	18	6.9%	4,334	8.0%		
4:00 pm	2,759	8.1%	1,658	8.5%	15	5.8%	4,432	8.2%		
5:00 pm	3,233	9.4%	1,894	9.8%	15	5.8%	5,142	9.5%		
6:00 pm	2,521	7.4%	1,429	7.4%	20	7.7%	3,970	7.4%		
7:00 pm	1,738	5.1%	943	4.9%	13	5.0%	2,694	5.0%		
8:00 pm	1,263	3.7%	693	3.6%	18	6.9%	1,974	3.7%		
9:00 pm	1,230	3.6%	669	3.4%	11	4.2%	1,910	3.5%		
10:00 pm	976	2.9%	505	2.6%	6	2.3%	1,487	2.8%		
11:00 pm	729	2.1%	396	2.0%	10	3.8%	1,135	2.1%		
Total	34,222	100.0%	19,423	100.0%	260	100.0%	53,905	100.0%		

NOTE: A crash may result in multiple injuries and/or fatalities.

#### **Crashes by Hour of Day (Utah 2004)**



- In 2004, total crashes and injury crashes were more likely to occur between 2:00 pm and 6:00 pm, with a peak at 5:00 pm (evening rush hour).
- Fatal crashes followed a similar pattern with a peak at 6:00 pm.

#### **Crash Type (Utah 2004)**

	Crash	es						
	Property	Damage	Injury		Fatal		Total	
	Only Cr	ashes	Cras	shes	Crashes		Crashes	
Crash Type	#	%	#	%	#	%	#	%
Two Motor Vehicles	24,783	72.4%	13,491	69.5%	78	30.0%	38,352	71.1%
Ran Off Roadway - To the Right	2,318	6.8%	1,693	8.7%	67	25.8%	4,078	7.6%
Ran Off Roadway - To the Left	1,462	4.3%	1,088	5.6%	42	16.2%	2,592	4.8%
Motor Vehicle and Fixed Object	1,668	4.9%	764	3.9%	7	2.7%	2,439	4.5%
Motor Vehicle and Wild Animal	2,006	5.9%	152	0.8%	3	1.2%	2,161	4.0%
Other Non-Collision	719	2.1%	319	1.6%	8	3.1%	1,046	1.9%
Motor Vehicle and Other Object	661	1.9%	157	0.8%	1	0.4%	819	1.5%
Motor Vehicle and Bicycle	45	0.1%	626	3.2%	5	1.9%	676	1.3%
Motor Vehicle and Pedestrian	37	0.1%	583	3.0%	23	8.8%	643	1.2%
Overturned in Roadway	142	0.4%	316	1.6%	9	3.5%	467	0.9%
Motor Vehicle and Domestic Animal	265	0.8%	65	0.3%	2	0.8%	332	0.6%
Ran Off Roadway - Through Median	98	0.3%	117	0.6%	13	5.0%	228	0.4%
Motor Vehicle and Skates, Scooters, Skateboards	3	0.0%	39	0.2%	0	0.0%	42	0.1%
Motor Vehicle and Train	14	0.0%	13	0.1%	1	0.4%	28	0.1%
Missing	1	0.0%	0	0.0%	1	0.4%	2	0.0%
Total	34,222	100.0%	19,423	100.0%	260	100.0%	53,905	100.0%

NOTE: A crash may result in multiple injuries and/or fatalities.

- The majority of property damage only crashes (72.4%), injury crashes (69.5%) and fatal crashes (30.0%) occurred between two motor vehicles.
- Crashes between a motor vehicle and pedestrian represented 1.2% of all crashes, but accounted for 8.8% of fatal crashes resulting in an 8-fold increased risk of a fatality.
- In addition, when a vehicle ran off the roadway (to the right, to the left, or through the median), there was a 6-fold increased risk of a fatality.

#### **Collision Description (Utah 2004)**

Crashes										
	Property Damage C	Only Crashes	Injury C	rashes	Fatal C	rashes	Total C	rashes		
<b>Collision Description</b>	#	%	#	%	#	%	#	%		
Rear End	10,047	29.4%	6,199	31.9%	13	5.0%	16,259	30.2%		
Broadside	6,135	17.9%	5,134	26.4%	24	9.2%	11,293	20.9%		
Side Swipe	2,775	8.1%	727	3.7%	18	6.9%	3,520	6.5%		
Single Vehicle Rollover	1,076	3.1%	2,050	10.6%	109	41.9%	3,235	6.0%		
Bicyclist/Pedestrian Crash	82	0.2%	1,209	6.2%	28	10.8%	1,319	2.4%		
Single Vehicle Fixed Object	528	1.5%	300	1.5%	1	0.4%	829	1.5%		
Head-On	148	0.4%	206	1.1%	37	14.2%	391	0.7%		
Other	13,431	39.2%	3,598	18.5%	30	11.5%	17,059	31.6%		
Total	34,222	100.0%	19,423	100.0%	260	100.0%	53,905	100.0%		

NOTE: A crash may result in multiple injuries and/or fatalities.

- For all crashes and injury crashes, the leading collision types (excluding other) were rear end (30.2%) and broadside (20.9%).
- For fatal crashes, the leading collision types (excluding other) were single vehicle rollover (41.9%) and headon (14.2%).
- Head-on collisions were 25 times more likely, and single vehicle rollovers were 12 times more likely to result in a fatality than other collisions.

#### **Urban/Rural Location (Utah 2004)**

Crashes									
	Property Damage		Injury		Fatal		Total		
	Only Cra	ashes	Crashes		Crashes		Crashes		
Urban/Rural Location	#	%	#	%	#	%	#	%	
Rural Area - Up to 5,000	9,204	26.9%	4,601	23.7%	164	63.1%	13,969	25.9%	
Small Urban - 5,000 to 49,999	1,801	5.3%	1,028	5.3%	7	2.7%	2,836	5.3%	
Moderate Urban - 50,000 to 199,999	929	2.7%	451	2.3%	2	0.8%	1,382	2.6%	
Large Urban - 200,000 or More	22,056	64.4%	13,204	68.0%	87	33.5%	35,347	65.6%	
Missing	232	0.7%	139	0.7%	0	0.0%	371	0.7%	
Total	34,222	100.0%	19,423	100.0%	260	100.0%	53,905	100.0%	

NOTE: A crash may result in multiple injuries and/or fatalities.

- While the majority of all crashes (73.5%) as well as the majority of injury crashes (75.6%) occurred in small, moderate and large urban areas, the majority of fatal crashes occurred in rural areas (63.1%).
- In fact, crashes occurring in rural areas were 5 times more likely to result in a fatality than crashes in urban areas.

#### **Vehicle Type (Utah 2004)**

Vehicles										
	Veh	icles	Vehicles		Veh	icles				
	Invol	ved in	Invol	ved in	Invol	ved in	Total			
	PDO C	rashes	Injury Crashes		Fatal C	rashes	Vehicles			
Vehicle Type	#	%	#	%	#	%	#	%		
Passenger Car	33,868	54.0%	20,677	56.2%	160	39.4%	54,705	54.8%		
Light Truck, Van or SUV	25,123	40.1%	13,829	37.6%	174	42.9%	39,126	39.2%		
Large/Semi Truck	2,175	3.5%	868	2.4%	32	7.9%	3,075	3.1%		
Motorcycle	108	0.2%	831	2.3%	30	7.4%	969	1.0%		
School Bus	83	0.1%	36	0.1%	2	0.5%	121	0.1%		
Other	1,290	2.1%	501	1.4%	8	2.0%	1,799	1.8%		
Missing	49	0.1%	19	0.1%	0	0.0%	68	0.1%		
Total	62,696	100.0%	36,761	100.0%	406	100.0%	99,863	100.0%		

- The majority of vehicles involved in Utah crashes were passenger cars (54.8%).
- While motorcycles represented 1% of vehicles involved in crashes, crashes involving a motorcycle were 8 times more likely to be fatal than crashes involving other vehicles.
- Crashes involving a large/semi truck were 3 times more likely to be fatal than crashes involving other vehicles.

#### **Violations (Utah 2004)**

Violations									
	Drivers	Cited in	<b>Drivers Cited in</b>		Drivers	Cited in	Total		
	PDO C	rashes	Injury Crashes		Fatal Crashes		<b>Drivers Cited</b>		
Violations	#	%	#	%	#	%	#	%	
Following Too Close	3,768	18.7%	2,066	15.8%	1	3.3%	5,835	17.5%	
Failure to Yield Right-of-Way	3,223	16.0%	2,607	19.9%	2	6.7%	5,832	17.5%	
Improper Lookout	3,231	16.0%	2,001	15.3%	0	0.0%	5,232	15.7%	
Other Non-Moving Violations	1,323	6.6%	1,015	7.7%	3	10.0%	2,341	7.0%	
Speeding	1,356	6.7%	660	5.0%	5	16.7%	2,021	6.1%	
All Other Moving Violations	1,259	6.2%	717	5.5%	1	3.3%	1,977	5.9%	
Improper Lane Change	1,253	6.2%	531	4.1%	1	3.3%	1,785	5.4%	
Negligent Collision	1,118	5.5%	664	5.1%		3.3%	1,783	5.4%	
Failure to Stop at Red Light	722	3.6%	953	7.3%	0	0.0%	1,675	5.0%	
Driving Under the Influence	649	3.2%	763	5.8%	4	13.3%	1,416	4.3%	
Improper Turn (Failure to Signal)	655	3.3%	321	2.5%	1	3.3%	977	2.9%	
Failure to Stop at Stop Sign	244	1.2%	259	2.0%	0	0.0%	503	1.5%	
Hit and Run	332	1.6%	113	0.9%	2	6.7%	447	1.3%	
Improper Backing	328	1.6%	45	0.3%	0	0.0%	373	1.1%	
Reckless Driving	187	0.9%	144	1.1%		3.3%	332	1.0%	
Improper Passing	189	0.9%	67	0.5%	0	0.0%	256	0.8%	
Wrong Side of Road	137	0.7%	107	0.8%	1	3.3%	245	0.7%	
Improper Start or Stop	170	0.8%	60	0.5%	0	0.0%	230	0.7%	
Vehicle Homicide	0	0.0%	0	0.0%		23.3%	7	0.0%	
Wrong Way on One-Way Street	3	0.0%	4	0.0%		0.0%	7	0.0%	
Total	20,147	100.0%	13,097	100.0%	30	100.0%	33,274	100.0%	

- In 2004, there were 96,659 drivers involved in a crash. Officers at the scene of the crash cited 30,933 (34.4%) of those drivers for a traffic violation.
- Overall, drivers involved in crashes were cited most often for "following too close" (17.5%) and "failure to yield right-of-way" (17.5%).
- The leading violations in fatal crashes were "vehicle homicide" (23.3%), "speeding" (16.7%) and "driving under the influence" (13.3%).
- Drivers cited for "driving under the influence" were 4 times more likely to be involved in a fatal crash than drivers cited for other violations.

#### **Contributing Factors (Utah 2004)**

	Contrib	uting Fa	actors					
	Cont	Factors	n:					
	Property I	Damage	Injury		Fatal		To	tal
	Only Cr	ashes	Crashes		Crashes		Crashes	
Contributing Factors	#	%	#	%	#	%	#	%
Improper Lookout	10,732	24.8%	6,168	23.8%	29	7.5%	16,929	24.3%
Failed to Yield Right of Way	5,475	12.7%	4,059	15.7%	16	4.1%		13.7%
Followed Too Closely	5,941	13.7%	3,266	12.6%	7	1.8%		13.3%
Speed Too Fast	4,943	11.4%	2,840	11.0%	74	19.1%		11.3%
Other Improper Driving	3,849	8.9%	2,307	8.9%	61	15.7%		8.9%
Hit and Run	1,776	4.1%	615	2.4%	2	0.5%		3.4%
Made Improper Turn	1,615	3.7%	664	2.6%	6	1.5%		3.3%
Disregard Traffic Signal	960	2.2%	1,154	4.5%	7	1.8%		3.1%
Driving Under the Influence	642	1.5%	734	2.8%	30	7.7%		2.0%
Improper Backing	923	2.1%	87	0.3%	0	0.0%		1.5%
Improper Overtaking	705	1.6%	268	1.0%	8	2.1%		1.4%
Drove Left of Center	547	1.3%	383	1.5%	32	8.2%	962	1.4%
Other Driver Distractions	493	1.1%	434	1.7%	9	2.3%	936	1.3%
Asleep	396	0.9%	452	1.7%	19	4.9%	867	1.2%
Object in Roadway	560	1.3%	199	0.8%	4	1.0%	763	1.1%
Non-Contact Vehicle Involved	416	1.0%	260	1.0%	10	2.6%	686	1.0%
Passed Stop Sign	283	0.7%	312	1.2%	1	0.3%	596	0.9%
Fatigued	264	0.6%	267	1.0%	20	5.2%		0.8%
Other Defective Condition of Vehicle	311	0.7%	111	0.4%	2	0.5%	424	0.6%
Had Been Drinking	161	0.4%	176	0.7%	10	2.6%	347	0.5%
Tires Defective	229	0.5%	105	0.4%	7	1.8%	341	0.5%
Aggressive Driving	169	0.4%	124	0.5%	9	2.3%	302	0.4%
Cargo Loss or Shifted	220	0.5%	62	0.2%	1	0.3%	283	0.4%
Brakes Defective	161	0.4%	94	0.4%	3	0.8%	258	0.4%
Improper Parking	207	0.5%	48	0.2%	0	0.0%	255	0.4%
Sick or III	58	0.1%	144	0.6%	1	0.3%	203	0.3%
Wrong Side of Road	104	0.2%	71	0.3%	7	1.8%	182	0.3%
Towed Vehicle	132	0.3%	36	0.1%	0	0.0%	168	0.2%
Driver Using Cell Phone	87	0.2%	75	0.3%	2	0.5%	164	0.2%
Under the Influence of Drugs	61	0.1%	77	0.3%	3	0.8%	141	0.2%
Failed to Signal	97	0.2%	35	0.1%	0	0.0%	132	0.2%
Windshield Not Clear	74	0.2%	51	0.2%	2	0.5%	127	0.2%
Vehicle Rolling in Traffic Lane	73	0.2%	36	0.1%	2	0.5%	111	0.2%
Non-Collision (Fire)	96	0.2%	7	0.0%	0	0.0%	103	0.1%
Downhill Runaway	73	0.2%	27	0.1%	1	0.3%	101	0.1%
Stolen	51	0.1%	36	0.1%	0	0.0%	87	0.1%
Jackknife	69	0.2%	18	0.1%	0	0.0%	87	0.1%
Separation of Units	71	0.2%	8	0.0%	1	0.3%	80	0.1%
Headlights Insufficient or Out	37	0.1%	37	0.1%	0	0.0%	74	0.1%
Other Lights or Reflectors Defective	43	0.1%	19	0.1%	0	0.0%	62	0.1%
Steering Mechanism Defective	41	0.1%	19	0.1%	0	0.0%	60	0.1%
Wrong Way on One-Way Street	7	0.0%	7	0.0%	2	0.5%	16	0.0%
Other	83	0.2%	24	0.1%	0	0.0%	107	0.2%
Total	43,235	100.0%	25,916	100.0%	388	100.0%	69,539	100.0%

- Contributing factors were coded by the police officer at the scene of the crash for each vehicle involved in the
  crash. The officer may record no contributing factor or up to two different contributing factors.
- "Improper lookout" was the leading contributing factor for vehicles involved in property damage only crashes (24.8%) and injury crashes (23.8%).
- "Speed too fast" was the leading contributing factor for vehicles involved in fatal crashes (19.1%).

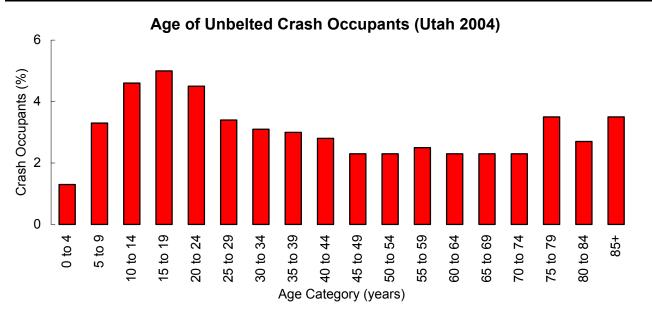
# Occupant Protection 2004

# **OCCUPANT PROTECTION**

Failure to "buckle up" contributes to more fatalities than any other traffic-safety-related behavior.

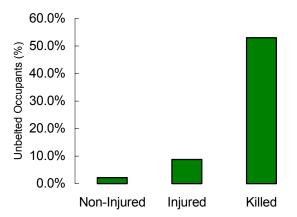
### Did you know that in 2004 . . .

- Unbelted crash occupants were 31 times more likely to die in a crash than belted crash occupants.
- An unbelted crash occupant was killed in Utah every 2 days.



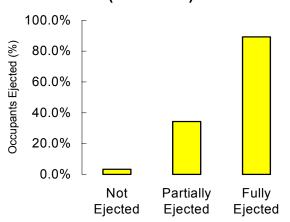
The highest percentage of unbelted crash occupants were aged 15 to 19 years (5.0%)

### Injury Severity of Unbelted Occupants (Utah 2004)



- The above graph shows that 53.0% of crash occupants killed in a crash were unbelted.
- The majority of persons who survived a crash reported wearing a seatbelt.

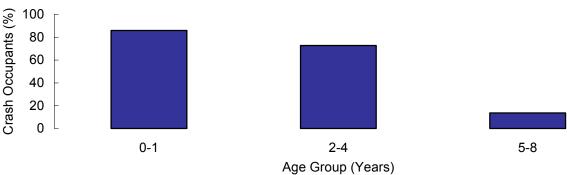
### Ejection and Seatbelt Use (Utah 2004)



 The above graph shows that 89.2% of crash occupants fully ejected from a motor vehicle were unbelted. Only 3.3% of crash occupants not ejected from a motor vehicle were unbelted.

# OCCUPANT PROTECTION

### Percent of Children in Crashes Using Child Safety Seats (Aged 0 to 8 years)



- While 86.0% of 0 to 1 year olds were reported as being in a child safety seat at the time of the crash, 72.8% of 2 to 4 year olds, and 13.7% of 5 to 8 year olds were reported as being in a child safety seat.
- The decrease in child safety seat use for children aged 2 to 8 years is concerning. The National Highway Traffic Safety Administration recommends that older children ride in belt-positioning booster seats until they are approximately 80 pounds and can use an adult-size lap and shoulder belt system. The percentages of child safety seat use in the above graph indicate that children are often moved to adult-sized seatbelts prematurely.

### Child Safety Seat Recommendations:

- Infants should be placed in a rear-facing safety seat until they are at least 20 pounds AND one year of age.
- NEVER place a rear-facing child safety seat in the front seat of a vehicle with a passenger side air bag.
- Children over one year of age weighing 20-40 pounds should ride in forward facing child safety seats.
- Older children (approximately 4-8 years of age) should ride in belt-positioning booster seats until they are approximately 80 pounds and can use an adult-size lap and shoulder belt system.
- Avoid using secondhand child safety seats especially if it does not have the original instruction booklet, if
  it has been used in a crash, it is does not have the manufacturer's date and model number on it, or if it is
  more than six years old.
- If your car has lap/shoulder combination belts, it could be critical to use a locking clip to properly secure your safety seat to the car. Consult the vehicle owner's manual.
- The safest place for any child aged 12 and under is in the back seat of the vehicle.

#### Seatbelt Recommendations:

- Always use both the lap and shoulder belt. When worn properly, the shoulder belt should fit across the collar bone and the lap belt should fit low over the hips.
- Never place the shoulder strap under your arm or behind your back.
- Use belt-positioning booster seats for children who have outgrown their toddler safety seat (at about 4 years of age and 40 pounds). Booster seats help position an adult-size seatbelt for a safer fit on children.

### Safety Restraint Laws (Effective July 1, 2000):

- Utah law requires all motor vehicle occupants to be wearing a seatbelt when traveling in a motor vehicle. This is a secondary law which means a person may be issued a citation and subject to a \$45 fine only when the police officer has stopped the vehicle for another reason.
- The law is primary for drivers and passengers under age 19 years.
  - ⇒ Children age 4 years and under must ride in an approved child safety seat; and
  - ⇒ Children aged 5 to 19 years must ride in an approved child safety seat or safety belt.

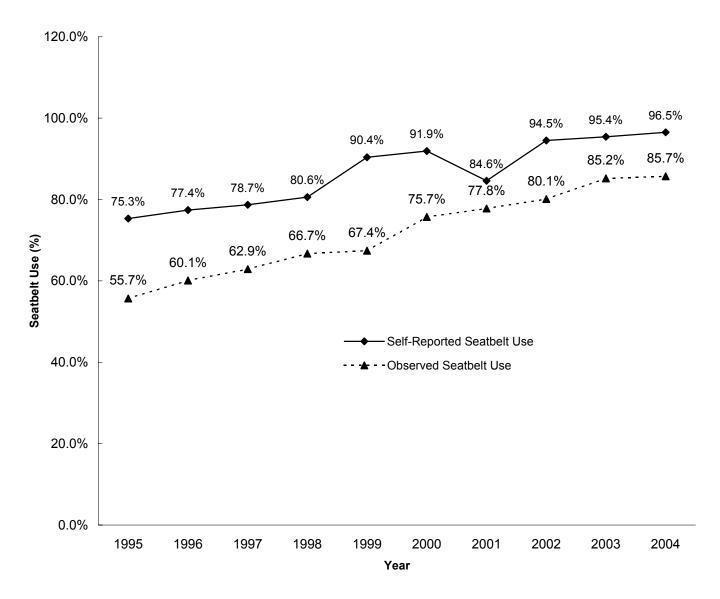
This primary law means a person may be issued a citation and subject to a fine of not more than \$45 if a law enforcement officer notices children are not properly restrained.

### **Section 2: Occupant Protection**

Section 2: Occupant Protection 2004	
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### Trends

### Seatbelt Use of Drivers and Front Seat Passengers In Crashes and Observational Studies (Utah 1995-2004)



- Historically, there have been differences between self-reported seatbelt use of people involved in crashes, and seatbelt use that is observed by researchers in observational studies.
- The difference between self-reported seatbelt use of people involved in crashes, and observed seatbelt use may be due to over-reporting by the people involved in crashes.
- The above graph compares the self-reported and observed percentage of seatbelt use by drivers and frontseat passengers.
- While there is some year-to-year variation, the ten-year trend shows an increase of seatbelt use by drivers and front-seat passengers in both crashes and observational studies.
- In 2004, the observational seatbelt use increased to 85.7% from 85.2% in 2003; a 0.6% increase.
- The 2004 self-reported seatbelt use percentage of people involved in crashes was 96.5%; a 1% increase from 2003.

### Counties

### **Seatbelt Use of Persons Killed by County (Utah 2004)**

	Persor	าร	
		<b>Fatalities</b>	Usage
County	Seatbelt Use	#	%
Beaver	Belted	0	0.0%
	Unbelted	1	100.0%
Box Elder	Belted	5	71.4%
	Unbelted	2	28.6%
Cache	Belted	5	50.0%
	Unbelted	5	50.0%
Carbon	Belted	1	25.0%
	Unbelted	3	75.0%
Daggett	Belted	0	0.0%
	Unbelted	0	0.0%
Davis	Belted	3	75.0%
	Unbelted	1	25.0%
Duchesne	Belted	0	0.0%
	Unbelted	3	100.0%
Emery	Belted	8	72.7%
	Unbelted	3	27.3%
Garfield	Belted	0	0.0%
	Unbelted	0	0.0%
Grand	Belted	5	62.5%
	Unbelted	3	37.5%
Iron	Belted	1	16.7%
	Unbelted	5	83.3%
Juab	Belted	0	0.0%
	Unbelted	2	100.0%
Kane	Belted	2	66.7%
	Unbelted	1	33.3%
Millard	Belted	3	23.1%
	Unbelted	10	76.9%
Morgan	Belted	0	0.0%
	Unbelted	1	100.0%

	Person	S	
		Fatalities	Usage
County	Seatbelt Use	#	%
Piute	Belted	0	0.0%
	Unbelted	1	100.0%
Rich	Belted	2	66.7%
	Unbelted	1	33.3%
Salt Lake	Belted	23	69.7%
	Unbelted	10	30.3%
San Juan	Belted	1	50.0%
	Unbelted	1	50.0%
Sanpete	Belted	1	50.0%
	Unbelted	1	50.0%
Sevier	Belted	0	0.0%
	Unbelted	4	100.0%
Summit	Belted	3	50.0%
	Unbelted	3	50.0%
Tooele	Belted	6	28.6%
	Unbelted	15	71.4%
Uintah	Belted	0	0.0%
	Unbelted	3	100.0%
Utah	Belted	8	42.1%
	Unbelted	11	57.9%
Wasatch	Belted	4	57.1%
	Unbelted	3	42.9%
Washington	Belted	3	50.0%
	Unbelted	3	50.0%
Wayne	Belted	0	0.0%
	Unbelted	0	0.0%
Weber	Belted	3	60.0%
	Unbelted	2	40.0%
Statewide	Belted	87	47.0%
	Unbelted	98	53.0%

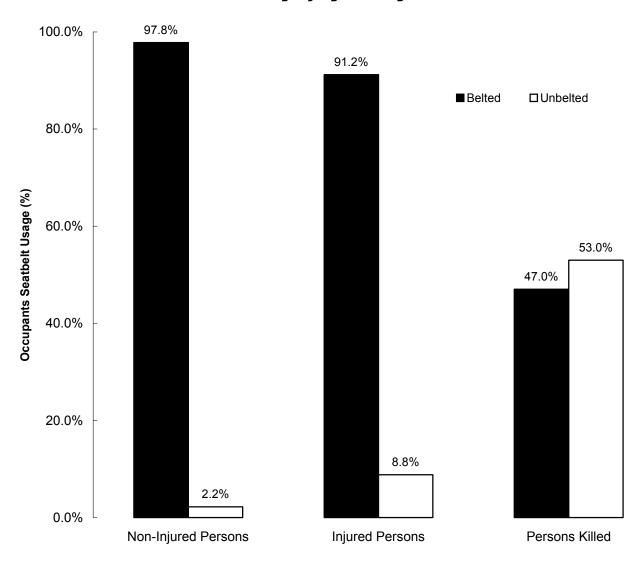
- The above table shows the seatbelt use by county of persons killed in motor vehicle crashes.
- Seatbelt use is reported for occupants in a passenger car, light truck, van or SUV. Occupants are considered "belted" if they were coded as using a shoulder/lap belt, lap belt or a child safety seat at the scene of the crash.
- While seatbelt use is self-reported by the crash occupant in the majority of crashes, the officer determines seatbelt use in the event of a fatal or severe injury crash.

### **Seatbelt Use by Injury Severity (Utah 2004)**

Persons											
	Non-Injured	Persons	Injured F	Persons	Person	s Killed	Total Persons				
Seatbelt Use	#	%	#	%	#	%	#	%			
Belted	92,661	97.8%	21,954	91.2%	87	47.0%	114,702	96.4%			
Unbelted	2,066	2.2%	2,111	8.8%	98	53.0%	4,275	3.6%			
Total	94,727	100.0%	24,065	100.0%	185	100.0%	118,977	100.0%			

NOTE: Seatbelt use may be inflated due to over-reporting by the people involved in crashes.

### **Seatbelt Use by Injury Severity (Utah 2004)**



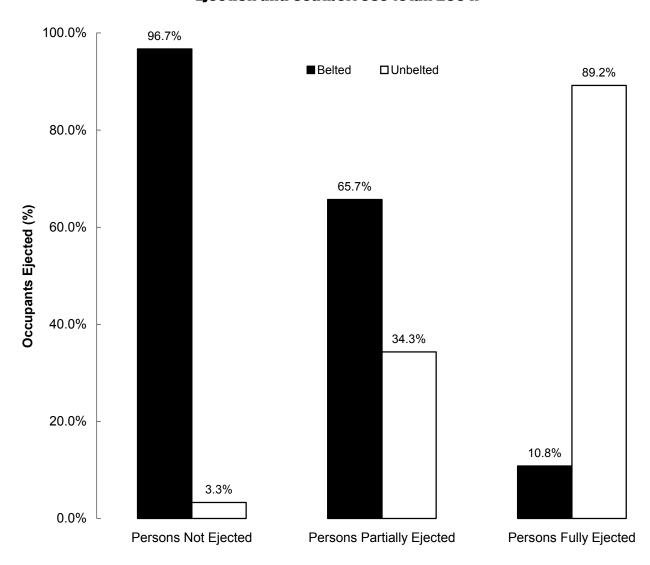
- The majority of persons who survived a crash reported wearing a seatbelt; non-injured persons (97.8%), injured persons (91.2%).
- In contrast, less than half (47.0%) of the persons killed in a crash were belted.
- In fact, unbelted crash occupants were 31 times more likely to be killed than belted crash occupants.

### **Ejection and Seatbelt Use (Utah 2004)**

Persons									
	Persons Not Ejected   Persons Partially Ejected   Persons Fully Ejected						Total P	<b>Total Persons</b>	
Seatbelt Use	#	%	#	%	#	%	#	%	
Belted	95,997	96.7%	67	65.7%	32	10.8%	96,096	96.4%	
Unbelted	3,285	3.3%	35	34.3%	265	89.2%	3,585	3.6%	
Total	99,282	100.0%	102	100.0%	297	100.0%	99,681	100.0%	

NOTE: Seatbelt use may be inflated due to over-reporting by the people involved in crashes.

### **Ejection and Seatbelt Use (Utah 2004)**



- The above table and graph show an inverse relationship between ejection from a motor vehicle and seatbelt use.
- The majority of crash occupants fully ejected from a motor vehicle (89.2%) were reported as being unbelted, compared to only 3.3% of crash occupants not ejected from a motor vehicle.

### Seatbelt Use by Age of Crash Occupants (Utah 2004)

			Р	ersons					
		Non-Injured	Persons	Injured P	ersons	Persons	Killed	Total Pe	rsons
Age	Seatbelt Use	#	%	#	%	#	%	#	%
0-4	Belted	4,833	99.0%	552	95.5%	4	100.0%	5,389	98.7%
	Unbelted	47	1.0%	26	4.5%	0	0.0%	73	1.3%
5-9	Belted	3,408	98.1%	602	89.7%	2	66.7%	4,012	96.7%
	Unbelted	67	1.9%	69	10.3%	1	33.3%	137	3.3%
10-14	Belted	3,240	97.3%	663	87.2%	3	60.0%	3,906	95.4%
	Unbelted	90	2.7%	97	12.8%	2	40.0%	189	4.6%
15-19	Belted	18,222	97.0%	3,881	86.6%	8	42.1%	22,111	95.0%
	Unbelted	562	3.0%	599	13.4%	11	57.9%	1,172	5.0%
20-24	Belted	14,689	97.3%	3,633	89.0%	12	36.4%	18,334	95.5%
	Unbelted	400	2.7%	448	11.0%	21	63.6%	869	4.5%
25-29	Belted	9,864	97.9%	2,451	91.8%	9	37.5%	12,324	96.6%
	Unbelted	207	2.1%	218	8.2%	15	62.5%	440	3.4%
30-34	Belted	7,060	98.2%	1,886	92.6%	7	43.8%	8,953	96.9%
	Unbelted	132	1.8%	150	7.4%	9	56.3%	291	3.1%
35-39	Belted	5,539	98.2%	1,341	92.5%	4	40.0%	6,884	97.0%
	Unbelted	100	1.8%	108	7.5%	6	60.0%	214	3.0%
40-44	Belted	5,558	98.4%	1,445	93.3%	4	28.6%	7,007	97.2%
	Unbelted	88	1.6%	104	6.7%	10	71.4%	202	2.8%
45-49	Belted	4,868	98.3%	1,243	95.4%	4	66.7%	6,115	97.7%
	Unbelted	83	1.7%	60	4.6%	2	33.3%	145	2.3%
50-54	Belted	4,016	98.5%	1,097	95.1%	5	50.0%	5,118	97.7%
	Unbelted	61	1.5%	56	4.9%	5	50.0%	122	2.3%
55-59	Belted	2,914	98.3%	838	95.2%	4	40.0%	3,756	97.5%
	Unbelted	50	1.7%	42	4.8%	6	60.0%	98	2.5%
60-64	Belted	2,173	98.5%	584	95.4%	3	60.0%	2,760	97.7%
	Unbelted	34	1.5%	28	4.6%	2	40.0%	64	2.3%
65-69	Belted	1,499	98.3%	401	96.2%	6	75.0%	1,906	97.7%
	Unbelted	26	1.7%	16	3.8%	2	25.0%	44	2.3%
70-74	Belted	1,184	98.3%	334	96.3%	2	50.0%	1,520	97.7%
	Unbelted	21	1.7%	13	3.7%	2	50.0%	36	2.3%
75-79	Belted	963	97.4%	291	93.9%	3	100.0%	1,257	96.5%
	Unbelted	26	2.6%	19	6.1%	0	0.0%	45	3.5%
80-84	Belted	614	98.2%	186	94.9%	1	50.0%	801	97.3%
	Unbelted	11	1.8%	10	5.1%	1	50.0%	22	2.7%
85+	Belted	387	96.8%	105	97.2%	2	50.0%	494	96.5%
	Unbelted	13	3.3%	3	2.8%	2	50.0%	18	3.5%
Unknown	Belted	1,630	97.1%	421	90.3%	4	80.0%	2,055	95.6%
	Unbelted	48	2.9%	45	9.7%	1	20.0%	94	4.4%
Total	Belted	92,661	97.8%	21,954	91.2%	87	47.0%		
	Unbelted	2,066	2.2%	2,111	8.8%	98	53.0%	4,275	3.6%

NOTE: Seatbelt use may be inflated due to over-reporting by the people involved in crashes.

- Overall, crash occupants aged 15 to 19 years had the highest percentage of being unbelted (5.0%).
- For injured crash occupants, persons aged 15 to 19 years were again the most likely to be unbelted (13.4%).
- For persons killed, crash occupants aged 40 to 44 years had the highest percentage of being unbelted (71.4%).

### **Seatbelt Use by Gender of Crash Occupants (Utah 2004)**

	Persons											
		Non-Injured	l Persons	Injured P	Persons	Persons	Killed	Total Pe	<b>Total Persons</b>			
Gender	Seatbelt Use	#	%	#	%	#	%	#	%			
F	Belted	42,194	98.2%	12,583	92.9%	36	49.3%	54,813	96.9%			
	Unbelted	775	1.8%	962	7.1%	37	50.7%	1,774	3.1%			
М	Belted	50,393	97.5%	9,355	89.1%	51	45.5%	59,799	96.0%			
	Unbelted	1,285	2.5%	1,148	10.9%	61	54.5%	2,494	4.0%			
Unknown	Belted	74	92.5%	16	94.1%	0	0.0%	90	92.8%			
	Unbelted	6	7.5%	1	5.9%	0	0.0%	7	7.2%			
Total	Belted	92,661	97.8%	21,954	91.2%	87	47.0%	114,702	96.4%			
	Unbelted	2,066	2.2%	2,111	8.8%	98	53.0%	4,275	3.6%			

NOTE: Seatbelt use may be inflated due to over-reporting by the people involved in crashes.

- Overall, female (96.9%) and male crash occupants (96.0%) reported similar seatbelt use.
- For injured crash occupants, reported seatbelt use was greater for females (92.9%) than for males (89.1%).
- For persons killed, female crash occupants had higher seatbelt use (49.3%) than male crash occupants (45.5%). In fact, the majority of male occupants killed in a crash were unbelted (54.5%).
- In addition, reported seatbelt use for fatalities was almost half of that reported for total crash occupants regardless of gender.

### **Seatbelt Use by Occupant Placement (Utah 2004)**

	Persons									
		Non-Injured	Persons	Injured P	ersons	Persons	Killed	<b>Total Persons</b>		
Occupant Placement	Seatbelt Use	#	%	#	%	#	%	#	%	
Driver	Belted	62,973	98.0%	15,162	92.6%	58	49.2%	78,193	96.9%	
	Unbelted	1,275	2.0%	1,204	7.4%	60	50.8%	2,539	3.1%	
Front Seat Passenger	Belted	15,767	97.4%	4,442	88.9%	18	47.4%	20,227	95.3%	
	Unbelted	428	2.6%	553	11.1%	20	52.6%	1,001	4.7%	
Back Seat Passenger	Belted	13,921	97.5%	2,350	86.9%	11	37.9%	16,282	95.7%	
	Unbelted	363	2.5%	354	13.1%	18	62.1%	735	4.3%	
Total	Belted	92,661	97.8%	21,954	91.2%	87	47.0%	114,702	96.4%	
	Unbelted	2,066	2.2%	2,111	8.8%	98	53.0%	4,275	3.6%	

NOTE: Seatbelt use may be inflated due to over-reporting by the people involved in crashes.

Reported seatbelt use did not vary substantially by seating location. Among all occupants, drivers reported
the highest seatbelt use (96.9%) compared to persons in other seating locations.

### **Air Bags and Seatbelt Use (Utah 2004)**

		Perso	ons (Who	se Airba	g Deploy	/ed)			
		Non-Injured	Persons	Injured P	ersons	Persons	s Killed	Total P	ersons
Age	Seatbelt Use	#	%	#	%	#	%	#	%
0-4	Belted	13	100.0%	2	40.0%	1	100.0%	16	84.2%
	Unbelted	0	0.0%	3	60.0%	0	0.0%	3	15.8%
5-9	Belted	11	91.7%	9	81.8%	0	0.0%	20	87.0%
	Unbelted	1	8.3%	2	18.2%	0	0.0%	3	13.0%
10-14	Belted	14	100.0%	21	87.5%	0	0.0%	35	92.1%
	Unbelted	0	0.0%	3	12.5%	0	0.0%	3	7.9%
15-19	Belted	283	95.9%	317	87.6%	2	66.7%	602	91.2%
	Unbelted	12	4.1%	45	12.4%	1	33.3%	58	8.8%
20-24	Belted	275	96.8%	303	86.3%	3	75.0%	581	90.9%
	Unbelted	9	3.2%	48	13.7%	1	25.0%	58	9.1%
25-29	Belted	139	96.5%	181	94.8%	3	100.0%	323	95.6%
	Unbelted	5	3.5%	10	5.2%	0	0.0%	15	4.4%
30-34	Belted	93	98.9%	145	92.9%	1	50.0%	239	94.8%
	Unbelted	1	1.1%	11	7.1%	1	50.0%	13	5.2%
35-39	Belted	60	98.4%	87	95.6%	0	0.0%	147	96.7%
	Unbelted	1	1.6%	4	4.4%	0	0.0%	5	3.3%
40-44	Belted	60	98.4%	92	94.8%	2	100.0%	154	96.3%
	Unbelted	1	1.6%	5	5.2%	0	0.0%	6	3.8%
45-49	Belted	57	100.0%	80	95.2%	2	100.0%	139	97.2%
	Unbelted	0	0.0%	4	4.8%	0	0.0%	4	2.8%
50-54	Belted	51	98.1%	68	97.1%	0	0.0%	119	97.5%
	Unbelted	1	1.9%	2	2.9%	0	0.0%	3	2.5%
55-59	Belted	24	92.3%	58	95.1%	2	66.7%	84	93.3%
	Unbelted	2	7.7%	3	4.9%	1	33.3%	6	6.7%
60-64	Belted	26	96.3%	44	97.8%	1	50.0%	71	95.9%
	Unbelted	1	3.7%	1	2.2%	1	50.0%	3	4.1%
65-69	Belted	15	100.0%	35	100.0%	0	0.0%	50	100.0%
	Unbelted	0	0.0%	0	0.0%	0	0.0%	0	0.0%
70-74	Belted	15	93.8%	27	100.0%	0	0.0%	42	97.7%
	Unbelted	1	6.3%	0	0.0%	0	0.0%	1	2.3%
75-79	Belted	8	100.0%	27	90.0%	0	0.0%	35	92.1%
	Unbelted	0	0.0%	3	10.0%	0	0.0%	3	7.9%
80-84	Belted	6	100.0%	27	100.0%	0	0.0%	33	100.0%
	Unbelted	0	0.0%	0	0.0%	0	0.0%	0	0.0%
85+	Belted	1	100.0%	8	100.0%	1	100.0%	10	100.0%
	Unbelted	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Unknown	Belted	14	100.0%	19	90.5%	0	0.0%	33	94.3%
	Unbelted	0	0.0%	2	9.5%	0	0.0%	2	5.7%
Total	Belted	1,165	97.1%	1,550	91.4%	18	78.3%	2,733	93.6%
	Unbelted	35	2.9%	146	8.6%	5	21.7%	186	6.4%

NOTE: Seatbelt use may be inflated due to over-reporting by the people involved in crashes.

- The above table shows the age of crash occupants whose air bag deployed and the percentage of belt use.
- A majority of the total (93.6%) and injured occupants (91.4%) whose air bag deployed were wearing a seatbelt. However, fewer (78.3%) persons killed, whose air bag deployed, were wearing a seatbelt.
- Airbags are a supplemental safety device, and were designed to be used with a seatbelt. Therefore, airbags are most effective when used in conjunction with a seatbelt.

### **Children and Restraint Use**

### **Restraint Use for Children Age 0 to 8 Years by Seating Location (Utah 2004)**

	Children										
		Children A	Ages 0-1	Children A	Ages 2-4	Children A	Ages 5-8	Total Children			
Seating Location	Restraint Use	#	%	#	%	#	%	#	%		
Front Middle Seat	Child Safety Seat	18	81.8%	16	32.7%	6	8.0%	40	27.4%		
	Other Belted	2	9.1%	29	59.2%	65	86.7%	96	65.8%		
	Unbelted	2	9.1%	4	8.2%	4	5.3%	10	6.8%		
Front Right Seat	Child Safety Seat	47	66.2%	93	46.5%	28	4.5%	168	18.9%		
	Other Belted	23	32.4%	102	51.0%	551	89.0%	676	76.0%		
	Unbelted	1	1.4%	5	2.5%	40	6.5%	46	5.2%		
Back Seat	Child Safety Seat	1,623	86.8%	2,433	75.0%	533	15.4%	4,589	53.6%		
	Other Belted	230	12.3%	771	23.8%	2,825	81.9%	3,826	44.7%		
	Unbelted	17	0.9%	41	1.3%	92	2.7%	150	1.8%		
Total	Child Safety Seat	1,688	86.0%	2,542	72.8%	567	13.7%	4,797	50.0%		
	Other Belted	255	13.0%	902	25.8%	3,441	83.0%	4,598	47.9%		
	Unbelted	20	1.0%	50	1.4%	136	3.3%	206	2.1%		

- The above table shows that as children's age increased, so did their likelihood to be unbelted. The unbelted percentage for children aged 0 to 1 years was 1.0%, while the unbelted percentage for children aged 5 to 8 years was 3.3%.
- The majority of children aged 0 to 1 years (86.0%) were in a child safety seat at the time of the crash, compared to 72.8% of 2 to 4 year olds, and 13.7% of 5 to 8 year olds.
- Children aged 0 to 1 years were 2 times more likely to be in a child safety seat than children between the ages of 2 to 4 years.
- The decrease in child safety seat use for children aged 2 to 4 years and 5 to 8 years is concerning. The
  National Highway Traffic Safety Administration recommends that older children ride in belt-positioning booster
  seats until they are approximately 80 pounds and can use an adult-size lap and shoulder belt system. The
  percentages of child safety seat use in the above table indicate that children are often moved to adult-sized
  seatbelts prematurely.

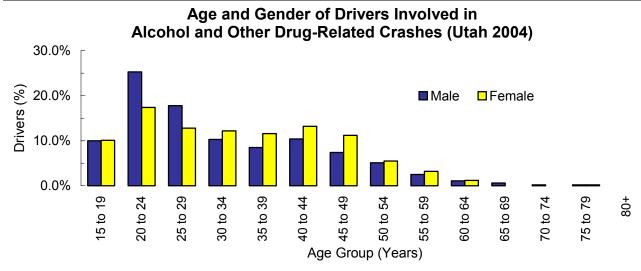
# Alcohol and Other Drug-Related Crashes 2004

# ALCOHOL AND OTHER DRUGS



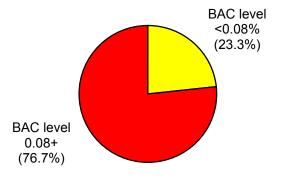
### Did you know that in 2004. . .

- There were 1,961 alcohol and other drug-related crashes in Utah that resulted in 1,078 injuries and 72 fatalities.
- Alcohol and other drug-related fatalities increased 53% from 2003.
- Alcohol and other drug-related crashes were 9 times more likely to be fatal than other types of crashes.



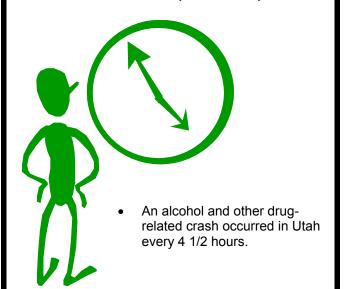
- Male drivers were involved in the majority (74.7%) of alcohol and other drug-related crashes.
- Male drivers aged 20 to 24 years represented the highest percentage of drivers involved in alcohol and other drug-related crashes (25.3%).
- For female drivers, those aged 20 to 24 years had the highest percentage of alcohol and other drugrelated crashes (17.4%).
- Of the impaired drivers, 280 (14.3%) were under the age of 21 years.

### Blood Alcohol Concentration (BAC) Levels of Drivers Involved in Fatal Alcohol-Related Crashes (Utah 2004)



 Approximately 3 out of 4 drivers involved in fatal alcohol-related crashes (76.7%) had blood alcohol concentration levels at or above the legal limit of 0.08%.

### Alcohol and Other Drug-Related Crash Clock (Utah 2004)



### **ALCOHOL AND OTHER DRUGS**

### Alcohol and Other Drug Involvement in Different Types of Crashes Pedestrian-Motor Vehicle Crashes



Of the 25 pedestrians killed in 2004, 6 were impaired by alcohol or other drugs (24.0%). Of the drivers involved in fatal pedestrian-motor vehicle crashes, 1 driver was cited for "driving"

under the influence."



#### **Bicyclist-Motor Vehicle Crashes**

Of the 6 bicyclists killed in 2004, none were impaired by alcohol or other drugs. Of the drivers involved in fatal bicyclist-motor vehicle crashes, none were cited for "driving under the influence."



#### **Motorcycle Crashes**

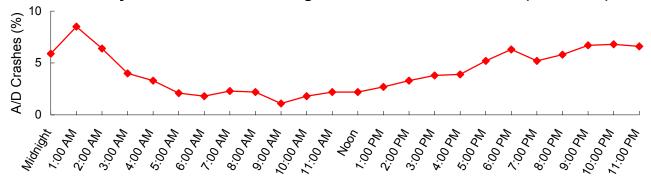
Of the 30 motorcycle drivers involved in fatal crashes in 2004, 5 were impaired by alcohol or other drugs (16.7%).



#### **Teenage-Driver Crashes**

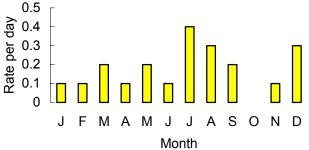
Of the 43 teenage drivers (aged 15 to 19 years) involved in fatal crashes in 2004, 2 were impaired by alcohol or other drugs (4.7%).

### Time of Day Alcohol and Other Drug-Related Crashes Occurred (Utah 2004)



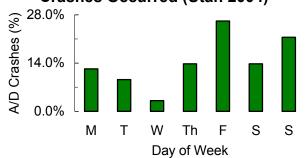
Alcohol and other drug-related crashes peaked in the evening and early morning hours (6:00 pm to 1:00 am). This is unlike most other types of motor vehicle crashes that tend to peak in the afternoon and early evening (2:00 pm to 6:00 pm).

# Month of the Year Fatal Alcohol and Other Drug-Related Crashes Occurred (Utah 2004)



 The highest rate per day of fatal alcohol and other drug-related crashes occurred in July (0.4); the lowest occurred in October (0.0).

# Day of the Week Fatal Alcohol and Other Drug-Related Crashes Occurred (Utah 2004)



The majority of fatal alcohol and other drugrelated crashes (61.5%) occurred on weekends (Friday, Saturday, Sunday).

### **Section 3: Alcohol and Other Drug-Related Crashes**

Section 3: Alcohol and Other Drug-Related Crashes 2004	
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### **Trends**

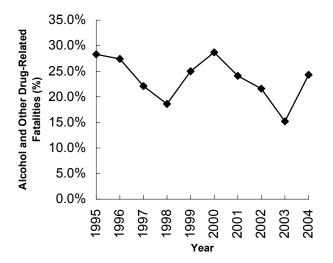
### **Alcohol and Other Drug-Related Fatalities and Fatal Crashes 1995-2004**

		A	Icohol and O	ther Drugs		
		Fatalities			Fatal Crashes	
	Alcohol/Drug		Percentage	Alcohol/Drug		Percentage
	Related	All	Alcohol/Drug	Related	All	Alcohol/Drug
	Fatalities	<b>Fatalities</b>	Related	<b>Fatal Crashes</b>	<b>Fatal Crashes</b>	Related
Year	#	#	%	#	#	%
1995	92	325	28.3%	74	285	26.0%
1996	88	321	27.4%	70	284	24.6%
1997	81	366	22.1%	59	309	19.1%
1998	65	350	18.6%	47	308	15.3%
1999	90	360	25.0%	68	318	21.4%
2000	107	373	28.7%	76	318	23.9%
2001	70	291	24.1%	62	258	24.0%
2002	71	328	21.6%	64	274	23.4%
2003	47	309	15.2%	40	262	15.3%
2004	72	296	24.3%	65	260	25.0%
Total	783	3,319	23.6%	625	2,876	21.7%

NOTE: NHTSA estimates alcohol involvement when alcohol test results are unknown. The above table has been modified from previous years to reflect those changes.

 Over the past ten years, the percentage of alcohol and other drug-related fatalities and fatal crashes has remained fairly consistent at approximately one-quarter of all fatalities and fatal crashes.

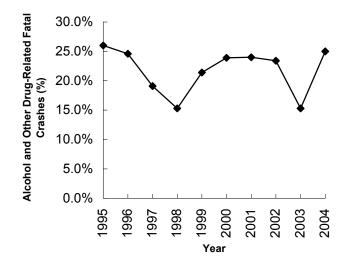
### Alcohol and Other Drug-Related Fatalities (Utah 1995-2004)



#### In 2004, there was a 53% increase from 2003 in alcohol and other drug-related fatalities.

 At 15.2%, the 2003 percentage of alcohol and other drug-related fatalities marked an all-time low.

### Alcohol and Other Drug-Related Fatal Crashes (Utah 1995-2004)



- In 2004, there was a 63% increase from 2003 in alcohol and other drug-related fatal crashes.
- At 15.3%, the 2003 percentage of alcohol and other drug-related fatal crashes tied the 1998 alltime low.

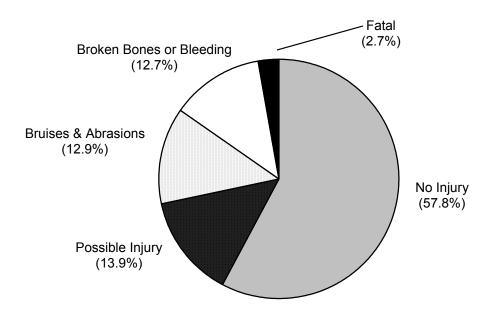
### **Counties**

### **Alcohol and Other Drug-Related Crashes by County (Utah 2004)**

	Alcohol and Other Drug-Related Crashes											
	Property	Damage	Only (PDO)		Injury			Fatal			Total	
	Alc/Drug	Rate	Rate	Alc/Drug	Rate	Rate	Alc/Drug	Rate	Rate	All	Rate	Rate
	PDO	per 100	per	Injury	per 100	per	Fatal	per 100	per	Alc/Drug	per 100	per
	Crashes	Million	10,000	Crashes	Million	10,000	Crashes	Million	10,000	Crashes	Million	10,000
County	#	VMT	Population	#	VMT	Population	#	VMT	Population	#	VMT	Population
Beaver	4	1.6	6.3	1	0.4	1.6	0	0.0	0.0	5	2.1	7.9
Box Elder	17	1.9	3.8	18	2.0	4.0	4	0.5	0.9	39	4.4	8.7
Cache	23	2.7	2.3	29	3.4	2.9	3	0.3	0.3	55	6.4	5.5
Carbon	4	1.3	2.1	11	3.7	5.7	1	0.3	0.5	16	5.3	8.3
Daggett	3	10.8	31.4	0	0.0	0.0	0	0.0	0.0	3	10.8	31.4
Davis	72	3.1	2.7	62	2.7	2.3	2	0.1	0.1	136	5.9	5.1
Duchesne	5	2.4	3.3	10	4.8	6.7	2	1.0	1.3	17	8.2	11.4
Emery	2	0.6	1.9	12	3.4	11.4	1	0.3	1.0	15	4.2	14.3
Garfield	2	1.6	4.3	3	2.4	6.5	0	0.0	0.0	5	4.0	10.8
Grand	4	1.4	4.6	7	2.5	8.1	3	1.1	3.5	14	5.0	16.3
Iron	5	0.8	1.3	14	2.2	3.6	0	0.0	0.0	19	3.0	4.9
Juab	7	1.8	7.9	9	2.3	10.2	0	0.0	0.0	16	4.1	18.1
Kane	2	1.5	3.3	5	3.9	8.3	0	0.0	0.0	7	5.4	11.6
Millard	4	0.9	3.0	8	1.9	6.1	3	0.7	2.3	15	3.5	11.4
Morgan	5	4.3	6.1	8	6.8	9.7	0	0.0	0.0	13	11.1	15.8
Piute	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Rich	4	7.6	19.3	1	1.9	4.8	0	0.0	0.0	5	9.5	24.2
Salt Lake	441	5.4	4.6	428	5.3	4.5	14	0.2	0.1	883	10.9	9.2
San Juan	3	1.1	2.1	10	3.6	7.0	2	0.7	1.4	15	5.3	10.5
Sanpete	6	2.5	2.4	9	3.7	3.6	0	0.0	0.0	15	6.2	6.0
Sevier	6	1.4	3.1	21	5.1	10.8	0	0.0	0.0	27	6.5	13.9
Summit	25	3.7	7.1	21	3.1	6.0	1	0.1	0.3	47	6.9	13.4
Tooele	20	2.4	4.0	35	4.3	7.0	11	1.3	2.2	66	8.0	13.2
Uintah	11	3.6	4.2	24	7.8	9.2	3	1.0	1.1	38	12.4	14.5
Utah	92	2.6	2.1	142	4.1	3.2	8	0.2	0.2	242	6.9	5.5
Wasatch	10	3.8	5.2	12	4.5	6.3	2	0.8	1.0	24	9.0	12.5
Washington	30	2.8	2.6	34	3.1	2.9	2	0.2	0.2	66	6.1	5.6
Wayne	2	5.2	7.9	1	2.6	4.0	0	0.0	0.0	3	7.8	11.9
Weber	69	4.5	3.3	83	5.4	4.0	3	0.2	0.1	155	10.2	7.4
Statewide	878	3.6	3.6	1,018	4.1	4.1	65	0.3	0.3	1,961	8.0	7.9

- Two different rates are given in the above table; one based on vehicle miles traveled in the county, and another based on the population of the county.
- Rate per 100 million vehicle miles traveled:
  - Uintah (7.8), Morgan (6.8) and Weber (5.4) had the highest rates of alcohol and other drug-related injury crashes per 100 million vehicle miles traveled.
  - Tooele (1.3), Grand (1.1) and Uintah (1.0) had the highest rates of fatal alcohol and other drug-related crashes per 100 million vehicle miles traveled.
- Rate per 10,000 population:
  - Emery (11.4), Sevier (10.8) and Juab (10.2) had the highest rates of alcohol and other drug-related injury crashes per 10,000 population.
  - Iron (3.5), Millard (2.3) and Tooele (2.2) had the highest rates of fatal alcohol and other drug-related crashes per 10,000 population.

### Injury Severity of Occupants Involved in Alcohol and Other Drug-Related Crashes (Utah 2004)



- In the above graph, there were a total of 2,724 persons involved in alcohol and other drug-related crashes.
- Crash occupants involved in alcohol and other drug-related crashes sustained a higher percentage of nonfatal injury (39.5%) compared to crash occupants involved in all motor vehicle crashes (21.0%).
- In addition, a higher percentage of crash occupants involved in alcohol and other drug-related crashes died (2.7%) compared to crash occupants involved in all motor vehicle crashes (0.2%).

### Occupant Placement of Persons Involved in Alcohol and Other Drug-Related Crashes (Utah 2004)

Persons Involved in Alcohol and Other Drug-Related Crashes										
	Non-Injured	d Persons	Injured F	Persons	Person	s Killed	Total Persons			
Occupant Placement	#	%	#	%	#	%	#	%		
Driver	1,144	72.7%	784	72.7%	50	69.4%	1,978	72.6%		
Passenger	424	26.9%	265	24.6%	16	22.2%	705	25.9%		
Pedestrian	2	0.1%	16	1.5%	6	8.3%	24	0.9%		
Bicyclist	0	0.0%	5	0.5%	0	0.0%	5	0.2%		
Other	4	0.3%	8	0.7%	0	0.0%	12	0.4%		
Total	1,574	100.0%	1,078	100.0%	72	100.0%	2,724	100.0%		

- The above table shows that drivers accounted for the majority of injured persons (72.7%) and persons killed (69.4%) in alcohol and other drug-related crashes.
- Only 0.9% of the total persons involved in alcohol and other drug-related crashes were pedestrians. However, 8.3% of the persons killed in alcohol and other drug-related crashes were pedestrians.
- In fact, pedestrians were 13 times more likely to be killed in an alcohol and other drug-related crash than other motor vehicle crash occupants.

### **Driver Characteristics**

### Age and Gender of Impaired Drivers Involved in Alcohol and Other Drug-Related Crashes (Utah 2004)

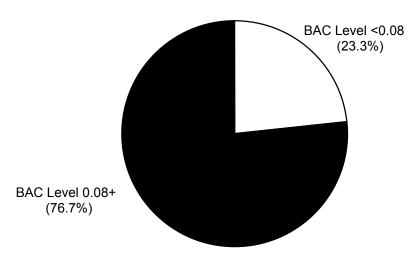
	Drivers (Alcohol and Other Drugs)															
		rivers In				rivers In				rivers In			Total Drivers Involved			
		/Drug PI			Alc/Drug Injury Crashes Female Male					in Alc/Drug Crashes						
		emale	_	Male				Male		emale	_	Male rivere	Female		Male Drivers	
۸۵۵	וט	rivers %	اط #	rivers %	#	rivers %	اط #	rivers %	اط #	rivers %	#	rivers %	וט #	rivers %	#	vers
Age																
<15	0	0.0%	0	0.0%		0.7%	0	0.0%		0.0%	0	0.0%	2	0.4%	0	0.0%
15-19	21	9.8%	75	11.3%	29	10.9%	69	9.2%	0	0.0%	2	5.1%	50	10.1%	146	10.0%
20-24	41	19.1%		24.6%	43	16.1%	201	26.7%	2	18.2%	4	10.3%	86	17.4%	368	25.3%
25-29	28	13.0%	114	17.2%	34	12.7%	138	18.3%	1	9.1%	7	17.9%	63	12.8%	259	17.8%
30-34	22	10.2%	73	11.0%	37	13.9%	74	9.8%	1	9.1%	3	7.7%	60	12.2%	150	10.3%
35-39	24	11.2%	57	8.6%	32	12.0%	64	8.5%	1	9.1%	3	7.7%	57	11.6%	124	8.5%
40-44	29	13.5%	59	8.9%	33	12.4%	87	11.5%	3	27.3%	5	12.8%	65	13.2%	151	10.4%
45-49	24	11.2%	50	7.5%	30	11.2%	54	7.2%	1	9.1%	4	10.3%	55	11.2%	108	7.4%
50-54	13	6.0%	41	6.2%	13	4.9%	29	3.8%	1	9.1%	4	10.3%	27	5.5%	74	5.1%
55-59	6	2.8%	12	1.8%	9	3.4%	20	2.7%	1	9.1%	4	10.3%	16	3.2%	36	2.5%
60-64	4	1.9%	6	0.9%	2	0.7%	8	1.1%	0	0.0%	2	5.1%	6	1.2%	16	1.1%
65-69	0	0.0%	4	0.6%	0	0.0%	4	0.5%	0	0.0%	1	2.6%	0	0.0%	9	0.6%
70-74	0	0.0%	2	0.3%	0	0.0%	1	0.1%	0	0.0%	0	0.0%	0	0.0%	3	0.2%
75-79	0	0.0%	2	0.3%	1	0.4%	1	0.1%	0	0.0%	0	0.0%	1	0.2%	3	0.2%
80+	1	0.5%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	0.2%	0	0.0%
Unknown	2	0.9%	5	0.8%	2	0.7%	4	0.5%	0	0.0%	0	0.0%	4	0.8%	9	0.6%
Total	215	100.0%	663	100.0%	267	100.0%	754	100.0%	11	100.0%	39	100.0%	493	100.0%	1,456	100.0%

NOTE: There were alcohol and other drug-related crashes that involved two impaired drivers. Gender was missing for 13 of the impaired drivers. In the event that an impaired pedestrian or bicyclist was involved in a crash, but the motor vehicle driver was not impaired, the driver information was not included in the above table.

- Overall, male drivers were much more likely to be involved in alcohol and other drug-related crashes. Male drivers represented 75% of the drivers involved in alcohol and other drug-related crashes.
- Male drivers aged 20 to 24 years represented the highest percentage of drivers involved in total alcohol and other drug-related crashes (25.3%) as well as alcohol and other drug-related injury crashes (26.7%).
- Male drivers aged 25 to 29 years represented the highest percentage of drivers involved in fatal alcohol and other drug-related crashes (17.9%).
- For female drivers, those aged 20 to 24 years had the highest percentage of total alcohol and other drugrelated crashes (17.4%). Female drivers aged 20 to 24 years had the highest percentage of alcohol and other drug-related injury crashes (16.1%).
- Female drivers aged 40 to 44 years represented the highest percentage of drivers involved in fatal alcohol and other drug-related crashes (27.3%).
- In addition, 280 of the impaired drivers (14.3%) were under the age of 21 years.

### **Driver Characteristics**

### Blood Alcohol Concentration Levels of Impaired Drivers Involved in Alcohol-Related\* Fatal Crashes (Utah 2004)



\*Note: This graph does not include information for seven drivers impaired by drugs other than alcohol.

- In the above graph, there were a total of 43 drivers involved in alcohol-related\* fatal crashes.
- In 2004, approximately 3 out of 4 drivers involved in alcohol-related fatal crashes (76.7%) had blood alcohol
  concentration levels at or above the legal limit of 0.08%

### Alcohol and Other Drug Involvement in Different Types of Motor Vehicle Crashes (Utah 2004)



#### **Pedestrian-Motor Vehicle Crashes**

- Of the 25 pedestrians killed in 2004, 6 were impaired by alcohol or other drugs (24.0%).
- Of the drivers involved in fatal pedestrian-motor vehicle crashes, 1 driver was cited for "driving under the influence."



#### **Bicyclist-Motor Vehicle Crashes**

- Of the 6 bicyclists killed in 2004, none were impaired by alcohol or other drugs.
- Of the drivers involved in fatal bicyclist-motor vehicle crashes, none were cited for "driving under the influence."



#### **Motorcycle Crashes**

Of the 30 motorcycle drivers involved in fatal crashes in 2004, 5 were impaired by alcohol or other drugs (16.7%).

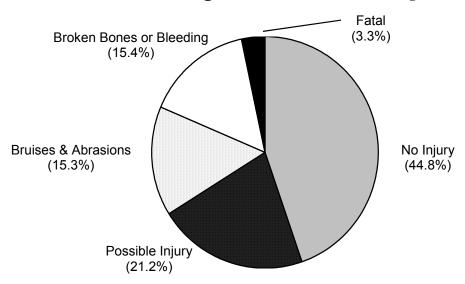


#### **Teenage-Driver Crashes**

Of the 43 teenage drivers (aged 15 to 19 years) involved in fatal crashes in 2004, 2 were impaired by alcohol or other drugs (4.7%).

### **Crash Characteristics**

### **Alcohol and Other Drug-Related Crash Severity (Utah 2004)**



- In the above table, there were a total of 1,961 alcohol and other drug-related crashes.
- A higher percentage of alcohol and other drug-related crashes (51.9%) resulted in a non-fatal injury compared to all motor vehicle crashes that resulted in a non-fatal injury (36.0%).
- In addition, a higher percentage of alcohol and other drug-related crashes were fatal (3.3%) compared to all fatal motor vehicle crashes (0.5%).
- In fact, alcohol and other drug-related crashes were 9 times more likely to be fatal than other types of crashes.

### **Alcohol and Other Drug-Related Crashes by Month of Year (Utah 2004)**

	Alcohol and Other Drug-Related Crashes										
		Property Damage	Only (PDO)	Injury		Fatal		Total			
	Days in	Alc/Drug	Rate	Alc/Drug	Rate	Alc/Drug	Rate	All Alc/Drug	Rate		
	Month	PDO Crashes	per	Injury Crashes	per	Fatal Crashes	per	Crashes	per		
Month	#	#	Day	#	Day	#	Day	#	Day		
January	31	72	2.3	67	2.2	4	0.1	143	4.6		
February	29	81	2.8	67	2.3	3	0.1	151	5.2		
March	31	76	2.5	84	2.7	7	0.2	167	5.4		
April	30	70	2.3	88	2.9	3	0.1	161	5.4		
May	31	59	1.9	88	2.8	5	0.2	152	4.9		
June	30	61	2.0	91	3.0	3	0.1	155	5.2		
July	31	65	2.1	96	3.1	11	0.4	172	5.5		
August	31	70	2.3	89	2.9	9	0.3	168	5.4		
September	30	70	2.3	95	3.2	5	0.2	170	5.7		
October	31	92	3.0	98	3.2	1	0.0	191	6.2		
November	30	77	2.6	72	2.4	4	0.1	153	5.1		
December	31	85	2.7	83	2.7	10	0.3	178	5.7		
Total	366	878	2.4	1,018	2.8	65	0.2	1,961	5.4		

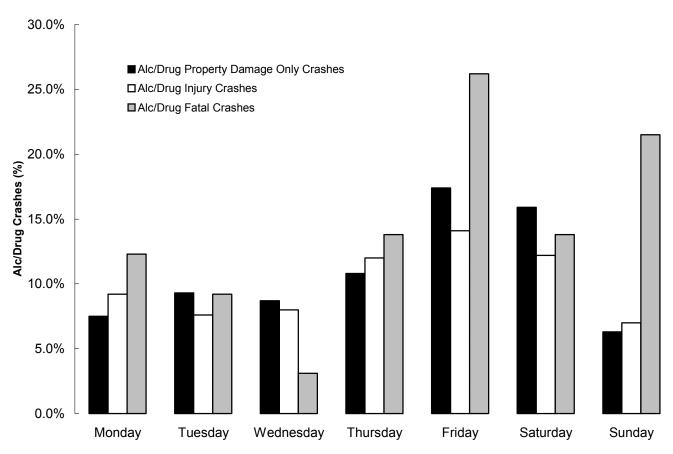
- The above table shows the number and rate per day of alcohol and other drug-related crashes for each month.
- Overall, the highest rate per day of alcohol and drug-related crashes was in October (6.2), while the lowest rate per day of alcohol and drug-related crashes was in January (4.6).
- The highest rate per day of fatal alcohol and other drug-related crashes occurred in July (0.4).

### **Crash Characteristics**

### **Alcohol and Other Drug-Related Crashes by Day of Week (Utah 2004)**

	Alcohol and Other Drug-Related Crashes										
	Property Dama	ge Only Crashes	Injury	Crashes	Fatal	Crashes	Total (	Crashes			
Day of Week	#	%	#	%	#	%	#	%			
Monday	66	7.5%	94	9.2%	8	12.3%	168	8.6%			
Tuesday	82	9.3%	77	7.6%	6	9.2%	165	8.4%			
Wednesday	76	8.7%	81	8.0%	2	3.1%	159	8.1%			
Thursday	95	10.8%	122	12.0%	9	13.8%	226	11.5%			
Friday	153	17.4%	144	14.1%	17	26.2%	314	16.0%			
Saturday	140	15.9%	124	12.2%	9	13.8%	273	13.9%			
Sunday	55	6.3%	71	7.0%	14	21.5%	140	7.1%			
Missing	211	24.0%	305	30.0%	0	0.0%	516	26.3%			
Total	878	100.0%	1,018	100.0%	65	100.0%	1,961	100.0%			

### **Alcohol and Other Drug-Related Crashes by Day of Week (Utah 2004)**



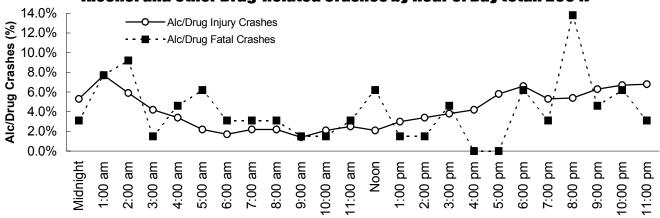
- The above table and graph show that the highest percentage of alcohol and other drug-related total crashes (16.0%), property damage only crashes (17.4%) and injury crashes (14.1%) occurred on Friday.
- The highest percentage of fatal alcohol and other drug-related crashes also occurred on Friday (26.2%).
- Overall, the majority of fatal alcohol and other drug-related crashes (61.5%) occurred on the weekends (Friday, Saturday, Sunday).

### **Crash Characteristics**

### **Alcohol and Other Drug-Related Crashes by Hour of Day (Utah 2004)**

Alcohol and Other Drug-Related Crashes											
	Property Dama	ge Only Crashes	Injury (	Crashes	Fatal	Crashes	Total (	Crashes			
Hour	#	%	#	%	#	%	#	%			
Midnight	59	6.7%	54	5.3%	2	3.1%	115	5.9%			
1:00 am	83	9.5%	78	7.7%	5	7.7%	166	8.5%			
2:00 am	59	6.7%	60	5.9%	6	9.2%	125	6.4%			
3:00 am	35	4.0%	43	4.2%	1	1.5%	79	4.0%			
4:00 am	27	3.1%	35	3.4%	3	4.6%	65	3.3%			
5:00 am	16	1.8%	22	2.2%	4	6.2%	42	2.1%			
6:00 am	17	1.9%	17	1.7%	2	3.1%	36	1.8%			
7:00 am	22	2.5%	22	2.2%	2	3.1%	46	2.3%			
8:00 am	19	2.2%	22	2.2%	2	3.1%	43	2.2%			
9:00 am	6	0.7%	14	1.4%	1	1.5%	21	1.1%			
10:00 am	13	1.5%	21	2.1%	1	1.5%	35	1.8%			
11:00 am	16	1.8%	25	2.5%	2	3.1%	43	2.2%			
Noon	18	2.1%	21	2.1%	4	6.2%	43	2.2%			
1:00 pm	20	2.3%	31	3.0%	1	1.5%	52	2.7%			
2:00 pm	29	3.3%	35	3.4%	1	1.5%	65	3.3%			
3:00 pm	33	3.8%	39	3.8%	3	4.6%	75	3.8%			
4:00 pm	33	3.8%	43	4.2%	0	0.0%	76	3.9%			
5:00 pm	42	4.8%	59	5.8%	0	0.0%	101	5.2%			
6:00 pm	52	5.9%	67	6.6%	4	6.2%	123	6.3%			
7:00 pm	46	5.2%	54	5.3%	2	3.1%	102	5.2%			
8:00 pm	49	5.6%	55	5.4%	9	13.8%	113	5.8%			
9:00 pm	64	7.3%	64	6.3%	3	4.6%	131	6.7%			
10:00 pm	62	7.1%	68	6.7%	4	6.2%	134	6.8%			
11:00 pm	58	6.6%	69	6.8%	2	3.1%	129	6.6%			
Missing	0	0.0%	0	0.0%	1	1.5%	1	0.1%			
Total	878	100.0%	1,018	100.0%	65	100.0%	1,961	100.0%			

### **Alcohol and Other Drug-Related Crashes by Hour of Day (Utah 2004)**



- The above table and graph show that alcohol and other drug-related injury crashes peaked in the evening and early morning hours (6:00 pm to 1:00 am).
- Fatal alcohol and other drug-related crashes varied by hour, but like injury crashes, peaked in the evening and early morning hours (6:00 pm to 2:00 am).

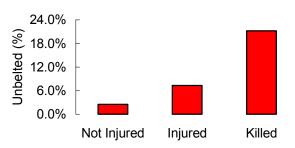
# Teenage-Driver Crashes 2004

### TEENAGE DRIVERS (15-19 YEARS)

### Did you know that in 2004. . .

- Teenage drivers represented 7.7% of the licensed drivers in Utah, yet they were involved in over one-quarter (27.6%) of all motor vehicle crashes in Utah.
- Approximately 1 out of 6 (16.2%) fatal crashes in Utah involved a teenage driver.
- A teenage-driver crash occurred in Utah every 35 minutes.

### Unbelted Occupants Involved in Teenage-Driver Crashes (Utah 2004)



- Almost one-quarter (21.2%) of the occupants killed in teenage-driver crashes were unbelted.
- Unbelted occupants involved in teenage-driver crashes were 6 times more likely to be killed in a crash than belted occupants.

### Fatalities Associated with Teenage-Driven Vehicles (Utah 2004)



Crashes where the teenage-driven vehicle contained four or more occupants were twice as likely to be fatal than crashes involving teenage-driven vehicles with fewer occupants.

### Leading Collision Descriptions of Teenage-Driver Crashes (Utah 2004)

#### **All Teenage Driver Crashes**

- 1. Rear End (34.7%)
- 2. Broadside (27.1%)
- 3. Side Swipe (6.0%)

#### **Fatal Teenage Driver Crashes**

- 1. Single Vehicle Rollover (28.6%)
- 2. Head-On (21.4%)
- 3. Broadside (16.7%)



- Overall, most teenage-driver crashes were rear-end (34.7%) or broadside (27.1%) collisions.
- For fatal teenage-driver crashes, single vehicle rollovers (28.6%) and head-on collisions (21.4%) were the leading collision types.
- Head-on collisions involving teenage drivers were 40 times more likely, and single vehicle rollovers involving teenage drivers were 9 times more likely to be fatal than other collision types.

### **Top 5 Driving Factors that Contributed to Teenage-Driver Crashes (Utah 2004)**

#### **All Teenage Driver Crashes**

- 1. Improper Lookout (26.4%)
- 2. Failed to Yield Right-of-Way (15.8%)
- 3. Followed Too Closely (14.2%)
- 4. Speed Too Fast (12.3%)
- 5. Other Improper Driving (8.9%)

#### **Fatal Teenage Driver Crashes**

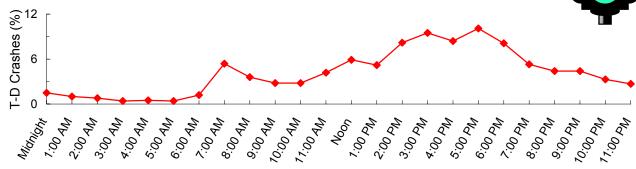
- 1. Speed Too Fast (24.4%)
- 2. Improper Lookout (13.3%)
- 3. Other Improper Driving (13.3%)
- 4. Fatigued or Asleep (8.9%)



- Overall, "improper lookout" was the leading contributing factor for all teenage-driver crashes (26.4%).
- "Speed too fast" accounted for approximately one-quarter (24.4%) of the fatal teenage-driver crashes.
- Drowsy driving was also a significant contributing factor of fatal teenage-driver crashes. "Fatigued" or "asleep" accounted for 8.9% of fatal teenage-driver crashes.

# TEENAGE DRIVERS (15-19 YEARS)





- Teenage-driver crashes peaked during after-school hours (2:00 pm to 6:00 pm).
- Another small peak occurred when teenage drivers were most likely going to school (7:00 am).

### Counties with the Highest Percentage of Teenage-Driver Crashes (Utah 2004)

County	All Crashes	Teenage Drivers	% Involving Teen Drivers	County	All Crashes	Teenage Drivers	% Involving Teen Drivers
Davis	4,776	1,576	33.0%	Weber	4,367	1,367	31.3%
Washington	2,233	730	32.7%	Utah	8,265	2,479	30.0%
Sanpete	310	100	32.3%	Morgan	177	51	28.8%
Cache	2,244	710	31.6%	Statewide	53,905	14,870	27.6%

### **Graduated Driver Licensing Law**

A graduated driver licensing law was enacted to address the concern of teenage driving and crashes. Graduated licensing regulations are in place for new drivers under the age of 18 years and not previously licensed in another state. First-time teenage drivers who apply for a drivers license in Utah must complete the following three steps to obtain a license:

- **Step 1.** Obtain an instruction permit, which allows driving with a certified driving instructor, complete a driver education course and pass a written exam.
- **Step 2.** After reaching age 15 years 9 months, obtain a practice permit which requires driving with a parent, guardian, or licensed over 21-year-old, and complete 40 hours of behind-the-wheel driving (at least 10 hours after dark).
- **Step 3.** Complete a driving test (or tests) and obtain a provisional (under 21 years) "D" (passenger vehicle), or "M" (passenger vehicle plus motorcycle) license. The provisional license shows "under 21," has a distinctive color, and allows a lower threshold of points/citations before sanctioning compared to regular licenses.

#### Night-time Restrictions

Anyone under the age of 17 years may not drive from midnight to 5:00 am except: 1) with an over-21-year-old licensed driver; 2) for employment, or going to or from employment; 3) going to or from a religious or a school activity; 4) in a supervised agricultural operation; or 5) in an emergency.

#### Passenger Restrictions

For the first six months of licensure, teenage drivers can only drive other teens if there is an over-21-year-old driver in the front passenger seat of the vehicle. Teenage drivers can drive themselves or family members without this restriction.

Exceptions: Teenage drivers can drive teenage occupants to or from school, school activities, church activities, or agricultural work if he/she has a signed note from his/her parent or guardian.

#### Seatbelt Restrictions

All occupants under the age of 19 years must be properly restrained in a motor vehicle. This is a primary law which means a person may be stopped by a law enforcement officer solely for that offense.

### **Section 4: Teenage-Driver Crashes**

Section 4:	Teenage-Driver	Crashes 2004
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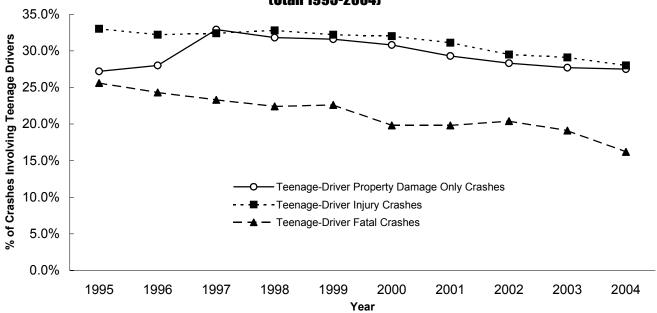
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### **Trends**

### **Teenage-Driver Crashes 1995-2004**

Teenage-Driver Crashes												
	Propery Damage Only Injury					Fatal			Total			
		Teenage	Percent		Teenage	Percent		Teenage	Percent		All	Percent
	All	Driver	Involving	All	Driver	Involving	All	Driver	Involving		Teenage	Involving
	PDO	PDO	Teenage	Injury	Injury	Teenage	Fatal	Fatal	Teenage	All	Driver	Teenage
	Crashes	Crashes	<b>Drivers</b>	Crashes	Crashes	Drivers	Crashes	Crashes	Drivers	Crashes	Crashes	Drivers
Year	#	#	%	#	#	%	#	#	%	#	#	%
1995	37,532	10,193	27.2%	19,828	6,542	33.0%	285	73	25.6%	57,645	16,808	29.2%
1996	40,225	11,267	28.0%	20,988	6,764	32.2%	284	69	24.3%	61,497	18,100	29.4%
1997	33,512	11,018	32.9%	21,131	6,851	32.4%	309	72	23.3%	54,952	17,941	32.6%
1998	34,337	10,916	31.8%	19,427	6,377	32.8%	308	69	22.4%	54,072	17,362	32.1%
1999	32,971	10,406	31.6%	19,513	6,281	32.2%	318	72	22.6%	52,802	16,759	31.7%
2000	33,269	10,252	30.8%	19,564	6,263	32.0%	318	63	19.8%	53,151	16,578	31.2%
2001	33,113	9,686	29.3%	19,332	6,006	31.1%	258	51	19.8%	52,703	15,743	29.9%
2002	33,542	9,478	28.3%	19,552	5,776	29.5%	274	56	20.4%	53,368	15,310	28.7%
2003	31,842	8,807	27.7%	18,285	5,321	29.1%	262	50	19.1%	50,389	14,178	28.1%
2004	34,222	9,397	27.5%	19,423	5,431	28.0%	260	42	16.2%	53,905	14,870	27.6%
Total	344,565	101,420	29.4%	197,043	61,612	31.3%	2,876	617	21.5%	544,484	163,649	30.1%

### Teenage-Driver Crashes (Utah 1995-2004)



- Teenage drivers (aged 15 to 19 years) are a special concern because of their high crash rates and lack of driving experience.
- The ten-year trend shows that approximately one-third (30.1%) of all crashes involve a teenage driver, with the largest percentage of teenage-driver crashes occurring in 1997 (32.6%).
- The percentage of injury crashes involving a teenage driver has generally decreased since 1995, and continues the trend in 2004 by dropping to 28.0%.
- Fatal teenage driver crashes have also shown a decreasing trend. In 1995 the percentage of fatal teenage driver crashes was 25.6%, and reached an all-time low in 2004 of 16.2%.

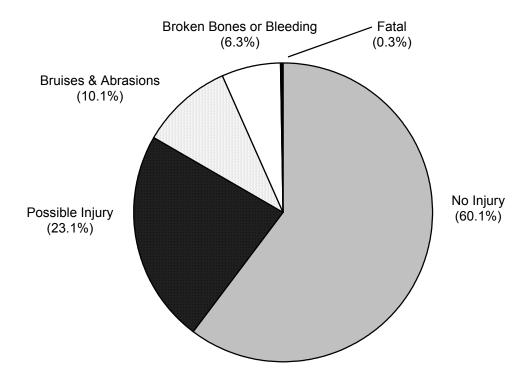
### **Counties**

### **Teenage-Driver Crashes by County (Utah 2004)**

Teenage-Driver Crashes												
	Proper	ty Damaç	ge Only	Injury			Fatal			Total		
	Teenage Percent				Teenage	Percent		Teenage	Percent		All	Percent
	All	Driver	Involving	All	Driver	Involving	All	Driver	Involving		Teenage	Involving
	PDO	PDO	Teenage	Injury	Injury	Teenage	Fatal	Fatal	Teenage	All	Driver	Teenage
	Crashes	Crashes	Drivers	Crashes	Crashes	Drivers	Crashes	Crashes	Drivers	Crashes	Crashes	Drivers
County	#	#	%	#	#	%	#	#	%	#	#	%
Beaver	189	26	13.8%	90	11	12.2%	2	0	0.0%	281	37	13.2%
Box Elder	656	145	22.1%	346	83	24.0%	7	1	14.3%	1,009	229	22.7%
Cache	1,506	469	31.1%	729	238	32.6%	9	3	33.3%	2,244	710	31.6%
Carbon	277	77	27.8%	124	29	23.4%	4	1	25.0%	405	107	26.4%
Daggett	35	4	11.4%	20	2	10.0%	0	0	0.0%	55	6	10.9%
Davis	3,088	1,006	32.6%	1,679	569	33.9%	9	1	11.1%	4,776	1,576	33.0%
Duchesne	277	46	16.6%	110	24	21.8%	4	1	25.0%	391	71	18.2%
Emery	196	31	15.8%	96	17	17.7%	9	0	0.0%	301	48	15.9%
Garfield	103	11	10.7%	45	11	24.4%	0	0	0.0%	148	22	14.9%
Grand	133	18	13.5%	102	20	19.6%	7	0	0.0%	242	38	15.7%
Iron	543	135	24.9%	306	71	23.2%	10	1	10.0%	859	207	24.1%
Juab	190	25	13.2%	124	26	21.0%	5	1	20.0%	319	52	16.3%
Kane	136	16	11.8%	71	13	18.3%	3	0	0.0%	210	29	13.8%
Millard	232	27	11.6%	151	30	19.9%	11	2	18.2%	394	59	15.0%
Morgan	123	36	29.3%	52	14	26.9%	2	1	50.0%	177	51	28.8%
Piute	21	3	14.3%	12	3	25.0%	1	1	100.0%	34	7	20.6%
Rich	55	9	16.4%	24	3	12.5%	3	1	33.3%	82	13	15.9%
Salt Lake	14,393	3,849	26.7%	8,522	2,257	26.5%	66	13	19.7%	22,981	6,119	26.6%
San Juan	165	15	9.1%	96	16	16.7%	7	0	0.0%	268	31	11.6%
Sanpete	197	64	32.5%	109	36	33.0%	4	0	0.0%	310	100	32.3%
Sevier	299	64	21.4%	190	35	18.4%	5	1	20.0%	494	100	20.2%
Summit	775	133	17.2%	244	53	21.7%	8	2	25.0%	1,027	188	18.3%
Tooele	545	134	24.6%	307	63	20.5%	20	1	5.0%	872	198	22.7%
Uintah	353	99	28.0%	169	50	29.6%	6	0	0.0%	528	149	28.2%
Utah	5,268	1,576	29.9%	2,970	896	30.2%	27	7	25.9%	8,265	2,479	30.0%
Wasatch	391	83	21.2%	164	54	32.9%	7	0	0.0%	562	137	24.4%
Washington	1,370	437	31.9%	851	289	34.0%	12	4	33.3%	2,233	730	32.7%
Wayne	39	2	5.1%	32	8	25.0%	0	0	0.0%	71	10	14.1%
Weber	2,667	857	32.1%		510	30.2%	12	0	0.0%	4,367	1,367	31.3%
Statewide	34,222	9,397	27.5%	19,423	5,431	28.0%	260	42	16.2%	53,905	14,870	27.6%

- The number of crashes, the number of teenage-driver crashes and the percent of crashes that involved a teenage driver are shown in the above table.
- Overall, Davis (33.0%), Washington (32.7%) and Sanpete (32.3%) had the highest percentage of crashes involving a teenage driver.
- Washington (34.0%), Davis (33.9%) and Sanpete (33.0%) had the highest percentage of injury crashes involving a teenage driver.
- Piute (100.0%) and Morgan (50.0%) had the highest percentage of fatal crashes involving a teenage driver.
- Statewide, teenage-driver crashes represented 27.6% of all crashes, and 16.2% of all fatal crashes.

### **Injury Severity of Occupants Involved in Teenage-Driver Crashes (Utah 2004)**



- In the above graph, there were a total of 25,765 occupants involved in teenage-driver crashes.
- The percentage of occupants who sustained a non-fatal injury in a teenage-driver crash (39.5%) was higher than the percentage of occupants who sustained a non-fatal injury in all motor vehicle crashes (21.0%).
- The fatality percentage of occupants involved in teenage-driver crashes (0.3%) was similar to the fatality percentage of occupants involved in all motor vehicle crashes (0.2%).

### Seatbelt Use of Occupants Involved in Teenage-Driver Crashes (Utah 2004)

Persons Involved in Teenage-Driver Crashes											
	Non-Injured	Persons	Injured P	ersons	Persons	Killed	Total Persons				
Seatbelt Use	#	%	#	%	#	%	#	%			
Belted	13,623	97.5%	8,521	92.7%	52	78.8%	22,196	95.6%			
Unbelted	343	2.5%	671	7.3%	14	21.2%	1,028	4.4%			
Total	13,966	100.0%	9,192	100.0%	66	100.0%	23,224	100.0%			

NOTE: Seatbelt use was not reported for 2,541 occupants because the teenage driver was either riding a motorcycle or seatbelt use of the occupant was unknown.

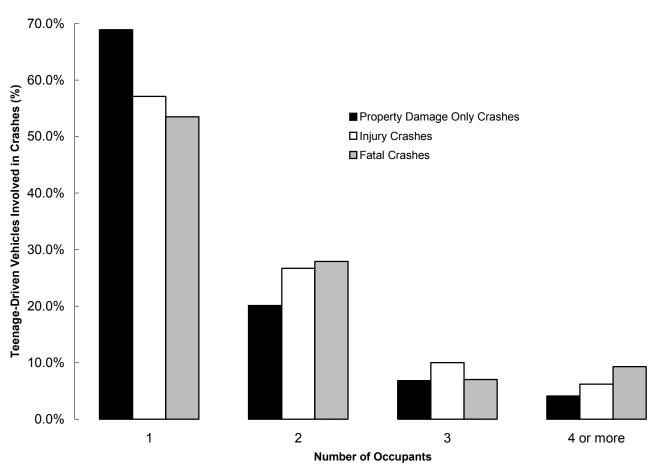
- Overall, most occupants involved in teenage-driver crashes reported wearing a seatbelt (95.6%).
- A high percentage of non-injured occupants (97.5%) and injured occupants (92.7%) involved in teenage-driver crashes reported wearing a seatbelt.
- Only 78.8% of occupants killed in teenage-driver crashes were reported as wearing a seatbelt.
- In fact, unbelted occupants involved in teenage-driver crashes were 6 times more likely to be killed in a crash than belted occupants.

#### **Occupant Characteristics (Including Driver)**

#### **Number of Occupants in Teenage-Driven Vehicles (Utah 2004)**

Teenage-Driven Vehicles									
	Teenage-I	Teenage-	Driven	Teenage-	Driven	Teenage-Driven			
	Vehicles Inv	olved in	Vehicles Inv	olved in	Vehicles Inv	volved in	Vehicles Involved i		
Number of	<b>Property Damage</b>	Only Crashes	Injury Cr	ashes	Fatal Cra	ashes	All Crashes		
Occupants	#	%	#	%	#	%	#	%	
1	7,261	68.9%	3,463	57.1%	23	53.5%	10,747	64.6%	
2	2,116	20.1%	1,617	26.7%	12	27.9%	3,745	22.5%	
3	715	6.8%	604	10.0%	3	7.0%	1,322	7.9%	
4 or more	430	4.1%	374	6.2%	4	9.3%	808	4.9%	
Missing	16	0.2%	9	0.1%	1	2.3%	26	0.2%	
Total	10,538	100.0%	6,067	100.0%	43	100.0%	16,648	100.0%	

#### **Number of Occupants in Teenage-Driven Vehicles (Utah 2004)**



- The above table shows the number of occupants in teenage-driven vehicles that were involved in crashes.
- Approximately two-thirds of teenage-driven vehicles (64.6%) involved in crashes contained only the teenage driver.
- Crashes where the teenage-driven vehicle contained four or more occupants were twice as likely to be fatal than crashes involving teenage-driven vehicles with fewer occupants.

#### **Driver Characteristics**

#### **Gender of Teenage Drivers Involved in Crashes (Utah 2004)**

Teenage Drivers										
	Teenage I Involved in	Property		Teenage Drivers Involved in		Drivers ed in	Total Teenage Drivers Involved			
	Damage Only	/ Crashes	Injury Crashes		Fatal Crashes		in Crashes			
Driver Gender	#	%	#	%	#	%	#	%		
Female	4,984	47.3%	3,003	49.5%	15	34.9%	8,002	48.1%		
Male	5,552	52.7%	3,062	50.5%	28	65.1%	8,642	51.9%		
Missing	2	0.0%	2	0.0%	0	0.0%	4	0.0%		
Total	10,538	100.0%	6,067	100.0%	43	100.0%	16,648	100.0%		

#### **Gender of Teenage Drivers Involved in Crashes (Utah 2004)**



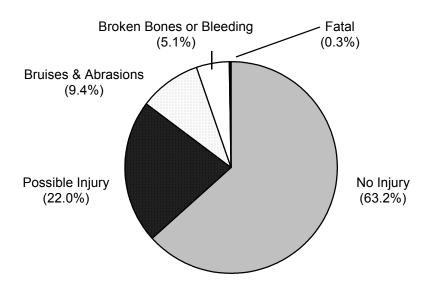
• The above table shows that the majority of teenage drivers involved in total crashes (51.9%), injury crashes (50.5%) and fatal crashes (65.1%) were male.

#### **Alcohol and Other Drug Involvement of Teenage Drivers (Utah 2004)**



• Of the 43 teenage drivers (aged 15 to 19 years) involved in fatal crashes in 2004, 2 were impaired by alcohol or other drugs (4.7%).

#### **Teenage-Driver Crash Severity (Utah 2004)**



- In the above graph, there were a total of 14,870 teenage-driver crashes.
- Similar to all motor vehicle crashes, over one-third (36.5%) of teenage-driver crashes resulted in some level of non-fatal injury.
- Fatal teenage-driver crashes were lower (0.3%) when compared to all motor vehicle crashes (0.5%).

#### **Teenage-Driver Crashes by Month of Year (Utah 2004)**

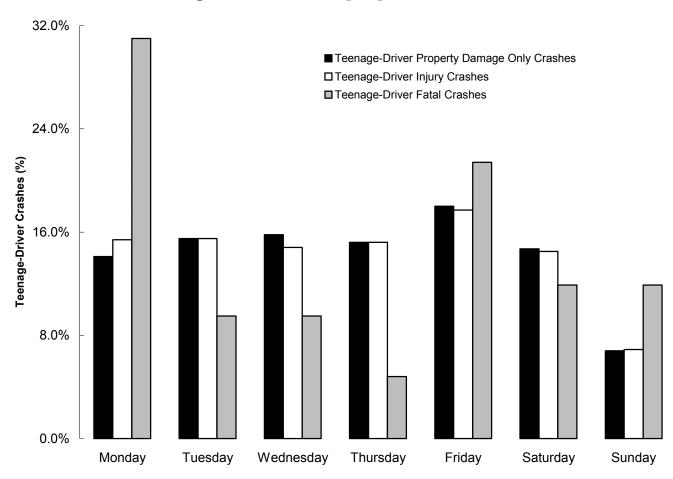
	Teenage-Driver Crashes									
		Property Damage	Only (PDO)	Injury		Fatal		Total		
	Days in	Teenage Driver	Rate	Teenage Driver	Rate	Teenage Driver	Rate	All Teenage	Rate	
	Month	PDO Crashes	per	Injury Crashes	per	Fatal Crashes	per	<b>Driver Crashes</b>	per	
Month	#	#	Day	#	Day	#	Day	#	Day	
January	31	768	24.8	376	12.1	3	0.10	1,147	37.0	
February	29	875	30.2	411	14.2	2	0.07	1,288	44.4	
March	31	693	22.4	421	13.6	2	0.06	1,116	36.0	
April	30	640	21.3	432	14.4	2	0.07	1,074	35.8	
May	31	649	20.9	451	14.5	5	0.16	1,105	35.6	
June	30	703	23.4	433	14.4	4	0.13	1,140	38.0	
July	31	671	21.6	458	14.8	2	0.06	1,131	36.5	
August	31	711	22.9	495	16.0	4	0.13	1,210	39.0	
September	30	835	27.8	523	17.4	4	0.13	1,362	45.4	
October	31	955	30.8	500	16.1	7	0.23	1,462	47.2	
November	30	891	29.7	460	15.3	5	0.17	1,356	45.2	
December	31	1,006	32.5	471	15.2	2	0.06	1,479	47.7	
Total	366	9,397	25.7	5,431	14.8	42	0.11	14,870	40.6	

- Overall, December (47.7), October (47.2) and September (45.4) were the leading months for teenage-driver crashes.
- September (17.4), October (16.1) and August (16.0) had the highest rates of teenage-driver injury crashes.
- The highest rates per day of fatal teenage-driver crashes occurred in October (0.23) and November (0.17).

#### **Teenage-Driver Crashes by Day of Week (Utah 2004)**

Teenage-Driver Crashes										
	Property Dama	ge Only Crashes	Injury	Crashes	Fatal	Crashes	<b>Total Crashes</b>			
Day of Week	#	%	#	%	#	%	#	%		
Monday	1,321	14.1%	835	15.4%	13	31.0%	2,169	14.6%		
Tuesday	1,456	15.5%	842	15.5%	4	9.5%	2,302	15.5%		
Wednesday	1,489	15.8%	802	14.8%	4	9.5%	2,295	15.4%		
Thursday	1,426	15.2%	826	15.2%	2	4.8%	2,254	15.2%		
Friday	1,692	18.0%	963	17.7%	9	21.4%	2,664	17.9%		
Saturday	1,378	14.7%	787	14.5%	5	11.9%	2,170	14.6%		
Sunday	635	6.8%	376	6.9%	5	11.9%	1,016	6.8%		
Total	9,397	100.0%	5,431	100.0%	42	100.0%	14,870	100.0%		

#### **Teenage-Driver Crashes by Day of Week (Utah 2004)**

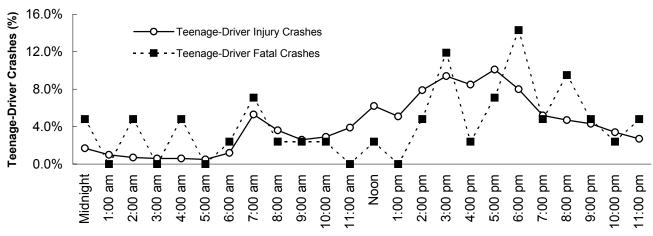


- Overall, the highest percentage of teenage-driver crashes occurred on Friday (17.9%).
- The highest percentage of teenage-driver injury crashes also occurred on Friday (17.7%).
- The highest percentage of fatal teenage-driver crashes occurred on Monday (31.0%) and Friday (21.4%).
- In fact, teenage-driver crashes that occurred on Monday were 3 times more likely to be fatal than on other days of the week.

#### **Teenage-Driver Crashes by Hour of Day (Utah 2004)**

Teenage-Driver Crashes									
	Property Damag	ge Only Crashes	Injury	Crashes	Fatal	Crashes	Total C	rashes	
Hour	#	%	#	%	#	%	#	%	
Midnight	129	1.4%	93	1.7%	2	4.8%	224	1.5%	
1:00 am	85	0.9%	57	1.0%	0	0.0%	142	1.0%	
2:00 am	77	0.8%	40	0.7%	2	4.8%	119	0.8%	
3:00 am	29	0.3%	31	0.6%	0	0.0%	60	0.4%	
4:00 am	35	0.4%	30	0.6%	2	4.8%	67	0.5%	
5:00 am	32	0.3%	28	0.5%	0	0.0%	60	0.4%	
6:00 am	108	1.1%	65	1.2%	1	2.4%	174	1.2%	
7:00 am	517	5.5%	286	5.3%	3	7.1%	806	5.4%	
8:00 am	335	3.6%	196	3.6%	1	2.4%	532	3.6%	
9:00 am	272	2.9%	141	2.6%	1	2.4%	414	2.8%	
10:00 am	262	2.8%	158	2.9%	1	2.4%	421	2.8%	
11:00 am	409	4.4%	214	3.9%	0	0.0%	623	4.2%	
Noon	532	5.7%	339	6.2%	1	2.4%	872	5.9%	
1:00 pm	493	5.2%	277	5.1%	0	0.0%	770	5.2%	
2:00 pm	787	8.4%	429	7.9%	2	4.8%	1,218	8.2%	
3:00 pm	899	9.6%	508	9.4%	5	11.9%	1,412	9.5%	
4:00 pm	793	8.4%	460	8.5%	1	2.4%	1,254	8.4%	
5:00 pm	954	10.2%	549	10.1%	3	7.1%	1,506	10.1%	
6:00 pm	765	8.1%	433	8.0%	6	14.3%	1,204	8.1%	
7:00 pm	510	5.4%	280	5.2%	2	4.8%	792	5.3%	
8:00 pm	395	4.2%	255	4.7%	4	9.5%	654	4.4%	
9:00 pm	418	4.4%	232	4.3%	2	4.8%	652	4.4%	
10:00 pm	307	3.3%	184	3.4%	1	2.4%	492	3.3%	
11:00 pm	254	2.7%	146	2.7%	2	4.8%	402	2.7%	
Total	9,397	100.0%	5,431	100.0%	42	100.0%	14,870	100.0%	

#### **Teenage-Driver Crashes by Hour of Day (Utah 2004)**



- The above table and graph show that teenage-driver injury crashes and fatal teenage-driver crashes were highest from 2:00 pm to 6:00 pm (after-school hours).
- Teenage-driver injury crashes also had a slight peak at 7:00 am, and Noon.

#### **Collision Description of Teenage-Driver Crashes (Utah 2004)**

Teenage-Driver Crashes									
	Property Damage Only Crashes   Injury Crashes   Fatal Crashes   Total Crashes								
Collision Description	#	%	#	%	#	%	#	%	
Rear End	3,267	34.8%	1,889	34.8%	5	11.9%	5,161	34.7%	
Broadside	2,239	23.8%	1,786	32.9%	7	16.7%	4,032	27.1%	
Side Swipe	717	7.6%	174	3.2%	1	2.4%	892	6.0%	
Single Vehicle Rollover	202	2.1%	412	7.6%	12	28.6%	626	4.2%	
Pedestrian/Bicyclist Crash	10	0.1%	165	3.0%	3	7.1%	178	1.2%	
Single Vehicle Fixed Object	118	1.3%	50	0.9%	1	2.4%	169	1.1%	
Head-On	43	0.5%	58	1.1%	9	21.4%	110	0.7%	
Other	2,801	29.8%	897	16.5%	4	9.5%	3,702	24.9%	
Total	9,397	100.0%	5,431	100.0%	42	100.0%	14,870	100.0%	

- Overall, most teenage-driver crashes were rear-end (34.7%) or broadside (27.1%) collisions.
- For fatal teenage-driver crashes, single vehicle rollovers (28.6%) and head-on collisions (21.4%) were the leading collision types.
- Head-on collisions involving teenage drivers were 40 times more likely, and single vehicle rollovers involving teenage drivers were 9 times more likely to be fatal than other collision types.

#### **Teenage-Driver Crash Violations (Utah 2004)**

	Violations (Teenage Drivers)								
	Cited in PDO Crashes		Cited in Injury Crashes		Cited in Fatal Crashes		Teenage Drivers Cited		
Violations	#	%	#	%	#	%	#	%	
Failure to Yield Right-Of-Way	865	17.8%	654	22.0%	0	0.0%	1,519	19.3%	
Following Too Close	950	19.5%	474	15.9%	1	25.0%	1,425	18.1%	
Improper Lookout	862	17.7%	493	16.6%	0	0.0%	1,355	17.3%	
Negligent Collision	332	6.8%	201	6.7%	0	0.0%	533	6.8%	
Speeding	327	6.7%	173	5.8%	0	0.0%	500	6.4%	
All Other Moving Violations	285	5.9%	168	5.6%	1	25.0%	454	5.8%	
Other Non-Moving Violations	276	5.7%	167	5.6%	0	0.0%	443	5.6%	
Improper Lane Change	227	4.7%	108	3.6%	0	0.0%	335	4.3%	
Failure to Stop at Red Light	133	2.7%	196	6.6%	0	0.0%	329	4.2%	
Improper Turn	160	3.3%	77	2.6%	0	0.0%	237	3.0%	
Reckless Driving	72	1.5%	57	1.9%	1	25.0%	130	1.7%	
Failure to Stop at Stop Sign	59	1.2%	69	2.3%	0	0.0%	128	1.6%	
Driving Under the Influence	55	1.1%	68	2.3%	0	0.0%	123	1.6%	
Hit and Run	101	2.1%	17	0.6%	0	0.0%	118	1.5%	
Improper Backing	65	1.3%	8	0.3%	0	0.0%	73	0.9%	
Wrong Side of Road	39	0.8%	26	0.9%	1	25.0%	66	0.8%	
Improper Passing	38	0.8%	13	0.4%	0	0.0%	51	0.6%	
Improper Start and Stop	23	0.5%	9	0.3%	0	0.0%		0.4%	
Wrong Way on One-Way Street	1	0.0%	0	0.0%	0	0.0%	1	0.0%	
Total	4,870	100.0%	2,978	100.0%	4	100.0%	7,852	100.0%	

• In 2004, 16,648 teenage drivers were involved in crashes. Officers at the scene of the crash cited 7,852 (47.2%) of those drivers for a traffic violation. The leading violation was "failure to yield right-of-way".

#### **Contributing Factors of Teenage-Driver Crashes (Utah 2004)**

Contributing Factors								
		Contribu	ting Fact	ors Code	d for Veh	icles Inv	olved In:	
	Teenage	Driver	Teenage	Driver	Teenage	Driver	Total To	eenage
	PDO C	rashes	Injury C	rashes	Fatal C	rashes	Driver C	rashes
Contributing Factors	#	%	#	%	#	%	#	%
Improper Lookout	2,529	27.0%	1,433	25.6%	6	13.3%	3,968	26.4%
Failed to Yield Right of Way	1,362	14.5%	1,003	18.0%	0	0.0%	2,365	15.8%
Followed Too Closely	1,423	15.2%	713	12.8%	1	2.2%	2,137	14.2%
Speed Too Fast	1,173	12.5%	662	11.8%	11	24.4%	1,846	12.3%
Other Improper Driving	823	8.8%	510	9.1%	6	13.3%	1,339	8.9%
Made Improper Turn	362	3.9%	153	2.7%	1	2.2%	516	3.4%
Disregard Traffic Signal	181	1.9%	212	3.8%	1	2.2%	394	2.6%
Other Driver Distractions	127	1.4%	109	2.0%	3	6.7%	239	1.6%
Drove Left of Center	124	1.3%	85	1.5%	3	6.7%	212	1.4%
Asleep	92	1.0%	94	1.7%	3	6.7%	189	1.3%
Improper Backing	160	1.7%	17	0.3%	0	0.0%	177	1.2%
Improper Overtaking	121	1.3%	46	0.8%	3	6.7%	170	1.1%
Hit and Run	137	1.5%	31	0.6%	0	0.0%	168	1.1%
Passed Stop Sign	78	0.8%	65	1.2%	0	0.0%	143	1.0%
Driving Under the Influence	63	0.7%	57	1.0%	0	0.0%	120	0.8%
Fatigued	60	0.6%	59	1.1%	1	2.2%	120	0.8%
Non-Contact Vehicle Involved	58	0.6%	43	0.8%	0	0.0%	101	0.7%
Object in Roadway	61	0.7%	33	0.6%	0	0.0%	94	0.6%
Aggressive Driving	54	0.6%	34	0.6%	2	4.4%	90	0.6%
Other Defective Condition of Vehicle	49	0.5%	23	0.4%	0	0.0%	72	0.5%
Brakes Defective	48	0.5%	23	0.4%	0	0.0%	71	0.5%
Driving Using Cell Phone	29	0.3%	24	0.4%	0	0.0%	53	0.4%
Windshield Not Clear	34	0.4%	18	0.3%	0	0.0%	52	0.3%
Tires Defective	34	0.4%	16	0.3%	1	2.2%	51	0.3%
Had Been Drinking	21	0.2%	24	0.4%	2	4.4%	47	0.3%
Wrong Side of Road	29	0.3%	12	0.2%	1	2.2%	42	0.3%
Failed to Signal	24	0.3%	9	0.2%	0	0.0%	33	0.2%
Headlight Insufficient or Out	15	0.2%	10	0.2%	0	0.0%	25	0.2%
	7	0.1%	18	0.3%	0	0.0%	25	0.2%
Under the Influence of Drugs	10	0.1%	14	0.3%	0	0.0%	24	0.2%
Steering Mechanism Defective	15	0.2%	4	0.1%		0.0%	19	0.1%
Stolen	8	0.1%	9	0.2%	0	0.0%	17	0.1%
Improper Parking	13	0.1%	2	0.0%	0	0.0%	15	0.1%
Cargo Loss or Shifted	10	0.1%	4	0.1%	0	0.0%	14	0.1%
Vehicle Rolling in Traffic Lane	4	0.0%	3	0.1%	0	0.0%	7	0.0%
Other Lights or Reflectors Defective	4	0.0%	2	0.0%	0	0.0%	6	0.0%
Other	29	0.3%	13	0.2%	0	0.0%	42	0.3%

- Contributing factors were coded by the police officer at the scene of the crash for each vehicle involved in the
  crash. The officer may record no contributing factors or up to two different contributing factors.
- "Improper lookout" was the leading contributing factor for total teenage-driver crashes (26.4%) and teenage-driver injury crashes (25.6%).
- "Speed too fast" was the leading contributing factor for fatal teenage-driver crashes (24.4%).

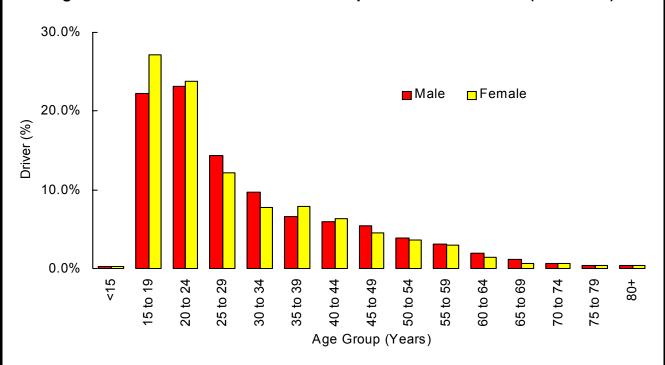
# Speed-Related Crashes 2004

## SPEED

#### Did you know that in 2004. . .

- 7,673 speed-related crashes occurred in Utah which resulted in 3,100 injuries and 84 fatalities.
- Speed-related crashes were 2.4 times more likely to be fatal than other motor vehicle crashes.
- A speed-related crash occurred in Utah every 60 minutes.

#### Age and Gender of Drivers Involved in Speed-Related Crashes (Utah 2004)



- While male drivers accounted for 56.7% of all drivers involved in a crash, they were involved in two-thirds (64.4%) of speed-related crashes.
- Teenage drivers between the ages of 15 to 19 years accounted for 17.2% of all drivers involved in a crash, yet they represented 22.3% of drivers involved in a speed-related crash.

#### Counties with the Highest Rates of Speed-Related Crashes (Utah 2004)

County	# of Speed-Related Crashes	Rate per 100 Million Vehicle Miles Traveled	County	# of Speed-Related Crashes	Rate per 100 Million Vehicle Miles Traveled
Morgan	75	64.1	Iron	248	39.1
Wasatch	161	60.5	Millard	157	36.5
Wayne	19	49.6	Kane	47	36.2
Summit	273	40.1	Cache	307	35.6
Daggett	11	39.6	Statewide	7,367	31.1

## **Section 5: Speed-Related Crashes**

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Crash Characteristics	
Crash Severity	
Month of Year	
Day of Week	91
Hour of Day	0.2

#### **Trends**

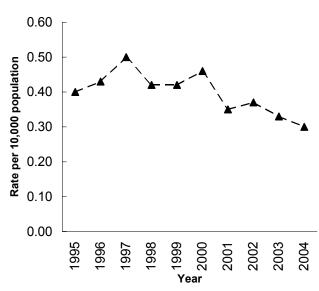
#### **Speed-Related Crashes 1995-2004**

	Speed-Related Crashes												
		Property Dama	age Only (PDO)	Ir	njury	F	atal	T	Total				
		Speed		Speed		Speed		All					
		PDO	Rate per	Injury	Rate per	Fatal	Rate per	Speed	Rate per				
	Utah	Crashes	10,000	Crashes	10,000	Crashes	10,000	Crashes	10,000				
Year	Population	#	Population	#	<b>Population</b>	#	<b>Population</b>	#	<b>Population</b>				
1995	1,995,228	3,980	19.9	2,912	14.6	80	0.40	6,972	34.9				
1996	2,042,893	5,565	27.2	3,322	16.3	87	0.43	8,974	43.9				
1997	2,099,409	4,823	23.0	3,151	15.0	105	0.50	8,079	38.5				
1998	2,141,632	4,717	22.0	2,981	13.9	90	0.42	7,788	36.4				
1999	2,193,014	3,836	17.5	2,652	12.1	92	0.42	6,580	30.0				
2000	2,246,553	4,687	20.9	2,934	13.1	104	0.46	7,725	34.4				
2001	2,295,971	5,037	21.9	3,003	13.1	80	0.35	8,120	35.4				
2002	2,338,761	4,379	18.7	2,770	11.8	86	0.37	7,235	30.9				
2003	2,385,358	4,498	18.9	2,604	10.9	79	0.33	7,181	30.1				
2004	2,469,230	4,836	19.6	2,764	11.2	73	0.30	7,673	31.1				
Total	22,208,049	46,358	20.9	29,093	13.1	876	0.39	76,327	34.4				

## Speed-Related Property Damage Only and Injury Crashes (Utah 1995-2004)

#### 

#### Speed-Related Fatal Crashes (Utah 1995-2004)



- Speed-related crashes are a concern because of the potential for severe injury and death.
- For the past ten years, the speed-related injury crash rate per 10,000 population remained fairly constant, while trends for property damage only speed-related crashes and fatal speed-related crashes varied from year to year.
- In 2004, speed-related property damage only crash rates increased 3.7% from 2003, and the total speed-related crash rate increased 3.3%.
- In 2004, speed-related injury crash rates increased 2.8% from 2003; however, the speed-related fatal crash rates decreased 9.1%.

#### **Counties**

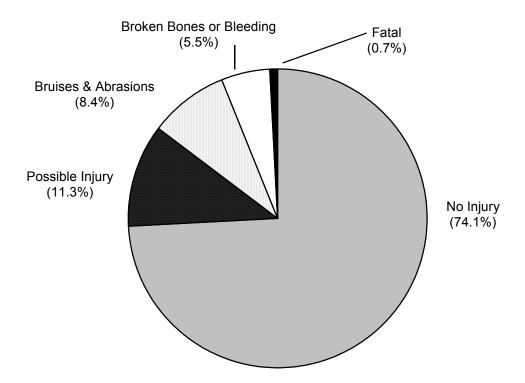
#### **Speed-Related Crashes by County (Utah 2004)**

	Speed-Related Crashes												
	Property I	Damage O	nly (PDO)		Injury			Fatal			Total		
	Speed	Rate	Rate	Speed	Rate	Rate	Speed	Rate	Rate	All	Rate	Rate	
	PDO	per 100	per	Injury	per 100	per	Fatal	per 100	per	Speed	per 100	per	
	Crashes	Million	10,000	Crashes	Million	10,000	Crashes	Million	10,000	Crashes	Million	10,000	
County	#	VMT	Population	#	VMT	Population	#	VMT	Population	#	VMT	<b>Population</b>	
Beaver	50	20.6	79.3	29	12.0	46.0	0	0.0	0.0	79	32.6	125.2	
Box ⊟der	173	19.5	38.7	116	13.1	26.0	0	0.0	0.0	289	32.6	64.7	
Cache	195	22.6	19.5	107	12.4	10.7	5	0.6	0.5	307	35.6	30.6	
Carbon	40	13.3	20.6	35	11.7	18.1	1	0.3	0.5	76	25.4	39.2	
Daggett	2	7.2	21.0	9	32.4	94.3	0	0.0	0.0	11	39.6	115.3	
Davis	398	17.3	14.8	207	9.0	7.7	2	0.1	0.1	607	26.4	22.6	
Duchesne	35	16.9	23.4	32	15.5	21.4	2	1.0	1.3	69	33.4	46.2	
Emery	56	15.8	53.4	34	9.6	32.4	1	0.3	1.0	91	25.7	86.7	
Garfield	16	12.9	34.6	12	9.7	25.9	0	0.0	0.0	28	22.6	60.5	
Grand	22	7.9	25.5	21	7.5	24.4	3	1.1	3.5	46	16.5	53.4	
Iron	132	20.8	33.9	111	17.5	28.5	5	0.8	1.3	248	39.1	63.7	
Juab	53	13.7	60.0	30	7.8	34.0	0	0.0	0.0	83	21.5	94.0	
Kane	22	17.0	36.3	23	17.7	38.0	2	1.5	3.3	47	36.2	77.6	
Millard	81	18.8	61.7	69	16.0	52.6	7	1.6	5.3	157	36.5	119.6	
Morgan	53	45.3	64.3	22	18.8	26.7	0	0.0	0.0	75	64.1	90.9	
Piute	3	9.9	22.0	2	6.6	14.6	1	3.3	7.3	6	19.7	43.9	
Rich	7	13.3	33.8	8	15.2	38.7	0	0.0	0.0	15	28.5	72.5	
Salt Lake	1,954	24.1	20.5	910	11.2	9.5	14	0.2	0.1	2,878	35.5	30.1	
San Juan	26	9.3	18.1	32	11.4	22.3	2	0.7	1.4	60	21.4	41.8	
Sanpete	30	12.4	12.0	17	7.0	6.8	1	0.4	0.4	48	19.8	19.2	
Sevier	62	14.9	31.9	39	9.4	20.1	0	0.0	0.0	101	24.3	52.0	
Summit	204	30.0	58.1	68	10.0	19.4	1	0.1	0.3	273	40.1	77.8	
Tooele	90	10.9	18.0	53	6.4	10.6	7	0.9	1.4	150	18.2	30.0	
Uintah	50	16.3	19.1	39	12.7	14.9	3	1.0	1.1	92	30.0	35.1	
Utah	590	16.9	13.5	392	11.2	9.0	8	0.2	0.2	990	28.3	22.6	
Wasatch	95	35.7	49.5	62	23.3	32.3	4	1.5	2.1	161	60.5	84.0	
Washington	92	8.5	7.8	102	9.4	8.7	2	0.2	0.2	196	18.1	16.7	
Wayne	5	13.0	19.9	14	36.5	55.6	0	0.0	0.0	19	49.6	75.5	
Weber	300	19.7	14.3	169	11.1	8.1	2	0.1	0.1	471	30.9	22.5	
Statewide	4,836	19.6	19.6	2,764	11.2	11.2	73	0.3	0.3	7,673	31.2	31.1	

- Two different rates are given in the above table; one based on vehicle miles traveled in the county, and another based on the population of the county.
- Rate per 100 million vehicle miles traveled:
  - Wayne (36.5), Daggett (32.4) and Wasatch (23.3) had the highest rates of speed-related injury crashes per 100 million vehicle miles traveled.
  - Piute (3.3) and Millard (1.6) had the highest rates of fatal speed-related crashes per 100 million vehicle miles traveled.
- Rate per 10,000 population:
  - Daggett (94.3), Wayne (55.6) and Millard (52.6) had the highest rates of speed-related injury crashes per 10,000 population.
  - Piute (7.3), Millard (5.3) and Grand (3.5) had the highest rates of speed-related crashes per 10,000 population.

#### Occupant Characteristics (Including Driver)

#### **Injury Severity of Occupants Involved in Speed-Related Crashes (Utah 2004)**



- In the above graph, there were a total of 12,284 persons involved in speed-related crashes.
- Approximately one-quarter (25.2%) of the occupants involved in speed-related crashes sustained a non-fatal injury. This compares to 21.0% of occupants who sustained a non-fatal injury in all motor vehicle crashes.
- The fatality percentage of occupants involved in speed-related crashes (0.7%) was higher than the fatality percentage of occupants involved in all motor vehicle crashes (0.2%).

#### **Driver Characteristics**

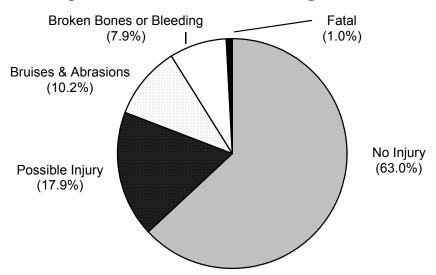
#### Age and Gender of Drivers Involved in Speed-Related Crashes (Utah 2004)

Drivers (Speed-Related)																
	Drivers Involved in Speed-Related Property Damage Only Crashes			perty	D	rivers In Speed-F Injury C	•			Rela	ted	Spe	Total Drivers Involved in Speed-Related Crashes			
	Female Male			Fer	male Male Femal			emale		Male	Fer	male	Male			
		vers		vers		vers		vers	_	rivers		rivers		vers	Drivers	
Age	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
<15	1	0.1%	7	0.2%	6	0.6%	10	0.5%	1	5.6%	0	0.0%	8	0.3%	17	0.3%
15-19	480	27.2%	716	22.7%	272	27.0%	398	21.7%	3	16.7%	8	14.3%	755	27.1%	1,122	22.3%
20-24	429	24.3%	727	23.1%	227	22.6%	422	23.0%	6	33.3%	14	25.0%	662	23.8%	1,163	23.1%
25-29	203	11.5%	459	14.6%	131	13.0%	255	13.9%	2	11.1%	8	14.3%	336	12.1%	722	14.3%
30-34	142	8.1%	320	10.2%	72	7.2%	164	9.0%	1	5.6%	4	7.1%	215	7.7%	488	9.7%
35-39	137	7.8%	208	6.6%	82	8.2%	116	6.3%	1	5.6%	8	14.3%	220	7.9%	332	6.6%
40-44	114	6.5%	181	5.7%	61	6.1%	117	6.4%	2	11.1%	4	7.1%	177	6.4%	302	6.0%
45-49	79	4.5%	173	5.5%	46	4.6%	96	5.2%	1	5.6%	3	5.4%	126	4.5%	272	5.4%
50-54	62	3.5%	111	3.5%	39	3.9%	81	4.4%	0	0.0%	4	7.1%	101	3.6%	196	3.9%
55-59	56	3.2%	94	3.0%	26	2.6%	61	3.3%	1	5.6%	2	3.6%	83	3.0%	157	3.1%
60-64	23	1.3%	57	1.8%	15	1.5%	43	2.3%	0	0.0%	0	0.0%	38	1.4%	100	2.0%
65-69	8	0.5%	33	1.0%	11	1.1%	23	1.3%	0	0.0%	0	0.0%	19	0.7%	56	1.1%
70-74	9	0.5%	17	0.5%	8	0.8%	14	0.8%	0	0.0%	0	0.0%	17	0.6%	31	0.6%
75-79	8	0.5%	10	0.3%	4	0.4%	9	0.5%	0	0.0%	1	1.8%	12	0.4%	20	0.4%
80-84	6	0.3%	4	0.1%	1	0.1%	8	0.4%	0	0.0%	0	0.0%	7	0.3%	12	0.2%
85+	1	0.1%	6	0.2%	2	0.2%	3	0.2%	0	0.0%	0	0.0%	3	0.1%	9	0.2%
Unknown	5	0.3%	26	0.8%	3	0.3%	12	0.7%	0	0.0%	0	0.0%	8	0.3%	38	0.8%
Total	1,763	100.0%	3,149	100.0%	1,006	100.0%	1,832	100.0%	18	100.0%	56	100.0%	2,787	100.0%	5,037	100.0%

NOTE: Gender was not reported for 136 drivers involved in speed-related crashes.

- Overall, male drivers represented 64.4% of the drivers involved in speed-related crashes.
- For male drivers, those aged 20 to 24 years had the highest percentage of total speed-related crashes (23.1%), speed-related injury crashes (23.0%), and fatal crashes (25.0%).
- For female drivers, those aged 15 to 19 years had the highest percentage of total speed-related crashes (27.1%) as well as speed-related injury crashes (27.0%). Female drivers aged 20 to 24 years had the highest percentage of fatal speed-related crashes (33.3%).

#### **Speed-Related Crash Severity (Utah 2004)**



- In the above graph, there were a total of 7,673 speed-related crashes.
- The percentage of speed-related crashes that resulted in a non-fatal injury (36.0%) was the same as the percentage of all motor vehicle crashes that resulted in a non-fatal injury (36.0%).
- In addition, a higher percentage of speed-related crashes were fatal (1.0%) compared to all fatal motor vehicle crashes (0.5%).
- In fact, speed-related crashes were 2.4 times more likely to be fatal than other motor vehicle crashes.

#### **Speed-Related Crashes by Month of Year (Utah 2004)**

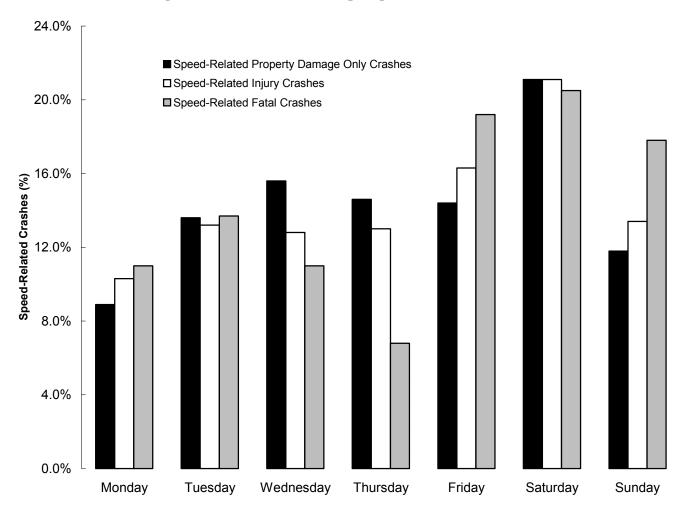
	Speed-Related Crashes												
		Property Damage	Only (PDO)	Injury		Fatal		Total					
	Days in	Speed-Related	Rate	Speed-Related	Rate	Speed-Related	Rate	All Speed-	Rate				
	Month	PDO Crashes	per	Injury Crashes	per	Fatal Crashes	per	Related Crashes	per				
Month	#	#	Day	#	Day	#	Day	#	Day				
January	31	751	24.2	321	10.4	2	0.1	1,074	34.6				
February	29	990	34.1	391	13.5	4	0.1	1,385	47.8				
March	31	221	7.1	162	5.2	10	0.3	393	12.7				
April	30	208	6.9	175	5.8	5	0.2	388	12.9				
May	31	179	5.8	207	6.7	8	0.3	394	12.7				
June	30	192	6.4	166	5.5	5	0.2	363	12.1				
July	31	194	6.3	181	5.8	8	0.3	383	12.4				
August	31	211	6.8	185	6.0	9	0.3	405	13.1				
September	30	214	7.1	167	5.6	6	0.2	387	12.9				
October	31	371	12.0	222	7.2	6	0.2	599	19.3				
November	30	527	17.6	284	9.5	7	0.2	818	27.3				
December	31	778	25.1	303	9.8	3	0.1	1,084	35.0				
Total	366	4,836	13.2	2,764	7.6	73	0.2	7,673	21.0				

- The above table shows the number and rate per day of speed-related crashes for each month.
- Overall, February (47.8), December (35.0) and January (34.6) had the highest rates of speed-related crashes per day.
- March had the highest rate per day of fatal speed-related crashes (0.3).

#### **Speed-Related Crashes by Day of Week (Utah 2004)**

Speed-Related Crashes												
	Property Dama	ge Only Crashes	Injury	Crashes	Fatal	Crashes	<b>Total Crashes</b>					
Day of Week	#	#	%	#	%	#	%					
Monday	428	8.9%	284	10.3%	8	11.0%	720	9.4%				
Tuesday	660	13.6%	365	13.2%	10	13.7%	1,035	13.5%				
Wednesday	756	15.6%	353	12.8%	8	11.0%	1,117	14.6%				
Thursday	704	14.6%	360	13.0%	5	6.8%	1,069	13.9%				
Friday	695	14.4%	450	16.3%	14	19.2%	1,159	15.1%				
Saturday	1,022	21.1%	583	21.1%	15	20.5%	1,620	21.1%				
Sunday	571	11.8%	369	13.4%	13	17.8%	953	12.4%				
Total	4,836	100.0%	2,764	100.0%	73	100.0%	7,673	100.0%				

#### **Speed-Related Crashes by Day of Week (Utah 2004)**

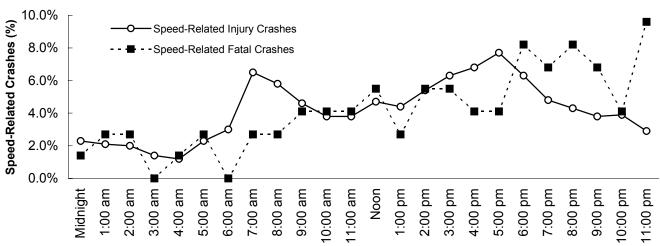


- The above table and graph show that the highest percentage of speed-related total crashes (21.1%), property damage only crashes (21.1%), injury crashes (21.1%) and fatal crashes (20.5%) occurred on Saturday.
- The lowest percentage of fatal speed-related crashes occurred on Thursday (6.8%).

#### **Speed-Related Crashes by Hour of Day (Utah 2004)**

Speed-Related Crashes											
	Property Damag	ge Only Crashes	Injury (	Crashes	Fatal	Crashes	Total C	crashes			
Hour	#	%	#	%	#	%	#	%			
Midnight	115	2.4%	63	2.3%	1	1.4%	179	2.3%			
1:00 am	97	2.0%	58	2.1%	2	2.7%	157	2.0%			
2:00 am	80	1.7%	55	2.0%	2	2.7%	137	1.8%			
3:00 am	60	1.2%	38	1.4%	0	0.0%	98	1.3%			
4:00 am	51	1.1%	33	1.2%	1	1.4%	85	1.1%			
5:00 am	93	1.9%	63	2.3%	2	2.7%	158	2.1%			
6:00 am	194	4.0%	82	3.0%	0	0.0%	276	3.6%			
7:00 am	330	6.8%	179	6.5%	2	2.7%	511	6.7%			
8:00 am	363	7.5%	161	5.8%	2	2.7%	526	6.9%			
9:00 am	281	5.8%	128	4.6%	3	4.1%	412	5.4%			
10:00 am	203	4.2%	106	3.8%	3	4.1%	312	4.1%			
11:00 am	183	3.8%	106	3.8%	3	4.1%	292	3.8%			
Noon	182	3.8%	130	4.7%	4	5.5%	316	4.1%			
1:00 pm	204	4.2%	122	4.4%	2	2.7%	328	4.3%			
2:00 pm	211	4.4%	148	5.4%	4	5.5%	363	4.7%			
3:00 pm	259	5.4%	175	6.3%	4	5.5%	438	5.7%			
4:00 pm	287	5.9%	188	6.8%	3	4.1%	478	6.2%			
5:00 pm	339	7.0%	212	7.7%	3	4.1%	554	7.2%			
6:00 pm	282	5.8%	174	6.3%	6	8.2%	462	6.0%			
7:00 pm	223	4.6%	133	4.8%	5	6.8%	361	4.7%			
8:00 pm	240	5.0%	119	4.3%	6	8.2%	365	4.8%			
9:00 pm	202	4.2%	104	3.8%	5	6.8%	311	4.1%			
10:00 pm	186	3.8%	107	3.9%	3	4.1%	296	3.9%			
11:00 pm	171	3.5%	80	2.9%	7	9.6%	258	3.4%			
Total	4,836	100.0%	2,764	100.0%	73	100.0%	7,673	100.0%			

#### **Speed-Related Crashes by Hour of Day (Utah 2004)**



- The above table and graph show that speed-related injury crashes peaked in the late afternoon (2:00 pm to 6:00 pm), with another peak at 7:00 am.
- Fatal speed-related crashes varied by hour peaked in evening (6:00 pm to 11:00 pm).

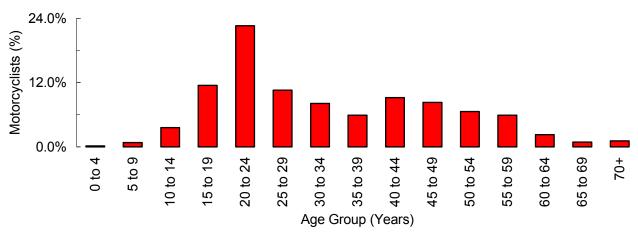
## Motorcycles 2004

## **Motorcycles**

#### Did you know that in 2004. . .

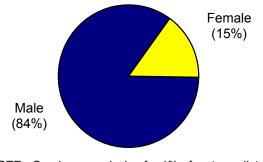
- There were 938 total motorcycle crashes in Utah, resulting in 877 injured motorcyclists and 31 motorcyclist fatalities.
- There was an 18.8% increase from 2003 in the rate of total motorcycle crashes, and a 17.9% increase from 2003 in the rate of motorcycle injury crashes.
- Nearly all of the motorcycle crashes resulted in a non-fatal injury (85.8%) compared to 36.0% of all motor vehicle crashes.
- Motorcyclists were 16 times more likely to be killed in a crash than other crash occupants.

#### Age of Motorcyclists (Driver and Passenger) Involved in Crashes (Utah 2004)



- Approximately one-half (49.3%) of the motorcyclists involved in crashes were under the age of 30 years.
- Motorcyclists aged 20 to 24 years were involved in the highest percentage of crashes (22.6%).

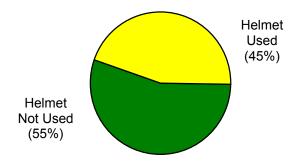
#### Gender of Motorcyclists Involved in Crashes (Utah 2004)



NOTE: Gender was missing for 1% of motorcyclists.

- Most motorcyclists involved in crashes were male (84%).
- The high percentage of male motorcyclists involved in crashes does not necessarily indicate that male motorcyclists are at greater risk for a crash, but may reflect the higher proportion of motorcycle users who are male.

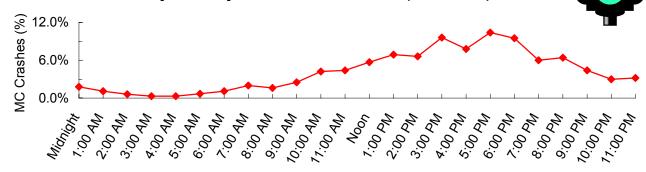
## Helmet Use of Motorcyclists Killed in a Crash (Utah 2004)



- The majority of the motorcyclists killed in a crash were not wearing a helmet (55%).
- Overall, only 37.2% of motorcycle drivers and passengers involved in crashes wore a helmet.
- Utah law states that anyone under the age of 18 years riding a motorcycle, either as the driver or as a passenger, must wear a helmet approved by the Department of Public Safety.

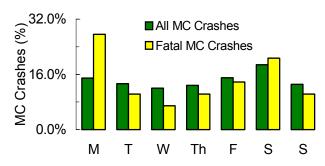
## MOTORCYCLES

#### Time of Day Motorcycle Crashes Occurred (Utah 2004)



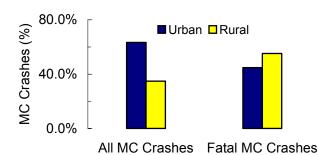
The highest percentage of motorcycle crashes occurred between 1:00 pm and 6:00 pm.

## Motorcycle Crashes by Day of Week (Utah 2004)



- The highest percentage of all motorcycle crashes occurred on Saturday (18.8%).
- Fatal motorcycle crashes occurred most frequently on Monday (27.6%).

## Urban/Rural Location of Motorcycle Crashes (Utah 2004)



- The majority of all motorcycle crashes occurred in urban areas (63.7%).
- The largest percentage of fatal motorcycle crashes occurred in rural areas (55.2%).
- Motorcycle crashes in rural areas were twice as likely to result in a fatality than motorcycle crashes in urban areas.

#### **Leading Motorcycle Crash Violations\* (Utah 2004)**

- 1. Following Too Close (12.5%)
- 2. Improper Lookout (9.3%)
- 3. Driving Under the Influence (7.4%)
- 4. Speeding (6.0%)
- 5. Reckless Driving (4.6%)

Approximately one-quarter (22.6%) of the motorcycle drivers involved in crashes received a citation.

\*Does not include "other moving violations" and "other non-moving violations".

#### **Motorcycle Crash Clock (Utah 2004)**



#### Alcohol and Other Drug Involvement



- Of the 30 motorcycle drivers involved in fatal crashes in 2004, 5 were impaired by alcohol or other drugs (16.7%).
- This compares to 4.5% of motorcycle drivers involved in fatal crashes in 2003 that were impaired.

## **Section 6: Motorcycles**

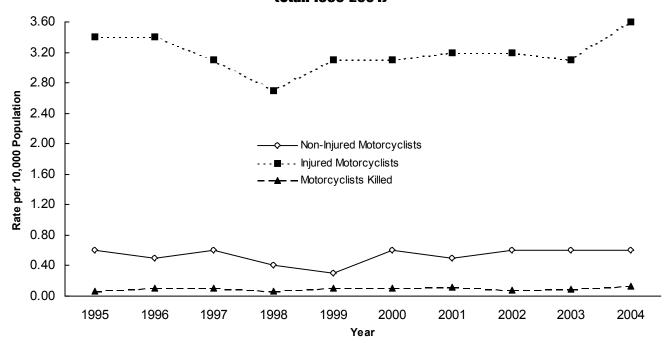
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#### **Trends**

#### **Motorcyclists Involved in Crashes 1995-2004**

	Motorcyclists (Driver and Passenger)											
		Non-Injured	Persons	Injured P	ersons	Persons	Killed	Total Pe	rsons			
		Non-Injured Rate per		Injured	Rate per	Motorcyclists	Rate per	All	Rate per			
		Motorcyclists	10,000	Motorcyclists	10,000	Killed	10,000	Motorcyclists	10,000			
Year	Population	#	Population	#	Population	#	Population	#	Population			
1995	1,995,228	119	0.6	680	3.4	11	0.06	810	4.1			
1996	2,042,893	112	0.5	698	3.4	21	0.10	831	4.1			
1997	2,099,409	120	0.6	652	3.1	22	0.10	794	3.8			
1998	2,141,632	93	0.4	584	2.7	14	0.07	691	3.2			
1999	2,193,014	76	0.3	671	3.1	23	0.10	770	3.5			
2000	2,246,553	124	0.6	694	3.1	24	0.11	842	3.7			
2001	2,295,971	124	0.5	733	3.2	28	0.12	885	3.9			
2002	2,338,761	130	0.6	755	3.2	18	0.08	903	3.9			
2003	2,385,358	134	0.6	730	3.1	22	0.09	886	3.7			
2004	2,469,230	149	0.6	877	3.6	31	0.13	1,057	4.3			
Total	22,208,049	1,181	0.5	7,074	3.2	214	0.10	8,469	3.8			

## Motorcyclists Involved in Crashes (Driver and Passenger) (Utah 1995-2004)



- The above table and graph show the trends in motorcyclists (driver and passenger) involved in crashes from 1995 to 2004.
- Overall, the rate of motorcyclists involved in crashes decreased from 1995 to 1998, with the lowest rate of motorcyclists involved in crashes occurring in 1998 (3.2). This has been followed by an upward trend.
- In fact, in 2004 there was a 16.2% increase in the rate of total motorcyclists involved in crashes and a 16.1% increase in the rate of motorcyclists injured in crashes from 2003.
- While the number of motorcyclists killed in crashes varies from year to year, the small number of fatalities makes it difficult to compare yearly increases and decreases.

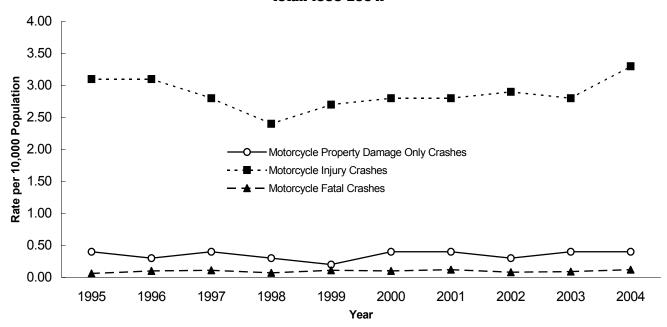
#### **Trends**

#### **Motorcycle Crashes 1995-2004**

	Motorcycle Crashes											
		Property Damag	ge Only (PDO)	Inju	ıry	Fa	tal	To	tal			
		Motorcycle	Rate	Motorcycle	Rate	Motorcycle	Rate	All	Rate			
		PDO	per	Injury	per	Fatal	per	Motorcycle	per			
		Crashes	10,000	Crashes	10,000	Crashes	10,000	Crashes	10,000			
Year	Population	#	Population	#	Population	#	Population	#	Population			
1995	1,995,228	86	0.4	614	3.1	11	0.06	711	3.6			
1996	2,042,893	66	0.3	626	3.1	21	0.10	713	3.5			
1997	2,099,409	80	0.4	594	2.8	23	0.11	697	3.3			
1998	2,141,632	66	0.3	509	2.4	14	0.07	589	2.8			
1999	2,193,014	52	0.2	602	2.7	24	0.11	678	3.1			
2000	2,246,553	88	0.4	624	2.8	22	0.10	734	3.3			
2001	2,295,971	82	0.4	648	2.8	28	0.12	758	3.3			
2002	2,338,761	81	0.3	689	2.9	18	0.08	788	3.4			
2003	2,385,358	84	0.4	661	2.8	21	0.09	766	3.2			
2004	2,469,230	104	0.4	805	3.3	29	0.12	938	3.8			
Total	22,208,049	789	0.4	6,372	2.9	211	0.10	7,372	3.3			

NOTE: A crash may result in multiple injuries and/or fatalities.

#### Motorcycle Crashes (Utah 1995-2004)



- The above table and graph show the trends in motorcycle crashes from 1995 to 2004.
- Overall, the rate of motorcycle crashes decreased from 1995 to 1998, with the lowest rate of motorcycle crashes occurring in 1998 (2.8). This has been followed by an upward trend.
- In fact, in 2004 there was a 18.8% increase in the rate of total motorcycle crashes and a 17.9% increase in the rate of motorcycle injury crashes from 2003.
- While fatal motorcycle crashes vary from year to year, the small number of fatal crashes makes it difficult to compare yearly increases and decreases.

#### **Counties**

#### **Motorcyclists Involved in Crashes by County (Utah 2004)**

	Motorcyclists (Driver and Passenger)											
	Non-Ir	njured Per	sons	ln	jured Per	sons	Р	ersons K	illed	T	otal Pers	ons
	Non-Injured	Rate	Rate	Injured	Rate	Rate	Motor-	Rate	Rate	All	Rate	Rate
	Motor-	per 100	per	Motor-	per 100	per	cyclists	per 100	per	Motor-	per 100	per
	cyclists	Million	10,000	cyclists	Million	10,000	Killed	Million	10,000	cyclists	Million	10,000
County	#	VMT	<b>Population</b>	#	VMT	<b>Population</b>	#	VMT	<b>Population</b>	#	VMT	Population
Beaver	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Box Elder	1	0.1	0.2	12	1.4	2.7	1	0.1	0.2	14	1.6	3.1
Cache	11	1.3	1.1	38	4.4	3.8	1	0.1	0.1	50	5.8	5.0
Carbon	0	0.0	0.0	6	2.0	3.1	0	0.0	0.0	6	2.0	3.1
Daggett	1	3.6	10.5	6	21.6	62.9	0	0.0	0.0	7	25.2	73.4
Davis	2	0.1	0.1	66	2.9	2.5	2	0.1	0.1	70	3.0	2.6
Duchesne	3	1.5	2.0	8	3.9	5.4	0	0.0	0.0	11	5.3	7.4
Emery	3	0.8	2.9	1	0.3	1.0	0	0.0	0.0	4	1.1	3.8
Garfield	2	1.6	4.3	4	3.2	8.6	0	0.0	0.0	6	4.8	13.0
Grand	1	0.4	1.2	9	3.2	10.5	2	0.7	2.3	12	4.3	13.9
Iron	0	0.0	0.0	23	3.6	5.9	3	0.5	0.8	26	4.1	6.7
Juab	1	0.3	1.1	5	1.3	5.7	1	0.3	1.1	7	1.8	7.9
Kane	2	1.5	3.3	7	5.4	11.6	0	0.0	0.0	9	6.9	14.9
Millard	4	0.9	3.0	8	1.9	6.1	0	0.0	0.0	12	2.8	9.1
Morgan	2	1.7	2.4	11	9.4	13.3	0	0.0	0.0	13	11.1	15.8
Piute	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Rich	2	3.8	9.7	3	5.7	14.5	0	0.0	0.0	5	9.5	24.2
Salt Lake	57	0.7	0.6	306	3.8	3.2	7	0.1	0.1	370	4.6	3.9
San Juan	1	0.4	0.7	7	2.5	4.9	2	0.7	1.4	10	3.6	7.0
Sanpete	2	0.8	0.8	3	1.2	1.2	0	0.0	0.0	5	2.1	2.0
Sevier	1	0.2	0.5	8	1.9	4.1	1	0.2	0.5	10	2.4	5.2
Summit	3	0.4	0.9	12	1.8	3.4	0	0.0	0.0	15	2.2	4.3
Tooele	3	0.4	0.6	20	2.4	4.0	0	0.0	0.0	23	2.8	4.6
Uintah	3	1.0	1.1	14	4.6	5.3	1	0.3	0.4	18	5.9	6.9
Utah	20	0.6	0.5	150	4.3	3.4	3	0.1	0.1	173	4.9	4.0
Wasatch	1	0.4	0.5	18	6.8	9.4	1	0.4	0.5	20	7.5	10.4
Washington	14	1.3	1.2	48	4.4	4.1	3	0.3	0.3	65	6.0	5.5
Wayne	0	0.0	0.0		36.5	55.6	0	0.0	0.0	14	36.5	55.6
Weber	9	0.6	0.4	70	4.6	3.3	3	0.2	0.1	82	5.4	3.9
Statewide	149	0.6	0.6	877	3.6	3.6	31	0.1	0.1	1,057	4.3	4.3

- Two different rates are given in the above table; one based on vehicle miles traveled in the county, and another based on the population of the county.
- Rate per 100 million vehicle miles traveled:
  - Wayne (36.5), Daggett (21.6) and Morgan (9.4) had the highest rates of motorcyclists injured in crashes per 100 million vehicle miles traveled.
  - Grand (0.7), San Juan (0.7) and Iron (0.5) had the highest rates of motorcyclists killed in crashes per 100 million vehicle miles traveled.
- Rate per 10,000 population:
  - Daggett (62.9), Wayne (55.6) and Rich (14.5) had the highest rates of motorcyclists injured in crashes per 10,000 population.
  - Grand (2.3), San Juan (1.4) and Juan (1.1) had the highest rates of motorcyclists killed in crashes per 10,000 population.

#### **Counties**

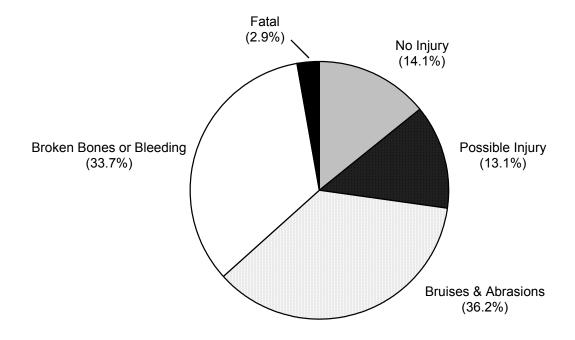
#### **Motorcycle Crashes by County (Utah 2004)**

					Motor	cycle Cra	shes					
	Property D	amage O	nly (PDO)		Injury			Fatal			Total	
	Motorcycle	Rate	Rate	Motorcycle	Rate	Rate	Motorcycle	Rate	Rate	All	Rate	Rate
	PDO	per 100	per	Injury	per 100	per	Fatal	per 100	per	Motorcycle	per 100	per
	Crashes	Million	10,000									
County	#	VMT	Population									
Beaver	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Box ∃der	1	0.1	0.2	12	1.4	2.7	1	0.1	0.2	14	1.6	3.1
Cache	9	1.0	0.9	34	3.9	3.4	1	0.1	0.1	44	5.1	4.4
Carbon	0	0.0	0.0	5	1.7	2.6	0	0.0	0.0	5	1.7	2.6
Daggett	0	0.0	0.0	4	14.4	41.9	0	0.0	0.0	4	14.4	41.9
Davis	3	0.1	0.1	58	2.5	2.2	2	0.1	0.1	63	2.7	2.3
Duchesne	0	0.0	0.0	6	29	4.0	0	0.0	0.0	6	2.9	4.0
Emery	1	0.3	1.0	1	0.3	1.0	0	0.0	0.0	2	0.6	1.9
Garfield	1	0.8	2.2	4	3.2	8.6	0	0.0	0.0	5	4.0	10.8
Grand	1	0.4	1.2	9	3.2	10.5	2	0.7	2.3	12	4.3	13.9
Iron	0	0.0	0.0	18	2.8	4.6	3	0.5	0.8	21	3.3	5.4
Juab	1	0.3	1.1	5	1.3	5.7	1	0.3	1.1	7	1.8	7.9
Kane	0	0.0	0.0	7	5.4	11.6	0	0.0	0.0	7	5.4	11.6
Mllard	1	0.2	0.8	7	1.6	5.3	0	0.0	0.0	8	1.9	6.1
Morgan	2	1.7	24	10	8.6	12.1	0	0.0	0.0	12	10.3	14.5
Piute	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Rich	1	1.9	4.8	2	3.8	9.7	0	0.0	0.0	3	5.7	14.5
Salt Lake	46	0.6	0.5	287	3.5	3.0	7	0.1	0.1	340	4.2	3.6
San Juan	1	0.4	0.7	7	2.5	4.9	2	0.7	1.4	10	3.6	7.0
Sanpete	1	0.4	0.4	3	1.2	1.2	0	0.0	0.0	4	1.7	1.6
Sevier	2	0.5	1.0	7	1.7	3.6	1	0.2	0.5	10	2.4	5.2
Summit	1	0.1	0.3	12	1.8	3.4	0	0.0	0.0	13	1.9	3.7
Tooele	0	0.0	0.0	16	1.9	3.2	0	0.0	0.0	16	1.9	3.2
Uintah	2	0.7	0.8	11	3.6	4.2	1	0.3	0.4	14	4.6	5.3
Utah	13	0.4	0.3	138	3.9	3.2	2	0.1	0.0	153	4.4	3.5
Wasatch	1	0.4	0.5	15	5.6	7.8	1	0.4	0.5	17	6.4	8.9
Washington	10	0.9	0.9	48	4.4	4.1	2	0.2	0.2	60	5.6	5.1
Wayne	0	0.0	0.0	13	33.9	51.6	0	0.0	0.0	13	33.9	51.6
Weber	6	0.4	0.3	66	4.3	3.1	3	0.2	0.1	75	4.9	3.6
Statewide	104	0.4	0.4	805	3.3	3.3	29	0.1	0.1	938	3.8	3.8

- Two different rates are given in the above table; one based on vehicle miles traveled in the county, and another based on the population of the county.
- Rate per 100 million vehicle miles traveled:
  - Wayne (33.9), Daggett (14.4) and Morgan (8.6) had the highest rates of motorcycle injury crashes per 100 million vehicle miles traveled.
  - Grand (0.7), San Juan (0.7) and Iron (0.5) had the highest rates of fatal motorcycle crashes per 100 million vehicle miles traveled.
- Rate per 10,000 population:
  - Wayne (51.6), Daggett (41.9) and Morgan (12.1) had the highest rates of motorcycle injury crashes per 10,000 population.
  - Grand (2.3), San Juab (1.4) and Iron (0.8) had the highest rates of fatal motorcycle crashes per 10,000 population.

#### **Motorcyclist Characteristics (Driver and Passenger)**

#### **Injury Severity of Motorcyclists Involved in Crashes (Utah 2004)**



- In the above graph, there were a total of 1,057 motorcyclists involved in crashes.
- The above graph shows that the percentage of motorcyclists sustaining a non-fatal injury (85.9%) was much higher than the percentage of all motor vehicle crash occupants sustaining a non-fatal injury (21.0%).
- A fatal injury was sustained by 2.9% of motorcyclists compared to 0.2% of all motor vehicle crash occupants.
- In fact, motorcyclists were 16 times more likely to be killed in a crash than other motor vehicle crash occupants.

#### **Occupant Placement of Motorcyclists Involved in Crashes (Utah 2004)**

Motorcyclists (Driver and Passenger)											
	Non-Injured Motorcyclists			red cyclists		cyclists lled	Total Motorcyclists				
Occupant Placement	#	%	#	%	#	%	#	%			
Driver	132	88.6%	796	90.8%	29	93.5%	957	90.5%			
Passenger	17	11.4%	81	9.2%	2	6.5%	100	9.5%			
Total	149	100.0%	877	100.0%	31	100.0%	1,057	100.0%			

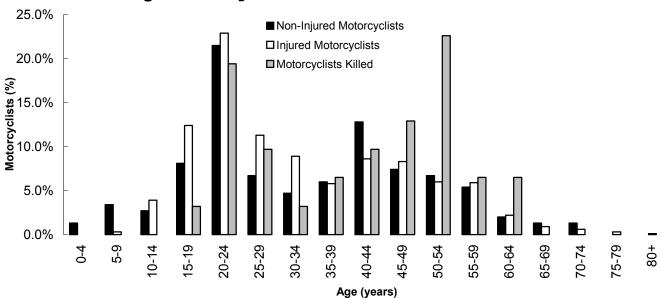
- The above table shows that drivers accounted for the majority of injured motorcyclists (90.8%) and 93.5% of the motorcyclist fatalities.
- In addition, there were 2 pedestrians and 8 bicyclists involved in motorcycle crashes. All of the pedestrians and bicyclists sustained non-fatal injuries.

#### **Motorcyclist Characteristics (Driver and Passenger)**

#### **Age of Motorcyclists Involved in Crashes (Utah 2004)**

	M	otorcy	clists (l	Driver a	and Pas	ssenge	r)	
	Non-lı	njured	Inju	ıred	Motoro	cyclists	To	otal
	Motorc	cyclists	Motoro	cyclists	Kil	led	Motoro	cyclists
Age	#	%	#	%	#	%	#	%
0-4	2	1.3%	0	0.0%	0	0.0%	2	0.2%
5-9	5	3.4%	3	0.3%	0	0.0%	8	0.8%
10-14	4	2.7%	34	3.9%	0	0.0%	38	3.6%
15-19	12	8.1%	109	12.4%	1	3.2%	122	11.5%
20-24	32	21.5%	201	22.9%	6	19.4%	239	22.6%
25-29	10	6.7%	99	11.3%	3	9.7%	112	10.6%
30-34	7	4.7%	78	8.9%	1	3.2%	86	8.1%
35-39	9	6.0%	51	5.8%	2	6.5%	62	5.9%
40-44	19	12.8%	75	8.6%	3	9.7%	97	9.2%
45-49	11	7.4%	73	8.3%	4	12.9%	88	8.3%
50-54	10	6.7%	53	6.0%	7	22.6%	70	6.6%
55-59	8	5.4%	52	5.9%	2	6.5%	62	5.9%
60-64	3	2.0%	19	2.2%	2	6.5%	24	2.3%
65-69	2	1.3%	8	0.9%	0	0.0%	10	0.9%
70-74	2	1.3%	5	0.6%	0	0.0%	7	0.7%
75-79	0	0.0%	3	0.3%	0	0.0%	3	0.3%
+08	0	0.0%	1	0.1%	0	0.0%	1	0.1%
Missing	13	8.7%	13	1.5%	0	0.0%	26	2.5%
Total	149	100.0%	877	100.0%	31	100.0%	1,057	100.0%

#### **Age of Motorcyclists Involved in Crashes (Utah 2004)**



- Overall, the largest percentage of motorcyclists involved in crashes were aged 20 to 24 years (22.6%). This age group also represented the largest percentage of injured motorcyclists involved in crashes (22.9%).
- The highest percentage of motorcyclist fatalities occurred in the 50 to 54 year age group (22.6%) and the 20 to 24 year age group (19.4%).

#### **Motorcyclist Characteristics (Driver and Passenger)**

#### **Gender of Motorcyclists Involved in Crashes (Utah 2004)**

	Motorcyclists (Driver and Passenger)												
	Non-Injured Motorcyclists		_	Injured Motorcyclists Motorcyclists Killed			Total Motorcyclists						
Gender	#	%	#	%	#	%	#	%					
Female	18	12.1%	133	15.2%	4	12.9%	155	14.7%					
Male	120	80.5%	743	84.7%	27	87.1%	890	84.2%					
Missing	11	7.4%	1	0.1%	0	0.0%	12	1.1%					
Total	149	100.0%	877	100.0%	31	100.0%	1,057	100.0%					

 The majority of all motorcyclists (84.2%), injured motorcyclists (84.7%) and motorcyclists killed (87.1%) in crashes were male.

#### **Helmet Use of Motorcyclists Involved in Crashes (Utah 2004)**

Motorcyclists (Driver and Passenger)										
	Non-Injured		•	ıred	Motoro	cyclists	Total			
	Motoro	cyclists	Motoro	cyclists	Kil	led	Motoro	Motorcyclists		
Helmet Use	#	%	#	%	#	%	#	%		
Helmet Worn	40	26.8%	339	38.7%	14	45.2%	393	37.2%		
Helmet Not Worn / Unknown	109	73.2%	538	61.3%	17	54.8%	664	62.8%		
Total	149	100.0%	877	100.0%	31	100.0%	1,057	100.0%		

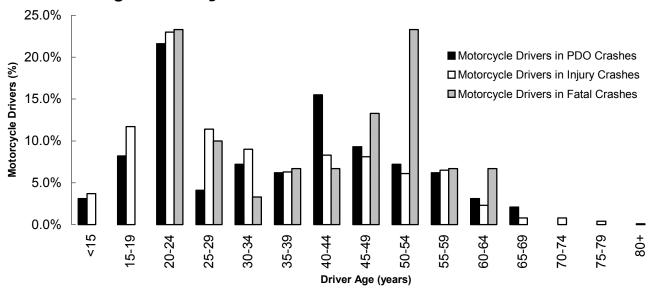
- Only 37.2% of motorcycle drivers and passengers involved in crashes wore a helmet.
- Utah law states that anyone under the age of 18 years riding a motorcycle, either as the driver or as the passenger, must wear a helmet approved by the Department of Public Safety.

#### **Motorcycle Driver Characteristics**

#### **Motorcycle Driver Age (Utah 2004)**

	Motorcycle Drivers												
	Motorcycle Drivers Involved in Property Damage Only Crashes		Motorcycl Involv Injury C	ed in	Invo	cle Drivers lved in Crashes	Total Mo Drivers I in Cra	nvolved					
Driver Age	#	%	#	%	#	%	#	%					
<15	3	3.1%	31	3.7%	(	0.0%	34	3.6%					
15-19	8	8.2%	97	11.7%	(	0.0%	105	11.0%					
20-24	21	21.6%	191	23.0%	7	23.3%	219	22.9%					
25-29	4	4.1%	95	11.4%	3	3 10.0%	102	10.7%					
30-34	7	7.2%	75	9.0%	,	3.3%	83	8.7%					
35-39	6	6.2%	52	6.3%	2	2 6.7%	60	6.3%					
40-44	15	15.5%	69	8.3%	2	2 6.7%	86	9.0%					
45-49	9	9.3%	67	8.1%	4	13.3%	80	8.4%					
50-54	7	7.2%	51	6.1%	7	23.3%	65	6.8%					
55-59	6	6.2%	54	6.5%	2	2 6.7%	62	6.5%					
60-64	3	3.1%	19	2.3%	2	2 6.7%	24	2.5%					
65-69	2	2.1%	7	0.8%	(	0.0%	9	0.9%					
70-74	0	0.0%	7	0.8%	(	0.0%	7	0.7%					
75-79	0	0.0%	3	0.4%	(	0.0%	3	0.3%					
80+	0	0.0%	1	0.1%	(	0.0%	1	0.1%					
Missing	6	6.2%	11	1.3%	(	0.0%	17	1.8%					
Total	97	100.0%	830	100.0%	30	100.0%	957	100.0%					

#### **Age of Motorcycle Drivers Involved in Crashes (Utah 2004)**



- The above table and graph show that approximately one-half (48.2%) of the motorcycle drivers involved in crashes were under the age of 30 years.
- The percentage of drivers involved in injury crashes was highest for those aged 20 to 24 years (22.9%).
- The percentage of drivers involved in fatal crashes was highest for those aged 20 to 24 years (23.3%) and 50 to 54 years (23.3%).

#### **Motorcycle Driver Characteristics**

#### **Motorcycle Driver Gender (Utah 2004)**

	Motorcycle Drivers											
	Motorcycle Drivers Involved in Property Damage Only Crashes		Motorcycle Involve Injury Ci	ed in	Motorcycle Involv Fatal Cr	ed in	Total Motorcycle Drivers Involved in Crashes					
Driver Gender	#	%	#	%	#	%	#	%				
Female	9	9.3%	78	9.4%	2	6.7%	89	9.3%				
Male	82	84.5%	749	90.2%	28	93.3%	859	89.8%				
Missing	6	6.2%	3	0.4%	0	0.0%	9	0.9%				
Total	97	100.0%	830	100.0%	30	100.0%	957	100.0%				

• The majority of motorcycle drivers involved in total crashes (89.8%), injury crashes (90.2%) and fatal crashes (93.3%) were male. This does not necessarily indicate that male motorcycle drivers are at greater risk for a crash, but may reflect a higher proportion of male motorcycle drivers in Utah.

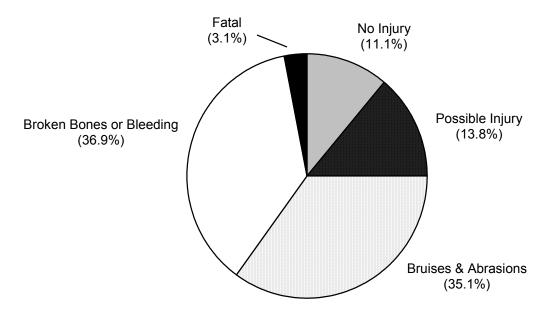
#### **Alcohol and Other Drug Involvement of Motorcycle Drivers (Utah 2004)**



• Of the 30 motorcycle drivers involved in fatal crashes in 2004, 5 were impaired by alcohol or other drugs (16.7%).

#### **Motorcycle Crash Characteristics**

#### **Motorcycle Crash Severity (Utah 2004)**



- In the above graph, there were a total of 938 motorcycle crashes.
- Most motorcycle crashes resulted in a non-fatal injury (85.8%) compared to 36.0% of all motor vehicle crashes.
- The percentage of fatal motorcycle crashes was 3.1%, compared to 0.5% of all motor vehicle crashes.
- In fact, motorcycle crashes were 7 times more likely to be fatal than other motor vehicle crashes.

#### **Motorcycle Crashes by Month of Year (Utah 2004)**

			Moto	rcycle Crash	nes				
		Property Damag	e Only (PDO)	Injury		Fatal		Total	
	Days in	Motorcycle	Rate	Motorcycle	Rate	Motorcycle	Rate	All Motorcycle	Rate
	Month	PDO Crashes	per	Injury Crashes	per	Fatal Crashes	per	Crashes	per
Month	#	#	Day	#	Day	#	Day	#	Day
January	31	2	0.1	5	0.2	0	0.0	7	0.2
February	29	3	0.1	10	0.3	0	0.0	13	0.4
March	31	10	0.3	68	2.2	1	0.0	79	2.5
April	30	6	0.2	68	2.3	1	0.0	75	2.5
May	31	10	0.3	98	3.2	3	0.1	111	3.6
June	30	11	0.4	118	3.9	8	0.3	137	4.6
July	31	16	0.5	115	3.7	5	0.2	136	4.4
August	31	13	0.4	131	4.2	6	0.2	150	4.8
September	30	15	0.5	91	3.0	4	0.1	110	3.7
October	31	11	0.4	66	2.1	1	0.0	78	2.5
November	30	4	0.1	19	0.6	0	0.0	23	8.0
December	31	3	0.1	16	0.5	0	0.0	19	0.6
Total	366	104	0.3	805	2.2	29	0.1	938	2.6

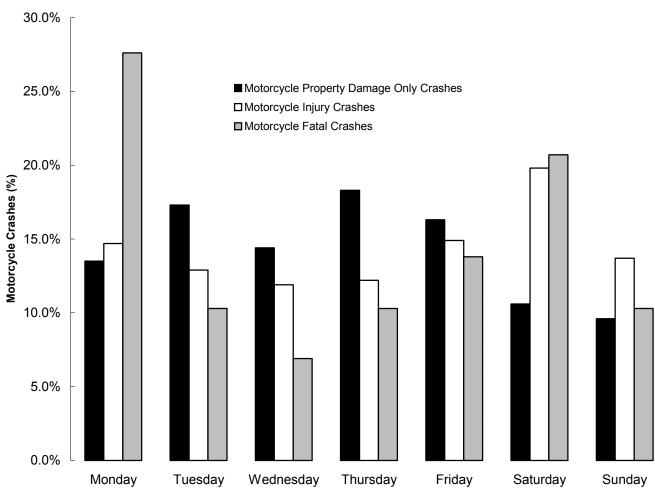
The above table shows May through September had the highest rates per day of total motorcycle crashes and
injury crashes. Very few motorcycle crashes occurred in the winter months, this is likely due to the decrease
of individuals riding motorcycles in the winter.

#### **Motorcycle Crash Characteristics**

#### **Motorcycle Crashes by Day of Week (Utah 2004)**

	Motorcycle Crashes											
	Property Dama	Injury	Crashes	Fatal	Crashes	Total	Crashes					
Day of Week	#	%	#	%	#	%	#	%				
Monday	14	13.5%	118	14.7%	8	27.6%	140	14.9%				
Tuesday	18	17.3%	104	12.9%	3	10.3%	125	13.3%				
Wednesday	15	14.4%	96	11.9%	2	6.9%	113	12.0%				
Thursday	19	18.3%	98	12.2%	3	10.3%	120	12.8%				
Friday	17	16.3%	120	14.9%	4	13.8%	141	15.0%				
Saturday	11	10.6%	159	19.8%	6	20.7%	176	18.8%				
Sunday	10	9.6%	110	13.7%	3	10.3%	123	13.1%				
Total	104	100.0%	805	100.0%	29	100.0%	938	100.0%				

#### **Motorcycle Crashes by Day of Week (Utah 2004)**

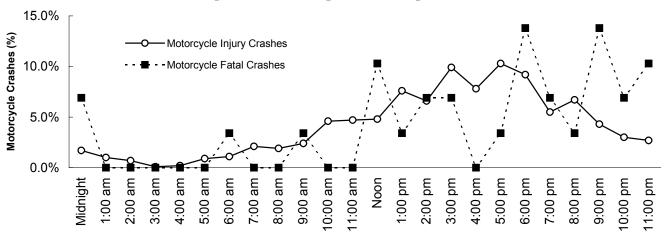


- The above table and graph show that the highest percentage of total motorcycle crashes (18.8%) and motorcycle injury crashes (19.8%) occurred on Saturday.
- Fatal motorcycle crashes occurred most frequently on Monday (27.6%).

### **Motorcycle Crashes by Hour of Day (Utah 2004)**

		Motorc	ycle Cı	rashes				
	Property Dama	ge Only Crashes	Injury	Crashes	Fatal	Crashes	Total (	Crashes
Hour	#	%	#	%	#	%	#	%
Midnight	1	1.0%	14	1.7%	2	6.9%	17	1.8%
1:00 am	2	1.9%	8	1.0%	0	0.0%	10	1.1%
2:00 am	0	0.0%	6	0.7%	0	0.0%	6	0.6%
3:00 am	2	1.9%	1	0.1%	0	0.0%	3	0.3%
4:00 am	1	1.0%	2	0.2%	0	0.0%	3	0.3%
5:00 am	0	0.0%	7	0.9%	0	0.0%	7	0.7%
6:00 am	0	0.0%	9	1.1%	1	3.4%	10	1.1%
7:00 am	2	1.9%	17	2.1%	0	0.0%	19	2.0%
8:00 am	0	0.0%	15	1.9%	0	0.0%	15	1.6%
9:00 am	3	2.9%	19	2.4%	1	3.4%	23	2.5%
10:00 am	2	1.9%	37	4.6%	0	0.0%	39	4.2%
11:00 am	3	2.9%	38	4.7%	0	0.0%	41	4.4%
Noon	11	10.6%	39	4.8%	3	10.3%	53	5.7%
1:00 pm	3	2.9%	61	7.6%	1	3.4%	65	6.9%
2:00 pm	7	6.7%	53	6.6%	2	6.9%	62	6.6%
3:00 pm	8	7.7%	80	9.9%	2	6.9%	90	9.6%
4:00 pm	10	9.6%	63	7.8%	0	0.0%	73	7.8%
5:00 pm	14	13.5%	83	10.3%	1	3.4%	98	10.4%
6:00 pm	11	10.6%	74	9.2%	4	13.8%	89	9.5%
7:00 pm	10	9.6%	44	5.5%	2	6.9%	56	6.0%
8:00 pm	5	4.8%	54	6.7%	1	3.4%	60	6.4%
9:00 pm	2	1.9%	35	4.3%	4	13.8%	41	4.4%
10:00 pm	2	1.9%	24	3.0%	2	6.9%	28	3.0%
11:00 pm	5	4.8%	22	2.7%	3	10.3%	30	3.2%
Total	104	100.0%	805	100.0%	29	100.0%	938	100.0%

### **Motorcycle Crashes by Hour of Day (Utah 2004)**



- In 2004, total motorcycle crashes and injury motorcycle crashes followed a similar time pattern, peaking between 1:00 pm and 6:00 pm.
- The highest proportion of fatal motorcycle crashes occurred during the 6:00 pm hour and the 9:00 pm hour.

### **Types of Crashes Involving Motorcycles (Utah 2004)**

Motorcycle Crashes												
	Property	Damage	Inj	ury	F	atal	To	tal				
	Only Cr	ashes	Cras	shes	Cr	ashes	Crashes					
Crash Type	#	%	#	%	#	%	#	%				
Two Motor Vehicles	75	72.1%	368	45.7%	13	44.8%	456	48.6%				
Overturned in Roadway	6	5.8%	116	14.4%	5	17.2%	127	13.5%				
Ran Off Roadway - To the Right	5	4.8%	115	14.3%	6	20.7%	126	13.4%				
Other Non-Collision	5	4.8%	64	8.0%	0	0.0%	69	7.4%				
Ran Off Roadway - To the Left	4	3.8%	39	4.8%	3	10.3%	46	4.9%				
Motor Vehicle and Fixed Object	2	1.9%	36	4.5%	1	3.4%	39	4.2%				
Motor Vehicle and Other Object	3	2.9%	22	2.7%	0	0.0%	25	2.7%				
Motor Vehicle and Wild Animal	4	3.8%	18	2.2%	1	3.4%	23	2.5%				
Motor Vehicle and Skates, Scooters, Skateboards	0	0.0%	9	1.1%	0	0.0%	9	1.0%				
Motor Vehicle and Bicycle	0	0.0%	8	1.0%	0	0.0%	8	0.9%				
Motor Vehicle and Domestic Animal	0	0.0%	6	0.7%	0	0.0%	6	0.6%				
Ran Off Roadway - Through Median	0	0.0%	3	0.4%	0	0.0%	3	0.3%				
Motor Vehicle and Pedestrian	0	0.0%	1	0.1%	0	0.0%	1	0.1%				
Total	104	100.0%	805	100.0%	29	100.0%	938	100.0%				

- The majority of motorcycle property damage only crashes (72.1%), injury crashes (45.7%) and fatal crashes (44.8%) involved another motor vehicle.
- "Ran off the roadway" (to the right, to the left, or through the median) accounted for another 31.0% of the fatal motorcycle crashes.

### **Collision Description of Motorcycle Crashes (Utah 2004)**

	Motorcycle Crashes											
	Property Damage	Injury C	rashes	Fatal C	rashes	<b>Total Crashes</b>						
Collision Description	#	%	#	%	#	%	#	%				
Single Vehicle Rollover	11	10.6%	293	36.4%	12	41.4%	316	33.7%				
Broadside	20	19.2%	153	19.0%	8	27.6%	181	19.3%				
Rear End	24	23.1%	112	13.9%	1	3.4%	137	14.6%				
Single Vehicle Fixed Object	1	1.0%	45	5.6%	4	13.8%	50	5.3%				
Side Swipe	4	3.8%	30	3.7%	1	3.4%	35	3.7%				
Head-On	2	1.9%	10	1.2%	3	10.3%	15	1.6%				
Bicyclist/Pedestrian Crash	0	0.0%	9	1.1%	0	0.0%	9	1.0%				
Other	42	40.4%	153	19.0%	0	0.0%	195	20.8%				
Total	104	49.0%	805	44.6%	29	58.6%	938	45.5%				

- Overall, the leading collision types for motorcycle crashes (excluding other) were single vehicle rollovers (33.7%), broadside (19.3%) and rear end collisions (14.6%).
- The leading collision types for motorcycle injury crashes (excluding other) were also single vehicle rollovers (36.4%), broadside (19.0%) and rear end collisions (13.9%).
- Single vehicle rollovers (41.4%) and broadside collisions (27.6%) accounted for the majority of fatal motorcycle crashes.

### **Urban/Rural Location of Motorcycle Crashes (Utah 2004)**

Motorcycle Crashes												
	Property Damage Only Crashes		_	ury		atal		tal				
Urban/Rural Location	#	%	#	shes %	#	ashes %	#	shes %				
Rural Area - Up to 5,000	26	25.0%	285	35.4%	16	55.2%	327	34.9%				
Small Urban - 5,000 to 49,999	10	9.6%	55	6.8%	2	6.9%	67	7.1%				
Moderate Urban - 50,000 to 199,999	7	6.7%	14	1.7%	0	0.0%	21	2.2%				
Large Urban - 200,000 or More	61	58.7%	438	54.4%	11	37.9%	510	54.4%				
Missing	0	0.0%	13	1.6%	0	0.0%	13	1.4%				
Total	104	100.0%	805	100.0%	29	100.0%	938	100.0%				

- While the majority of total motorcycle crashes (63.7%) as well as the majority of motorcycle injury crashes (62.9%) occurred in small, moderate and large urban areas, the majority of fatal motorcycle crashes occurred in rural areas (55.2%).
- In fact, motorcycle crashes occurring in rural areas were twice as likely to result in a fatality than motorcycle crashes in urban areas.

### **Motorcycle Crash Violations (Utah 2004)**

\	/iolatio	ns (Mot	torcycle	<b>Driver</b>	s)				
	Motor	cycle	Motor	cycle	Motor	cycle	Tot	al	
	Drivers	Cited in	Drivers	Cited in	Drivers (	Cited in	Motor	rcycle	
	PDO C	rashes	Injury C		Fatal C		Drivers Cited		
Violations	#	%	#	%	#	%	#	%	
Other Non-Moving Violations	10	43.5%	47	24.4%	0	0.0%	57	26.4%	
All Other Moving Violations	4	17.4%		14.5%		0.0%	32	14.8%	
Following Too Close	5	21.7%		11.4%		0.0%	27	12.5%	
Improper Lookout	2	8.7%		9.3%		0.0%	20	9.3%	
Driving Under the Influence	0	0.0%		8.3%		0.0%	16	7.4%	
Speeding	0	0.0%		6.7%	0	0.0%	13	6.0%	
Reckless Driving	0	0.0%	10	5.2%	0	0.0%	10	4.6%	
Failure to Yield Right-of-Way	0	0.0%	10	5.2%	0	0.0%	10	4.6%	
Improper Lane Change	0	0.0%	9	4.7%	0	0.0%	9	4.2%	
Wrong Side of Road	0	0.0%		2.1%	0	0.0%	4	1.9%	
Negligent Collision	0	0.0%		2.1%	0	0.0%	4	1.9%	
Hit and Run	0	0.0%		2.1%	0	0.0%	4	1.9%	
Failure to Stop at Red Light	0	0.0%		1.0%	0	0.0%	2	0.9%	
Failure to Stop at Stop Sign	0	0.0%		1.0%		0.0%	2	0.9%	
Improper Passing	0	0.0%		1.0%	0	0.0%	2	0.9%	
Improper Turn (Failure to Signal)	1	4.3%	1	0.5%	0	0.0%	2	0.9%	
Wrong Way on One-Way Street	0	0.0%		0.5%		0.0%	1	0.5%	
Improper Backing	1	4.3%	0	0.0%	0	0.0%	1	0.5%	
Total	23	100.0%	193	100.0%	0	0.0%	216	100.0%	

- In 2004, there were 957 motorcycle drivers involved in crashes. Officers at the scene of the crash cited 216 (22.6%) of those drivers for a traffic violation.
- Overall, motorcycle drivers involved in crashes were cited most often for "other non-moving violations" (26.4%), "all other moving violations" (14.8%) and "following too close" (12.5%).

### **Contributing Factors of Motorcycle Crashes (Utah 2004)**

Contribu	ting Facto	ors (Mot	orcycle	Crash	nes)			
	Cont	tributing I	Factors (	Coded fo	or Ve	hicles In	volved i	n:
	Motore	cycle	Moto	rcycle	Mot	orcycle	To	otal
	Property	Damage	Inj	ury	F	atal	Moto	rcycle
	Only Cr		Cras	shes	Cr	ashes	Crashes	
Contributing Factors	# %		#	%	#	%	#	%
Speed Too Fast	9	11.1%	155	23.1%	12	36.4%	176	22.4%
Other Improper Driving	13	16.0%	147	21.9%	6	18.2%	166	21.1%
Improper Lookout	14	17.3%	95	14.1%	1	3.0%	110	14.0%
Followed Too Closely	13	16.0%	60	8.9%	1	3.0%	74	9.4%
Failed to Yield Right of Way	5	6.2%	24	3.6%	0	0.0%	29	3.7%
Made Improper Turn	4	4.9%	20	3.0%	0	0.0%	24	3.1%
Object in Roadway	2	2.5%	19	2.8%	1	3.0%	22	2.8%
Drove Left of Center	2	2.5%	18	2.7%	1	3.0%	21	2.7%
Non-Contact Vehicle Involved	5	6.2%	14	2.1%	1	3.0%	20	2.5%
Improper Overtaking	3	3.7%	12	1.8%	1	3.0%	16	2.0%
Driving Under the Influence	0	0.0%	14	2.1%	1	3.0%	15	1.9%
Other Driver Distractions	0	0.0%	14	2.1%	0	0.0%	14	1.8%
Had Been Drinking	0	0.0%	12	1.8%	1	3.0%	13	1.7%
Aggressive Driving	1	1.2%	9	1.3%	2	6.1%	12	1.5%
Hit and Run	4	4.9%	6	0.9%	1	3.0%	11	1.4%
Other Defective Condition of Vehicle	1	1.2%	9	1.3%	0	0.0%	10	1.3%
Tires Defective	0	0.0%	9	1.3%	0	0.0%	9	1.1%
Disregard Traffic Signal	0	0.0%	7	1.0%	2	6.1%	9	1.1%
Passed Stop Sign	0	0.0%	3	0.4%	0	0.0%	3	0.4%
Improper Parking	1	1.2%	4	0.6%	0	0.0%	5	0.6%
Brakes Defective	1	1.2%	3	0.4%	0	0.0%	4	0.5%
Cargo Loss or Shifted	1	1.2%	3	0.4%	0	0.0%	4	0.5%
Wrong Side of Road	1	1.2%	2	0.3%	0	0.0%	3	0.4%
Headlights Insufficient or Out	0	0.0%	3	0.4%	0	0.0%	3	0.4%
Fatigued	0	0.0%	1	0.1%	1	3.0%	2	0.3%
Sick or III	0	0.0%	2	0.3%	0	0.0%	2	0.3%
Steering Mechanism Defective	0	0.0%	2	0.3%	0	0.0%	2	0.3%
Wrong Way on One-Way Street	1	1.2%	1	0.1%	0	0.0%	2	0.3%
Under the Influence of Drugs	0	0.0%	1	0.1%	0	0.0%	1	0.1%
Failed to Signal	0	0.0%	1	0.1%	0	0.0%	1	0.1%
Stolen	0	0.0%	1	0.1%	0	0.0%	1	0.1%
Windshield Not Clear	0	0.0%	0	0.0%	1	3.0%	1	0.1%
Jackknife	0	0.0%	1	0.1%	0	0.0%	1	0.1%
Total	81	100.0%		100.0%		100.0%	786	100.0%

- Contributing factors were coded by the police officer at the scene of the crash for each vehicle involved in the crash. The officer may record no contributing factor or up to two different contributing factors.
- "Speed too fast" was the leading contributing factor for total motorcycle crashes (22.4%), motorcycle injury crashes (23.1%) and fatal motorcycle crashes (36.4%).
- The combined contributing factors of "driving under the influence," "had been drinking" and "under the influence of drugs" accounted for 3.7% of total motorcycle crashes, 4.0% of motorcycle injury crashes, and 6.0% of fatal motorcycle crashes.

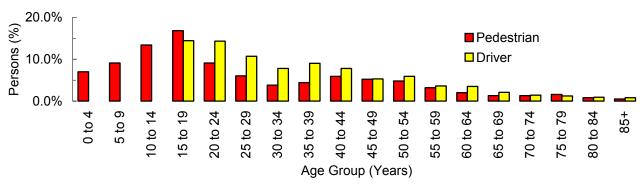
# Pedestrians 2004

### **PEDESTRIANS**

### Did you know that in 2004. . .

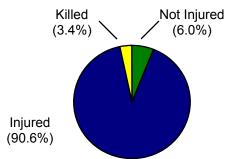
- 745 pedestrians were involved in motor vehicle crashes; 675 were injured, and 25 were killed.
- Pedestrians were 18 times more likely to be killed in a crash than other crash occupants.

### Age of Persons Involved in Pedestrian-Motor Vehicle Crashes (Utah 2004)



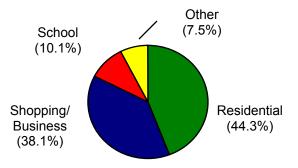
- The highest percentage of pedestrians involved in crashes were aged 15 to 19 years (16.8%).
- Almost half (46.3%) of the pedestrians involved in crashes were under 20 years old.
- The highest percentage of drivers involved in pedestrian crashes were aged 15 to 19 years (14.4%).

### Pedestrian Injury Severity (Utah 2004)



 Nearly all pedestrians (90.6%) involved in crashes sustained an injury compared to 21.0% of all motor vehicle crash occupants.

### Locality of Pedestrian-Motor Vehicle Crashes (Utah 2004)



 The majority of pedestrian-motor vehicle crashes occurred in residential (44.3%) and shopping/business (38.1%) areas.

### Top 3 Contributing Factors Involved in Pedestrian-Motor Vehicle Crashes:

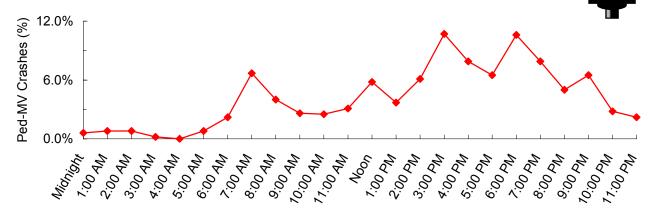
- 1. Improper Lookout (37.0%)
- 2. Failed to Yield Right-of-Way (25.5%)
- 3. Hit and Run (12.6%)
- In addition to the above, "driving under the influence," "had been drinking," and "under the influence of drugs" accounted for 2.4% of pedestrian-motor vehicle crashes.

### Top 3 Violations of Drivers Involved in Pedestrian-Motor Vehicle Crashes:

- 1. Failure to Yield Right-of-Way (48.1%)
- 2. Improper Lookout (16.4%)
- 3. Hit and Run (9.5%)
- Over one-quarter (28.4%) of the drivers involved in pedestrian-motor vehicle crashes received a citation.

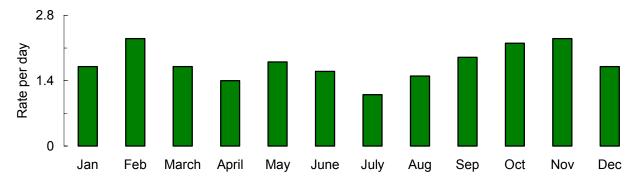
### **PEDESTRIANS**

Time of Day Pedestrian-Motor Vehicle Crashes Occurred (Utah 2004



 Pedestrian-motor vehicle crashes occurred most often between 3:00 pm to 7:00 pm. There was also a small peak at 7:00 am.

### Month of the Year Pedestrian-Motor Vehicle Crashes Occurred (Utah 2004)



February (2.3) and November (2.3) had the highest rates per day of pedestrian-motor vehicle crashes.

### **Actions of Pedestrians Prior to Crashes (Utah 2004)**

- 1. Crossing Intersection with Signal (21.3%)
- 2. Crossing Not at Intersection (15.3%)
- 3. Crossing Intersection with No Signal (12.6%)
- 4. Other in Roadway (7.7%)
- 5. Crossing Intersection Against Signal (5.0%)

"Crossing Intersection (with signal, no signal, against signal, diagonally)" comprised 39.2% of pedestrian actions prior to crashes.

### Pedestrian Crash Clock (Utah 2004)



## **\***

### Alcohol and Other Drug Involvement

- Of the 25 pedestrians killed in 2004, 6 pedestrians were impaired by alcohol or other drugs (24.0%).
- Of the drivers involved in fatal pedestrian-motor vehicle crashes, 1 driver was cited for "driving under the influence."

### **Section 7: Pedestrians**

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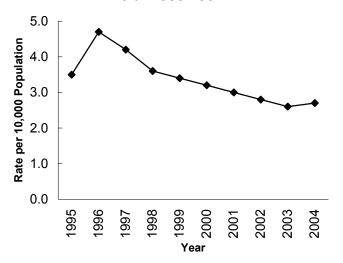
### **Trends**

### **Pedestrians Involved in Crashes 1995-2004**

				Ped	estrians				
		Non-Injured	Pedestrians	Injured Pe	destrians	Pedestriar	ns Killed	Total Ped	estrians
		Non-Injured	Rate per	Injured	Rate per	Pedestrians	Rate per	All	Rate per
		Pedestrians	10,000	<b>Pedestrians</b>	10,000	Killed	10,000	<b>Pedestrians</b>	10,000
Year	Population	#	Population	#	Population	#	Population	#	Population
1995	1,995,228	25	0.13	699	3.5	44	0.22	768	3.8
1996	2,042,893	49	0.24	966	4.7	33	0.16	1,048	5.1
1997	2,099,409	41	0.20	889	4.2	39	0.19	969	4.6
1998	2,141,632	33	0.15	774	3.6	43	0.20	850	4.0
1999	2,193,014	32	0.15	748	3.4	38	0.17	818	3.7
2000	2,246,553	44	0.20	708	3.2	33	0.15	785	3.5
2001	2,295,971	39	0.17	682	3.0	33	0.14	754	3.3
2002	2,338,761	32	0.14	664	2.8	25	0.11	721	3.1
2003	2,385,358	42	0.18	616	2.6	28	0.12	686	2.9
2004	2,469,230	45	0.18	675	2.7	25	0.10	745	3.0
Total	22,208,049	382	0.17	7,421	3.3	341	0.15	8,144	3.7

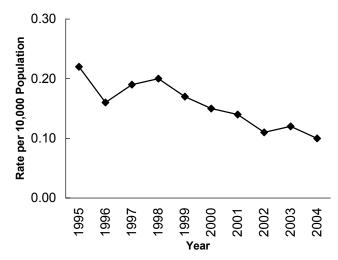
- In 2004, the rate of pedestrians injured in crashes was 2.7; a 4% increase from 2003.
- However, in 2004, Utah experienced a 17% decrease from 2003 in the rate of pedestrians killed in crashes.

### **Pedestrians Injured in Crashes** (Utah 1995-2004)



- Over the last ten years, total pedestrians involved in crashes and pedestrians injured in crashes have followed a similar trend.
- The highest rate of total pedestrians involved in crashes (5.1) and the highest rate of pedestrians injured in crashes (4.7) occurred in 1996, and have been followed by a decreasing trend.

### Pedestrians Killed in Crashes (Utah 1995-2004)



- The highest rate of pedestrians killed in crashes occurred in 1995 (0.22) and went up again in 1998 (0.20).
- Since 1998, the rate of pedestrians killed in crashes has varied slightly from year to year, but has followed a decreasing trend; decreasing once again in 2004.

NOTE: Part of the decrease in reported pedestrians involved in crashes from 1997 forward is due to a change in reporting criteria initiated in 1997 that excluded private property crashes. As a result, pedestrians that were involved in crashes that occurred in a parking lot, driveway, sidewalk and other private roadways are not included from 1997 forward.

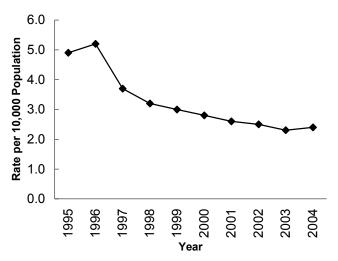
### Trends

### **Pedestrian-Motor Vehicle Crashes 1995-2004**

			Pedestr	ian-Moto	· Vehicle C	rashes				
		Property Dam	age Only (PDO)	Inj	ury	Fa	atal	Total		
		Ped-MV	Rate	Ped-MV	Rate	Ped-MV	Rate	All	Rate	
		PDO	per	Injury	per	Fatal	per	Ped-MV	per	
		Crashes	10,000	Crashes	10,000	Crashes	10,000	Crashes	10,000	
Year	Population	#	Population	#	Population	#	Population	#	Population	
1995	1,995,228	87	0.4	981	4.9	40	0.20	1,108	5.6	
1996	2,042,893	44	0.2	1,060	5.2	33	0.16	1,137	5.6	
1997	2,099,409	77	0.4	773	3.7	34	0.16	884	4.2	
1998	2,141,632	28	0.1	679	3.2	41	0.19	748	3.5	
1999	2,193,014	24	0.1	661	3.0	35	0.16	720	3.3	
2000	2,246,553	31	0.1	626	2.8	30	0.13	687	3.1	
2001	2,295,971	30	0.1	597	2.6	28	0.12	655	2.9	
2002	2,338,761	28	0.1	584	2.5	24	0.10	636	2.7	
2003	2,385,358	36	0.2	540	2.3	23	0.10	599	2.5	
2004	2,469,230	37	0.1	583	2.4	23	0.09	643	2.6	
Total	22,208,049	422	0.2	7,084	3.2	311	0.14	7,817	3.5	

- In 2004, the rate of pedestrian-motor vehicle injury crashes was 2.4; an 4% increase from 2003.
- However, in 2004, the rate of fatal pedestrian-motor vehicle crashes decreased 10% from 2003.

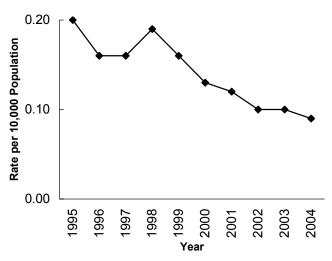
### Pedestrian-Motor Vehicle Injury Crashes (Utah 1995-2004)



### Over the last ten years, total pedestrian-motor vehicle crashes and pedestrian-motor vehicle injury crashes have followed a similar trend.

 The highest rate of total pedestrian-motor vehicle crashes (5.6) and the highest rate of pedestrianmotor vehicle injury crashes (5.2) occurred in 1996, and have been followed by a decreasing trend.

### Fatal Pedestrian-Motor Vehicle Crashes (Utah 1995-2004)



- The highest rate of fatal pedestrian-motor vehicle crashes occurred in 1995 (0.20) and went up again in 1998 (0.19).
- Since 1998, the rate of pedestrian-motor vehicle crashes has varied slightly from year to year, but has followed a decreasing trend; decreasing once again in 2004.

NOTE: Part of the decrease in reported pedestrian-motor vehicle crashes from 1997 forward is due to a change in reporting criteria initiated in 1997 that excluded private property crashes. As a result, pedestrian-motor vehicle crashes that occurred in a parking lot, driveway, sidewalk and other private roadways are not included from 1997 forward.

### **Counties**

### **Pedestrians Involved in Crashes by County (Utah 2004)**

					Ped	destrians						
	Non-li	njured Pe	edestrians	lnju	red Pede	strians	Pe	edestrian	s Killed	T	Total Pede	estrians
	Non-	Rate	Rate		Rate	Rate		Rate	Rate		Rate	Rate
	Injured	per 100	per	Injured	per 100	per	Ped.	per 100	per	All	per 100	per
	Ped.	Million	10,000	Ped.	Million	10,000	Killed	Million	10,000	Ped.	Million	10,000
County	#	VMT	Population	#	VMT	Population	#	VMT	Population	#	VMT	Population
Beaver	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Box Elder	0	0.0	0.0	4	0.5	0.9	0	0.0	0.0	4	0.5	0.9
Cache	1	0.1	0.1	28	3.2	2.8	0	0.0	0.0	29	3.4	2.9
Carbon	0	0.0	0.0	2	0.7	1.0	0	0.0	0.0	2	0.7	1.0
Daggett	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Davis	3	0.1	0.1	48	2.1	1.8	2	0.1	0.1	53	2.3	2.0
Duchesne	0	0.0	0.0	2	1.0	1.3	0	0.0	0.0	2	1.0	1.3
Emery	0	0.0	0.0	1	0.3	1.0	0	0.0	0.0	1	0.3	1.0
Garfield	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Grand	0	0.0	0.0	0	0.0	0.0	1	0.4	1.2	1	0.4	1.2
Iron	0	0.0	0.0	8	1.3	2.1	1	0.2	0.3	9	1.4	2.3
Juab	0	0.0	0.0	2	0.5	2.3	1	0.3	1.1	3	0.8	3.4
Kane	2	1.5	3.3	1	0.8	1.7	0	0.0	0.0	3	2.3	5.0
Millard	0	0.0	0.0	1	0.2	0.8	0	0.0	0.0	1	0.2	8.0
Morgan	0	0.0	0.0	2	1.7	2.4	0	0.0	0.0	2	1.7	2.4
Piute	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Rich	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Salt Lake	30	0.4	0.3	351	4.3	3.7	13	0.2	0.1	394	4.9	4.1
San Juan	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Sanpete	0	0.0	0.0	2	0.8	0.8	2	0.8	0.8	4	1.7	1.6
Sevier	0	0.0	0.0	4	1.0	2.1	0	0.0	0.0	4	1.0	2.1
Summit	0	0.0	0.0	7	1.0	2.0	0	0.0	0.0	7	1.0	2.0
Tooele	1	0.1	0.2	6	0.7	1.2	1	0.1	0.2	8	1.0	1.6
Uintah	0	0.0	0.0	2	0.7	0.8	0	0.0	0.0	2	0.7	0.8
Utah	5	0.1	0.1	120	3.4	2.7	2	0.1	0.0	127	3.6	2.9
Wasatch	0	0.0	0.0	7	2.6	3.7	0	0.0	0.0	7	2.6	3.7
Washington	1	0.1	0.1	20	1.9	1.7	0	0.0	0.0	21	1.9	1.8
Wayne	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Weber	2	0.1	0.1	57	3.7	2.7	2	0.1	0.1	61	4.0	2.9
Statewide	45	0.2	0.2	675	2.7	2.7	25	0.1	0.1	745	3.0	3.0

- Two different rates are given in the above table; one based on vehicle miles traveled in the county, and another based on the population of the county.
- Rate per 100 million vehicle miles traveled:
  - Salt Lake (4.3), Weber (3.7) and Utah (3.4) had the highest rates of pedestrians injured in crashes per 100 million vehicle miles traveled.
  - Sanpete (0.8), Grand (0.4) and Juab (0.3) had the highest rate of pedestrians killed in crashes per 100 million vehicle miles traveled.
- Rate per 10,000 population:
  - Salt Lake (3.7), Wasatch (3.7) and Cache (2.8) had the highest rates of pedestrians injured in crashes per 10,000 population.
  - Grand (1.2), Juab (1.1) and Sanpete (0.8) had the highest rates of pedestrians killed in crashes per 10,000 population.

### **Counties**

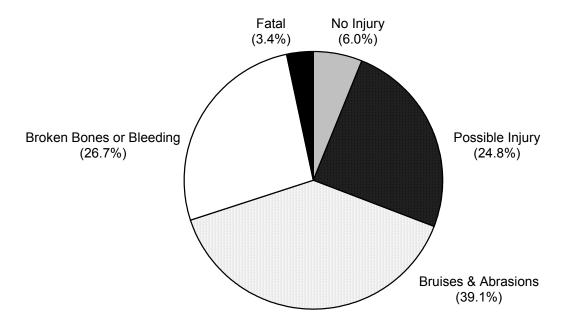
### **Pedestrian-Motor Vehicle Crashes by County (Utah 2004)**

				Pedes	strian-N	Notor Veh	icle Cra	shes				
	Property	Damage	Only (PDO)		Injury			Fatal			Total	
	Ped-MV	Rate	Rate	Ped-MV	Rate	Rate	Ped-MV	Rate	Rate	All	Rate	Rate
	PDO	per 100	per	Injury	per 100	per	Fatal	per 100	per	Ped-MV	per 100	per
	Crashes	Million	10,000	Crashes	Million	10,000	Crashes	Million	10,000	Crashes	Million	10,000
County	#	VMT	<b>Population</b>	#	VMT	Population	#	VMT	<b>Population</b>	#	VMT	<b>Population</b>
Beaver	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Box Elder	0	0.0	0.0	2	0.2	0.4	0	0.0	0.0	2	0.2	0.4
Cache	1	0.1	0.1	25	2.9	2.5	0	0.0	0.0	26	3.0	2.6
Carbon	0	0.0	0.0	2	0.7	1.0	0	0.0	0.0	2	0.7	1.0
Daggett	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Davis	2	0.1	0.1	39	1.7	1.5	2	0.1	0.1	43	1.9	1.6
Duchesne	0	0.0	0.0	2	1.0	1.3	0	0.0	0.0	2	1.0	1.3
Emery	0	0.0	0.0	1	0.3	1.0	0	0.0	0.0	1	0.3	1.0
Garfield	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Grand	0	0.0	0.0	0	0.0	0.0	1	0.4	1.2	1	0.4	1.2
Iron	0	0.0	0.0	5	0.8	1.3	1	0.2	0.3	6	0.9	1.5
Juab	0	0.0	0.0	3	0.8	3.4	1	0.3	1.1	4	1.0	4.5
Kane	0	0.0	0.0	1	0.8	1.7	0	0.0	0.0	1	0.8	1.7
Millard	0	0.0	0.0	1	0.2	0.8	0	0.0	0.0	1	0.2	0.8
Morgan	0	0.0	0.0	1	0.9	1.2	0	0.0	0.0	1	0.9	1.2
Piute	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Rich	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Salt Lake	27	0.3	0.3	307	3.8	3.2	11	0.1	0.1	345	4.3	3.6
San Juan	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Sanpete	0	0.0	0.0	2	8.0	8.0	2	0.8	0.8	4	1.7	1.6
Sevier	0	0.0	0.0	3	0.7	1.5	0	0.0	0.0	3	0.7	1.5
Summit	0	0.0	0.0	7	1.0	2.0	0	0.0	0.0	7	1.0	2.0
Tooele	2	0.2	0.4	5	0.6	1.0	1	0.1	0.2	8	1.0	1.6
Uintah	0	0.0	0.0	1	0.3	0.4	0	0.0	0.0	1	0.3	0.4
Utah	4	0.1	0.1	101	2.9	2.3	2	0.1	0.0	107	3.1	2.4
Wasatch	0	0.0	0.0	7	2.6	3.7	0	0.0	0.0	7	2.6	3.7
Washington	0	0.0	0.0	16	1.5	1.4	0	0.0	0.0	16	1.5	1.4
Wayne	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Weber	1	0.1	0.0	52	3.4	2.5	2	0.1	0.1	55	3.6	2.6
Statewide	37	0.2	0.1	583	2.4	2.4	23	0.1	0.1	643	2.6	2.6

- Two different rates are given in the above table; one based on vehicle miles traveled in the county, and another based on the population of the county.
- Rate per 100 million vehicle miles traveled:
  - Salt Lake (3.8), Weber (3.4) and Utah (2.9) had the highest rates of pedestrian-motor vehicle injury crashes per 100 million vehicle miles traveled.
  - Sanpete (0.8), Grand (0.4) and Juab (0.3) had the highest rate of fatal pedestrian-motor vehicle crashes per 100 million vehicle miles traveled.
- Rate per 10,000 population:
  - Wasatch (3.7), Juab (3.4) and Salt Lake (3.2) had the highest rates of pedestrian-motor vehicle injury crashes per 10,000 population.
  - Grand (1.2), Juab (1.1) and Sanpete (0.8) had the highest rates of fatal pedestrian-motor vehicle crashes per 10,000 population.

### **Pedestrian Characteristics**

### **Injury Severity of Pedestrians Involved in Crashes (Utah 2004)**



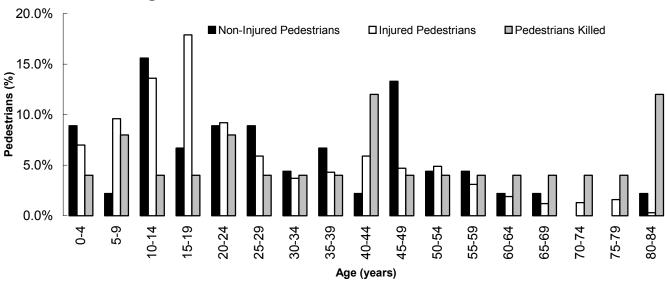
- In the above table, there were a total of 745 pedestrians involved in crashes.
- The above graph shows that 90.6% of pedestrians involved in crashes sustained a non-fatal injury compared to 21.0% of all motor vehicle crash occupants.
- The percentage of pedestrians killed in crashes (3.4%) was much higher than the percentage for all motor vehicle crash occupants (0.2%).
- In fact, pedestrians were 18 times more likely to be killed in a crash than other motor vehicle crash occupants.

### **Pedestrian Characteristics**

### **Age of Pedestrians Involved in Crashes (Utah 2004)**

			Pe	destria	ns			
	Non-l	njured	Inju	ıred	Pedes	strians	To	tal
	Pedes	strians	Pedes	trians	Kil	led	Pedes	strians
Age	#	%	#	%	#	%	#	%
0-4	4	8.9%	47	7.0%	1	4.0%	52	7.0%
5-9	1	2.2%	65	9.6%	2	8.0%	68	9.1%
10-14	7	15.6%	92	13.6%	1	4.0%	100	13.4%
15-19	3	6.7%	121	17.9%	1	4.0%	125	16.8%
20-24	4	8.9%	62	9.2%	2	8.0%	68	9.1%
25-29	4	8.9%	40	5.9%	1	4.0%	45	6.0%
30-34	2	4.4%	25	3.7%	1	4.0%	28	3.8%
35-39	3	6.7%	29	4.3%	1	4.0%	33	4.4%
40-44	1	2.2%	40	5.9%	3	12.0%	44	5.9%
45-49	6	13.3%	32	4.7%	1	4.0%	39	5.2%
50-54	2	4.4%	33	4.9%	1	4.0%	36	4.8%
55-59	2	4.4%	21	3.1%	1	4.0%	24	3.2%
60-64	1	2.2%	13	1.9%	1	4.0%	15	2.0%
65-69	1	2.2%	8	1.2%	1	4.0%	10	1.3%
70-74	0	0.0%	9	1.3%	1	4.0%	10	1.3%
75-79	0	0.0%	11	1.6%	1	4.0%	12	1.6%
80-84	1	2.2%	2	0.3%	3	12.0%	6	0.8%
85+	0	0.0%	3	0.4%	1	4.0%	4	0.5%
Missing	3	6.7%	22	3.3%	1	4.0%	26	3.5%
Total	45	100.0%	675	100.0%	25	100.0%	745	100.0%

### **Age of Pedestrians Involved in Crashes (Utah 2004)**



- Overall, the largest percentage of pedestrians involved in crashes were aged 15 to 19 years (16.8%). This
  age group also represented the largest percentage of pedestrians injured in crashes (17.9%).
- The highest percentage of pedestrian fatalities occurred in the 40 to 44 year age group (12.0%) and the 80 to 84 year age group (12.0%).

### **Pedestrian Characteristics**

### **Gender of Pedestrians Involved in Crashes (Utah 2004)**

Pedestrians												
		njured strians		red strians		strians led	Total Pedestrians					
Gender	#	%	# %		#	%	#	%				
Female	17	37.8%	285	42.2%	9	36.0%	311	41.7%				
Male	27	60.0%	387	57.3%	16	64.0%	430	57.7%				
Missing	1	2.2%	3	0.4%	0	0.0%	4	0.5%				
Total	45	100.0%	675	100.0%	25	100.0%	745	100.0%				

• The majority of all pedestrians (57.7%), injured pedestrians (57.3%) and pedestrians killed (64.0%) in crashes were male.

### **Actions of Pedestrians Prior to Crashes (Utah 2004)**

	Pedestrians											
	Non-	Injured	Inj	ured	Pede	estrians	Т	otal				
	Pede	estrians	Pede	strians		illed	Pede	strians				
Pedestrian Action Prior to Crash	#	%	#	%	#	%	#	%				
Crossing Intersection with Signal	11	24.4%	146	21.6%	2	8.0%	159	21.3%				
Crossing Not at Intersection	4	8.9%	103	15.3%	7	28.0%	114	15.3%				
Crossing Intersection with No Signal	4	8.9%	89	13.2%	1	4.0%	94	12.6%				
Other in Roadway	1	2.2%	53	7.9%	3	12.0%	57	7.7%				
Crossing Intersection Against Signal	1	2.2%	34	5.0%	2	8.0%	37	5.0%				
Other Standing in Roadway	0	0.0%	25	3.7%	1	4.0%	26	3.5%				
Not in Roadway	1	2.2%	20	3.0%	2	8.0%	23	3.1%				
Walking in Roadway with Traffic	3	6.7%	16	2.4%	2	8.0%	21	2.8%				
Coming From Behind Parked Cars	1	2.2%	19	2.8%	0	0.0%	20	2.7%				
Walking To or From School	0	0.0%	19	2.8%	1	4.0%	20	2.7%				
Playing in Roadway	0	0.0%	17	2.5%	0	0.0%	17	2.3%				
Other Working in Roadway	1	2.2%	14	2.1%	1	4.0%	16	2.1%				
Walking in Roadway Against Traffic	2	4.4%	11	1.6%	1	4.0%	14	1.9%				
Walking on Sidewalk	1	2.2%	13	1.9%	0	0.0%	14	1.9%				
Crosswalk Not at Intersection	0	0.0%	13	1.9%	0	0.0%	13	1.7%				
Getting On or Off Other Vehicle	1	2.2%	10	1.5%	1	4.0%	12	1.6%				
Pushing or Working on Vehicle in Roadway	0	0.0%	11	1.6%	0	0.0%	11	1.5%				
Riding in Roadway Against Traffic	1	2.2%	8	1.2%	0	0.0%	9	1.2%				
Riding in Roadway with Traffic	1	2.2%	7	1.0%	0	0.0%	8	1.1%				
Hitching on Vehicle	0	0.0%	6	0.9%	0	0.0%	6	0.8%				
Riding on Sidewalk	0	0.0%	6	0.9%	0	0.0%	6	0.8%				
Crossing Intersection Diagonally	0	0.0%	2	0.3%	0	0.0%	2	0.3%				
Getting On or Off Bus	0	0.0%	2	0.3%	0	0.0%	2	0.3%				
Standing on Median Island in Crosswalk	0	0.0%	1	0.1%	0	0.0%	1	0.1%				
Lying in Roadway	0	0.0%	0	0.0%	1	4.0%	1	0.1%				
Missing	12	26.7%	30	4.4%	0	0.0%	42	5.6%				
Total	45	100.0%	675	100.0%	25	100.0%	745	100.0%				

• Leading pedestrian actions prior to crashes were "crossing intersection (with signal, no signal, against signal, diagonally)" (39.2%).

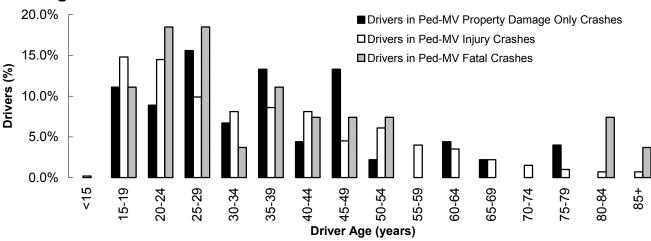
### **Driver Characteristics**

### **Driver Age (Utah 2004)**

Drivers											
	Drivers Inv	olved in	Drivers Inv	olved in	Drivers In	volved in	Total Drive	rs Involved			
	Pedestrian-M	IV Property	Pedestri	an-MV	Pedest	rian-MV	in Pedes	trian-MV			
	Damage Onl	•	Injury Crashes		Fatal C	rashes	Crashes				
Driver Age	#	%	#	%	#	%	#	%			
<15	0	0.0%	1	0.2%	0	0.0%	1	0.2%			
15-19	5	11.1%	88	14.8%	3	11.1%	96	14.4%			
20-24	4	8.9%	86	14.5%	5	18.5%	95	14.3%			
25-29	7	15.6%	59	9.9%	5	18.5%	71	10.7%			
30-34	3	6.7%	48	8.1%	1	3.7%	52	7.8%			
35-39	6	13.3%	51	8.6%	3	11.1%	60	9.0%			
40-44	2	4.4%	48	8.1%	2	7.4%	52	7.8%			
45-49	6	13.3%	27	4.5%	2	7.4%	35	5.3%			
50-54	1	2.2%	36	6.1%	2	7.4%	39	5.9%			
55-59	0	0.0%	24	4.0%	0	0.0%	24	3.6%			
60-64	2	4.4%	21	3.5%	0	0.0%	23	3.5%			
65-69	1	2.2%	13	2.2%	0	0.0%	14	2.1%			
70-74	0	0.0%	9	1.5%	0	0.0%	9	1.4%			
75-79	2	4.4%	6	1.0%	0	0.0%	8	1.2%			
80-84	0	0.0%	4	0.7%	2	7.4%	6	0.9%			
85+	0	0.0%	4	0.7%		3.7%	5	0.8%			
Missing	6	13.3%	69	11.6%	1	3.7%	76	11.4%			
Total	45	100.0%	594	100.0%	27	100.0%	666	100.0%			

NOTE: More than one driver may be involved in a pedestrian-motor vehicle crash and driver information may be missing (e.g., hit and run).

### Age of Drivers Involved in Pedestrian-Motor Vehicle Crashes (Utah 2004)



- The above table and graph show that drivers between the ages of 15 to 19 years represented the greatest percentage of drivers involved in total pedestrian-motor vehicle crashes (14.4%) and pedestrian-motor vehicle injury crashes (14.8%).
- The percentage of drivers involved in fatal pedestrian-motor vehicle crashes was highest for those aged 20 to 24 years (18.5%) and 25 to 29 years (18.5%).

### **Driver Characteristics**

### **Driver Gender (Utah 2004)**

	Drivers											
	Drivers Involved in		Drivers Inv	olved in	Drivers Inv	olved in	Total Drivers Involved					
	Pedestrian-MV Property		Pedestrian-MV		Pedestri	an-MV	in Pedestrian-MV					
	Damage Only	Injury Cı	rashes	Fatal Cr	rashes	Crashes						
Driver Gender	#	%	#	%	#	%	#	%				
Female	17	37.8%	234	39.4%	16	59.3%	267	40.1%				
Male	24	53.3%	320	53.9%	11	40.7%	355	53.3%				
Missing	4	8.9%	40	6.7%	0	0.0%	44	6.6%				
Total	45	100.0%	594	100.0%	27	100.0%	666	100.0%				

NOTE: More than one driver may be involved in a pedestrian-motor vehicle crash and driver information may be missing (e.g., hit and run).

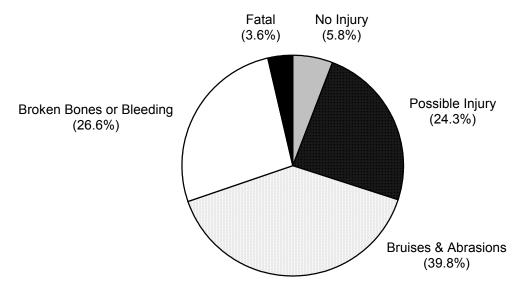
- The majority of drivers involved in total pedestrian-motor vehicle crashes (53.3%) and pedestrian-motor vehicle injury crashes (53.9%) were male.
- However, the majority of drivers involved in fatal pedestrian-motor vehicle crashes (59.3%) were female.

### Alcohol and Other Drug Involvement of Pedestrians and Motor Vehicle Drivers (Utah 2004)



- Of the 25 pedestrians killed in 2004, 6 pedestrians were impaired by alcohol or other drugs (24.0%).
- Of the drivers involved in fatal pedestrian-motor vehicle crashes, 1 driver was cited for "driving under the influence."

### **Pedestrian-Motor Vehicle Crash Severity (Utah 2004)**



- In the above table, there were a total of 643 pedestrian-motor vehicle crashes.
- The above graph shows that 90.7% of pedestrian-motor vehicle crashes resulted in some level of non-fatal injury compared to 36.0% of all motor vehicle crashes.
- Moreover, 3.6% of pedestrian-motor vehicle crashes resulted in a fatality, compared to 0.5% of all motor vehicle crashes.

### **Pedestrian-Motor Vehicle Crashes by Month of Year (Utah 2004)**

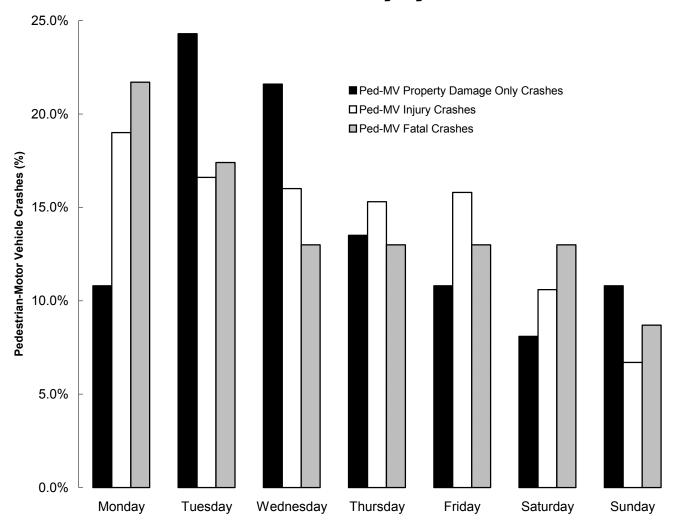
			Pedestriar	n-Motor Vehic	cle C	rashes			
		Property Damage	Only (PDO)	Injury		Fatal		Total	
	Days in	Pedestrian-MV	Rate	Pedestrian-MV	Rate	Pedestrian-MV	Rate	All Pedestrian-MV	Rate
	Month	PDO Crashes	per	Injury Crashes	per	Fatal Crashes	per	Crashes	per
Month	#	#	Day	#	Day	#	Day	#	Day
January	31	5	0.2	46	1.5	1	0.0	52	1.7
February	29	6	0.2	59	2.0	2	0.1	67	2.3
March	31	2	0.1	48	1.5	3	0.1	53	1.7
April	30	3	0.1	40	1.3	0	0.0	43	1.4
May	31	2	0.1	51	1.6	2	0.1	55	1.8
June	30	3	0.1	44	1.5	0	0.0	47	1.6
July	31	2	0.1	32	1.0	0	0.0	34	1.1
August	31	4	0.1	37	1.2	5	0.2	46	1.5
September	30	1	0.0	54	1.8	1	0.0	56	1.9
October	31	1	0.0	64	2.1	2	0.1	67	2.2
November	30	3	0.1	65	2.2	2	0.1	70	2.3
December	31	5	0.2	43	1.4	5	0.2	53	1.7
Total	366	37	0.1	583	1.6	23	0.1	643	1.8

- The above table shows that February (2.3), November (2.3) and October (2.2) had the highest rates per day of total pedestrian-motor vehicle crashes.
- November had the highest rate per day of pedestrian-motor vehicle injury crashes (2.2).
- August (0.2) and December (0.2) had the highest rates per day of fatal pedestrian-motor vehicle crashes.

### **Pedestrian-Motor Vehicle Crashes by Day of Week (Utah 2004)**

	Pedestrian-Motor Vehicle Crashes												
	Property Dama	age Only Crashes	Injury	Crashes	Fatal	Crashes	Total	Crashes					
Day of Week	#	%	#	%	#	%	#	%					
Monday	4	10.8%	111	19.0%	5	21.7%	120	18.7%					
Tuesday	9	24.3%	97	16.6%	4	17.4%	110	17.1%					
Wednesday	8	21.6%	93	16.0%	3	13.0%	104	16.2%					
Thursday	5	13.5%	89	15.3%	3	13.0%	97	15.1%					
Friday	4	10.8%	92	15.8%	3	13.0%	99	15.4%					
Saturday	3	8.1%	62	10.6%	3	13.0%	68	10.6%					
Sunday	4	10.8%	39	6.7%	2	8.7%	45	7.0%					
Total	37	100.0%	583	100.0%	23	100.0%	643	100.0%					

### **Pedestrian-Motor Vehicle Crashes by Day of Week (Utah 2004)**

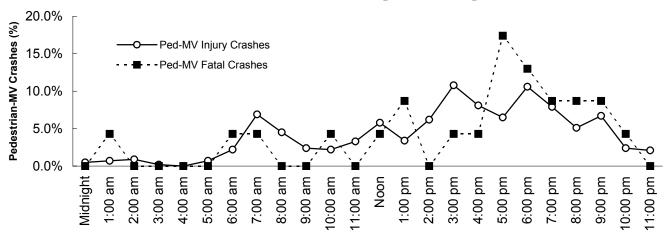


 The above table and graph show that the highest percentage of total pedestrian-motor vehicle crashes (18.7%), pedestrian-motor vehicle injury crashes (19.0%) and fatal pedestrian-motor vehicle crashes (21.7%) occurred on Monday.

### **Pedestrian-Motor Vehicle Crashes by Hour of Day (Utah 2004)**

Pedestrian-Motor Vehicle Crashes											
	Property Dama	ge Only Crashes	Injury	Crashes	Fatal	Crashes	Total	Crashes			
Hour	#	%	#	%	#	%	#	%			
Midnight	1	2.7%	3	0.5%	0	0.0%	4	0.6%			
1:00 am	0	0.0%	4	0.7%	1	4.3%	5	0.8%			
2:00 am	0	0.0%	5	0.9%	0	0.0%	5	0.8%			
3:00 am	0	0.0%	1	0.2%	0	0.0%	1	0.2%			
4:00 am	0	0.0%	0	0.0%	0	0.0%	0	0.0%			
5:00 am	1	2.7%	4	0.7%	0	0.0%	5	0.8%			
6:00 am	0	0.0%	13	2.2%	1	4.3%	14	2.2%			
7:00 am	2	5.4%	40	6.9%	1	4.3%	43	6.7%			
8:00 am	0	0.0%	26	4.5%	0	0.0%	26	4.0%			
9:00 am	3	8.1%	14	2.4%	0	0.0%	17	2.6%			
10:00 am	2	5.4%	13	2.2%	1	4.3%	16	2.5%			
11:00 am	1	2.7%	19	3.3%	0	0.0%	20	3.1%			
Noon	2	5.4%	34	5.8%	1	4.3%	37	5.8%			
1:00 pm	2	5.4%	20	3.4%	2	8.7%	24	3.7%			
2:00 pm	3	8.1%	36	6.2%	0	0.0%	39	6.1%			
3:00 pm	5	13.5%	63	10.8%	1	4.3%	69	10.7%			
4:00 pm	3	8.1%	47	8.1%	1	4.3%	51	7.9%			
5:00 pm	0	0.0%	38	6.5%	4	17.4%	42	6.5%			
6:00 pm	3	8.1%	62	10.6%	3	13.0%	68	10.6%			
7:00 pm	3	8.1%	46	7.9%	2	8.7%	51	7.9%			
8:00 pm	0	0.0%	30	5.1%	2	8.7%	32	5.0%			
9:00 pm	1	2.7%	39	6.7%	2	8.7%	42	6.5%			
10:00 pm	3	8.1%	14	2.4%	1	4.3%	18	2.8%			
11:00 pm	2	5.4%	12	2.1%	0	0.0%	14	2.2%			
Total	37	100.0%	583	100.0%	23	100.0%	643	100.0%			

### **Pedestrian-Motor Vehicle Crashes by Hour of Day (Utah 2004)**



- In 2004, total pedestrian-motor vehicle crashes and pedestrian-motor vehicle injury crashes followed a similar time pattern, peaking between 3:00 pm and 7:00 pm.
- Fatal pedestrian-motor vehicle crashes occurred most often at 5:00 pm.

### **Locality of Pedestrian-Motor Vehicle Crashes (Utah 2004)**

	Pedestrian-Motor Vehicle Crashes											
	Property Damage	Injury C	rashes	Fatal C	rashes	Total C	rashes					
Locality	#	%	#	%	#	%	#	%				
Residential	13	35.1%	260	44.6%	12	52.2%	285	44.3%				
Shopping/Business	15	40.5%	223	38.3%	7	30.4%	245	38.1%				
School	3	8.1%	62	10.6%	0	0.0%	65	10.1%				
Manufacturing/Industrial	3	8.1%	11	1.9%	0	0.0%	14	2.2%				
Open Country	1	2.7%	11	1.9%	2	8.7%	14	2.2%				
Farms and Fields	2	5.4%	4	0.7%	0	0.0%	6	0.9%				
Church	0	0.0%	3	0.5%	0	0.0%	3	0.5%				
Playground	0	0.0%	3	0.5%	0	0.0%	3	0.5%				
Railroad Tracks	0	0.0%	2	0.3%	0	0.0%	2	0.3%				
Missing	0	0.0%	4	0.7%	2	8.7%	6	0.9%				
Total	37	100.0%	583	100.0%	23	100.0%	643	100.0%				

<sup>•</sup> The above table shows the majority of total pedestrian-motor vehicle crashes (44.3%), pedestrian-motor vehicle injury crashes (44.6%), and fatal pedestrian-motor vehicle crashes (52.2%) occurred in residential areas.

### **Urban/Rural Location of Pedestrian-Motor Vehicle Crashes (Utah 2004)**

Pedestrian-Motor Vehicle Crashes											
	Property Damage Only Crashes		Injury Crashes		Fatal Crashes		Total Crashes				
Urban/Rural Location	#	%	#	%	#	%	#	%			
Rural Area - Up to 5,000	7	18.9%	101	17.3%	8	34.8%	116	18.0%			
Small Urban - 5,000 to 49,999	1	2.7%	24	4.1%	0	0.0%	25	3.9%			
Moderate Urban - 50,000 to 199,999	1	2.7%	15	2.6%	0	0.0%	16	2.5%			
Large Urban - 200,000 or More	27	73.0%	439	75.3%	15	65.2%	481	74.8%			
Missing	1	2.7%	4	0.7%	0	0.0%	5	0.8%			
Total	37	100.0%	583	100.0%	23	100.0%	643	100.0%			

 Urban areas accounted for 81.2% of total pedestrian-motor vehicle crashes, 82.0% of pedestrian-motor vehicle injury crashes and 65.2% of fatal pedestrian-motor vehicle crashes.

### **Type of Vehicles Involved in Pedestrian-Motor Vehicle Crashes (Utah 2004)**

	Vehicles										
	Vehicles Inv	olved in	Vehicles In	Vehicles Involved in		Vehicles Involved in		icles			
	Pedestrian-MV		Pedestri	Pedestrian-MV		Pedestrian-MV		l in			
	PDO Cra	ashes	Injury Cı	rashes	Fatal Cı	rashes	Pedestrian-MV	Crashes			
Vehicle Type	#	%	#	%	#	%	#	%			
Passenger Car	24	53.3%	333	54.8%	16	57.1%	373	54.8%			
Light Truck, Van or SUV	21	46.7%	234	38.5%	9	32.1%	264	38.8%			
Hit and Run Vehicle	0	0.0%	19	3.1%	0	0.0%	19	2.8%			
Large/Semi Truck	0	0.0%	11	1.8%	2	7.1%	13	1.9%			
School Bus	0	0.0%	6	1.0%	1	3.6%	7	1.0%			
Motorcycle	0	0.0%	1	0.2%	0	0.0%	1	0.1%			
Other	0	0.0%	4	0.7%	0	0.0%	4	0.6%			
Total	45	100.0%	608	100.0%	28	100.0%	681	100.0%			

 The above table shows that the largest percentage of vehicles involved in total pedestrian-motor vehicle crashes (54.8%), pedestrian-motor vehicle injury crashes (54.8%) and fatal pedestrian-motor vehicle crashes (57.1%) were passenger cars.

### **Pedestrian-Motor Vehicle Crash Violations (Utah 2004)**

	Violations (Drivers)											
	Pedest	Pedestrian-MV I		Pedestrian-MV		Cited in ian-MV	in Pedestrian-M\					
		rashes		rashes	Fatal C		Crashes					
Violations	#	%	#	%	#	%	#	%				
Failure to Yield Right-of-Way	5	31.3%	86	50.6%	0	0.0%	91	48.1%				
Improper Lookout	4	25.0%	27	15.9%	0	0.0%	31	16.4%				
Hit and Run	2	12.5%	14	8.2%	2	66.7%	18	9.5%				
Other Non-Moving Violations	1	6.3%	16	9.4%	0	0.0%	17	9.0%				
Driving Under the Influence	1	6.3%	8	4.7%	1	33.3%	10	5.3%				
Reckless Driving	1	6.3%	4	2.4%	0	0.0%	5	2.6%				
Failure to Stop at Red Light	0	0.0%	5	2.9%	0	0.0%	5	2.6%				
All Other Moving Violations	1	6.3%	4	2.4%	0	0.0%	5	2.6%				
Improper Turn (Failure to Signal)	1	6.3%	2	1.2%	0	0.0%	3	1.6%				
Failure to Stop at a Stop Sign	0	0.0%	2	1.2%	0	0.0%	2	1.1%				
Wrong Side of Road	0	0.0%	1	0.6%	0	0.0%	1	0.5%				
Negligent Collision	0	0.0%	1	0.6%	0	0.0%	1	0.5%				
Total	16	100.0%	170	100.0%	3	100.0%	189	100.0%				

- In 2004, there were 666 drivers involved in pedestrian-motor vehicle crashes. Officers at the scene of the crash cited 189 (28.4%) of those drivers for a traffic violation.
- "Failure to yield right-of-way" was the leading violation for total pedestrian-motor vehicle crashes (48.1%), and pedestrian-motor vehicle injury crashes (50.6%).
- Only 3 of the 27 drivers involved in fatal pedestrian-motor vehicle crashes received a citation. The drivers were cited for "hit and run" (66.7%) and "driving under the influence" (33.3%).

### **Contributing Factors of Pedestrian-Motor Vehicle Crashes (Utah 2004)**

Contributing Fa	actors (P	edestria	n-Moto	r Vehic	le Cras	shes)			
	Co	ontributing	Factors	s Coded	for Vehi	cles Inv	olved in:		
	Pedesti	rian-MV	Pedest	rian-MV	Pedest	rian-MV	To	tal	
	Property	Damage	lnj	ury	Fa	tal	Pedest	rian-MV	
	Only C			shes		shes	Crashes		
Contributing Factors	#	%	#	%	#	%	#	%	
Improper Lookout	14	38.9%	182	36.6%	7	43.8%	203	37.0%	
Failed to Yield Right of Way	7	19.4%	132	26.6%	1	6.3%	140	25.5%	
Hit and Run	3	8.3%	65	13.1%	1	6.3%	69	12.6%	
Other Improper Driving	3	8.3%	19	3.8%	0	0.0%	22	4.0%	
Non-Contact Vehicle Involved	0	0.0%	11	2.2%	3	18.8%	14	2.6%	
Speed Too Fast	1	2.8%	10	2.0%	1	6.3%	12	2.2%	
Made Improper Turn	1	2.8%	9	1.8%	0	0.0%	10	1.8%	
Driving Under the Influence	1	2.8%	8	1.6%	1	6.3%	10	1.8%	
Disregard Traffic Signal	0	0.0%	10	2.0%	0	0.0%	10	1.8%	
Improper Backing	0	0.0%	7	1.4%	0	0.0%	7	1.3%	
Aggressive Driving	2	5.6%	3	0.6%	1	6.3%	6	1.1%	
Improper Overtaking	1	2.8%	4	0.8%	0	0.0%	5	0.9%	
Other Driver Distractions	0	0.0%	4	0.8%	1	6.3%	5	0.9%	
Passed Stop Sign	0	0.0%	5	1.0%	0	0.0%	5	0.9%	
Vehicle Rolling in Traffic Lane	1	2.8%	4	0.8%	0	0.0%	5	0.9%	
Asleep	0	0.0%	3	0.6%	0	0.0%	3	0.5%	
Other Defective Condition of Vehicle	0	0.0%	3	0.6%	0	0.0%		0.5%	
Windshield Not Clear	0	0.0%	3	0.6%	0	0.0%		0.5%	
Object in Roadway	0	0.0%	2	0.4%	0	0.0%	2	0.4%	
Had Been Drinking	0	0.0%	2	0.4%	0	0.0%	2	0.4%	
Brakes Defective	0	0.0%	2	0.4%	0	0.0%	2	0.4%	
Downhill Runaway	0	0.0%	2	0.4%	0	0.0%	2	0.4%	
Improper Parking	0	0.0%	2	0.4%	0	0.0%	2	0.4%	
Under the Influence of Drugs	1	2.8%	0	0.0%	0	0.0%	1	0.2%	
Headlights Insufficient or Out	0	0.0%	1	0.2%	0	0.0%	1	0.2%	
Failed to Signal	0	0.0%	1	0.2%	0	0.0%	1	0.2%	
Wrong Side of Road	0	0.0%	1	0.2%	0	0.0%	1	0.2%	
Eyesight Defective Uncorrected	0	0.0%	1	0.2%	0	0.0%	1	0.2%	
Other Lights or Reflectors Defective	0	0.0%	1	0.2%	0	0.0%	1	0.2%	
Followed Too Closely	1	2.8%	0	0.0%	0	0.0%	1	0.2%	
Total	36	100.0%	497	100.0%	16	100.0%	549	100.0%	

- Contributing factors were coded by the police officer at the scene of the crash for each vehicle involved in the
  crash. The officer may record no contributing factor or up to two different contributing factors.
- "Improper lookout" was the leading contributing factor for total pedestrian-motor vehicle crashes (37.0%), pedestrian-motor vehicle injury crashes (36.6%) and fatal pedestrian-motor vehicle crashes (43.8%).
- The combined contributing factors of "driving under the influence," "had been drinking" and "under the influence of drugs" accounted for 2.4% of total pedestrian-motor vehicle crashes, 2.0% of pedestrian-motor vehicle injury crashes, and 6.3% of fatal pedestrian-motor vehicle crashes.

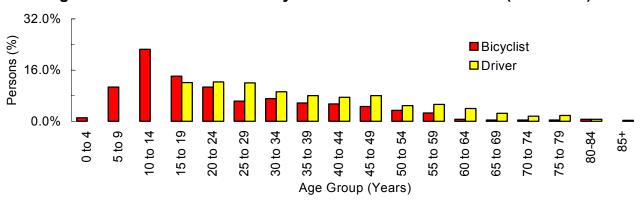
# Bicyclists 2004

### **BICYCLISTS**

### Did you know that in 2004. . .

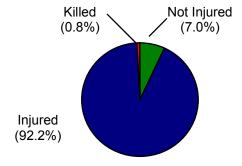
- 703 bicyclists were involved in motor vehicle crashes; 648 were injured, and 6 were killed.
- Bicyclists were 4 times more likely to be killed in a crash than other crash occupants.

### Age of Persons Involved in Bicyclist-Motor Vehicle Crashes (Utah 2004)



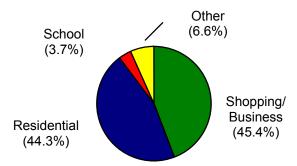
- The highest percentage of bicyclists involved in crashes were aged 10 to 14 years (22.5%).
- The highest percentage of drivers involved in bicyclist crashes were aged 20 to 24 years (12.3%).

### Bicyclist Injury Severity (Utah 2004)



 Nearly all bicyclists (92.2%) involved in crashes sustained an injury compared to 21.0% of all motor vehicle crash occupants.

### Location of Bicyclist-Motor Vehicle Crashes (Utah 2004)



 The majority of bicyclist-motor vehicle crashes occurred in shopping/business (45.4%) and residential (44.3%) areas.

### **Top 3 Contributing Factors Involved in Bicyclist-Motor Vehicle Crashes:**

- 1. Improper Lookout (46.6%)
- 2. Failed to Yield Right-of-Way (34.0%)
- 3. Hit and Run (6.7%)
- In addition to the above, "driving under the influence," "had been drinking," and "under the influence of drugs" accounted for 0.9% of bicyclist-motor vehicle crashes.

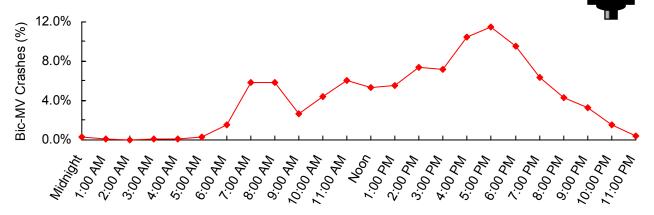
### Top 3 Violations of Drivers Involved in Bicyclist-Motor Vehicle Crashes:

- 1. Failed to Yield Right-of-Way (42.7%)
- 2. Improper Lookout (24.1%)
- 3. Other Non-Moving Violations (14.1%)
- Over one-quarter (29.4%) of drivers involved in bicyclist-motor vehicle crashes received a citation.

# 

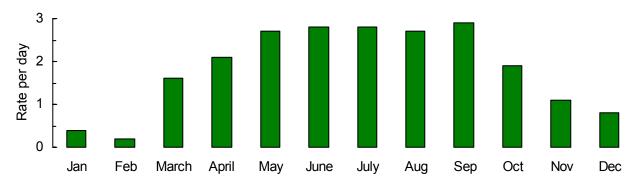
### **BICYCLISTS**

### Time of Day Bicyclist-Motor Vehicle Crashes Occurred (Utah 2004)



 Bicyclist-motor vehicle crashes occurred most often between 3:00 pm to 7:00 pm. There was also a small peak between 7:00 am and 8:00 am.

### Month of the Year Bicyclist-Motor Vehicle Crashes Occurred (Utah 2004)



September (2.9) had the highest rate per day of bicyclist-motor vehicle crashes.

### **Actions of Bicyclists Prior to Crashes (Utah 2004)**

- 1. Riding in Roadway with Traffic (21.9%)
- 2. Riding in Roadway Against Traffic (17.4%)
- 3. Crossing Intersection with Signal (15.6%)
- 4. Riding on Sidewalk (11.9%)
- 5. Crossing Intersection with No Signal (10.0%)
- "Crossing Intersection (with signal, no signal, against signal, diagonally)" comprised 33.6% of bicyclist actions prior to crashes.

### **Bicyclist Crash Clock (Utah 2004)**



### **Alcohol and Other Drug Involvement**



- Of the 6 bicyclists killed in 2004, none were impaired by alcohol or other drugs.
- Of the drivers involved in fatal bicyclist-motor vehicle crashes, none were cited for "driving under the influence."

### **Section 8: Bicyclists**

Section 8: Bicyclists 2004	
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### <u>Trends</u>

### **Bicyclists Involved in Crashes 1995-2004**

				Bio	cyclists					
		Non-Injured	Bicyclists	Injured B	icyclists	Bicyclist	s Killed	Total Bicyclists		
		Non-Injured	Rate per	Injured	Rate per	Bicyclists	Rate per	All	Rate per	
		Bicyclists	10,000	Bicyclists	10,000	Killed	10,000	<b>Bicyclists</b>	10,000	
Year	Population	#	Population	#	Population	#	Population	#	Population	
1995	1,995,228	57	0.29	729	3.7	9	0.05	795	4.0	
1996	2,042,893	62	0.30	766	3.7	9	0.04	837	4.1	
1997	2,099,409	79	0.38	797	3.8	3	0.01	879	4.2	
1998	2,141,632	72	0.34	758	3.5	9	0.04	839	3.9	
1999	2,193,014	72	0.33	777	3.5	7	0.03	856	3.9	
2000	2,246,553	62	0.28	635	2.8	9	0.04	706	3.1	
2001	2,295,971	48	0.21	625	2.7	3	0.01	676	2.9	
2002	2,338,761	50	0.21	590	2.5	5	0.02	645	2.8	
2003	2,385,358	48	0.20	621	2.6	2	0.01	671	2.8	
2004	2,469,230	49	0.20	648	2.6	6	0.02	703	2.8	
Total	22,208,049	599	0.27	6,946	3.1	62	0.03	7,607	3.4	

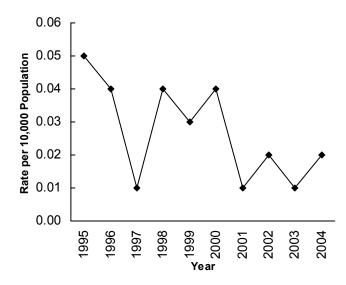
- In 2004, the total rate of bicyclists involved in crashes (2.8), and the rate of bicyclists injured in crashes (2.6), remained the same as the 2003 rates.
- In 2004, there were 6 bicyclists killed in crashes; a rate of 0.02. Because of the small number of bicyclist fatalities, it is difficult to compare increases and decreases from year to year.

### Bicyclists Injured in Crashes (Utah 1995-2004)

# 4.0 Rate per 10,000 Population 3.0 - 1995 -

 Over the last ten years, the rates of total bicyclists and bicyclists injured in crashes have followed a similar overall decreasing trend.

### Bicyclists Killed in Crashes (Utah 1995-2004)



- The rate of bicyclists killed in crashes has varied over time.
- The highest rate of bicyclists killed in crashes occurred in 1995 (0.05).

NOTE: Part of the decrease in reported bicyclists involved in crashes from 1997 forward is due to a change in reporting criteria initiated in 1997 that excluded private property crashes. As a result, bicyclists that were involved in crashes that occurred in a parking lot, driveway, sidewalk and other private roadways are not included from 1997 forward.

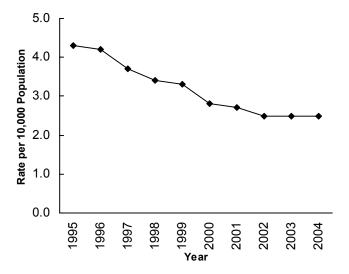
### **Trends**

### **Bicyclist-Motor Vehicle Crashes 1995-2004**

	Bicyclist-Motor Vehicle Crashes													
		<b>Property Dam</b>	age Only (PDO)	Inj	ury	Fa	atal	Total						
		Bic-MV	Rate	Bic-MV	Rate	Bic-MV	Rate	All	Rate					
		PDO	per	Injury	per	Fatal	per	Bic-MV	per					
		Crashes	10,000	Crashes	10,000	Crashes	10,000	Crashes	10,000					
Year	Population	#	Population	#	Population	#	Population	#	Population					
1995	1,995,228	103	0.5	860	4.3	9	0.05	972	4.9					
1996	2,042,893	61	0.3	858	4.2	9	0.04	928	4.5					
1997	2,099,409	74	0.4	778	3.7	3	0.01	855	4.1					
1998	2,141,632	67	0.3	728	3.4	9	0.04	804	3.8					
1999	2,193,014	66	0.3	732	3.3	7	0.03	805	3.7					
2000	2,246,553	58	0.3	625	2.8	8	0.04	691	3.1					
2001	2,295,971	42	0.2	609	2.7	3	0.01	654	2.8					
2002	2,338,761	44	0.2	585	2.5	5	0.02	634	2.7					
2003	2,385,358	39	0.2	589	2.5	2	0.01	630	2.6					
2004	2,469,230	45	0.2	626	2.5	5	0.02	676	2.7					
Total	22,208,049	599	0.3	6,990	3.1	60	0.03	7,649	3.4					

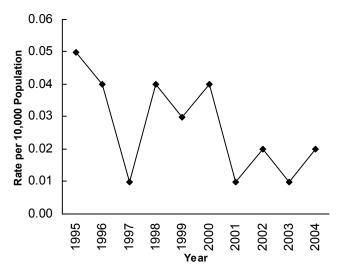
- In 2004, the rate of total bicyclist-motor vehicle crashes (2.7) increased 4% from 2003; while the rate of bicyclist-motor vehicle injury crashes (2.5) remained the same as 2003.
- In 2004, there were 5 fatal bicyclist-motor vehicle crashes; a rate of 0.02. Because of the small number of fatal bicyclist-motor vehicle crashes, it is difficult to compare increases and decreases from year to year.

### Bicyclist-Motor Vehicle Injury Crashes (Utah 1995-2004)



 Over the last ten years, the rates of total bicyclistmotor vehicle crashes and bicyclist-motor vehicle injury crashes have followed a similar overall decreasing trend.

### Fatal Bicyclist-Motor Vehicle Crashes (Utah 1995-2004)



- The rate of fatal bicyclist-motor vehicle crashes has varied over time.
- The highest rate of fatal bicyclist motor vehicle crashes occurred in 1995 (0.05).

NOTE: Part of the decrease in reported bicyclist-motor vehicle crashes from 1997 forward is due to a change in reporting criteria initiated in 1997 that excluded private property crashes. As a result, bicyclist-motor vehicle crashes that occurred in a parking lot, driveway, sidewalk and other private roadways are not included from 1997 forward.

### **Counties**

### **Bicyclists Involved in Crashes by County (Utah 2004)**

					Bi	cyclists						
	Non-	Injured E	Bicyclists	Inj	jured Bic	yclists	E	Bicyclists	Killed		Total Bic	yclists
	Non-	Rate	Rate		Rate	Rate		Rate	Rate		Rate	Rate
	Injured	per 100	per	Injured	per 100	per	Bic.	per 100	per	All	per 100	per
	Bic.	Million	10,000	Bic.	Million	10,000	Killed	Million	10,000	Bic.	Million	10,000
County	#	VMT	Population	#	VMT	Population	#	VMT	Population	#	VMT	Population
Beaver	0	0.0	0.0	0	0.0	0.0	1	0.4	1.6	1	0.4	1.6
Box Elder	0	0.0	0.0	7	0.8	1.6	0	0.0	0.0	7	0.8	1.6
Cache	5	0.6	0.5	22	2.5	2.2	0	0.0	0.0	27	3.1	2.7
Carbon	0	0.0	0.0	6	2.0	3.1	0	0.0	0.0	6	2.0	3.1
Daggett	1	3.6	10.5	0	0.0	0.0	0	0.0	0.0	1	3.6	10.5
Davis	0	0.0	0.0	43	1.9	1.6	0	0.0	0.0	43	1.9	1.6
Duchesne	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Emery	0	0.0	0.0	1	0.3	1.0	0	0.0	0.0	1	0.3	1.0
Garfield	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Grand	0	0.0	0.0	3	1.1	3.5	0	0.0	0.0	3	1.1	3.5
Iron	0	0.0	0.0	3	0.5	0.8	0	0.0	0.0	3	0.5	0.8
Juab	1	0.3	1.1	2	0.5	2.3	0	0.0	0.0	3	8.0	3.4
Kane	0	0.0	0.0	1	8.0	1.7	0	0.0	0.0	1	8.0	1.7
Millard	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Morgan	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Piute	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Rich	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Salt Lake	33	0.4	0.3	321	4.0	3.4	3	0.0	0.0	357	4.4	3.7
San Juan	0	0.0	0.0	1	0.4	0.7	1	0.4	0.7	2	0.7	1.4
Sanpete	0	0.0	0.0	3	1.2	1.2	0	0.0	0.0	3	1.2	1.2
Sevier	0	0.0	0.0	4	1.0	2.1	0	0.0	0.0	4	1.0	2.1
Summit	0	0.0	0.0	6	0.9	1.7	0	0.0	0.0	6	0.9	1.7
Tooele	0	0.0	0.0	5	0.6	1.0	0	0.0	0.0	5	0.6	1.0
Uintah	0	0.0	0.0	2	0.7	8.0	0	0.0	0.0	2	0.7	0.8
Utah	6	0.2	0.1	128	3.7	2.9	0	0.0	0.0	134	3.8	3.1
Wasatch	0	0.0	0.0	5	1.9	2.6	0	0.0	0.0	5	1.9	2.6
Washington	0	0.0	0.0	20	1.9	1.7	0	0.0	0.0	20	1.9	1.7
Wayne	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Weber	3	0.2	0.1	65	4.3	3.1	1	0.1	0.0	69	4.5	3.3
Statewide	49	0.2	0.2	648	2.6	2.6	6	0.0	0.0	703	2.9	2.8

- Two different rates are given in the above table; one based on vehicle miles traveled in the county, and another based on the population of the county.
- Rate per 100 million vehicle miles traveled:
  - Weber (4.5), Salt Lake (4.4) and Utah (3.8) had the highest rates of total bicyclists involved in crashes per 100 million vehicle miles traveled.
  - Weber (4.3), Salt Lake (4.0) and Utah (3.7) had the highest rates of bicyclists injured in crashes per 100 million vehicle miles traveled.
- Rate per 10,000 population:
  - Daggett (10.5), Salt Lake (3.7) and Grand (3.5) had the highest rates of total bicyclists involved in crashes per 10,000 population.
  - Grand (3.5), Salt Lake (3.4) and Weber (3.1) had the highest rates of bicyclists injured in crashes per 10,000 population.

### **Counties**

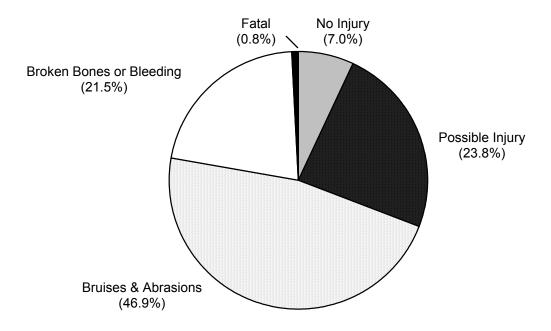
### **Bicyclist-Motor Vehicle Crashes by County (Utah 2004)**

				Bicy	clist-Mo	otor Vehic	de Cras	nes				
	Property	Damage	Only (PDO)		Injury			Fatal			Total	
	Bic-MV	Rate	Rate	Bic-MV	Rate	Rate	Bic-MV	Rate	Rate	All	Rate	Rate
	PDO	per 100	per	Injury	per 100	per	Fatal	per 100	per	Bic-MV	per 100	per
	Crashes	Million	10,000	Crashes	Million	10,000	Crashes	Million	10,000	Crashes	Million	10,000
County	#	VMT	<b>Population</b>	#	VMT	<b>Population</b>	#	VMT	<b>Population</b>	#	VMT	<b>Population</b>
Beaver	0	0.0	0.0	0	0.0	0.0	1	0.4	1.6	1	0.4	1.6
Box Elder	1	0.1	0.2	7	0.8	1.6	0	0.0	0.0	8	0.9	1.8
Cache	5	0.6	0.5	21	2.4	2.1	0	0.0	0.0	26	3.0	2.6
Carbon	0	0.0	0.0	5	1.7	2.6	0	0.0	0.0	5	1.7	2.6
Daggett	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Davis	2	0.1	0.1	37	1.6	1.4	0	0.0	0.0	39	1.7	1.5
Duchesne	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Emery	0	0.0	0.0	1	0.3	1.0	0	0.0	0.0	1	0.3	1.0
Garfield	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Grand	0	0.0	0.0	3	1.1	3.5	0	0.0	0.0	3	1.1	3.5
Iron	0	0.0	0.0	3	0.5	0.8	0	0.0	0.0	3	0.5	0.8
Juab	0	0.0	0.0	3	0.8	3.4	0	0.0	0.0	3	0.8	3.4
Kane	0	0.0	0.0	1	0.8	1.7	0	0.0	0.0	1	0.8	1.7
Millard	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Morgan	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Piute	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Rich	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Salt Lake	28	0.3	0.3	314	3.9	3.3	2	0.0	0.0	344	4.2	3.6
San Juan	0	0.0	0.0	0	0.0	0.0	1	0.4	0.7	1	0.4	0.7
Sanpete	0	0.0	0.0	3	1.2	1.2	0	0.0	0.0	3	1.2	1.2
Sevier	0	0.0	0.0	4	1.0	2.1	0	0.0	0.0	4	1.0	2.1
Summit	0	0.0	0.0	5	0.7	1.4	0	0.0	0.0	5	0.7	1.4
Tooele	1	0.1	0.2	4	0.5	0.8	0	0.0	0.0	5	0.6	1.0
Uintah	0	0.0	0.0	3	1.0	1.1	0	0.0	0.0	3	1.0	1.1
Utah	5	0.1	0.1	125	3.6	2.9	0	0.0	0.0	130	3.7	3.0
Wasatch	0	0.0	0.0	5	1.9	2.6	0	0.0	0.0	5	1.9	2.6
Washington	0	0.0	0.0	20	1.9	1.7	0	0.0	0.0	20	1.9	1.7
Wayne	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Weber	3	0.2	0.1	62	4.1	3.0	1	0.1	0.0	66	4.3	3.1
Statewide	45	0.2	0.2	626	2.5	2.5	5	0.0	0.0	676	2.7	2.7

- Two different rates are given in the above table; one based on vehicle miles traveled in the county, and another based on the population of the county.
- Rate per 100 million vehicle miles traveled:
  - Weber (4.3), Salt Lake (4.2) and Utah (3.7) had the highest rates of total bicyclist-motor vehicle per 100 million vehicle miles traveled.
  - Weber (4.1), Salt Lake (3.9) and Utah (3.6) had the highest rate of bicyclist-motor vehicle injury crashes per 100 million vehicle miles traveled.
- Rate per 10,000 population:
  - Salt Lake (3.6), Grand (3.5) and Juab (3.4) had the highest rates of total bicyclist-motor vehicle crashes per 10,000 population.
  - Grand (3.5), Juab (3.4) and Salt Lake (3.3) had the highest rates of bicyclist-motor vehicle injury crashes per 10,000 population.

### **Bicyclist Characteristics**

### **Injury Severity of Bicyclists Involved in Crashes (Utah 2004)**



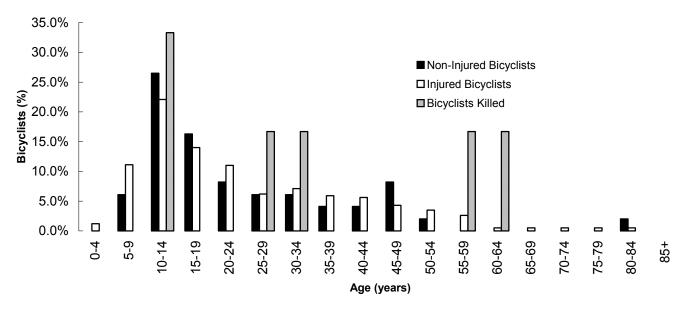
- In the above graph, there were a total of 703 bicyclists involved in crashes.
- The above graph shows that 92.2% of bicyclists involved in crashes sustained a non-fatal injury compared to 21.0% of all motor vehicle crash occupants.
- The percentage of bicyclists killed in crashes (0.8%) was higher than the percentage for all motor vehicle crash occupants killed in crashes (0.2%).
- In fact, bicyclists were 4 times more likely to be killed in a crash than other motor vehicle crash occupants.

### **Bicyclist Characteristics**

### **Age of Bicyclists Involved in Crashes (Utah 2004)**

			В	icyclist	:S			Bicyclists													
		njured	_	ıred	_	clists		tal													
	Bicy	clists		clists		led	Bicyclists														
Age	#	%	#	%	#	%	#	%													
0-4	0	0.0%	8	1.2%	0	0.0%	8	1.1%													
5-9	3	6.1%	72	11.1%	0	0.0%	75	10.7%													
10-14	13	26.5%	143	22.1%	2	33.3%	158	22.5%													
15-19	8	16.3%	91	14.0%	0	0.0%	99	14.1%													
20-24	4	8.2%	71	11.0%	0	0.0%	75	10.7%													
25-29	3	6.1%	40	6.2%	1	16.7%	44	6.3%													
30-34	3	6.1%	46	7.1%	1	16.7%	50	7.1%													
35-39	2	4.1%	38	5.9%	0	0.0%	40	5.7%													
40-44	2	4.1%	36	5.6%	0	0.0%	38	5.4%													
45-49	4	8.2%	28	4.3%	0	0.0%	32	4.6%													
50-54	1	2.0%	23	3.5%	0	0.0%	24	3.4%													
55-59	0	0.0%	17	2.6%	1	16.7%	18	2.6%													
60-64	0	0.0%	3	0.5%	1	16.7%	4	0.6%													
65-69	0	0.0%	3	0.5%	0	0.0%	3	0.4%													
70-74	0	0.0%	3	0.5%	0	0.0%	3	0.4%													
75-79	0	0.0%	3	0.5%	0	0.0%	3	0.4%													
80-84	1	2.0%	3	0.5%	0	0.0%	4	0.6%													
85+	0	0.0%	0	0.0%	0	0.0%	0	0.0%													
Missing	5	10.2%	20	3.1%	0	0.0%	25	3.6%													
Total	49	100.0%	648	100.0%	6	100.0%	703	100.0%													

### **Age of Bicyclists Involved in Crashes (Utah 2004)**



- Overall, the largest percentage of bicyclists involved in crashes were aged 10 to 14 years (22.5%). This age group also represented the largest percentage of bicyclists injured in crashes (22.1%).
- Bicyclists aged 10 to 14 years also had the highest percentage of fatalities (33.3%).

### **Bicyclist Characteristics**

### **Gender of Bicyclists Involved in Crashes (Utah 2004)**

	Bicyclists													
		njured clists		ıred clists	_	clists lled	Total Bicyclists							
Gender	#	%	#	%	#	%	#	%						
Female	9	18.4%	135	20.8%	1	16.7%	145	20.6%						
Male	39	79.6%	510	78.7%	5	83.3%	554	78.8%						
Missing	1	2.0%	3	0.5%	0	0.0%	4	0.6%						
Total	49	100.0%	648	100.0%	6	100.0%	703	100.0%						

• The majority of all bicyclists (78.8%), bicyclists injured (78.7%) and bicyclists killed (83.3%) in crashes were male.

### **Actions of Bicyclists Prior to Crashes (Utah 2004)**

	Bicy	clists							
	Non-	Injured	Inj	ured	Bic	yclists	Т	otal	
	Bic	yclists	Bic	yclists	K			Bicyclists	
Bicyclist Action Prior to Crash	#	%	#	%	#	%	#	%	
Riding in Roadway with Traffic	12	24.5%	138	21.3%	4	66.7%	154	21.9%	
Riding in Roadway Against Traffic	8	16.3%	114	17.6%	0	0.0%	122	17.4%	
Crossing Intersection with Signal	8	16.3%	102	15.7%	0	0.0%	110	15.6%	
Riding on Sidewalk	4	8.2%	79	12.2%	1	16.7%	84	11.9%	
Crossing Intersection with No Signal	6	12.2%	63	9.7%	1	16.7%	70	10.0%	
Crossing Intersection Against Signal	4	8.2%	47	7.3%	0	0.0%	51	7.3%	
Crossing Not at Intersection	2	4.1%	24	3.7%	0	0.0%	26	3.7%	
Other in Roadway	0	0.0%	20	3.1%	0	0.0%	20	2.8%	
Coming From Behind Parked Cars	0	0.0%	10	1.5%	0	0.0%	10	1.4%	
Playing in Roadway	0	0.0%	7	1.1%	0	0.0%	7	1.0%	
Crosswalk Not at Intersection	1	2.0%	6	0.9%	0	0.0%	7	1.0%	
Crossing Intersection Diagonally	0	0.0%	5	0.8%	0	0.0%	5	0.7%	
Walking on Sidewalk	0	0.0%	4	0.6%	0	0.0%	4	0.6%	
Walking in Roadway with Traffic	0	0.0%	3	0.5%	0	0.0%	3	0.4%	
Not in Roadway	0	0.0%	3	0.5%	0	0.0%	3	0.4%	
Walking To or From School	0	0.0%	3	0.5%	0	0.0%	3	0.4%	
Other Standing in Roadway	2	4.1%	0	0.0%	0	0.0%	2	0.3%	
Walking in Roadway Against Traffic	0	0.0%	1	0.2%	0	0.0%	1	0.1%	
Standing on Median Island in Crosswalk	0	0.0%	1	0.2%	0	0.0%	1	0.1%	
Missing	2	4.1%	18	2.8%	0	0.0%	20	2.8%	
Total	49	100.0%	648	100.0%	6	100.0%	703	100.0%	

• Leading bicyclist actions prior to crashes were "crossing at intersection (with signal, against signal, no signal and diagonally" (33.6%), and "riding in roadway (with traffic, against traffic)" (39.3%).

### **Bicyclists and Helmet Use (Utah 2004)**

 Helmet use for bicyclists involved in crashes was not coded consistently at the scene of the crash and cannot be reported with accuracy. As a result, it is not included in this summary.

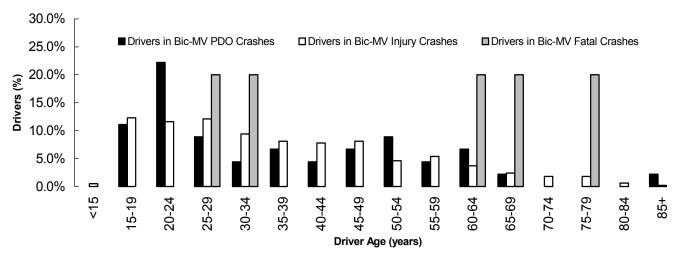
#### **Driver Characteristics**

#### **Driver Age (Utah 2004)**

Drivers									
	Drivers In	volved in	Drivers Inv	volved in	Drivers In	volved in	Total Drive	rs Involved	
	Bicyclist-M		Bicyclist-MV		_	ist-MV	in Bicyclist-MV		
	Damage On		Injury C		Fatal C	rashes	Crashes		
Driver Age	#	%	#	%	#	%	#	%	
<15	0	0.0%	3	0.5%	0	0.0%	3	0.4%	
15-19	5	11.1%	77	12.3%	0	0.0%	82	12.1%	
20-24	10	22.2%	73	11.6%		0.0%	83	12.3%	
25-29	4	8.9%	76	12.1%		20.0%		12.0%	
30-34	2	4.4%	59	9.4%	1	20.0%	62	9.2%	
35-39	3	6.7%	51	8.1%	0	0.0%	54	8.0%	
40-44	2	4.4%	49	7.8%	0	0.0%	51	7.5%	
45-49	3	6.7%	51	8.1%	0	0.0%	54	8.0%	
50-54	4	8.9%	29	4.6%	0	0.0%	33	4.9%	
55-59	2	4.4%	34	5.4%	0	0.0%	36	5.3%	
60-64	3	6.7%	23	3.7%	1	20.0%	27	4.0%	
65-69	1	2.2%	15	2.4%	1	20.0%	17	2.5%	
70-74	0	0.0%	11	1.8%	0	0.0%	11	1.6%	
75-79	0	0.0%	11	1.8%	1	20.0%	12	1.8%	
80-84	0	0.0%	4	0.6%	0	0.0%	4	0.6%	
85+	1	2.2%	1	0.2%	0	0.0%	2	0.3%	
Missing	5	11.1%	60	9.6%	0	0.0%	65	9.6%	
Total	45	100.0%	627	100.0%	5	100.0%	677	100.0%	

NOTE: More than one driver may be involved in a bicyclist-motor vehicle crash and driver information may be missing (e.g., hit and run).

#### Age of Drivers Involved in Bicyclist-Motor Vehicle Crashes (Utah 2004)



- The above table and graph show that drivers between the ages of 20 to 24 years represented the greatest percentage of drivers involved in total bicyclist-motor vehicle crashes (12.3%). Drivers aged 15 to 19 years represented the greatest percentage of drivers involved in bicyclist-motor vehicle injury crashes (15.9%).
- Of the drivers involved in fatal bicyclist-motor vehicle crashes, two were aged 25 to 34 years, two were aged 60 to 69 years, and another was aged 75 to 79 years.

#### **Driver Characteristics**

#### **Driver Gender (Utah 2004)**

			Driv	/ers				
	Drivers Inv		Drivers Inv				Total Driver	
	Bicyclist-MV		Bicyclis		_	list-MV	in Bicyc	
	Damage Only	/ Crashes	Injury C	rashes	Fatal C	Crashes	Cras	hes
Driver Gender	#	%	#	%	#	%	#	%
Female	20	44.4%	261	41.6%	1	20.0%	282	41.7%
Male	22	48.9%	326	52.0%	4	80.0%	352	52.0%
Missing	3	6.7%	40	6.4%	0	0.0%	43	6.4%
Total	45	100.0%	627	100.0%	5	100.0%	677	100.0%

NOTE: More than one driver may be involved in a pedestrian-motor vehicle crash and driver information may be missing (e.g., hit and run).

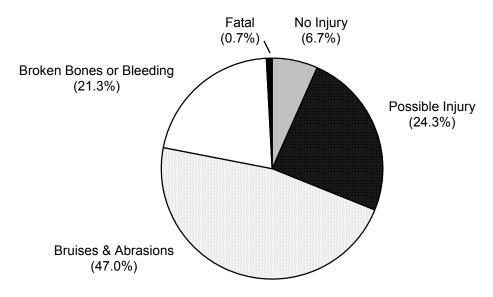
• The majority of drivers involved in total bicyclist-motor vehicle crashes (52.0%), bicyclist-motor vehicle injury crashes (52.0%), and fatal bicyclist-motor vehicle crashes (80.0%) were male.

# Alcohol and Other Drug Involvement of Bicyclists and Motor Vehicle Drivers (Utah 2004)



- Of the 6 bicyclists killed in 2004, none were impaired by alcohol or other drugs.
- Of the drivers involved in fatal bicyclist-motor vehicle crashes, none were cited for "driving under the influence."

#### **Bicyclist-Motor Vehicle Crash Severity (Utah 2004)**



- In the above graph, there were a total of 676 bicyclist-motor vehicle crashes.
- The above graph shows that 92.6% of bicyclist-motor vehicle crashes resulted in some level of non-fatal injury compared to 36.0% of all motor vehicle crashes.
- Moreover, 0.7% of bicyclist-motor vehicle crashes resulted in a fatality, compared to 0.5% of all motor vehicle crashes.

#### **Bicyclist-Motor Vehicle Crashes by Month of Year (Utah 2004)**

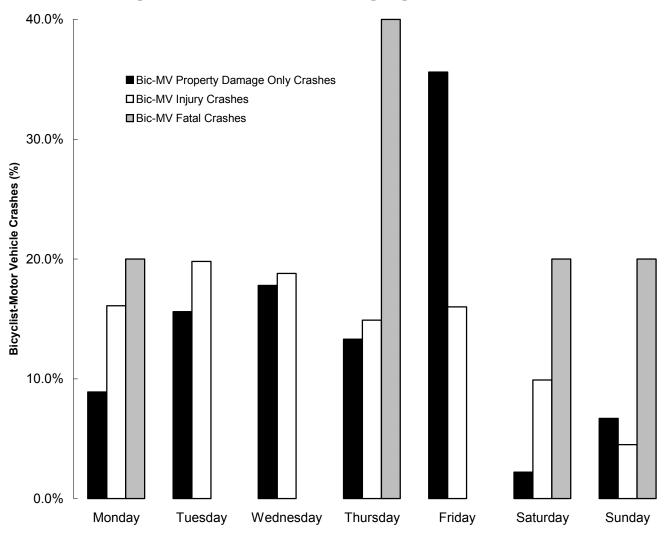
	Bicyclist-Motor Vehicle Crashes								
		Property Damag	e Only (PDO)	Injury		Fatal		Total	
	Days in	Bicyclist-MV	Rate	Bicyclist-MV	Rate	Bicyclist-MV	Rate	All Bicyclist-MV	Rate
	Month	PDO Crashes	per	Injury Crashes	per	Fatal Crashes	per	Crashes	per
Month	#	#	Day	#	Day	#	Day	#	Day
January	31	0	0.0	11	0.4	0	0.0	11	0.4
February	29	0	0.0	6	0.2	0	0.0	6	0.2
March	31	2	0.1	49	1.6	0	0.0	51	1.6
April	30	9	0.3	54	1.8	1	0.0	64	2.1
May	31	2	0.1	82	2.6	1	0.0	85	2.7
June	30	3	0.1	82	2.7	0	0.0	85	2.8
July	31	7	0.2	80	2.6	0	0.0	87	2.8
August	31	7	0.2	75	2.4	2	0.1	84	2.7
September	30	7	0.2	79	2.6	1	0.0	87	2.9
October	31	6	0.2	53	1.7	0	0.0	59	1.9
November	30	1	0.0	31	1.0	0	0.0	32	1.1
December	31	1	0.0	24	0.8	0	0.0	25	0.8
Total	366	45	0.1	626	1.7	5	0.0	676	1.8

- September (2.9), June (2.8) and July (2.8) had the highest rates per day of total bicyclist-motor vehicle crashes.
- June (2.7) had the highest rate per day of bicyclist-motor vehicle injury crashes.
- Fatal bicyclist-motor vehicle crashes varied throughout the year.

#### **Bicyclist-Motor Vehicle Crashes by Day of Week (Utah 2004)**

	Bicyclist-Motor Vehicle Crashes									
	Property Dama	age Only Crashes	Injury	Crashes	Fatal	Crashes	Total	Crashes		
Day of Week	#	%	#	%	#	%	#	%		
Monday	4	8.9%	101	16.1%	1	20.0%	106	15.7%		
Tuesday	7	15.6%	124	19.8%	0	0.0%	131	19.4%		
Wednesday	8	17.8%	118	18.8%	0	0.0%	126	18.6%		
Thursday	6	13.3%	93	14.9%	2	40.0%	101	14.9%		
Friday	16	35.6%	100	16.0%	0	0.0%	116	17.2%		
Saturday	1	2.2%	62	9.9%	1	20.0%	64	9.5%		
Sunday	3	6.7%	28	4.5%	1	20.0%	32	4.7%		
Total	45	100.0%	626	100.0%	5	100.0%	676	100.0%		

#### **Bicyclist-Motor Vehicle Crashes by Day of Week (Utah 2004)**

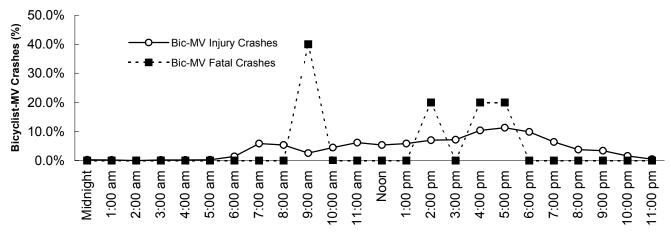


 The above table and graph show that the highest percentage of total bicyclist-motor vehicle crashes (19.4%) and bicyclist-motor vehicle injury crashes (19.8%) occurred on Tuesday.

#### **Bicyclist-Motor Vehicle Crashes by Hour of Day (Utah 2004)**

Bicyclist-Motor Vehicle Crashes								
	Property Dama	ge Only Crashes	Injury	Crashes	Fatal	Crashes	Total (	Crashes
Hour	#	%	#	%	#	%	#	%
Midnight	0	0.0%	2	0.3%	0	0.0%	2	0.3%
1:00 am	0	0.0%	1	0.2%	0	0.0%	1	0.1%
2:00 am	0	0.0%	0	0.0%	0	0.0%	0	0.0%
3:00 am	0	0.0%	1	0.2%	0	0.0%	1	0.1%
4:00 am	0	0.0%	1	0.2%	0	0.0%	1	0.1%
5:00 am	0	0.0%	2	0.3%	0	0.0%	2	0.3%
6:00 am	1	2.2%	9	1.4%	0	0.0%	10	1.5%
7:00 am	2	4.4%	37	5.9%	0	0.0%	39	5.8%
8:00 am	5	11.1%	34	5.4%	0	0.0%	39	5.8%
9:00 am	0	0.0%	16	2.6%	2	40.0%	18	2.7%
10:00 am	2	4.4%	28	4.5%	0	0.0%	30	4.4%
11:00 am	2	4.4%	39	6.2%	0	0.0%	41	6.1%
Noon	2	4.4%	34	5.4%	0	0.0%	36	5.3%
1:00 pm	0	0.0%	37	5.9%	0	0.0%	37	5.5%
2:00 pm	5	11.1%	44	7.0%	1	20.0%	50	7.4%
3:00 pm	4	8.9%	45	7.2%	0	0.0%	49	7.2%
4:00 pm	5	11.1%	65	10.4%	1	20.0%	71	10.5%
5:00 pm	6	13.3%	71	11.3%	1	20.0%	78	11.5%
6:00 pm	2	4.4%	62	9.9%	0	0.0%	64	9.5%
7:00 pm	3	6.7%	40	6.4%	0	0.0%	43	6.4%
8:00 pm	5	11.1%	24	3.8%	0	0.0%	29	4.3%
9:00 pm	1	2.2%	21	3.4%	0	0.0%	22	3.3%
10:00 pm	0	0.0%	10	1.6%	0	0.0%	10	1.5%
11:00 pm	0	0.0%	3	0.5%	0	0.0%	3	0.4%
Total	45	100.0%	626	100.0%	5	100.0%	676	100.0%

#### **Bicyclist-Motor Vehicle Crashes by Hour of Day (Utah 2004)**



- In 2004, total bicyclist-motor vehicle crashes and bicyclist-motor vehicle injury crashes followed a similar time pattern, peaking between 3:00 pm and 7:00 pm.
- Fatal bicyclist-motor vehicle crashes occurred during the morning (9:00 am) and mid– to late-afternoon (2:00 pm, 4:00 pm, 5:00 pm).

#### **Locality of Bicyclist-Motor Vehicle Crashes (Utah 2004)**

Bicyclist-Motor Vehicle Crashes								
	Property Damage	e Only Crashes	Injury C	rashes	Fatal C	rashes	Total C	rashes
Locality	#	%	#	%	#	%	#	%
Shopping/Business	28	62.2%	295	47.1%	0	0.0%	323	47.8%
Residential	14	31.1%	267	42.7%	1	20.0%	282	41.7%
School	2	4.4%	25	4.0%	0	0.0%	27	4.0%
Manufacturing/Industrial	0	0.0%	19	3.0%	0	0.0%	19	2.8%
Open Country	0	0.0%	5	0.8%	3	60.0%	8	1.2%
Farms and Fields	0	0.0%	6	1.0%	1	20.0%	7	1.0%
Playground	1	2.2%	3	0.5%	0	0.0%	4	0.6%
Church	0	0.0%	2	0.3%	0	0.0%	2	0.3%
Missing	0	0.0%	4	0.6%	0	0.0%	4	0.6%
Total	45	100.0%	626	100.0%	5	100.0%	676	100.0%

- The above table shows the majority of total bicyclist-motor vehicle crashes (47.8%) and bicyclist-motor vehicle injury crashes (47.1%) occurred in shopping/business areas.
- Most fatal bicyclist-motor vehicle crashes occurred in open country, one occurred in a residential area, and the
  other occurred in a farms and fields area.

#### **Urban/Rural Location of Bicyclist-Motor Vehicle Crashes (Utah 2004)**

Bicyclist-Motor Vehicle Crashes									
Property Damage Injury Fatal Total Only Crashes Crashes Crashes									
Urban/Rural Location	#	%	#	%	#	%	#	%	
Rural Area - Up to 5,000	4	8.9%	88	14.1%	4	80.0%	96	14.2%	
Small Urban - 5,000 to 49,999	1	2.2%	27	4.3%	0	0.0%	28	4.1%	
Moderate Urban - 50,000 to 199,999	3	6.7%	18	2.9%	0	0.0%	21	3.1%	
Large Urban - 200,000 or More	36	80.0%	489	78.1%	1	20.0%	526	77.8%	
Missing	1	2.2%	4	0.6%	0	0.0%	5	0.7%	
Total	45	100.0%	626	100.0%	5	100.0%	676	100.0%	

- Urban areas accounted for 85.0% of total bicyclist-motor vehicle crashes, 85.3% of bicyclist-motor vehicle injury crashes, but only 20% of the fatal bicyclist-motor vehicle crashes.
- In 2004, 4 out of the 5 fatal bicyclist-motor vehicle crashes (80%) occurred in a rural area.

#### **Type of Vehicles Involved in Bicyclist-Motor Vehicle Crashes (Utah 2004)**

	Vehicles								
	Vehicles In	volved in	Vehicles In	volved in	Vehicles II	nvolved in	Total Ve	hicles	
	Bicyclis	st-MV	Bicyclis		Bicycl	ist-MV	Involved in		
	PDO Cra	ashes	Injury Cr	ashes	Fatal C	rashes	Bicyclist-M	/ Crashes	
Vehicle Type	#	%	#	%	#	%	#	%	
Passenger Car	21	46.7%	373	59.1%	0	0.0%	394	57.9%	
Light Truck, Van or SUV	21	46.7%	232	36.8%	4	80.0%	257	37.7%	
Hit and Run Vehicle	2	4.4%	9	1.4%	0	0.0%	11	1.6%	
Motorcycle	0	0.0%	8	1.3%	0	0.0%	8	1.2%	
Large/Semi Truck	0	0.0%	6	1.0%	0	0.0%	6	0.9%	
School Bus	0	0.0%		0.2%		20.0%		0.3%	
Other	1	2.2%	2	0.3%	0	0.0%	3	0.4%	
Total	45	100.0%	631	100.0%	5	100.0%	681	100.0%	

- The above table shows that the largest percentage of vehicles involved in total bicyclist-motor vehicle crashes (57.9%) and bicyclist-motor vehicle injury crashes (59.1%) were passenger cars.
- The vehicles involved in the fatal bicyclist-motor vehicle crashes were light trucks, vans or SUV's, and a school bus.

#### **Bicyclist-Motor Vehicle Crash Violations (Utah 2004)**

Violations (Drivers)								
	Drivers	Cited in	Drivers	Cited in	Drivers C	Cited in	<b>Total Drive</b>	ers Cited
		Bicyclist-MV		Bicyclist-MV		Bicyclist-MV		list-MV
	PDO C	rashes	Injury C	Injury Crashes		Fatal Crashes		hes
Violations	#	%	#	%	#	%	#	%
Failure to Yield Right-of-Way	6	42.9%	79	42.7%	0	0.0%	85	42.7%
Improper Lookout	3	21.4%	45	24.3%	0	0.0%	48	24.1%
Other Non-Moving Violations	1	7.1%	27	14.6%	0	0.0%	28	14.1%
Failure to Stop at Red Light	0	0.0%	6	3.2%	0	0.0%	6	3.0%
Hit and Run	1	7.1%	5	2.7%	0	0.0%	6	3.0%
Failure to Stop at Stop Sign	1	7.1%	4	2.2%	0	0.0%	5	2.5%
Negligent Collision	0	0.0%	5	2.7%	0	0.0%	5	2.5%
All Other Moving Violations	0	0.0%	3	1.6%	0	0.0%	3	1.5%
Reckless Driving	0	0.0%	2	1.1%	0	0.0%	2	1.0%
Improper Turn (Failure to Signal)	0	0.0%	2	1.1%	0	0.0%	2	1.0%
Driving Under the Influence	0	0.0%	2	1.1%	0	0.0%	2	1.0%
Improper Backing	0	0.0%	2	1.1%	0	0.0%	2	1.0%
Improper Start and Stop	1	7.1%	1	0.5%	0	0.0%	2	1.0%
Speeding	0	0.0%	1	0.5%	0	0.0%	1	0.5%
Following Too Close	0	0.0%	1	0.5%	0	0.0%	1	0.5%
Wrong Side of Road	1	7.1%	0	0.0%	0	0.0%	1	0.5%
Total	14	100.0%	185	100.0%	0	0.0%	199	100.0%

- In 2004, there were 677 drivers involved in bicyclist-motor vehicle crashes. Officers at the scene of the crash cited 199 (29.4%) of those drivers for a traffic violation.
- "Failure to yield right-of-way" was the leading violation for total bicyclist-motor vehicle crashes (42.7%), and bicyclist-motor vehicle injury crashes (42.7%).
- None of the drivers involved in fatal bicyclist-motor vehicle crashes received a citation.

#### **Contributing Factors of Bicyclist-Motor Vehicle Crashes (Utah 2004)**

Contributing Factors (Bicyclist-Motor Vehicle Crashes)									
	Co	ntributing	Factors	<b>Coded</b>	for Vehic	les Invo	olved in:		
	Bicycli	st-MV	Bicycl	Bicyclist-MV		st-MV	То	tal	
	Property	Damage	Injury		Fatal		Bicyclist-MV		
	Only Cr			shes	Cras		Crashes		
Contributing Factors	#	%	#	%	#	%	#	%	
Improper Lookout	16	37.2%	235	47.5%	1	0.0%	252	46.6%	
Failed to Yield Right of Way	18	41.9%	164	33.1%	2	0.0%	184	34.0%	
Hit and Run	3	7.0%	33	6.7%	0	0.0%	36	6.7%	
Other Improper Driving	1	2.3%	10	2.0%	0	0.0%	11	2.0%	
Disregard Traffic Signal	0	0.0%	9	1.8%	0	0.0%	9	1.7%	
Passed Stop Sign	1	2.3%	6	1.2%	0	0.0%	7	1.3%	
Made Improper Turn	1	2.3%	5	1.0%	0	0.0%	6	1.1%	
Speed Too Fast	1	2.3%	4	0.8%	0	0.0%	5	0.9%	
Driving Under the Influence	0	0.0%	4	0.8%	0	0.0%	4	0.7%	
Other Driver Distractions	0	0.0%	4	0.8%	0	0.0%	4	0.7%	
Windshield Not Clear	0	0.0%	3	0.6%	0	0.0%	3	0.6%	
Wrong Side of Road	0	0.0%	3	0.6%	0	0.0%	3	0.6%	
Drove Left of Center	1	2.3%	2	0.4%	0	0.0%	3	0.6%	
Improper Backing	0	0.0%	3	0.6%	0	0.0%	3	0.6%	
Headlights Insufficient or Out	0	0.0%	2	0.4%	0	0.0%	2	0.4%	
Steering Mechanism Defective	0	0.0%	2	0.4%	0	0.0%	2	0.4%	
Improper Overtaking	0	0.0%	1	0.2%	0	0.0%	1	0.2%	
Followed Too Closely	0	0.0%	1	0.2%	0	0.0%	1	0.2%	
Had Been Drinking	0	0.0%	1	0.2%	0	0.0%	1	0.2%	
Brakes Defective	0	0.0%	1	0.2%	0	0.0%	1	0.2%	
Non-Contact Vehicle Involved	0	0.0%	1	0.2%	0	0.0%	1	0.2%	
Other Lights or Reflectors Defective	1	2.3%	0	0.0%	0	0.0%	1	0.2%	
Other Defective Condition of Vehicle	0	0.0%	1	0.2%	0	0.0%	1	0.2%	
Total	43	100.0%	495	100.0%	3	0.0%	541	100.0%	

- Contributing factors were coded by the police officer at the scene of the crash for each vehicle involved in the
  crash. The officer may record no contributing factor or up to two different contributing factors.
- "Improper lookout" was the leading contributing factor for total bicyclist-motor vehicle crashes (46.6%), and bicyclist-motor vehicle injury crashes (47.5%).
- The combined contributing factors of "driving under the influence," "had been drinking" and "under the influence of drugs" accounted for 0.9% of total bicyclist-motor vehicle crashes and 0.9% of bicyclist-motor vehicle injury crashes.

# Glossary 2004

#### **Glossary**

**Alcohol and Other Drug-Related Crash:** A crash in which the investigating officer cited a driver for "driving under the influence," or coded a contributing factor of "driving under the influence," "had been drinking," or "under the influence of drugs." Since breath test or blood test results may not always be used to determine a person's alcohol and other drug content, these crashes may be underestimated.

**Alcohol and Other Drug-Related Fatal Crash:** A crash resulting in one or more deaths and in which the drug/alcohol test was positive (blood or breath test) for any driver, pedestrian, or bicyclist involved in the crash. Alcohol and other drug-related fatal crash information is obtained from the Fatal Analysis Reporting System (FARS) database.

**Crash Occupant:** A person who is involved in a crash, including motor vehicle occupants, motorcyclists, pedestrians and bicyclists.

**Contributing Factor:** The circumstances reported by the investigating officer surrounding a crash that contributed to the crash or the crash severity. Examples are "speed too fast," "fatigue," and "had been drinking." A contributing factor is coded for each vehicle involved in the crash. The officer may record no contributing factor or up to two different contributing factors.

**Fatal Crash:** A motor vehicle crash on public roadways resulting in one or more deaths. The death must occur within 30 days of the crash.

**Injury Crash:** A crash in which one or more persons sustained a possible injury, probable injury or an incapacitating injury as recorded by the investigating officer.

Motorcycle Crash: A crash involving one or more motorcycles or mopeds.

**Out-of-State Driver:** A driver licensed from a state other than Utah who is involved in a crash. Some of these drivers may reside in the state of Utah, but have not yet applied for a Utah driver's license.

**Property Damage Only Crash:** A crash in which no injury was recorded for any person involved in the crash by the investigating officer.

**Seatbelt Use:** Seatbelt use is reported for occupants in a passenger car, light truck, van or SUV. Occupants are coded as wearing a seatbelt if they reported using a shoulder/lap belt, lap belt or a child safety seat at the scene of the crash (for the purpose of this report, occupants using only a shoulder strap were reported as being unbelted). In the majority of cases, seatbelt use is self-reported by the crash occupant. It is possible that crash occupants may report using a seatbelt, when they did not use one, in order to avoid a citation or fine. Thus, the seatbelt use rate may be inflated. In the case of fatal or severe injury crashes, the officer will determine the seatbelt use.

**Speed-Related Crash:** A crash where the investigating officer cites one or more drivers for "speeding," or codes a contributing factor of "speed too fast."

**Teenage Driver:** A driver aged 15 to 19 years.

**Teenage-Driver Crash:** A crash involving a driver aged 15 to 19 years.

**Vehicle Miles Traveled:** The number of miles traveled in a year for a given area. This is calculated by the Utah Department of Transportation.

# Appendix 2004

# **Appendix**

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# **Historical Persons and Crashes**

#### **Injured Persons and Fatalities (Utah 1975-2004)**

Persons					
		Inj	uries	Fat	alities
		Persons	Rate Per	Persons	Rate Per
	<b>Vehicle Miles</b>	Injured	100 Million	Killed	100 Million
Year	Traveled (VMT)	#	VMT	#	VMT
1975	7,942,000,000	17,762	223.6	274	3.5
1976	8,420,000,000	18,315	217.5	254	3.0
1977	9,054,000,000	19,728	217.9	360	4.0
1978	9,826,000,000	21,029	214.0	376	3.8
1979	9,811,000,000	20,798	212.0	328	3.3
1980	10,645,000,000	17,828	167.5	335	3.1
1981	10,733,000,000	18,090	168.5	364	3.4
1982	10,947,000,000	17,538	160.2	296	2.7
1983	11,228,000,000	18,910	168.4	283	2.5
1984	11,642,000,000	20,487	176.0	315	2.7
1985	12,035,000,000	21,346	177.4	303	2.5
1986	12,253,000,000	21,350	174.2	312	2.5
1987	12,679,000,000	19,237	151.7	297	2.3
1988	13,263,000,000	19,066	143.8	297	2.2
1989	13,915,000,000	19,843	142.6	303	2.2
1990	14,646,000,000	20,608	140.7	272	1.9
1991	15,390,000,000	19,540	127.0	271	1.8
1992	16,263,000,000	22,490	138.3	269	1.7
1993	17,055,000,000	25,763	151.1	303	1.8
1994	18,091,944,321	28,436	157.2	343	1.9
1995	18,798,488,669	28,343	150.8	325	1.7
1996	19,433,341,748	30,711	158.0	321	1.7
1997	20,407,590,239	31,238	153.1	366	1.8
1998	21,236,980,216	30,232	142.4	350	1.6
1999	21,867,355,694	29,959	137.0	360	1.6
2000	22,517,131,427	30,086	133.6	373	1.7
2001	23,398,734,621	29,375	125.5	291	1.2
2002	24,438,992,554	30,433	124.5	328	1.3
2003	23,963,242,376	28,352	118.3	309	1.3
2004	24,624,791,795	29,638	120.4	296	1.2
Total	466,525,593,660	706,531	151.4	9,474	2.0

# **Historical Persons and Crashes**

#### **Crashes (Utah 1975-2004)**

Crashes								
	Property D	amage Only	Injury		Fatal		Total	
	PDO	Rate Per	Injury	Rate Per	Fatal	Rate Per	All	Rate Per
	Crashes	100 Million	Crashes	100 Million	Crashes	100 Million	Crashes	100 Million
Year	#	VMT	#	VMT	#	VMT	#	VMT
1975	24,740	311.5	11,441	144.1	245	3.1	36,426	458.7
1976	22,435	266.4	11,685	138.8	225	2.7	34,345	407.9
1977	25,562	282.3	12,652	139.7	310	3.4	38,524	425.5
1978	28,946	294.6	13,423	136.6	315	3.2	42,684	434.4
1979	26,732	272.5	13,449	137.1	287	2.9	40,468	412.5
1980	21,589	202.8	11,701	109.9	292	2.7	33,582	315.5
1981	23,844	222.2	11,824	110.2	321	3.0	35,989	335.3
1982	26,425	241.4	11,504	105.1	263	2.4	38,192	348.9
1983	28,419	253.1	12,317	109.7	253	2.3	40,989	365.1
1984	33,738	289.8	13,477	115.8	274	2.4	47,489	407.9
1985	33,684	279.9	13,917	115.6	270	2.2	47,871	397.8
1986	32,426	264.6	13,988	114.2	276	2.3	46,690	381.0
1987	33,386	263.3	13,599	107.3	271	2.1	47,256	372.7
1988	35,614	268.5	13,377	100.9	258	1.9	49,249	371.3
1989	37,110	266.7	13,941	100.2	269	1.9	51,320	368.8
1990	37,823	258.2	14,632	99.9	236	1.6	52,691	359.8
1991	33,443	217.3	13,763	89.4	229	1.5	47,435	308.2
1992	34,760	213.7	15,665	96.3	235	1.4	50,660	311.5
1993	38,357	224.9	17,088	100.2	259	1.5	55,704	326.6
1994	40,243	222.4	18,726	103.5	302	1.7	59,271	327.6
1995	37,532	199.7	19,828	105.5	285	1.5	57,645	306.6
1996	40,225	207.0	20,988	108.0	284	1.5	61,497	316.5
1997	33,512	164.2	21,131	103.5	309	1.5	54,952	269.3
1998	34,337	161.7	19,427	91.5	308	1.5	54,072	254.6
1999	32,971	150.8	19,513	89.2	318	1.5	52,802	241.5
2000	33,269	147.7	19,564	86.9	318	1.4	53,151	236.0
2001	33,113	141.5	19,332	82.6	258	1.1	52,703	225.2
2002	33,542	137.2	19,552	80.0	274	1.1	53,368	218.4
2003	31,842	132.9	18,285	76.3	262	1.1	50,389	210.3
2004	34,222	139.0	19,423	78.9	260	1.1	53,905	218.9
Total	963,841	206.6	469,212	100.6	8,266	1.8	1,441,319	308.9

# **Licensed Drivers**

# Number of Licensed Drivers by Age (Utah 2004)

Licensed	Drivers
Driver Age	#
15-19	123,185
20-24	196,256
25-29	206,698
30-34	165,042
35-39	142,817
40-44	140,069
45-49	141,577
50-54	127,796
55-59	104,745
60-64	76,785
65-69	58,258
70-74	46,771
75-79	37,240
80-84	25,010
85+	14,879
Total	1,607,128

SOURCE: State of Utah

Driver License Division Department of Public Safety

# **Population**

#### **State Population (Utah 1995-2004)**

<b>Utah Population</b>				
Year	#			
1995	1,995,228			
1996	2,042,893			
1997	2,099,409			
1998	2,141,632			
1999	2,193,014			
2000	2,246,553			
2001	2,295,971			
2002	2,338,761			
2003	2,385,358			
2004	2,469,230			
Total	22,208,049			

SOURCE: State of Utah Population Estimates

Demographic & Economic Analysis http://www.governor.state.ut.us

# **Population**

# **County Population (Utah 2004)**

County Po	pulation
County	#
Beaver	6,308
Box Elder	44,654
Cache	100,182
Carbon	19,385
Daggett	954
Davis	268,916
Duchesne	14,933
Emery	10,493
Garfield	4,625
Grand	8,611
Iron	38,925
Juab	8,826
Kane	6,056
Millard	13,127
Morgan	8,249
Piute	1,366
Rich	2,069
Salt Lake	955,166
San Juan	14,353
Sanpete	25,043
Sevier	19,415
Summit	35,090
Tooele	50,075
Uintah	26,224
Utah	437,627
Wasatch	19,177
Washington	117,316
Wayne	2,518
Weber	209,547
Statewide	2,469,230

SOURCE: State of Utah Population Estimates

Demographic & Economic Analysis http://www.governor.state.ut.us

# **Vehicle Miles Traveled**

#### **Vehicle Miles Traveled (Utah 1975-2004)**

Vel	hicle Miles Traveled
Year	#
1975	7,942,000,000
1976	8,420,000,000
1977	9,054,000,000
1978	9,826,000,000
1979	9,811,000,000
1980	10,645,000,000
1981	10,733,000,000
1982	10,947,000,000
1983	11,228,000,000
1984	11,642,000,000
1985	12,035,000,000
1986	12,253,000,000
1987	12,679,000,000
1988	13,263,000,000
1989	13,915,000,000
1990	14,646,000,000
1991	15,390,000,000
1992	16,263,000,000
1993	17,055,000,000
1994	18,091,944,321
1995	18,798,488,669
1996	19,433,341,748
1997	20,407,590,239
1998	21,236,980,216
1999	21,867,355,694
2000	22,517,131,427
2001	23,398,734,621
2002	24,438,992,554
2003	23,963,242,376
2004	24,624,791,795
Total	466,525,593,660

http://www.dot.state.ut.us

# **Vehicle Miles Traveled**

# **Vehicle Miles Traveled by County (Utah 2004)**

Vehicle Mi	les Traveled
County	#
Beaver	242,455,995
Box Elder	885,817,405
Cache	863,338,150
Carbon	299,741,650
Daggett	27,763,725
Davis	2,299,724,475
Duchesne	206,834,915
Emery	353,687,920
Garfield	124,002,180
Grand	278,707,065
Iron	633,808,995
Juab	386,405,790
Kane	129,749,835
Millard	430,505,090
Morgan	116,946,365
Piute	30,447,205
Rich	52,616,210
Salt Lake	8,104,176,760
San Juan	280,902,175
Sanpete	242,096,835
Sevier	415,128,005
Summit	680,048,290
Tooele	822,723,870
Uintah	307,074,135
Utah	3,498,356,370
Wasatch	266,231,730
Washington	1,081,023,055
Wayne	38,320,620
Weber	1,526,156,980
Statewide	24,624,791,795

Utah Highway Performance Monitoring System and Traffic on Utah Highways Prepared By: Data Analysis Section Using Annual Average Daily Traffic SOURCE:

http://www.dot.state.ut.us