

# Utah Crash Summary 2003



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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](http://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 2003, Utah made notable progress in the following areas when compared to 2002:

- Utah experienced a 4% reduction in the rate of motor vehicle crashes, which resulted in a 5% reduction in the rate of injured persons;
- Approximately 15% of motor vehicle crashes in Utah involved alcohol or other drugs; the lowest percentage in ten years;
- The percentage of teenage-driver crashes dropped to 28%, which also marks a ten-year low;
- The rate of speed-related crashes decreased 3%.

As improvements are made and progress continues, traffic safety needs to remain a top priority in Utah. In 2003:

- Rural crashes were 6 times more likely to result in a fatality than crashes in urban areas;
- Less than half (48%) of the persons killed in a crash were using a seat belt, and unbelted occupants were 23 times more likely to be killed in a crash than belted occupants;
- Utah experienced a 9% increase in the rate of pedestrian fatalities.

The 2003 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, bicycle and walk.



## Utah Crash Clock 2003

### In Utah during 2003:

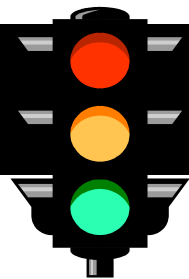
- Every 10 minutes a crash occurred.
- Every 19 minutes a person was injured in a crash.
- Every 28 hours a person was killed in a crash.
- Every 3 days an unbelted crash occupant was killed.
- Every 4 1/2 hours an alcohol or other drug-related crash occurred.
- Every 8 days a person died in an alcohol or other drug-related crash.
- Every 37 minutes a teenage-driver crash occurred.
- Every 7 days a person died in a teenage-driver crash.
- Every hour a speed-related crash occurred.
- Every 4 1/2 days a person died in a speed-related crash.
- Every hour a motorcyclist was involved in a crash.
- Every 17 days a motorcyclist was killed in a crash.
- Every 13 hours a pedestrian was involved in a crash.
- Every 13 days a pedestrian was killed in a crash.
- Every 13 hours a bicyclist was involved in a crash.



# **Persons and Crashes 2003**



## PERSONS AND CRASHES

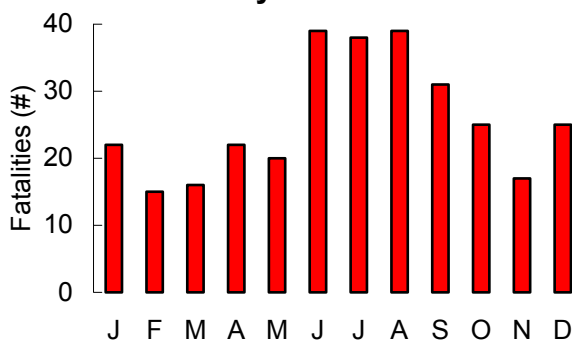


*Motor vehicle crashes are the leading cause of death and disability for persons in the United States.*

### Did you know that in 2003 . . .

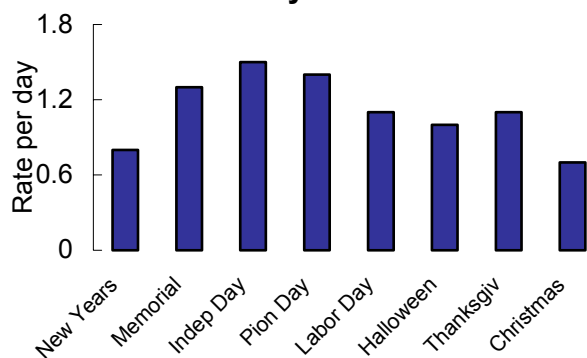
- 50,389 motor vehicle crashes occurred in Utah which resulted in 28,352 injured persons and 309 fatalities.
- Utah's total motor vehicle crash rate decreased 4% from 2002, the injury crash rate decreased 5%, and the fatal crash rate stayed the same.
- A motor vehicle crash occurred in Utah every 10 minutes, a person was injured in a crash every 19 minutes, and a person died in a crash every 28 hours.

### Fatalities by Month of the Year



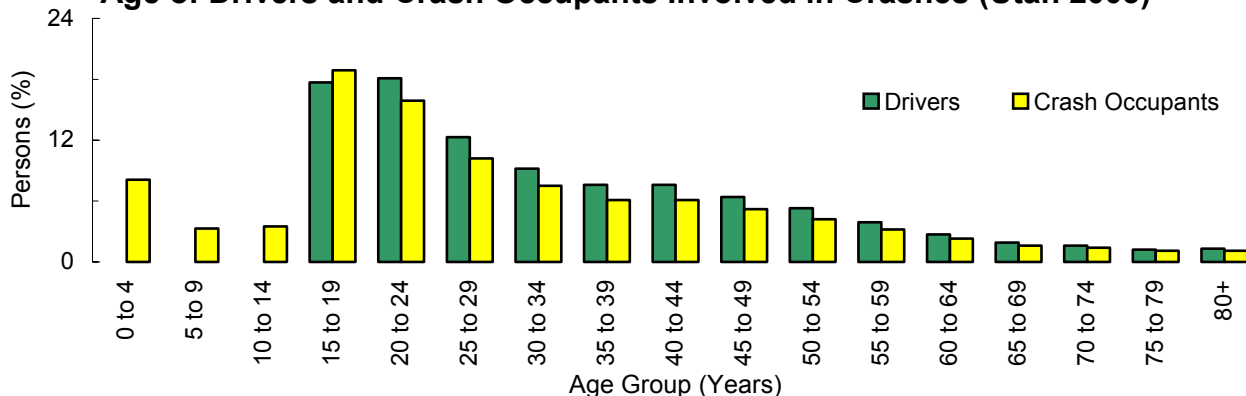
- Over one-third (38%) of the 2003 fatalities occurred during June, July and August.

### Holiday Fatalities



- In 2003, Labor Day had the highest rate of fatalities (1.8), while Thanksgiving had the lowest rate (0.4).

### Age of Drivers and Crash Occupants Involved in Crashes (Utah 2003)



- Drivers aged 20 to 24 years represented the largest percentage of drivers involved in crashes (18.1%).
- The largest proportion of crash occupants were aged 15 to 19 years (18.9%).

### Leading Collision Descriptions (Utah 2003)

#### All Crashes

1. Rear End (30.0%)
2. Broadside (21.0%)
3. Side Swipe (6.2%)
4. Single Vehicle Rollover (5.8%)
5. Pedestrian/Bicyclist (2.4%)

#### Fatal Crashes

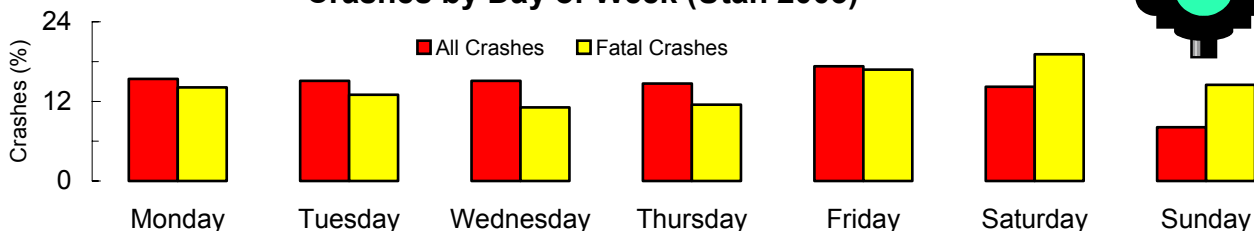
1. Single Vehicle Rollover (44.7%)
2. Head-On (14.5%)
3. Broadside (13.7%)
4. Pedestrian/Bicyclist (9.5%)
5. Side Swipe (7.3%)

Head-on collisions were 21 times more likely, and single vehicle rollovers were 14 times more likely to result in a fatality than other collisions.

## PERSONS AND CRASHES

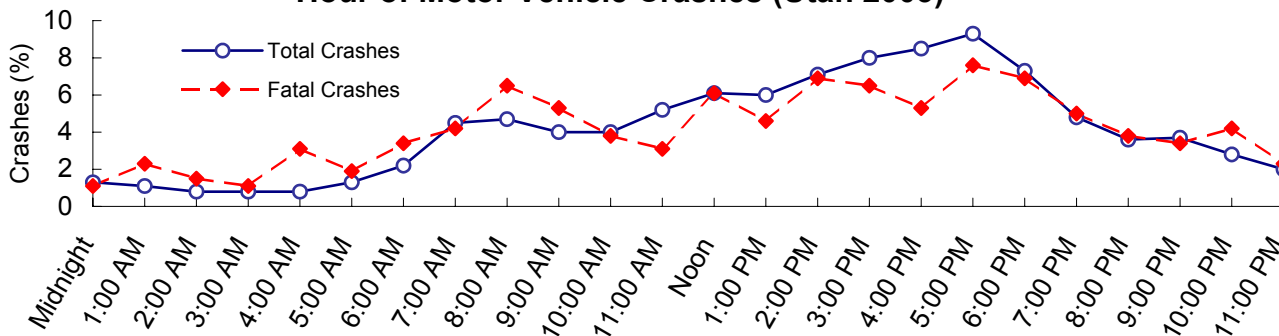


### Crashes by Day of Week (Utah 2003)



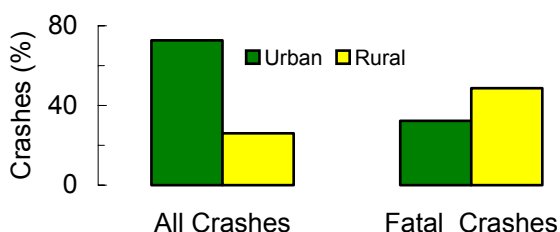
- The highest percentage of total crashes occurred on Friday (17.3%), while the highest percentage of fatal crashes occurred on Saturday (19.1%).
- Even though Sunday crashes represented 8.1% of total crashes, they accounted for 14.5% of fatal crashes. In fact, crashes occurring on Sunday were 1.9 times more likely to involve a fatality than crashes that occurred on other days of the week.

### Hour of Motor Vehicle Crashes (Utah 2003)



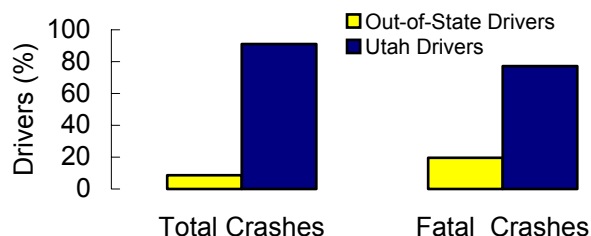
- Total crashes and fatal crashes followed a similar pattern where crashes were more likely to occur between 2:00 pm and 6:00 pm, with a peak at 5:00 pm (evening rush hour).

### Urban/Rural Location of Crashes



- While the majority of all crashes occurred in urban areas (73.7%), the majority of fatal crashes occurred in rural areas (66.8%).
- In fact, rural crashes were 6 times more likely to be fatal than urban crashes.

### Out-Of-State Drivers (Utah 2003)



- While out-of-state licensed drivers accounted for 8.6% of drivers involved in crashes, they represented 19.6% of drivers involved in fatal crashes.

### Leading Violations (Utah 2003)

#### All Crashes

1. Failure to Yield Right-of-Way (18.0%)
2. Improper Lookout (17.9%)
3. Following Too Close (16.2%)

#### Fatal Crashes

1. Vehicular Homicide (23.5%)
2. All Other Moving Violations (17.6%)
3. Driving Under the Influence (11.8%)

- Officers at the scene cited 35.2% of drivers involved in a crash for a traffic violation.
- Drivers cited for driving under the influence were 3 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 2003

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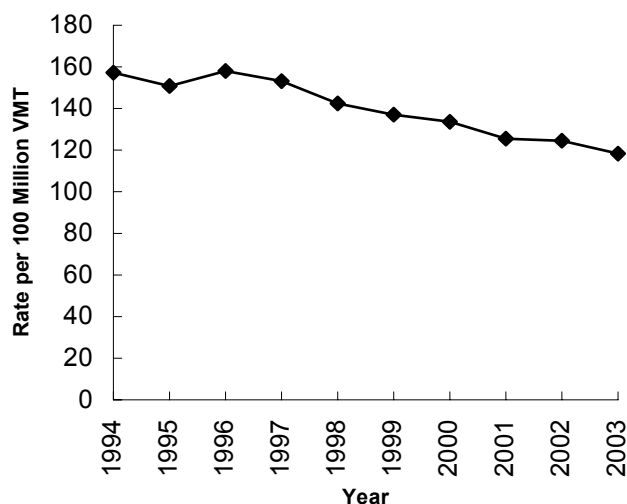
## Trends

### Injured Persons and Fatalities (Utah 1994-2003)

Year	Vehicle Miles Traveled (VMT)	Persons			
		Injured		Killed	
		Persons Injured #	Rate per 100 Million VMT	Persons Killed #	Rate per 100 Million VMT
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
Total	214,153,801,865	297,165	138.8	3,366	1.6

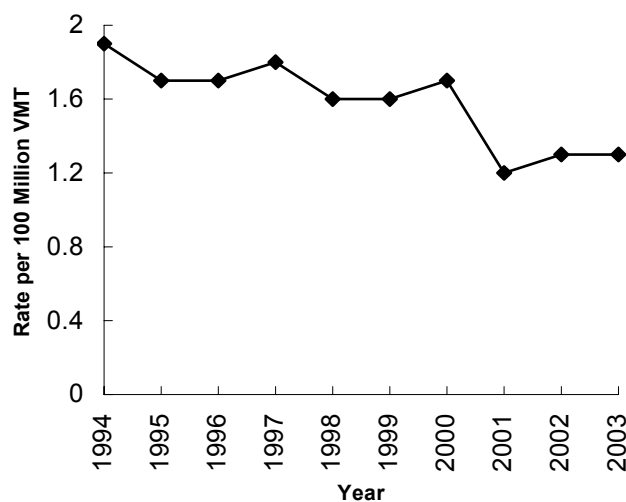
- During the last ten years, approximately 300,000 people have been injured and over 3,300 have been killed in motor vehicle crashes.
- In 2003, fewer people were injured in crashes. The 2003 injury rate was 118.3; a 5% decrease from 2002.
- Utah experienced a decrease in the number of crash fatalities in 2003. There were 328 fatalities in 2002, which dropped to 309 in 2003. However, the 2003 fatality rate of 1.3 remained the same as 2002.

**Injured Person Rates  
Per Million Vehicle Miles Traveled  
(Utah 1994-2003)**



- Overall, there has been a decreasing trend in the rate of people injured in crashes from 1994 to 2003.
- There has been a 25% decrease in the rate of people injured in crashes since 1994.

**Fatality Rates  
Per Million Vehicle Miles Traveled  
(Utah 1994-2003)**



- The rate of people killed in crashes has been decreasing over time, with the lowest rate occurring in 2001.
- There has been a 32% decrease in the rate of people killed in crashes since 1994.



## Trends

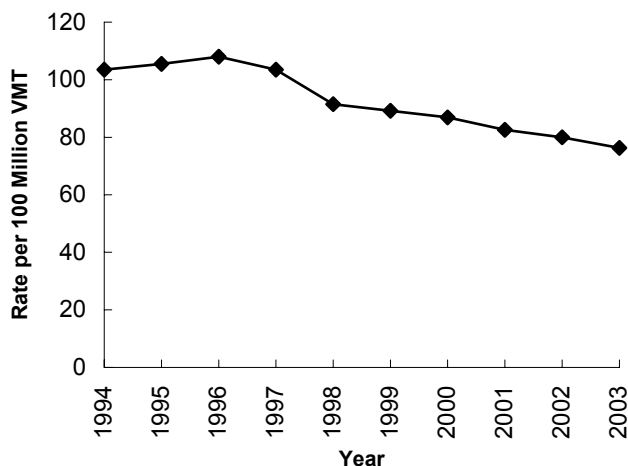
### Crashes (Utah 1994-2003)

Crashes								
Year	Property Damage Only (PDO)		Injury		Fatal		Total	
	PDO Crashes #	Rate per 100 Million VMT	Injury Crashes #	Rate per 100 Million VMT	Fatal Crashes #	Rate per 100 Million VMT	All Crashes #	Rate per 100 Million VMT
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
Total	350,586	163.7	196,346	91.7	2,918	1.4	549,850	256.8

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

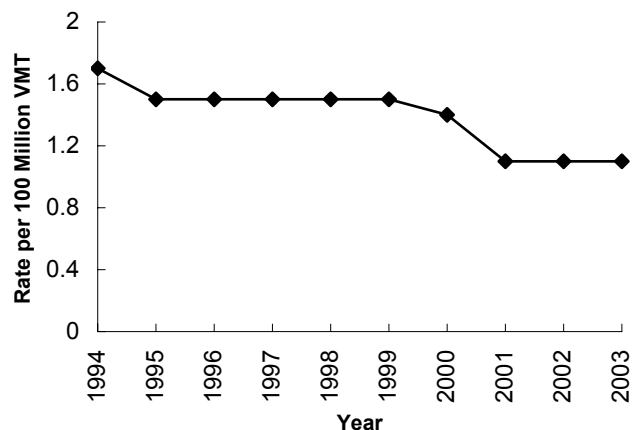
- During the last ten years, approximately 550,000 motor vehicle crashes occurred in Utah. Approximately 200,000 of the crashes involved injuries and nearly 3,000 involved fatalities.
- In 2003, the total crash rate in Utah was 210.3; a 4% decrease from 2002. The injury crash rate was 76.3; a 5% decrease from 2002. However, the 2003 fatal crash rate of 1.1 remained the same as 2002.
- Several factors may account for the changes such as seatbelt use, improvement in roadways, and changes in driver behavior.

**Injury Crash Rates  
Per Million Vehicle Miles Traveled  
(Utah 1994-2003)**



- Overall, there has been a decreasing trend in injury crash rates from 1994 to 2003 despite a small increase between 1994 and 1996.
- There has been a 26% decrease in the injury crash rate since 1994.

**Fatal Crash Rates  
Per Million Vehicle Miles Traveled  
(Utah 1994-2003)**



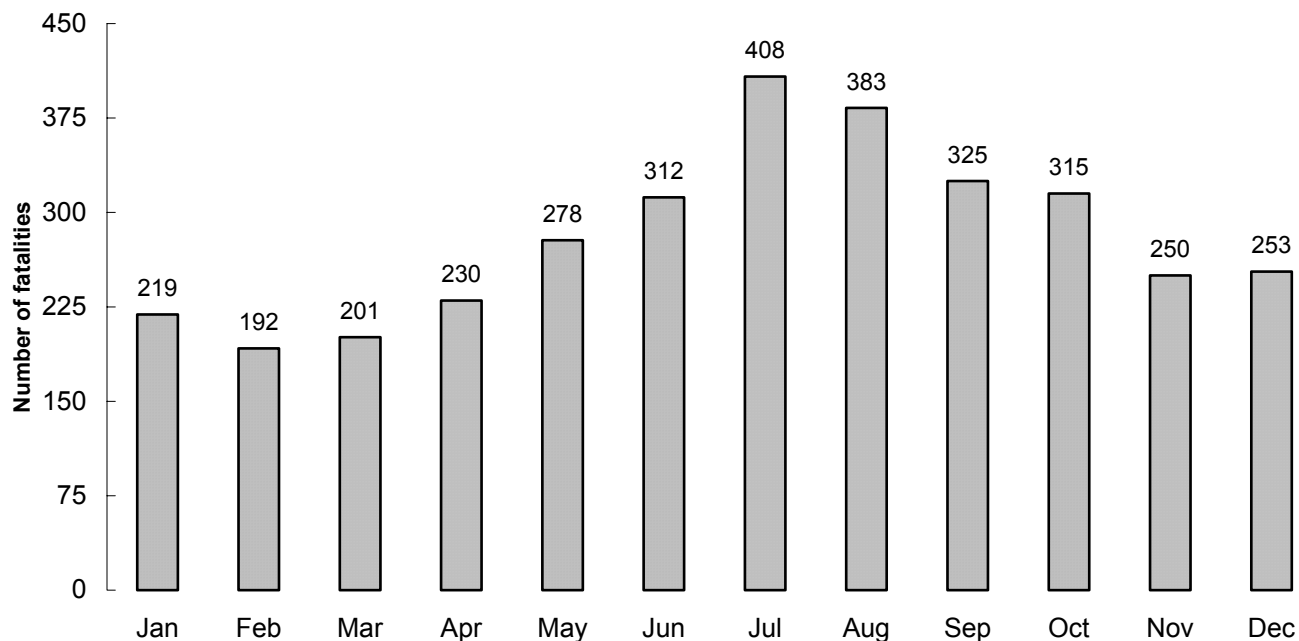
- The above graph reflects a decreasing trend in fatal crash rates from 1994 to 2003. The 2003 fatal crash rate remains at an all time low of 1.1.
- There has been a 35% decrease in the fatal crash rate since 1994.

## Trends

### Fatalities by Month (Utah 1994-2003)

Fatalities													
Year	Month												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1994	19	18	19	22	34	27	44	45	35	32	20	28	343
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
Total	219	192	201	230	278	312	408	383	325	315	250	253	3,366

### Fatalities by Month (Utah 1994-2003)



- Since 1994, over 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 (33%) 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 (408), while February has had the fewest (192).
- In 2003, June (39), July (38) and August (39) were the months with the highest number of fatalities. Over one-third (38%) of the 2003 fatalities occurred during these months.
- In 2003, February had the fewest number of fatalities (15), followed closely by March (16) and November (17).

## Trends

### Holiday Fatalities (Utah 1994-2003)

Fatalities																											
Year	New Years Day			Memorial Day			Independence Day			Pioneer Day			Labor Day			Halloween			Thanksgiving			Christmas			Total		
	Rate per			Rate per			Rate per			Rate per			Rate per			Rate per			Rate per			Rate per					
	#	Days	Day	#	Days	Day	#	Days	Day	#	Days	Day	#	Days	Day	#	Days	Day	#	Days	Day	#	Days	Day	#	Days	Day
1994	0	3	0.0	6	4	1.5	10	4	2.5	1	3	0.3	4	4	1.0	3	4	0.8	2	5	0.4	1	3	0.3	27	30	0.9
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
Total	27	35	0.8	50	40	1.3	54	37	1.5	53	37	1.4	44	40	1.1	37	37	1.0	53	50	1.1	27	37	0.7	345	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 1994-2003) (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 had the highest rate of fatalities (1.5), while Christmas had the lowest rate (0.7).
- Since 1994, the holiday fatality rate has increased from 0.9 to 1.1; an increase of 22%.
- In 2003, Labor Day had the highest rate of fatalities (1.8), while Thanksgiving had the lowest rate (0.4).
- The 2003 rate per day for holiday fatalities was 1.1 which was higher than the rate per day for all 2003 fatalities (0.8).

## Counties

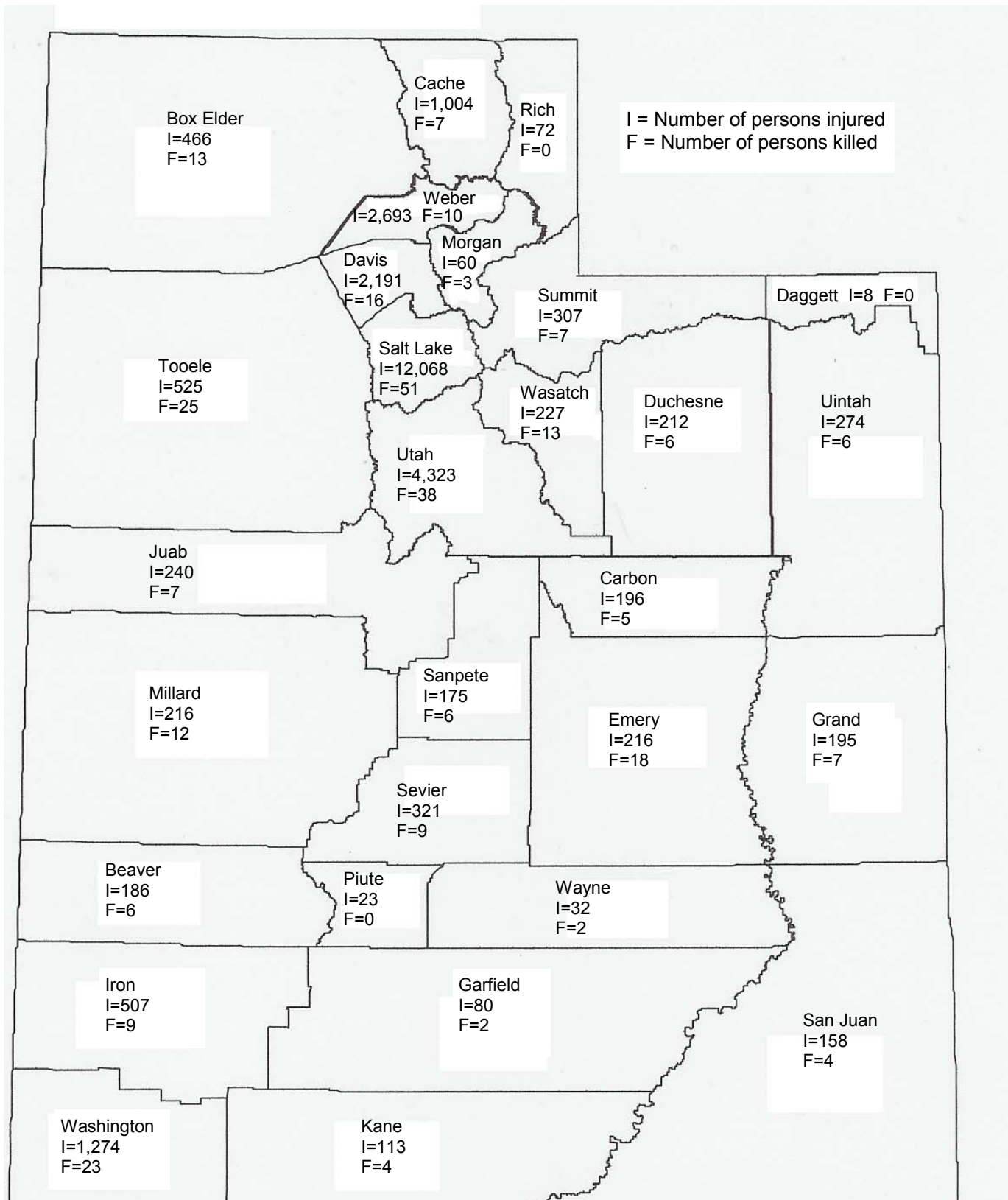
### Persons Involved in Crashes by County (Utah 2003)

County	Persons											
	Non-Injured			Injured			Killed			Total		
	Non-Injured Persons #	Rate per 100 Million VMT	Rate per 10,000 Population	Injured Persons #	Rate per 100 Million VMT	Rate per 10,000 Population	Persons Killed #	Rate per 100 Million VMT	Rate per 10,000 Population	All Persons #	Rate per 100 Million VMT	Rate per 10,000 Population
Beaver	369	155.4	587.1	186	78.3	295.9	6	2.5	9.5	561	236.2	892.6
Box Elder	1,520	173.2	345.3	466	53.1	105.9	13	1.5	3.0	1,999	227.8	454.1
Cache	4,917	592.3	500.8	1,004	120.9	102.3	7	0.8	0.7	5,928	714.0	603.8
Carbon	627	209.6	320.6	186	62.2	95.1	5	1.7	2.6	818	273.5	418.2
Daggett	64	235.4	694.9	8	29.4	86.9	0	0.0	0.0	72	264.9	781.8
Davis	9,216	411.0	359.2	2,191	97.7	85.4	16	0.7	0.6	11,423	509.4	445.2
Duchesne	520	266.8	353.8	212	108.8	144.2	6	3.1	4.1	738	378.7	502.1
Emery	398	115.1	379.9	216	62.5	206.2	18	5.2	17.2	632	182.8	603.2
Garfield	273	219.3	602.4	80	64.3	176.5	2	1.6	4.4	355	285.2	783.3
Grand	373	133.2	440.7	195	69.6	230.4	7	2.5	8.3	575	205.3	679.3
Iron	1,631	262.2	449.2	507	81.5	139.6	9	1.4	2.5	2,147	345.1	591.3
Juab	520	137.3	596.8	240	63.4	275.5	7	1.8	8.0	767	202.5	880.3
Kane	347	284.6	584.5	113	92.7	190.3	4	3.3	6.7	464	380.6	781.5
Millard	571	140.7	468.0	216	53.2	177.0	12	3.0	9.8	799	196.9	654.9
Morgan	253	223.0	335.9	60	52.9	79.7	3	2.6	4.0	316	278.5	419.5
Piute	41	135.8	301.9	23	76.2	169.4	0	0.0	0.0	64	212.0	471.3
Rich	160	367.1	769.6	72	165.2	346.3	0	0.0	0.0	232	532.2	1,115.9
Salt Lake	46,694	584.5	496.5	12,068	151.1	128.3	51	0.6	0.5	58,813	736.2	625.4
San Juan	350	124.3	245.8	158	56.1	111.0	4	1.4	2.8	512	181.8	359.6
Sanpete	533	233.8	227.9	175	76.8	74.8	6	2.6	2.6	714	313.2	305.2
Sevier	816	205.4	422.4	321	80.8	166.2	9	2.3	4.7	1,146	288.5	593.2
Summit	1,422	218.2	417.3	307	47.1	90.1	7	1.1	2.1	1,736	266.3	509.5
Tooele	1,337	169.0	279.5	525	66.4	109.8	25	3.2	5.2	1,887	238.5	394.5
Uintah	887	311.5	340.9	274	96.2	105.3	6	2.1	2.3	1,167	409.9	448.5
Utah	15,560	461.9	378.8	4,323	128.3	105.2	38	1.1	0.9	19,921	591.3	485.0
Wasatch	906	352.3	521.6	227	88.3	130.7	13	5.1	7.5	1,146	445.6	659.8
Washington	4,593	456.4	434.5	1,274	126.6	120.5	23	2.3	2.2	5,890	585.3	557.2
Wayne	86	222.1	345.8	32	82.6	128.7	2	5.2	8.0	120	309.9	482.5
Weber	9,676	647.7	470.0	2,693	180.3	130.8	10	0.7	0.5	12,379	828.7	601.3
Statewide	104,660	436.8	438.8	28,352	118.3	118.9	309	1.3	1.3	133,321	556.4	558.9

- 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:
  - Weber (180.3), Rich (165.2) and Salt Lake (151.1) had the highest rates of persons injured per 100 million vehicle miles traveled.
  - Wayne (5.2), Emery (5.2) and Wasatch (5.1) had the highest rates of persons killed per 100 million vehicle miles traveled.
- Rate per 10,000 population:
  - Rich (346.3), Beaver (295.9) and Juab (275.5) had the highest rates of persons injured per 10,000 population.
  - Emery (17.2), Millard (9.8) and Beaver (9.5) had the highest rates of persons killed per 10,000 population.

## Counties

### Persons Involved in Crashes by County (Utah 2003)



## Counties

### Crashes by County (Utah 2003)

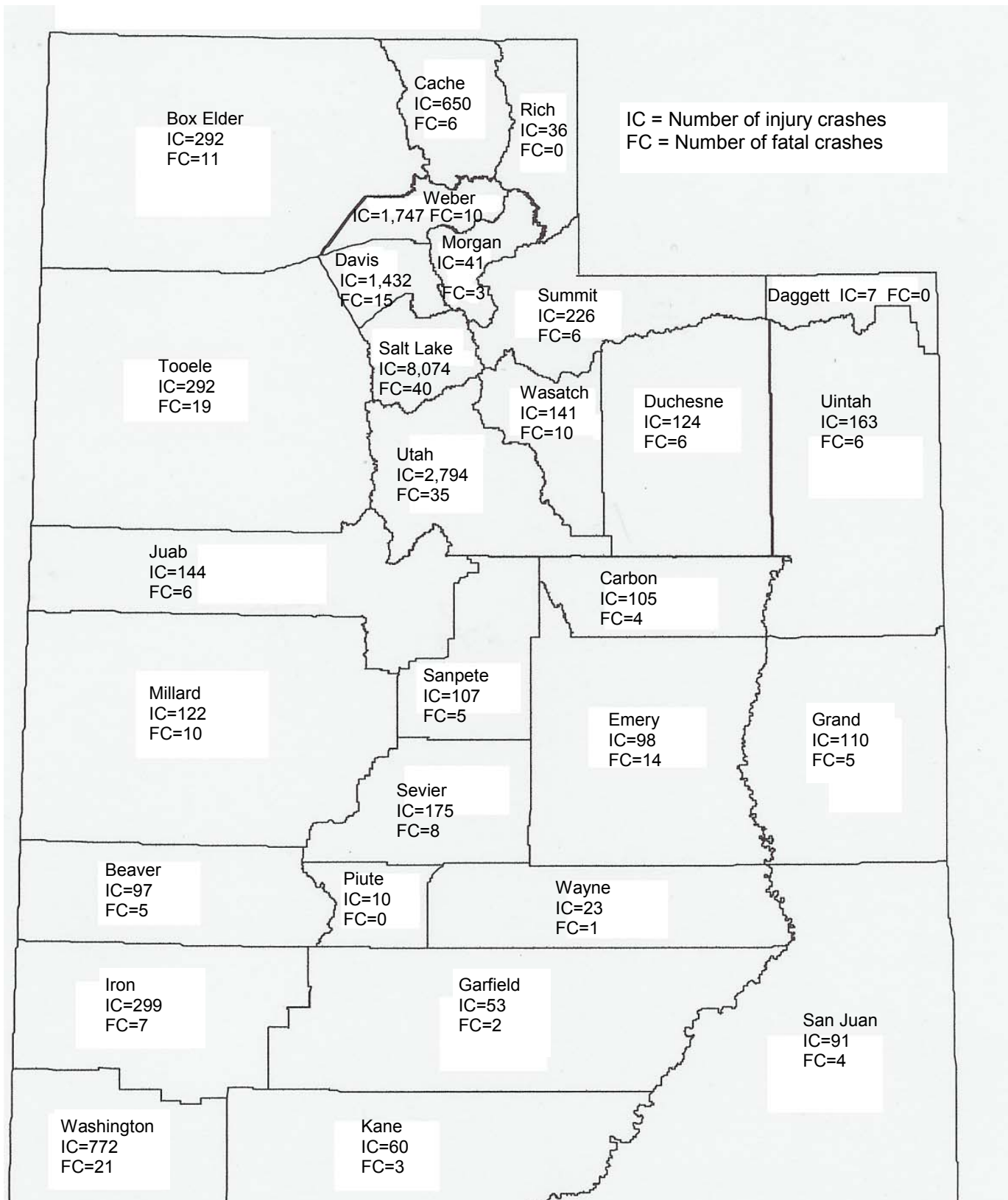
County	Crashes											
	Property Damage Only (PDO)			Injury			Fatal			Total		
	PDO	Rate	Rate	Injury	Rate	Rate	Fatal	Rate	Rate	All	Rate	Rate
	Crashes	per 100	per	Crashes	per 100	per	Crashes	per 100	per	Crashes	per 100	per
	#	Million	10,000	#	Million	10,000	#	Million	10,000	#	Million	10,000
		VTM	Population		VTM	Population		VTM	Population		VTM	Population
Beaver	145	61.0	230.7	97	40.8	154.3	5	2.1	8.0	247	104.0	393.0
Box Elder	604	68.8	137.2	292	33.3	66.3	11	1.3	2.5	907	103.4	206.0
Cache	1,510	181.9	153.8	650	78.3	66.2	6	0.7	0.6	2,166	260.9	220.6
Carbon	249	83.3	127.3	105	35.1	53.7	4	1.3	2.0	358	119.7	183.0
Daggett	28	103.0	304.0	7	25.8	76.0	0	0.0	0.0	35	128.8	380.0
Davis	2,600	116.0	101.3	1,432	63.9	55.8	15	0.7	0.6	4,047	180.5	157.7
Duchesne	190	97.5	129.3	124	63.6	84.4	6	3.1	4.1	320	164.2	217.7
Emery	170	49.2	162.3	98	28.4	93.5	14	4.1	13.4	282	81.6	269.2
Garfield	98	78.7	216.2	53	42.6	116.9	2	1.6	4.4	153	122.9	337.6
Grand	132	47.1	156.0	110	39.3	130.0	5	1.8	5.9	247	88.2	291.8
Iron	539	86.6	148.4	299	48.1	82.3	7	1.1	1.9	845	135.8	232.7
Juab	211	55.7	242.2	144	38.0	165.3	6	1.6	6.9	361	95.3	414.3
Kane	123	100.9	207.2	60	49.2	101.1	3	2.5	5.1	186	152.6	313.3
Millard	242	59.6	198.4	122	30.1	100.0	10	2.5	8.2	374	92.1	306.6
Morgan	125	110.2	166.0	41	36.1	54.4	3	2.6	4.0	169	149.0	224.4
Piute	24	79.5	176.7	10	33.1	73.6	0	0.0	0.0	34	112.6	250.4
Rich	59	135.4	283.8	36	82.6	173.2	0	0.0	0.0	95	217.9	457.0
Salt Lake	13,663	171.0	145.3	8,074	101.1	85.9	40	0.5	0.4	21,777	272.6	231.6
San Juan	150	53.3	105.3	91	32.3	63.9	4	1.4	2.8	245	87.0	172.1
Sanpete	222	97.4	94.9	107	46.9	45.7	5	2.2	2.1	334	146.5	142.8
Sevier	328	82.6	169.8	175	44.1	90.6	8	2.0	4.1	511	128.6	264.5
Summit	611	93.7	179.3	226	34.7	66.3	6	0.9	1.8	843	129.3	247.4
Tooele	456	57.6	95.3	292	36.9	61.0	19	2.4	4.0	767	97.0	160.4
Uintah	319	112.0	122.6	163	57.2	62.6	6	2.1	2.3	488	171.4	187.6
Utah	4,507	133.8	109.7	2,794	82.9	68.0	35	1.0	0.9	7,336	217.8	178.6
Wasatch	384	149.3	221.1	141	54.8	81.2	10	3.9	5.8	535	208.0	308.0
Washington	1,310	130.2	123.9	772	76.7	73.0	21	2.1	2.0	2,103	209.0	199.0
Wayne	42	108.5	168.9	23	59.4	92.5	1	2.6	4.0	66	170.4	265.4
Weber	2,801	187.5	136.0	1,747	116.9	84.9	10	0.7	0.5	4,558	305.1	221.4
Statewide	31,842	132.9	133.5	18,285	76.3	76.7	262	1.1	1.1	50,389	210.3	211.2

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 (116.9), Salt Lake (101.1) and Utah (82.9) had the highest rates of injury crashes per 100 million vehicle miles traveled.
  - Emery (4.1), Wasatch (3.9) and Duchesne (3.1) had the highest rates of fatal crashes per 100 million vehicle miles traveled.
- Rate per 10,000 population:
  - Rich (173.2), Juab (165.3) and Beaver (154.3) had the highest rates of injury crashes per 10,000 population.
  - Emery (13.4), Millard (8.2) and Beaver (8.0) had the highest rates of fatal crashes per 10,000 population.

## Counties

### Crashes by County (Utah 2003)



## Cities

### Crashes by City (Utah 2003)

City	Crashes							
	Property Damage Only (PDO)		Injury		Fatal		Total	
	PDO Crashes #	Rate per 10,000 Population	Injury Crashes #	Rate per 10,000 Population	Fatal Crashes #	Rate per 10,000 Population	All Crashes #	Rate per 10,000 Population
American Fork	328	143.4	190	83.1	3	1.3	521	227.7
Beaver	137	545.6	105	418.2	4	15.9	246	979.7
Bountiful	383	92.5	192	46.4	0	0.0	575	138.9
Brigham City	145	83.7	76	43.8	1	0.6	222	128.1
Cedar City	381	173.6	178	81.1	1	0.5	560	255.2
Centerville	201	136.3	90	61.0	0	0.0	291	197.3
Clearfield	331	121.9	226	83.3	6	2.2	563	207.4
Draper	871	280.8	293	94.5	3	1.0	1,167	376.2
Farmington	265	197.7	141	105.2	0	0.0	406	302.8
Heber	276	320.7	99	115.0	6	7.0	381	442.8
Holladay	219	111.4	62	31.5	0	0.0	281	142.9
Kaysville	246	115.0	135	63.1	4	1.9	385	180.0
Layton	831	136.7	462	76.0	4	0.7	1,297	213.4
Lehi	341	146.6	216	92.8	1	0.4	558	239.8
Lindon	190	218.9	117	134.8	4	4.6	311	358.3
Logan	797	182.5	326	74.6	2	0.5	1,125	257.6
Midvale	665	244.8	276	101.6	0	0.0	941	346.4
Murray	1,737	398.2	658	150.9	3	0.7	2,398	549.8
Nephi	152	306.3	110	221.7	4	8.1	266	536.1
North Logan	141	205.2	69	100.4	0	0.0	210	305.6
North Salt Lake	273	292.9	119	127.7	1	1.1	393	421.6
Ogden	1,217	155.4	812	103.7	2	0.3	2,031	259.4
Orem	969	110.6	726	82.9	4	0.5	1,699	194.0
Park City	305	388.3	120	152.8	2	2.5	427	543.7
Payson	167	113.1	93	63.0	0	0.0	260	176.1
Pleasant Grove	268	112.1	147	61.5	1	0.4	416	174.1
Provo	1,370	130.0	831	78.8	5	0.5	2,206	209.3
Riverdale	323	414.6	214	274.7	2	2.6	539	691.8
Riverton	186	63.6	94	32.1	1	0.3	281	96.1
Roy	301	85.4	174	49.4	2	0.6	477	135.3
Salt Lake City	2,895	160.9	2,209	122.8	9	0.5	5,113	284.2
Sandy	2,002	224.1	946	105.9	2	0.2	2,950	330.3
South Jordan	351	104.5	166	49.4	0	0.0	517	153.9
South Ogden	233	155.3	127	84.6	1	0.7	361	240.6
South Salt Lake	793	365.1	389	179.1	3	1.4	1,185	545.6
Spanish Fork	289	125.7	180	78.3	7	3.0	476	207.0
Springville	288	131.3	148	67.5	3	1.4	439	200.2
St. George	929	164.8	471	83.5	9	1.6	1,409	249.9
Taylorsville	554	94.4	255	43.4	1	0.2	810	138.0
Tooele	194	71.7	86	31.8	2	0.7	282	104.2
Vernal	172	217.9	85	107.7	3	3.8	260	329.4
West Haven	135	270.5	79	158.3	0	0.0	214	428.8
West Jordan	882	104.1	442	52.2	2	0.2	1,326	156.6
West Valley City	1,465	131.2	1,080	96.7	8	0.7	2,553	228.6

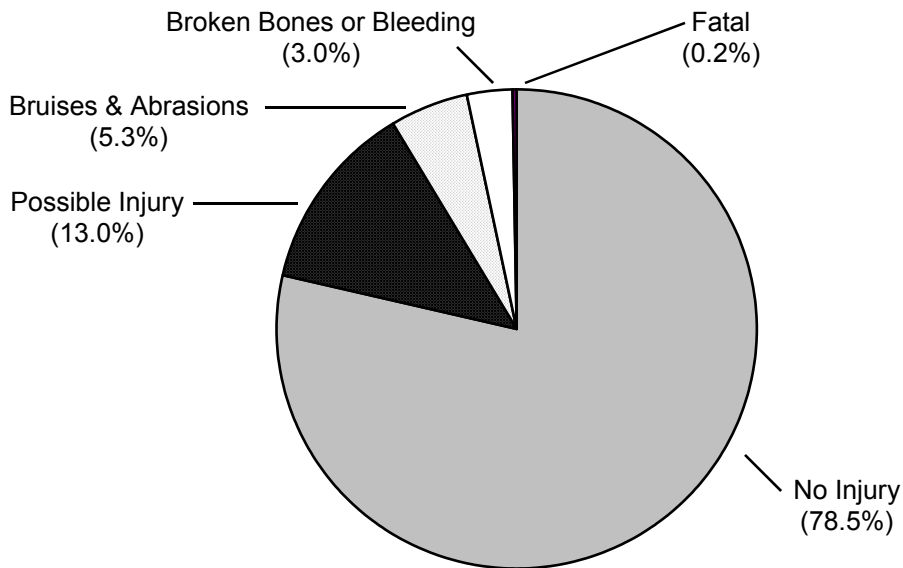
NOTE: A crash may result in multiple injuries and/or fatalities.

- The above table shows the crash rates per population for cities with over 200 crashes in 2003.
- Beaver had the highest rate per population of total crashes (979.7) , injury crashes (418.2), and fatal crashes (15.9).



## Occupant Characteristics (Including Driver)

### Injury Severity (Utah 2003)



- In the above graph, there were a total of 133,321 persons involved in crashes.
- Although many people were injured and killed in Utah's motor vehicle crashes, the majority (78.5%) of crash occupants did not sustain an injury.
- Even though 0.2% of crash occupants were killed, 0.5% of all crashes were fatal (See Page 16). 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 2003)

Persons								
Occupant Placement	Non-Injured Persons		Injured Persons		Persons Killed		Total Persons	
	#	%	#	%	#	%	#	%
Driver	71,985	68.8%	18,149	64.0%	168	54.4%	90,302	67.7%
Front Seat Passenger	17,550	16.8%	5,676	20.0%	53	17.2%	23,279	17.5%
Back Seat Passenger	14,519	13.9%	3,045	10.7%	47	15.2%	17,611	13.2%
Pedestrian	42	0.0%	616	2.2%	28	9.1%	686	0.5%
Bicyclist	48	0.0%	621	2.2%	2	0.6%	671	0.5%
Cargo Area	373	0.4%	109	0.4%	8	2.6%	490	0.4%
Other	143	0.1%	136	0.5%	3	1.0%	282	0.2%
Total	104,660	100.0%	28,352	100.0%	309	100.0%	133,321	100.0%

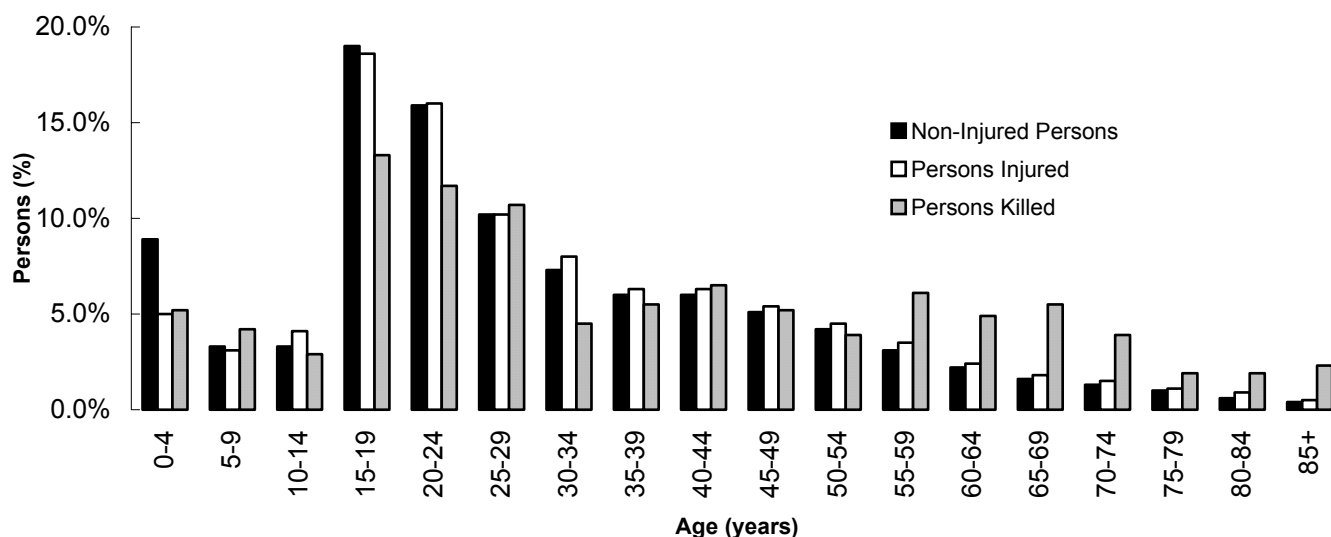
- The above table shows the injury levels by occupant placement in the crash.
- Pedestrians involved in a crash had the greatest risk of sustaining a fatal injury. In fact, pedestrians were 20 times more likely than other crash occupants to sustain a fatal injury.

## Occupant Characteristics (Including Driver)

### Age of Crash Occupants (Utah 2003)

Age	Persons							
	Non-Injured Persons		Injured Persons		Persons Killed		Total Persons	
	#	%	#	%	#	%	#	%
0-4	9,355	8.9%	1,412	5.0%	16	5.2%	10,783	8.1%
5-9	3,441	3.3%	889	3.1%	13	4.2%	4,343	3.3%
10-14	3,463	3.3%	1,174	4.1%	9	2.9%	4,646	3.5%
15-19	19,916	19.0%	5,263	18.6%	41	13.3%	25,220	18.9%
20-24	16,653	15.9%	4,532	16.0%	36	11.7%	21,221	15.9%
25-29	10,635	10.2%	2,886	10.2%	33	10.7%	13,554	10.2%
30-34	7,672	7.3%	2,260	8.0%	14	4.5%	9,946	7.5%
35-39	6,257	6.0%	1,796	6.3%	17	5.5%	8,070	6.1%
40-44	6,274	6.0%	1,798	6.3%	20	6.5%	8,092	6.1%
45-49	5,316	5.1%	1,541	5.4%	16	5.2%	6,873	5.2%
50-54	4,365	4.2%	1,289	4.5%	12	3.9%	5,666	4.2%
55-59	3,230	3.1%	998	3.5%	19	6.1%	4,247	3.2%
60-64	2,319	2.2%	687	2.4%	15	4.9%	3,021	2.3%
65-69	1,632	1.6%	508	1.8%	17	5.5%	2,157	1.6%
70-74	1,360	1.3%	432	1.5%	12	3.9%	1,804	1.4%
75-79	1,071	1.0%	326	1.1%	6	1.9%	1,403	1.1%
80-84	674	0.6%	256	0.9%	6	1.9%	936	0.7%
85+	416	0.4%	152	0.5%	7	2.3%	575	0.4%
Missing	611	0.6%	153	0.5%	0	0.0%	764	0.6%
<b>Total</b>	<b>104,660</b>	<b>100.0%</b>	<b>28,352</b>	<b>100.0%</b>	<b>309</b>	<b>100.0%</b>	<b>133,321</b>	<b>100.0%</b>

### Age of Crash Occupants (Utah 2003)



- Overall, the largest proportion of persons involved in crashes (34.8%) were aged 15 to 24 years. In addition, persons aged 15 to 24 years represented the highest proportion of non-injured persons (34.9%), persons injured (34.6%) and persons killed (25.0%).
- While persons aged 65 years and older represented a small proportion of the persons involved in crashes (5.2%), 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 2003)

Persons								
Gender	Non-Injured Persons		Injured Persons		Persons Killed		Total Persons	
	#	%	#	%	#	%	#	%
Female	44,342	42.4%	15,028	53.0%	120	38.8%	59,490	44.6%
Male	57,835	55.3%	13,028	46.0%	189	61.2%	71,052	53.3%
Missing	2,483	2.4%	296	1.0%	0	0.0%	2,779	2.1%
Total	104,660	100.0%	28,352	100.0%	309	100.0%	133,321	100.0%

- The above table shows that males comprised over half (53.3%) of all persons involved in crashes.
- While males had a higher percentage of fatal injuries (61.2%) than females, female occupants had a slightly higher percentage of injuries (53.0%) than males.

### Age and Gender of Fatalities (Utah 2003)

Fatalities						
Age	Female		Male		Total	
	#	%	#	%	#	%
0-4	7	5.8%	9	4.8%	16	5.2%
5-9	6	5.0%	7	3.7%	13	4.2%
10-14	3	2.5%	6	3.2%	9	2.9%
15-19	12	10.0%	29	15.3%	41	13.3%
20-24	13	10.8%	23	12.2%	36	11.7%
25-29	13	10.8%	20	10.6%	33	10.7%
30-34	5	4.2%	9	4.8%	14	4.5%
35-39	3	2.5%	14	7.4%	17	5.5%
40-44	6	5.0%	14	7.4%	20	6.5%
45-49	7	5.8%	9	4.8%	16	5.2%
50-54	5	4.2%	7	3.7%	12	3.9%
55-59	9	7.5%	10	5.3%	19	6.1%
60-64	7	5.8%	8	4.2%	15	4.9%
65-69	7	5.8%	10	5.3%	17	5.5%
70-74	8	6.7%	4	2.1%	12	3.9%
75-79	4	3.3%	2	1.1%	6	1.9%
80-84	2	1.7%	4	2.1%	6	1.9%
85+	3	2.5%	4	2.1%	7	2.3%
Total	120	100.0%	189	100.0%	309	100.0%

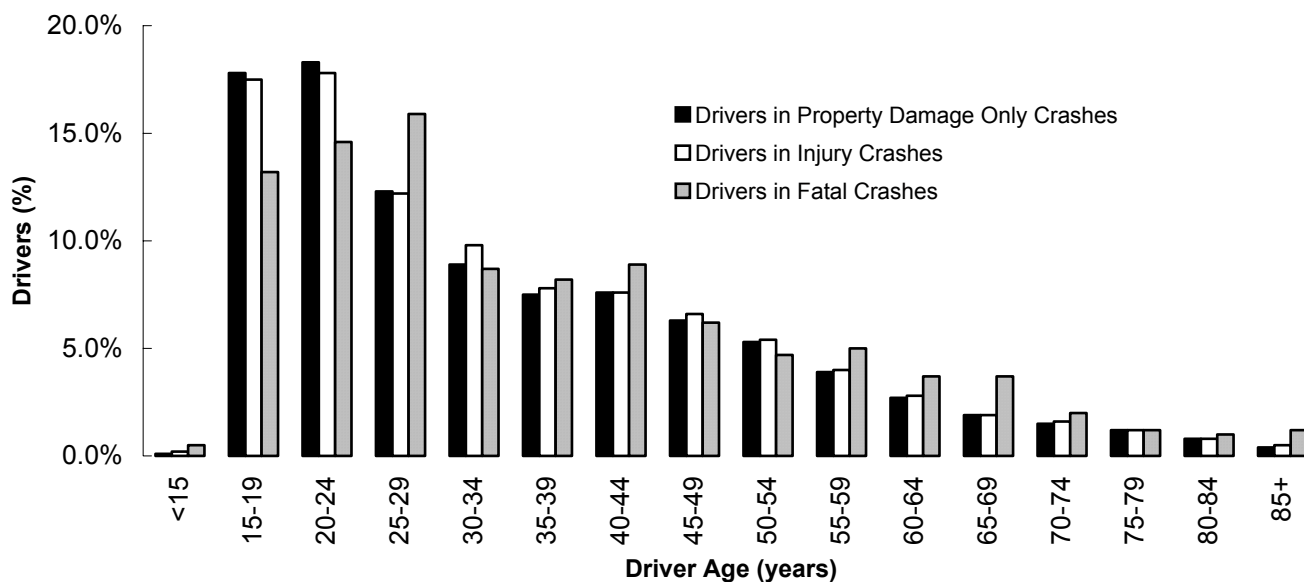
- Taking a closer look at the gender of crash fatalities shows that the highest percentage of fatalities involved males aged 15 to 19 years (15.3%).
- For females, the highest percentage of fatalities occurred in the 20 to 24 year (10.8%) and the 25 to 29 year age group (10.8%).

## Driver Characteristics

### Driver Age (Utah 2003)

Age	Drivers							
	Drivers Involved in Property Damage Only Crashes		Drivers Involved in Injury Crashes		Drivers Involved in Fatal Crashes		Total Drivers Involved in Crashes	
	#	%	#	%	#	%	#	%
<15	53	0.1%	64	0.2%	2	0.5%	119	0.1%
15-19	9,927	17.8%	5,977	17.5%	53	13.2%	15,957	17.7%
20-24	10,200	18.3%	6,085	17.8%	59	14.6%	16,344	18.1%
25-29	6,845	12.3%	4,170	12.2%	64	15.9%	11,079	12.3%
30-34	4,958	8.9%	3,355	9.8%	35	8.7%	8,348	9.2%
35-39	4,152	7.5%	2,659	7.8%	33	8.2%	6,844	7.6%
40-44	4,240	7.6%	2,593	7.6%	36	8.9%	6,869	7.6%
45-49	3,526	6.3%	2,242	6.6%	25	6.2%	5,793	6.4%
50-54	2,934	5.3%	1,842	5.4%	19	4.7%	4,795	5.3%
55-59	2,162	3.9%	1,374	4.0%	20	5.0%	3,556	3.9%
60-64	1,511	2.7%	956	2.8%	15	3.7%	2,482	2.7%
65-69	1,042	1.9%	663	1.9%	15	3.7%	1,720	1.9%
70-74	856	1.5%	542	1.6%	8	2.0%	1,406	1.6%
75-79	667	1.2%	424	1.2%	5	1.2%	1,096	1.2%
80-84	418	0.8%	284	0.8%	4	1.0%	706	0.8%
85+	234	0.4%	176	0.5%	5	1.2%	415	0.5%
Unknown	1,994	3.6%	774	2.3%	5	1.2%	2,773	3.1%
Total	55,719	100.0%	34,180	100.0%	403	100.0%	90,302	100.0%

### Age of Drivers Involved in Crashes (Utah 2003)



- The age distribution of drivers involved in property damage only crashes and injury crashes were similar. Drivers aged 15 to 24 years represented 36.1% of the drivers involved in property damage only crashes. Drivers aged 15 to 24 years represented 35.1% of the drivers involved in injury crashes.
- Drivers aged 20 to 29 represented the largest percentage of drivers involved in fatal crashes (30.5%).

## Driver Characteristics

### Driver Gender (Utah 2003)

Drivers								
Gender	Drivers Involved in Property Damage Only Crashes		Drivers Involved in Injury Crashes		Drivers Involved in Fatal Crashes		Total Drivers Involved in Crashes	
	#	%	#	%	#	%	#	%
Female	21,897	39.3%	15,069	44.1%	121	30.0%	37,087	41.1%
Male	32,154	57.7%	18,517	54.2%	280	69.5%	50,951	56.4%
Missing	1,668	3.0%	594	1.7%	2	0.5%	2,264	2.5%
<b>Total</b>	<b>55,719</b>	<b>100.0%</b>	<b>34,180</b>	<b>100.0%</b>	<b>403</b>	<b>100.0%</b>	<b>90,302</b>	<b>100.0%</b>

- The above table shows males represented 56.4% of all drivers involved in a crash, 69.5% of drivers involved in fatal crashes, and 54.2% of drivers involved in injury crashes.

### Out-of-State Drivers (Utah 2003)

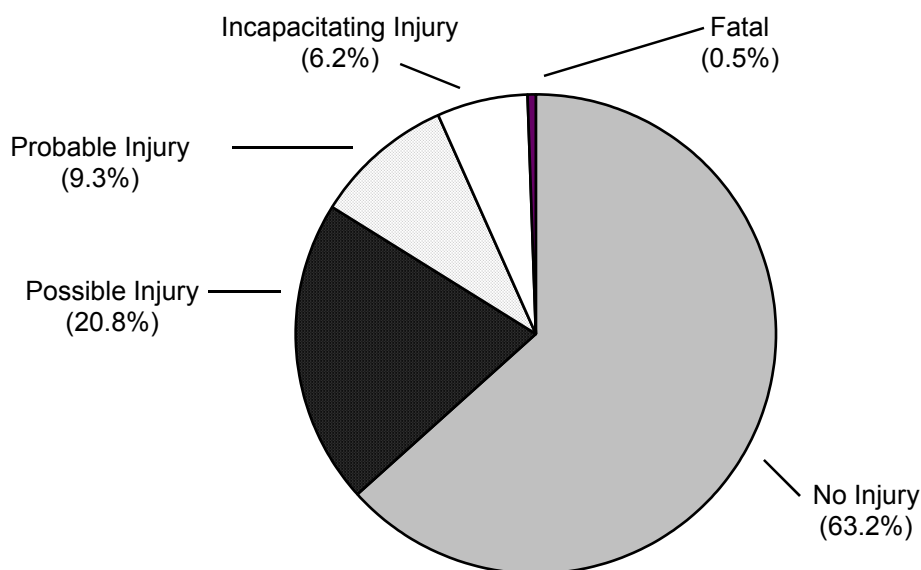
Drivers							
	Drivers Involved in PDO Crashes		Drivers Involved in Injury Crashes		Drivers Involved in Fatal Crashes		Total Drivers in Crashes
	#	%	#	%	#	%	# %
Out-Of-State	4,663	8.4%	2,985	8.7%	79	19.6%	7,727 8.6%
UT	50,897	91.3%	31,071	90.9%	311	77.2%	82,279 91.1%
Missing	159	0.3%	124	0.4%	13	3.2%	296 0.3%
<b>Total</b>	<b>55,719</b>	<b>100.0%</b>	<b>34,180</b>	<b>100.0%</b>	<b>403</b>	<b>100.0%</b>	<b>90,302 100.0%</b>

- Although out-of-state licensed drivers represented 8.6% of all drivers involved in crashes, they represented 19.6% 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 out-of-state drivers involved in crashes. Most notably, in Grand (49.0%), Kane (46.3%), and San Juan (44.4%) 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			
County	All Drivers	Out-of-State Drivers	
	#	#	%
Beaver	322	110	34.2%
Box Elder	1,268	245	19.3%
Cache	3,949	425	10.8%
Carbon	536	52	9.7%
Daggett	38	10	26.3%
Davis	7,567	474	6.3%
Duchesne	409	32	7.8%
Emery	345	134	38.8%
Garfield	179	62	34.6%
Grand	349	171	49.0%
Iron	1,283	273	21.3%
Juab	463	77	16.6%
Kane	244	113	46.3%
Millard	458	121	26.4%
Morgan	217	37	17.1%
Piute	40	8	20.0%
Rich	120	31	25.8%
Salt Lake	41,308	2,062	5.0%
San Juan	288	128	44.4%
Sanpete	467	20	4.3%
Sevier	666	225	33.8%
Summit	1,208	279	23.1%
Tooele	1,165	152	13.0%
Uintah	733	49	6.7%
Utah	13,532	1,399	10.3%
Wasatch	726	55	7.6%
Washington	3,739	479	12.8%
Wayne	70	18	25.7%
Weber	8,613	486	5.6%
<b>Total</b>	<b>90,302</b>	<b>7,727</b>	<b>8.6%</b>

## Crash Characteristics

### Crash Severity (Utah 2003)



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

- In the above graph, there were a total of 50,389 crashes.
- In 2003, 50,389 motor vehicle crashes occurred in Utah. Of those crashes, 63.2% resulted in property damage only, 36.3% resulted in some level of injury, and 0.5% involved a fatality.

### Month of Year (Utah 2003)

Crashes									
Month	Days in the Month #	Property Damage Only (PDO)		Injury		Fatal		Total	
		PDO Crashes #	Rate per Day	Injury Crashes #	Rate per Day	Fatal Crashes #	Rate per Day	All Crashes #	Rate per Day
January	31	2,247	72.5	1,273	41.1	20	0.65	3,540	114.2
February	28	2,460	87.9	1,286	45.9	15	0.54	3,761	134.3
March	31	2,378	76.7	1,338	43.2	14	0.45	3,730	120.3
April	30	2,330	77.7	1,453	48.4	22	0.73	3,805	126.8
May	31	2,584	83.4	1,627	52.5	19	0.61	4,230	136.5
June	30	2,411	80.4	1,580	52.7	31	1.03	4,022	134.1
July	31	2,350	75.8	1,487	48.0	29	0.94	3,866	124.7
August	31	2,616	84.4	1,584	51.1	31	1.00	4,231	136.5
September	30	2,563	85.4	1,633	54.4	25	0.83	4,221	140.7
October	31	2,984	96.3	1,785	57.6	23	0.74	4,792	154.6
November	30	3,209	107.0	1,515	50.5	15	0.50	4,739	158.0
December	31	3,710	119.7	1,724	55.6	18	0.58	5,452	175.9
<b>Total</b>	<b>365</b>	<b>31,842</b>	<b>87.2</b>	<b>18,285</b>	<b>50.1</b>	<b>262</b>	<b>0.72</b>	<b>50,389</b>	<b>138.1</b>

- The above table shows December had the highest rate of total crashes per day (175.9), while June (1.03) and August (1.00) had the highest rates of fatal crashes per day.
- October had the highest rate of injury crashes per day (57.6) followed closely by December (55.6).

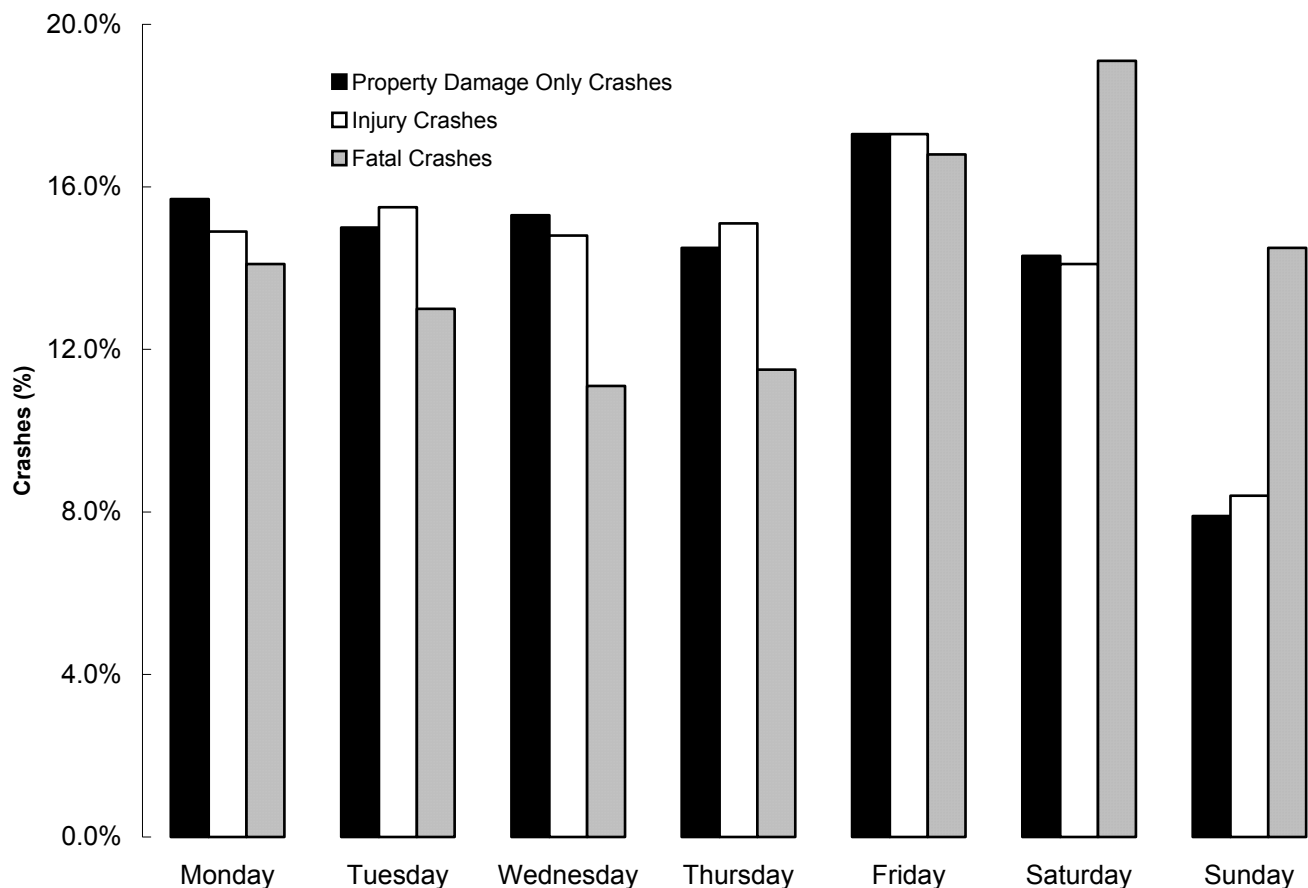
## Crash Characteristics

### Day of Week (Utah 2003)

Crashes							
Day of Week	Property Damage Only Crashes		Injury Crashes		Fatal Crashes		Total Crashes
	#	%	#	%	#	%	# %
Monday	5,014	15.7%	2,720	14.9%	37	14.1%	7,771 15.4%
Tuesday	4,764	15.0%	2,832	15.5%	34	13.0%	7,630 15.1%
Wednesday	4,856	15.3%	2,706	14.8%	29	11.1%	7,591 15.1%
Thursday	4,615	14.5%	2,768	15.1%	30	11.5%	7,413 14.7%
Friday	5,517	17.3%	3,157	17.3%	44	16.8%	8,718 17.3%
Saturday	4,557	14.3%	2,572	14.1%	50	19.1%	7,179 14.2%
Sunday	2,519	7.9%	1,530	8.4%	38	14.5%	4,087 8.1%
<b>Total</b>	<b>31,842</b>	<b>100.0%</b>	<b>18,285</b>	<b>100.0%</b>	<b>262</b>	<b>100.0%</b>	<b>50,389 100.0%</b>

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

### Crashes by Day of Week (Utah 2003)



- The above table and graph show that the highest percentage of total crashes (17.3%), property damage only crashes (17.3%) and injury crashes (17.3%) occurred on Friday. The highest percentage of fatal crashes occurred on Saturday (19.1%).
- Sunday crashes represented 8.1% of all crashes, but accounted for 14.5% of fatal crashes. In fact, crashes occurring on Sunday were 1.9 times more likely to involve a fatality compared to crashes that occurred on other days of the week.

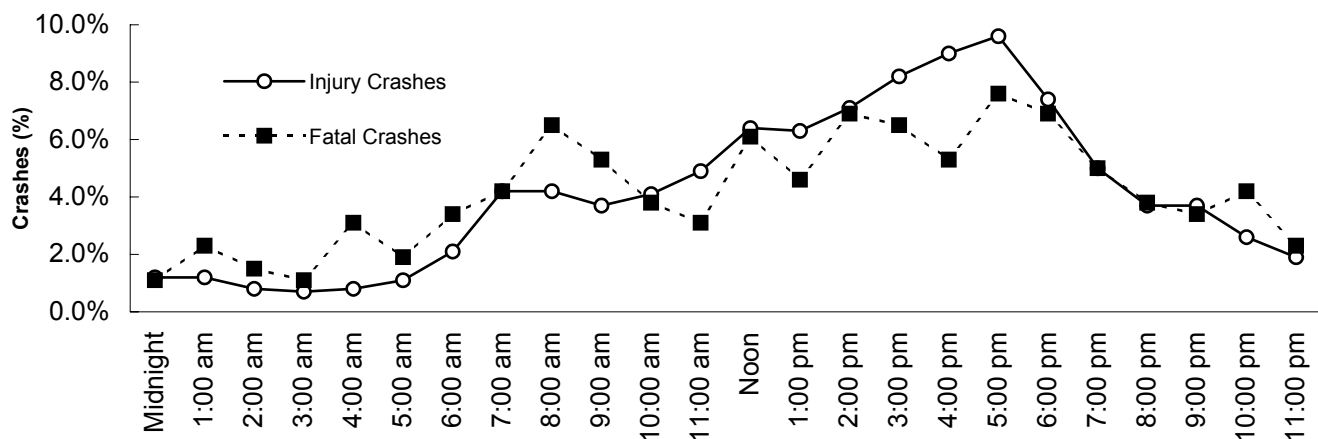
## Crash Characteristics

### Hour of Day (Utah 2003)

Crashes								
Hour	Property Damage Only Crashes		Injury Crashes		Fatal Crashes		Total Crashes	
	#	%	#	%	#	%	#	%
Midnight	434	1.4%	223	1.2%	3	1.1%	660	1.3%
1:00 am	337	1.1%	214	1.2%	6	2.3%	557	1.1%
2:00 am	269	0.8%	145	0.8%	4	1.5%	418	0.8%
3:00 am	246	0.8%	137	0.7%	3	1.1%	386	0.8%
4:00 am	230	0.7%	141	0.8%	8	3.1%	379	0.8%
5:00 am	447	1.4%	192	1.1%	5	1.9%	644	1.3%
6:00 am	711	2.2%	387	2.1%	9	3.4%	1,107	2.2%
7:00 am	1,512	4.7%	767	4.2%	11	4.2%	2,290	4.5%
8:00 am	1,580	5.0%	760	4.2%	17	6.5%	2,357	4.7%
9:00 am	1,298	4.1%	683	3.7%	14	5.3%	1,995	4.0%
10:00 am	1,277	4.0%	748	4.1%	10	3.8%	2,035	4.0%
11:00 am	1,701	5.3%	891	4.9%	8	3.1%	2,600	5.2%
Noon	1,882	5.9%	1,173	6.4%	16	6.1%	3,071	6.1%
1:00 pm	1,877	5.9%	1,148	6.3%	12	4.6%	3,037	6.0%
2:00 pm	2,271	7.1%	1,306	7.1%	18	6.9%	3,595	7.1%
3:00 pm	2,517	7.9%	1,500	8.2%	17	6.5%	4,034	8.0%
4:00 pm	2,624	8.2%	1,654	9.0%	14	5.3%	4,292	8.5%
5:00 pm	2,930	9.2%	1,747	9.6%	20	7.6%	4,697	9.3%
6:00 pm	2,324	7.3%	1,361	7.4%	18	6.9%	3,703	7.3%
7:00 pm	1,493	4.7%	919	5.0%	13	5.0%	2,425	4.8%
8:00 pm	1,146	3.6%	683	3.7%	10	3.8%	1,839	3.6%
9:00 pm	1,161	3.6%	682	3.7%	9	3.4%	1,852	3.7%
10:00 pm	904	2.8%	482	2.6%	11	4.2%	1,397	2.8%
11:00 pm	671	2.1%	342	1.9%	6	2.3%	1,019	2.0%
Total	31,842	100.0%	18,285	100.0%	262	100.0%	50,389	100.0%

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

### Crashes by Hour of Day (Utah 2003)



- In 2003, 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 5:00 pm



## Crash Characteristics

### Crash Type (Utah 2003)

Crashes								
Crash Type	Property Damage Only Crashes		Injury Crashes		Fatal Crashes		Total Crashes	
	#	%	#	%	#	%	#	%
Two Motor Vehicles	22,897	71.9%	12,741	69.7%	86	32.8%	35,724	70.9%
Ran Off Roadway - To the Right	1,934	6.1%	1,499	8.2%	56	21.4%	3,489	6.9%
Motor Vehicle and Fixed Object	1,890	5.9%	813	4.4%	9	3.4%	2,712	5.4%
Ran Off Roadway - To the Left	1,244	3.9%	1,003	5.5%	49	18.7%	2,296	4.6%
Motor Vehicle and Wild Animal	1,875	5.9%	126	0.7%	0	0.0%	2,001	4.0%
Other Non-Collision	747	2.3%	304	1.7%	6	2.3%	1,057	2.1%
Motor Vehicle and Other Object	595	1.9%	107	0.6%	1	0.4%	703	1.4%
Motor Vehicle and Bicycle	39	0.1%	589	3.2%	2	0.8%	630	1.3%
Motor Vehicle and Pedestrian	36	0.1%	540	3.0%	23	8.8%	599	1.2%
Overturned in Roadway	145	0.5%	309	1.7%	8	3.1%	462	0.9%
Motor Vehicle and Domestic Animal	299	0.9%	89	0.5%	2	0.8%	390	0.8%
Ran Off Roadway - Through Median	119	0.4%	127	0.7%	20	7.6%	266	0.5%
Motor Vehicle and Train	13	0.0%	14	0.1%	0	0.0%	27	0.1%
Motor Vehicle and Skates, Scooters, Skateboards	1	0.0%	20	0.1%	0	0.0%	21	0.0%
Missing	8	0.0%	4	0.0%	0	0.0%	12	0.0%
Total	31,842	100.0%	18,285	100.0%	262	100.0%	50,389	100.0%

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

- The majority of property damage only crashes (71.9%), injury crashes (69.7%) and fatal crashes (32.8%) 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 7-fold increased risk of a fatality.

### Collision Description (Utah 2003)

Crashes								
Collision Description	Property Damage Only Crashes		Injury Crashes		Fatal Crashes		Total Crashes	
	#	%	#	%	#	%	#	%
Other	12,764	40.1%	3,405	18.6%	11	4.2%	16,180	32.1%
Rear End	9,292	29.2%	5,836	31.9%	11	4.2%	15,139	30.0%
Broadside	5,660	17.8%	4,902	26.8%	36	13.7%	10,598	21.0%
Side Swipe	2,442	7.7%	645	3.5%	17	6.5%	3,104	6.2%
Single Vehicle Rollover	958	3.0%	1,861	10.2%	117	44.7%	2,936	5.8%
Bicyclist/Pedestrian Crash	75	0.2%	1,129	6.2%	25	9.5%	1,229	2.4%
Single Vehicle Fixed Object	473	1.5%	276	1.5%	7	2.7%	756	1.5%
Head-On	178	0.6%	231	1.3%	38	14.5%	447	0.9%
Total	31,842	30.7%	18,285	49.5%	262	91.6%	50,389	37.8%

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 (30.0%) and broadside (21.0%).
- For fatal crashes, the leading collision types (excluding other) were single vehicle rollover (44.7%) and head-on (14.5%).
- Head-on collisions were 21 times more likely, and single vehicle rollovers were 14 times more likely to result in a fatality than other collisions.

## Crash Characteristics

### Urban/Rural Location (Utah 2003)

Crashes								
	Property Damage Only Crashes		Injury Crashes		Fatal Crashes		Total Crashes	
Urban/Rural Location	#	%	#	%	#	%	#	%
Rural Area - Up to 5,000	8,677	27.3%	4,380	24.0%	175	66.8%	13,232	26.3%
Small Urban - 5,000 to 49,999	1,827	5.7%	913	5.0%	8	3.1%	2,748	5.5%
Moderate Urban - 50,000 to 199,999	975	3.1%	429	2.3%	2	0.8%	1,406	2.8%
Large Urban - 200,000 or More	20,198	63.4%	12,457	68.1%	76	29.0%	32,731	65.0%
Missing	165	0.5%	106	0.6%	1	0.4%	272	0.5%
Total	31,842	100.0%	18,285	100.0%	262	100.0%	50,389	100.0%

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

- While the majority of all crashes (73.7%) as well as the majority of injury crashes (76.0%) occurred in small, moderate and large urban areas, the majority of fatal crashes occurred in rural areas (66.8%).
- In fact, crashes occurring in rural areas were 6 times more likely to result in a fatality than crashes in urban areas.

### Vehicle Type (Utah 2003)

Vehicles								
Vehicle Type	Vehicles Involved in PDO Crashes		Vehicles Involved in Injury Crashes		Vehicles Involved in Fatal Crashes		Total Vehicles	
	#	%	#	%	#	%	#	%
Passenger Car	31,784	54.7%	19,794	56.9%	155	38.2%	51,733	55.4%
Light Truck, Van or SUV	23,221	39.9%	13,097	37.7%	193	47.5%	36,511	39.1%
Large/Semi Truck	1,837	3.2%	735	2.1%	25	6.2%	2,597	2.8%
Other	1,086	1.9%	433	1.2%	10	2.5%	1,529	1.6%
Motorcycle	84	0.1%	675	1.9%	23	5.7%	782	0.8%
School Bus	108	0.2%	23	0.1%	0	0.0%	131	0.1%
Missing	26	0.0%	19	0.1%	0	0.0%	45	0.0%
Total	58,146	100.0%	34,776	100.0%	406	100.0%	93,328	100.0%

- The majority of vehicles involved in Utah crashes were passenger cars (55.4%).
- While motorcycles represented less than 1% of vehicles involved in crashes, crashes involving a motorcycle were 7 times more likely to be fatal than crashes involving other vehicles.
- Crashes involving a large/semi truck were twice as likely to be fatal than crashes involving other vehicles.

## Crash Characteristics

### Violations (Utah 2003)

Violations								
Violations	Drivers Cited in PDO Crashes		Drivers Cited in Injury Crashes		Drivers Cited in Fatal Crashes		Total Drivers Cited	
	#	%	#	%	#	%	#	%
Failure to Yield Right-of-Way	3,191	16.6%	2,516	20.2%	4	11.8%	5,711	18.0%
Improper Lookout	3,528	18.3%	2,155	17.3%	0	0.0%	5,683	17.9%
Following Too Close	3,229	16.8%	1,907	15.3%	1	2.9%	5,137	16.2%
Other Non-Moving Violations	1,391	7.2%	986	7.9%	0	0.0%	2,377	7.5%
Speeding	1,174	6.1%	627	5.0%	3	8.8%	1,804	5.7%
All Other Moving Violations	1,076	5.6%	565	4.5%	6	17.6%	1,647	5.2%
Negligent Collision	1,028	5.3%	536	4.3%	0	0.0%	1,564	4.9%
Improper Lane Change	1,064	5.5%	473	3.8%	1	2.9%	1,538	4.8%
Failure to Stop at Red Light	657	3.4%	864	6.9%	2	5.9%	1,523	4.8%
Driving Under the Influence	647	3.4%	745	6.0%	4	11.8%	1,396	4.4%
Improper Turn (Failure to Signal)	760	4.0%	338	2.7%	0	0.0%	1,098	3.5%
Failure to Stop at Stop Sign	245	1.3%	248	2.0%	0	0.0%	493	1.6%
Hit and Run	318	1.7%	119	1.0%	1	2.9%	438	1.4%
Improper Backing	302	1.6%	30	0.2%	0	0.0%	332	1.0%
Improper Passing	221	1.1%	80	0.6%	1	2.9%	302	1.0%
Reckless Driving	147	0.8%	124	1.0%	1	2.9%	272	0.9%
Wrong Side of Road	136	0.7%	109	0.9%	2	5.9%	247	0.8%
Improper Start or Stop	122	0.6%	54	0.4%	0	0.0%	176	0.6%
Wrong Way on One-Way Street	4	0.0%	7	0.1%	0	0.0%	11	0.0%
Vehicle Homicide	0	0.0%	3	0.0%	8	23.5%	11	0.0%
<b>Total</b>	<b>19,240</b>	<b>100.0%</b>	<b>12,486</b>	<b>100.0%</b>	<b>34</b>	<b>100.0%</b>	<b>31,760</b>	<b>100.0%</b>

- In 2003, there were 90,302 drivers involved in a crash. Officers at the scene of the crash cited 31,760 (35.2%) of those drivers for a traffic violation.
- Overall, drivers involved in crashes were cited most often for “failure to yield right-of-way” (18.0%).
- The leading violations in fatal crashes were “vehicular homicide” (23.5%), “all other moving violations” (17.6%), “driving under the influence” (11.8%), and “failure to yield right-of-way” (11.8%).
- Drivers cited for “driving under the influence” were 3 times more likely to be involved in a fatal crash than drivers cited for other violations.

## Crash Characteristics

### Contributing Factors (Utah 2003)

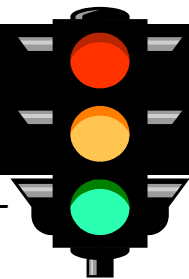
Contributing Factors								
Contributing Factors	Property Damage Only Crashes		Injury Crashes		Fatal Crashes		Total Crashes	
	#	%	#	%	#	%	#	%
Improper Lookout	9,706	24.8%	5,672	23.5%	39	9.8%	15,417	24.2%
Failed to Yield Right of Way	5,040	12.9%	3,771	15.6%	21	5.3%	8,832	13.9%
Followed Too Closely	5,225	13.3%	3,016	12.5%	9	2.3%	8,250	12.9%
Speed Too Fast	4,624	11.8%	2,721	11.3%	81	20.5%	7,426	11.7%
Other Improper Driving	3,352	8.6%	2,047	8.5%	52	13.1%	5,451	8.6%
Hit and Run	1,646	4.2%	582	2.4%	3	0.8%	2,231	3.5%
Made Improper Turn	1,559	4.0%	627	2.6%	5	1.3%	2,191	3.4%
Disregard Traffic Signal	917	2.3%	1,091	4.5%	9	2.3%	2,017	3.2%
Driving Under the Influence	656	1.7%	715	3.0%	15	3.8%	1,386	2.2%
Drove Left of Center	556	1.4%	479	2.0%	38	9.6%	1,073	1.7%
Improper Overtaking	681	1.7%	220	0.9%	5	1.3%	906	1.4%
Asleep	368	0.9%	445	1.8%	30	7.6%	843	1.3%
Improper Backing	701	1.8%	63	0.3%	0	0.0%	764	1.2%
Other Driver Distractions	386	1.0%	322	1.3%	5	1.3%	713	1.1%
Object in Roadway	462	1.2%	188	0.8%	6	1.5%	656	1.0%
Passed Stop Sign	298	0.8%	320	1.3%	5	1.3%	623	1.0%
Non-Contact Vehicle Involved	391	1.0%	209	0.9%	9	2.3%	609	1.0%
Fatigued	224	0.6%	274	1.1%	23	5.8%	521	0.8%
Other Defective Condition of Vehicle	249	0.6%	107	0.4%	4	1.0%	360	0.6%
Had Been Drinking	148	0.4%	196	0.8%	5	1.3%	349	0.5%
Tires Defective	208	0.5%	108	0.4%	4	1.0%	320	0.5%
Aggressive Driving	156	0.4%	108	0.4%	4	1.0%	268	0.4%
Brakes Defective	143	0.4%	103	0.4%	0	0.0%	246	0.4%
Improper Parking	184	0.5%	55	0.2%	0	0.0%	239	0.4%
Cargo Loss or Shifted	182	0.5%	43	0.2%	1	0.3%	226	0.4%
Sick or Ill	60	0.2%	149	0.6%	2	0.5%	211	0.3%
Failed to Signal	100	0.3%	36	0.1%	0	0.0%	136	0.2%
Towed Vehicle	95	0.2%	38	0.2%	3	0.8%	136	0.2%
Driver Using Cell Phone	68	0.2%	67	0.3%	0	0.0%	135	0.2%
Wrong Side of Road	58	0.1%	59	0.2%	8	2.0%	125	0.2%
Under the Influence of Drugs	52	0.1%	62	0.3%	2	0.5%	116	0.2%
Non-Collision (Fire)	103	0.3%	9	0.0%	0	0.0%	112	0.2%
Downhill Runaway	85	0.2%	22	0.1%	0	0.0%	107	0.2%
Vehicle Rolling in Traffic Lane	68	0.2%	35	0.1%	2	0.5%	105	0.2%
Stolen	62	0.2%	30	0.1%	1	0.3%	93	0.1%
Windshield Not Clear	52	0.1%	32	0.1%	1	0.3%	85	0.1%
Jackknife	51	0.1%	17	0.1%	1	0.3%	69	0.1%
Separation of Units	49	0.1%	11	0.0%	2	0.5%	62	0.1%
Explosion or Fire	49	0.1%	6	0.0%	0	0.0%	55	0.1%
Headlights Insufficient or Out	25	0.1%	26	0.1%	0	0.0%	51	0.1%
Steering Mechanism Defective	31	0.1%	17	0.1%	0	0.0%	48	0.1%
Immersion	16	0.0%	7	0.0%	1	0.3%	24	0.0%
Other	80	0.2%	53	0.2%	0	0.0%	133	0.2%
<b>Total</b>	<b>39,166</b>	<b>100.0%</b>	<b>24,158</b>	<b>100.0%</b>	<b>396</b>	<b>100.0%</b>	<b>63,720</b>	<b>100.0%</b>

- 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 property damage only crashes (24.8%) and injury crashes (23.5%).
- "Speed too fast" was the leading contributing factor for fatal crashes (20.5%).

# **Occupant Protection 2003**



## OCCUPANT PROTECTION

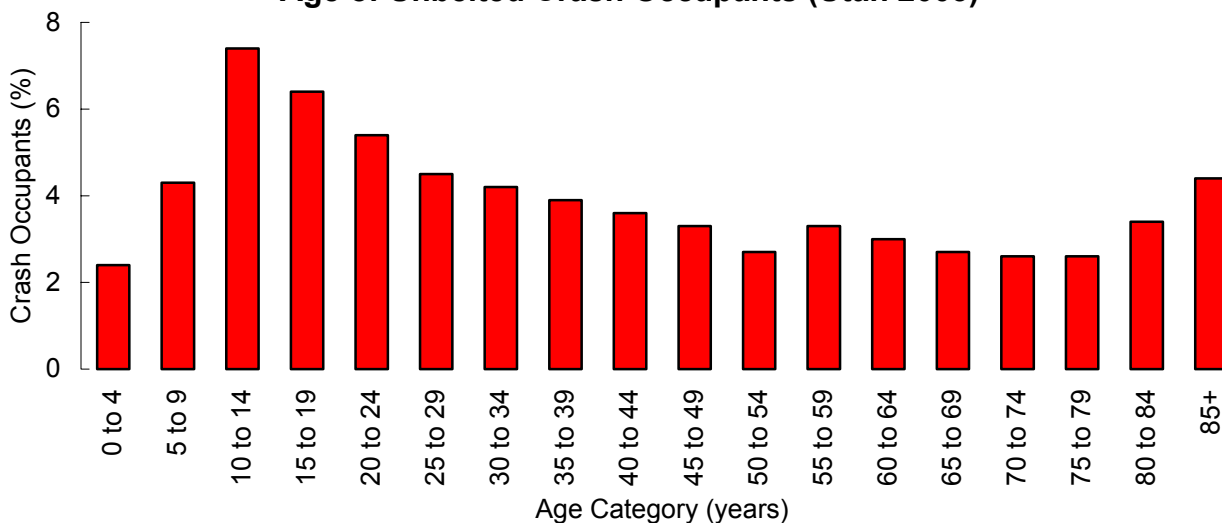


*Failure to "buckle up" contributes to more fatalities than any other traffic-safety-related behavior.*

**Did you know that in 2003 . . .**

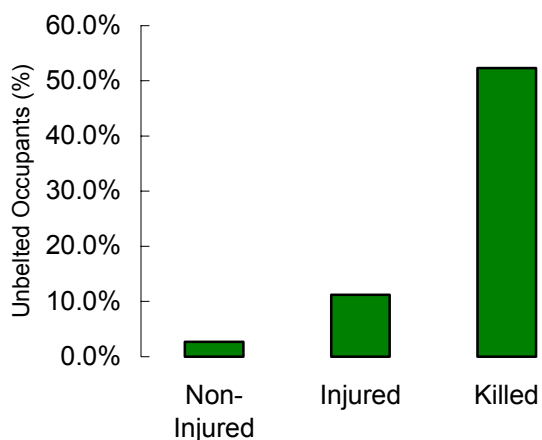
- Unbelted crash occupants were 23 times more likely to die in a crash than belted crash occupants.
- An unbelted crash occupant was killed in Utah every 3 days.

**Age of Unbelted Crash Occupants (Utah 2003)**



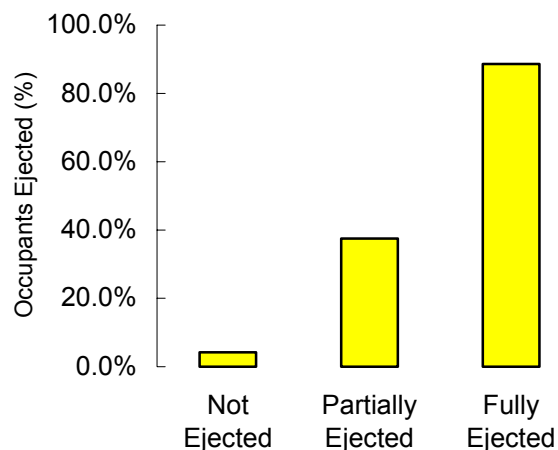
- The highest percentage of unbelted crash occupants were aged 10 to 14 years (7.4%)
- In addition, 83.3% of 10 to 14 year-olds that were killed in a crash were unbelted.

**Injury Severity of Unbelted Occupants**



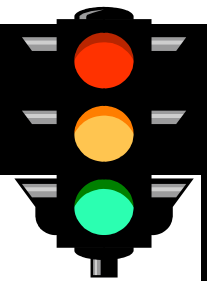
- The above graph shows that 52.3% of crash occupants killed in a crash were unbelted.
- The majority of persons who survived a crash reported wearing a seatbelt.

**Ejection and Seatbelt Use**

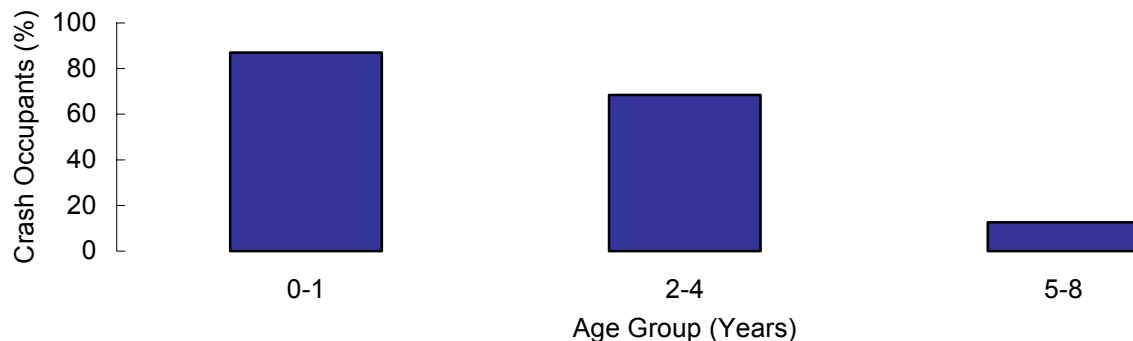


- The above graph shows that 88.6% of crash occupants ejected from a motor vehicle were unbelted. Only 4.2% of crash occupants not ejected from a motor vehicle were unbelted.

# OCCUPANT PROTECTION



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



- Only 64.8% of 2 to 4 year olds, and 12.6% of 5 to 8 year olds were reported as being in a child safety seat at the time of the crash.
- 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 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.



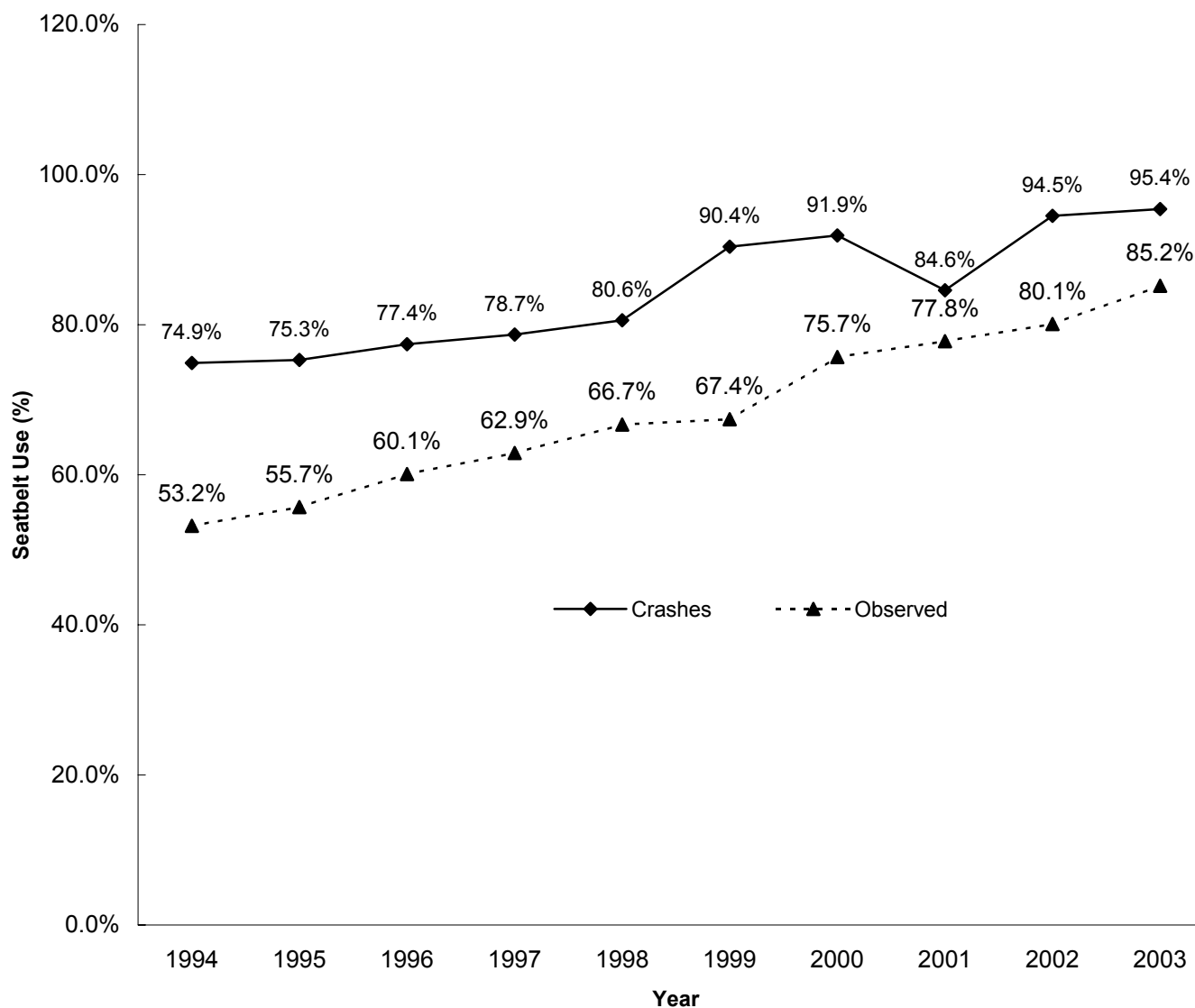
## Section 2: Occupant Protection

### Section 2: Occupant Protection 2003

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## Trends

### Seatbelt Use of Drivers and Front Seat Passengers In Crashes and Observational Studies (Utah 1994-2003)



- Historically, there have been differences between self-reported seatbelt use of people in crashes, and seatbelt use that is observed by researchers in observational studies.
- The difference between self-reported seatbelt use of people 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 front-seat 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 crash and observational studies.
- In 2003, the observational seatbelt use increased to 85.2% from 80.1% in 2002; a 6% increase.
- The 2003 self-reported seatbelt use rate of people in crashes was 95.4%; a 1% increase from 2002.

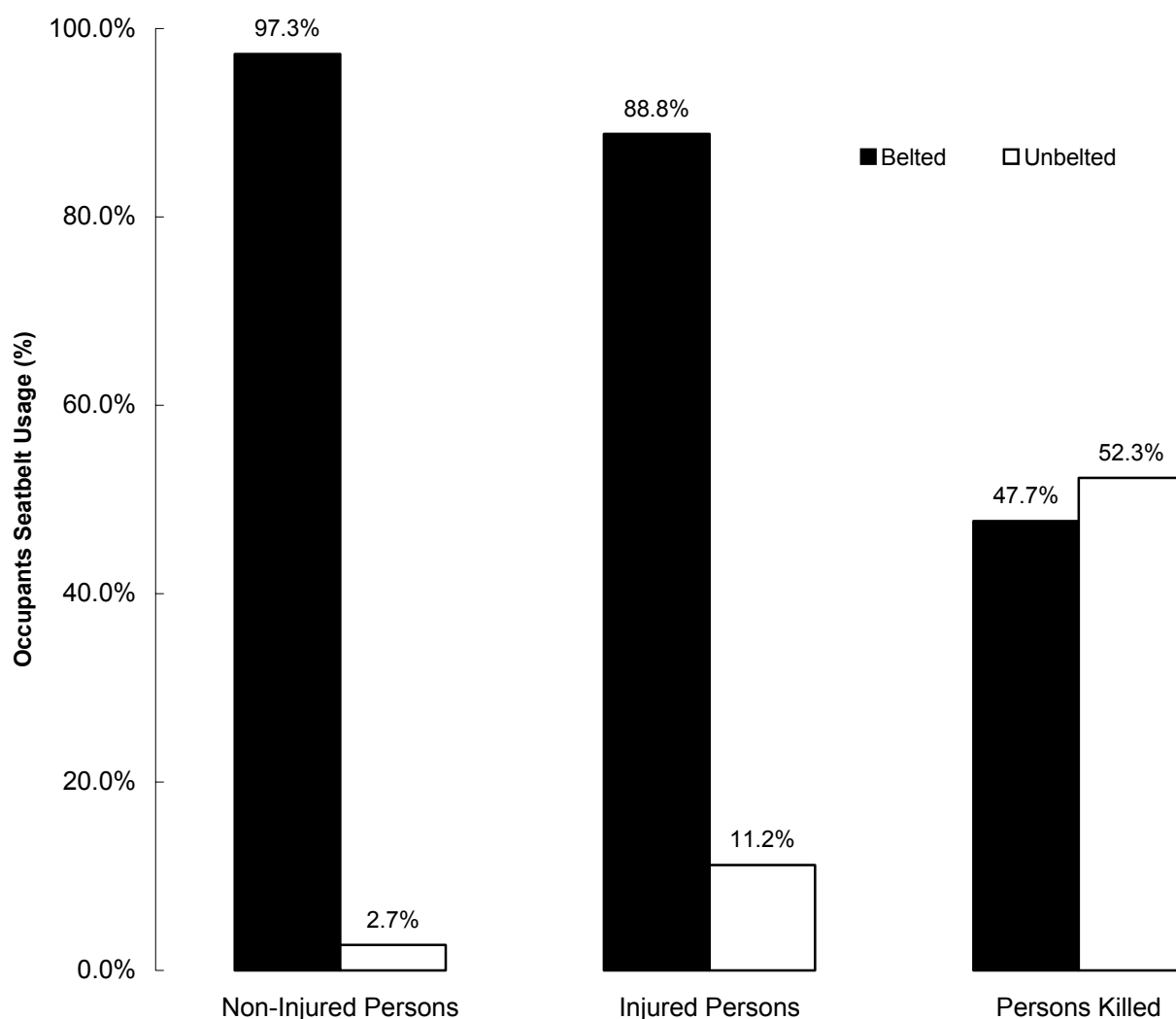
## Occupant Characteristics (Including Driver)

### Seatbelt Use by Injury Severity (Utah 2003)

Seatbelt Use	Persons							
	Non-Injured Persons		Injured Persons		Persons Killed		Total Persons	
	#	%	#	%	#	%	#	%
Belted	87,954	97.3%	20,691	88.8%	103	47.7%	108,748	95.4%
Unbelted	2,480	2.7%	2,616	11.2%	113	52.3%	5,209	4.6%
Total	90,434	100.0%	23,307	100.0%	216	100.0%	113,957	100.0%

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

### Seatbelt Use by Injury Severity (Utah 2003)



- The majority of persons who survived a crash reported wearing a seatbelt; non-injured persons (97.3%), injured persons (88.8%).
- In contrast, less than half (47.7%) of the persons killed in a crash were belted.
- In fact, unbelted crash occupants were 23 times more likely to be killed than belted crash occupants.

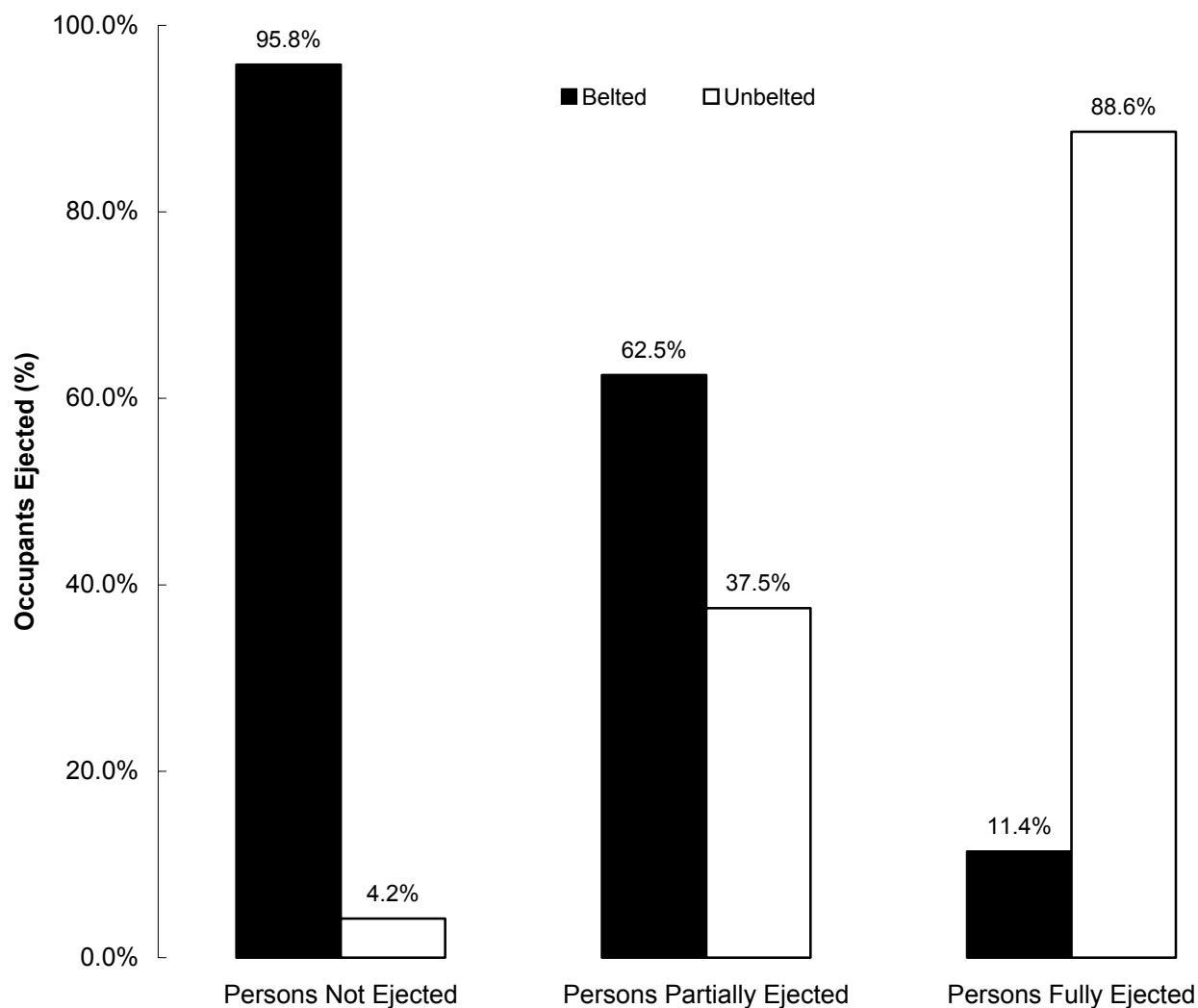
## Occupant Characteristics (Including Driver)

### Ejection and Seatbelt Use (Utah 2003)

Seatbelt Use	Persons							
	Persons Not Ejected		Persons Partially Ejected		Persons Fully Ejected		Total Persons	
	#	%	#	%	#	%	#	%
Belted	91,324	95.8%	60	62.5%	43	11.4%	91,427	95.4%
Unbelted	4,030	4.2%	36	37.5%	334	88.6%	4,400	4.6%
Total	95,354	100.0%	96	100.0%	377	100.0%	95,827	100.0%

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

### Ejection and Seatbelt Use (Utah 2003)



- The above table and graph show an inverse relationship between ejection from a motor vehicle and seatbelt use.
- The majority of crash occupants ejected from a motor vehicle (88.6%) were reported as being unbelted, compared to only 4.2% of crash occupants not ejected from a motor vehicle.

## Occupant Characteristics (Including Driver)

### Seatbelt Use by Age of Crash Occupants (Utah 2003)

Persons									
Age	Seatbelt Use	Non-Injured Persons		Injured Persons		Persons Killed		Total Persons	
		#	%	#	%	#	%	#	%
0-4	Belted	6,112	98.6%	900	91.9%	6	60.0%	7,018	97.6%
	Unbelted	89	1.4%	79	8.1%	4	40.0%	172	2.4%
5-9	Belted	3,134	98.0%	563	85.0%	4	66.7%	3,701	95.7%
	Unbelted	64	2.0%	99	15.0%	2	33.3%	165	4.3%
10-14	Belted	3,061	95.9%	665	80.6%	1	16.7%	3,727	92.6%
	Unbelted	131	4.1%	160	19.4%	5	83.3%	296	7.4%
15-19	Belted	17,544	96.1%	3,750	83.6%	11	34.4%	21,305	93.6%
	Unbelted	710	3.9%	735	16.4%	21	65.6%	1,466	6.4%
20-24	Belted	14,544	96.8%	3,257	86.5%	10	35.7%	17,811	94.6%
	Unbelted	483	3.2%	509	13.5%	18	64.3%	1,010	5.4%
25-29	Belted	9,145	97.2%	2,162	89.2%	17	65.4%	11,324	95.5%
	Unbelted	262	2.8%	262	10.8%	9	34.6%	533	4.5%
30-34	Belted	6,505	97.7%	1,693	89.7%	5	41.7%	8,203	95.8%
	Unbelted	154	2.3%	195	10.3%	7	58.3%	356	4.2%
35-39	Belted	5,231	97.8%	1,365	90.6%	5	50.0%	6,601	96.1%
	Unbelted	120	2.2%	142	9.4%	5	50.0%	267	3.9%
40-44	Belted	5,230	97.9%	1,333	91.8%	4	30.8%	6,567	96.4%
	Unbelted	114	2.1%	119	8.2%	9	69.2%	242	3.6%
45-49	Belted	4,408	97.9%	1,191	93.0%	5	50.0%	5,604	96.7%
	Unbelted	94	2.1%	90	7.0%	5	50.0%	189	3.3%
50-54	Belted	3,652	98.1%	1,017	95.0%	4	66.7%	4,673	97.3%
	Unbelted	72	1.9%	54	5.0%	2	33.3%	128	2.7%
55-59	Belted	2,684	98.0%	785	93.5%	5	38.5%	3,474	96.7%
	Unbelted	54	2.0%	55	6.5%	8	61.5%	117	3.3%
60-64	Belted	1,948	98.0%	564	94.2%	4	44.4%	2,516	97.0%
	Unbelted	39	2.0%	35	5.8%	5	55.6%	79	3.0%
65-69	Belted	1,418	98.2%	425	95.7%	5	41.7%	1,848	97.3%
	Unbelted	26	1.8%	19	4.3%	7	58.3%	52	2.7%
70-74	Belted	1,210	98.0%	361	96.0%	8	80.0%	1,579	97.4%
	Unbelted	25	2.0%	15	4.0%	2	20.0%	42	2.6%
75-79	Belted	969	98.0%	283	95.9%	2	66.7%	1,254	97.4%
	Unbelted	20	2.0%	12	4.1%	1	33.3%	33	2.6%
80-84	Belted	593	98.0%	211	93.8%	3	60.0%	807	96.6%
	Unbelted	12	2.0%	14	6.2%	2	40.0%	28	3.4%
85+	Belted	356	98.6%	115	87.8%	4	80.0%	475	95.6%
	Unbelted	5	1.4%	16	12.2%	1	20.0%	22	4.4%
Unknown	Belted	210	97.2%	51	89.5%	0	0.0%	261	95.6%
	Unbelted	6	2.8%	6	10.5%	0	0.0%	12	4.4%
Total	Belted	87,954	97.3%	20,691	88.8%	103	47.7%	108,748	95.4%
	Unbelted	2,480	2.7%	2,616	11.2%	113	52.3%	5,209	4.6%

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

- Overall, crash occupants aged 10 to 14 years had the highest percentage of being unbelted (7.4%).
- For injured crash occupants, persons aged 10 to 14 years were again the most likely to be unbelted (19.4%).
- For persons killed, crash occupants aged 10 to 14 years had the highest percentage of being unbelted (83.3%).

## Occupant Characteristics (Including Driver)

### Seatbelt Use by Gender of Crash Occupants (Utah 2003)

Persons									
Gender	Seatbelt Use	Non-Injured Persons		Injured Persons		Persons Killed		Total Persons	
		#	%	#	%	#	%	#	%
F	Belted	39,806	97.7%	12,102	90.9%	53	58.9%	51,961	96.0%
	Unbelted	938	2.3%	1,214	9.1%	37	41.1%	2,189	4.0%
M	Belted	48,049	96.9%	8,573	85.9%	50	39.7%	56,672	94.9%
	Unbelted	1,537	3.1%	1,402	14.1%	76	60.3%	3,015	5.1%
Unknown	Belted	99	95.2%	16	100.0%	0	0.0%	115	95.8%
	Unbelted	5	4.8%	0	0.0%	0	0.0%	5	4.2%
Total	Belted	87,954	97.3%	20,691	88.8%	103	47.7%	108,748	95.4%
	Unbelted	2,480	2.7%	2,616	11.2%	113	52.3%	5,209	4.6%

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

- Overall, female (96.0%) and male crash occupants (94.9%) reported similar seatbelt use.
- For injured crash occupants, reported seatbelt use was greater for females (90.9%) than for males (85.9%).
- For persons killed, female crash occupants had higher seatbelt use (58.9%) than male crash occupants (39.7%). In fact, the majority of male occupants killed in a crash were unbelted (60.3%).
- 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 2003)

Persons									
Occupant Placement	Seatbelt Use	Non-Injured Persons		Injured Persons		Persons Killed		Total Persons	
		#	%	#	%	#	%	#	%
Driver	Belted	59,548	97.5%	13,937	90.9%	62	50.4%	73,547	96.1%
	Unbelted	1,513	2.5%	1,398	9.1%	61	49.6%	2,972	3.9%
Front Seat Passenger	Belted	15,370	96.4%	4,484	86.3%	27	54.0%	19,881	93.9%
	Unbelted	570	3.6%	709	13.7%	23	46.0%	1,302	6.1%
Back Seat Passenger	Belted	13,036	97.0%	2,270	81.7%	14	32.6%	15,320	94.2%
	Unbelted	397	3.0%	509	18.3%	29	67.4%	935	5.8%
Total	Belted	87,954	97.3%	20,691	88.8%	103	47.7%	108,748	95.4%
	Unbelted	2,480	2.7%	2,616	11.2%	113	52.3%	5,209	4.6%

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 (96.1%) compared to persons in other seating locations.

## Occupant Characteristics (Including Driver)

### Air Bags and Seatbelt Use (Utah 2003)

Persons (Whose Airbag Deployed)									
Age	Seatbelt Use	Non-Injured Persons		Injured Persons		Persons Killed		Total Persons	
		#	%	#	%	#	%	#	%
0-4	Belted	22	100.0%	16	84.2%	0	0.0%	38	90.5%
	Unbelted	0	0.0%	3	15.8%	1	100.0%	4	9.5%
5-9	Belted	9	81.8%	8	100.0%	0	0.0%	17	89.5%
	Unbelted	2	18.2%	0	0.0%	0	0.0%	2	10.5%
10-14	Belted	23	95.8%	16	84.2%	0	0.0%	39	90.7%
	Unbelted	1	4.2%	3	15.8%	0	0.0%	4	9.3%
15-19	Belted	198	93.0%	256	86.2%	0	0.0%	454	88.8%
	Unbelted	15	7.0%	41	13.8%	1	100.0%	57	11.2%
20-24	Belted	210	93.8%	225	87.5%	0	0.0%	435	90.1%
	Unbelted	14	6.3%	32	12.5%	2	100.0%	48	9.9%
25-29	Belted	132	96.4%	129	89.0%	5	100.0%	266	92.7%
	Unbelted	5	3.6%	16	11.0%	0	0.0%	21	7.3%
30-34	Belted	65	94.2%	94	86.2%	1	100.0%	160	89.4%
	Unbelted	4	5.8%	15	13.8%	0	0.0%	19	10.6%
35-39	Belted	46	95.8%	79	92.9%	1	33.3%	126	92.6%
	Unbelted	2	4.2%	6	7.1%	2	66.7%	10	7.4%
40-44	Belted	74	96.1%	69	97.2%	0	0.0%	143	96.0%
	Unbelted	3	3.9%	2	2.8%	1	100.0%	6	4.0%
45-49	Belted	45	95.7%	62	92.5%	0	0.0%	107	93.9%
	Unbelted	2	4.3%	5	7.5%	0	0.0%	7	6.1%
50-54	Belted	35	100.0%	59	96.7%	1	50.0%	95	96.9%
	Unbelted	0	0.0%	2	3.3%	1	50.0%	3	3.1%
55-59	Belted	23	100.0%	50	94.3%	1	50.0%	74	94.9%
	Unbelted	0	0.0%	3	5.7%	1	50.0%	4	5.1%
60-64	Belted	20	95.2%	30	90.9%	1	50.0%	51	91.1%
	Unbelted	1	4.8%	3	9.1%	1	50.0%	5	8.9%
65-69	Belted	16	100.0%	32	97.0%	0	0.0%	48	94.1%
	Unbelted	0	0.0%	1	3.0%	2	100.0%	3	5.9%
70-74	Belted	15	100.0%	25	89.3%	1	100.0%	41	93.2%
	Unbelted	0	0.0%	3	10.7%	0	0.0%	3	6.8%
75-79	Belted	8	100.0%	23	92.0%	0	0.0%	31	93.9%
	Unbelted	0	0.0%	2	8.0%	0	0.0%	2	6.1%
80-84	Belted	8	100.0%	17	94.4%	1	100.0%	26	96.3%
	Unbelted	0	0.0%	1	5.6%	0	0.0%	1	3.7%
85+	Belted	3	100.0%	11	100.0%	1	50.0%	15	93.8%
	Unbelted	0	0.0%	0	0.0%	1	50.0%	1	6.3%
Unknown	Belted	1	100.0%	6	100.0%	0	0.0%	7	100.0%
	Unbelted	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Total	Belted	953	95.1%	1,207	89.7%	13	50.0%	2,173	91.6%
	Unbelted	49	4.9%	138	10.3%	13	50.0%	200	8.4%

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 (91.6%) and injured occupants (89.7%) whose air bag deployed were wearing a seatbelt. However, only half (50.0%) of the 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 2003)

Children								
Seating Location	Restraint Use	Children Ages 0-1		Children Ages 2-4		Children Ages 5-8		Total Children
		#	%	#	%	#	%	# %
Front Middle Seat	Child Safety Seat	23	76.7%	25	36.8%	5	4.4%	53 25.0%
	Other Belted	4	13.3%	37	54.4%	98	86.0%	139 65.6%
	Unbelted	3	10.0%	6	8.8%	11	9.6%	20 9.4%
Front Right Seat	Child Safety Seat	56	76.7%	97	43.7%	36	5.3%	189 19.4%
	Other Belted	14	19.2%	116	52.3%	610	90.0%	740 76.1%
	Unbelted	3	4.1%	9	4.1%	32	4.7%	44 4.5%
Back Seat	Child Safety Seat	1,573	87.6%	2,198	70.9%	443	14.5%	4,214 52.9%
	Other Belted	205	11.4%	856	27.6%	2,500	81.6%	3,561 44.7%
	Unbelted	18	1.0%	46	1.5%	120	3.9%	184 2.3%
Total	Child Safety Seat	1,652	87.0%	2,320	68.4%	484	12.6%	4,456 48.7%
	Other Belted	223	11.7%	1,009	29.8%	3,208	83.2%	4,440 48.6%
	Unbelted	24	1.3%	61	1.8%	163	4.2%	248 2.7%

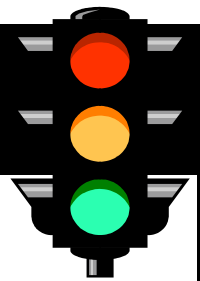
- The above table shows that as children's age increased, so did their likelihood to be unbelted. The unbelted percentage for children aged 0 to 1 years was 1.3%, while the unbelted percentage for children aged 5 to 8 years was 4.2%.
- The majority of children aged 0 to 1 years (87.0%) were in a child safety seat at the time of the crash, compared to 68.4% of 2 to 4 year olds, and 12.6% of 5 to 8 year olds.
- Children aged 0 to 1 years were 3 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 2003**



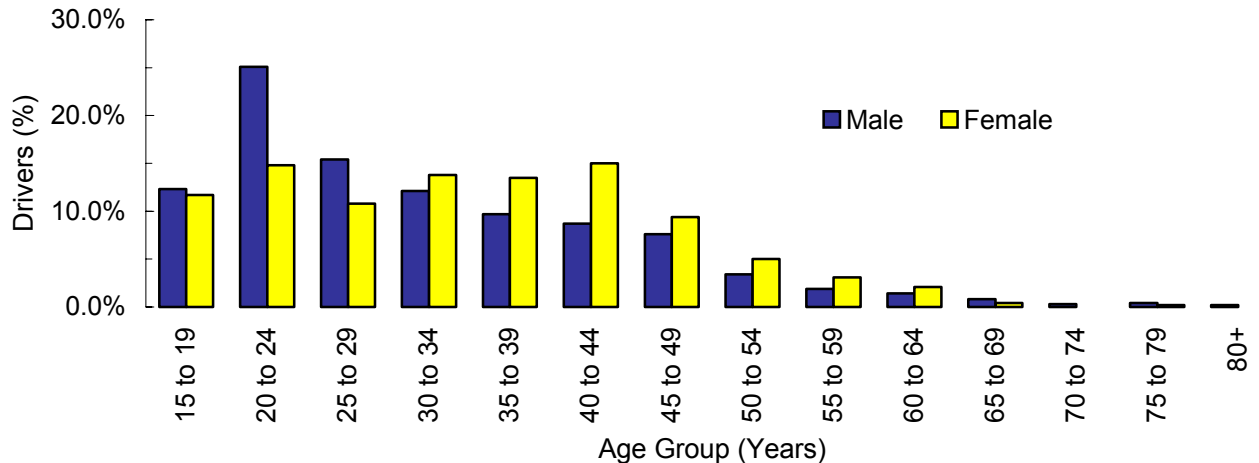
## ALCOHOL AND OTHER DRUGS



### Did you know that in 2003. . .

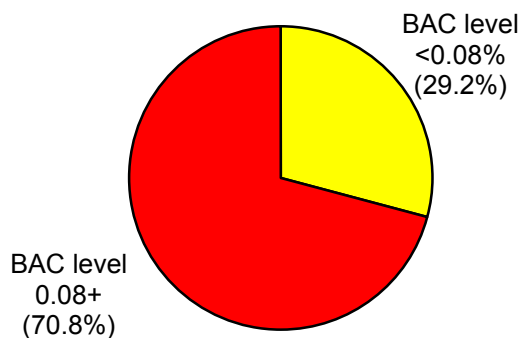
- There were 1,947 alcohol and other drug-related crashes in Utah that resulted in 1,101 injuries and 46 fatalities.
- Alcohol and other drug-related fatalities decreased 36% from 2002.
- Alcohol and other drug-related crashes were 4 times more likely to be fatal than other types of crashes.

### Age and Gender of Drivers Involved in Alcohol and Other Drug-Related Crashes



- Male drivers were involved in the majority (75.1%) 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 (25.1%).
- For female drivers, those aged 40 to 44 years had the highest percentage of alcohol and other drug-related crashes (15.0%).
- Of the impaired drivers, 304 (15.8%) were under the age of 21 years.

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



- The majority (70.8%) of drivers involved in fatal alcohol-related crashes had blood alcohol concentration levels at or above the legal limit of 0.08%.

### Alcohol and Other Drug-Related Crash Clock

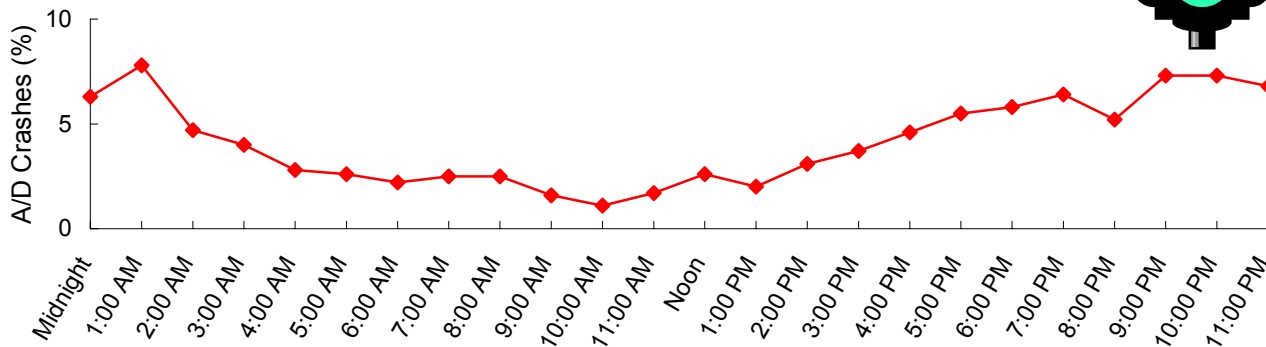


- An alcohol and other drug-related crash occurred in Utah every 4 1/2 hours.

## ALCOHOL AND OTHER DRUGS

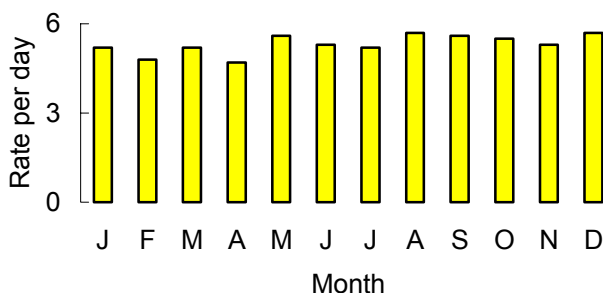


**Time of Day Alcohol and Other Drug-Related Crashes Occurred**



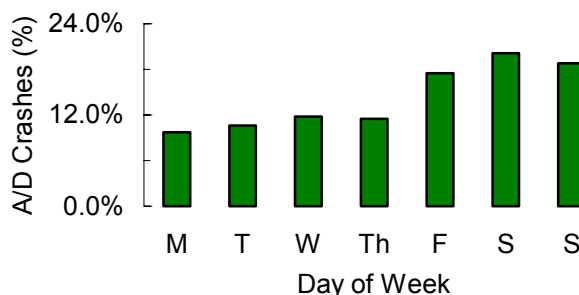
- Alcohol and other drug-related crashes peaked in the evening and early morning hours (7:00 pm to 1:00 am). This is unlike most other types of motor vehicle crashes that tend to peak in the afternoon and early evening (2:00 pm to 6:00 pm).

**Month of the Year Alcohol and Other Drug-Related Crashes Occurred**



- The highest rate per day of alcohol and other drug-related crashes occurred in August (5.7) and December (5.7).

**Day of the Week Alcohol and Other Drug-Related Crashes Occurred**



- The majority of alcohol and other drug-related crashes (56.4%) occurred on weekends (Friday, Saturday, Sunday).

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



#### Pedestrian-Motor Vehicle Crashes

Of the 28 pedestrians killed in 2003, 1 pedestrian was impaired by alcohol and other drugs. Of the drivers involved in fatal pedestrian-motor vehicle crashes, 3 drivers were impaired.



#### Bicyclist-Motor Vehicle Crashes

Of the 2 bicyclists killed in 2003, none were impaired by alcohol or other drugs. Of the motor vehicle drivers involved in fatal bicyclist-motor vehicle crashes, none were impaired.



#### Motorcycle Crashes

Of the 22 motorcycle drivers and passengers killed in 2003, 1 motorcycle driver was impaired.



#### Teenage-Driver Crashes

In 2003, there were 2 teenage drivers (aged 15 to 19 years) involved in fatal crashes that were impaired by alcohol or other drugs.

# Section 3: Alcohol and Other Drug-Related Crashes

## Section 3: Alcohol and Other Drug-Related Crashes 2003

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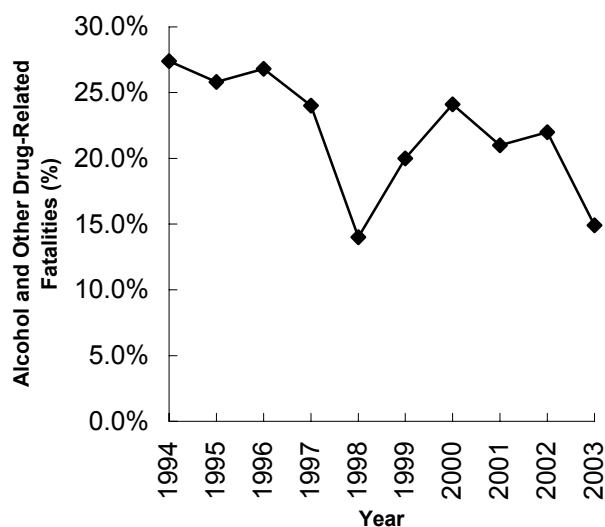
## Trends

### Alcohol and Other Drug-Related Fatalities and Fatal Crashes 1994-2003

Year	Alcohol and Other Drugs					
	Fatalities			Fatal Crashes		
	Alcohol/Drug Related Fatalities #	All Fatalities #	Percentage Alcohol/Drug Related %	Alcohol/Drug Related Fatal Crashes #	All Fatal Crashes #	Percentage Alcohol/Drug Related %
1994	94	343	27.4%	81	302	26.8%
1995	84	325	25.8%	73	285	25.6%
1996	86	321	26.8%	74	284	26.1%
1997	88	366	24.0%	70	309	22.7%
1998	49	350	14.0%	48	308	15.6%
1999	72	360	20.0%	66	318	20.8%
2000	90	373	24.1%	79	318	24.8%
2001	61	291	21.0%	54	258	20.9%
2002	72	328	22.0%	61	274	22.3%
2003	46	309	14.9%	39	262	14.9%
Total	742	3,366	22.0%	645	2,918	22.1%

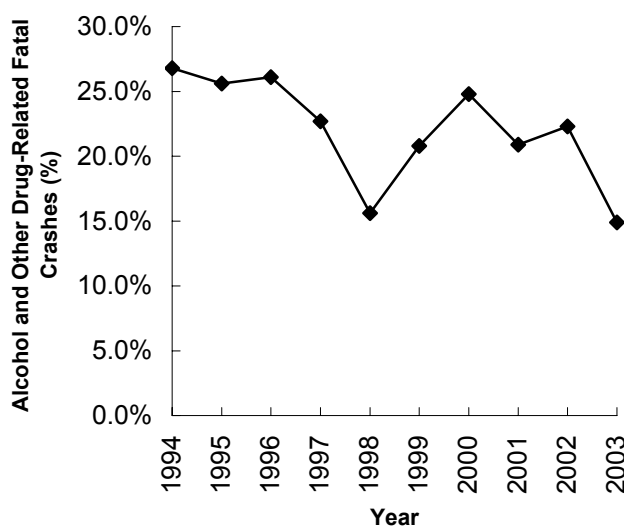
- Over the past ten years, the percentage of alcohol and other drug-related fatalities and fatal crashes has remained fairly consistent at approximately one-quarter of all fatalities and fatal crashes.

**Alcohol and Other Drug-Related Fatalities  
(Utah 1994-2003)**



- In 2003, there was a 36% decrease from 2002 in alcohol and other drug-related fatalities.
- At 14.9%, the 2003 percentage of alcohol and other drug-related fatalities nears the 1998 all-time low of 14.0%.

**Alcohol and Other Drug-Related Fatal Crashes  
(Utah 1994-2003)**



- In 2003, there was a 36% decrease from 2002 in alcohol and other drug-related fatal crashes.
- At 14.9%, the 2003 percentage of alcohol and other drug-related fatal crashes marks an all-time low.

## Counties

### Alcohol and Other Drug-Related Crashes by County (Utah 2003)

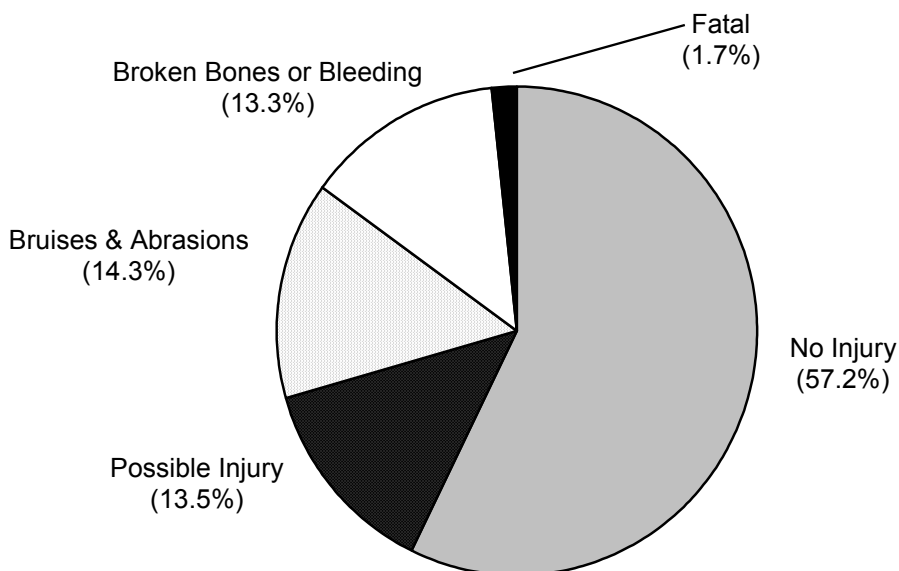
Alcohol and Other Drug-Related Crashes												
County	Property Damage Only (PDO)			Injury			Fatal			Total		
	Alc/Drug PDO Crashes #	Rate per 100 Million VMT	Rate per 10,000 Population	Alc/Drug Injury Crashes #	Rate per 100 Million VMT	Rate per 10,000 Population	Alc/Drug Fatal Crashes #	Rate per 100 Million VMT	Rate per 10,000 Population	All Alc/Drug Crashes #	Rate per 100 Million VMT	Rate per 10,000 Population
Beaver	1	0.4	1.6	7	2.9	11.1	1	0.4	1.6	9	3.8	14.3
Box Elder	8	0.9	1.8	20	2.3	4.5	1	0.1	0.2	29	3.3	6.6
Cache	26	3.1	2.6	20	2.4	2.0	1	0.1	0.1	47	5.7	4.8
Carbon	6	2.0	3.1	15	5.0	7.7	0	0.0	0.0	21	7.0	10.7
Daggett	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Davis	68	3.0	2.7	46	2.1	1.8	1	0.0	0.0	115	5.1	4.5
Duchesne	6	3.1	4.1	13	6.7	8.8	1	0.5	0.7	20	10.3	13.6
Emery	3	0.9	2.9	7	2.0	6.7	2	0.6	1.9	12	3.5	11.5
Garfield	1	0.8	2.2	2	1.6	4.4	0	0.0	0.0	3	2.4	6.6
Grand	10	3.6	11.8	8	2.9	9.5	1	0.4	1.2	19	6.8	22.4
Iron	10	1.6	2.8	13	2.1	3.6	1	0.2	0.3	24	3.9	6.6
Juab	7	1.8	8.0	11	2.9	12.6	1	0.3	1.1	19	5.0	21.8
Kane	2	1.6	3.4	4	3.3	6.7	0	0.0	0.0	6	4.9	10.1
Millard	9	2.2	7.4	4	1.0	3.3	1	0.2	0.8	14	3.4	11.5
Morgan	3	2.6	4.0	2	1.8	2.7	0	0.0	0.0	5	4.4	6.6
Piute	1	3.3	7.4	0	0.0	0.0	0	0.0	0.0	1	3.3	7.4
Rich	0	0.0	0.0	4	9.2	19.2	0	0.0	0.0	4	9.2	19.2
Salt Lake	443	5.5	4.7	457	5.7	4.9	6	0.1	0.1	906	11.3	9.6
San Juan	2	0.7	1.4	15	5.3	10.5	1	0.4	0.7	18	6.4	12.6
Sanpete	4	1.8	1.7	9	3.9	3.8	1	0.4	0.4	14	6.1	6.0
Sevier	7	1.8	3.6	12	3.0	6.2	0	0.0	0.0	19	4.8	9.8
Summit	18	2.8	5.3	18	2.8	5.3	3	0.5	0.9	39	6.0	11.4
Tooele	27	3.4	5.6	36	4.6	7.5	4	0.5	0.8	67	8.5	14.0
Uintah	12	4.2	4.6	23	8.1	8.8	4	1.4	1.5	39	13.7	15.0
Utah	79	2.3	1.9	117	3.5	2.8	5	0.1	0.1	201	6.0	4.9
Wasatch	6	2.3	3.5	18	7.0	10.4	1	0.4	0.6	25	9.7	14.4
Washington	40	4.0	3.8	31	3.1	2.9	1	0.1	0.1	72	7.2	6.8
Wayne	1	2.6	4.0	3	7.7	12.1	0	0.0	0.0	4	10.3	16.1
Weber	91	6.1	4.4	102	6.8	5.0	1	0.1	0.0	194	13.0	9.4
Statewide	891	3.7	3.7	1,017	4.2	4.3	38	0.2	0.2	1,946	8.1	8.2

NOTE: County was missing for one fatal alcohol and other drug-related crash.

- 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:
  - Rich (9.2), Uintah (8.1) and Wayne (7.7) had the highest rates of alcohol and other drug-related injury crashes per 100 million vehicle miles traveled.
  - Uintah (1.4) and Emery (0.6) had the highest rates of fatal alcohol and other drug-related crashes per 100 million vehicle miles traveled.
- Rate per 10,000 population:
  - Rich (19.2), Juab (12.6) and Wayne (12.1) had the highest rates of alcohol and other drug-related injury crashes per 10,000 population.
  - Emery (1.9), Beaver (1.6) and Uintah (1.5) had the highest rates of fatal alcohol and other drug-related crashes per 10,000 population.

## Occupant Characteristics (Including Driver)

### Injury Severity of Occupants Involved in Alcohol and Other Drug-Related Crashes (Utah 2003)



- In the above graph, there were a total of 2,673 persons involved in alcohol and other drug-related crashes.
- Crash occupants involved in alcohol and other drug-related crashes sustained a higher percentage of injury (41.1%) compared to crash occupants involved in all motor vehicle crashes (21.3%).
- In addition, a higher percentage of crash occupants involved in alcohol and other drug-related crashes died (1.7%) compared to crash occupants involved in all motor vehicle crashes (0.3%).

### Occupant Placement of Persons Involved in Alcohol and Other Drug-Related Crashes (Utah 2003)

Persons Involved in Alcohol and Other Drug-Related Crashes								
Occupant Placement	Non-Injured Persons		Injured Persons		Persons Killed		Total Persons	
	#	%	#	%	#	%	#	%
Driver	1,157	75.8%	778	70.7%	30	65.2%	1,965	73.5%
Passenger	368	24.1%	294	26.7%	10	21.7%	672	25.1%
Pedestrian	1	0.1%	22	2.0%	4	8.7%	27	1.0%
Bicyclist	0	0.0%	6	0.5%	0	0.0%	6	0.2%
Other	0	0.0%	1	0.1%	0	0.0%	1	0.0%
Missing	0	0.0%	0	0.0%	2	4.3%	2	0.1%
Total	1,526	100.0%	1,101	100.0%	46	100.0%	2,673	100.0%

- The above table shows that drivers accounted for the majority of injured persons (70.7%) and persons killed (65.2%) in alcohol and other drug-related crashes.



## Driver Characteristics

### Age and Gender of Impaired Drivers Involved in Alcohol and Other Drug-Related Crashes (Utah 2003)

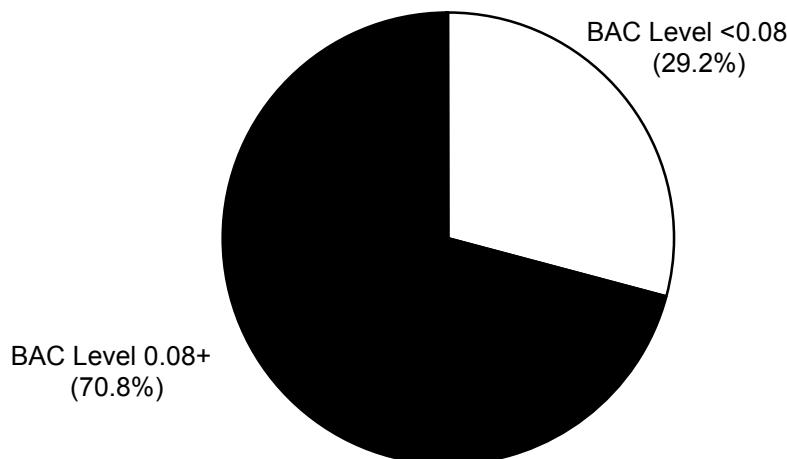
Drivers (Alcohol and Other Drugs)																
Age	Drivers Involved in Alc/Drug PDO Crashes				Drivers Involved in Alc/Drug Injury Crashes				Drivers Involved in Alc/Drug Fatal Crashes				Total Drivers Involved in Alc/Drug Crashes			
	Female Drivers		Male Drivers		Female Drivers		Male Drivers		Female Drivers		Male Drivers		Female Drivers		Male Drivers	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
<15	0	0.0%	1	0.2%	1	0.4%	0	0.0%	0	0.0%	0	0.0%	1	0.2%	1	0.1%
15-19	22	9.8%	80	12.2%	34	13.9%	96	12.5%	0	0.0%	2	10.5%	56	11.7%	178	12.3%
20-24	27	12.1%	167	25.4%	42	17.1%	192	25.0%	2	18.2%	4	21.1%	71	14.8%	363	25.1%
25-29	24	10.7%	96	14.6%	26	10.6%	121	15.7%	2	18.2%	5	26.3%	52	10.8%	222	15.4%
30-34	28	12.5%	79	12.0%	37	15.1%	94	12.2%	1	9.1%	2	10.5%	66	13.8%	175	12.1%
35-39	30	13.4%	62	9.4%	34	13.9%	77	10.0%	1	9.1%	1	5.3%	65	13.5%	140	9.7%
40-44	39	17.4%	57	8.7%	32	13.1%	67	8.7%	1	9.1%	1	5.3%	72	15.0%	125	8.7%
45-49	28	12.5%	56	8.5%	16	6.5%	53	6.9%	1	9.1%	1	5.3%	45	9.4%	110	7.6%
50-54	10	4.5%	20	3.0%	14	5.7%	28	3.6%	0	0.0%	1	5.3%	24	5.0%	49	3.4%
55-59	8	3.6%	11	1.7%	5	2.0%	16	2.1%	2	18.2%	1	5.3%	15	3.1%	28	1.9%
60-64	8	3.6%	12	1.8%	2	0.8%	7	0.9%	0	0.0%	1	5.3%	10	2.1%	20	1.4%
65-69	0	0.0%	4	0.6%	1	0.4%	7	0.9%	1	9.1%	0	0.0%	2	0.4%	11	0.8%
70-74	0	0.0%	1	0.2%	0	0.0%	3	0.4%	0	0.0%	0	0.0%	0	0.0%	4	0.3%
75-79	0	0.0%	4	0.6%	1	0.4%	2	0.3%	0	0.0%	0	0.0%	1	0.2%	6	0.4%
80+	0	0.0%	1	0.2%	0	0.0%	2	0.3%	0	0.0%	0	0.0%	0	0.0%	3	0.2%
Unknown	0	0.0%	6	0.9%	0	0.0%	4	0.5%	0	0.0%	0	0.0%	0	0.0%	10	0.7%
Total	224	100.0%	657	100.0%	245	100.0%	769	100.0%	11	100.0%	19	100.0%	480	100.0%	1,445	100.0%

NOTE: There were alcohol and other drug-related crashes that involved two impaired drivers. Gender was missing for 27 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 (25.1%) as well as alcohol and other drug-related injury crashes (25.0%).
- Male drivers aged 25 to 29 years represented the highest percentage of drivers involved in fatal alcohol and other drug-related crashes (26.3%).
- For female drivers, those aged 40 to 44 years had the highest percentage of total alcohol and other drug-related crashes (15.0%). Female drivers aged 20 to 24 years had the highest percentage of alcohol and other drug-related injury crashes (17.1%).
- Female drivers involved in fatal alcohol and other drug-related crashes varied by age.

## Driver Characteristics

### Blood Alcohol Concentration Levels of Impaired Drivers Involved in Alcohol-Related\* Fatal Crashes (Utah 2003)



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

- In the above graph, there were a total of 24 drivers involved in alcohol-related\* fatal crashes.
- In 2003, the majority (70.8%) of drivers involved in alcohol-related fatal crashes 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 2003)



#### Pedestrian-Motor Vehicle Crashes

- Of the 28 pedestrians killed in 2003, 1 pedestrian was impaired by alcohol or other drugs.
- Of the drivers involved in fatal pedestrian-motor vehicle crashes, 3 drivers were impaired by alcohol or other drugs.



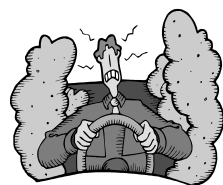
#### Bicyclist-Motor Vehicle Crashes

- Of the 2 bicyclists killed in 2003, none were impaired by alcohol or other drugs.
- Of the drivers involved in fatal bicyclist-motor vehicle crashes, none were impaired by alcohol or other drugs.



#### Motorcycle Crashes

- Of the 22 motorcycle drivers and motorcycle passengers killed in 2003, 1 motorcycle driver was impaired by alcohol or other drugs.

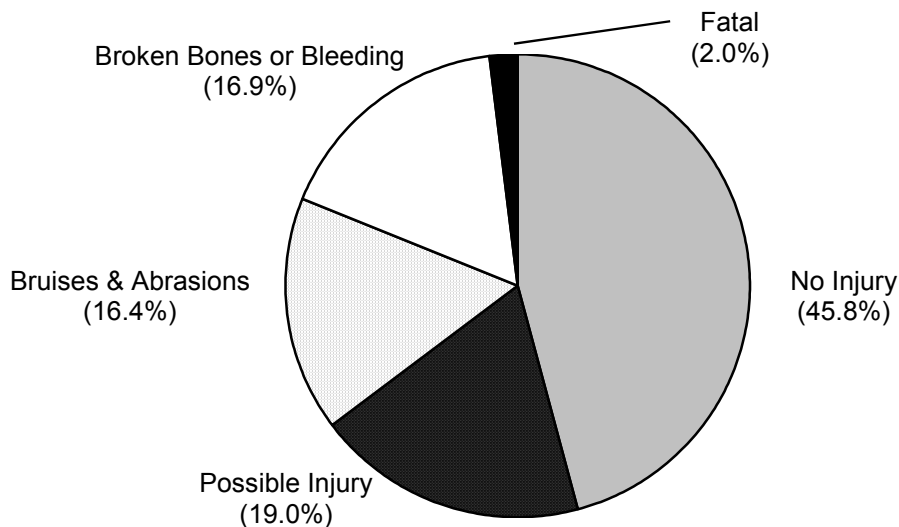


#### Teenage-Driver Crashes

- In 2003, there were 2 teenage drivers (aged 15 to 19 years) involved in fatal crashes that were impaired by alcohol or other drugs.

## Crash Characteristics

### Alcohol and Other Drug-Related Crash Severity (Utah 2003)



- In the above table, there were a total of 1,947 alcohol and other drug-related crashes.
- A higher percentage of alcohol and other drug-related crashes (52.3%) resulted in at least one injury compared to all motor vehicle crashes that resulted in at least one injury (36.3%).
- In addition, a higher percentage of alcohol and other drug-related crashes were fatal (2.0%) compared to all fatal motor vehicle crashes (0.5%). In fact, alcohol and other drug-related crashes were 4 times more likely to be fatal than other types of crashes.

### Alcohol and Other Drug-Related Crashes by Month of Year (Utah 2003)

Alcohol and Other Drug-Related Crashes									
Month	Days in Month #	Property Damage Only (PDO)		Injury		Fatal		Total	
		Alc/Drug PDO Crashes #	Rate per Day	Alc/Drug Injury Crashes #	Rate per Day	Alc/Drug Fatal Crashes #	Rate per Day	All Alc/Drug Crashes #	Rate per Day
January	31	68	2.2	91	2.9	3	0.1	162	5.2
February	28	67	2.4	67	2.4	1	0.0	135	4.8
March	31	64	2.1	95	3.1	3	0.1	162	5.2
April	30	60	2.0	79	2.6	2	0.1	141	4.7
May	31	85	2.7	90	2.9	0	0.0	175	5.6
June	30	65	2.2	89	3.0	6	0.2	160	5.3
July	31	73	2.4	85	2.7	3	0.1	161	5.2
August	31	78	2.5	93	3.0	6	0.2	177	5.7
September	30	81	2.7	86	2.9	1	0.0	168	5.6
October	31	79	2.5	84	2.7	6	0.2	169	5.5
November	30	86	2.9	71	2.4	3	0.1	160	5.3
December	31	85	2.7	87	2.8	4	0.1	176	5.7
<b>Total</b>	<b>365</b>	<b>891</b>	<b>2.4</b>	<b>1,017</b>	<b>2.8</b>	<b>38</b>	<b>0.1</b>	<b>1,946</b>	<b>5.3</b>

NOTE: Month of year was missing for one fatal alcohol and other drug-related crash.

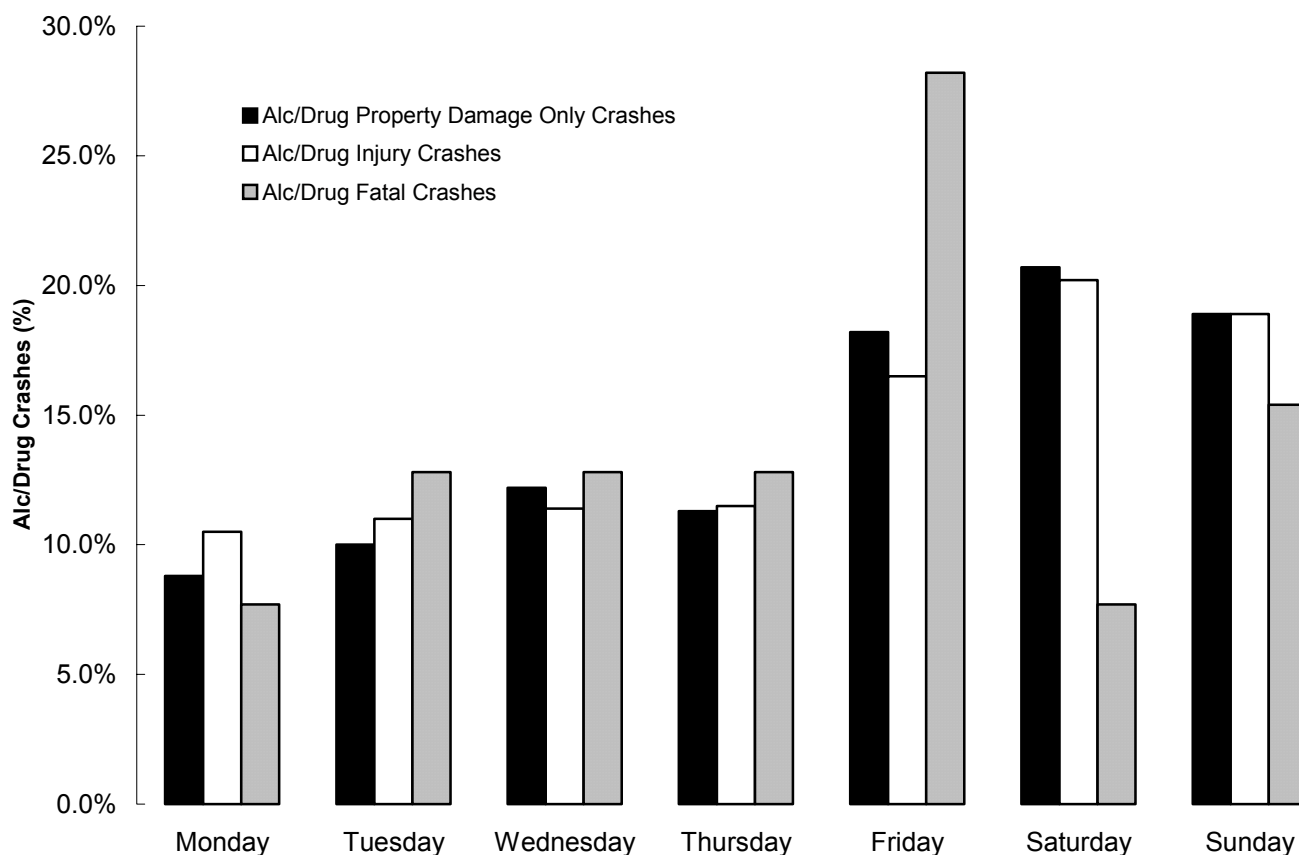
- The above table shows the number and rate per day of alcohol and other drug-related crashes for each month. The rates remained similar from month to month.
- Overall, the highest rate per day of alcohol and drug-related crashes was in August (5.7) and December (5.7).

## Crash Characteristics

### Alcohol and Other Drug-Related Crashes by Day of Week (Utah 2003)

Alcohol and Other Drug-Related Crashes								
Day of Week	Property Damage Only Crashes		Injury Crashes		Fatal Crashes		Total Crashes	
	#	%	#	%	#	%	#	%
Monday	78	8.8%	107	10.5%	3	7.7%	188	9.7%
Tuesday	89	10.0%	112	11.0%	5	12.8%	206	10.6%
Wednesday	109	12.2%	116	11.4%	5	12.8%	230	11.8%
Thursday	101	11.3%	117	11.5%	5	12.8%	223	11.5%
Friday	162	18.2%	168	16.5%	11	28.2%	341	17.5%
Saturday	184	20.7%	205	20.2%	3	7.7%	392	20.1%
Sunday	168	18.9%	192	18.9%	6	15.4%	366	18.8%
Missing	0	0.0%	0	0.0%	1	2.6%	1	0.1%
<b>Total</b>	<b>891</b>	<b>100.0%</b>	<b>1,017</b>	<b>100.0%</b>	<b>39</b>	<b>100.0%</b>	<b>1,947</b>	<b>100.0%</b>

### Alcohol and Other Drug-Related Crashes by Day of Week (Utah 2003)



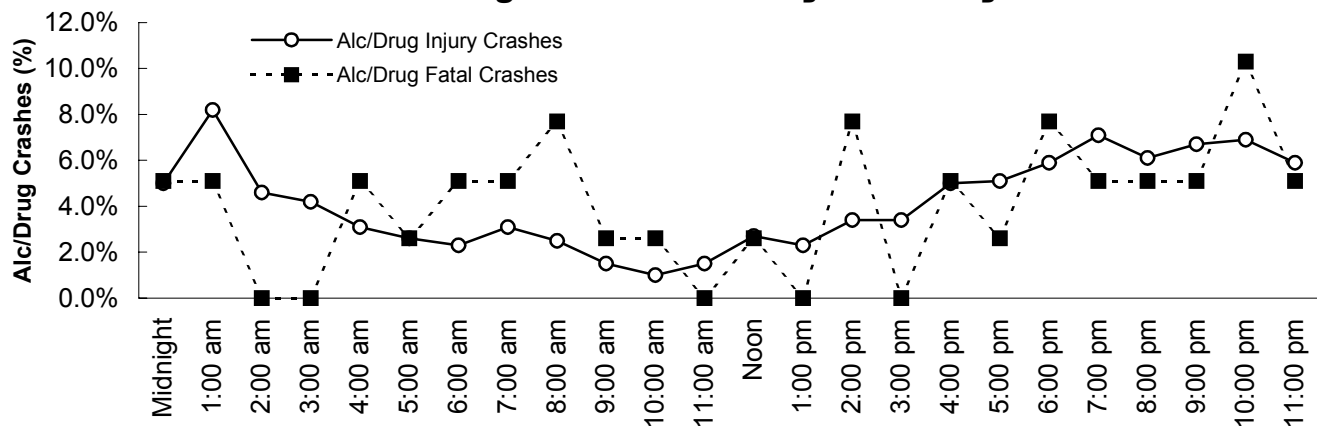
- The above table and graph show that the highest percentage of alcohol and other drug-related total crashes (20.1%), property damage only crashes (20.7%) and injury crashes (20.2%) occurred on Saturday.
- The percentage of fatal alcohol and other drug-related crashes occurred on Friday (28.2%).
- Overall, the majority of alcohol and other drug-related crashes (56.4%) occurred on the weekends (Friday, Saturday, Sunday).

## Crash Characteristics

### Alcohol and Other Drug-Related Crashes by Hour of Day (Utah 2003)

Alcohol and Other Drug-Related Crashes								
Hour	Property Damage Only Crashes		Injury Crashes		Fatal Crashes		Total Crashes	
	#	%	#	%	#	%	#	%
Midnight	69	7.7%	51	5.0%	2	5.1%	122	6.3%
1:00 am	66	7.4%	83	8.2%	2	5.1%	151	7.8%
2:00 am	45	5.1%	47	4.6%	0	0.0%	92	4.7%
3:00 am	34	3.8%	43	4.2%	0	0.0%	77	4.0%
4:00 am	20	2.2%	32	3.1%	2	5.1%	54	2.8%
5:00 am	23	2.6%	26	2.6%	1	2.6%	50	2.6%
6:00 am	17	1.9%	23	2.3%	2	5.1%	42	2.2%
7:00 am	14	1.6%	32	3.1%	2	5.1%	48	2.5%
8:00 am	21	2.4%	25	2.5%	3	7.7%	49	2.5%
9:00 am	16	1.8%	15	1.5%	1	2.6%	32	1.6%
10:00 am	10	1.1%	10	1.0%	1	2.6%	21	1.1%
11:00 am	19	2.1%	15	1.5%	0	0.0%	34	1.7%
Noon	22	2.5%	27	2.7%	1	2.6%	50	2.6%
1:00 pm	16	1.8%	23	2.3%	0	0.0%	39	2.0%
2:00 pm	23	2.6%	35	3.4%	3	7.7%	61	3.1%
3:00 pm	38	4.3%	35	3.4%	0	0.0%	73	3.7%
4:00 pm	36	4.0%	51	5.0%	2	5.1%	89	4.6%
5:00 pm	54	6.1%	52	5.1%	1	2.6%	107	5.5%
6:00 pm	49	5.5%	60	5.9%	3	7.7%	112	5.8%
7:00 pm	50	5.6%	72	7.1%	2	5.1%	124	6.4%
8:00 pm	38	4.3%	62	6.1%	2	5.1%	102	5.2%
9:00 pm	73	8.2%	68	6.7%	2	5.1%	143	7.3%
10:00 pm	68	7.6%	70	6.9%	4	10.3%	142	7.3%
11:00 pm	70	7.9%	60	5.9%	2	5.1%	132	6.8%
Missing	0	0.0%	0	0.0%	1	2.6%	1	0.1%
Total	891	100.0%	1,017	100.0%	39	100.0%	1,947	100.0%

### Alcohol and Other Drug-Related Crashes by Hour of Day (Utah 2003)



- The above table and graph show that alcohol and other drug-related injury crashes peaked in the evening and early morning hours (7:00 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 1:00 am).



# **Teenage-Driver Crashes**

## **2003**





## TEENAGE DRIVERS (15-19 YEARS)



Did you know that in 2003. . .

- Teenage drivers represented 7.7% of the licensed drivers in Utah, yet they were involved in over one-quarter (28.1%) of all motor vehicle crashes in Utah.
- Approximately 1 out of 5 (19.1%) fatal crashes in Utah involved a teenage driver.
- A teenage-driver crash occurred in Utah every 37 minutes.

### Seatbelt Use of Occupants Involved in Teenage-Driver Crashes, Utah 2003



- Only 36.8% of occupants killed in teenage-driver crashes were wearing a seatbelt.
- Unbelted occupants involved in teenage-driver crashes were 27 times more likely to be killed in a crash than belted occupants.

### Fatalities Associated with Teenage-Driven Vehicles, Utah 2003



- Crashes where the teenage-driven vehicle contained four or more occupants were 9 times more likely to be fatal than crashes involving teenage-driven vehicles with fewer occupants.

### Leading Collision Descriptions of Teenage-Driver Crashes, Utah 2003

#### All Teenage Driver Crashes

1. Rear End (34.7%)
2. Broadside (27.0%)
3. Side Swipe (5.6%)

#### Fatal Teenage Driver Crashes

1. Single Vehicle Rollover (36.0%)
2. Broadside (22.0%)
3. Head-On (14.0%)



- Overall, most teenage-driver crashes were rear-end (34.7%) or broadside (27.0%) collisions.
- For fatal teenage-driver crashes, single vehicle rollovers (36.0%) and broadside collisions (22.0%) were the leading collision types.
- Single vehicle rollovers involving teenage drivers were 13 times more likely to be fatal than other collision types.

### Top 5 Driving Factors that Contributed to Teenage-Driver Crashes, Utah 2003

#### All Teenage Driver Crashes

1. Improper Lookout (25.5%)
2. Followed Too Closely (15.8%)
3. Failed to Yield Right-of-Way (15.5%)
4. Speed Too Fast (12.0%)
5. Other Improper Driving (8.4%)

#### Fatal Teenage Driver Crashes

1. Speed Too Fast (26.0%)
2. Improper Lookout (13.0%)
3. Fatigued or Asleep (11.7%)
4. Drove Left of Center (10.4%)
5. Other Improper Driving (7.8%)

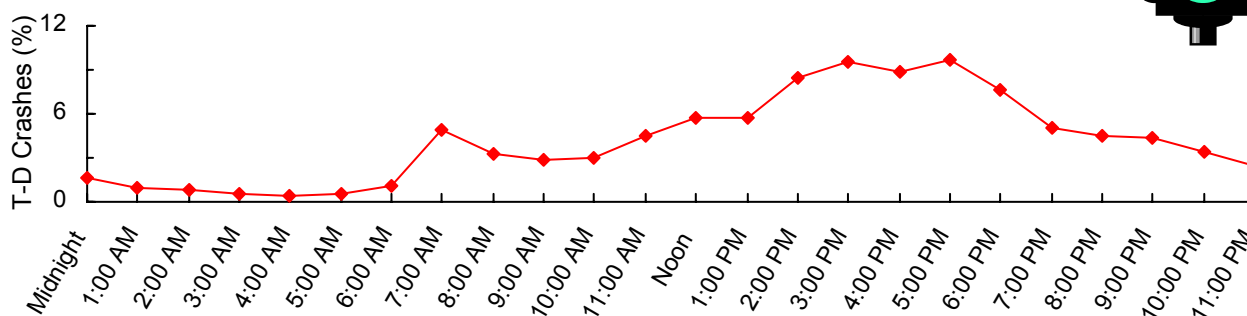


- Overall, "improper lookout" was the leading contributing factor for all teenage-driver crashes (25.5%).
- "Speed too fast" accounted for more than one-quarter (26.0%) of fatal teenage-driver crashes.
- Drowsy driving was also a significant contributing factor of fatal teenage-driver crashes. "Fatigued" or "asleep" accounted for 11.7% of fatal teenage-driver crashes.

# TEENAGE DRIVERS (15-19 YEARS)



Time of Day Teenage-Driver Crashes Occurred, Utah 2003



- 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 2003

County	All Crashes	Teenage Drivers	% Involving Teen Drivers	County	All Crashes	Teenage Drivers	% Involving Teen Drivers
Cache	2,166	753	34.8%	Uintah	488	156	32.0%
Davis	4,047	1,366	33.8%	Weber	4,558	1,433	31.4%
Sanpete	334	113	33.8%	Utah	7,336	2,228	30.4%
Washington	2,103	709	33.7%	Statewide	50,389	14,178	28.1%

## 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 2003

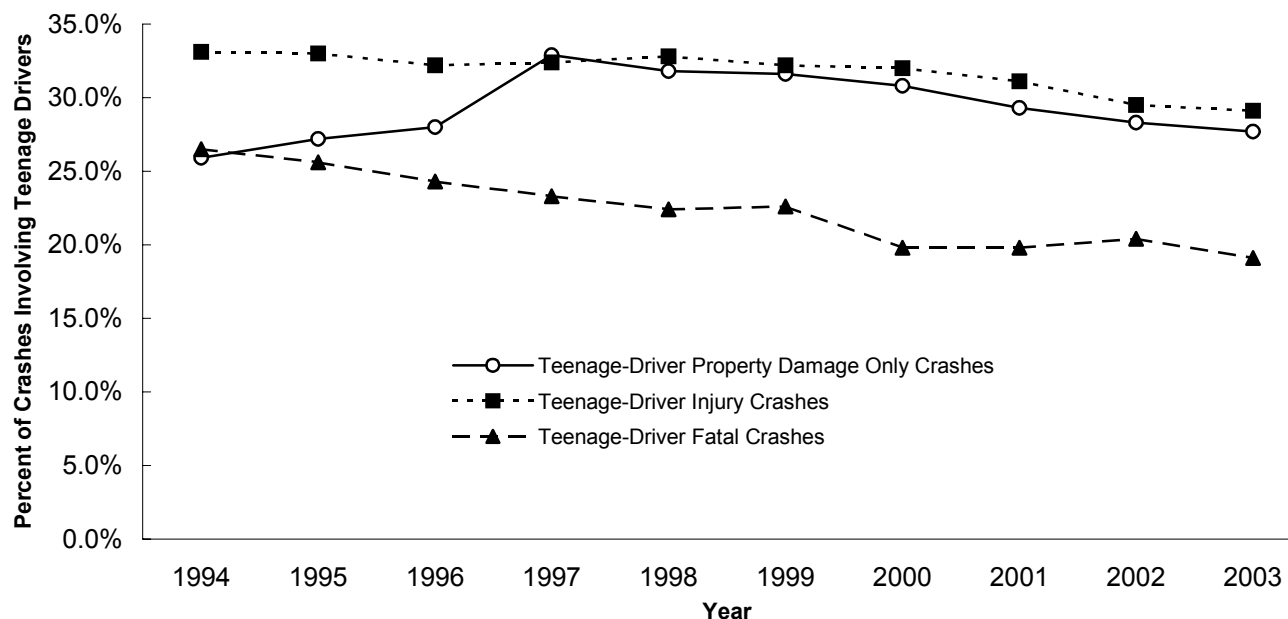
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## Trends

### Teenage-Driver Crashes 1994-2003

Teenage-Driver Crashes												
Year	Property Damage Only			Injury			Fatal			Total		
	All	Teenage Driver	Percent Involving Teenage	All	Teenage Driver	Percent Involving Teenage	All	Teenage Driver	Percent Involving Teenage	All	Teenage Driver	Percent Involving Teenage
	PDO	PDO	Teenage	Injury	Injury	Teenage	Fatal	Fatal	Teenage	All	Driver	Teenage
	Crashes	Crashes	Drivers	Crashes	Crashes	Drivers	Crashes	Crashes	Drivers	Crashes	Crashes	Drivers
	#	#	%	#	#	%	#	#	%	#	#	%
1994	40,243	10,411	25.9%	18,726	6,197	33.1%	302	80	26.5%	59,271	16,688	28.2%
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%
Total	350,586	102,434	29.2%	196,346	62,378	31.8%	2,918	655	22.4%	549,850	165,467	30.1%

### Teenage-Driver Crashes (Utah 1994-2003)



- 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 1994, and continues the trend in 2003 by dropping to 29.1%.
- Fatal teenage driver crashes have also shown a decreasing trend. In 1994 the percentage of fatal teenage driver crashes was 26.5%, and reached an all-time low in 2003 of 19.1%.

## Counties

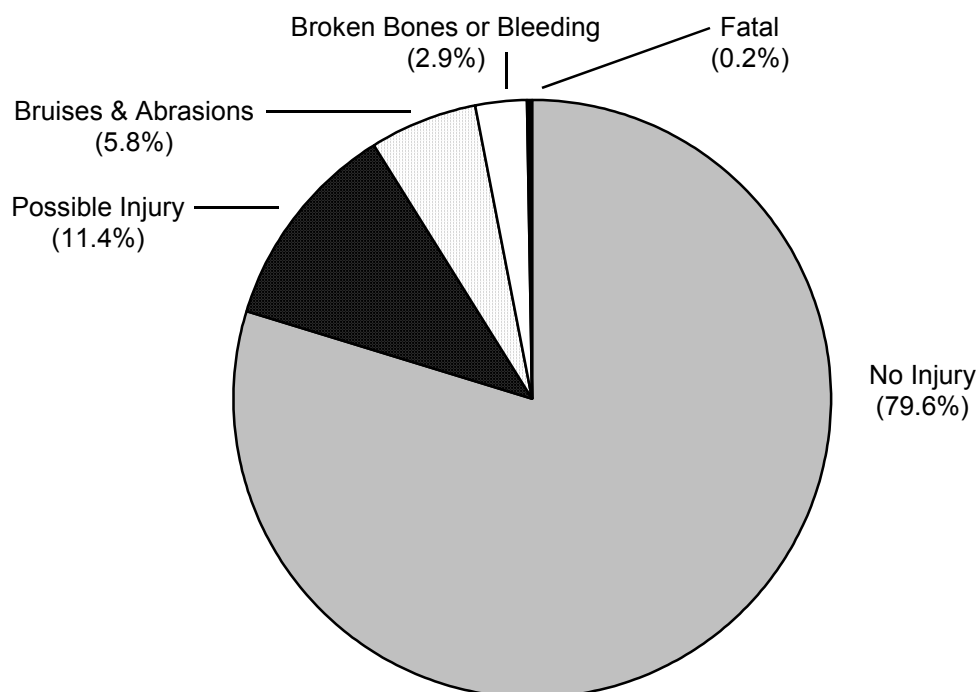
### Teenage-Driver Crashes by County (Utah 2003)

Teenage-Driver Crashes												
	Property 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	Drivers	Crashes	Crashes	Drivers	Crashes	Crashes	Drivers	Crashes	Crashes	Drivers
County	#	#	%	#	#	%	#	#	%	#	#	%
Beaver	145	25	17.2%	97	17	17.5%	5	0	0.0%	247	42	17.0%
Box Elder	604	137	22.7%	292	60	20.5%	11	5	45.5%	907	202	22.3%
Cache	1,510	533	35.3%	650	219	33.7%	6	1	16.7%	2,166	753	34.8%
Carbon	249	57	22.9%	105	25	23.8%	4	0	0.0%	358	82	22.9%
Daggett	28	3	10.7%	7	2	28.6%	0	0	0.0%	35	5	14.3%
Davis	2,600	850	32.7%	1,432	512	35.8%	15	4	26.7%	4,047	1,366	33.8%
Duchesne	190	41	21.6%	124	38	30.6%	6	1	16.7%	320	80	25.0%
Emery	170	36	21.2%	98	16	16.3%	14	2	14.3%	282	54	19.1%
Garfield	98	11	11.2%	53	5	9.4%	2	0	0.0%	153	16	10.5%
Grand	132	22	16.7%	110	19	17.3%	5	0	0.0%	247	41	16.6%
Iron	539	136	25.2%	299	74	24.7%	7	2	28.6%	845	212	25.1%
Juab	211	42	19.9%	144	32	22.2%	6	2	33.3%	361	76	21.1%
Kane	123	10	8.1%	60	15	25.0%	3	0	0.0%	186	25	13.4%
Millard	242	46	19.0%	122	21	17.2%	10	2	20.0%	374	69	18.4%
Morgan	125	31	24.8%	41	9	22.0%	3	0	0.0%	169	40	23.7%
Piute	24	3	12.5%	10	2	20.0%	0	0	0.0%	34	5	14.7%
Rich	59	15	25.4%	36	8	22.2%	0	0	0.0%	95	23	24.2%
Salt Lake	13,663	3,620	26.5%	8,074	2,238	27.7%	40	7	17.5%	21,777	5,865	26.9%
San Juan	150	10	6.7%	91	17	18.7%	4	2	50.0%	245	29	11.8%
Sanpete	222	74	33.3%	107	38	35.5%	5	1	20.0%	334	113	33.8%
Sevier	328	65	19.8%	175	36	20.6%	8	1	12.5%	511	102	20.0%
Summit	611	103	16.9%	226	66	29.2%	6	0	0.0%	843	169	20.0%
Tooele	456	93	20.4%	292	70	24.0%	19	2	10.5%	767	165	21.5%
Uintah	319	90	28.2%	163	66	40.5%	6	0	0.0%	488	156	32.0%
Utah	4,507	1,350	30.0%	2,794	869	31.1%	35	9	25.7%	7,336	2,228	30.4%
Wasatch	384	70	18.2%	141	34	24.1%	10	3	30.0%	535	107	20.0%
Washington	1,310	440	33.6%	772	264	34.2%	21	5	23.8%	2,103	709	33.7%
Wayne	42	6	14.3%	23	5	21.7%	1	0	0.0%	66	11	16.7%
Weber	2,801	888	31.7%	1,747	544	31.1%	10	1	10.0%	4,558	1,433	31.4%
Statewide	31,842	8,807	27.7%	18,285	5,321	29.1%	262	50	19.1%	50,389	14,178	28.1%

- 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, Cache (34.8%), Davis (33.8%) and Sanpete (33.8%) had the highest percentage of crashes involving a teenage driver.
- Uintah (40.5%), Davis (35.8%) and Sanpete (35.5%) had the highest percentage of injury crashes involving a teenage driver.
- San Juan (50.0%), Box Elder (45.5%) and Juab (33.3%) had the highest percentage of fatal crashes involving a teenage driver.
- Statewide, teenage-driver crashes represented 28.1% of all crashes, and 19.1% of all fatal crashes.

## Occupant Characteristics (Including Driver)

### Injury Severity of Occupants Involved in Teenage-Driver Crashes (Utah 2003)



- In the above graph, there were a total of 25,088 occupants involved in teenage-driver crashes.
- The percentage of occupants who sustained an injury in a teenage-driver crash was 20.1%; similar to the percentage of occupants who sustained an injury in all motor vehicle crashes (21.3%).
- The fatality percentage of occupants involved in teenage-driver crashes (0.2%) was the same as the fatality percentage of occupants involved in all motor vehicle crashes (0.2%).

### Seatbelt Use of Occupants Involved in Teenage-Driver Crashes (Utah 2003)

Persons Involved in Teenage-Driver Crashes								
Seatbelt Use	Non-Injured Persons		Injured Persons		Persons Killed		Total Persons	
	#	%	#	%	#	%	#	%
Belted	17,703	96.2%	3,816	85.5%	14	36.8%	21,533	94.0%
Unbelted	704	3.8%	648	14.5%	24	63.2%	1,376	6.0%
Total	18,407	100.0%	4,464	100.0%	38	100.0%	22,909	100.0%

NOTE: Seatbelt use was not reported for 2,179 occupants because the teenage driver was either riding a motorcycle or seatbelt use was unknown.

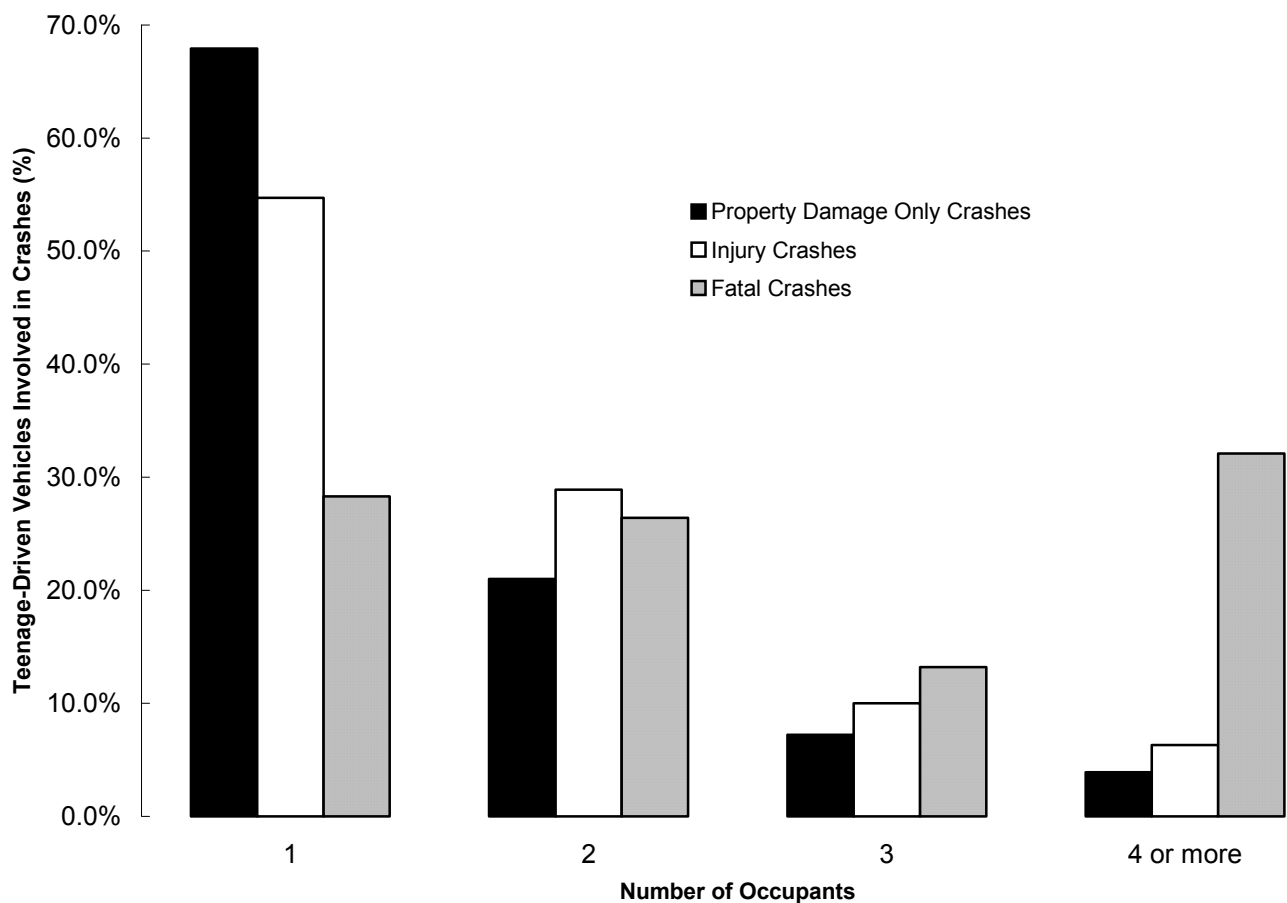
- Overall, most occupants involved in teenage-driver crashes reported wearing a seatbelt (94.0%).
- A high percentage of non-injured occupants (96.2%) and injured occupants (85.5%) involved in teenage-driver crashes reported wearing a seatbelt.
- Only 36.8% of occupants killed in teenage-driver crashes were reported as wearing a seatbelt.
- In fact, unbelted occupants involved in teenage-driver crashes were 27 times more likely to be killed in a crash than belted occupants.

## Occupant Characteristics (Including Driver)

### Number of Occupants in Teenage-Driven Vehicles (Utah 2003)

Teenage-Driven Vehicles								
Number of Occupants	Teenage-Driven Vehicles Involved in Property Damage Only Crashes		Teenage-Driven Vehicles Involved in Injury Crashes		Teenage-Driven Vehicles Involved in Fatal Crashes		Teenage-Driven Vehicles Involved in All Crashes	
	#	%	#	%	#	%	#	%
1	6,740	67.9%	3,267	54.7%	15	28.3%	10,022	62.8%
2	2,081	21.0%	1,728	28.9%	14	26.4%	3,823	24.0%
3	716	7.2%	598	10.0%	7	13.2%	1,321	8.3%
4 or more	386	3.9%	378	6.3%	17	32.1%	781	4.9%
Missing	4	0.0%	6	0.1%	0	0.0%	10	0.1%
Total	9,927	100.0%	5,977	100.0%	53	100.0%	15,957	100.0%

### Number of Occupants in Teenage-Driven Vehicles (Utah 2003)



- The above table shows the number of occupants in teenage-driven vehicles that were involved in crashes.
- Approximately two-thirds of teenage-driven vehicles (62.8%) involved in crashes contained only the teenage driver.
- Crashes where the teenage-driven vehicle contained four or more occupants were 9 times more likely to be fatal than crashes involving teenage-driven vehicles with fewer occupants.

## Driver Characteristics

### Gender of Teenage Drivers Involved in Crashes (Utah 2003)

Teenage Drivers								
	Teenage Drivers Involved in Property Damage Only Crashes		Teenage Drivers Involved in Injury Crashes		Teenage Drivers Involved in Fatal Crashes		Total Teenage Drivers Involved in Crashes	
Driver Gender	#	%	#	%	#	%	#	%
Female	4,630	46.6%	2,972	49.7%	12	22.6%	7,614	47.7%
Male	5,290	53.3%	3,000	50.2%	41	77.4%	8,331	52.2%
Missing	7	0.1%	5	0.1%	0	0.0%	12	0.1%
Total	9,927	100.0%	5,977	100.0%	53	100.0%	15,957	100.0%

### Gender of Teenage Drivers Involved in Crashes (Utah 2003)



- The above table shows that the majority of teenage drivers involved in total crashes (52.2%), injury crashes (50.2%) and fatal crashes (77.4%) were male.

### Alcohol and Other Drug Involvement of Teenage Drivers (Utah 2003)

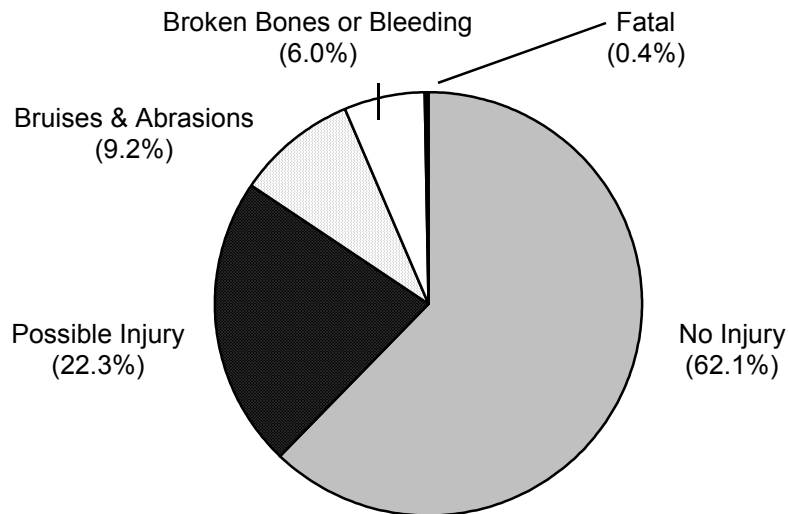


- In 2003, there were 2 teenage drivers (aged 15 to 19 years) involved in fatal crashes that were impaired by alcohol or other drugs.



## Crash Characteristics

### Teenage-Driver Crash Severity (Utah 2003)



- In the above graph, there were a total of 14,178 teenage-driver crashes.
- Similar to all motor vehicle crashes, over one-third (37.5) of teenage-driver crashes resulted in some level of injury.
- Fatal teenage-driver crashes were lower (0.4%) when compared to all motor vehicle crashes (0.5%).

### Teenage-Driver Crashes by Month of Year (Utah 2003)

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	Driver Crashes	per
Month	#	#	Day	#	Day	#	Day	#	Day
January	31	621	20.0	373	12.0	5	0.16	999	32.2
February	28	688	24.6	365	13.0	1	0.04	1,054	37.6
March	31	705	22.7	418	13.5	2	0.06	1,125	36.3
April	30	640	21.3	456	15.2	4	0.13	1,100	36.7
May	31	740	23.9	466	15.0	1	0.03	1,207	38.9
June	30	680	22.7	447	14.9	7	0.23	1,134	37.8
July	31	637	20.5	440	14.2	7	0.23	1,084	35.0
August	31	718	23.2	460	14.8	3	0.10	1,181	38.1
September	30	765	25.5	473	15.8	7	0.23	1,245	41.5
October	31	854	27.5	511	16.5	10	0.32	1,375	44.4
November	30	864	28.8	463	15.4	1	0.03	1,328	44.3
December	31	895	28.9	449	14.5	2	0.06	1,346	43.4
Total	365	8,807	24.1	5,321	14.6	50	0.14	14,178	38.8

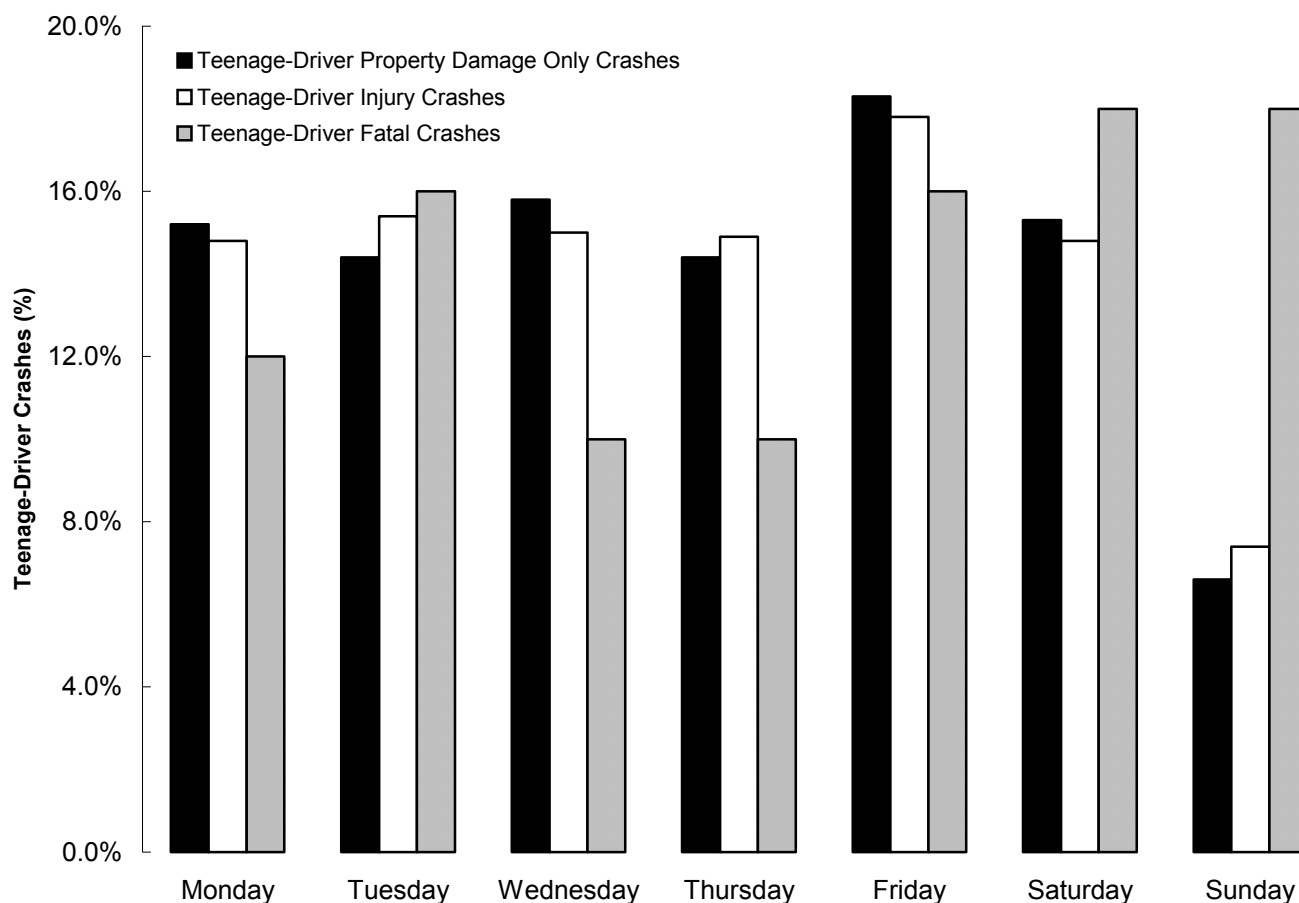
- Overall, October (44.4), November (44.3) and December (43.4) were the leading months for teenage-driver crashes.
- October (16.5) and September (15.8) had the highest rates of teenage-driver injury crashes.
- The highest rate per day of fatal teenage-driver crashes occurred in October (0.32).

## Crash Characteristics

### Teenage-Driver Crashes by Day of Week (Utah 2003)

Teenage-Driver Crashes								
Day of Week	Property Damage Only Crashes		Injury Crashes		Fatal Crashes		Total Crashes	
	#	%	#	%	#	%	#	%
Monday	1,335	15.2%	787	14.8%	6	12.0%	2,128	15.0%
Tuesday	1,270	14.4%	818	15.4%	8	16.0%	2,096	14.8%
Wednesday	1,395	15.8%	797	15.0%	5	10.0%	2,197	15.5%
Thursday	1,265	14.4%	792	14.9%	5	10.0%	2,062	14.5%
Friday	1,614	18.3%	947	17.8%	8	16.0%	2,569	18.1%
Saturday	1,346	15.3%	786	14.8%	9	18.0%	2,141	15.1%
Sunday	582	6.6%	394	7.4%	9	18.0%	985	6.9%
Total	8,807	100.0%	5,321	100.0%	50	100.0%	14,178	100.0%

### Teenage-Driver Crashes by Day of Week (Utah 2003)



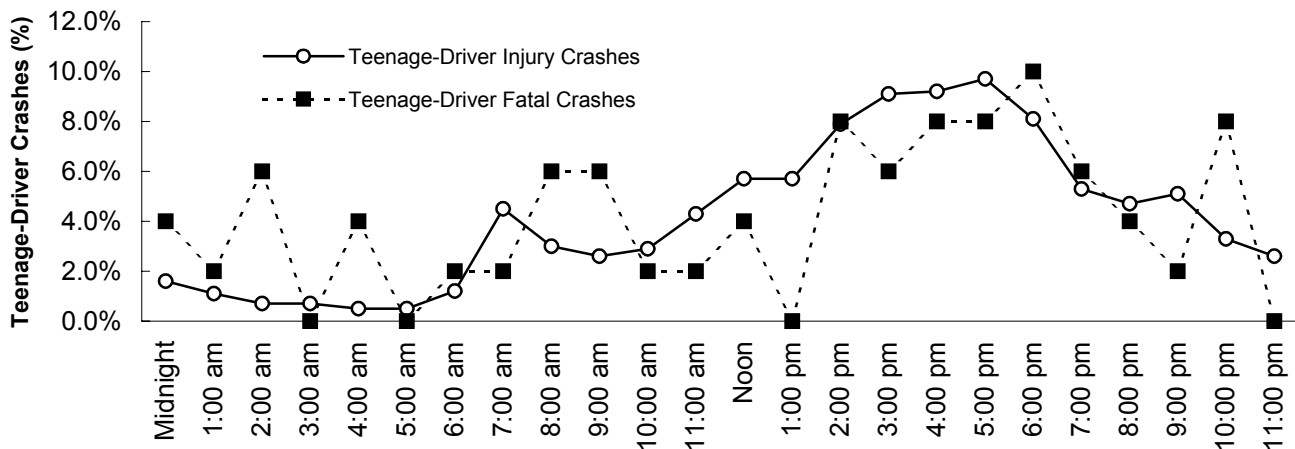
- Overall, the highest percentage of teenage-driver crashes occurred on Friday (18.1%).
- The highest percentage of teenage-driver injury crashes also occurred on Friday (17.8%).
- The highest percentage of fatal teenage-driver crashes occurred on Saturday (18.0%) and Sunday (18.0%).
- In fact, teenage-driver crashes that occurred on Sunday were 3 times more likely to be fatal than on other days of the week.

## Crash Characteristics

### Teenage-Driver Crashes by Hour of Day (Utah 2003)

Teenage-Driver Crashes								
	Property Damage Only Crashes		Injury Crashes		Fatal Crashes		Total Crashes	
Hour	#	%	#	%	#	%	#	%
Midnight	138	1.6%	87	1.6%	2	4.0%	227	1.6%
1:00 am	75	0.9%	57	1.1%	1	2.0%	133	0.9%
2:00 am	65	0.7%	39	0.7%	3	6.0%	107	0.8%
3:00 am	43	0.5%	39	0.7%	0	0.0%	82	0.6%
4:00 am	23	0.3%	29	0.5%	2	4.0%	54	0.4%
5:00 am	46	0.5%	24	0.5%	0	0.0%	70	0.5%
6:00 am	88	1.0%	64	1.2%	1	2.0%	153	1.1%
7:00 am	456	5.2%	242	4.5%	1	2.0%	699	4.9%
8:00 am	307	3.5%	157	3.0%	3	6.0%	467	3.3%
9:00 am	251	2.9%	139	2.6%	3	6.0%	393	2.8%
10:00 am	268	3.0%	155	2.9%	1	2.0%	424	3.0%
11:00 am	413	4.7%	229	4.3%	1	2.0%	643	4.5%
Noon	510	5.8%	301	5.7%	2	4.0%	813	5.7%
1:00 pm	506	5.7%	302	5.7%	0	0.0%	808	5.7%
2:00 pm	760	8.6%	421	7.9%	4	8.0%	1,185	8.4%
3:00 pm	866	9.8%	485	9.1%	3	6.0%	1,354	9.6%
4:00 pm	776	8.8%	487	9.2%	4	8.0%	1,267	8.9%
5:00 pm	856	9.7%	515	9.7%	4	8.0%	1,375	9.7%
6:00 pm	659	7.5%	432	8.1%	5	10.0%	1,096	7.7%
7:00 pm	441	5.0%	281	5.3%	3	6.0%	725	5.1%
8:00 pm	390	4.4%	251	4.7%	2	4.0%	643	4.5%
9:00 pm	353	4.0%	269	5.1%	1	2.0%	623	4.4%
10:00 pm	302	3.4%	177	3.3%	4	8.0%	483	3.4%
11:00 pm	215	2.4%	139	2.6%	0	0.0%	354	2.5%
Total	8,807	100.0%	5,321	100.0%	50	100.0%	14,178	100.0%

### Teenage-Driver Crashes by Hour of Day (Utah 2003)



- 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.

## Crash Characteristics

### Collision Description of Teenage-Driver Crashes (Utah 2003)

Teenage-Driver Crashes								
Collision Description	Property Damage Only Crashes		Injury Crashes		Fatal Crashes		Total Crashes	
	#	%	#	%	#	%	#	%
Rear End	3,058	34.7%	1,854	34.8%	4	8.0%	4,916	34.7%
Broadside	2,079	23.6%	1,734	32.6%	11	22.0%	3,824	27.0%
Other	2,688	30.5%	887	16.7%	3	6.0%	3,578	25.2%
Side Swipe	639	7.3%	152	2.9%	3	6.0%	794	5.6%
Single Vehicle Rollover	179	2.0%	395	7.4%	18	36.0%	592	4.2%
Pedestrian/Bicyclist Crash	13	0.1%	167	3.1%	3	6.0%	183	1.3%
Single Vehicle Fixed Object	89	1.0%	59	1.1%	1	2.0%	149	1.1%
Head-On	62	0.7%	73	1.4%	7	14.0%	142	1.0%
<b>Total</b>	<b>8,807</b>	<b>100.0%</b>	<b>5,321</b>	<b>100.0%</b>	<b>50</b>	<b>100.0%</b>	<b>14,178</b>	<b>100.0%</b>

- Overall, most teenage-driver crashes were rear-end (34.7%) or broadside (27.0%) collisions.
- For fatal teenage-driver crashes, single vehicle rollovers (36.0%) and broadside collisions (22.0%) were the leading collision types.
- Single vehicle rollovers involving teenage drivers were 13 times more likely to be fatal than other collision types.

### Teenage-Driver Crash Violations (Utah 2003)

Violations (Teenage Drivers)								
Violations	Teenage Drivers Cited in PDO Crashes		Teenage Drivers Cited in Injury Crashes		Teenage Drivers Cited in Fatal Crashes		Total Teenage Drivers Cited	
	#	%	#	%	#	%	#	%
Failure to Yield Right-Of-Way	870	18.7%	652	22.3%	1	10.0%	1,523	20.0%
Improper Lookout	938	20.1%	561	19.2%	0	0.0%	1,499	19.7%
Following Too Close	813	17.4%	490	16.7%	0	0.0%	1,303	17.1%
Negligent Collision	313	6.7%	154	5.3%	0	0.0%	467	6.1%
Speeding	279	6.0%	147	5.0%	0	0.0%	426	5.6%
Other Non-Moving Violations	255	5.5%	168	5.7%	0	0.0%	423	5.6%
All Other Moving Violations	253	5.4%	150	5.1%	3	30.0%	406	5.3%
Improper Lane Change	195	4.2%	93	3.2%	0	0.0%	288	3.8%
Failure to Stop at Red Light	110	2.4%	156	5.3%	0	0.0%	266	3.5%
Improper Turn	178	3.8%	79	2.7%	0	0.0%	257	3.4%
Driving Under the Influence	61	1.3%	87	3.0%	1	10.0%	149	2.0%
Failure to Stop at Stop Sign	80	1.7%	59	2.0%	0	0.0%	139	1.8%
Reckless Driving	61	1.3%	57	1.9%	0	0.0%	118	1.6%
Hit and Run	87	1.9%	25	0.9%	0	0.0%	112	1.5%
Improper Passing	55	1.2%	13	0.4%	0	0.0%	68	0.9%
Wrong Side of Road	38	0.8%	23	0.8%	1	10.0%	62	0.8%
Improper Backing	54	1.2%	4	0.1%	0	0.0%	58	0.8%
Improper Start and Stop	24	0.5%	6	0.2%	0	0.0%	30	0.4%
Vehicle Homicide	0	0.0%	0	0.0%	4	40.0%	4	0.1%
Wrong Way on One-Way Street	0	0.0%	3	0.1%	0	0.0%	3	0.0%
<b>Total</b>	<b>4,664</b>	<b>100.0%</b>	<b>2,927</b>	<b>100.0%</b>	<b>10</b>	<b>100.0%</b>	<b>7,601</b>	<b>100.0%</b>

- In 2003, 15,957 teenage drivers were involved in crashes. Officers at the scene of the crash cited 7,601 (47.6%) of those drivers for a traffic violation. The leading violation was "failed to yield right-of-way".

## Crash Characteristics

### Contributing Factors of Teenage-Driver Crashes (Utah 2003)

Contributing Factors (Teenage Driver Crashes)								
	Teenage Driver PDO Crashes		Teenage Driver Injury Crashes		Teenage Driver Fatal Crashes		Total Teenage Driver Crashes	
Contributing Factors	#	%	#	%	#	%	#	%
Improper Lookout	2,568	26.5%	1,462	24.0%	10	13.0%	4,040	25.5%
Followed Too Closely	1,563	16.1%	937	15.4%	2	2.6%	2,502	15.8%
Failed to Yield Right of Way	1,474	15.2%	988	16.2%	4	5.2%	2,466	15.5%
Speed Too Fast	1,139	11.7%	752	12.4%	20	26.0%	1,911	12.0%
Other Improper Driving	810	8.3%	515	8.5%	6	7.8%	1,331	8.4%
Made Improper Turn	406	4.2%	151	2.5%	1	1.3%	558	3.5%
Disregard Traffic Signal	179	1.8%	241	4.0%	3	3.9%	423	2.7%
Drove Left of Center	156	1.6%	109	1.8%	8	10.4%	273	1.7%
Other Driver Distractions	112	1.2%	115	1.9%	1	1.3%	228	1.4%
Improper Overtaking	157	1.6%	53	0.9%	1	1.3%	211	1.3%
Asleep	94	1.0%	112	1.8%	5	6.5%	211	1.3%
Hit and Run	150	1.5%	55	0.9%	0	0.0%	205	1.3%
Passed Stop Sign	86	0.9%	72	1.2%	1	1.3%	159	1.0%
Driving Under the Influence	68	0.7%	89	1.5%	2	2.6%	159	1.0%
Improper Backing	144	1.5%	8	0.1%	0	0.0%	152	1.0%
Non-Contact Vehicle Involved	84	0.9%	55	0.9%	3	3.9%	142	0.9%
Object in Roadway	80	0.8%	41	0.7%	0	0.0%	121	0.8%
Fatigued	45	0.5%	48	0.8%	4	5.2%	97	0.6%
Aggressive Driving	43	0.4%	41	0.7%	0	0.0%	84	0.5%
Brakes Defective	45	0.5%	35	0.6%	0	0.0%	80	0.5%
Tires Defective	41	0.4%	24	0.4%	1	1.3%	66	0.4%
Had Been Drinking	25	0.3%	25	0.4%	1	1.3%	51	0.3%
Other Defective Condition of Vehicle	28	0.3%	21	0.3%	0	0.0%	49	0.3%
Driving Using Cell Phone	24	0.2%	22	0.4%	0	0.0%	46	0.3%
Failed to Signal	25	0.3%	8	0.1%	0	0.0%	33	0.2%
Windshield Not Clear	19	0.2%	13	0.2%	0	0.0%	32	0.2%
Wrong Side of Road	21	0.2%	9	0.1%	2	2.6%	32	0.2%
Improper Parking	16	0.2%	11	0.2%	0	0.0%	27	0.2%
Headlight Insufficient or Out	8	0.1%	12	0.2%	0	0.0%	20	0.1%
Under the Influence of Drugs	8	0.1%	11	0.2%	0	0.0%	19	0.1%
Stolen	9	0.1%	8	0.1%	1	1.3%	18	0.1%
Vehicle Rolling in Traffic Lane	8	0.1%	7	0.1%	1	1.3%	16	0.1%
Ill	3	0.0%	9	0.1%	0	0.0%	12	0.1%
Non-Collision (Fire)	9	0.1%	3	0.0%	0	0.0%	12	0.1%
Downhill Runaway	11	0.1%	1	0.0%	0	0.0%	12	0.1%
Other Lights or Reflectors Defective	5	0.1%	5	0.1%	0	0.0%	10	0.1%
Steering Mechanism Defective	8	0.1%	2	0.0%	0	0.0%	10	0.1%
Other	35	0.4%	14	0.2%	0	0.0%	49	0.3%
<b>Total</b>	<b>9,706</b>	<b>100.0%</b>	<b>6,084</b>	<b>100.0%</b>	<b>77</b>	<b>100.0%</b>	<b>15,867</b>	<b>100.0%</b>

- 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 (25.5%) and teenage-driver injury crashes (24.0%).
- "Speed too fast" was the leading contributing factor for fatal teenage-driver crashes (26.0%).



# **Speed-Related Crashes**

## **2003**





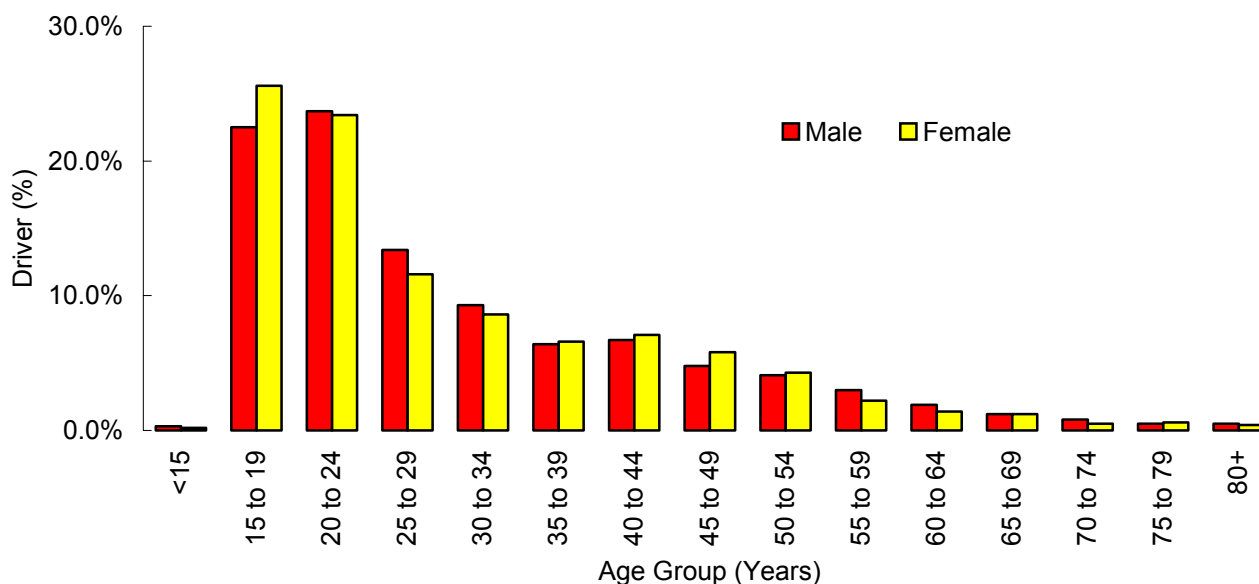
## SPEED



### Did you know that in 2003. . .

- 7,181 speed-related crashes occurred in Utah which resulted in 3,106 injuries and 80 fatalities.
- There were nearly twice as many speed-related crash fatalities (80) than alcohol and other drug-related crash fatalities (46).
- Speed-related crashes were 2.6 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 2003



- While male drivers accounted for 56.4% of all drivers involved in a crash, they were involved in two-thirds (65.3%) of speed-related crashes.
- Teenage drivers between the ages of 15 to 19 years accounted for 17.7% of all drivers involved in a crash, yet they represented 23.6% of drivers involved in a speed-related crash.

### Counties with the Highest Rates of Speed-Related Crashes, Utah 2003

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	65	57.3	Summit	254	39.0
Wasatch	147	57.2	Iron	220	35.4
Wayne	21	54.2	Salt Lake	2,747	34.4
Rich	22	50.5	Cache	273	32.9
Sevier	160	40.3	Statewide	7,181	30.0



## Section 5: Speed-Related Crashes

### Section 5: Speed-Related Crashes 2003

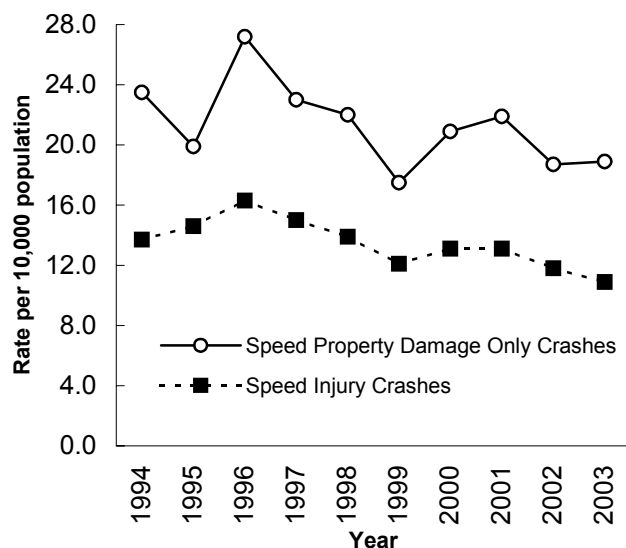
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## Trends

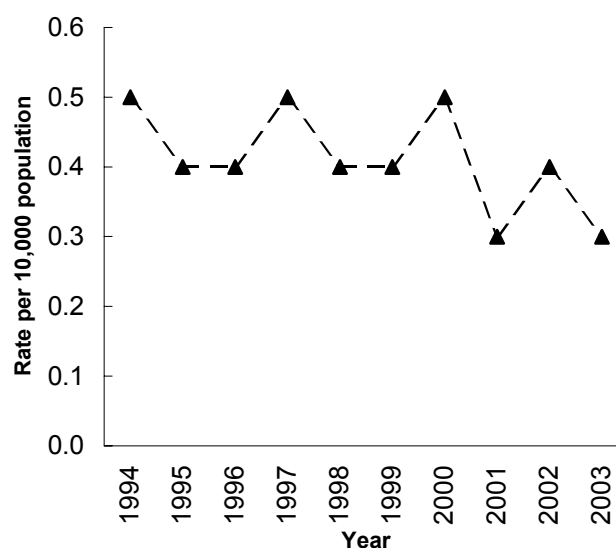
### Speed-Related Crashes 1994-2003

Speed-Related Crashes									
Year	Utah Population	Property Damage Only (PDO)		Injury		Fatal		Total	
		Speed PDO Crashes #	Rate per 10,000 Population	Speed Injury Crashes #	Rate per 10,000 Population	Speed Fatal Crashes #	Rate per 10,000 Population	All Speed Crashes #	Rate per 10,000 Population
1994	1,946,721	4,582	23.5	2,658	13.7	104	0.53	7,344	37.7
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
Total	21,685,540	46,104	21.3	28,987	13.4	907	0.42	75,998	35.0

**Speed-Related Property Damage Only and Injury Crashes (Utah 1994-2003)**



**Speed-Related Fatal Crashes (Utah 1994-2003)**



- 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.
- While speed-related property damage only crash rates increased 1.1% in 2003, the total speed-related crash rate decreased 2.6% from 2002.
- Speed-related injury crash rates decreased 7.6% from 2002; and speed-related fatal crash rates decreased 10.8%.

## Counties

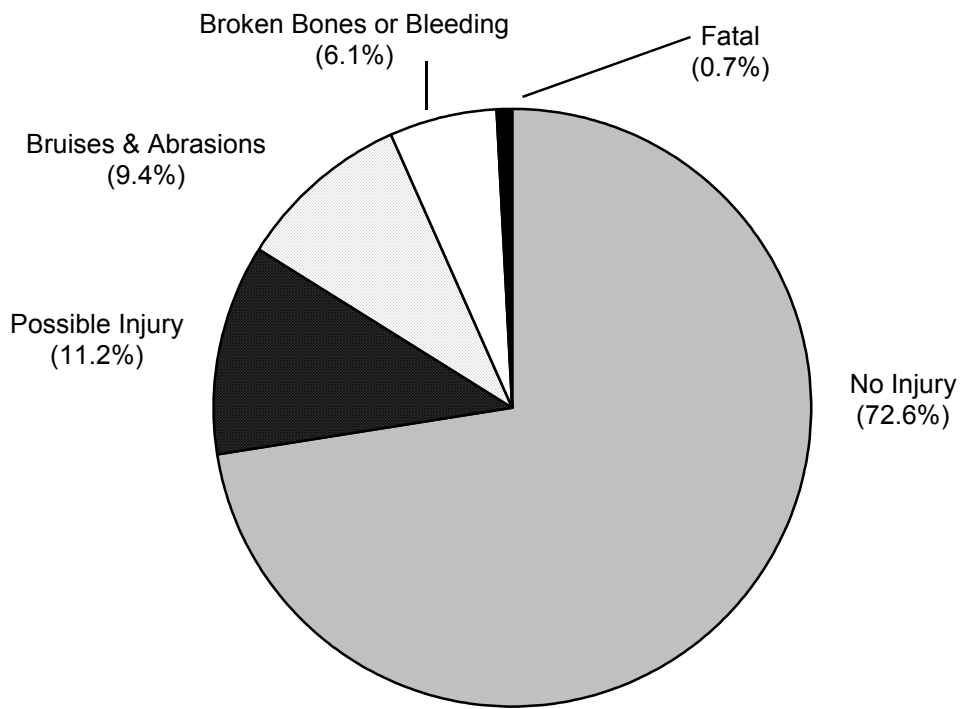
### Speed-Related Crashes by County (Utah 2003)

County	Speed-Related Crashes											
	Property Damage Only (PDO)			Injury			Fatal			Total		
	Speed PDO Crashes #	Rate per 100 Million VMT	Rate per 10,000 Population	Speed Injury Crashes #	Rate per 100 Million VMT	Rate per 10,000 Population	Speed Fatal Crashes #	Rate per 100 Million VMT	Rate per 10,000 Population	All Speed Crashes #	Rate per 100 Million VMT	Rate per 10,000 Population
Beaver	42	17.7	66.8	31	13.1	49.3	1	0.4	1.6	74	31.2	117.7
Box Elder	128	14.6	29.1	102	11.6	23.2	3	0.3	0.7	233	26.6	52.9
Cache	182	21.9	18.5	89	10.7	9.1	2	0.2	0.2	273	32.9	27.8
Carbon	29	9.7	14.8	20	6.7	10.2	1	0.3	0.5	50	16.7	25.6
Daggett	1	3.7	10.9	4	14.7	43.4	0	0.0	0.0	5	18.4	54.3
Davis	325	14.5	12.7	143	6.4	5.6	3	0.1	0.1	471	21.0	18.4
Duchesne	23	11.8	15.6	35	18.0	23.8	3	1.5	2.0	61	31.3	41.5
Emery	41	11.9	39.1	34	9.8	32.5	2	0.6	1.9	77	22.3	73.5
Garfield	17	13.7	37.5	22	17.7	48.5	0	0.0	0.0	39	31.3	86.1
Grand	22	7.9	26.0	29	10.4	34.3	3	1.1	3.5	54	19.3	63.8
Iron	101	16.2	27.8	115	18.5	31.7	4	0.6	1.1	220	35.4	60.6
Juab	56	14.8	64.3	48	12.7	55.1	1	0.3	1.1	105	27.7	120.5
Kane	13	10.7	21.9	12	9.8	20.2	3	2.5	5.1	28	23.0	47.2
Millard	77	19.0	63.1	44	10.8	36.1	5	1.2	4.1	126	31.0	103.3
Morgan	51	45.0	67.7	13	11.5	17.3	1	0.9	1.3	65	57.3	86.3
Plute	2	6.6	14.7	0	0.0	0.0	0	0.0	0.0	2	6.6	14.7
Rich	9	20.6	43.3	13	29.8	62.5	0	0.0	0.0	22	50.5	105.8
Salt Lake	1,858	23.3	19.8	883	11.1	9.4	6	0.1	0.1	2,747	34.4	29.2
San Juan	20	7.1	14.0	21	7.5	14.7	0	0.0	0.0	41	14.6	28.8
Sanpete	28	12.3	12.0	22	9.6	9.4	3	1.3	1.3	53	23.2	22.7
Sevier	102	25.7	52.8	55	13.8	28.5	3	0.8	1.6	160	40.3	82.8
Summit	166	25.5	48.7	86	13.2	25.2	2	0.3	0.6	254	39.0	74.5
Tooele	68	8.6	14.2	51	6.4	10.7	7	0.9	1.5	126	15.9	26.3
Utah	49	17.2	18.8	39	13.7	15.0	2	0.7	0.8	90	31.6	34.6
Utah	604	17.9	14.7	387	11.5	9.4	13	0.4	0.3	1,004	29.8	24.4
Wasatch	92	35.8	53.0	50	19.4	28.8	5	1.9	2.9	147	57.2	84.6
Washington	85	8.4	8.0	98	9.7	9.3	3	0.3	0.3	186	18.5	17.6
Wayne	11	28.4	44.2	10	25.8	40.2	0	0.0	0.0	21	54.2	84.4
Weber	296	19.8	14.4	148	9.9	7.2	3	0.2	0.1	447	29.9	21.7
Statewide	4,498	18.8	18.9	2,604	10.9	10.9	79	0.3	0.3	7,181	30.0	30.1

- 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:
  - Rich (29.8), Wayne (25.8) and Wasatch (19.4) had the highest rates of speed-related injury crashes per 100 million vehicle miles traveled.
  - Kane (2.5), Wasatch (1.9) and Duchesne (1.5) had the highest rates of fatal speed-related crashes per 100 million vehicle miles traveled.
- Rate per 10,000 population:
  - Rich (62.5), Juab (55.1) and Beaver (49.3) had the highest rates of speed-related injury crashes per 10,000 population.
  - Kane (5.1), Millard (4.1) 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 2003)



- In the above graph, there were a total of 11,639 persons involved in speed-related crashes.
- Over one-quarter (26.7%) of the occupants involved in speed-related crashes were injured. This compares to 21.3% of occupants who sustained an 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 2003)

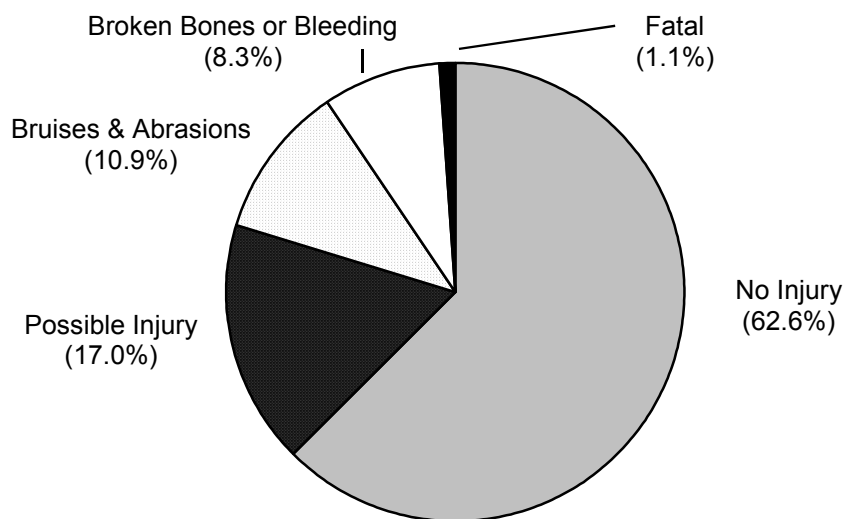
Drivers (Speed-Related)																
Age	Drivers Involved in Speed-Related Property Damage Only Crashes				Drivers Involved in Speed-Related Injury Crashes				Drivers Involved in Speed-Related Fatal Crashes				Total Drivers Involved in Speed-Related Crashes			
	Female Drivers		Male Drivers		Female Drivers		Male Drivers		Female Drivers		Male Drivers		Female Drivers		Male Drivers	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
<15	3	0.2%	7	0.2%	3	0.3%	8	0.5%	0	0.0%	1	1.7%	6	0.2%	16	0.3%
15-19	388	24.7%	659	22.0%	266	27.6%	404	23.2%	1	4.5%	16	27.6%	655	25.6%	1,079	22.5%
20-24	379	24.1%	745	24.8%	213	22.1%	383	22.0%	7	31.8%	9	15.5%	599	23.4%	1,137	23.7%
25-29	190	12.1%	427	14.2%	103	10.7%	213	12.2%	4	18.2%	6	10.3%	297	11.6%	646	13.4%
30-34	139	8.9%	279	9.3%	80	8.3%	166	9.5%	2	9.1%	3	5.2%	221	8.6%	448	9.3%
35-39	104	6.6%	205	6.8%	63	6.5%	99	5.7%	2	9.1%	4	6.9%	169	6.6%	308	6.4%
40-44	117	7.5%	183	6.1%	65	6.7%	133	7.6%	0	0.0%	7	12.1%	182	7.1%	323	6.7%
45-49	96	6.1%	137	4.6%	50	5.2%	92	5.3%	2	9.1%	2	3.4%	148	5.8%	231	4.8%
50-54	66	4.2%	127	4.2%	43	4.5%	70	4.0%	1	4.5%	1	1.7%	110	4.3%	198	4.1%
55-59	34	2.2%	75	2.5%	21	2.2%	68	3.9%	0	0.0%	1	1.7%	55	2.2%	144	3.0%
60-64	19	1.2%	57	1.9%	17	1.8%	33	1.9%	0	0.0%	2	3.4%	36	1.4%	92	1.9%
65-69	12	0.8%	33	1.1%	17	1.8%	23	1.3%	2	9.1%	4	6.9%	31	1.2%	60	1.2%
70-74	4	0.3%	23	0.8%	8	0.8%	16	0.9%	0	0.0%	0	0.0%	12	0.5%	39	0.8%
75-79	8	0.5%	11	0.4%	7	0.7%	13	0.7%	0	0.0%	1	1.7%	15	0.6%	25	0.5%
80-84	3	0.2%	9	0.3%	2	0.2%	7	0.4%	0	0.0%	1	1.7%	5	0.2%	17	0.4%
85+	2	0.1%	4	0.1%	1	0.1%	3	0.2%	1	4.5%	0	0.0%	4	0.2%	7	0.1%
Unknown	6	0.4%	20	0.7%	6	0.6%	13	0.7%	0	0.0%	0	0.0%	12	0.5%	33	0.7%
Total	1,570	100.0%	3,001	100.0%	965	100.0%	1,744	100.0%	22	100.0%	58	100.0%	2,557	100.0%	4,803	100.0%

NOTE: Gender was not reported for 155 drivers involved in speed-related crashes.

- Overall, male drivers represented 65.3% 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 (23.7%), while those aged 15 to 19 years had the highest percentage of speed-related injury crashes (23.2%), and fatal crashes (27.6%).
- For female drivers, those aged 15 to 19 years had the highest percentage of total speed-related crashes (25.6%) as well as speed-related injury crashes (27.6%). Female drivers aged 20 to 24 years had the highest percentage of fatal speed-related crashes (31.8%).

## Crash Characteristics

### Speed-Related Crash Severity (Utah 2003)



- In the above graph, there were a total of 7,181 speed-related crashes.
- The percentage of speed-related crashes that resulted in an injury (36.2%) was similar to the percentage of all motor vehicle crashes that resulted in at least one injury (36.3%).
- In addition, a higher percentage of speed-related crashes were fatal (1.1%) compared to all fatal motor vehicle crashes (0.5%).
- In fact, speed-related crashes were 2.6 times more likely to be fatal than other motor vehicle crashes.

### Speed-Related Crashes by Month of Year (Utah 2003)

Speed-Related Crashes									
Month	Days in Month #	Property Damage Only (PDO)		Injury		Fatal		Total	
		Speed-Related PDO Crashes #	Rate per Day	Speed-Related Injury Crashes #	Rate per Day	Speed-Related Fatal Crashes #	Rate per Day	All Speed-Related Crashes #	Rate per Day
January	31	265	8.5	162	5.2	5	0.2	432	13.9
February	28	589	21.0	243	8.7	5	0.2	837	29.9
March	31	357	11.5	194	6.3	5	0.2	556	17.9
April	30	270	9.0	217	7.2	6	0.2	493	16.4
May	31	219	7.1	194	6.3	5	0.2	418	13.5
June	30	172	5.7	166	5.5	11	0.4	349	11.6
July	31	144	4.6	148	4.8	7	0.2	299	9.6
August	31	167	5.4	164	5.3	9	0.3	340	11.0
September	30	201	6.7	154	5.1	8	0.3	363	12.1
October	31	308	9.9	219	7.1	5	0.2	532	17.2
November	30	769	25.6	324	10.8	7	0.2	1,100	36.7
December	31	1,037	33.5	419	13.5	6	0.2	1,462	47.2
<b>Total</b>	<b>365</b>	<b>4,498</b>	<b>12.3</b>	<b>2,604</b>	<b>7.1</b>	<b>79</b>	<b>0.2</b>	<b>7,181</b>	<b>19.7</b>

- The above table shows the number and rate per day of speed-related crashes for each month.
- Overall, December (47.2), November (36.7) and February (29.9) had the highest rates of speed-related crashes per day.
- June had the highest rate per day of fatal speed-related crashes (0.4).

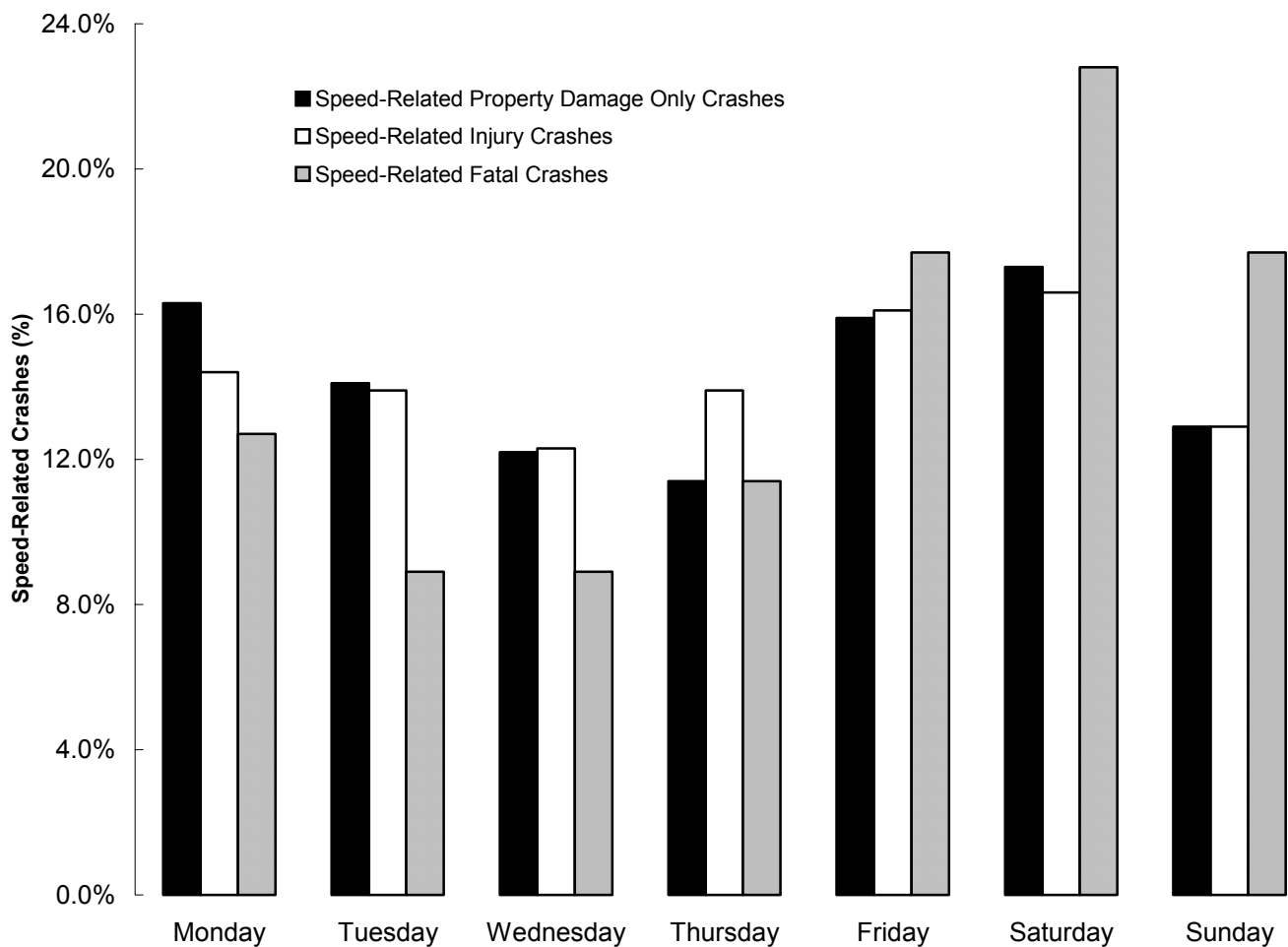


## Crash Characteristics

### Speed-Related Crashes by Day of Week (Utah 2003)

Speed-Related Crashes								
Day of Week	Property Damage Only Crashes		Injury Crashes		Fatal Crashes		Total Crashes	
	#	%	#	%	#	%	#	%
Monday	734	16.3%	374	14.4%	10	12.7%	1,118	15.6%
Tuesday	632	14.1%	361	13.9%	7	8.9%	1,000	13.9%
Wednesday	548	12.2%	321	12.3%	7	8.9%	876	12.2%
Thursday	514	11.4%	361	13.9%	9	11.4%	884	12.3%
Friday	716	15.9%	419	16.1%	14	17.7%	1,149	16.0%
Saturday	776	17.3%	432	16.6%	18	22.8%	1,226	17.1%
Sunday	578	12.9%	336	12.9%	14	17.7%	928	12.9%
Total	4,498	100.0%	2,604	100.0%	79	100.0%	7,181	100.0%

### Speed-Related Crashes by Day of Week (Utah 2003)



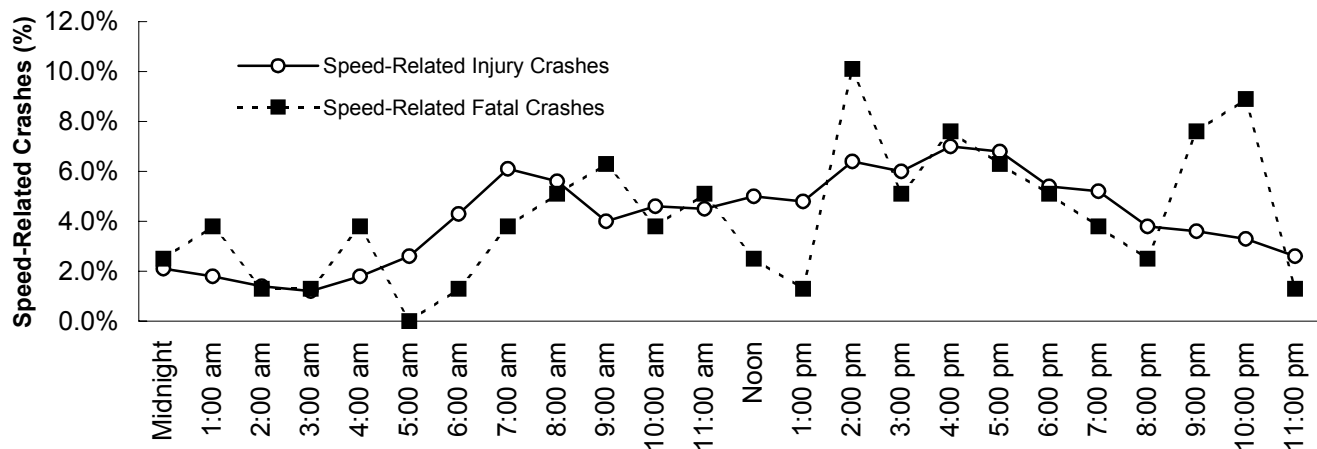
- The above table and graph show that the highest percentage of speed-related total crashes (17.1%), property damage only crashes (17.3%), injury crashes (16.6%) and fatal crashes (22.8%) occurred on Saturday.
- The lowest percentage of fatal speed-related crashes occurred on Tuesday (8.9%) and Wednesday (8.9%).

## Crash Characteristics

### Speed-Related Crashes by Hour of Day (Utah 2003)

Speed-Related Crashes							
Hour	Property Damage Only Crashes		Injury Crashes		Fatal Crashes		Total Crashes
	#	%	#	%	#	%	# %
Midnight	100	2.2%	55	2.1%	2	2.5%	157 2.2%
1:00 am	76	1.7%	48	1.8%	3	3.8%	127 1.8%
2:00 am	66	1.5%	36	1.4%	1	1.3%	103 1.4%
3:00 am	57	1.3%	32	1.2%	1	1.3%	90 1.3%
4:00 am	59	1.3%	46	1.8%	3	3.8%	108 1.5%
5:00 am	115	2.6%	69	2.6%	0	0.0%	184 2.6%
6:00 am	198	4.4%	113	4.3%	1	1.3%	312 4.3%
7:00 am	300	6.7%	158	6.1%	3	3.8%	461 6.4%
8:00 am	327	7.3%	146	5.6%	4	5.1%	477 6.6%
9:00 am	244	5.4%	105	4.0%	5	6.3%	354 4.9%
10:00 am	192	4.3%	119	4.6%	3	3.8%	314 4.4%
11:00 am	241	5.4%	116	4.5%	4	5.1%	361 5.0%
Noon	222	4.9%	130	5.0%	2	2.5%	354 4.9%
1:00 pm	198	4.4%	126	4.8%	1	1.3%	325 4.5%
2:00 pm	217	4.8%	166	6.4%	8	10.1%	391 5.4%
3:00 pm	261	5.8%	157	6.0%	4	5.1%	422 5.9%
4:00 pm	304	6.8%	181	7.0%	6	7.6%	491 6.8%
5:00 pm	293	6.5%	178	6.8%	5	6.3%	476 6.6%
6:00 pm	235	5.2%	141	5.4%	4	5.1%	380 5.3%
7:00 pm	201	4.5%	135	5.2%	3	3.8%	339 4.7%
8:00 pm	177	3.9%	100	3.8%	2	2.5%	279 3.9%
9:00 pm	165	3.7%	93	3.6%	6	7.6%	264 3.7%
10:00 pm	128	2.8%	87	3.3%	7	8.9%	222 3.1%
11:00 pm	122	2.7%	67	2.6%	1	1.3%	190 2.6%
Total	4,498	100.0%	2,604	100.0%	79	100.0%	7,181 100.0%

### Speed-Related Crashes by Hour of Day (Utah 2003)



- The above table and graph show that speed-related injury crashes peaked in the late afternoon (2:00 pm to 5:00 pm), with a small peak at 7:00 am.
- Fatal speed-related crashes varied by hour, but like injury crashes, peaked in the late afternoon (2:00 pm to 5:00 pm), with another peak between 9:00 pm and 10:00 pm.

# **Motorcycles**

## **2003**



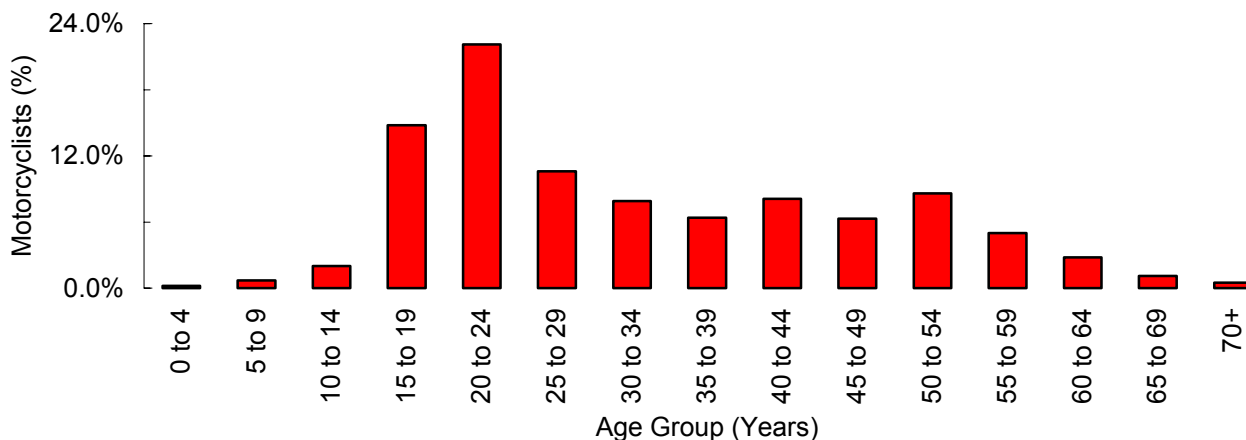
## MOTORCYCLES



### Did you know that in 2003. . .

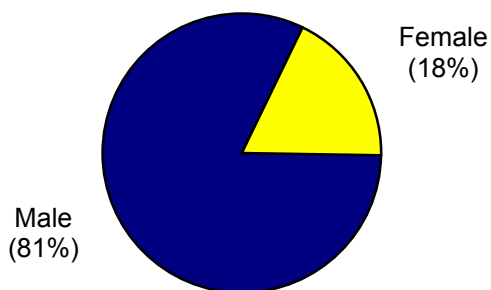
- There were 766 total motorcycle crashes in Utah, resulting in 730 injured persons and 22 fatalities.
- There was a 5.9% decrease from 2002 in the rate of total motorcycle crashes, and a 3.4% decrease from 2002 in the rate of motorcycle injury crashes.
- Nearly all of the motorcycle crashes resulted in an injury (86.2%) compared to 36.3% of all motor vehicle crashes.
- Fatalities were 12 times higher for motorcyclists than for other motor vehicle crash occupants.

### Age of Motorcyclists (Driver and Passenger) Involved in Crashes, Utah 2003



- Over one-half (50.4%) 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 (22.1%).

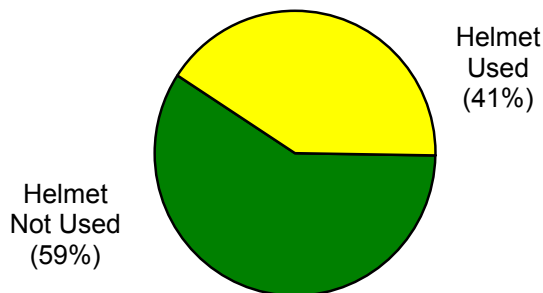
### Gender of Motorcyclists Involved in Crashes, Utah 2003



NOTE: Gender was missing for 1% of motorcyclists.

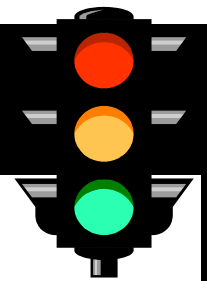
- Most motorcyclists involved in crashes were male (81%).
- The high percentage of male motorcyclists involved in crashes does not necessarily indicate that male motorcyclists are at greater risk for a crash, but may reflect the higher proportion of motorcycle users who are male.

### Helmet Use of Motorcyclists Killed in a Crash, Utah 2003

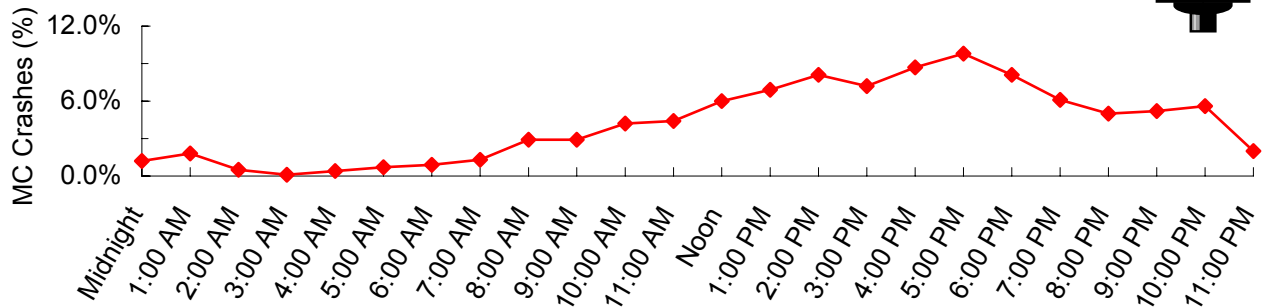


- The majority of the motorcyclists killed in a crash were not wearing a helmet (59%).
- Overall, only 35.4% of motorcycle drivers and passengers involved in crashes wore a helmet.
- Utah law states that anyone under the age of 18 years riding a motorcycle, either as the driver or as a passenger, must wear a helmet approved by the Department of Public Safety.

## MOTORCYCLES

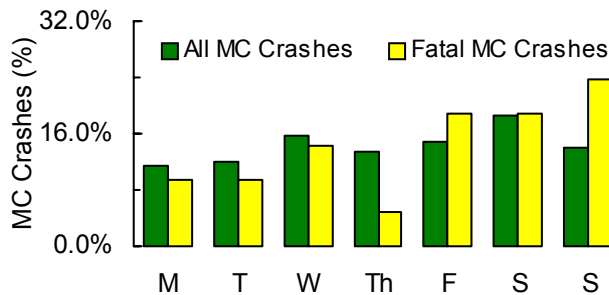


**Time of Day Motorcycle Crashes Occurred, Utah 2003**



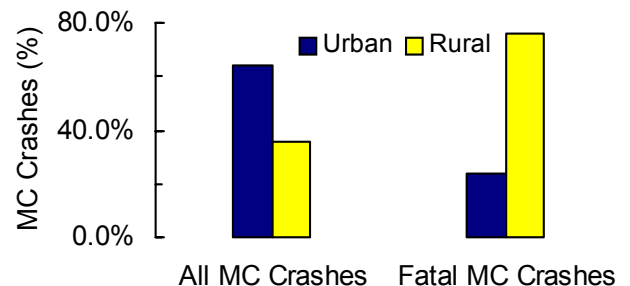
- The highest percentage of motorcycle crashes occurred between 2:00 pm and 6:00 pm.

**Motorcycle Crashes by Day of Week, Utah 2003**



- The highest percentage of all motorcycle crashes occurred on Saturday (18.7%).
- Fatal motorcycle crashes occurred most frequently on Sunday (23.8%).

**Urban/Rural Location of Motorcycle Crashes, Utah 2003**



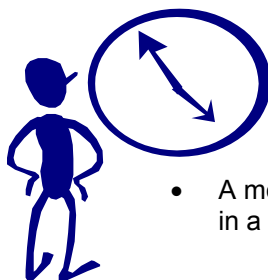
- The majority of all motorcycle crashes occurred in urban areas (64.2%).
- The largest percentage of fatal motorcycle crashes occurred in rural areas (76.2%).
- Motorcycle crashes in rural areas were 13 times more likely to result in a fatality than motorcycle crashes in urban areas.

**Leading Motorcycle Crash Violations, Utah 2003**

- Speeding (12.7%)
- Driving under the influence (9.6%)
- Following too close (7.6%)
- Reckless driving (7.1%)
- Improper lookout (5.6%)

Approximately one-quarter (25.3%) of the motorcycle drivers involved in crashes received a citation. However, no citations were given to motorcycle drivers involved in fatal crashes.

**Motorcycle Crash Clock**



- A motorcyclist was involved in a crash every 60 minutes.

**Alcohol and Other Drug Involvement**



- Of the 22 motorcycle drivers and motorcycle passengers killed in 2003, 1 motorcycle driver was impaired by alcohol or other drugs.

## Section 6: Motorcycles

### Section 6: Motorcycles 2003

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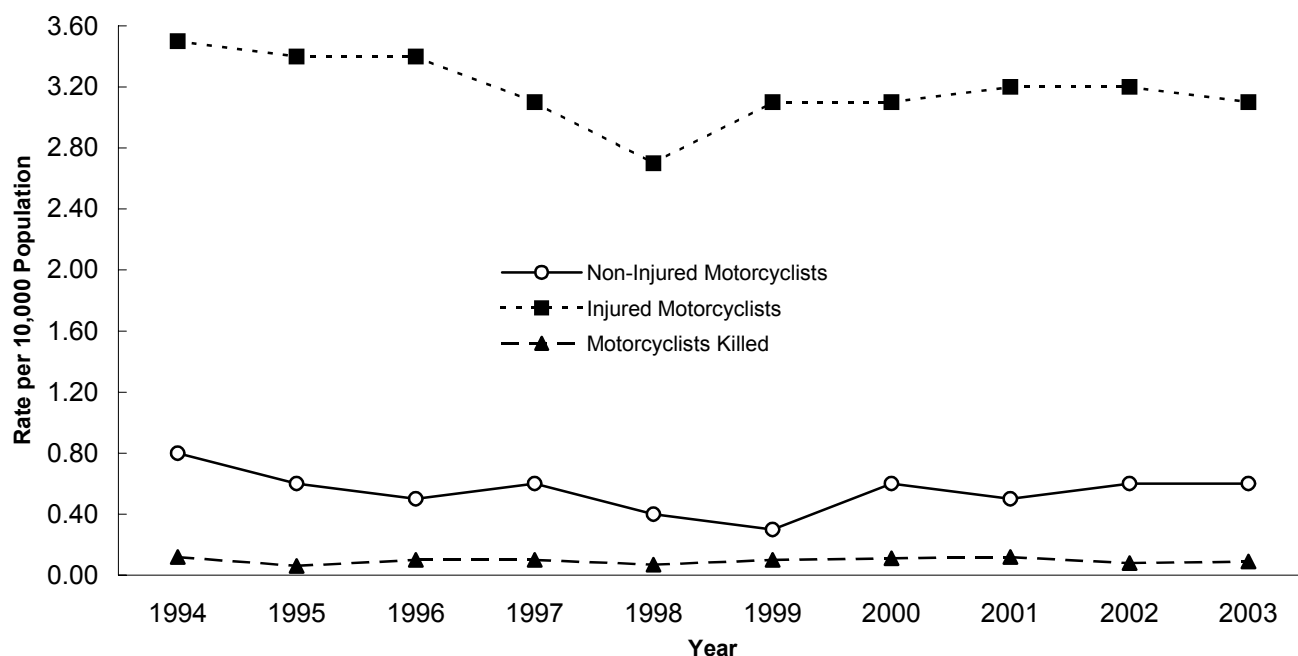
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## Trends

### Motorcyclists Involved in Crashes 1994-2003

Motorcyclists (Driver and Passenger)									
Year	Population	Non-Injured Persons		Injured Persons		Persons Killed		Total Persons	
		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
		#	Population	#	Population	#	Population	#	Population
1994	1,946,721	156	0.8	674	3.5	24	0.12	854	4.4
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
Total	21,685,540	1,188	0.5	6,871	3.2	207	0.10	8,266	3.8

### Motorcyclists Involved in Crashes (Driver and Passenger) (Utah 1994-2003)



- The above table and graph show the trends in motorcyclists (driver and passenger) involved in crashes from 1994 to 2003.
- Overall, the rate of motorcyclists involved in crashes decreased from 1994 to 1998, with the lowest rate of motorcyclists involved in crashes occurring in 1998 (3.2).
- In 2003, there was a 5.1% decrease in the rate of total motorcyclists involved in crashes and a 3.1% decrease in the rate of motorcyclists injured in crashes from 2002.
- While motorcyclists killed in crashes vary from year to year, the small number of fatalities makes it difficult to compare yearly increases and decreases.

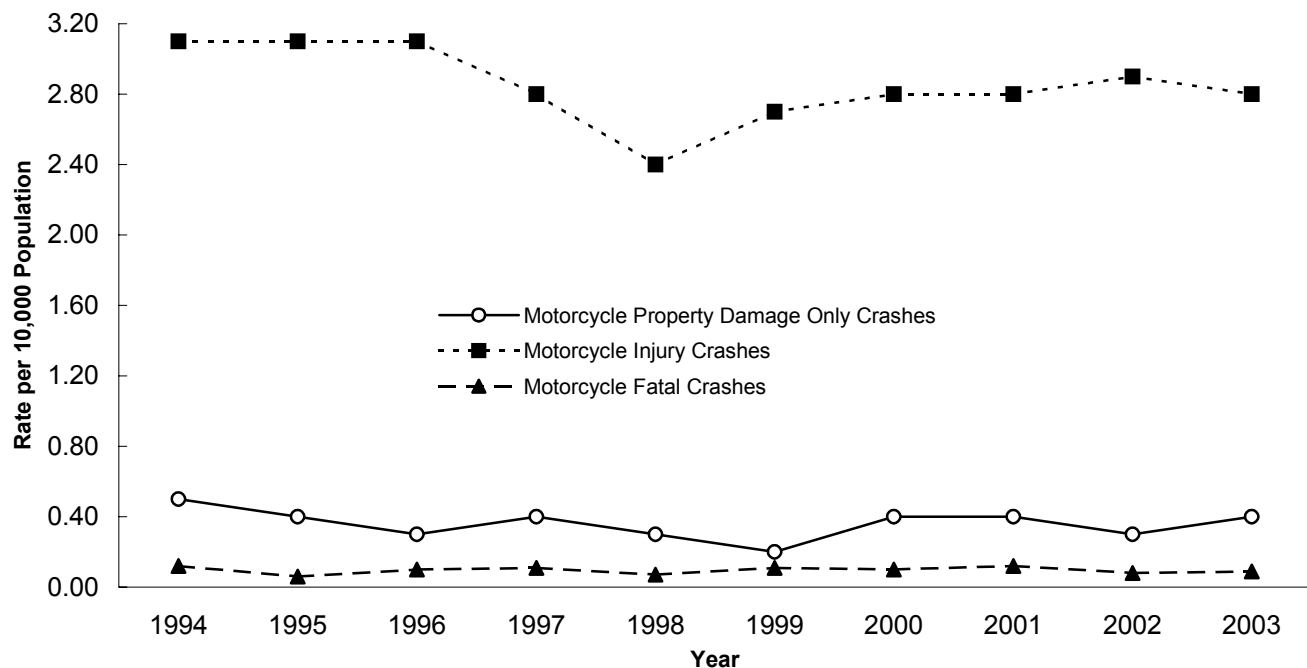


## Trends

### Motorcycle Crashes 1994-2003

Motorcycle Crashes									
Year	Population	Property Damage Only (PDO)		Injury		Fatal		Total	
		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
		#	Population	#	Population	#	Population	#	Population
1994	1,946,721	96	0.5	597	3.1	24	0.12	717	3.7
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
Total	21,685,540	781	0.4	6,164	2.8	206	0.09	7,151	3.3

### Motorcycle Crashes (Utah 1994-2003)



- The above table and graph show the trends in motorcycle crashes from 1994 to 2003.
- Overall, the rate of motorcycle crashes decreased from 1994 to 1998, with the lowest rate of motorcycle crashes occurring in 1998 (2.8).
- In 2003, there was a 5.9% decrease in the rate of total motorcycle crashes and a 3.4% decrease in the rate of motorcycle injury crashes from 2002.
- 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 2003)

Motorcyclists (Driver and Passenger)												
	Non-Injured Persons			Injured Persons			Persons Killed			Total Persons		
	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	#	VT	Population	#	VT	Population	#	VT	Population	#	VT	Population
Beaver	1	0.4	1.6	4	1.7	6.4	0	0.0	0.0	5	2.1	8.0
Box Elder	4	0.5	0.9	8	0.9	1.8	0	0.0	0.0	12	1.4	2.7
Cache	7	0.8	0.7	28	3.4	2.9	0	0.0	0.0	35	4.2	3.6
Carbon	1	0.3	0.5	6	2.0	3.1	0	0.0	0.0	7	2.3	3.6
Daggett	0	0.0	0.0	1	3.7	10.9	0	0.0	0.0	1	3.7	10.9
Davis	9	0.4	0.4	45	2.0	1.8	1	0.0	0.0	55	2.5	2.1
Duchesne	1	0.5	0.7	8	4.1	5.4	1	0.5	0.7	10	5.1	6.8
Emery	1	0.3	1.0	5	1.4	4.8	2	0.6	1.9	8	2.3	7.6
Garfield	2	1.6	4.4	10	8.0	22.1	0	0.0	0.0	12	9.6	26.5
Grand	1	0.4	1.2	7	2.5	8.3	0	0.0	0.0	8	2.9	9.5
Iron	3	0.5	0.8	16	2.6	4.4	0	0.0	0.0	19	3.1	5.2
Juab	2	0.5	2.3	3	0.8	3.4	0	0.0	0.0	5	1.3	5.7
Kane	2	1.6	3.4	6	4.9	10.1	2	1.6	3.4	10	8.2	16.8
Millard	2	0.5	1.6	2	0.5	1.6	0	0.0	0.0	4	1.0	3.3
Morgan	3	2.6	4.0	7	6.2	9.3	1	0.9	1.3	11	9.7	14.6
Piute	0	0.0	0.0	1	3.3	7.4	0	0.0	0.0	1	3.3	7.4
Rich	0	0.0	0.0	9	20.6	43.3	0	0.0	0.0	9	20.6	43.3
Salt Lake	62	0.8	0.7	257	3.2	2.7	5	0.1	0.1	324	4.1	3.4
San Juan	1	0.4	0.7	12	4.3	8.4	0	0.0	0.0	13	4.6	9.1
Sanpete	0	0.0	0.0	2	0.9	0.9	1	0.4	0.4	3	1.3	1.3
Sevier	1	0.3	0.5	5	1.3	2.6	0	0.0	0.0	6	1.5	3.1
Summit	0	0.0	0.0	11	1.7	3.2	1	0.2	0.3	12	1.8	3.5
Tooele	1	0.1	0.2	15	1.9	3.1	0	0.0	0.0	16	2.0	3.3
Uintah	0	0.0	0.0	12	4.2	4.6	0	0.0	0.0	12	4.2	4.6
Utah	16	0.5	0.4	134	4.0	3.3	1	0.0	0.0	151	4.5	3.7
Wasatch	0	0.0	0.0	7	2.7	4.0	4	1.6	2.3	11	4.3	6.3
Washington	6	0.6	0.6	35	3.5	3.3	1	0.1	0.1	42	4.2	4.0
Wayne	0	0.0	0.0	5	12.9	20.1	0	0.0	0.0	5	12.9	20.1
Weber	8	0.5	0.4	69	4.6	3.4	2	0.1	0.1	79	5.3	3.8
Statewide	134	0.6	0.6	730	3.0	3.1	22	0.1	0.1	886	3.7	3.7

- 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:
  - Rich (20.6), Wayne (12.9) and Garfield (8.0) had the highest rates of motorcyclists injured in crashes per 100 million vehicle miles traveled.
  - Kane (1.6), Wasatch (1.6) and Morgan (0.9) had the highest rates of motorcyclists killed in crashes per 100 million vehicle miles traveled.
- Rate per 10,000 population:
  - Rich (43.3), Garfield (22.1) and Wayne (20.1) had the highest rates of motorcyclists injured in crashes per 10,000 population.
  - Kane (3.4), Wasatch (2.3) and Emery (1.9) had the highest rates of motorcyclists killed in crashes per 10,000 population.

## Counties

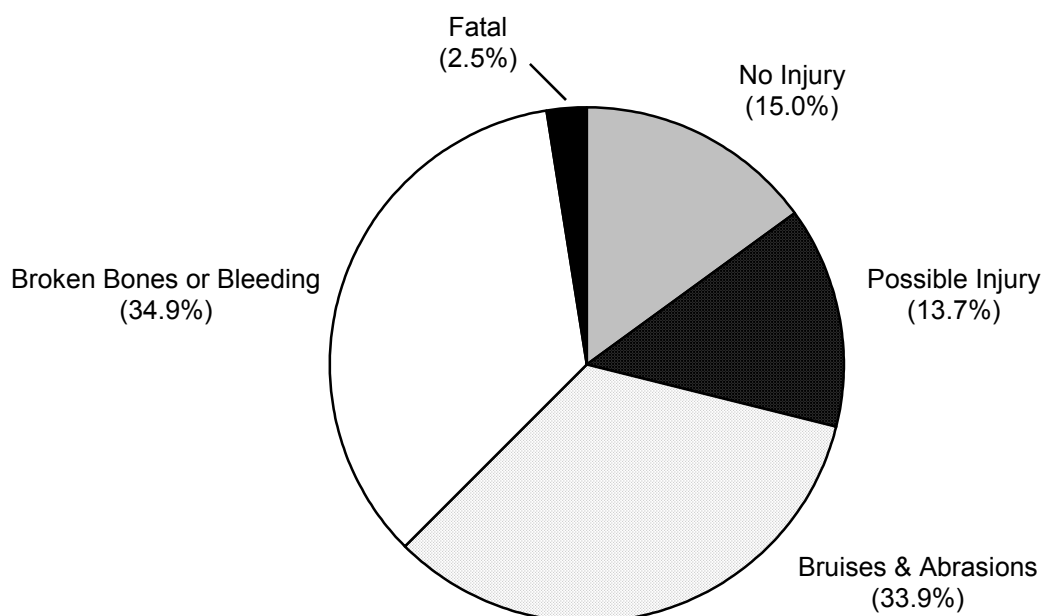
### Motorcycle Crashes by County (Utah 2003)

Motorcycle Crashes												
County	Property Damage Only (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	Crashes	Million	10,000	Crashes	Million	10,000	Crashes	Million	10,000
	#	VTM	Population	#	VTM	Population	#	VTM	Population	#	VTM	Population
Beaver	0	0.0	0.0	4	1.7	6.4	0	0.0	0.0	4	1.7	6.4
Box Elder	1	0.1	0.2	9	1.0	2.0	0	0.0	0.0	10	1.1	2.3
Cache	6	0.7	0.6	25	3.0	2.5	0	0.0	0.0	31	3.7	3.2
Carbon	1	0.3	0.5	5	1.7	2.6	0	0.0	0.0	6	2.0	3.1
Daggett	0	0.0	0.0	1	3.7	10.9	0	0.0	0.0	1	3.7	10.9
Davis	4	0.2	0.2	41	1.8	1.6	1	0.0	0.0	46	2.1	1.8
Duchesne	0	0.0	0.0	7	3.6	4.8	1	0.5	0.7	8	4.1	5.4
Emery	1	0.3	1.0	3	0.9	2.9	2	0.6	1.9	6	1.7	5.7
Garfield	1	0.8	2.2	9	7.2	19.9	0	0.0	0.0	10	8.0	22.1
Grand	1	0.4	1.2	7	2.5	8.3	0	0.0	0.0	8	2.9	9.5
Iron	3	0.5	0.8	13	2.1	3.6	1	0.2	0.3	17	2.7	4.7
Juab	2	0.5	2.3	2	0.5	2.3	0	0.0	0.0	4	1.1	4.6
Kane	1	0.8	1.7	5	4.1	8.4	1	0.8	1.7	7	5.7	11.8
Millard	2	0.5	1.6	2	0.5	1.6	0	0.0	0.0	4	1.0	3.3
Morgan	2	1.8	2.7	6	5.3	8.0	1	0.9	1.3	9	7.9	11.9
Piute	0	0.0	0.0	1	3.3	7.4	0	0.0	0.0	1	3.3	7.4
Rich	0	0.0	0.0	6	13.8	28.9	0	0.0	0.0	6	13.8	28.9
Salt Lake	39	0.5	0.4	242	3.0	2.6	5	0.1	0.1	286	3.6	3.0
San Juan	1	0.4	0.7	10	3.6	7.0	0	0.0	0.0	11	3.9	7.7
Sanpete	0	0.0	0.0	2	0.9	0.9	1	0.4	0.4	3	1.3	1.3
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	10	1.5	2.9	1	0.2	0.3	11	1.7	3.2
Tooele	1	0.1	0.2	13	1.6	2.7	0	0.0	0.0	14	1.8	2.9
Uintah	0	0.0	0.0	10	3.5	3.8	0	0.0	0.0	10	3.5	3.8
Utah	6	0.2	0.1	118	3.5	2.9	1	0.0	0.0	125	3.7	3.0
Wasatch	0	0.0	0.0	4	1.6	2.3	3	1.2	1.7	7	2.7	4.0
Washington	5	0.5	0.5	32	3.2	3.0	1	0.1	0.1	38	3.8	3.6
Wayne	1	2.6	4.0	5	12.9	20.1	0	0.0	0.0	6	15.5	24.1
Weber	6	0.4	0.3	65	4.4	3.2	2	0.1	0.1	73	4.9	3.5
Statewide	84	0.4	0.4	661	2.8	2.8	21	0.1	0.1	766	3.2	3.2

- 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:
  - Rich (13.8), Wayne (12.9) and Garfield (7.2) had the highest rates of motorcycle injury crashes per 100 million vehicle miles traveled.
  - Wasatch (1.2), Morgan (0.9) and Kane (0.8) had the highest rates of fatal motorcycle crashes per 100 million vehicle miles traveled.
- Rate per 10,000 population:
  - Rich (28.9), Wayne (20.1) and Garfield (19.9) had the highest rates of motorcycle injury crashes per 10,000 population.
  - Emery (1.9), Kane (1.7) and Wasatch (1.7) 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 2003)



- In the above graph, there were a total of 886 motorcyclists involved in crashes.
- The above graph shows that the percentage of injured motorcyclists (82.5%) was much higher than the percentage of occupants injured in all motor vehicle crashes (21.3%).
- A fatal injury was sustained by 2.5% of motorcyclists compared to 0.2% of all motor vehicle crash occupants. In fact, fatalities were 12 times higher for motorcyclists than for other motor vehicle crash occupants.

### Occupant Placement of Motorcyclists Involved in Crashes (Utah 2003)

Motorcyclists (Driver and Passenger)								
Occupant Placement	Non-Injured Motorcyclists		Injured Motorcyclists		Motorcyclists Killed		Total Motorcyclists	
	#	%	#	%	#	%	#	%
Driver	112	83.6%	644	88.2%	20	90.9%	776	87.6%
Passenger	22	16.4%	86	11.8%	2	9.1%	110	12.4%
<b>Total</b>	<b>134</b>	<b>100.0%</b>	<b>730</b>	<b>100.0%</b>	<b>22</b>	<b>100.0%</b>	<b>886</b>	<b>100.0%</b>

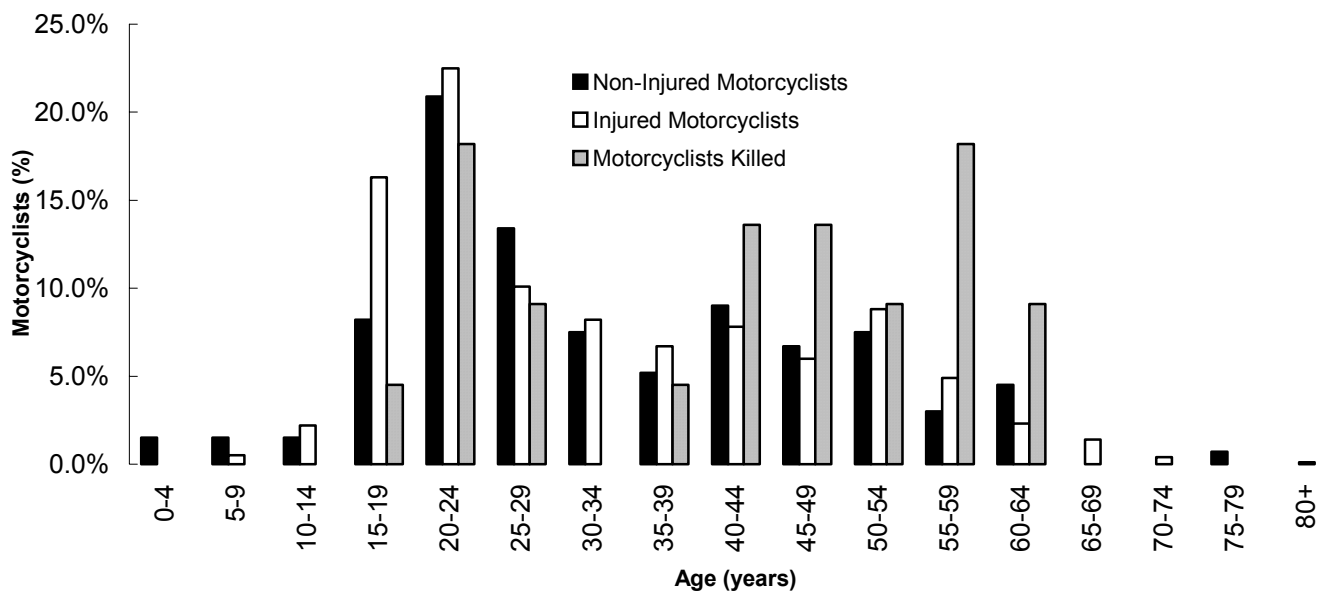
- The above table shows that drivers accounted for the majority of injured motorcyclists (88.2%) and 90.9% of the motorcyclist fatalities.
- In addition, there were 8 pedestrians and 1 bicyclist involved in motorcycle crashes. One pedestrian was killed in the crash, while the other pedestrians and bicyclist sustained non-fatal injuries.

## Motorcyclist Characteristics (Driver and Passenger)

### Age of Motorcyclists Involved in Crashes (Utah 2003)

Motorcyclists (Driver and Passenger)								
	Non-Injured Motorcyclists		Injured Motorcyclists		Motorcyclists Killed		Total Motorcyclists	
Age	#	%	#	%	#	%	#	%
0-4	2	1.5%	0	0.0%	0	0.0%	2	0.2%
5-9	2	1.5%	4	0.5%	0	0.0%	6	0.7%
10-14	2	1.5%	16	2.2%	0	0.0%	18	2.0%
15-19	11	8.2%	119	16.3%	1	4.5%	131	14.8%
20-24	28	20.9%	164	22.5%	4	18.2%	196	22.1%
25-29	18	13.4%	74	10.1%	2	9.1%	94	10.6%
30-34	10	7.5%	60	8.2%	0	0.0%	70	7.9%
35-39	7	5.2%	49	6.7%	1	4.5%	57	6.4%
40-44	12	9.0%	57	7.8%	3	13.6%	72	8.1%
45-49	9	6.7%	44	6.0%	3	13.6%	56	6.3%
50-54	10	7.5%	64	8.8%	2	9.1%	76	8.6%
55-59	4	3.0%	36	4.9%	4	18.2%	44	5.0%
60-64	6	4.5%	17	2.3%	2	9.1%	25	2.8%
65-69	0	0.0%	10	1.4%	0	0.0%	10	1.1%
70-74	0	0.0%	3	0.4%	0	0.0%	3	0.3%
75-79	1	0.7%	0	0.0%	0	0.0%	1	0.1%
80+	0	0.0%	1	0.1%	0	0.0%	1	0.1%
Missing	12	9.0%	12	1.6%	0	0.0%	24	2.7%
Total	134	100.0%	730	100.0%	22	100.0%	886	100.0%

### Age of Motorcyclists Involved in Crashes (Utah 2003)



- Overall, the largest percentage of motorcyclists involved in crashes were aged 20 to 24 years (22.1%). This age group also represented the largest percentage of injured motorcyclists involved in crashes (22.5%).
- The highest percentage of motorcyclist fatalities occurred in the 20 to 24 year age group (18.2%) and the 55 to 59 year age group (18.2%).

## Motorcyclist Characteristics (Driver and Passenger)

### Gender of Motorcyclists Involved in Crashes (Utah 2003)

Motorcyclists (Driver and Passenger)								
	Non-Injured Motorcyclists		Injured Motorcyclists		Motorcyclists Killed		Total Motorcyclists	
Gender	#	%	#	%	#	%	#	%
Female	31	23.1%	121	16.6%	4	18.2%	156	17.6%
Male	95	70.9%	605	82.9%	18	81.8%	718	81.0%
Missing	8	6.0%	4	0.5%	0	0.0%	12	1.4%
Total	134	100.0%	730	100.0%	22	100.0%	886	100.0%

- The majority of all motorcyclists (81.0%), injured motorcyclists (82.9%) and motorcyclists killed (81.8%) in crashes were male.

### Helmet Use of Motorcyclists Involved in Crashes (Utah 2003)

Motorcyclists (Driver and Passenger)								
	Non-Injured Motorcyclists		Injured Motorcyclists		Motorcyclists Killed		Total Motorcyclists	
Helmet Use	#	%	#	%	#	%	#	%
Helmet Worn	35	26.1%	270	37.0%	9	40.9%	314	35.4%
Helmet Not Worn / Unknown	99	73.9%	460	63.0%	13	59.1%	572	64.6%
Total	134	100.0%	730	100.0%	22	100.0%	886	100.0%

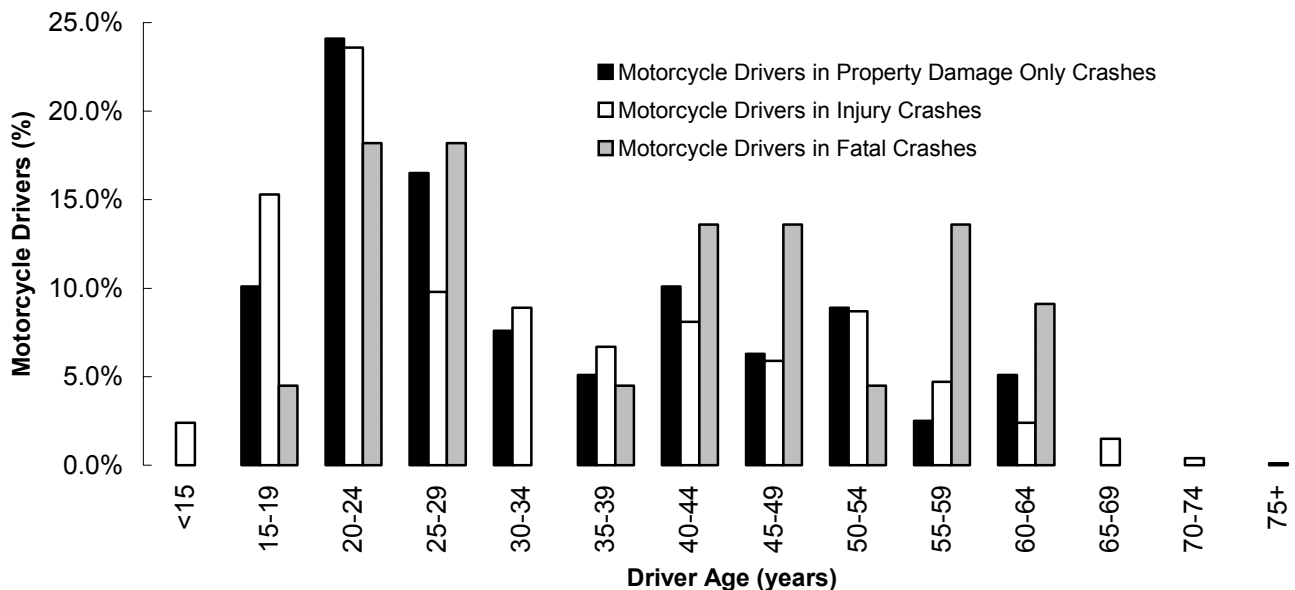
- Only 35.4% of motorcycle drivers and passengers involved in crashes wore a helmet.
- The percentage of helmet use was slightly higher for those motorcycle drivers and passengers injured in a crash (37.0%), as well as those killed in a crash (40.9%).
- Utah law states that anyone under the age of 18 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 2003)

Motorcycle Drivers								
	Motorcycle Drivers Involved in Property Damage Only Crashes		Motorcycle Drivers Involved in Injury Crashes		Motorcycle Drivers Involved in Fatal Crashes		Total Motorcycle Drivers Involved in Crashes	
Driver Age	#	%	#	%	#	%	#	%
<15	0	0.0%	16	2.4%	0	0.0%	16	2.1%
15-19	8	10.1%	103	15.3%	1	4.5%	112	14.4%
20-24	19	24.1%	159	23.6%	4	18.2%	182	23.5%
25-29	13	16.5%	66	9.8%	4	18.2%	83	10.7%
30-34	6	7.6%	60	8.9%	0	0.0%	66	8.5%
35-39	4	5.1%	45	6.7%	1	4.5%	50	6.4%
40-44	8	10.1%	55	8.1%	3	13.6%	66	8.5%
45-49	5	6.3%	40	5.9%	3	13.6%	48	6.2%
50-54	7	8.9%	59	8.7%	1	4.5%	67	8.6%
55-59	2	2.5%	32	4.7%	3	13.6%	37	4.8%
60-64	4	5.1%	16	2.4%	2	9.1%	22	2.8%
65-69	0	0.0%	10	1.5%	0	0.0%	10	1.3%
70-74	0	0.0%	3	0.4%	0	0.0%	3	0.4%
75+	0	0.0%	1	0.1%	0	0.0%	1	0.1%
Missing	3	3.8%	10	1.5%	0	0.0%	13	1.7%
Total	79	100.0%	675	100.0%	22	100.0%	776	100.0%

### Age of Motorcycle Drivers Involved in Crashes (Utah 2003)



- The above table and graph show that over one-half (50.7%) 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 (23.6%).
- The percentage of drivers involved in fatal crashes was highest for those aged 20 to 24 years (18.2%) and 25 to 29 years (18.2%).

## Motorcycle Driver Characteristics

### Motorcycle Driver Gender (Utah 2003)

Motorcycle Drivers								
	Motorcycle Drivers Involved in Property Damage Only Crashes		Motorcycle Drivers Involved in Injury Crashes		Motorcycle Drivers Involved in Fatal Crashes		Total Motorcycle Drivers Involved in Crashes	
Driver Gender	#	%	#	%	#	%	#	%
Female	11	13.9%	56	8.3%	2	9.1%	69	8.9%
Male	65	82.3%	611	90.5%	20	90.9%	696	89.7%
Missing	3	3.8%	8	1.2%	0	0.0%	11	1.4%
<b>Total</b>	<b>79</b>	<b>100.0%</b>	<b>675</b>	<b>100.0%</b>	<b>22</b>	<b>100.0%</b>	<b>776</b>	<b>100.0%</b>

- The majority of motorcycle drivers involved in total crashes (89.7%), injury crashes (90.5%) and fatal crashes (90.9%) 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 2003)

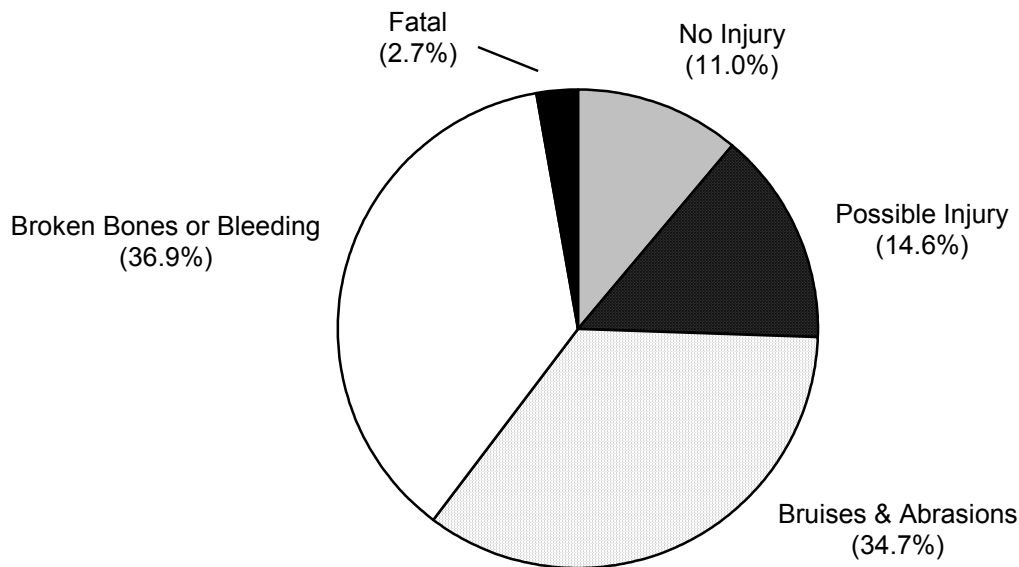


- Of the 22 motorcycle drivers and motorcycle passengers killed in 2003, 1 motorcycle driver was impaired by alcohol or other drugs.



## Motorcycle Crash Characteristics

### Motorcycle Crash Severity (Utah 2003)



- In the above graph, there were a total of 766 motorcycle crashes.
- Most motorcycle crashes resulted in an injury (86.2%) compared to 36.3% of all motor vehicle crashes.
- The percentage of fatal motorcycle crashes was 2.7%, 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 2003)

Motorcycle Crashes									
		Property Damage 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	5	0.2	22	0.7	0	0.0	27	0.9
February	28	4	0.1	7	0.3	0	0.0	11	0.4
March	31	1	0.0	24	0.8	3	0.1	28	0.9
April	30	7	0.2	40	1.3	0	0.0	47	1.6
May	31	11	0.4	74	2.4	1	0.0	86	2.8
June	30	7	0.2	94	3.1	5	0.2	106	3.5
July	31	10	0.3	104	3.4	1	0.0	115	3.7
August	31	11	0.4	102	3.3	6	0.2	119	3.8
September	30	17	0.6	107	3.6	3	0.1	127	4.2
October	31	7	0.2	71	2.3	1	0.0	79	2.5
November	30	3	0.1	12	0.4	0	0.0	15	0.5
December	31	1	0.0	4	0.1	1	0.0	6	0.2
Total	365	84	0.2	661	1.8	21	0.1	766	2.1

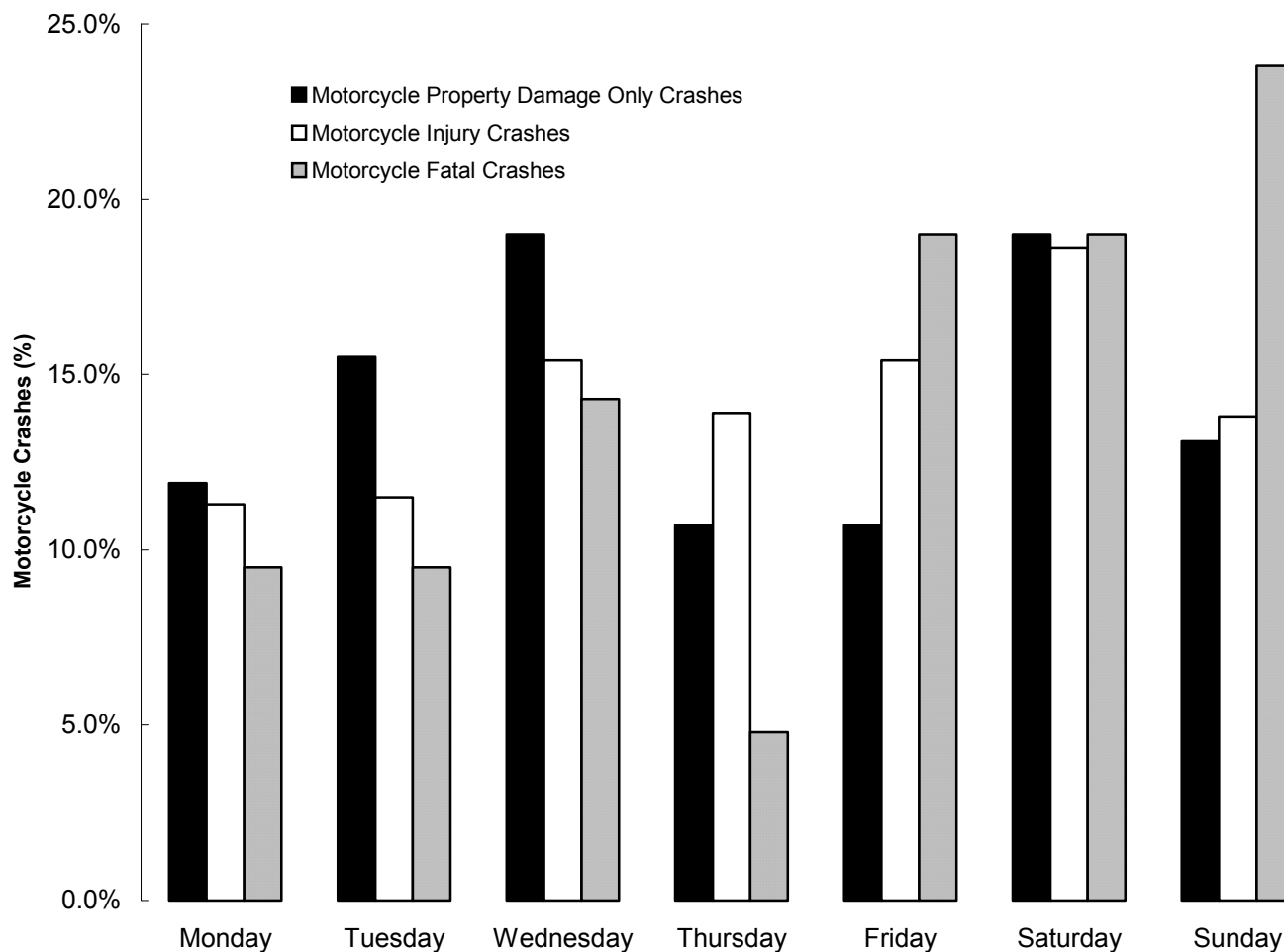
- The above table shows May through October had the highest rate per day of total motorcycle crashes and injury crashes. Very few motorcycle crashes occurred in the winter months, which may be due to the decrease of individuals riding motorcycles in the winter.

## Motorcycle Crash Characteristics

### Motorcycle Crashes by Day of Week (Utah 2003)

Motorcycle Crashes								
Day of Week	Property Damage Only Crashes		Injury Crashes		Fatal Crashes		Total Crashes	
	#	%	#	%	#	%	#	%
Monday	10	11.9%	75	11.3%	2	9.5%	87	11.4%
Tuesday	13	15.5%	76	11.5%	2	9.5%	91	11.9%
Wednesday	16	19.0%	102	15.4%	3	14.3%	121	15.8%
Thursday	9	10.7%	92	13.9%	1	4.8%	102	13.3%
Friday	9	10.7%	102	15.4%	4	19.0%	115	15.0%
Saturday	16	19.0%	123	18.6%	4	19.0%	143	18.7%
Sunday	11	13.1%	91	13.8%	5	23.8%	107	14.0%
Total	84	100.0%	661	100.0%	21	100.0%	766	100.0%

### Motorcycle Crashes by Day of Week (Utah 2003)



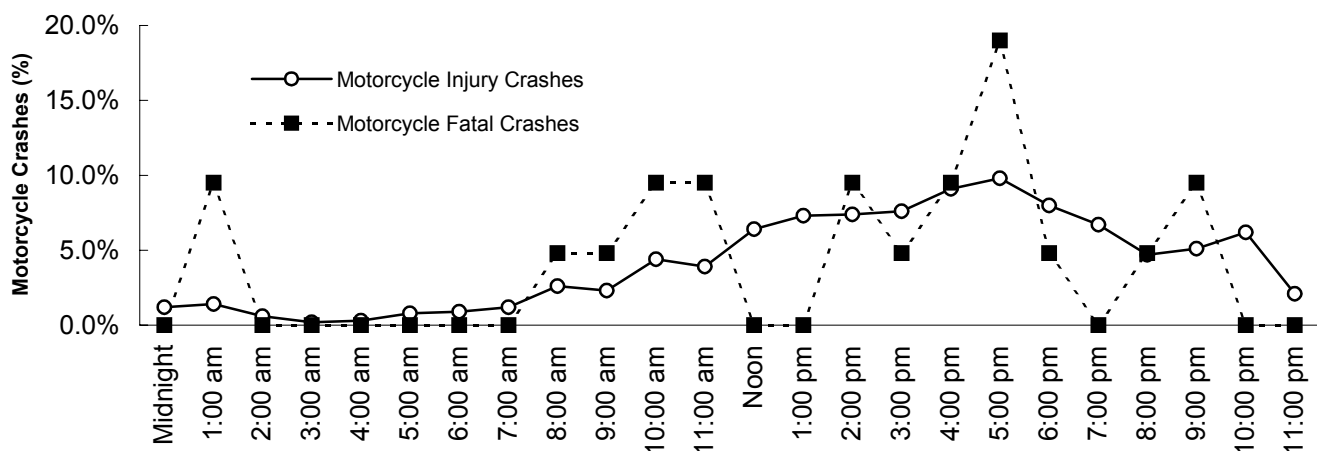
- The above table and graph show that the highest percentage of total motorcycle crashes (18.7%) and motorcycle injury crashes (18.6%) occurred on Saturday.
- Fatal motorcycle crashes occurred most frequently on Sunday (23.8%).

## Motorcycle Crash Characteristics

### Motorcycle Crashes by Hour of Day (Utah 2003)

Motorcycle Crashes								
Hour	Property Damage Only Crashes		Injury Crashes		Fatal Crashes		Total Crashes	
	#	%	#	%	#	%	#	%
Midnight	1	1.2%	8	1.2%	0	0.0%	9	1.2%
1:00 am	3	3.6%	9	1.4%	2	9.5%	14	1.8%
2:00 am	0	0.0%	4	0.6%	0	0.0%	4	0.5%
3:00 am	0	0.0%	1	0.2%	0	0.0%	1	0.1%
4:00 am	1	1.2%	2	0.3%	0	0.0%	3	0.4%
5:00 am	0	0.0%	5	0.8%	0	0.0%	5	0.7%
6:00 am	1	1.2%	6	0.9%	0	0.0%	7	0.9%
7:00 am	2	2.4%	8	1.2%	0	0.0%	10	1.3%
8:00 am	4	4.8%	17	2.6%	1	4.8%	22	2.9%
9:00 am	6	7.1%	15	2.3%	1	4.8%	22	2.9%
10:00 am	1	1.2%	29	4.4%	2	9.5%	32	4.2%
11:00 am	6	7.1%	26	3.9%	2	9.5%	34	4.4%
Noon	4	4.8%	42	6.4%	0	0.0%	46	6.0%
1:00 pm	5	6.0%	48	7.3%	0	0.0%	53	6.9%
2:00 pm	11	13.1%	49	7.4%	2	9.5%	62	8.1%
3:00 pm	4	4.8%	50	7.6%	1	4.8%	55	7.2%
4:00 pm	5	6.0%	60	9.1%	2	9.5%	67	8.7%
5:00 pm	6	7.1%	65	9.8%	4	19.0%	75	9.8%
6:00 pm	8	9.5%	53	8.0%	1	4.8%	62	8.1%
7:00 pm	3	3.6%	44	6.7%	0	0.0%	47	6.1%
8:00 pm	6	7.1%	31	4.7%	1	4.8%	38	5.0%
9:00 pm	4	4.8%	34	5.1%	2	9.5%	40	5.2%
10:00 pm	2	2.4%	41	6.2%	0	0.0%	43	5.6%
11:00 pm	1	1.2%	14	2.1%	0	0.0%	15	2.0%
Total	84	100.0%	661	100.0%	21	100.0%	766	100.0%

### Motorcycle Crashes by Hour of Day (Utah 2003)



- In 2003, total motorcycle crashes and injury motorcycle crashes followed a similar time pattern, peaking between 2:00 pm and 6:00 pm.
- The highest proportion of fatal motorcycle crashes occurred during the 5:00 pm hour.

## Motorcycle Crash Characteristics

### Types of Crashes Involving Motorcycles (Utah 2003)

Motorcycle Crashes								
Crash Type	Property Damage Only Crashes		Injury Crashes		Fatal Crashes		Total Crashes	
	#	%	#	%	#	%	#	%
Two Motor Vehicles	63	75.0%	305	46.1%	13	61.9%	381	49.7%
Ran Off Roadway - To the Right	8	9.5%	79	12.0%	4	19.0%	91	11.9%
Overtaken in Roadway	3	3.6%	87	13.2%	1	4.8%	91	11.9%
Other Non-Collision	1	1.2%	63	9.5%	0	0.0%	64	8.4%
Motor Vehicle and Fixed Object	2	2.4%	45	6.8%	1	4.8%	48	6.3%
Ran Off Roadway - To the Left	3	3.6%	43	6.5%	1	4.8%	47	6.1%
Motor Vehicle and Other Object	1	1.2%	16	2.4%	0	0.0%	17	2.2%
Motor Vehicle and Wild Animal	1	1.2%	10	1.5%	0	0.0%	11	1.4%
Motor Vehicle and Pedestrian	0	0.0%	6	0.9%	1	4.8%	7	0.9%
Motor Vehicle and Domestic Animal	2	2.4%	4	0.6%	0	0.0%	6	0.8%
Ran Off Roadway - Through Median	0	0.0%	1	0.2%	0	0.0%	1	0.1%
Motor Vehicle and Train	0	0.0%	1	0.2%	0	0.0%	1	0.1%
Motor Vehicle and Skates, Scooters, Skateboards	0	0.0%	1	0.2%	0	0.0%	1	0.1%
Motor Vehicle and Bicycle	0	0.0%	0	0.0%	0	0.0%	0	0.0%
<b>Total</b>	<b>84</b>	<b>100.0%</b>	<b>661</b>	<b>100.0%</b>	<b>21</b>	<b>100.0%</b>	<b>766</b>	<b>100.0%</b>

- The majority of motorcycle property damage only crashes (75.0%), injury crashes (46.1%) and fatal crashes (61.8%) involved another motor vehicle.
- "Ran off the roadway" (to the right, to the left, or through the median) accounted for another 23.8% of the fatal motorcycle crashes.

### Collision Description of Motorcycle Crashes (Utah 2003)

Motorcycle Crashes								
Collision Description	Property Damage Only Crashes		Injury Crashes		Fatal Crashes		Total Crashes	
	#	%	#	%	#	%	#	%
Single Vehicle Rollover	12	14.3%	210	31.8%	8	38.1%	230	30.0%
Other	30	35.7%	181	27.4%	0	0.0%	211	27.5%
Broadside	14	16.7%	136	20.6%	5	23.8%	155	20.2%
Rear End	22	26.2%	89	13.5%	0	0.0%	111	14.5%
Side Swipe	4	4.8%	26	3.9%	0	0.0%	30	3.9%
Head-On	1	1.2%	10	1.5%	7	33.3%	18	2.3%
Bicyclist/Pedestrian Crash	0	0.0%	6	0.9%	1	4.8%	7	0.9%
Single Vehicle Fixed Object	1	1.2%	3	0.5%	0	0.0%	4	0.5%
<b>Total</b>	<b>84</b>	<b>50.0%</b>	<b>661</b>	<b>40.8%</b>	<b>21</b>	<b>61.9%</b>	<b>766</b>	<b>42.4%</b>

- Overall, the leading collision types for motorcycle crashes (excluding other) were single vehicle rollovers (30.0%) and broadside collisions (20.2%).
- The leading collision types for motorcycle injury crashes (excluding other) were also single vehicle rollovers (31.8%) and broadside collisions (20.6%).
- Single vehicle rollovers (38.1%) and head-on collisions (33.3%) accounted for the majority of fatal motorcycle crashes.

## Motorcycle Crash Characteristics

### Urban/Rural Location of Motorcycle Crashes (Utah 2003)

Motorcycle Crashes								
	Property Damage Only Crashes		Injury Crashes		Fatal Crashes		Total Crashes	
Urban/Rural Location	#	%	#	%	#	%	#	%
Rural Area - Up to 5,000	24	28.6%	234	35.4%	16	76.2%	274	35.8%
Small Urban - 5,000 to 49,999	6	7.1%	41	6.2%	0	0.0%	47	6.1%
Moderate Urban - 50,000 to 199,999	5	6.0%	14	2.1%	0	0.0%	19	2.5%
Large Urban - 200,000 or More	49	58.3%	371	56.1%	5	23.8%	425	55.5%
Missing	0	0.0%	1	0.2%	0	0.0%	1	0.1%
<b>Total</b>	<b>84</b>	<b>100.0%</b>	<b>661</b>	<b>100.0%</b>	<b>21</b>	<b>100.0%</b>	<b>766</b>	<b>100.0%</b>

- While the majority of total motorcycle crashes (64.1%) as well as the majority of motorcycle injury crashes (64.4%) occurred in small, moderate and large urban areas, the majority of fatal motorcycle crashes occurred in rural areas (76.2%).
- In fact, motorcycle crashes occurring in rural areas were 13 times more likely to result in a fatality than motorcycle crashes in urban areas.

### Motorcycle Crash Violations (Utah 2003)

Violations (Motorcycle Drivers)								
	Motorcycle Drivers Cited in PDO Crashes		Motorcycle Drivers Cited in Injury Crashes		Motorcycle Drivers Cited in Fatal Crashes		Total Motorcycle Drivers Cited	
Violations	#	%	#	%	#	%	#	%
Other Non-Moving Violations	5	31.3%	37	20.4%	0	0.0%	42	21.3%
Speeding	1	6.3%	24	13.3%	0	0.0%	25	12.7%
All Other Moving Violations	0	0.0%	25	13.8%	0	0.0%	25	12.7%
Driving Under the Influence	1	6.3%	18	9.9%	0	0.0%	19	9.6%
Following Too Close	2	12.5%	13	7.2%	0	0.0%	15	7.6%
Reckless Driving	0	0.0%	14	7.7%	0	0.0%	14	7.1%
Improper Lookout	1	6.3%	10	5.5%	0	0.0%	11	5.6%
Failure to Yield Right-of-Way	1	6.3%	8	4.4%	0	0.0%	9	4.6%
Negligent Collision	2	12.5%	6	3.3%	0	0.0%	8	4.1%
Hit and Run	0	0.0%	6	3.3%	0	0.0%	6	3.0%
Improper Lane Change	1	6.3%	4	2.2%	0	0.0%	5	2.5%
Improper Passing	0	0.0%	5	2.8%	0	0.0%	5	2.5%
Failure to Stop at Red Light	1	6.3%	3	1.7%	0	0.0%	4	2.0%
Improper Turn (Failure to Signal)	1	6.3%	2	1.1%	0	0.0%	3	1.5%
Failure to Stop at Stop Sign	0	0.0%	3	1.7%	0	0.0%	3	1.5%
Wrong Side of Road	0	0.0%	2	1.1%	0	0.0%	2	1.0%
Improper Start or Stop	0	0.0%	1	0.6%	0	0.0%	1	0.5%
Improper Backing	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Wrong Way on One-Way Street	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Vehicle Homicide	0	0.0%	0	0.0%	0	0.0%	0	0.0%
<b>Total</b>	<b>16</b>	<b>100.0%</b>	<b>181</b>	<b>100.0%</b>	<b>0</b>	<b>0.0%</b>	<b>197</b>	<b>100.0%</b>

- In 2003, there were 776 motorcycle drivers involved in crashes. Officers at the scene of the crash cited 197 (25.3%) of those drivers for a traffic violation.
- Overall, motorcycle drivers involved in crashes were cited most often for "other non-moving violations" (21.3%), and "speeding" (12.7%).

## Motorcycle Crash Characteristics

### Contributing Factors of Motorcycle Crashes (Utah 2003)

Contributing Factors (Motorcycle Crashes)								
Contributing Factors	Motorcycle Property Damage Only Crashes		Motorcycle Injury Crashes		Motorcycle Fatal Crashes		Total Motorcycle Crashes	
	#	%	#	%	#	%	#	%
Speed Too Fast	9	18.8%	152	23.8%	9	45.0%	170	24.1%
Other Improper Driving	10	20.8%	127	19.9%	4	20.0%	141	20.0%
Improper Lookout	8	16.7%	84	13.2%	1	5.0%	93	13.2%
Followed Too Closely	9	18.8%	47	7.4%	0	0.0%	56	7.9%
Failed to Yield Right of Way	0	0.0%	31	4.9%	0	0.0%	31	4.4%
Drove Left of Center	1	2.1%	26	4.1%	3	15.0%	30	4.2%
Non-Contact Vehicle Involved	0	0.0%	20	3.1%	0	0.0%	20	2.8%
Made Improper Turn	4	8.3%	15	2.4%	0	0.0%	19	2.7%
Driving Under the Influence	1	2.1%	18	2.8%	0	0.0%	19	2.7%
Improper Overtaking	1	2.1%	18	2.8%	0	0.0%	19	2.7%
Object in Roadway	1	2.1%	17	2.7%	0	0.0%	18	2.5%
Aggressive Driving	0	0.0%	13	2.0%	0	0.0%	13	1.8%
Wrong Side of Road	0	0.0%	10	1.6%	1	5.0%	11	1.6%
Tires Defective	0	0.0%	10	1.6%	0	0.0%	10	1.4%
Disregard Traffic Signal	1	2.1%	8	1.3%	0	0.0%	9	1.3%
Other Driver Distractions	1	2.1%	8	1.3%	0	0.0%	9	1.3%
Hit and Run	0	0.0%	8	1.3%	0	0.0%	8	1.1%
Had Been Drinking	0	0.0%	7	1.1%	0	0.0%	7	1.0%
Passed Stop Sign	0	0.0%	3	0.5%	1	5.0%	4	0.6%
Other Defective Condition of Vehicle	0	0.0%	4	0.6%	0	0.0%	4	0.6%
Brakes Defective	0	0.0%	3	0.5%	0	0.0%	3	0.4%
Fatigued	1	2.1%	1	0.2%	0	0.0%	2	0.3%
Sick or Ill	0	0.0%	2	0.3%	0	0.0%	2	0.3%
Under the Influence of Drugs	0	0.0%	2	0.3%	0	0.0%	2	0.3%
Headlights Insufficient or Out	0	0.0%	2	0.3%	0	0.0%	2	0.3%
Driver Using Cell Phone	0	0.0%	1	0.2%	0	0.0%	1	0.1%
Vehicle Rolling in Traffic Lane	0	0.0%	0	0.0%	1	5.0%	1	0.1%
Stolen	1	2.1%	0	0.0%	0	0.0%	1	0.1%
Headlights Glaring	0	0.0%	1	0.2%	0	0.0%	1	0.1%
<b>Total</b>	<b>48</b>	<b>100.0%</b>	<b>638</b>	<b>100.0%</b>	<b>20</b>	<b>100.0%</b>	<b>706</b>	<b>100.0%</b>

- 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 (24.1%), motorcycle injury crashes (23.8%) and fatal motorcycle crashes (45.0%).
- The combined contributing factors of “driving under the influence,” “had been drinking” and “under the influence of drugs” accounted for 4.0% of total motorcycle crashes and 4.2% of motorcycle injury crashes.

# **Pedestrians 2003**





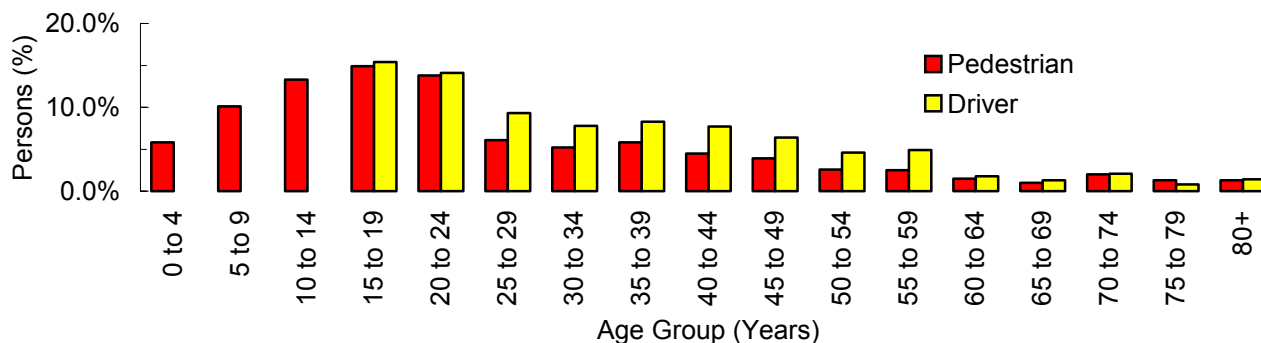
## PEDESTRIANS



### Did you know that in 2003. . .

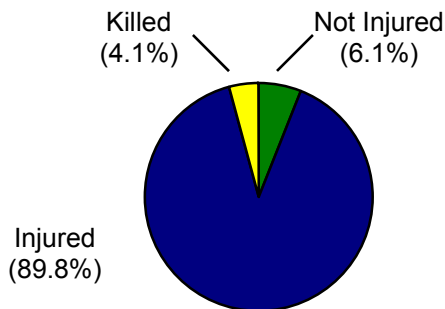
- 686 pedestrians were involved in motor vehicle crashes; 616 were injured, and 28 were killed.
- Fatalities were 20 times higher for pedestrians than for other motor vehicle crash occupants.

### Age of Persons Involved in Pedestrian Crashes, Utah 2003



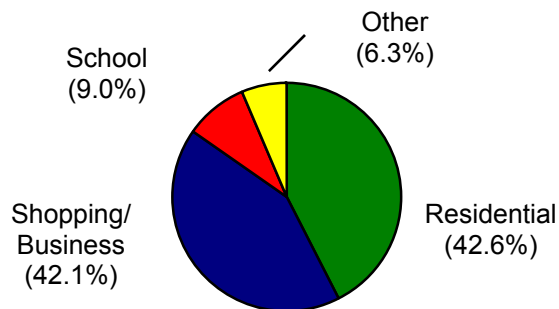
- The highest percentage of pedestrians involved in crashes were aged 15 to 19 years (14.9%).
- Almost half (44.1%) of the pedestrians involved in crashes were under 20 years old.
- The highest percentage of drivers involved in pedestrian crashes were aged 15 to 19 years (15.4%).

### Pedestrian Injury Severity, Utah 2003



- Nearly all pedestrians (89.8%) involved in crashes sustained an injury compared to 21.3% of all motor vehicle crash occupants.

### Location of Pedestrian-Motor Vehicle Crashes, Utah 2003



- The majority of pedestrian-motor vehicle crashes occurred in residential (42.6%) and shopping/business (42.1%) areas.

### Top 3 Driving Factors that Contributed to Pedestrian-Motor Vehicle Crashes:

1. Speed Too Fast (24.1%)
2. Improper Lookout (13.2%)
3. Followed Too Closely (7.9%)

- In addition to the above, "driving under the influence," "had been drinking," and "under the influence of drugs" accounted for 4.0% of pedestrian-motor vehicle crashes.

### Top 3 Violations of Drivers Involved in Pedestrian Crashes:

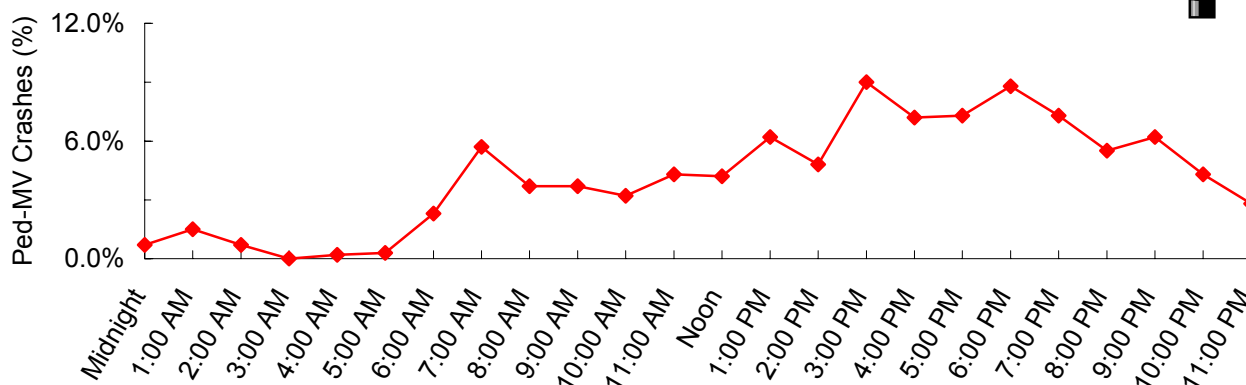
1. Failed to Yield Right-of-Way (50.3%)
2. Improper Lookout (10.6%)
3. Driving Under the Influence (6.9%)

- One-third (30.9%) of drivers involved in pedestrian-motor vehicle crashes received a citation.

## PEDESTRIANS

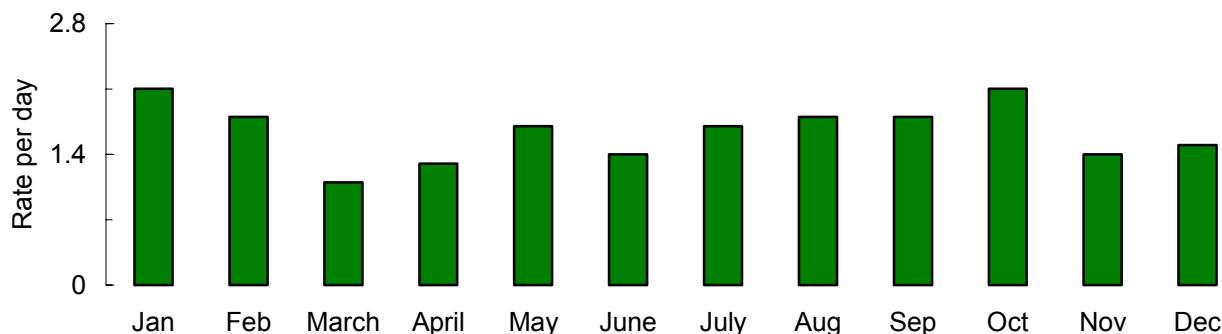


**Time of Day Pedestrian Crashes Occurred, Utah 2003**



- 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 2003**



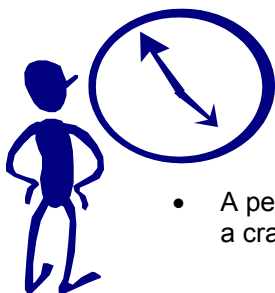
- January (2.1) and October (2.1) had the highest rates per day of pedestrian-motor vehicle crashes.

**Actions of Pedestrians Prior to Crashes, Utah 2003**

1. Crossing Intersection with Signal (18.2%)
2. Crossing Not at Intersection (14.7%)
3. Crossing Intersection with No Signal (13.4%)
4. Other in Roadway (6.0%)
5. Crossing Intersection Against Signal (5.7%)

- "Crossing Intersection (with signal, no signal, against signal, diagonally)" comprised 38.2% of pedestrian actions prior to crashes.

**Pedestrian Crash Clock**



- A pedestrian was involved in a crash every 13 hours.

**Alcohol and Other Drug Involvement**



- Of the 28 pedestrians killed in 2003, 1 pedestrian was impaired by alcohol or other drugs.
- Of the drivers involved in fatal pedestrian-motor vehicle crashes, 3 drivers were impaired by alcohol or other drugs.

## Section 7: Pedestrians

### Section 7: Pedestrians 2003

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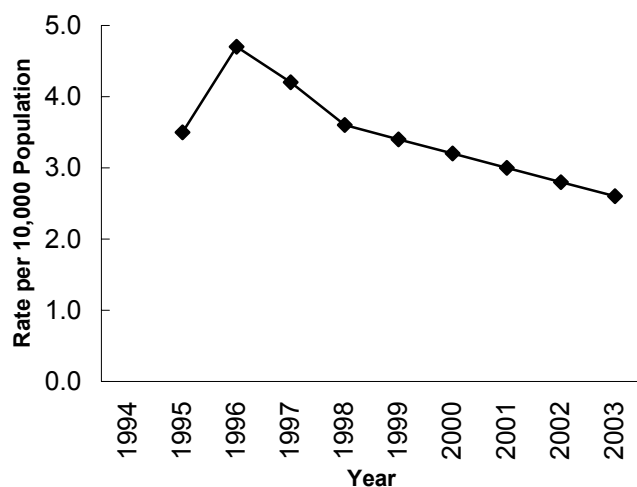
## Trends

### Pedestrians Involved in Crashes 1994-2003

Pedestrians									
Year	Population	Non-Injured Pedestrians		Injured Pedestrians		Pedestrians Killed		Total Pedestrians	
		Non-Injured Pedestrians #	Rate per 10,000 Population	Injured Pedestrians #	Rate per 10,000 Population	Pedestrians Killed #	Rate per 10,000 Population	All Pedestrians #	Rate per 10,000 Population
1994	1,946,721	N/A	N/A	N/A	N/A	40	0.21	N/A	N/A
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
Total	21,685,540	337	0.16	6,746	3.1	356	0.16	7,439	3.4

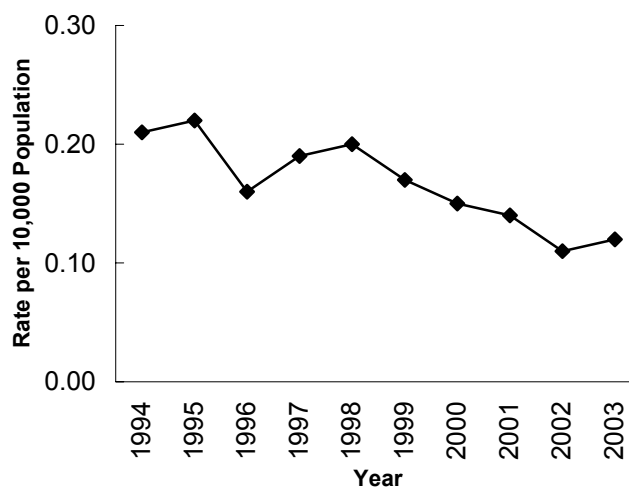
- In 2003, the rate of pedestrians injured in crashes was 2.6; a 7% decrease from 2002.
- However, in 2003, Utah experienced a 9% increase from 2002 in the rate of pedestrians killed in crashes.

**Pedestrians Injured in Crashes  
(Utah 1994-2003)**



- 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 decreased every year since.

**Pedestrians Killed in Crashes  
(Utah 1994-2003)**



- The highest rate of pedestrians killed in crashes occurred in 1995 (0.22) and went up again in 1998 (0.20).
- The rate of pedestrians killed in crashes decreased every year since 1998, until 2003 where there was a slight increase.

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.

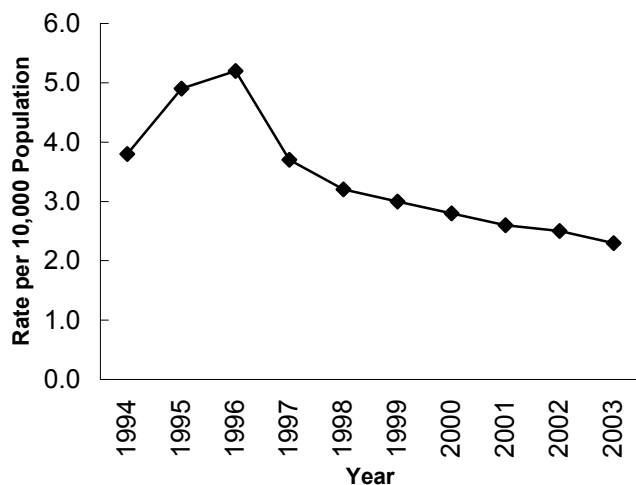
## Trends

### Pedestrian-Motor Vehicle Crashes 1994-2003

Pedestrian-Motor Vehicle Crashes									
Year	Population	Property Damage Only (PDO)		Injury		Fatal		Total	
		Ped-MV PDO Crashes #	Rate per 10,000 Population	Ped-MV Injury Crashes #	Rate per 10,000 Population	Ped-MV Fatal Crashes #	Rate per 10,000 Population	All Ped-MV Crashes #	Rate per 10,000 Population
1994	1,946,721	293	1.5	745	3.8	37	0.19	1,075	5.5
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
Total	21,685,540	678	0.3	7,246	3.3	325	0.15	8,249	3.8

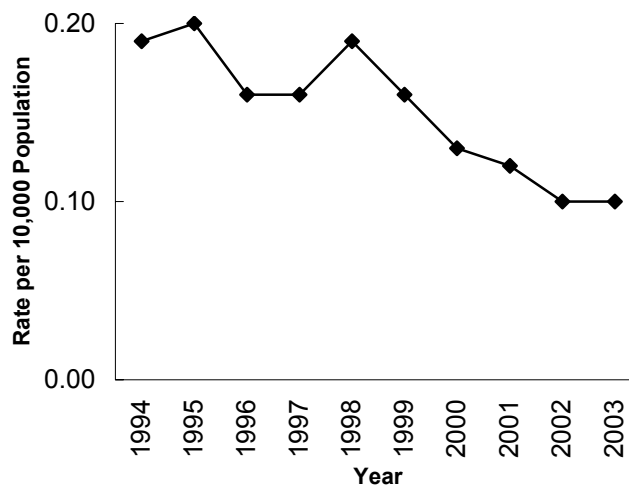
- In 2003, the rate of pedestrian-motor vehicle injury crashes was 2.3; an 8% decrease from 2002.
- However, in 2003, the rate of fatal pedestrian-motor vehicle crashes remained the same as 2002 at 0.10.

#### Pedestrian-Motor Vehicle Injury Crashes (Utah 1994-2003)



- 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 pedestrian-motor vehicle injury crashes (5.2) occurred in 1996, and have decreased every year since.

#### Fatal Pedestrian-Motor Vehicle Crashes (Utah 1994-2003)



- The highest rate of fatal pedestrian-motor vehicle crashes occurred in 1995 (0.20) and went up again in 1998 (0.19).
- The rate of fatal pedestrian-motor vehicle crashes decreased every year since 1998, until 2003 where there rate stayed the same.

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 2003)

Pedestrians												
County	Non-Injured Pedestrians			Injured Pedestrians			Pedestrians Killed			Total Pedestrians		
	Non-Injured Ped. #	Rate per 100 Million VMT	Rate per 10,000 Population	Injured Ped. #	Rate per 100 Million VMT	Rate per 10,000 Population	Ped. Killed #	Rate per 100 Million VMT	Rate per 10,000 Population	All Ped. #	Rate per 100 Million VMT	Rate per 10,000 Population
Beaver	0	0.0	0.0	1	0.4	1.6	0	0.0	0.0	1	0.4	1.6
Box Elder	2	0.2	0.5	8	0.9	1.8	1	0.1	0.2	11	1.3	2.5
Cache	0	0.0	0.0	18	2.2	1.8	1	0.1	0.1	19	2.3	1.9
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	4	0.2	0.2	60	2.7	2.3	1	0.0	0.0	65	2.9	2.5
Duchesne	0	0.0	0.0	1	0.5	0.7	0	0.0	0.0	1	0.5	0.7
Emery	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Garfield	0	0.0	0.0	1	0.8	2.2	0	0.0	0.0	1	0.8	2.2
Grand	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Iron	0	0.0	0.0	4	0.6	1.1	1	0.2	0.3	5	0.8	1.4
Juab	1	0.3	1.1	4	1.1	4.6	0	0.0	0.0	5	1.3	5.7
Kane	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Millard	0	0.0	0.0	1	0.2	0.8	1	0.2	0.8	2	0.5	1.6
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	20	0.3	0.2	319	4.0	3.4	11	0.1	0.1	350	4.4	3.7
San Juan	0	0.0	0.0	1	0.4	0.7	0	0.0	0.0	1	0.4	0.7
Sanpete	0	0.0	0.0	1	0.4	0.4	0	0.0	0.0	1	0.4	0.4
Sevier	1	0.3	0.5	3	0.8	1.6	0	0.0	0.0	4	1.0	2.1
Summit	0	0.0	0.0	5	0.8	1.5	1	0.2	0.3	6	0.9	1.8
Tooele	0	0.0	0.0	4	0.5	0.8	1	0.1	0.2	5	0.6	1.0
Uintah	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Utah	5	0.1	0.1	104	3.1	2.5	3	0.1	0.1	112	3.3	2.7
Wasatch	0	0.0	0.0	3	1.2	1.7	0	0.0	0.0	3	1.2	1.7
Washington	3	0.3	0.3	19	1.9	1.8	5	0.5	0.5	27	2.7	2.6
Wayne	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Weber	6	0.4	0.3	57	3.8	2.8	2	0.1	0.1	65	4.4	3.2
Statewide	42	0.2	0.2	616	2.6	2.6	28	0.1	0.1	686	2.9	2.9

- 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:
  - Salt Lake (4.0), Weber (3.8) and Utah county (3.1) had the highest rates of pedestrians injured in crashes per 100 million vehicle miles traveled.
  - Washington county (0.5) had the highest rate of pedestrians killed in crashes per 100 million vehicle miles traveled.
- Rate per 10,000 population:
  - Juab (4.6), Salt Lake (3.4) and Weber county (2.8) had the highest rates of pedestrians injured in crashes per 10,000 population.
  - Millard (0.8) and Washington county (0.5) had the highest rates of pedestrians killed in crashes per 10,000 population.

## Counties

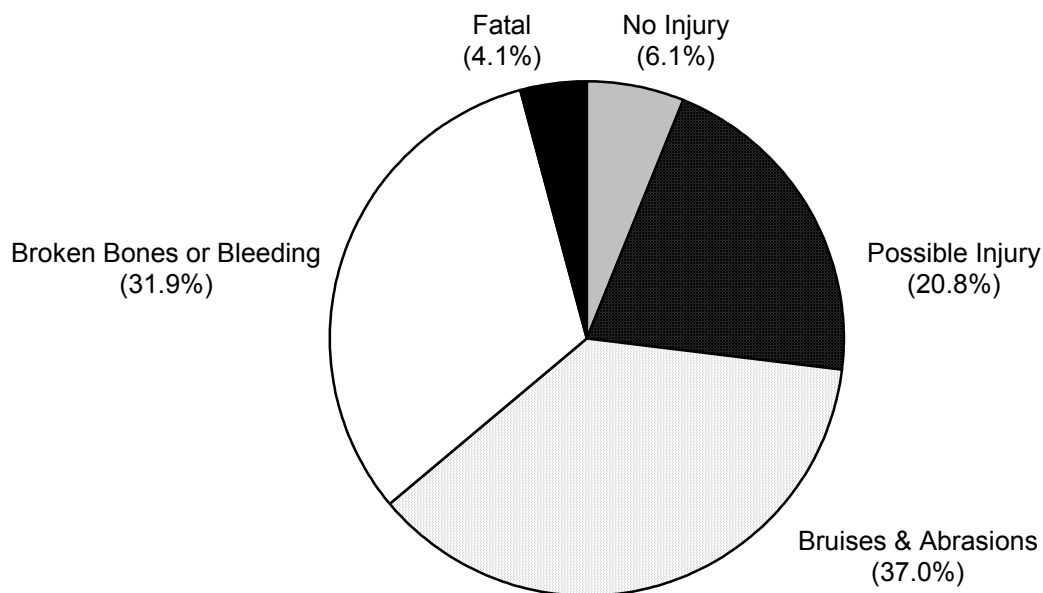
### Pedestrian-Motor Vehicle Crashes by County (Utah 2003)

Pedestrian-Motor Vehicle Crashes												
County	Property Damage Only (PDO)			Injury			Fatal			Total		
	Ped-MV PDO Crashes #	Rate per 100 Million VMT	Rate per 10,000 Population	Ped-MV Injury Crashes #	Rate per 100 Million VMT	Rate per 10,000 Population	Ped-MV Fatal Crashes #	Rate per 100 Million VMT	Rate per 10,000 Population	All Ped-MV Crashes #	Rate per 100 Million VMT	Rate per 10,000 Population
Beaver	0	0.0	0.0	1	0.4	1.6	0	0.0	0.0	1	0.4	1.6
Box Elder	1	0.1	0.2	6	0.7	1.4	1	0.1	0.2	8	0.9	1.8
Cache	0	0.0	0.0	17	2.0	1.7	1	0.1	0.1	18	2.2	1.8
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	6	0.3	0.2	54	2.4	2.1	1	0.0	0.0	61	2.7	2.4
Duchesne	0	0.0	0.0	1	0.5	0.7	0	0.0	0.0	1	0.5	0.7
Emery	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
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	0	0.0	0.0	0	0.0	0.0
Iron	0	0.0	0.0	3	0.5	0.8	1	0.2	0.3	4	0.6	1.1
Juab	0	0.0	0.0	2	0.5	2.3	0	0.0	0.0	2	0.5	2.3
Kane	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Millard	0	0.0	0.0	1	0.2	0.8	1	0.2	0.8	2	0.5	1.6
Morgan	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Plute	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	17	0.2	0.2	285	3.6	3.0	9	0.1	0.1	311	3.9	3.3
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	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Sevier	2	0.5	1.0	4	1.0	2.1	0	0.0	0.0	6	1.5	3.1
Summit	0	0.0	0.0	4	0.6	1.2	1	0.2	0.3	5	0.8	1.5
Tooele	0	0.0	0.0	2	0.3	0.4	0	0.0	0.0	2	0.3	0.4
Uintah	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Utah	6	0.2	0.1	91	2.7	2.2	2	0.1	0.0	99	2.9	2.4
Wasatch	0	0.0	0.0	3	1.2	1.7	0	0.0	0.0	3	1.2	1.7
Washington	1	0.1	0.1	13	1.3	1.2	4	0.4	0.4	18	1.8	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	51	3.4	2.5	2	0.1	0.1	56	3.7	2.7
Statewide	36	0.2	0.2	540	2.3	2.3	23	0.1	0.1	599	2.5	2.5

- 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 (3.6), Weber (3.4) and Utah county (2.7) had the highest rates of pedestrian-motor vehicle injury crashes per 100 million vehicle miles traveled.
  - Washington county (0.4) had the highest rate of fatal pedestrian-motor vehicle crashes per 100 million vehicle miles traveled.
- Rate per 10,000 population:
  - Salt Lake (3.0), Weber (2.5) and Juab county (2.3) had the highest rates of pedestrian-motor vehicle injury crashes per 10,000 population.
  - Millard (0.8) and Washington (0.4) had the highest rates of fatal pedestrian-motor vehicle crashes per 10,000 population.

## Pedestrian Characteristics

### Injury Severity of Pedestrians Involved in Crashes (Utah 2003)



- In the above table, there were a total of 686 pedestrians involved in crashes.
- The above graph shows that 89.7% of pedestrians involved in crashes sustained an injury compared to 21.3% of all motor vehicle crash occupants.
- The percentage of pedestrians killed in crashes (4.1%) was much higher than the percentage for all motor vehicle crash occupants (0.2%).
- In fact, fatalities were 20 times higher for pedestrians than for other motor vehicle crash occupants.

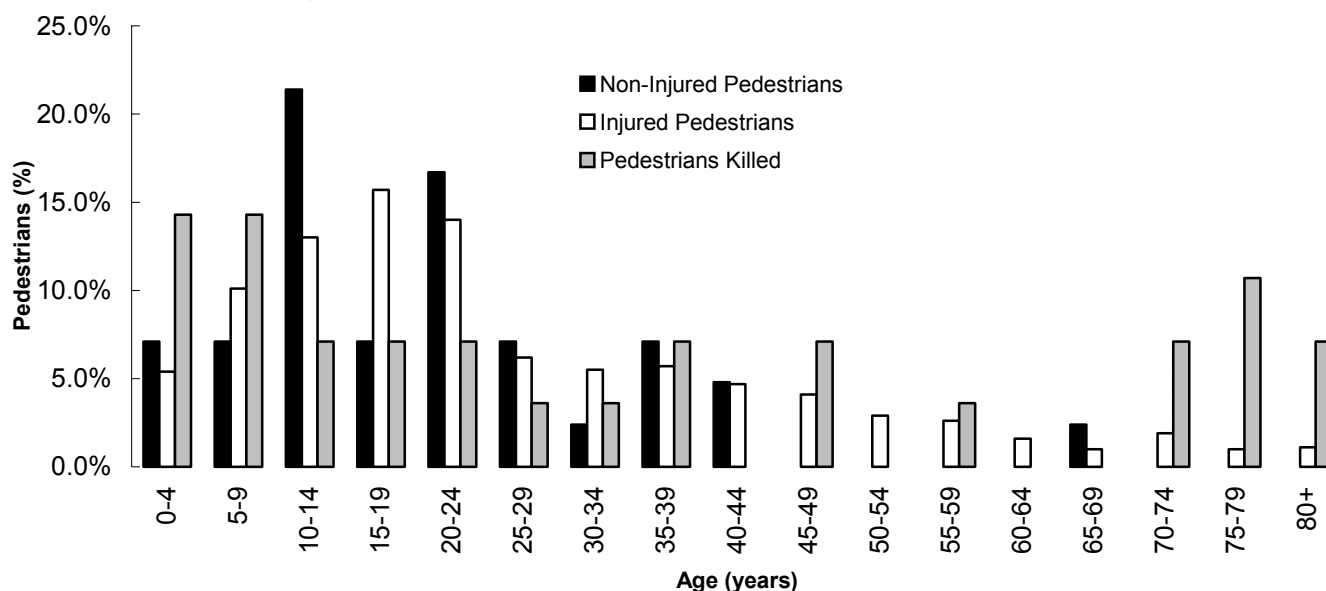


## Pedestrian Characteristics

### Age of Pedestrians Involved in Crashes (Utah 2003)

Age	Pedestrians							
	Non-Injured Pedestrians		Injured Pedestrians		Pedestrians Killed		Total Pedestrians	
	#	%	#	%	#	%	#	%
0-4	3	7.1%	33	5.4%	4	14.3%	40	5.8%
5-9	3	7.1%	62	10.1%	4	14.3%	69	10.1%
10-14	9	21.4%	80	13.0%	2	7.1%	91	13.3%
15-19	3	7.1%	97	15.7%	2	7.1%	102	14.9%
20-24	7	16.7%	86	14.0%	2	7.1%	95	13.8%
25-29	3	7.1%	38	6.2%	1	3.6%	42	6.1%
30-34	1	2.4%	34	5.5%	1	3.6%	36	5.2%
35-39	3	7.1%	35	5.7%	2	7.1%	40	5.8%
40-44	2	4.8%	29	4.7%	0	0.0%	31	4.5%
45-49	0	0.0%	25	4.1%	2	7.1%	27	3.9%
50-54	0	0.0%	18	2.9%	0	0.0%	18	2.6%
55-59	0	0.0%	16	2.6%	1	3.6%	17	2.5%
60-64	0	0.0%	10	1.6%	0	0.0%	10	1.5%
65-69	1	2.4%	6	1.0%	0	0.0%	7	1.0%
70-74	0	0.0%	12	1.9%	2	7.1%	14	2.0%
75-79	0	0.0%	6	1.0%	3	10.7%	9	1.3%
80+	0	0.0%	7	1.1%	2	7.1%	9	1.3%
Missing	7	16.7%	22	3.6%	0	0.0%	29	4.2%
<b>Total</b>	<b>42</b>	<b>100.0%</b>	<b>616</b>	<b>100.0%</b>	<b>28</b>	<b>100.0%</b>	<b>686</b>	<b>100.0%</b>

### Age of Pedestrians Involved in Crashes (Utah 2003)



- Overall, the largest percentage of pedestrians involved in crashes were aged 15 to 19 years (14.9%). This age group also represented the largest percentage of pedestrians injured in crashes (15.7%).
- The highest percentage of pedestrian fatalities occurred in the 0 to 4 year age group (14.3%) and the 5 to 9 year age group (14.3%).

## Pedestrian Characteristics

### Gender of Pedestrians Involved in Crashes (Utah 2003)

Gender	Pedestrians							
	Non-Injured Pedestrians		Injured Pedestrians		Pedestrians Killed		Total Pedestrians	
	#	%	#	%	#	%	#	%
Female	9	21.4%	261	42.4%	11	39.3%	281	41.0%
Male	30	71.4%	354	57.5%	17	60.7%	401	58.5%
Missing	3	7.1%	1	0.2%	0	0.0%	4	0.6%
<b>Total</b>	<b>42</b>	<b>100.0%</b>	<b>616</b>	<b>100.0%</b>	<b>28</b>	<b>100.0%</b>	<b>686</b>	<b>100.0%</b>

- The majority of all pedestrians (58.5%), injured pedestrians (57.5%) and pedestrians killed (60.7%) in crashes were male.

### Actions of Pedestrians Prior to Crashes (Utah 2003)

Pedestrian Action Prior to Crash	Pedestrians							
	Non-Injured Pedestrians		Injured Pedestrians		Pedestrians Killed		Total Pedestrians	
	#	%	#	%	#	%	#	%
Crossing Intersection with Signal	9	21.4%	114	18.5%	2	7.1%	125	18.2%
Crossing Not at Intersection	2	4.8%	90	14.6%	9	32.1%	101	14.7%
Crossing Intersection with No Signal	3	7.1%	86	14.0%	3	10.7%	92	13.4%
Other in Roadway	2	4.8%	38	6.2%	1	3.6%	41	6.0%
Crossing Intersection Against Signal	2	4.8%	35	5.7%	2	7.1%	39	5.7%
Not in Roadway	0	0.0%	21	3.4%	3	10.7%	24	3.5%
Coming From Behind Parked Cars	0	0.0%	23	3.7%	0	0.0%	23	3.4%
Walking in Roadway with Traffic	0	0.0%	17	2.8%	2	7.1%	19	2.8%
Other Working in Roadway	0	0.0%	13	2.1%	0	0.0%	13	1.9%
Walking on Sidewalk	0	0.0%	12	1.9%	1	3.6%	13	1.9%
Other Standing in Roadway	2	4.8%	10	1.6%	0	0.0%	12	1.7%
Crosswalk Not at Intersection	0	0.0%	12	1.9%	0	0.0%	12	1.7%
Playing in Roadway	0	0.0%	9	1.5%	0	0.0%	9	1.3%
Riding in Roadway with Traffic	0	0.0%	9	1.5%	0	0.0%	9	1.3%
Walking To or From School	1	2.4%	8	1.3%	0	0.0%	9	1.3%
Walking in Roadway Against Traffic	1	2.4%	6	1.0%	1	3.6%	8	1.2%
Getting On or Off Other Vehicle	0	0.0%	8	1.3%	0	0.0%	8	1.2%
Hitching on Vehicle	0	0.0%	7	1.1%	0	0.0%	7	1.0%
Crossing Intersection Diagonally	1	2.4%	5	0.8%	0	0.0%	6	0.9%
Riding on Sidewalk	1	2.4%	5	0.8%	0	0.0%	6	0.9%
Getting On or Off Bus	0	0.0%	5	0.8%	0	0.0%	5	0.7%
Pushing or Working on Vehicle in Roadway	2	4.8%	3	0.5%	0	0.0%	5	0.7%
Riding in Roadway Against Traffic	0	0.0%	2	0.3%	0	0.0%	2	0.3%
Standing on Median Island in Crosswalk	0	0.0%	1	0.2%	0	0.0%	1	0.1%
Lying in Roadway	0	0.0%	1	0.2%	0	0.0%	1	0.1%
Missing	16	38.1%	76	12.3%	4	14.3%	96	14.0%
<b>Total</b>	<b>42</b>	<b>100.0%</b>	<b>616</b>	<b>100.0%</b>	<b>28</b>	<b>100.0%</b>	<b>686</b>	<b>100.0%</b>

- Leading pedestrian actions prior to crashes were "crossing intersection (with signal, no signal, against signal, diagonally)" (38.2%).

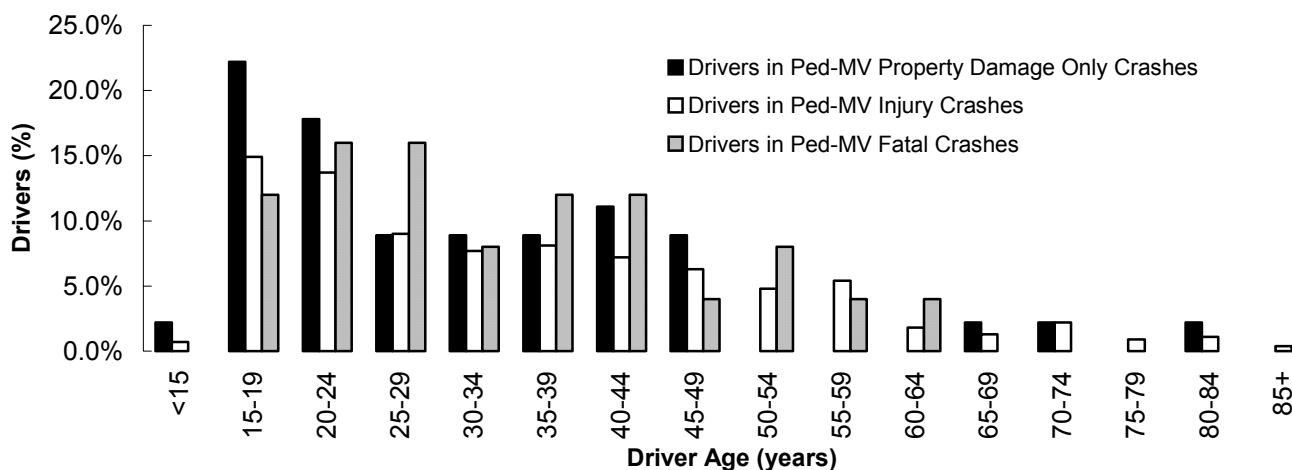
## Driver Characteristics

### Driver Age (Utah 2003)

Driver Age	Drivers							
	Drivers Involved in Pedestrian-MV Property Damage Only Crashes		Drivers Involved in Pedestrian-MV Injury Crashes		Drivers Involved in Pedestrian-MV Fatal Crashes		Total Drivers Involved in Pedestrian-MV Crashes	
	#	%	#	%	#	%	#	%
<15	1	2.2%	4	0.7%	0	0.0%	5	0.8%
15-19	10	22.2%	81	14.9%	3	12.0%	94	15.4%
20-24	8	17.8%	74	13.7%	4	16.0%	86	14.1%
25-29	4	8.9%	49	9.0%	4	16.0%	57	9.3%
30-34	4	8.9%	42	7.7%	2	8.0%	48	7.8%
35-39	4	8.9%	44	8.1%	3	12.0%	51	8.3%
40-44	5	11.1%	39	7.2%	3	12.0%	47	7.7%
45-49	4	8.9%	34	6.3%	1	4.0%	39	6.4%
50-54	0	0.0%	26	4.8%	2	8.0%	28	4.6%
55-59	0	0.0%	29	5.4%	1	4.0%	30	4.9%
60-64	0	0.0%	10	1.8%	1	4.0%	11	1.8%
65-69	1	2.2%	7	1.3%	0	0.0%	8	1.3%
70-74	1	2.2%	12	2.2%	0	0.0%	13	2.1%
75-79	0	0.0%	5	0.9%	0	0.0%	5	0.8%
80-84	1	2.2%	6	1.1%	0	0.0%	7	1.1%
85+	0	0.0%	2	0.4%	0	0.0%	2	0.3%
Missing	2	4.4%	78	14.4%	1	4.0%	81	13.2%
Total	45	100.0%	542	100.0%	25	100.0%	612	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 2003)



- 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 (15.4%) and pedestrian-motor vehicle injury crashes (14.9%).
- The percentage of drivers involved in fatal pedestrian-motor vehicle crashes was highest for those aged 20 to 24 years (16.0%) and 25 to 29 years (16.0%).

## Driver Characteristics

### Driver Gender (Utah 2003)

Drivers							
Driver Gender	Drivers Involved in Pedestrian-MV Property Damage Only Crashes		Drivers Involved in Pedestrian-MV Injury Crashes		Drivers Involved in Pedestrian-MV Fatal Crashes		Total Drivers Involved in Pedestrian-MV Crashes
	#	%	#	%	#	%	# %
Female	18	40.0%	218	40.2%	8	32.0%	244 39.9%
Male	26	57.8%	264	48.7%	17	68.0%	307 50.2%
Missing	1	2.2%	60	11.1%	0	0.0%	61 10.0%
<b>Total</b>	<b>45</b>	<b>100.0%</b>	<b>542</b>	<b>100.0%</b>	<b>25</b>	<b>100.0%</b>	<b>612 100.0%</b>

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 (50.2%), pedestrian-motor vehicle injury crashes (48.7%) and fatal pedestrian-motor vehicle crashes (68.0%) were male.

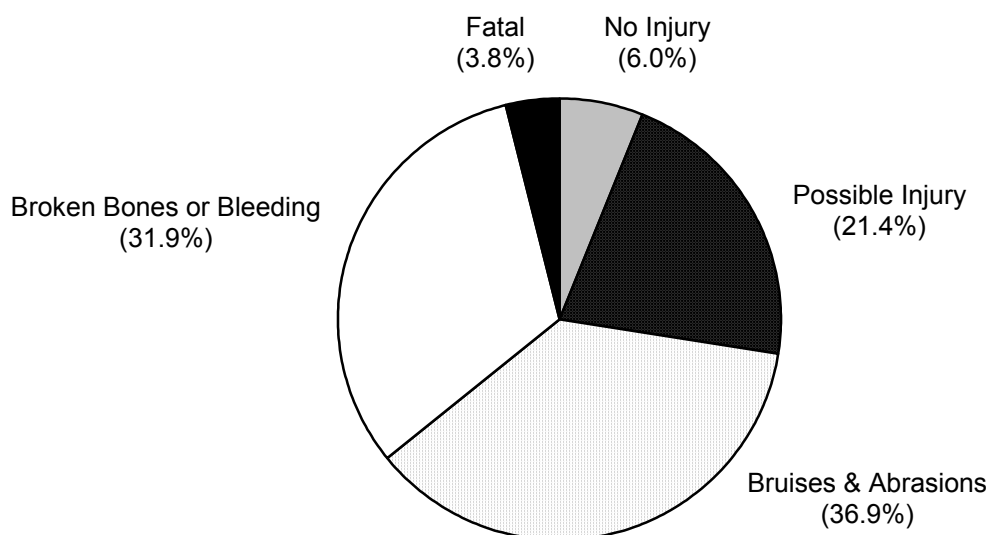
### Alcohol and Other Drug Involvement of Pedestrians and Motor Vehicle Drivers (Utah 2003)



- Of the 28 pedestrians killed in 2003, 1 pedestrian was impaired by alcohol or other drugs.
- Of the drivers involved in fatal pedestrian-motor vehicle crashes, 3 drivers were impaired by alcohol or other drugs.

## Pedestrian-Motor Vehicle Crash Characteristics

### Pedestrian-Motor Vehicle Crash Severity (Utah 2003)



- In the above table, there were a total of 599 pedestrian-motor vehicle crashes.
- The above graph shows that 90.2% of pedestrian-motor vehicle crashes resulted in some level of injury compared to 36.3% of all motor vehicle crashes.
- Moreover, 3.8% 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 2003)

Pedestrian-Motor Vehicle Crashes									
Month	Days in Month #	Property Damage Only (PDO)		Injury		Fatal		Total	
		Pedestrian-MV PDO Crashes #	Rate per Day	Pedestrian-MV Injury Crashes #	Rate per Day	Pedestrian-MV Fatal Crashes #	Rate per Day	All Pedestrian-MV Crashes #	Rate per Day
January	31	3	0.1	56	1.8	6	0.2	65	2.1
February	28	4	0.1	44	1.6	1	0.0	49	1.8
March	31	1	0.0	32	1.0	1	0.0	34	1.1
April	30	5	0.2	30	1.0	3	0.1	38	1.3
May	31	5	0.2	46	1.5	2	0.1	53	1.7
June	30	3	0.1	37	1.2	1	0.0	41	1.4
July	31	3	0.1	49	1.6	0	0.0	52	1.7
August	31	3	0.1	50	1.6	4	0.1	57	1.8
September	30	0	0.0	53	1.8	2	0.1	55	1.8
October	31	4	0.1	59	1.9	2	0.1	65	2.1
November	30	2	0.1	40	1.3	0	0.0	42	1.4
December	31	3	0.1	44	1.4	1	0.0	48	1.5
<b>Total</b>	<b>365</b>	<b>36</b>	<b>0.1</b>	<b>540</b>	<b>1.5</b>	<b>23</b>	<b>0.1</b>	<b>599</b>	<b>1.6</b>

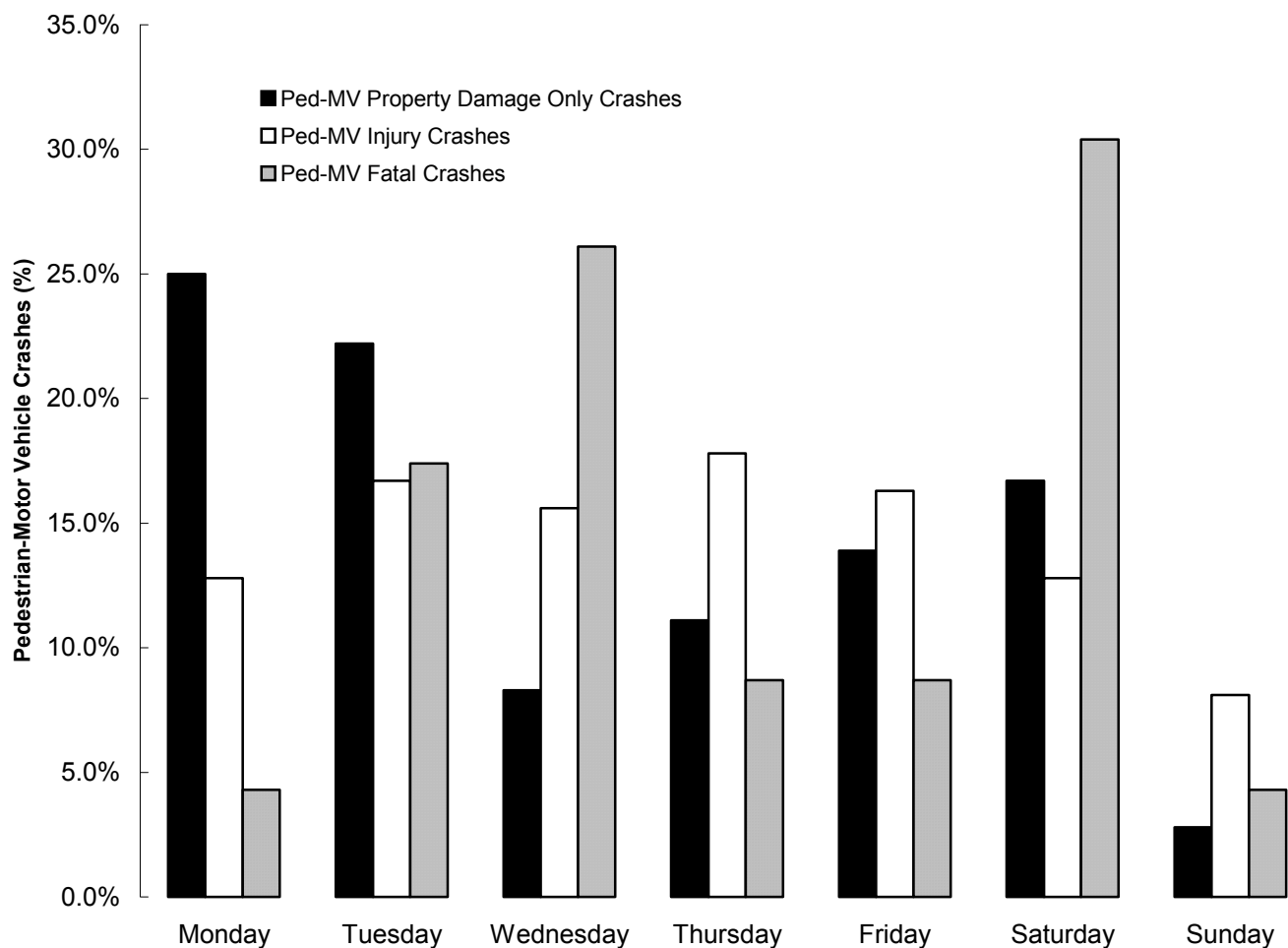
- The above table shows that January (2.1) and October (2.1) had the highest rates per day of total pedestrian-motor vehicle crashes.
- October had the highest rate per day of pedestrian-motor vehicle injury crashes (1.9).
- April (0.2) and May (0.2) had the highest rate per day of fatal pedestrian-motor vehicle crashes.

## Pedestrian-Motor Vehicle Crash Characteristics

### Pedestrian-Motor Vehicle Crashes by Day of Week (Utah 2003)

Pedestrian-Motor Vehicle Crashes								
Day of Week	Property Damage Only Crashes		Injury Crashes		Fatal Crashes		Total Crashes	
	#	%	#	%	#	%	#	%
Monday	9	25.0%	69	12.8%	1	4.3%	79	13.2%
Tuesday	8	22.2%	90	16.7%	4	17.4%	102	17.0%
Wednesday	3	8.3%	84	15.6%	6	26.1%	93	15.5%
Thursday	4	11.1%	96	17.8%	2	8.7%	102	17.0%
Friday	5	13.9%	88	16.3%	2	8.7%	95	15.9%
Saturday	6	16.7%	69	12.8%	7	30.4%	82	13.7%
Sunday	1	2.8%	44	8.1%	1	4.3%	46	7.7%
Total	36	100.0%	540	100.0%	23	100.0%	599	100.0%

### Pedestrian-Motor Vehicle Crashes by Day of Week (Utah 2003)



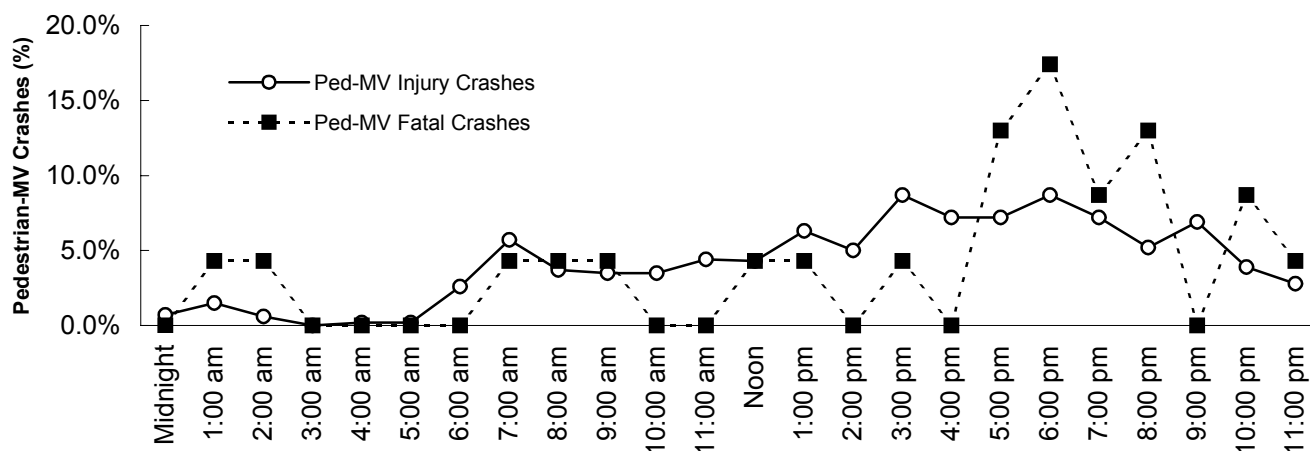
- The above table and graph show that the highest percentage of total pedestrian-motor vehicle crashes occurred on Tuesday (17.0%) and Thursday (17.0%).
- The highest percentage of pedestrian-motor vehicle injury crashes occurred on Thursday (17.8%).
- The highest percentage of fatal pedestrian-motor vehicle crashes occurred on Saturday (30.4%).

## Pedestrian-Motor Vehicle Crash Characteristics

### Pedestrian-Motor Vehicle Crashes by Hour of Day (Utah 2003)

Pedestrian-Motor Vehicle Crashes								
Hour	Property Damage Only Crashes		Injury Crashes		Fatal Crashes		Total Crashes	
	#	%	#	%	#	%	#	%
Midnight	0	0.0%	4	0.7%	0	0.0%	4	0.7%
1:00 am	0	0.0%	8	1.5%	1	4.3%	9	1.5%
2:00 am	0	0.0%	3	0.6%	1	4.3%	4	0.7%
3:00 am	0	0.0%	0	0.0%	0	0.0%	0	0.0%
4:00 am	0	0.0%	1	0.2%	0	0.0%	1	0.2%
5:00 am	1	2.8%	1	0.2%	0	0.0%	2	0.3%
6:00 am	0	0.0%	14	2.6%	0	0.0%	14	2.3%
7:00 am	2	5.6%	31	5.7%	1	4.3%	34	5.7%
8:00 am	1	2.8%	20	3.7%	1	4.3%	22	3.7%
9:00 am	2	5.6%	19	3.5%	1	4.3%	22	3.7%
10:00 am	0	0.0%	19	3.5%	0	0.0%	19	3.2%
11:00 am	2	5.6%	24	4.4%	0	0.0%	26	4.3%
Noon	1	2.8%	23	4.3%	1	4.3%	25	4.2%
1:00 pm	2	5.6%	34	6.3%	1	4.3%	37	6.2%
2:00 pm	2	5.6%	27	5.0%	0	0.0%	29	4.8%
3:00 pm	6	16.7%	47	8.7%	1	4.3%	54	9.0%
4:00 pm	4	11.1%	39	7.2%	0	0.0%	43	7.2%
5:00 pm	2	5.6%	39	7.2%	3	13.0%	44	7.3%
6:00 pm	2	5.6%	47	8.7%	4	17.4%	53	8.8%
7:00 pm	3	8.3%	39	7.2%	2	8.7%	44	7.3%
8:00 pm	2	5.6%	28	5.2%	3	13.0%	33	5.5%
9:00 pm	0	0.0%	37	6.9%	0	0.0%	37	6.2%
10:00 pm	3	8.3%	21	3.9%	2	8.7%	26	4.3%
11:00 pm	1	2.8%	15	2.8%	1	4.3%	17	2.8%
Total	36	100.0%	540	100.0%	23	100.0%	599	100.0%

### Pedestrian-Motor Vehicle Crashes by Hour of Day (Utah 2003)



- In 2003, 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 6:00 pm.

## Pedestrian-Motor Vehicle Crash Characteristics

### Locality of Pedestrian-Motor Vehicle Crashes (Utah 2003)

Pedestrian-Motor Vehicle Crashes								
Locality	Property Damage Only Crashes		Injury Crashes		Fatal Crashes		Total Crashes	
	#	%	#	%	#	%	#	%
Residential	11	30.6%	236	43.7%	8	34.8%	255	42.6%
Shopping/Business	19	52.8%	222	41.1%	11	47.8%	252	42.1%
School	3	8.3%	51	9.4%	0	0.0%	54	9.0%
Manufacturing/Industrial	2	5.6%	14	2.6%	1	4.3%	17	2.8%
Open Country	0	0.0%	8	1.5%	2	8.7%	10	1.7%
Farms and Fields	1	2.8%	3	0.6%	1	4.3%	5	0.8%
Church	0	0.0%	2	0.4%	0	0.0%	2	0.3%
Playground	0	0.0%	1	0.2%	0	0.0%	1	0.2%
Missing	0	0.0%	3	0.6%	0	0.0%	3	0.5%
Total	36	100.0%	540	100.0%	23	100.0%	599	100.0%

- The above table shows the majority of total pedestrian-motor vehicle crashes (42.6%) and pedestrian-motor vehicle injury crashes (43.7%) occurred in residential areas.
- Most fatal pedestrian-motor vehicle crashes occurred in shopping/business locations (47.8%).

### Urban/Rural Location of Pedestrian-Motor Vehicle Crashes (Utah 2003)

Pedestrian-Motor Vehicle Crashes								
Urban/Rural Location	Property Damage Only Crashes		Injury Crashes		Fatal Crashes		Total Crashes	
	#	%	#	%	#	%	#	%
Rural Area - Up to 5,000	5	13.9%	85	15.7%	7	30.4%	97	16.2%
Small Urban - 5,000 to 49,999	2	5.6%	20	3.7%	3	13.0%	25	4.2%
Moderate Urban - 50,000 to 199,999	0	0.0%	9	1.7%	0	0.0%	9	1.5%
Large Urban - 200,000 or More	29	80.6%	424	78.5%	13	56.5%	466	77.8%
Missing	0	0.0%	2	0.4%	0	0.0%	2	0.3%
Total	36	100.0%	540	100.0%	23	100.0%	599	100.0%

- Urban areas accounted for 83.5% of total pedestrian-motor vehicle crashes, 83.9% of pedestrian-motor vehicle injury crashes and 69.5% of fatal pedestrian-motor vehicle crashes.



## Pedestrian-Motor Vehicle Crash Characteristics

### Type of Vehicles Involved in Pedestrian-Motor Vehicle Crashes (Utah 2003)

Vehicle Type	Vehicles							
	Vehicles Involved in Pedestrian-MV PDO Crashes		Vehicles Involved in Pedestrian-MV Injury Crashes		Vehicles Involved in Pedestrian-MV Fatal Crashes		Total Vehicles Involved in Pedestrian-MV Crashes	
	#	%	#	%	#	%	#	%
Passenger Car	23	51.1%	287	51.8%	11	42.3%	321	51.4%
Light Truck, Van or SUV	19	42.2%	230	41.5%	10	38.5%	259	41.4%
Hit and Run Vehicle	0	0.0%	21	3.8%	0	0.0%	21	3.4%
Large/Semi Truck	1	2.2%	5	0.9%	3	11.5%	9	1.4%
Motorcycle	0	0.0%	6	1.1%	1	3.8%	7	1.1%
Other	1	2.2%	2	0.4%	1	3.8%	4	0.6%
School Bus	1	2.2%	3	0.5%	0	0.0%	4	0.6%
<b>Total</b>	<b>45</b>	<b>100.0%</b>	<b>554</b>	<b>100.0%</b>	<b>26</b>	<b>100.0%</b>	<b>625</b>	<b>100.0%</b>

- The above table shows that the largest percentage of vehicles involved in total pedestrian-motor vehicle crashes (51.4%), pedestrian-motor vehicle injury crashes (51.8%) and fatal pedestrian-motor vehicle crashes (42.3%) were passenger cars.

### Pedestrian-Motor Vehicle Crash Violations (Utah 2003)

Violations	Violations (Drivers)							
	Drivers Cited in Pedestrian-MV PDO Crashes		Drivers Cited in Pedestrian-MV Injury Crashes		Drivers Cited in Pedestrian-MV Fatal Crashes		Total Drivers Cited in Pedestrian-MV Crashes	
	#	%	#	%	#	%	#	%
Failure to Yield Right-of-Way	8	44.4%	86	51.5%	1	25.0%	95	50.3%
Improper Lookout	2	11.1%	18	10.8%	0	0.0%	20	10.6%
Other Non-Moving Violations	2	11.1%	16	9.6%	0	0.0%	18	9.5%
Driving Under the Influence	1	5.6%	10	6.0%	2	50.0%	13	6.9%
Hit and Run	1	5.6%	11	6.6%	1	25.0%	13	6.9%
All Other Moving Violations	0	0.0%	8	4.8%	0	0.0%	8	4.2%
Failure to Stop at Red Light	1	5.6%	4	2.4%	0	0.0%	5	2.6%
Negligent Collision	1	5.6%	3	1.8%	0	0.0%	4	2.1%
Speeding	0	0.0%	3	1.8%	0	0.0%	3	1.6%
Reckless Driving	0	0.0%	3	1.8%	0	0.0%	3	1.6%
Improper Backing	0	0.0%	3	1.8%	0	0.0%	3	1.6%
Wrong Side of Road	0	0.0%	2	1.2%	0	0.0%	2	1.1%
Following Too Close	1	5.6%	0	0.0%	0	0.0%	1	0.5%
Improper Turn (Failure to Signal)	1	5.6%	0	0.0%	0	0.0%	1	0.5%
<b>Total</b>	<b>18</b>	<b>100.0%</b>	<b>167</b>	<b>100.0%</b>	<b>4</b>	<b>100.0%</b>	<b>189</b>	<b>100.0%</b>

- In 2003, there were 612 drivers involved in pedestrian-motor vehicle crashes. Officers at the scene of the crash cited 189 (30.9%) of those drivers for a traffic violation.
- "Failure to yield right-of-way" was the leading violation for total pedestrian-motor vehicle crashes (50.3%), and pedestrian-motor vehicle injury crashes (51.5%).
- Only 4 of the 25 drivers involved in fatal pedestrian-motor vehicle crashes received a citation. The drivers were cited for "driving under the influence" (50.0%), "failure to yield right-of-way" (25.0%) and "hit and run" (25.0%).

## Pedestrian-Motor Vehicle Crash Characteristics

### Contributing Factors of Pedestrian-Motor Vehicle Crashes (Utah 2003)

Contributing Factors (Pedestrian-Motor Vehicle Crashes)								
Contributing Factors	Pedestrian-MV Property Damage Only Crashes		Pedestrian-MV Injury Crashes		Pedestrian-MV Fatal Crashes		Total Pedestrian-MV Crashes	
	#	%	#	%	#	%	#	%
Speed Too Fast	9	18.8%	152	23.8%	9	45.0%	170	24.1%
Other Improper Driving	10	20.8%	127	19.9%	4	20.0%	141	20.0%
Improper Lookout	8	16.7%	84	13.2%	1	5.0%	93	13.2%
Followed Too Closely	9	18.8%	47	7.4%	0	0.0%	56	7.9%
Failed to Yield Right of Way	0	0.0%	31	4.9%	0	0.0%	31	4.4%
Drove Left of Center	1	2.1%	26	4.1%	3	15.0%	30	4.2%
Non-Contact Vehicle Involved	0	0.0%	20	3.1%	0	0.0%	20	2.8%
Made Improper Turn	4	8.3%	15	2.4%	0	0.0%	19	2.7%
Driving Under the Influence	1	2.1%	18	2.8%	0	0.0%	19	2.7%
Improper Overtaking	1	2.1%	18	2.8%	0	0.0%	19	2.7%
Object in Roadway	1	2.1%	17	2.7%	0	0.0%	18	2.5%
Aggressive Driving	0	0.0%	13	2.0%	0	0.0%	13	1.8%
Wrong Side of Road	0	0.0%	10	1.6%	1	5.0%	11	1.6%
Tires Defective	0	0.0%	10	1.6%	0	0.0%	10	1.4%
Disregard Traffic Signal	1	2.1%	8	1.3%	0	0.0%	9	1.3%
Other Driver Distractions	1	2.1%	8	1.3%	0	0.0%	9	1.3%
Hit and Run	0	0.0%	8	1.3%	0	0.0%	8	1.1%
Had Been Drinking	0	0.0%	7	1.1%	0	0.0%	7	1.0%
Passed Stop Sign	0	0.0%	3	0.5%	1	5.0%	4	0.6%
Other Defective Condition of Vehicle	0	0.0%	4	0.6%	0	0.0%	4	0.6%
Brakes Defective	0	0.0%	3	0.5%	0	0.0%	3	0.4%
Fatigued	1	2.1%	1	0.2%	0	0.0%	2	0.3%
Sick or Ill	0	0.0%	2	0.3%	0	0.0%	2	0.3%
Under the Influence of Drugs	0	0.0%	2	0.3%	0	0.0%	2	0.3%
Headlights Insufficient or Out	0	0.0%	2	0.3%	0	0.0%	2	0.3%
Driver Using Cell Phone	0	0.0%	1	0.2%	0	0.0%	1	0.1%
Vehicle Rolling in Traffic Lane	0	0.0%	0	0.0%	1	5.0%	1	0.1%
Stolen	1	2.1%	0	0.0%	0	0.0%	1	0.1%
Headlights Glaring	0	0.0%	1	0.2%	0	0.0%	1	0.1%
Total	48	100.0%	638	100.0%	20	100.0%	706	100.0%

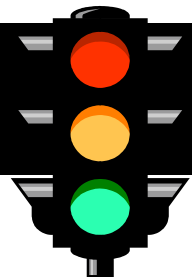
- Contributing factors were coded by the police officer at the scene of the crash for each vehicle involved in the crash. The officer may record no contributing factor or up to two different contributing factors.
- "Speed too fast" was the leading contributing factor for total pedestrian-motor vehicle crashes (24.1%), pedestrian-motor vehicle injury crashes (23.8%) and fatal pedestrian-motor vehicle crashes (45.0%).
- The combined contributing factors of "driving under the influence," "had been drinking" and "under the influence of drugs" accounted for 4.0% of total pedestrian-motor vehicle crashes and 4.2% of pedestrian-motor vehicle injury crashes.

# **Bicyclists**

## **2003**



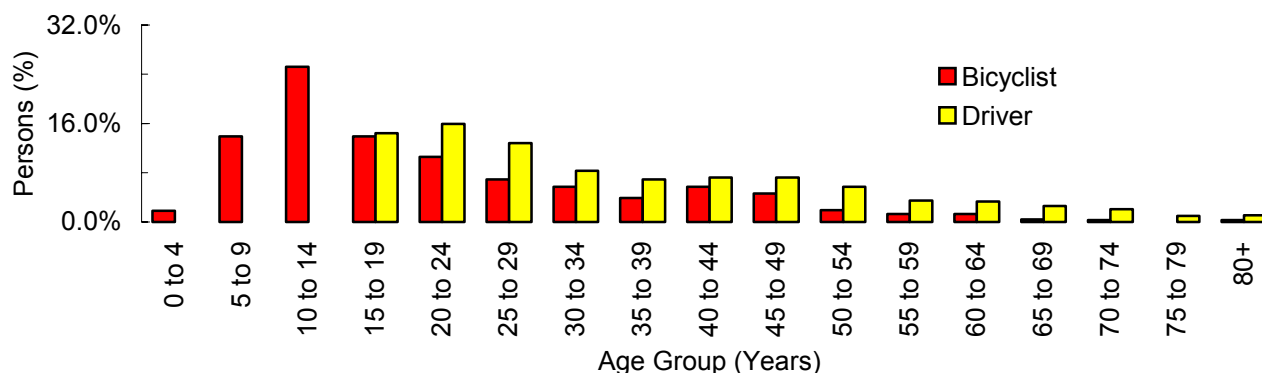
## BICYCLISTS



### Did you know that in 2003. . .

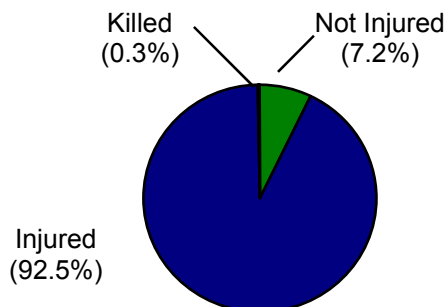
- 671 bicyclists were involved in motor vehicle crashes; 621 were injured, and 2 were killed.
- Injuries were 3 times higher for bicyclists than for other motor vehicle crash occupants.

### Age of Persons Involved in Bicyclist Crashes, Utah 2003



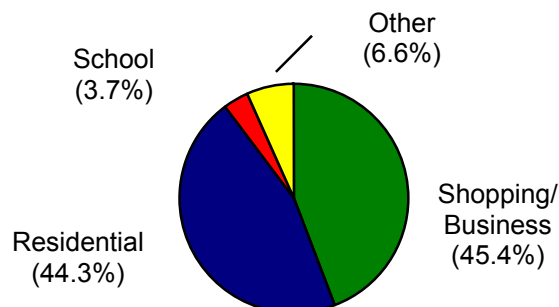
- The highest percentage of bicyclists involved in crashes were aged 10 to 14 years (25.2%).
- The highest percentage of drivers involved in bicyclist crashes were aged 20 to 24 years (15.9%).

### Bicyclist Injury Severity, Utah 2003



- Nearly all bicyclists (92.5%) involved in crashes sustained an injury compared to 21.3% of all motor vehicle crash occupants.

### Location of Bicyclist-Motor Vehicle Crashes, Utah 2003



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

### Top 3 Driving Factors that Contributed to Bicyclist-Motor Vehicle Crashes:

1. Improper Lookout (46.6%)
2. Failed to Yield Right-of-Way (30.0%)
3. Hit and Run (8.8%)

- In addition to the above, "driving under the influence," "had been drinking," and "under the influence of drugs" accounted for 1.1% of bicyclist-motor vehicle crashes.

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

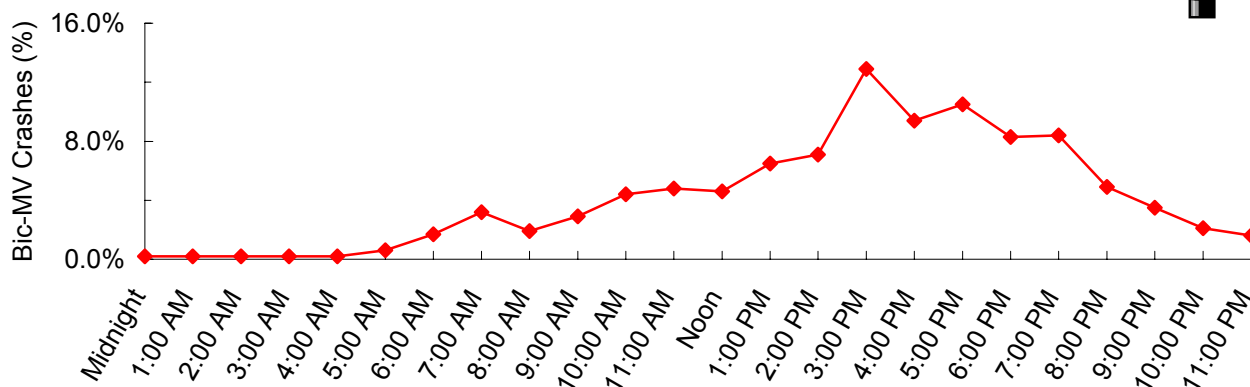
1. Failed to Yield Right-of-Way (45.1%)
2. Improper Lookout (25.9%)
3. Failure to Stop at Red Light (4.3%)

- One-quarter (25.6%) of drivers involved in bicyclist-motor vehicle crashes received a citation.

## BICYCLISTS

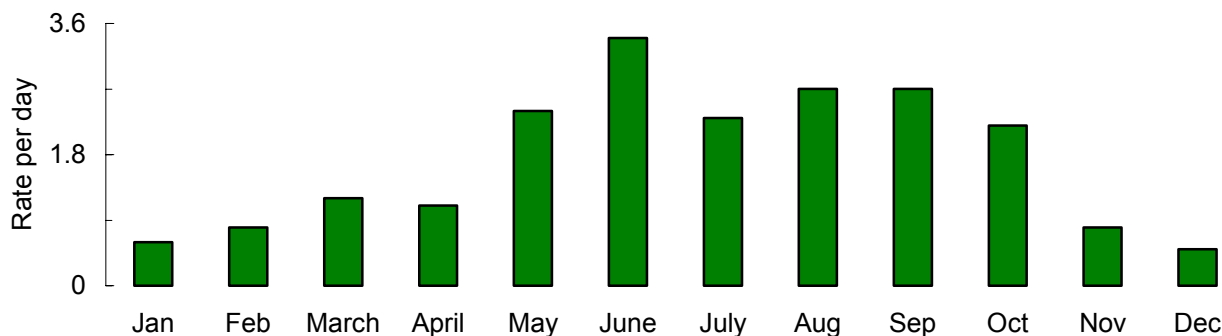


### Time of Day Bicyclist Crashes Occurred, Utah 2003



- Bicyclist-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 Bicyclist-Motor Vehicle Crashes Occurred, Utah 2003



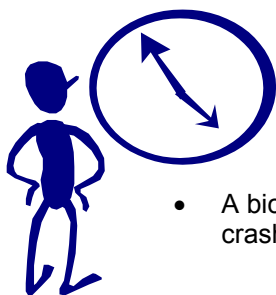
- June (3.4) had the highest rates per day of bicyclist-motor vehicle crashes.

### Actions of Bicyclists Prior to Crashes, Utah 2003

- Riding in Roadway with Traffic (15.6%)
- Crossing Intersection with Signal (13.4%)
- Riding in Roadway Against Traffic (13.3%)
- Crossing Intersection with No Signal (13.0%)
- Riding on Sidewalk (11.2%)

- "Crossing Intersection (with signal, no signal, against signal, diagonally)" comprised 34.1% of bicyclist actions prior to crashes.

### Bicyclist Crash Clock



- A bicyclist was involved in a crash every 13 hours.

### Alcohol and Other Drug Involvement



- Of the 2 bicyclists killed in 2003, none were impaired by alcohol or other drugs.
- Of the drivers involved in fatal bicyclist-motor vehicle crashes, none were impaired by alcohol or other drugs.

## Section 8: Bicyclists

### Section 8: Bicyclists 2003

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Violations.....	149
Contributing Factors .....	150

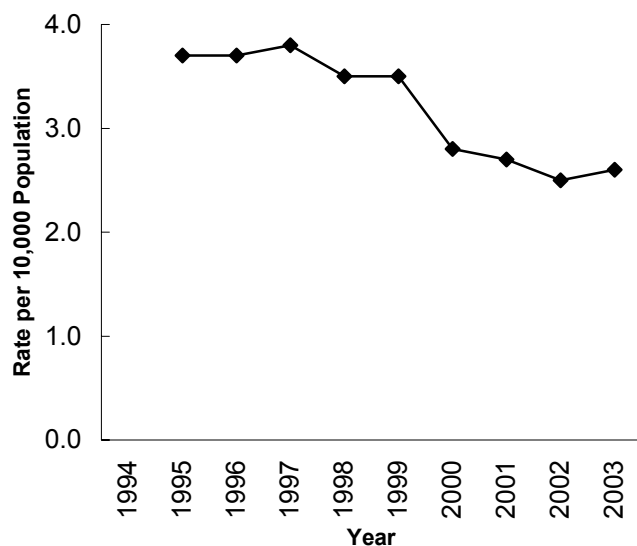
## Trends

### Bicyclists Involved in Crashes 1994-2003

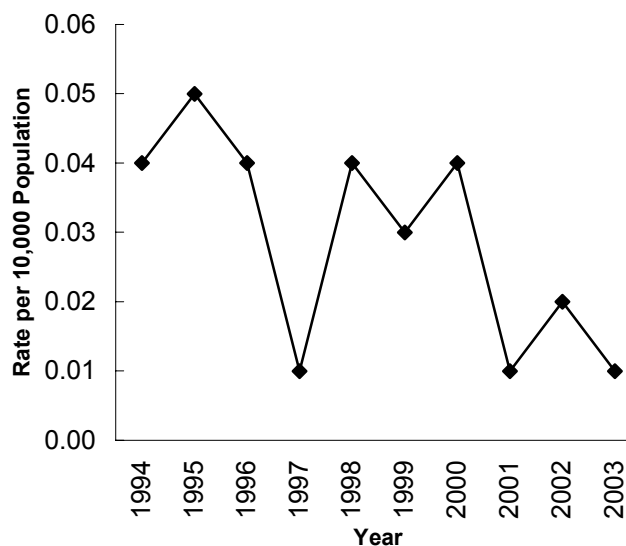
Bicyclists									
Year	Population	Non-Injured Bicyclists		Injured Bicyclists		Bicyclists Killed		Total Bicyclists	
		Non-Injured Bicyclists #	Rate per 10,000 Population	Injured Bicyclists #	Rate per 10,000 Population	Bicyclists Killed #	Rate per 10,000 Population	All Bicyclists #	Rate per 10,000 Population
1994	1,946,721	N/A	N/A	N/A	N/A	7	0.04	N/A	N/A
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
Total	21,685,540	550	0.25	6,298	2.9	63	0.03	6,911	3.2

- In 2003, the rate of bicyclists injured in crashes was 2.6; a 4% increase from 2002.
- In 2003, there were 2 bicyclists killed in crashes; a rate of 0.01. 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 1994-2003)**



**Bicyclists Killed in Crashes  
(Utah 1994-2003)**



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



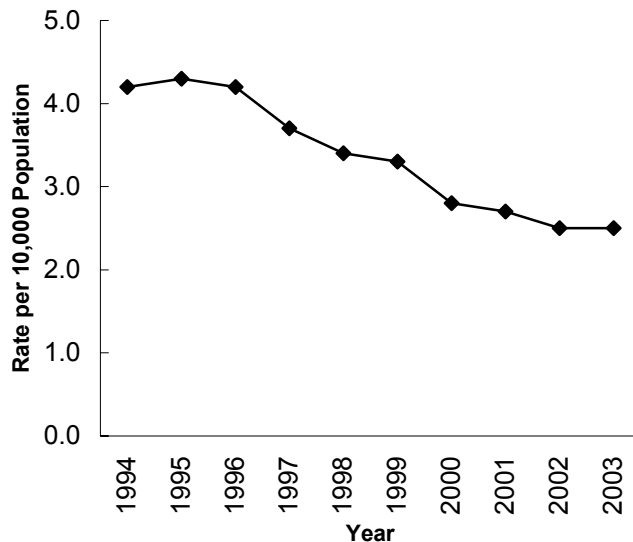
## Trends

### Bicyclist-Motor Vehicle Crashes 1994-2003

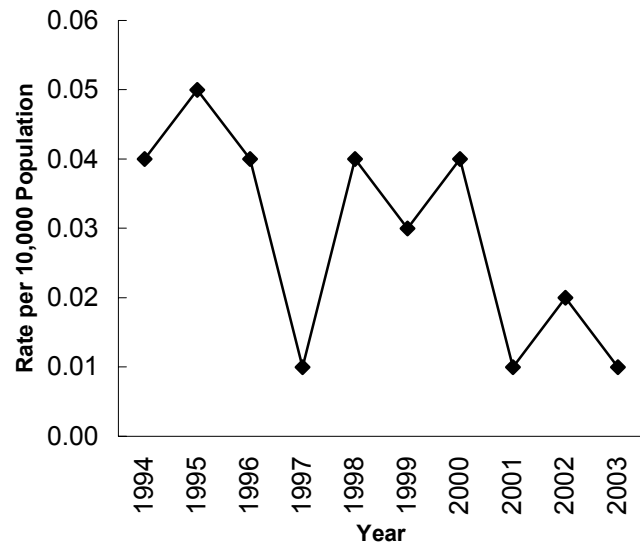
Bicyclist-Motor Vehicle Crashes									
Year	Population	Property Damage Only (PDO)		Injury		Fatal		Total	
		Bic-MV PDO Crashes #	Rate per 10,000 Population	Bic-MV Injury Crashes #	Rate per 10,000 Population	Bic-MV Fatal Crashes #	Rate per 10,000 Population	All Bic-MV Crashes #	Rate per 10,000 Population
1994	1,946,721	224	1.2	819	4.2	7	0.04	1,050	5.4
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
Total	21,685,540	778	0.4	7,183	3.3	62	0.03	8,023	3.7

- In 2003, the rate of bicyclist-motor vehicle injury crashes was 2.5; the same as 2002.
- In 2003, there were 2 fatal bicyclist-motor vehicle crashes; a rate of 0.01. 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 1994-2003)



#### Fatal Bicyclist-Motor Vehicle Crashes (Utah 1994-2003)



- Over the last ten years, the rates of total bicyclist-motor vehicle crashes and bicyclist-motor vehicle injury crashes have followed a similar overall decreasing trend.
- 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 2003)

Bicyclists												
County	Non-Injured Bicyclists			Injured Bicyclists			Bicyclists Killed			Total Bicyclists		
	Non-Injured Bic. #	Rate per 100 Million VMT	Rate per 10,000 Population	Injured Bic. #	Rate per 100 Million VMT	Rate per 10,000 Population	Bic. Killed #	Rate per 100 Million VMT	Rate per 10,000 Population	All Bic. #	Rate per 100 Million VMT	Rate per 10,000 Population
Beaver	0	0.0	0.0	1	0.4	1.6	0	0.0	0.0	1	0.4	1.6
Box Elder	0	0.0	0.0	6	0.7	1.4	0	0.0	0.0	6	0.7	1.4
Cache	4	0.5	0.4	24	2.9	2.4	0	0.0	0.0	28	3.4	2.9
Carbon	1	0.3	0.5	1	0.3	0.5	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	1	0.0	0.0	51	2.3	2.0	0	0.0	0.0	52	2.3	2.0
Duchesne	0	0.0	0.0	3	1.5	2.0	0	0.0	0.0	3	1.5	2.0
Emery	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
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	2	0.7	2.4	0	0.0	0.0	2	0.7	2.4
Iron	0	0.0	0.0	7	1.1	1.9	0	0.0	0.0	7	1.1	1.9
Juab	0	0.0	0.0	1	0.3	1.1	0	0.0	0.0	1	0.3	1.1
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	1	0.9	1.3	0	0.0	0.0	1	0.9	1.3
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	299	3.7	3.2	0	0.0	0.0	326	4.1	3.5
San Juan	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Sanpete	2	0.9	0.9	3	1.3	1.3	0	0.0	0.0	5	2.2	2.1
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	3	0.5	0.9	0	0.0	0.0	3	0.5	0.9
Tooele	0	0.0	0.0	6	0.8	1.3	0	0.0	0.0	6	0.8	1.3
Uintah	1	0.4	0.4	2	0.7	0.8	0	0.0	0.0	3	1.1	1.2
Utah	8	0.2	0.2	116	3.4	2.8	1	0.0	0.0	125	3.7	3.0
Wasatch	0	0.0	0.0	1	0.4	0.6	0	0.0	0.0	1	0.4	0.6
Washington	2	0.2	0.2	23	2.3	2.2	0	0.0	0.0	25	2.5	2.4
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	66	4.4	3.2	1	0.1	0.0	69	4.6	3.4
Statewide	48	0.2	0.2	621	2.6	2.6	2	0.0	0.0	671	2.8	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 (4.6), Salt Lake (4.1) and Utah county (3.7) had the highest rates of total bicyclists involved in crashes per 100 million vehicle miles traveled.
  - Weber (4.4), Salt Lake (3.7) and Utah county (3.4) had the highest rates of bicyclists injured in crashes per 100 million vehicle miles traveled.
- Rate per 10,000 population:
  - Salt Lake (3.5), Weber (3.4) and Utah county (3.0) had the highest rates of total bicyclists involved in crashes per 10,000 population.
  - Salt Lake (3.2), Weber (3.2) and Utah county (2.8) had the highest rates of bicyclists injured in crashes per 10,000 population.

## Counties

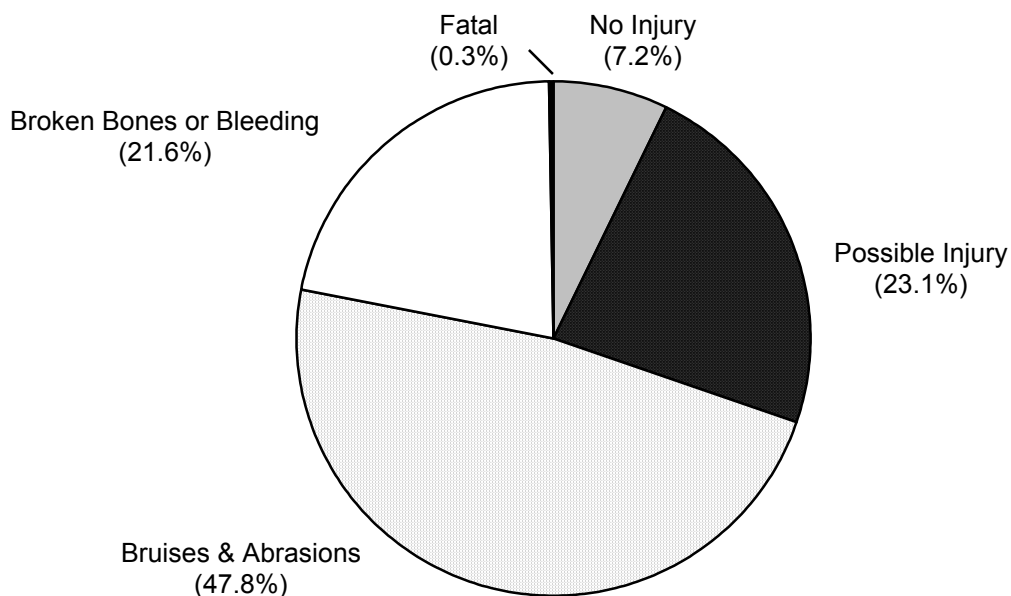
### Bicyclist-Motor Vehicle Crashes by County (Utah 2003)

Bicyclist-Motor Vehicle Crashes												
County	Property Damage Only (PDO)			Injury			Fatal			Total		
	Bic-MV PDO Crashes #	Rate per 100 Million VMT	Rate per 10,000 Population	Bic-MV Injury Crashes #	Rate per 100 Million VMT	Rate per 10,000 Population	Bic-MV Fatal Crashes #	Rate per 100 Million VMT	Rate per 10,000 Population	All Bic-MV Crashes #	Rate per 100 Million VMT	Rate per 10,000 Population
Beaver	0	0.0	0.0	1	0.4	1.6	0	0.0	0.0	1	0.4	1.6
Box Elder	1	0.1	0.2	6	0.7	1.4	0	0.0	0.0	7	0.8	1.6
Cache	2	0.2	0.2	25	3.0	2.5	0	0.0	0.0	27	3.3	2.8
Carbon	1	0.3	0.5	1	0.3	0.5	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	0	0.0	0.0	44	2.0	1.7	0	0.0	0.0	44	2.0	1.7
Duchesne	0	0.0	0.0	3	1.5	2.0	0	0.0	0.0	3	1.5	2.0
Emery	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
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	2	0.7	2.4	0	0.0	0.0	2	0.7	2.4
Iron	0	0.0	0.0	7	1.1	1.9	0	0.0	0.0	7	1.1	1.9
Juab	0	0.0	0.0	1	0.3	1.1	0	0.0	0.0	1	0.3	1.1
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	1	0.9	1.3	0	0.0	0.0	1	0.9	1.3
Plute	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	22	0.3	0.2	281	3.5	3.0	0	0.0	0.0	303	3.8	3.2
San Juan	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Sanpete	2	0.9	0.9	3	1.3	1.3	0	0.0	0.0	5	2.2	2.1
Sevier	0	0.0	0.0	3	0.8	1.6	0	0.0	0.0	3	0.8	1.6
Summit	0	0.0	0.0	3	0.5	0.9	0	0.0	0.0	3	0.5	0.9
Tooele	0	0.0	0.0	7	0.9	1.5	0	0.0	0.0	7	0.9	1.5
Uintah	1	0.4	0.4	2	0.7	0.8	0	0.0	0.0	3	1.1	1.2
Utah	7	0.2	0.2	111	3.3	2.7	0	0.0	0.0	118	3.5	2.9
Wasatch	0	0.0	0.0	1	0.4	0.6	1	0.4	0.6	2	0.8	1.2
Washington	1	0.1	0.1	24	2.4	2.3	0	0.0	0.0	25	2.5	2.4
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	62	4.2	3.0	1	0.1	0.0	65	4.4	3.2
Statewide	39	0.2	0.2	589	2.5	2.5	2	0.0	0.0	630	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:
  - Weber (4.4), Salt Lake (3.8) and Utah county (3.5) had the highest rates of total bicyclist-motor vehicle per 100 million vehicle miles traveled.
  - Weber (4.2), Salt Lake (3.5) and Utah county (3.3) had the highest rate of bicyclist-motor vehicle injury crashes per 100 million vehicle miles traveled.
- Rate per 10,000 population:
  - Weber (3.2), Salt Lake (3.2) and Utah county (2.9) had the highest rates of total bicyclist-motor vehicle crashes per 10,000 population.
  - Weber (3.0), Salt Lake (3.0) and Utah county (2.7) had the highest rates of bicyclist-motor vehicle injury crashes per 10,000 population.

## Bicyclist Characteristics

### Injury Severity of Bicyclists Involved in Crashes (Utah 2003)



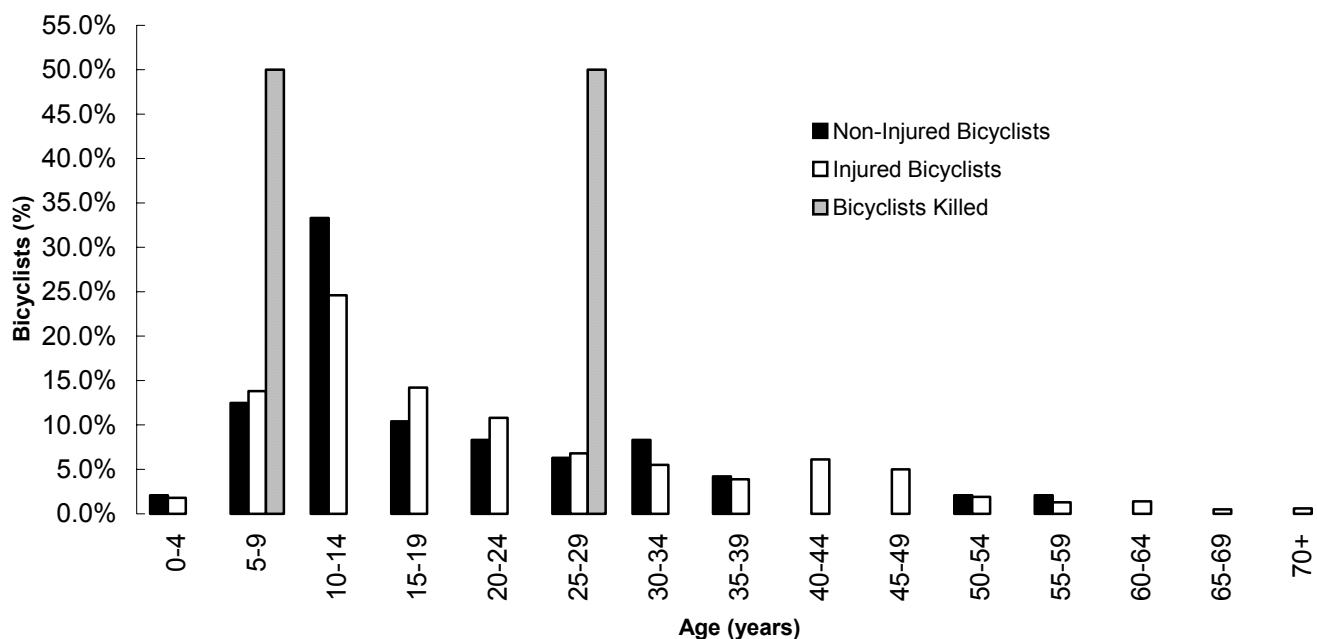
- In the above graph, there were a total of 671 bicyclists involved in crashes.
- The above graph shows that 92.5% of bicyclists involved in crashes sustained an injury compared to 21.3% of all motor vehicle crash occupants.
- In fact, injuries were 3 times higher for bicyclists than for other motor vehicle crash occupants.
- The percentage of bicyclists killed in crashes (0.3%) was similar to the percentage for all motor vehicle crash occupants killed in crashes (0.2%).

## Bicyclist Characteristics

### Age of Bicyclists Involved in Crashes (Utah 2003)

Bicyclists								
Age	Non-Injured Bicyclists		Injured Bicyclists		Bicyclists Killed		Total Bicyclists	
	#	%	#	%	#	%	#	%
0-4	1	2.1%	11	1.8%	0	0.0%	12	1.8%
5-9	6	12.5%	86	13.8%	1	50.0%	93	13.9%
10-14	16	33.3%	153	24.6%	0	0.0%	169	25.2%
15-19	5	10.4%	88	14.2%	0	0.0%	93	13.9%
20-24	4	8.3%	67	10.8%	0	0.0%	71	10.6%
25-29	3	6.3%	42	6.8%	1	50.0%	46	6.9%
30-34	4	8.3%	34	5.5%	0	0.0%	38	5.7%
35-39	2	4.2%	24	3.9%	0	0.0%	26	3.9%
40-44	0	0.0%	38	6.1%	0	0.0%	38	5.7%
45-49	0	0.0%	31	5.0%	0	0.0%	31	4.6%
50-54	1	2.1%	12	1.9%	0	0.0%	13	1.9%
55-59	1	2.1%	8	1.3%	0	0.0%	9	1.3%
60-64	0	0.0%	9	1.4%	0	0.0%	9	1.3%
65-69	0	0.0%	3	0.5%	0	0.0%	3	0.4%
70+	0	0.0%	4	0.6%	0	0.0%	4	0.6%
Missing	5	10.4%	11	1.8%	0	0.0%	16	2.4%
Total	48	100.0%	621	100.0%	2	100.0%	671	100.0%

### Age of Bicyclists Involved in Crashes (Utah 2003)



- Overall, the largest percentage of bicyclists involved in crashes were aged 10 to 14 years (25.2%). This age group also represented the largest percentage of bicyclists injured in crashes (24.6%).
- Regarding the two fatalities, one bicyclist was aged 5 to 9 years, and the other was aged 25 to 29 years.

## Bicyclist Characteristics

### Gender of Bicyclists Involved in Crashes (Utah 2003)

Bicyclists						
Gender	Non-Injured Bicyclists		Injured Bicyclists		Bicyclists Killed	
	#	%	#	%	#	%
Female	8	16.7%	128	20.6%	1	50.0%
Male	40	83.3%	490	78.9%	1	50.0%
Missing	0	0.0%	3	0.5%	0	0.0%
<b>Total</b>	<b>48</b>	<b>100.0%</b>	<b>621</b>	<b>100.0%</b>	<b>2</b>	<b>100.0%</b>

- The majority of all bicyclists (79.1%), and bicyclists injured (78.9%) in crashes were male.
- Of the two bicyclists killed in crashes, one was male and one was female.

### Actions of Bicyclists Prior to Crashes (Utah 2003)

Bicyclists						
Bicyclist Action Prior to Crash	Non-Injured Bicyclists		Injured Bicyclists		Bicyclists Killed	
	#	%	#	%	#	%
Riding in Roadway with Traffic	6	12.5%	98	15.8%	1	50.0%
Crossing Intersection with Signal	7	14.6%	83	13.4%	0	0.0%
Riding in Roadway Against Traffic	6	12.5%	83	13.4%	0	0.0%
Crossing Intersection with No Signal	5	10.4%	82	13.2%	0	0.0%
Missing	7	14.6%	80	12.9%	0	0.0%
Riding on Sidewalk	4	8.3%	71	11.4%	0	0.0%
Crossing Intersection Against Signal	5	10.4%	38	6.1%	0	0.0%
Crossing Not at Intersection	3	6.3%	26	4.2%	0	0.0%
Other in Roadway	1	2.1%	16	2.6%	0	0.0%
Coming From Behind Parked Cars	1	2.1%	14	2.3%	0	0.0%
Playing in Roadway	0	0.0%	12	1.9%	0	0.0%
Crossing Intersection Diagonally	0	0.0%	8	1.3%	1	50.0%
Walking on Sidewalk	1	2.1%	5	0.8%	0	0.0%
Other Standing in Roadway	1	2.1%	1	0.2%	0	0.0%
Crosswalk Not at Intersection	0	0.0%	2	0.3%	0	0.0%
Not in Roadway	0	0.0%	1	0.2%	0	0.0%
Walking To or From School	1	2.1%	0	0.0%	0	0.0%
Hitching on Vehicle	0	0.0%	1	0.2%	0	0.0%
<b>Total</b>	<b>48</b>	<b>100.0%</b>	<b>621</b>	<b>100.0%</b>	<b>2</b>	<b>100.0%</b>

- Leading bicyclist actions prior to crashes were “crossing at intersection (with signal, against signal, no signal and diagonally)” (34.1%), and “riding in roadway (in traffic, against traffic)” (28.9%).

### Bicyclists and Helmet Use (Utah 2003)

- 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.

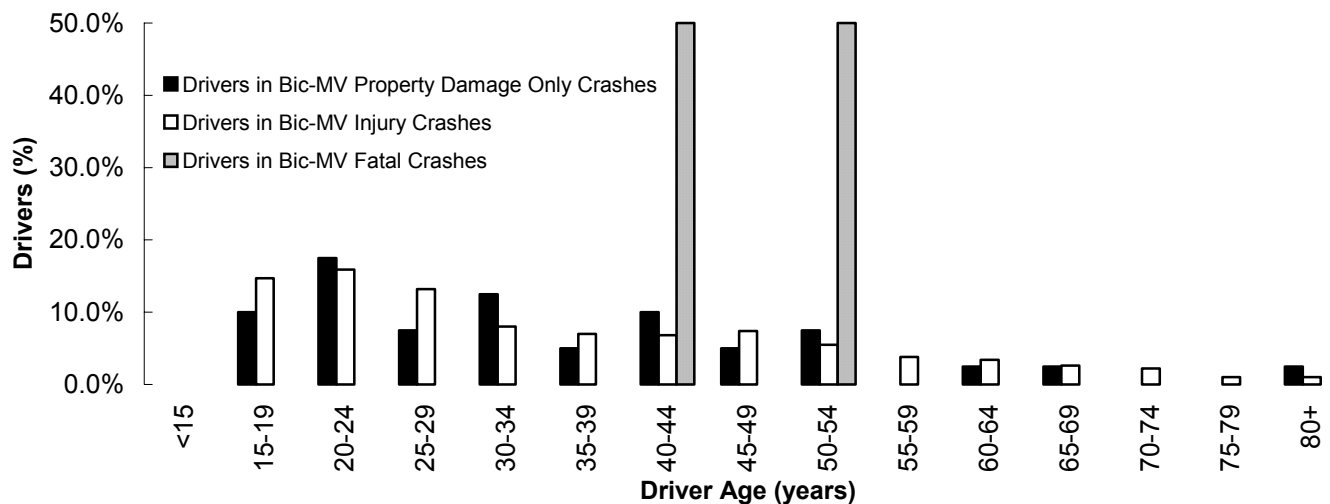
## Driver Characteristics

### Driver Age (Utah 2003)

Driver Age	Drivers							
	Drivers Involved in Bicyclist-MV Property Damage Only Crashes		Drivers Involved in Bicyclist-MV Injury Crashes		Drivers Involved in Bicyclist-MV Fatal Crashes		Total Drivers Involved in Bicyclist-MV Crashes	
	#	%	#	%	#	%	#	%
<15	0	0.0%	0	0.0%	0	0.0%	0	0.0%
15-19	4	10.0%	86	14.7%	0	0.0%	90	14.4%
20-24	7	17.5%	93	15.9%	0	0.0%	100	15.9%
25-29	3	7.5%	77	13.2%	0	0.0%	80	12.8%
30-34	5	12.5%	47	8.0%	0	0.0%	52	8.3%
35-39	2	5.0%	41	7.0%	0	0.0%	43	6.9%
40-44	4	10.0%	40	6.8%	1	50.0%	45	7.2%
45-49	2	5.0%	43	7.4%	0	0.0%	45	7.2%
50-54	3	7.5%	32	5.5%	1	50.0%	36	5.7%
55-59	0	0.0%	22	3.8%	0	0.0%	22	3.5%
60-64	1	2.5%	20	3.4%	0	0.0%	21	3.3%
65-69	1	2.5%	15	2.6%	0	0.0%	16	2.6%
70-74	0	0.0%	13	2.2%	0	0.0%	13	2.1%
75-79	0	0.0%	6	1.0%	0	0.0%	6	1.0%
80+	1	2.5%	6	1.0%	0	0.0%	7	1.1%
Missing	7	17.5%	44	7.5%	0	0.0%	51	8.1%
<b>Total</b>	<b>40</b>	<b>100.0%</b>	<b>585</b>	<b>100.0%</b>	<b>2</b>	<b>100.0%</b>	<b>627</b>	<b>100.0%</b>

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 2003)



- 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 (15.9%) and bicyclist-motor vehicle injury crashes (15.9%).
- Of the drivers involved in fatal bicyclist-motor vehicle crashes, one was aged 40 to 44 years and another was aged 50 to 54 years.

## Driver Characteristics

### Driver Gender (Utah 2003)

Drivers							
Driver Gender	Drivers Involved in Bicyclist-MV Property Damage Only Crashes		Drivers Involved in Bicyclist-MV Injury Crashes		Drivers Involved in Bicyclist-MV Fatal Crashes		Total Drivers Involved in Bicyclist-MV Crashes
	#	%	#	%	#	%	# %
Female	14	35.0%	233	39.8%	1	50.0%	248 39.6%
Male	22	55.0%	321	54.9%	1	50.0%	344 54.9%
Missing	4	10.0%	31	5.3%	0	0.0%	35 5.6%
<b>Total</b>	<b>40</b>	<b>100.0%</b>	<b>585</b>	<b>100.0%</b>	<b>2</b>	<b>100.0%</b>	<b>627 100.0%</b>

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 (54.9%) and bicyclist-motor vehicle injury crashes (54.9%) were male.
- Of the drivers involved in fatal bicyclist-motor vehicle crashes, one was male and one was female.

### Alcohol and Other Drug Involvement of Bicyclists and Motor Vehicle Drivers (Utah 2003)

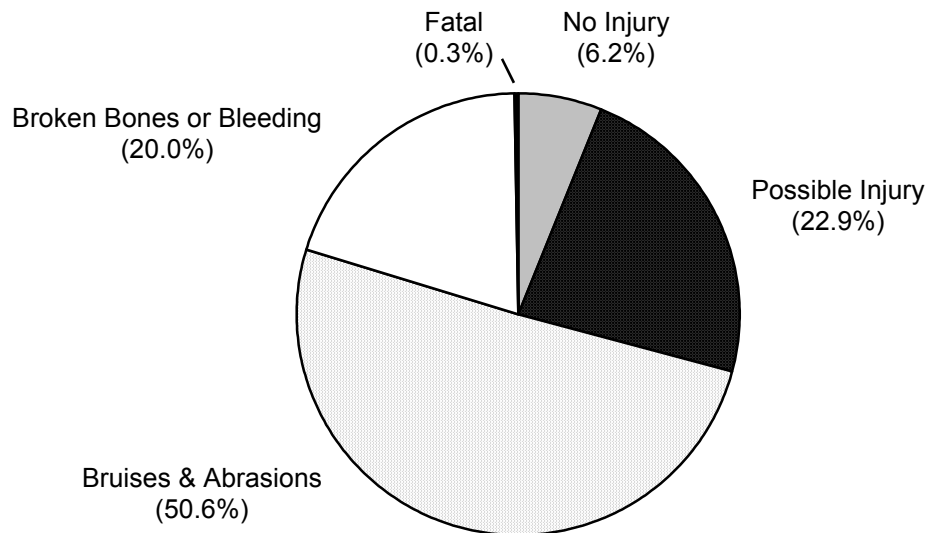


- Of the 2 bicyclists killed in 2003, none were impaired by alcohol or other drugs.
- Of the drivers involved in fatal bicyclist-motor vehicle crashes, none were impaired by alcohol or other drugs.



## Bicyclist-Motor Vehicle Crash Characteristics

### Bicyclist-Motor Vehicle Crash Severity (Utah 2003)



- In the above graph, there were a total of 630 bicyclist-motor vehicle crashes.
- The above graph shows that 93.5% of bicyclist-motor vehicle crashes resulted in some level of injury compared to 36.3% of all motor vehicle crashes.
- Moreover, 0.3% 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 2003)

Bicyclist-Motor Vehicle Crashes									
Month	Days in Month #	Property Damage Only (PDO)		Injury		Fatal		Total	
		Bicyclist-MV PDO Crashes #	Rate per Day	Bicyclist-MV Injury Crashes #	Rate per Day	Bicyclist-MV Fatal Crashes #	Rate per Day	All Bicyclist-MV Crashes #	Rate per Day
January	31	3	0.1	17	0.5	0	0.0	20	0.6
February	28	1	0.0	20	0.7	0	0.0	21	0.8
March	31	2	0.1	36	1.2	0	0.0	38	1.2
April	30	3	0.1	30	1.0	0	0.0	33	1.1
May	31	1	0.0	73	2.4	0	0.0	74	2.4
June	30	8	0.3	93	3.1	1	0.0	102	3.4
July	31	6	0.2	64	2.1	0	0.0	70	2.3
August	31	3	0.1	80	2.6	0	0.0	83	2.7
September	30	5	0.2	75	2.5	0	0.0	80	2.7
October	31	5	0.2	62	2.0	1	0.0	68	2.2
November	30	2	0.1	23	0.8	0	0.0	25	0.8
December	31	0	0.0	16	0.5	0	0.0	16	0.5
<b>Total</b>	<b>365</b>	<b>39</b>	<b>0.1</b>	<b>589</b>	<b>1.6</b>	<b>2</b>	<b>0.0</b>	<b>630</b>	<b>1.7</b>

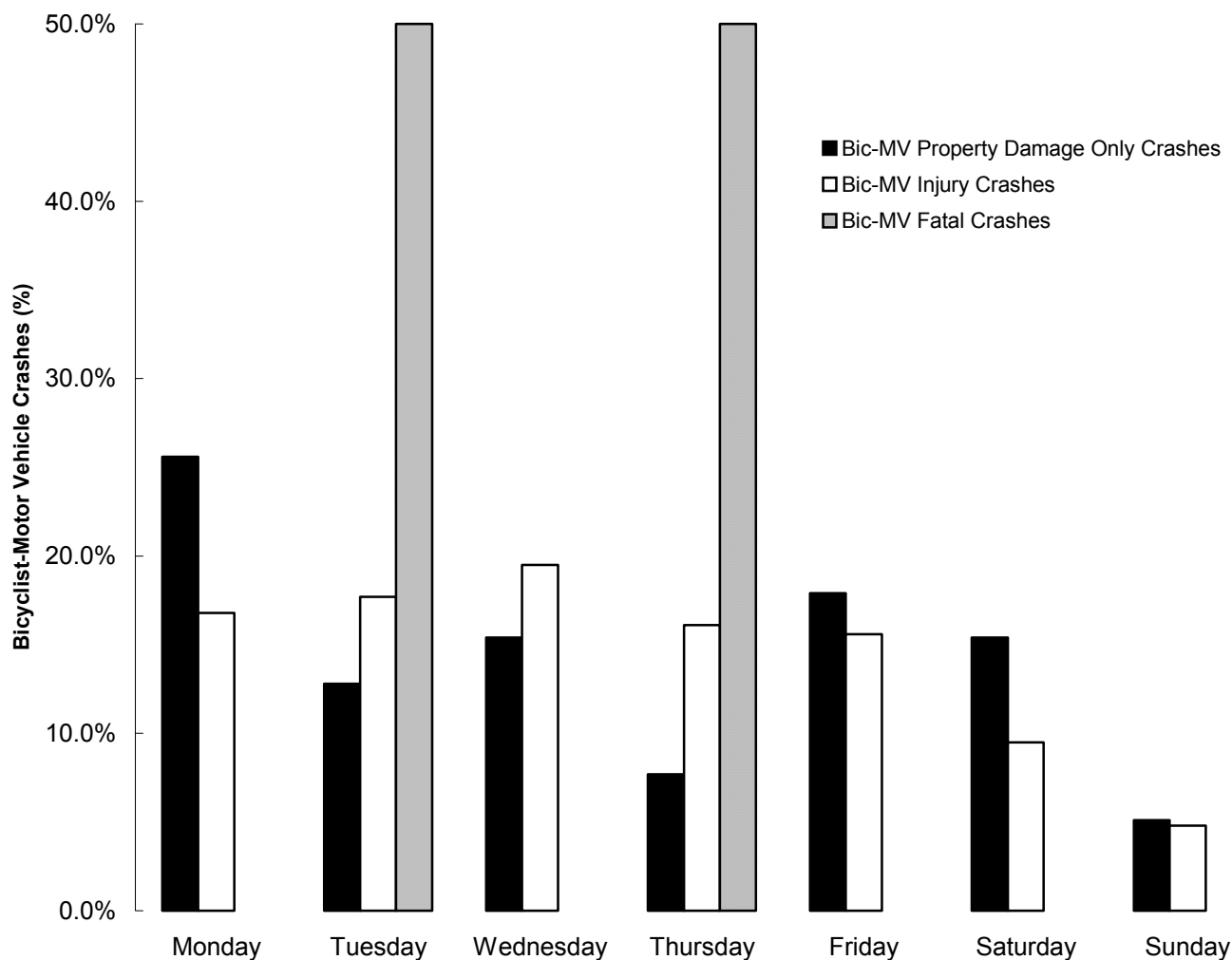
- June (3.4), August (2.7) and September (2.7) had the highest rates per day of total bicyclist-motor vehicle crashes.
- June (3.1), August (2.6) and September (2.5) had the highest rate per day of bicyclist-motor vehicle injury crashes.
- The two fatal bicyclist-motor vehicle crashes occurred in June and October.

## Bicyclist-Motor Vehicle Crash Characteristics

### Bicyclist-Motor Vehicle Crashes by Day of Week (Utah 2003)

Bicyclist-Motor Vehicle Crashes								
Day of Week	Property Damage Only Crashes		Injury Crashes		Fatal Crashes		Total Crashes	
	#	%	#	%	#	%	#	%
Monday	10	25.6%	99	16.8%	0	0.0%	109	17.3%
Tuesday	5	12.8%	104	17.7%	1	50.0%	110	17.5%
Wednesday	6	15.4%	115	19.5%	0	0.0%	121	19.2%
Thursday	3	7.7%	95	16.1%	1	50.0%	99	15.7%
Friday	7	17.9%	92	15.6%	0	0.0%	99	15.7%
Saturday	6	15.4%	56	9.5%	0	0.0%	62	9.8%
Sunday	2	5.1%	28	4.8%	0	0.0%	30	4.8%
Total	39	100.0%	589	100.0%	2	100.0%	630	100.0%

### Bicyclist-Motor Vehicle Crashes by Day of Week (Utah 2003)



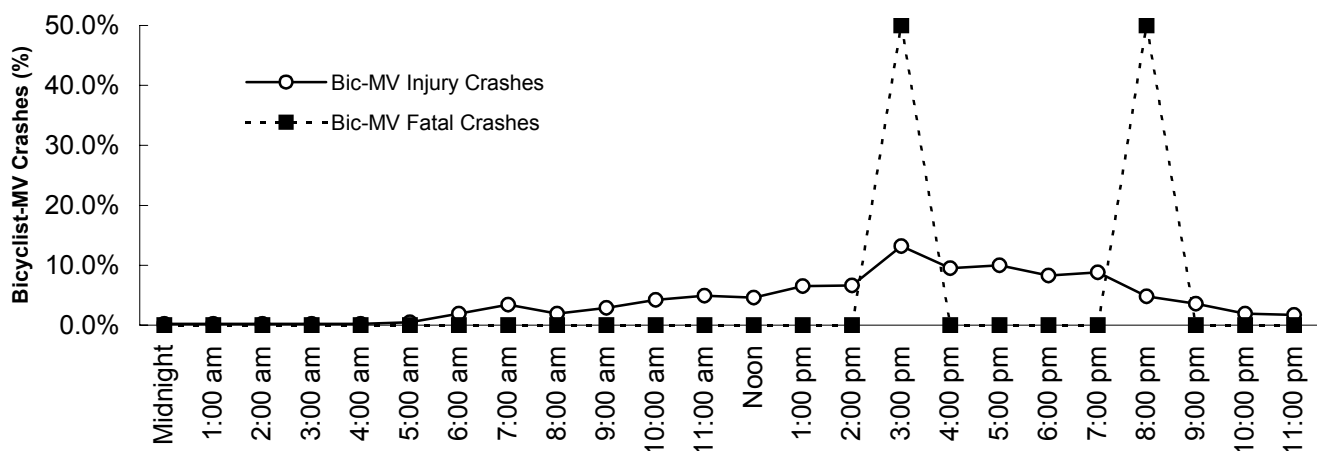
- The above table and graph show that the highest percentage of total bicyclist-motor vehicle crashes (19.2%) and bicyclist-motor vehicle injury crashes (19.5%) occurred on Wednesday.
- Of the two fatal bicyclist-motor vehicle crashes, one occurred on Tuesday, the other occurred on Thursday.

## Bicyclist-Motor Vehicle Crash Characteristics

### Bicyclist-Motor Vehicle Crashes by Hour of Day (Utah 2003)

Bicyclist-Motor Vehicle Crashes								
Hour	Property Damage Only Crashes		Injury Crashes		Fatal Crashes		Total Crashes	
	#	%	#	%	#	%	#	%
Midnight	0	0.0%	1	0.2%	0	0.0%	1	0.2%
1:00 am	0	0.0%	1	0.2%	0	0.0%	1	0.2%
2:00 am	0	0.0%	1	0.2%	0	0.0%	1	0.2%
3:00 am	0	0.0%	1	0.2%	0	0.0%	1	0.2%
4:00 am	0	0.0%	1	0.2%	0	0.0%	1	0.2%
5:00 am	1	2.6%	3	0.5%	0	0.0%	4	0.6%
6:00 am	0	0.0%	11	1.9%	0	0.0%	11	1.7%
7:00 am	0	0.0%	20	3.4%	0	0.0%	20	3.2%
8:00 am	1	2.6%	11	1.9%	0	0.0%	12	1.9%
9:00 am	1	2.6%	17	2.9%	0	0.0%	18	2.9%
10:00 am	3	7.7%	25	4.2%	0	0.0%	28	4.4%
11:00 am	1	2.6%	29	4.9%	0	0.0%	30	4.8%
Noon	2	5.1%	27	4.6%	0	0.0%	29	4.6%
1:00 pm	3	7.7%	38	6.5%	0	0.0%	41	6.5%
2:00 pm	6	15.4%	39	6.6%	0	0.0%	45	7.1%
3:00 pm	2	5.1%	78	13.2%	1	50.0%	81	12.9%
4:00 pm	3	7.7%	56	9.5%	0	0.0%	59	9.4%
5:00 pm	7	17.9%	59	10.0%	0	0.0%	66	10.5%
6:00 pm	3	7.7%	49	8.3%	0	0.0%	52	8.3%
7:00 pm	1	2.6%	52	8.8%	0	0.0%	53	8.4%
8:00 pm	2	5.1%	28	4.8%	1	50.0%	31	4.9%
9:00 pm	1	2.6%	21	3.6%	0	0.0%	22	3.5%
10:00 pm	2	5.1%	11	1.9%	0	0.0%	13	2.1%
11:00 pm	0	0.0%	10	1.7%	0	0.0%	10	1.6%
Total	39	100.0%	589	100.0%	2	100.0%	630	100.0%

### Bicyclist-Motor Vehicle Crashes by Hour of Day (Utah 2003)



- In 2003, 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 3:00 pm hour and the 8:00 pm hour.

## Bicyclist-Motor Vehicle Crash Characteristics

### Locality of Bicyclist-Motor Vehicle Crashes (Utah 2003)

Bicyclist-Motor Vehicle Crashes								
Locality	Property Damage Only Crashes		Injury Crashes		Fatal Crashes		Total Crashes	
	#	%	#	%	#	%	#	%
Shopping/Business	21	53.8%	265	45.0%	0	0.0%	286	45.4%
Residential	16	41.0%	262	44.5%	1	50.0%	279	44.3%
School	0	0.0%	23	3.9%	0	0.0%	23	3.7%
Manufacturing/Industrial	0	0.0%	13	2.2%	0	0.0%	13	2.1%
Open Country	0	0.0%	10	1.7%	1	50.0%	11	1.7%
Farms and Fields	1	2.6%	9	1.5%	0	0.0%	10	1.6%
Playground	0	0.0%	1	0.2%	0	0.0%	1	0.2%
Church	0	0.0%	1	0.2%	0	0.0%	1	0.2%
Missing	1	2.6%	5	0.8%	0	0.0%	6	1.0%
Total	39	100.0%	589	100.0%	2	100.0%	630	100.0%

- The above table shows the majority of total bicyclist-motor vehicle crashes (45.4%) and bicyclist-motor vehicle injury crashes (45.0%) occurred in shopping/business areas.
- One fatal bicyclist-motor vehicle crash occurred in a residential area, while the other occurred in open county.

### Urban/Rural Location of Bicyclist-Motor Vehicle Crashes (Utah 2003)

Bicyclist-Motor Vehicle Crashes								
Urban/Rural Location	Property Damage Only Crashes		Injury Crashes		Fatal Crashes		Total Crashes	
	#	%	#	%	#	%	#	%
Rural Area - Up to 5,000	5	12.8%	89	15.1%	0	0.0%	94	14.9%
Small Urban - 5,000 to 49,999	3	7.7%	35	5.9%	0	0.0%	38	6.0%
Moderate Urban - 50,000 to 199,999	2	5.1%	13	2.2%	0	0.0%	15	2.4%
Large Urban - 200,000 or More	29	74.4%	445	75.6%	2	100.0%	476	75.6%
Missing	0	0.0%	7	1.2%	0	0.0%	7	1.1%
Total	39	100.0%	589	100.0%	2	100.0%	630	100.0%

- Urban areas accounted for 84.0% of total bicyclist-motor vehicle crashes, 83.7% of bicyclist-motor vehicle injury crashes and all of the fatal bicyclist-motor vehicle crashes.

## Bicyclist-Motor Vehicle Crash Characteristics

### Type of Vehicles Involved in Bicyclist-Motor Vehicle Crashes (Utah 2003)

Vehicle Type	Vehicles							
	Vehicles Involved in Bicyclist-MV PDO Crashes		Vehicles Involved in Bicyclist-MV Injury Crashes		Vehicles Involved in Bicyclist-MV Fatal Crashes		Total Vehicles Involved in Bicyclist-MV Crashes	
	#	%	#	%	#	%	#	%
Passenger Car	19	47.5%	354	60.0%	0	0.0%	373	59.0%
Light Truck, Van or SUV	16	40.0%	214	36.3%	2	100.0%	232	36.7%
Hit and Run Vehicle	3	7.5%	10	1.7%	0	0.0%	13	2.1%
Large/Semi Truck	1	2.5%	6	1.0%	0	0.0%	7	1.1%
Other	1	2.5%	4	0.7%	0	0.0%	5	0.8%
School Bus	0	0.0%	1	0.2%	0	0.0%	1	0.2%
Missing	0	0.0%	1	0.2%	0	0.0%	1	0.2%
<b>Total</b>	40	100.0%	590	100.0%	2	100.0%	632	100.0%

- The above table shows that the largest percentage of vehicles involved in total bicyclist-motor vehicle crashes (59.0%) and bicyclist-motor vehicle injury crashes (60.0%) were passenger cars.
- The vehicles involved in the fatal bicyclist-motor vehicle crashes were light trucks, vans or SUVs.

### Bicyclist-Motor Vehicle Crash Violations (Utah 2003)

Violations	Violations (Drivers)							
	Drivers Cited in Bicyclist-MV PDO Crashes		Drivers Cited in Bicyclist-MV Injury Crashes		Drivers Cited in Bicyclist-MV Fatal Crashes		Total Drivers Cited in Bicyclist-MV Crashes	
	#	%	#	%	#	%	#	%
Failure to Yield Right-of-Way	2	66.7%	71	44.7%	0	0.0%	73	45.1%
Improper Lookout	0	0.0%	42	26.4%	0	0.0%	42	25.9%
Other Non-Moving Violations	1	33.3%	15	9.4%	0	0.0%	16	9.9%
Failure to Stop at Red Light	0	0.0%	7	4.4%	0	0.0%	7	4.3%
Driving Under the Influence	0	0.0%	5	3.1%	0	0.0%	5	3.1%
Improper Turn (Failure to Signal)	0	0.0%	5	3.1%	0	0.0%	5	3.1%
Hit and Run	0	0.0%	3	1.9%	0	0.0%	3	1.9%
Wrong Side of Road	0	0.0%	3	1.9%	0	0.0%	3	1.9%
Speeding	0	0.0%	2	1.3%	0	0.0%	2	1.2%
All Other Moving Violations	0	0.0%	1	0.6%	0	0.0%	1	0.6%
Negligent Collision	0	0.0%	1	0.6%	0	0.0%	1	0.6%
Reckless Driving	0	0.0%	1	0.6%	0	0.0%	1	0.6%
Improper Passing	0	0.0%	1	0.6%	0	0.0%	1	0.6%
Following Too Close	0	0.0%	1	0.6%	0	0.0%	1	0.6%
Improper Lane Change	0	0.0%	1	0.6%	0	0.0%	1	0.6%
<b>Total</b>	3	100.0%	159	100.0%	0	0.0%	162	100.0%

- In 2003, there were 632 drivers involved in pedestrian-motor vehicle crashes. Officers at the scene of the crash cited 162 (25.6%) of those drivers for a traffic violation.
- "Failure to yield right-of-way" was the leading violation for total bicyclist-motor vehicle crashes (45.1%), and bicyclist-motor vehicle injury crashes (44.7%).
- None of the drivers involved in fatal bicyclist-motor vehicle crashes received a citation.

## Bicyclist-Motor Vehicle Crash Characteristics

### Contributing Factors of Bicyclist-Motor Vehicle Crashes (Utah 2003)

Contributing Factors (Bicyclist-Motor Vehicle Crashes)								
Contributing Factors	Bicyclist-MV Property Damage Only Crashes		Bicyclist-MV Injury Crashes		Bicyclist-MV Fatal Crashes		Total Bicyclist-MV Crashes	
	#	%	#	%	#	%	#	%
Improper Lookout	7	31.8%	200	47.4%	0	0.0%	207	46.6%
Failed to Yield Right of Way	7	31.8%	126	29.9%	0	0.0%	133	30.0%
Hit and Run	5	22.7%	34	8.1%	0	0.0%	39	8.8%
Other Improper Driving	0	0.0%	11	2.6%	0	0.0%	11	2.5%
Speed Too Fast	1	4.5%	7	1.7%	0	0.0%	8	1.8%
Disregard Traffic Signal	1	4.5%	6	1.4%	0	0.0%	7	1.6%
Made Improper Turn	0	0.0%	6	1.4%	0	0.0%	6	1.4%
Driving Under the Influence	0	0.0%	4	0.9%	0	0.0%	4	0.9%
Other Driver Distractions	0	0.0%	4	0.9%	0	0.0%	4	0.9%
Windshield Not Clear	0	0.0%	4	0.9%	0	0.0%	4	0.9%
Followed Too Closely	0	0.0%	3	0.7%	0	0.0%	3	0.7%
Drove Left of Center	0	0.0%	3	0.7%	0	0.0%	3	0.7%
Improper Backing	0	0.0%	3	0.7%	0	0.0%	3	0.7%
Improper Overtaking	1	4.5%	1	0.2%	0	0.0%	2	0.5%
Passed Stop Sign	0	0.0%	2	0.5%	0	0.0%	2	0.5%
Improper Parking	0	0.0%	2	0.5%	0	0.0%	2	0.5%
Aggressive Driving	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%
Had Been Drinking	0	0.0%	1	0.2%	0	0.0%	1	0.2%
Immersion	0	0.0%	1	0.2%	0	0.0%	1	0.2%
Headlights Insufficient or Out	0	0.0%	1	0.2%	0	0.0%	1	0.2%
Driver Using Cell Phone	0	0.0%	1	0.2%	0	0.0%	1	0.2%
Non-Contact Vehicle Involved	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Fatigued	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Under the Influence of Drugs	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Total	22	100.0%	422	100.0%	0	0.0%	444	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 (47.4%).
- The combined contributing factors of “driving under the influence,” “had been drinking” and “under the influence of drugs” accounted for 1.1% of total bicyclist-motor vehicle crashes and 1.1% of bicyclist-motor vehicle injury crashes.

# **Glossary**

## **2003**





# 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 2003**



# Appendix

## Historical Persons and Crashes

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## Historical Persons and Crashes

### Injured Persons and Fatalities (Utah 1974-2003)

Year	Vehicle Miles Traveled (VMT)	Persons			
		Injuries		Fatalities	
		Persons Injured #	Rate Per 100 Million VMT	Persons Killed #	Rate Per 100 Million VMT
1974	7,457,000,000	16,268	218.2	228	3.1
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
<b>Total</b>	<b>449,357,801,865</b>	<b>693,161</b>	<b>154.3</b>	<b>9,406</b>	<b>2.1</b>

## Historical Persons and Crashes

### Crashes (Utah 1974-2003)

Crashes								
Year	Property Damage Only		Injury		Fatal		Total	
	PDO Crashes #	Rate Per 100 Million VMT	Injury Crashes #	Rate Per 100 Million VMT	Fatal Crashes #	Rate Per 100 Million VMT	All Crashes #	Rate Per 100 Million VMT
1974	20,637	276.7	10,560	141.6	204	2.7	31,401	421.1
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
Total	950,256	211.5	460,349	102.4	8,210	1.8	1,418,815	315.7

## Licensed Drivers

### Number of Licensed Drivers by Age (Utah 2003)

Licensed Drivers	
Driver Age	#
15-19	116,252
20-24	188,590
25-29	188,914
30-34	163,082
35-39	135,491
40-44	139,127
45-49	128,234
50-54	111,132
55-59	85,703
60-64	66,253
65-69	52,367
70-74	44,614
75-79	39,496
80-84	30,493
85+	28,644
<i>Total</i>	1,518,392

SOURCE: State of Utah  
Driver License Division  
Department of Public Safety

## Population

### State Population (Utah 1994-2003)

Utah Population	
Year	#
1994	1,946,721
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
<i>Total</i>	21,685,540

SOURCE: State of Utah Population Estimates  
Demographic & Economic Analysis  
<http://www.governor.state.ut.us>



## Population

### County Population (Utah 2003)

County Population	
County	#
Beaver	6,285
Box Elder	44,022
Cache	98,176
Carbon	19,558
Daggett	921
Davis	256,554
Duchesne	14,698
Emery	10,477
Garfield	4,532
Grand	8,464
Iron	36,310
Juab	8,713
Kane	5,937
Millard	12,200
Morgan	7,532
Piute	1,358
Rich	2,079
Salt Lake	940,465
San Juan	14,240
Sanpete	23,391
Sevier	19,318
Summit	34,073
Tooele	47,832
Uintah	26,019
Utah	410,768
Wasatch	17,368
Washington	105,702
Wayne	2,487
Weber	205,882
Statewide	2,385,361

NOTE: Statewide total may not add to the official State of Utah Population Estimate due to rounding.

SOURCE: State of Utah Population Estimates  
Demographic & Economic Analysis  
<http://www.governor.state.ut.us>

# Population

## City Population (Utah 2003)

City Population	
City	#
Alpine	7,937
Alta	365
Altamont	178
Alton	130
Amalga	428
American Fork	22,876
Annabella	598
Antimony	115
Aurora	939
Ballard	590
Bear River City	791
Beaver	2,511
Bicknell	337
Big Water	416
Blanding	3,035
Bluffdale	5,672
Boulder	180
Bountiful	41,401
Brian Head	112
Brigham City	17,334
Cannonville	140
Castle Dale	1,618
Castle Valley	348
Cedar City	21,946
Cedar Fort	330
Cedar Hills	5,160
Centerfield	1,068
Centerville	14,748
Charleston	404
Circleville	484
Clarkston	686
Clawson	157
Clearfield	27,146
Cleveland	510
Clinton	15,281
Coalville	1,426
Corinne	650
Cornish	259
Delta	3,186
Deweyville	303
Draper	31,020
Duchesne	1,447

City Population	
City	#
Eagle Mountain	7,405
East Carbon	1,313
Elk Ridge	2,064
Elmo	372
Elsinore	724
Elwood	674
Emery	302
Enoch	3,876
Enterprise	1,298
Ephraim	4,962
Escalante	771
Eureka	772
Fairview	1,170
Farmington	13,407
Farr West	3,850
Fayette	206
Ferron	1,576
Fielding	449
Fillmore	2,220
Fountain Green	952
Francis	761
Fruit Heights	4,775
Garden City	377
Garland	1,964
Genola	937
Glendale	346
Glenwood	430
Goshen	846
Grantsville	6,824
Green River	958
Gunnison	2,484
Hanksville	197
Harrisville	4,452
Hatch	118
Heber	8,605
Helper	1,911
Henefer	723
Henrieville	149
Herriman	5,632
Highland	9,642
Hildale	1,938
Hinckley	755

City Population	
City	#
Holden	393
Holladay	19,667
Honeyville	1,276
Hooper	4,019
Howell	238
Huntington	2,087
Huntsville	650
Hurricane	9,465
Hyde Park	2,978
Hyrum	6,305
Ivins	6,049
Joseph	268
Junction	170
Kamas	1,429
Kanab	3,490
Kanarraville	302
Kanosh	476
Kaysville	21,386
Kingston	136
Kooshareem	272
Laketown	185
La Verkin	3,731
Layton	60,769
Leamington	214
Leeds	576
Lehi	23,266
Levan	782
Lewiston	1,847
Lindon	8,680
Loa	504
Logan	43,675
Lyman	224
Lynndyl	130
Manila	297
Manti	3,070
Mantua	796
Mapleton	6,180
Mariott-Slaterville	1,425
Marysville	357
Mayfield	421
Meadow	250
Mendon	993

SOURCE: Population Division, US Census Bureau  
 Release Date: June 24, 2004  
<http://www.census.gov>

## Population

### City Population (Utah 2003) (continued)

City Population		City Population		City Population	
City	#	City	#	City	#
Midvale	27,166	Providence	5,186	Tooele	27,052
Midway	2,387	Provo	105,410	Toquerville	990
Milford	1,438	Randolph	478	Torrey	166
Millville	1,504	Redmond	778	Tremonton	6,083
Minersville	829	Richfield	6,936	Trenton	451
Moab	4,845	Richmond	2,045	Tropic	479
Mona	993	Riverdale	7,791	Uintah	1,205
Monroe	1,819	River Heights	1,484	Vernal	7,892
Monticello	1,900	Riverton	29,244	Vernon	262
Morgan	2,711	Rockville	259	Vineyard	141
Moroni	1,296	Rocky Ridge	429	Virgin	450
Mount Pleasant	2,735	Roosevelt	4,404	Wales	227
Murray	43,617	Roy	35,249	Wallsburg	278
Myton	552	Rush Valley	506	Washington	10,496
Naples	1,411	St. George	56,382	Washington Terrace	8,455
Nephi	4,962	Salem	4,926	Wellington	1,592
New Harmony	191	Salina	2,378	Wellsville	2,729
Newton	717	Salt Lake City	179,894	Wendover	1,620
Nibley	2,384	Sandy	89,319	West Bountiful	4,597
North Logan	6,872	Santa Clara	5,360	West Haven	4,991
North Ogden	16,084	Santaquin	5,751	West Jordan	84,701
North Salt Lake	9,321	Saratoga Springs	3,119	West Point	6,472
Oak City	644	Scipio	297	West Valley City	111,687
Oakley	1,125	Scofield	26	Willard	1,647
Ogden	78,293	Sigurd	424	Woodland Hills	1,099
Ophir	23	Smithfield	7,877	Woodruff	192
Orangeville	1,349	Snowville	176	Woods Cross	7,466
Orderville	593	South Jordan	33,589		
Orem	87,599	South Ogden	15,003		
Panguitch	1,525	South Salt Lake	21,719		
Paradise	753	South Weber	5,384		
Paragonah	458	Spanish Fork	23,000		
Park City	7,854	Spring City	965		
Parowan	2,518	Springdale	510		
Payson	14,761	Springville	21,929		
Perry	2,832	Sterling	255		
Plain City	3,932	Stockton	555		
Pleasant Grove	23,901	Sunnyside	388		
Pleasant View	5,965	Sunset	5,068		
Plymouth	377	Syracuse	14,159		
Portage	267	Tabiona	150		
Price	8,229	Taylorsville	58,701		

SOURCE: Population Division, US Census Bureau  
 Release Date: June 24, 2004  
<http://www.census.gov>

## Vehicle Miles Traveled

### Vehicle Miles Traveled (Utah 1974-2003)

Vehicle Miles Traveled	
Year	#
1974	7,457,000,000
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
<b>Total</b>	<b>449,357,801,865</b>

SOURCE: Utah Highway Performance Monitoring System and Traffic on Utah Highways  
 Prepared By: Data Analysis Section Using Annual Average Daily Traffic  
<http://www.dot.state.ut.us>

## Vehicle Miles Traveled

### Vehicle Miles Traveled by County (Utah 2003)

Vehicle Miles Traveled	
County	#
Beaver	237,515,866
Box Elder	877,570,835
Cache	830,211,424
Carbon	299,072,179
Daggett	27,184,462
Davis	2,242,334,765
Duchesne	194,900,322
Emery	345,638,997
Garfield	124,469,530
Grand	280,025,122
Iron	622,123,020
Juab	378,830,726
Kane	121,913,876
Millard	405,877,123
Morgan	113,448,842
Piute	30,189,739
Rich	43,590,396
Salt Lake	7,989,105,215
San Juan	281,587,296
Sanpete	227,997,086
Sevier	397,245,170
Summit	651,805,427
Tooele	791,062,103
Uintah	284,734,290
Utah	3,368,805,212
Wasatch	257,182,387
Washington	1,006,287,857
Wayne	38,724,901
Weber	1,493,808,216
Statewide	23,963,242,384

SOURCE: Utah Highway Performance Monitoring System and Traffic on Utah Highways  
 Prepared By: Data Analysis Section Using Annual Average Daily Traffic  
<http://www.dot.state.ut.us>