

# Utah Crash Summary



**State of Utah**

**Department of Public Safety**



# Utah Crash Summary 2007



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# Introduction

- Purpose:** The annual Utah Crash Summary 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 deaths, injuries, and crashes. This report is designed to heighten awareness about traffic safety and allows interested individuals to identify areas where safety programs may be focused in an effort to reduce traffic-related injuries and deaths.
- 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 investigate crash scenes on public roadways and gather data. Information is collected when a crash involves injuries, deaths, 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 Public Safety for central collection.
- Fatal Crashes:** Additional information is collected on fatal crashes and compiled into a separate database, the Fatality Analysis Reporting System (FARS). FARS is a national data system containing data on all fatal traffic crashes in the U.S. This database was used for the reporting of fatal crashes in this document.
- 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 highlighting key points and often provides most readers with the information they seek.
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- Available At:** A limited number of printed copies of the Utah Crash Summary are available at the Utah Highway Safety Office. The summary and fact sheets are also available on the internet in PDF at [www.highwaysafety.utah.gov](http://www.highwaysafety.utah.gov).
- Suggested Citation:** Utah Department of Public Safety Highway Safety Office. *Utah Crash Summary 2007*. Salt Lake City, UT: Utah Department of Public Safety, 2009.



## 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 over the last 40 years. If Utah had the same fatal crash rate in 2007 as 1977 there would have been 768 additional deaths in 2007. These reductions can be attributed to a variety of factors, including:

- 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 roadways;
- Improved safety of motor vehicles;
- Advancements in emergency response and treatment.

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 2007, there were 61,245 reported traffic crashes which is the highest number of crashes ever in a single year on public roadways in Utah. These crashes involved 155,049 people with 27,420 injured and 299 people killed.

Utah made progress in the following areas in 2007 when compared to 2006:

- The Utah death rate per vehicle miles traveled is still below the U.S. rate;
- An estimated 145 lives were saved because of seatbelt use;
- The percent of deaths that involved a senior driver decreased 29%;
- The percent of crashes involving a teenage driver decreased 5%;
- The bicyclist crash rate per population decreased 8%.

As improvements are made and progress continues, traffic safety needs to remain a top priority in Utah. Some areas of concern in Utah during 2007:

- Traffic deaths increased from 287 in 2006 to 299 in 2007;
- Traffic crashes increased for the fourth year in a row to the highest number ever;
- The crash rate per miles traveled increased 6% from 2006;
- Motorcyclist deaths increased to the highest total since 1985;
- Speed was a factor in 43% of fatal crashes;
- Alcohol-impaired driver fatal crashes increased 16%;
- The number of pedestrians in crashes increased 11%.

The *Utah Crash Summary 2007* contains further details regarding motor vehicle crashes in Utah.

The Utah Department of Public Safety Highway Safety Office invites users of this Crash Summary to help promote motor vehicle safety in Utah. Dr. Victor Sidel said, "*Statistics are people with the tears washed away.*" The numbers in the Crash Summary represent lost lives, injured people, and lives changed. Utah has a goal of zero fatalities because the loss of just one life is too many. It is a goal we can all live with.



# 2007 Utah Crash Synopsis

## All Crashes

Category	#	% of Total*
<b>Total Crashes</b>	<b>61,245</b>	<b>100%</b>
Urban	46,693	76%
Property Damage Only	42,368	69%
Injury	18,619	30%
Teenage Driver	14,844	24%
Rural	14,552	24%
Speed	11,411	19%
Adverse Weather	11,374	19%
Distracted Driving	6,044	10%
Senior (Age 65+) Driver	5,959	10%
Large Truck	4,629	8%
Animal-Related	2,891	5%
Alcohol-Impaired Driver	2,744	5%
Drowsy Driving	1,307	2%
Motorcycle	1,215	2%
Pedestrian-Motor Vehicle	724	1%
Bicycle-Motor Vehicle	631	1%
Fatal	258	<1%
<b>Total Persons in Crashes</b>	<b>155,049</b>	<b>100%</b>
Drivers	109,764	71%
Teenage Driver	42,274	27%
Injured Persons	27,420	18%
Adverse Weather	26,680	17%
Speed	26,396	17%
Distracted Driving	16,624	11%
Senior (Age 65+) Driver	16,402	11%
Children (Ages 0-14 Years)	16,108	10%
Large Truck	11,143	7%
Alcohol-Impaired Driver	5,839	4%
Unbelted Occupants	5,631	4%
Animal-Related	4,361	3%
Drowsy Driving	2,402	2%
Motorcyclists	1,380	1%
Pedestrians	778	1%
Bicyclists	643	<1%
Deaths	299	<1%

## Fatal Crashes

Category	#	% of Total*
<b>Fatal Crashes</b>	<b>258</b>	<b>100%</b>
Rural	147	57%
Speed	112	43%
Urban	111	43%
Teenage Driver	46	18%
Alcohol-Impaired Driver	37	14%
Drowsy Driving	35	14%
Large Truck	35	14%
Motorcycle	32	12%
Pedestrian-Motor Vehicle	31	12%
Adverse Weather	30	12%
Senior (Age 65+) Driver	28	11%
Distracted Driving	23	9%
Red Light/Stop Sign Running	14	5%
Bicycle-Motor Vehicle	6	2%
Animal-Related	4	2%
<b>Deaths</b>	<b>299</b>	<b>100%</b>
Drivers	169	57%
Speed	134	45%
Unbelted Occupants	92	31%
Teenage Driver	51	17%
Drowsy Driving	46	15%
Alcohol-Impaired Driver	42	14%
Large Truck	40	13%
Adverse Weather	37	12%
Motorcyclists	33	11%
Distracted Driving	32	11%
Pedestrians	32	11%
Senior (Age 65+) Driver	30	10%
Children (Ages 0-14 Years)	19	6%
Red Light/Stop Sign Running	15	5%
Bicyclists	6	2%
Animal-Related	4	1%

\* NOTE: Groups overlap and do not total 100%.

## 2007 Utah Crash Facts

- In an average day in Utah, there were 168 motor vehicle crashes involving 425 people with 75 people injured and 1 person killed.
- First motor vehicle crash occurred January 1, 2007 at 12:05 a.m. and the last crash occurred December 31, 2007 at 11:45 p.m.
- First fatal motor vehicle crash occurred January 5, 2007 at 6:46 p.m. and the last fatal crash occurred December 28, 2007 at 8:10 a.m.
- Thursday, January 11, 2007 had the most crashes with 478 crashes and Sunday, May 27, 2007 had the fewest crashes with 61.
- 145 lives were estimated to be saved at current seatbelt use rates. (National Highway Traffic Safety Administration)
- 43 additional lives would have been saved if everyone had been wearing seatbelts.
- A motor vehicle crash occurred every 8 minutes.
- A person was injured in a crash every 19 minutes.
- A teenage-driver crash occurred every 35 minutes.
- A speed-related crash occurred every 46 minutes.
- A distracted driver crash occurred every 86 minutes.
- A driver age 65 years or older was in a crash every 88 minutes.
- A semi/large truck was in a crash every 2 hours.
- An animal-motor vehicle crash occurred every 3 hours.
- An alcohol-impaired driver crash occurred every 3 hours.
- A motorcyclist was in a crash every 6 hours.
- A pedestrian was hit by a motor vehicle every 11 hours.
- A bicyclist was hit by a motor vehicle every 13 hours.
- A person died in a crash every 29 hours.
- The youngest person in a motor vehicle crash was less than one week-old and the oldest person was over 100 years-old.
- The youngest person killed in a motor vehicle crash was less than one month-old and the oldest person killed was 92 years-old.
- The estimated statewide economic loss due to motor vehicle crashes in Utah was \$1.63 billion. (National Highway Traffic Safety Administration)
- Hospital and emergency department charges for the treatment of Utah residents in motor vehicle crashes was \$103,115,837. (Utah Department of Health)
- One out of every 15 licensed drivers were in a crash.
- One out of every 17 registered vehicles were in a crash.
- One out of every 17 Utah residents were in a crash.
- One out of every 46 deaths in Utah involved a motor vehicle crash.
- One out of every 518 people in a crash died.
- A person was in a crash every 173,000 miles driven in Utah.



# Overview

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*Motor vehicle crashes are the leading cause of death for ages 2 through 34 in the United States.*

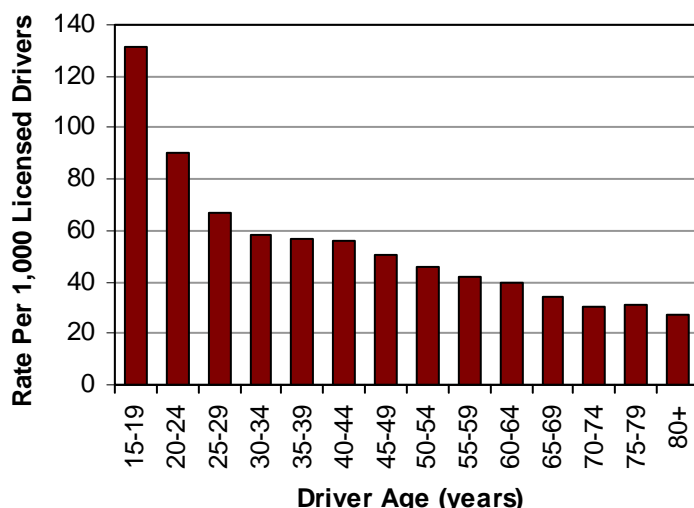
## Overview



### Did you know in 2007:

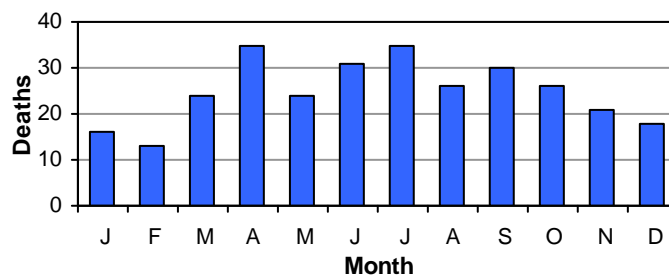
- 61,245 motor vehicle crashes occurred in Utah which resulted in 27,420 injured persons and 299 deaths.
- 2007 had the highest number of crashes ever on public roadways in Utah.
- A motor vehicle crash occurred in Utah every 8 minutes, a person was injured in a crash every 19 minutes, and a person died in a crash every 29 hours.

### Crash Rates per Licensed Drivers by Age (Utah 2007)



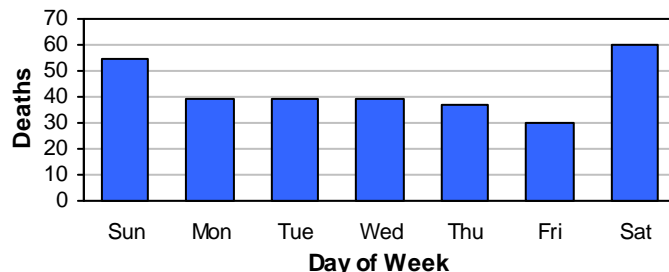
- Drivers aged 15-19 years had the highest crash rates per licensed driver.
- Older drivers had the lowest crash rates per licensed driver.

### Deaths by Month (Utah 2007)



- April and July had the most deaths.

### Deaths by Day of Week (Utah 2007)



- Saturday and Sunday had the most deaths.

### Leading Contributing Factors (Utah 2007)

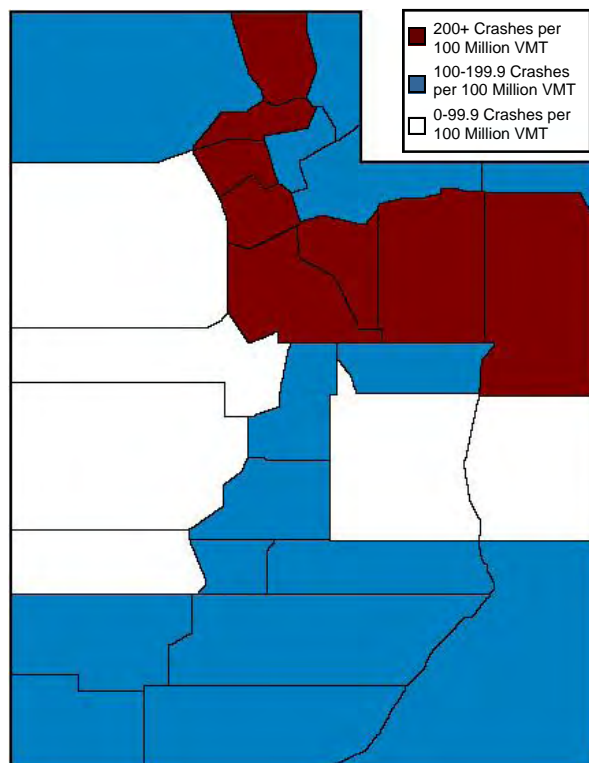
#### All Crashes

1. Followed Too Closely (23%)
2. Failed to Yield Right of Way (19%)
3. Speed Too Fast (14%)
4. Driver Distraction (10%)
5. Failed to Keep in Proper Lane (9%)

#### Fatal Crashes

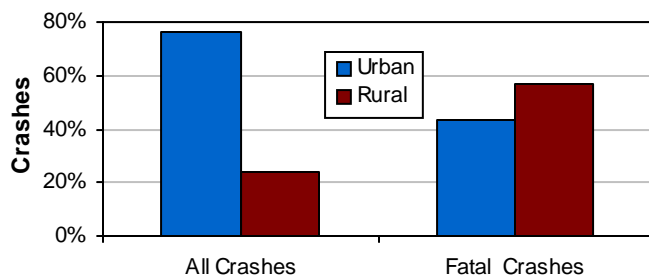
1. Speed Too Fast (35%)
2. Reckless/Aggressive Driving (34%)
3. Driving Under the Influence (22%)
4. Asleep/Fatigue (14%)
5. Failed to Yield Right of Way (12%)

## County Crash Rates by Miles Traveled (Utah 2007)



- Salt Lake, Weber, Utah, Uintah, and Wasatch Counties had the highest crash rates per miles traveled.

## Urban/Rural Location (Utah 2007)



- While the majority of all crashes occurred in urban areas (76%), the majority of fatal crashes occurred in rural areas (57%).
- Rural crashes were 4.3 times more likely to be fatal than urban crashes.

## Leading Crash Descriptions (Utah 2007)

### All Crashes

1. Rear End (32%)
2. Broadside (24%)
3. Collision With Fixed Object (14%)
4. Sideswipe (10%)
5. Parked Vehicle (5%)

### Fatal Crashes

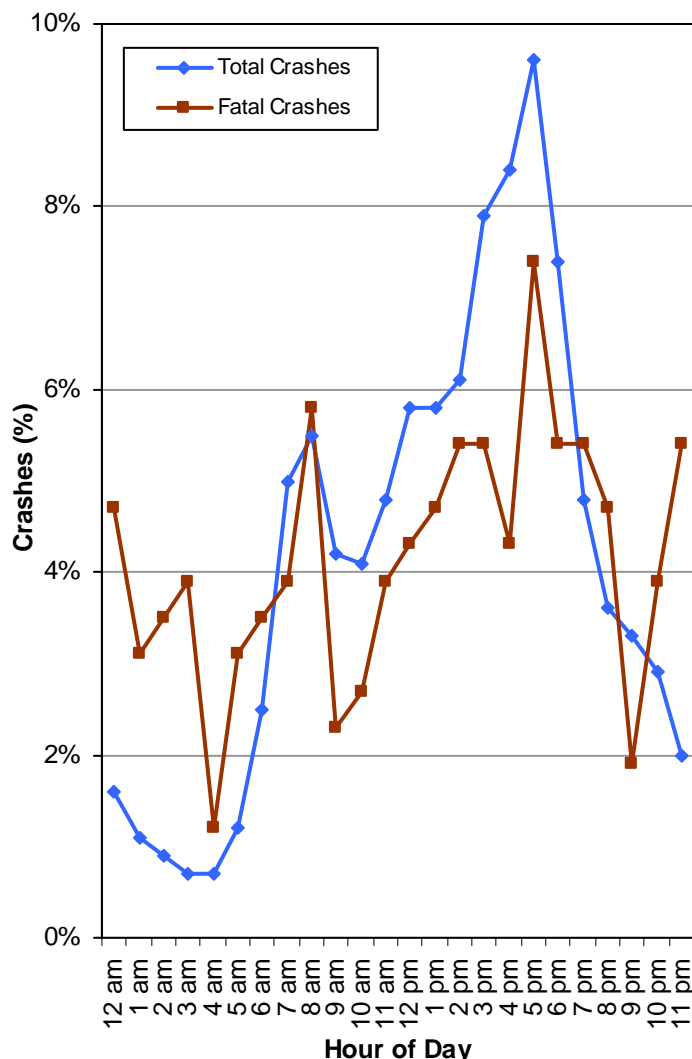
1. Overturn/Rollover (27%)
2. Collision With Fixed Object (17%)
3. Pedestrian/Bicyclist (14%)
4. Broadside (14%)
4. Head On (14%)

**Vehicle rollovers were 12 times more likely to result in a death than other crashes.**

# Overview



## Motor Vehicle Crashes by Hour of Day (Utah 2007)

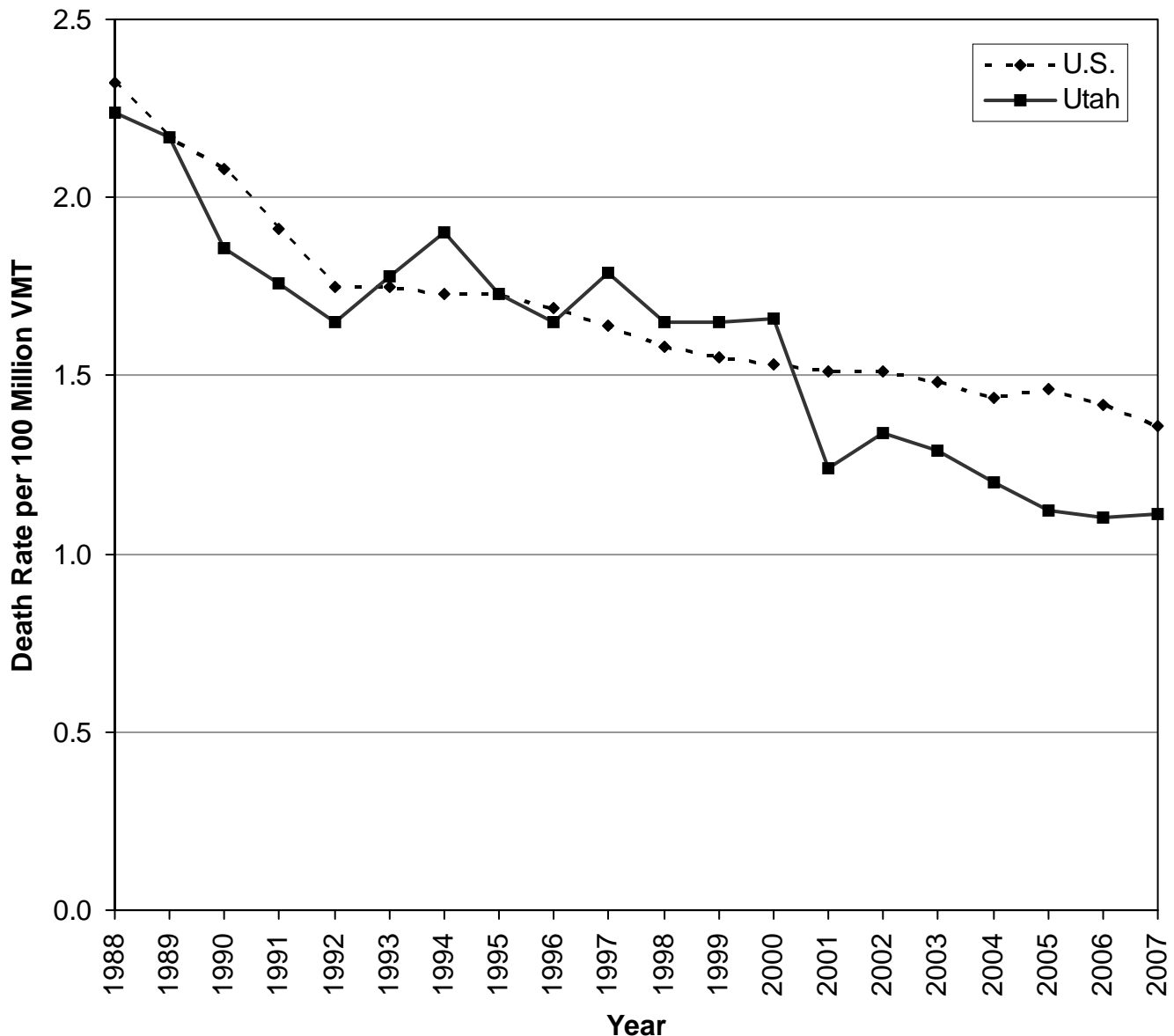


- Total crashes were more likely to occur between 3:00 p.m. and 6:59 p.m.
- Fatal crashes were highest during the hours of 8:00 a.m., 2:00-7:59 p.m., and 11 p.m.

## Trends

## Utah vs. U.S. Death Rate per 100 Million Vehicle Miles Traveled, 1988-2007

Death Rate per Miles Traveled																				
	Year																			
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
U.S.	2.32	2.17	2.08	1.91	1.75	1.75	1.73	1.73	1.69	1.64	1.58	1.55	1.53	1.51	1.51	1.48	1.44	1.46	1.42	1.36
Utah	2.24	2.17	1.86	1.76	1.65	1.78	1.90	1.73	1.65	1.79	1.65	1.65	1.66	1.24	1.34	1.29	1.20	1.12	1.10	1.11



U.S. SOURCE: National Highway Traffic Safety Administration

- In 2007, the Utah death rate per 100 million vehicle miles traveled was 1.11 which was lower than the U.S. rate of 1.36.
- The Utah death rate per 100 million vehicle miles traveled has been lower than the U.S. rate since 2001. This somewhat dispels the myth that drivers in Utah are worse than other drivers in the U.S.



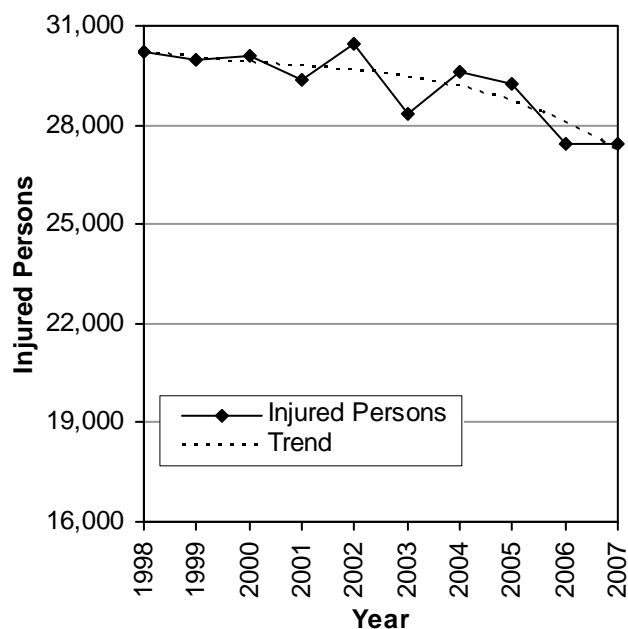
## Trends

### Persons Involved (Utah 1998-2007)

Persons								
Year	Non-Injured		Injured		Killed		Total	
		Rate per		Rate per		Rate per		Rate per
		100 Million		100 Million		100 Million		100 Million
	#	VMT	#	VMT	#	VMT	#	VMT
1998	110,879	522.1	30,232	142.4	350	1.65	141,461	666.1
1999	109,354	500.1	29,959	137.0	360	1.65	139,673	638.7
2000	110,318	489.9	30,086	133.6	373	1.66	140,777	625.2
2001	108,427	463.4	29,375	125.5	291	1.24	138,093	590.2
2002	109,878	449.6	30,433	124.5	328	1.34	140,639	575.5
2003	104,660	436.8	28,352	118.3	309	1.29	133,321	556.4
2004	111,225	451.4	29,638	120.3	296	1.20	141,159	572.8
2005	115,546	459.8	29,221	116.3	282	1.12	145,049	577.2
2006	116,187	444.0	27,433	104.8	287	1.10	143,907	550.0
2007	127,330	474.7	27,420	102.2	299	1.11	155,049	578.0
<b>Total</b>	<b>1,123,804</b>	<b>467.9</b>	<b>292,149</b>	<b>121.6</b>	<b>3,175</b>	<b>1.32</b>	<b>1,419,128</b>	<b>590.8</b>

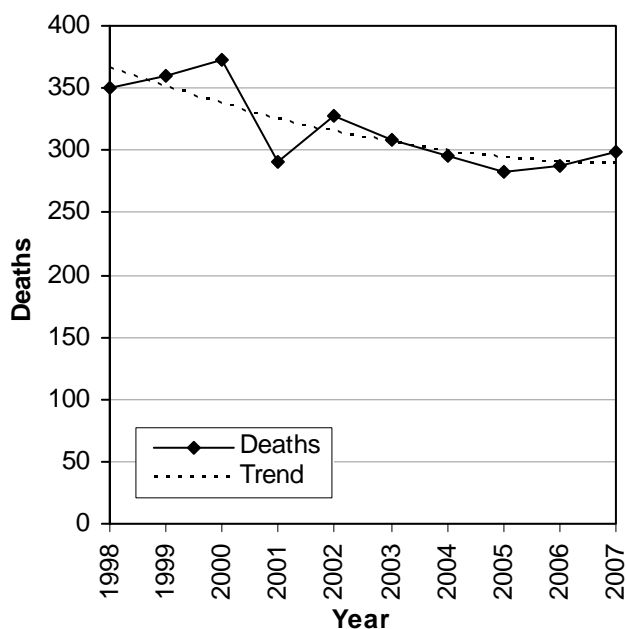
- During the last 10 years, over 1.4 million people have been in a crash. Approximately 29,200 people are injured and 318 people are killed in motor vehicle crashes a year.
- Utah experienced a 4.2% increase in the number of crash deaths in 2007 from 2006.
- The injury rate per miles traveled decreased for the third year in a row.
- Over 11,000 more people were in a crash in Utah in 2007; a 7.7% increase from 2006,

### Injured Persons by Year (Utah 1998-2007)



- There has been a 9.3% decrease in the number of people injured over the last 10 years.

### Deaths by Year (Utah 1998-2007)



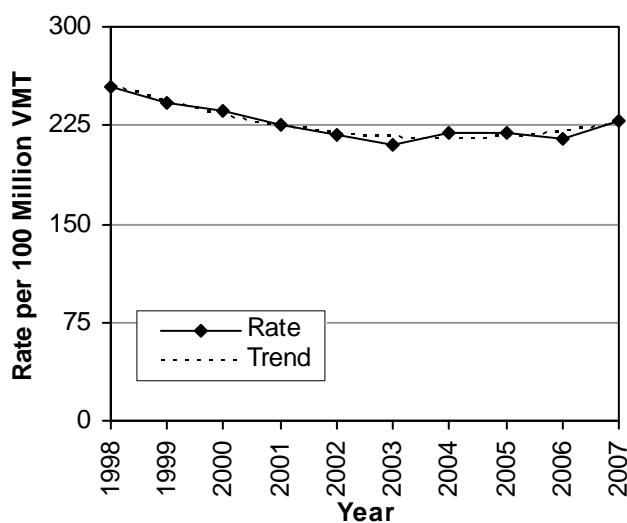
- Deaths have increased the last two years after seeing a decreasing trend the previous years.

**Crashes (Utah 1998-2007)**

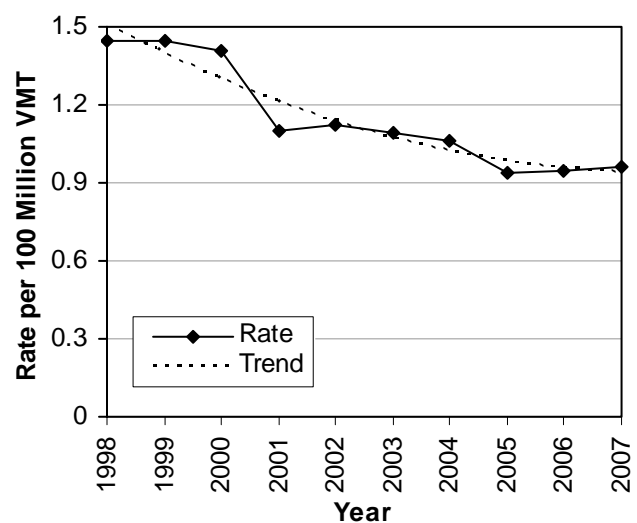
<b>Crashes</b>								
<b>Property Damage Only</b>			<b>Injury</b>		<b>Fatal</b>		<b>Total</b>	
		Rate per		Rate per		Rate per		Rate per
		100 Million		100 Million		100 Million		100 Million
<b>Year</b>	<b>#</b>	<b>VMT</b>	<b>#</b>	<b>VMT</b>	<b>#</b>	<b>VMT</b>	<b>#</b>	<b>VMT</b>
1998	34,337	161.7	19,427	91.5	308	1.45	54,072	254.6
1999	32,971	150.8	19,513	89.2	318	1.45	52,802	241.5
2000	33,269	147.7	19,564	86.9	318	1.41	53,151	236.0
2001	33,113	141.5	19,332	82.6	258	1.10	52,703	225.2
2002	33,542	137.2	19,552	80.0	274	1.12	53,368	218.4
2003	31,842	132.9	18,285	76.3	262	1.09	50,389	210.3
2004	34,222	138.9	19,423	78.8	260	1.06	53,905	218.8
2005	35,158	139.9	19,545	77.8	235	0.94	54,938	218.6
2006	37,674	144.0	18,264	69.8	249	0.95	56,187	214.7
2007	42,368	157.9	18,619	69.4	258	0.96	61,245	228.3
<b>Total</b>	<b>348,496</b>	<b>145.1</b>	<b>191,524</b>	<b>79.7</b>	<b>2,740</b>	<b>1.14</b>	<b>542,760</b>	<b>226.0</b>

NOTE: A crash may result in multiple injuries and/or deaths. See previous page for persons.

- During the last 10 years, 542,760 motor vehicle crashes occurred in Utah. On average, there are 54,300 crashes a year of which 19,200 involve injuries and 274 involve deaths.
- In 2007, total crashes increased 9.0% from 2006 to the highest number of crashes ever on public roadways.
- The 2007 total crash rate in Utah was 228.3, a 6.3% increase from 2006.

**Crash Rates Per 100 Million Vehicle Miles Traveled (Utah 1998-2007)**

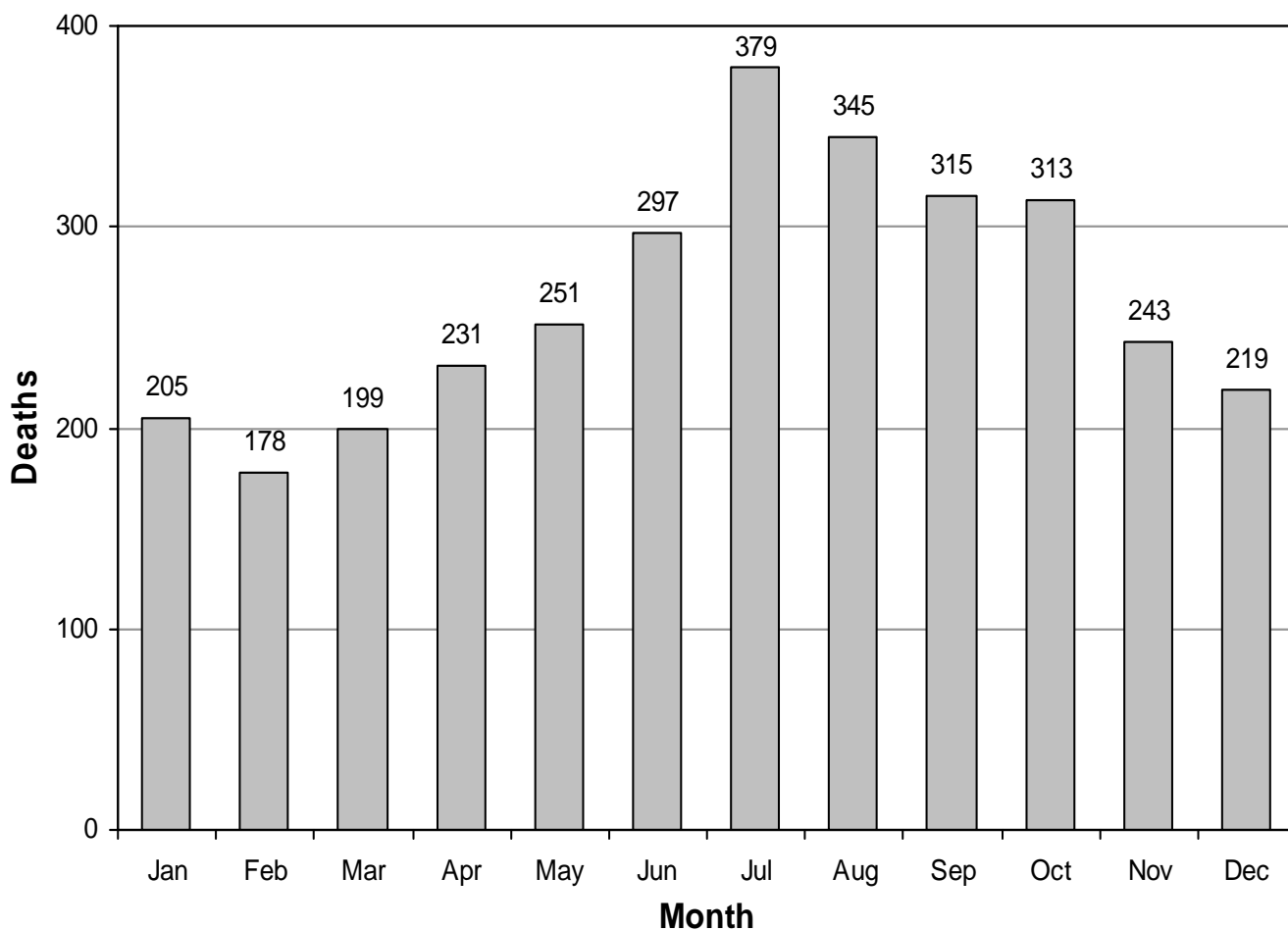
- The 2007 total crash rate increased to the highest rate since 2000.
- There has been a 10.3% decrease in the total crash rate since 1998.

**Fatal Crash Rates Per 100 Million Vehicle Miles Traveled (Utah 1998-2007)**

- There has been a decreasing trend in fatal crash rates over the last 10 years.
- There has been a 33.8% decrease in the fatal crash rate since 1998.

## Trends

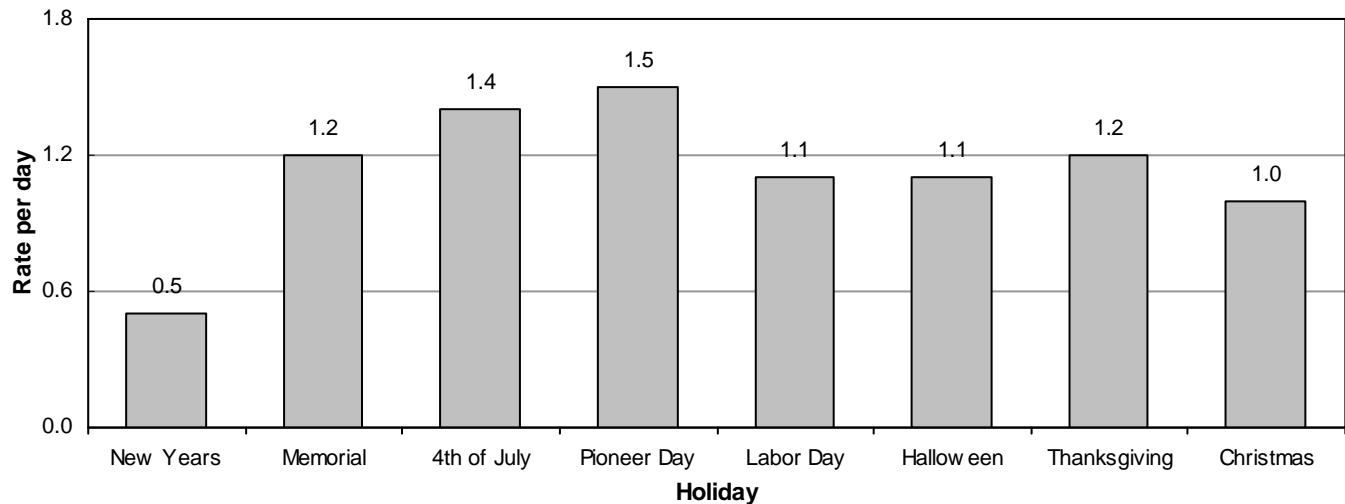
### Deaths by Month (Utah 1998-2007)



Deaths													
	Month												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1998	27	23	18	24	26	29	44	36	42	34	30	17	350
1999	19	16	25	34	37	35	46	29	32	39	25	23	360
2000	30	23	21	27	29	38	50	36	30	33	23	33	373
2001	22	19	12	14	30	24	40	33	21	29	27	20	291
2002	22	17	18	20	28	19	44	36	36	38	27	23	328
2003	22	15	16	22	20	39	38	39	31	25	17	25	309
2004	9	15	28	20	25	31	28	40	31	26	25	18	296
2005	16	22	14	18	18	25	25	37	31	30	25	21	282
2006	22	15	23	17	14	26	29	33	31	33	23	21	287
2007	16	13	24	35	24	31	35	26	30	26	21	18	299
<b>Total</b>	<b>205</b>	<b>178</b>	<b>199</b>	<b>231</b>	<b>251</b>	<b>297</b>	<b>379</b>	<b>345</b>	<b>315</b>	<b>313</b>	<b>243</b>	<b>219</b>	<b>3,175</b>

- Nearly one-half (42.6%) of deaths occurred July-October.
- In the last 10 years, July (379) had the highest total number of motor vehicle crash deaths while February (178) and March (199) had the fewest.
- In 2007, April (35) and July (35) had the highest number of deaths while February (13) had the fewest.

## Holiday Death Rate Per Day (Utah 1998-2007)



Deaths																		
	New Years		Memorial Day		4th of July		24th of July		Labor Day		Hallow- een		Thanks- giving		Christ- mas		Total	
		Rate		Rate		Rate		Rate		Rate		Rate		Rate		Rate		Rate
		per		per		per		per		per		per		per		per		per
Year	#	Day	#	Day	#	Day	#	Day	#	Day	#	Day	#	Day	#	Day	#	Day
1998	2	0.4	4	1.0	4	1.3	2	0.5	4	1.0	2	0.7	10	2.0	2	0.5	30	0.9
1999	1	0.3	11	2.8	10	3.3	5	1.7	4	1.0	6	2.0	8	1.6	1	0.3	46	1.6
2000	2	0.7	3	0.8	2	0.7	5	1.3	3	0.8	2	0.7	2	0.4	5	1.3	24	0.8
2001	3	0.8	5	1.3	2	0.7	8	2.7	4	1.0	1	0.3	7	1.4	3	1.0	33	1.1
2002	2	0.7	9	2.3	8	1.6	9	3.0	3	0.8	6	1.2	7	1.4	0	0.0	44	1.4
2003	3	1.0	2	0.5	4	1.0	7	1.4	7	1.8	4	1.0	2	0.4	8	1.6	37	1.1
2004	1	0.2	3	0.8	5	1.7	0	0.0	4	1.0	1	0.3	7	1.4	2	0.7	23	0.8
2005	5	1.7	7	1.8	9	2.3	4	1.3	3	0.8	11	2.8	4	0.8	2	0.7	45	1.5
2006	0	0.0	2	0.5	1	0.3	7	1.8	6	1.5	1	0.3	7	1.4	10	2.5	34	1.1
2007	0	0.0	2	0.5	3	1.0	4	1.3	6	1.5	5	1.7	6	1.2	1	0.3	27	1.0
Total	19	0.5	48	1.2	48	1.4	51	1.5	44	1.1	39	1.1	60	1.2	34	1.0	343	1.1

- Holiday deaths are a concern because of the increased death rate due to risk factors such as fatigue, impaired driving, long distance traveling, speeding, and traveling on unfamiliar roadways.
- Over the past 10 years, the Pioneer Day Holiday (1.5) and the Independence Day Holiday (1.4) had the highest rates of deaths while the New Years Holiday (0.5) had the lowest rate.
- In 2007, Halloween had the highest death rate per day (1.7) while New Years had the lowest rate (0.0).
- The 2007 holiday death rate per day was 1.0 which was higher than the rate per day for all 2007 days (0.8).

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

The following criteria was used to determine the number of days in the holiday period:

- If a holiday occurred on Sunday, Tuesday, Wednesday, or Saturday, then it was considered a three day holiday (the day prior to the holiday, the holiday, and the day after the holiday).
- If a holiday occurred on Monday, then it was considered a four day holiday (Friday, Saturday, Sunday, and Monday).
- If a holiday occurred on Friday, then it was considered a four day holiday (Thursday, Friday, Saturday, and Sunday).
- If a holiday occurred on Thursday, then it was considered a five day holiday (Wednesday, Thursday, Friday, Saturday, and Sunday).

## Counties

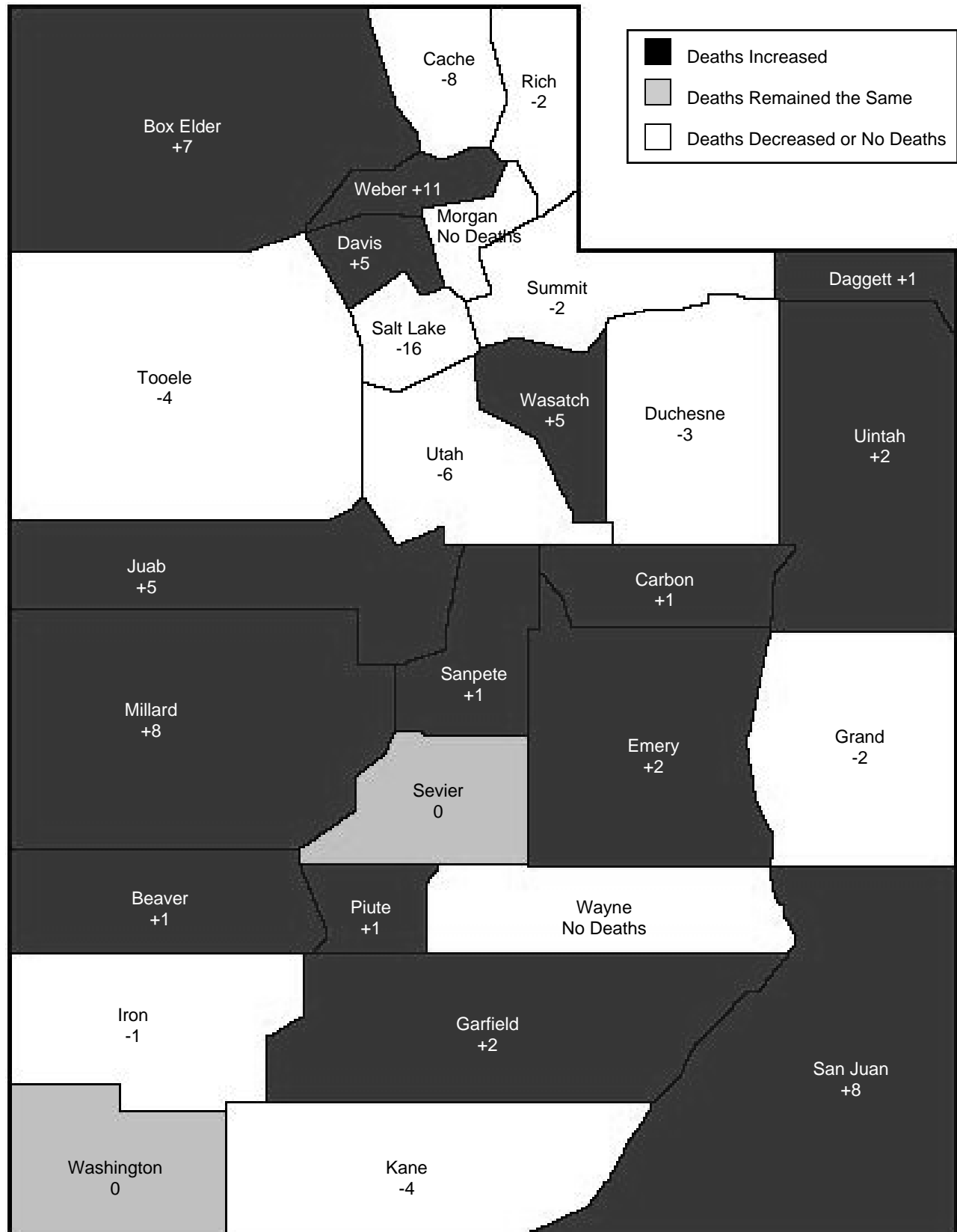
### Persons in Crashes by County (Utah 2007)

Persons												
	Non-Injured			Injured			Killed			Total		
		Rate	Rate		Rate	Rate		Rate	Rate		Rate	Rate
		per 100	per		per 100	per		per 100	per		per 100	per
		Million	10,000		Million	10,000		Million	10,000		Million	10,000
County	#	VMT	Pop.	#	VMT	Pop.	#	VMT	Pop.	#	VMT	Pop.
Weber	10,548	645.3	477.8	2,371	145.0	107.4	25	1.5	1.1	12,944	791.8	586.3
Salt Lake	57,962	659.0	568.9	11,441	130.1	112.3	54	0.6	0.5	69,457	789.7	681.7
Utah	20,079	537.4	400.4	4,621	123.7	92.2	24	0.6	0.5	24,724	661.7	493.1
Davis	12,197	483.8	412.0	2,550	101.2	86.1	19	0.8	0.6	14,766	585.7	498.8
Cache	4,691	478.3	430.3	892	90.9	81.8	6	0.6	0.6	5,589	569.8	512.6
Uintah	1,516	431.0	526.3	348	98.9	120.8	9	2.6	3.1	1,873	532.6	650.2
Washington	5,636	407.8	400.0	1,397	101.1	99.1	22	1.6	1.6	7,055	510.5	500.7
Wasatch	1,205	394.2	548.9	269	88.0	122.5	11	3.6	5.0	1,485	485.8	676.5
Duchesne	742	315.7	459.1	153	65.1	94.7	4	1.7	2.5	899	382.5	556.2
Sanpete	561	239.1	212.0	219	93.3	82.8	7	3.0	2.6	787	335.4	297.4
Garfield	301	251.2	617.8	86	71.8	176.5	3	2.5	6.2	390	325.4	800.5
Iron	1,821	258.3	406.4	416	59.0	92.8	8	1.1	1.8	2,245	318.4	501.0
Carbon	733	252.6	371.5	163	56.2	82.6	5	1.7	2.5	901	310.5	456.7
Rich	113	226.4	522.7	36	72.1	166.5	0	0.0	0.0	149	298.5	689.2
Summit	1,878	241.6	488.9	332	42.7	86.4	6	0.8	1.6	2,216	285.1	576.9
Kane	321	211.8	498.4	76	50.1	118.0	5	3.3	7.8	402	265.2	624.2
Sevier	821	195.4	401.6	221	52.6	108.1	7	1.7	3.4	1,049	249.7	513.2
Daggett	76	230.7	784.3	5	15.2	51.6	1	3.0	10.3	82	248.9	846.2
Wayne	68	169.2	258.1	22	54.8	83.5	0	0.0	0.0	90	224.0	341.6
Piute	55	175.9	397.1	11	35.2	79.4	2	6.4	14.4	68	217.4	491.0
Tooele	1,551	170.0	274.3	393	43.1	69.5	10	1.1	1.8	1,954	214.1	345.6
Morgan	244	171.0	263.4	55	38.5	59.4	0	0.0	0.0	299	209.5	322.7
San Juan	420	150.3	283.6	141	50.5	95.2	16	5.7	10.8	577	206.5	389.7
Box Elder	1,453	158.8	306.0	420	45.9	88.4	17	1.9	3.6	1,890	206.5	398.0
Millard	639	139.0	476.4	269	58.5	200.5	15	3.3	11.2	923	200.7	688.1
Juab	573	137.7	593.5	186	44.7	192.7	8	1.9	8.3	767	184.3	794.5
Beaver	366	142.9	566.0	93	36.3	143.8	3	1.2	4.6	462	180.4	714.5
Grand	340	118.5	372.6	134	46.7	146.8	5	1.7	5.5	479	166.9	524.9
Emery	420	116.8	401.5	100	27.8	95.6	7	1.9	6.7	527	146.5	503.8
<b>Statewide</b>	<b>127,330</b>	<b>474.7</b>	<b>471.7</b>	<b>27,420</b>	<b>102.2</b>	<b>101.6</b>	<b>299</b>	<b>1.1</b>	<b>1.1</b>	<b>155,049</b>	<b>578.0</b>	<b>574.4</b>

- Two different rates are given in the above table. One rate is based on vehicle miles traveled in the county and the other based on the county population.
- Rate per 100 million vehicle miles traveled:
  - Weber (791.8), Salt Lake (789.7), and Utah (661.7) counties had the highest rates of total persons in crashes per 100 million vehicle miles traveled.
  - Piute (6.4), San Juan (5.7), and Wasatch (3.6) counties had the highest rates of persons killed per 100 million vehicle miles traveled.
- Rate per 10,000 population:
  - Daggett (846.2), Garfield (800.5), and Juab (794.5) counties had the highest rates of total persons in crashes per 10,000 population.
  - Piute (14.4), Millard (11.2), and San Juan (10.8) counties had the highest rates of persons killed per 10,000 population.

## Counties

### Change in Number of Deaths From 2006 to 2007 by County (Utah)



## Counties

### Crashes by County (Utah 2007)

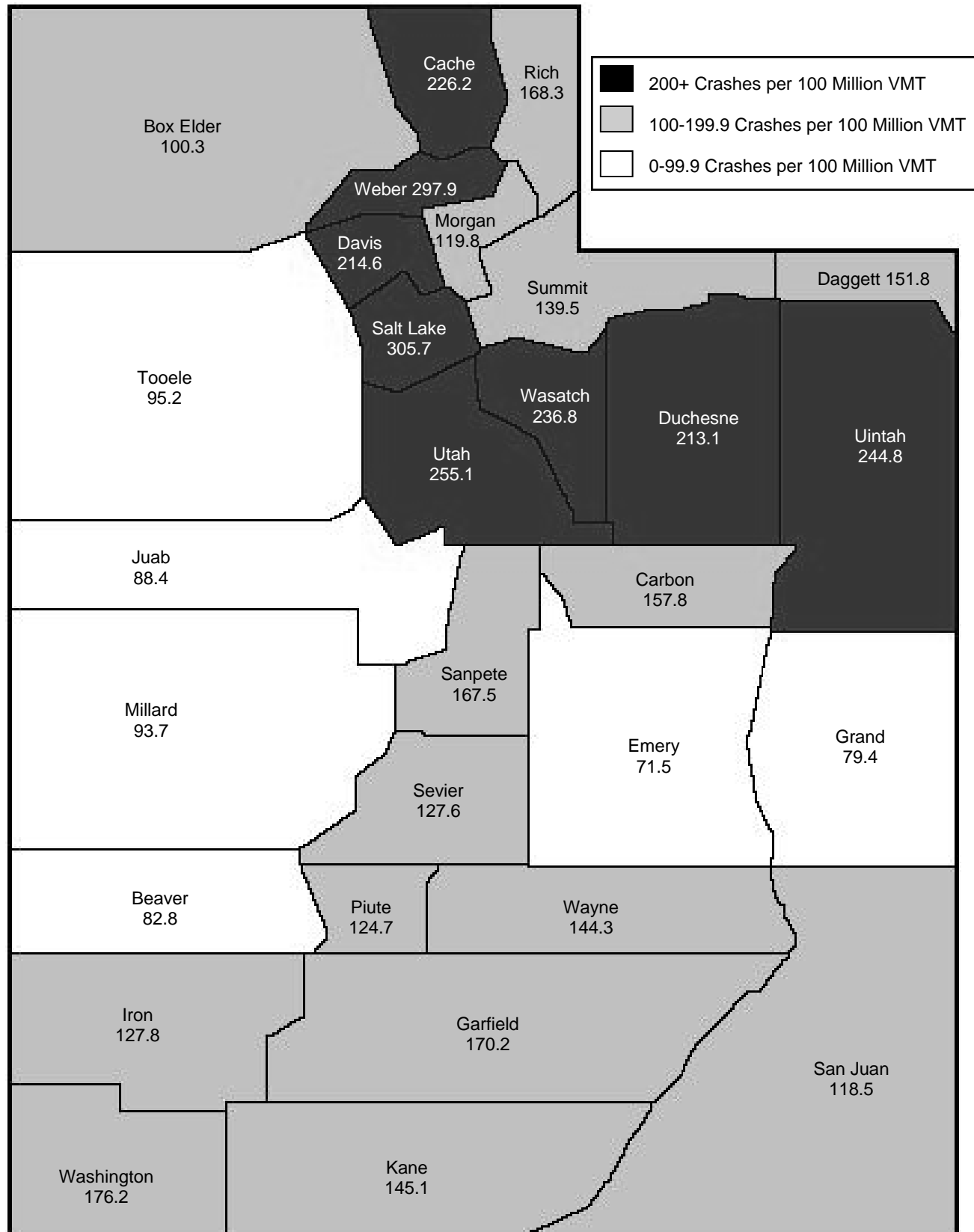
Crashes								
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
		Rate		Rate		Rate		Rate
		per 100		per 100		per 100		per 100
		Million		Million		Million		Million
County	#	VMT	#	VMT	#	VMT	#	VMT
Salt Lake	18,839	214.2	7,995	90.9	49	0.6	26,883	305.7
Weber	3,202	195.9	1,645	100.6	23	1.4	4,870	297.9
Utah	6,425	172.0	3,083	82.5	22	0.6	9,530	255.1
Uintah	636	180.8	216	61.4	9	2.6	861	244.8
Wasatch	523	171.1	191	62.5	10	3.3	724	236.8
Cache	1,600	163.1	615	62.7	4	0.4	2,219	226.2
Davis	3,657	145.1	1,736	68.9	17	0.7	5,410	214.6
Duchesne	396	168.5	101	43.0	4	1.7	501	213.1
Washington	1,522	110.1	897	64.9	16	1.2	2,435	176.2
Garfield	150	125.2	51	42.6	3	2.5	204	170.2
Rich	57	114.2	27	54.1	0	0.0	84	168.3
Sanpete	258	110.0	130	55.4	5	2.1	393	167.5
Carbon	345	118.9	108	37.2	5	1.7	458	157.8
Daggett	45	136.6	4	12.1	1	3.0	50	151.8
Kane	166	109.5	49	32.3	5	3.3	220	145.1
Wayne	41	102.0	17	42.3	0	0.0	58	144.3
Summit	836	107.6	243	31.3	5	0.6	1,084	139.5
Iron	637	90.3	256	36.3	8	1.1	901	127.8
Sevier	387	92.1	142	33.8	7	1.7	536	127.6
Piute	29	92.7	8	25.6	2	6.4	39	124.7
Morgan	132	92.5	39	27.3	0	0.0	171	119.8
San Juan	234	83.8	88	31.5	9	3.2	331	118.5
Box Elder	643	70.3	260	28.4	15	1.6	918	100.3
Tooele	599	65.6	262	28.7	8	0.9	869	95.2
Millard	272	59.2	148	32.2	11	2.4	431	93.7
Juab	249	59.8	112	26.9	7	1.7	368	88.4
Beaver	156	60.9	54	21.1	2	0.8	212	82.8
Grand	142	49.5	81	28.2	5	1.7	228	79.4
Emery	190	52.8	61	17.0	6	1.7	257	71.5
<b>Statewide</b>	<b>42,368</b>	<b>157.9</b>	<b>18,619</b>	<b>69.4</b>	<b>258</b>	<b>1.0</b>	<b>61,245</b>	<b>228.3</b>

- Salt Lake (305.7), Weber (297.9), and Utah (255.1) counties had the highest total crash rates per miles traveled.
- Piute (6.4), Kane (3.3), and Wasatch (3.3) counties had the highest fatal crash rates per miles traveled.
- Emery (71.5), Grand (79.4), and Beaver (82.8) counties had the lowest total crash rates per miles traveled.



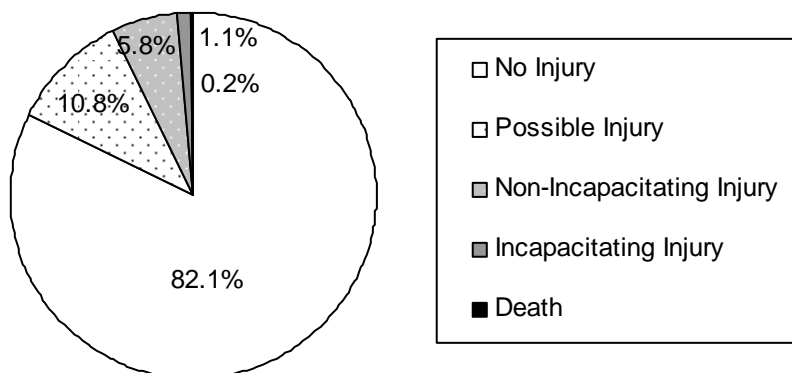
# Counties

## County Crash Rates by Miles Traveled (Utah 2007)



## Persons Involved

### Injury Severity (Utah 2007)



- Although many people were injured and killed in motor vehicle crashes, the majority (82.1%) of persons in crashes did not sustain an injury. See Glossary in the Appendix for injury definitions.
- Persons in the same crash sustain different levels of injury. Many factors influence injury patterns including seatbelt use, seating position, and vehicle safety equipment.

### Person Placement (Utah 2007)

Persons								
Person Placement	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Driver	91,454	71.8%	18,141	66.2%	169	56.5%	109,764	70.8%
Passenger	35,758	28.1%	8,014	29.2%	92	30.8%	43,864	28.3%
Pedestrian	65	0.1%	681	2.5%	32	10.7%	778	0.5%
Bicyclist	53	0.0%	584	2.1%	6	2.0%	643	0.4%
<b>Total</b>	<b>127,330</b>	<b>100.0%</b>	<b>27,420</b>	<b>100.0%</b>	<b>299</b>	<b>100.0%</b>	<b>155,049</b>	<b>100.0%</b>

- Pedestrians in a crash had the greatest risk of being killed. In fact, pedestrian crashes were 11 times more likely to be fatal than other crashes.

### Gender of Persons in Crashes (Utah 2007)

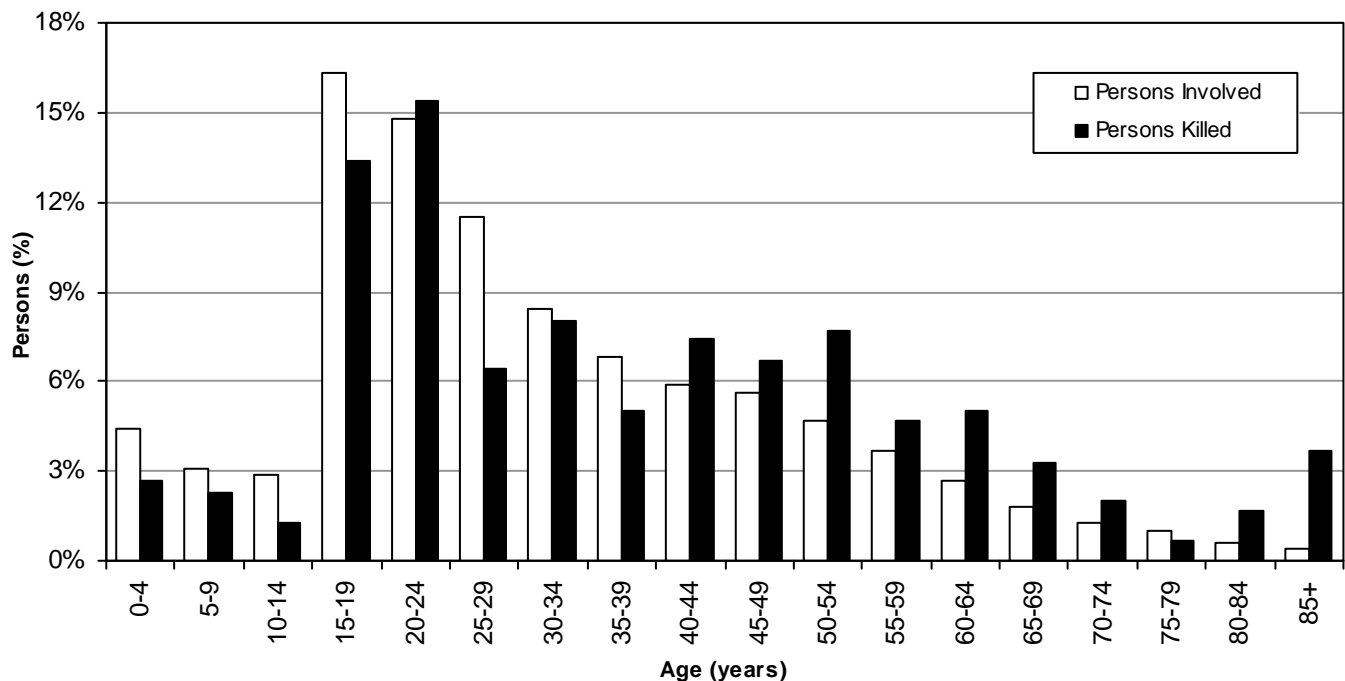
Persons								
Gender	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Male	70,890	55.7%	12,843	46.8%	194	64.9%	83,927	54.1%
Female	52,130	40.9%	14,329	52.3%	102	34.1%	66,561	42.9%
Unknown	4,310	3.4%	248	0.9%	3	1.0%	4,561	2.9%
<b>Total</b>	<b>127,330</b>	<b>100.0%</b>	<b>27,420</b>	<b>100.0%</b>	<b>299</b>	<b>100.0%</b>	<b>155,049</b>	<b>100.0%</b>

- Males comprised over half (54.1%) of all persons in crashes and nearly two-thirds (64.9%) of deaths, while females sustained more injuries (52.3%) than males.
- Males were 1.5 times more likely to die than females in a crash.

## Persons Involved

### Age of Persons in Crashes (Utah 2007)

Age	Persons							
	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
0-4	6,023	4.7%	720	2.6%	8	2.7%	<b>6,751</b>	<b>4.4%</b>
5-9	4,038	3.2%	817	3.0%	7	2.3%	<b>4,862</b>	<b>3.1%</b>
10-14	3,533	2.8%	955	3.5%	4	1.3%	<b>4,492</b>	<b>2.9%</b>
15-19	20,654	16.2%	4,478	16.3%	41	13.7%	<b>25,173</b>	<b>16.2%</b>
20-24	18,582	14.6%	4,273	15.6%	47	15.7%	<b>22,902</b>	<b>14.8%</b>
25-29	14,509	11.4%	3,224	11.8%	21	7.0%	<b>17,754</b>	<b>11.5%</b>
30-34	10,631	8.3%	2,317	8.5%	24	8.0%	<b>12,972</b>	<b>8.4%</b>
35-39	8,634	6.8%	1,893	6.9%	15	5.0%	<b>10,542</b>	<b>6.8%</b>
40-44	7,429	5.8%	1,664	6.1%	22	7.4%	<b>9,115</b>	<b>5.9%</b>
45-49	7,124	5.6%	1,551	5.7%	20	6.7%	<b>8,695</b>	<b>5.6%</b>
50-54	5,866	4.6%	1,421	5.2%	23	7.7%	<b>7,310</b>	<b>4.7%</b>
55-59	4,538	3.6%	1,149	4.2%	14	4.7%	<b>5,701</b>	<b>3.7%</b>
60-64	3,320	2.6%	830	3.0%	15	5.0%	<b>4,165</b>	<b>2.7%</b>
65-69	2,217	1.7%	518	1.9%	10	3.3%	<b>2,745</b>	<b>1.8%</b>
70-74	1,565	1.2%	368	1.3%	6	2.0%	<b>1,939</b>	<b>1.3%</b>
75-79	1,229	1.0%	328	1.2%	2	0.7%	<b>1,559</b>	<b>1.0%</b>
80-84	788	0.6%	211	0.8%	5	1.7%	<b>1,004</b>	<b>0.6%</b>
85+	448	0.4%	123	0.4%	11	3.7%	<b>582</b>	<b>0.4%</b>
Unknown	6,202	4.9%	580	2.1%	4	1.3%	<b>6,786</b>	<b>4.4%</b>
<b>Total</b>	<b>127,330</b>	<b>100.0%</b>	<b>27,420</b>	<b>100.0%</b>	<b>299</b>	<b>100.0%</b>	<b>155,049</b>	<b>100.0%</b>



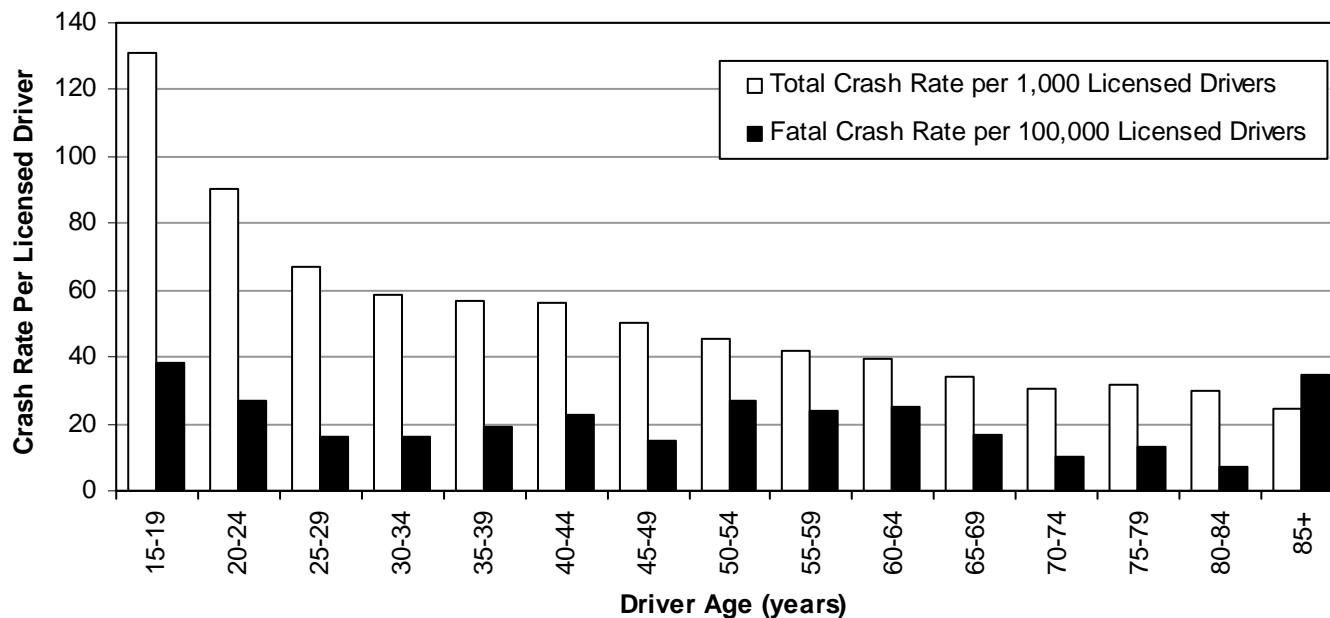
- The largest proportion of persons in crashes were aged 15-19 years (16.2%).
- The largest proportion of persons killed were aged 20-24 years (15.7%).
- While persons aged 65 years and older represented a small proportion of the persons in crashes (5.1%), they were 2.4 times more likely than all other age groups to die.

## Drivers

### Driver Age (Utah 2007)

Drivers												
	PDO Crashes			Injury Crashes			Fatal Crashes			Total		
			Rate per			Rate per			Rate per			Rate per
			1,000			1,000			1,000			1,000
Age	#	%	Drivers	#	%	Drivers	#	%	Drivers	#	%	Drivers
<15	9	0.0%	n/a	10	0.0%	n/a	0	0.0%	n/a	19	0.0%	n/a
15-19	11,069	14.9%	88.6	5,275	15.1%	42.2	47	12.6%	0.38	16,391	14.9%	131.2
20-24	12,156	16.3%	61.2	5,762	16.5%	29.0	53	14.2%	0.27	17,971	16.4%	90.4
25-29	9,952	13.4%	45.3	4,799	13.7%	21.8	36	9.7%	0.16	14,787	13.5%	67.2
30-34	7,437	10.0%	39.3	3,584	10.3%	18.9	30	8.1%	0.16	11,051	10.1%	58.4
35-39	6,153	8.3%	38.5	2,880	8.2%	18.0	31	8.3%	0.19	9,064	8.3%	56.8
40-44	5,331	7.2%	37.8	2,525	7.2%	17.9	33	8.9%	0.23	7,889	7.2%	56.0
45-49	5,094	6.8%	34.4	2,378	6.8%	16.0	22	5.9%	0.15	7,494	6.8%	50.5
50-54	4,220	5.7%	30.5	2,040	5.8%	14.8	38	10.2%	0.27	6,298	5.7%	45.6
55-59	3,245	4.4%	28.1	1,552	4.4%	13.5	28	7.5%	0.24	4,825	4.4%	41.8
60-64	2,350	3.2%	26.2	1,145	3.3%	12.8	22	5.9%	0.25	3,517	3.2%	39.3
65-69	1,474	2.0%	22.4	753	2.2%	11.5	11	3.0%	0.17	2,238	2.0%	34.1
70-74	1,030	1.4%	20.4	502	1.4%	10.0	5	1.3%	0.10	1,537	1.4%	30.5
75-79	826	1.1%	20.9	412	1.2%	10.4	5	1.3%	0.13	1,243	1.1%	31.5
80-84	514	0.7%	19.2	279	0.8%	10.4	2	0.5%	0.07	795	0.7%	29.7
85+	272	0.4%	15.9	138	0.4%	8.1	6	1.6%	0.35	416	0.4%	24.3
Unknown	3,348	4.5%	n/a	878	2.5%	n/a	3	0.8%	n/a	4,229	3.9%	n/a
<b>Total</b>	<b>74,480</b>	<b>100.0%</b>	<b>43.2</b>	<b>34,912</b>	<b>100.0%</b>	<b>20.2</b>	<b>372</b>	<b>100.0%</b>	<b>0.22</b>	<b>109,764</b>	<b>100.0%</b>	<b>63.7</b>

### Crash Rate of Licensed Drivers by Age (Utah 2007)



- Drivers aged 15-19 years had the highest rates per licensed driver of total crashes, fatal crashes, injury crashes, and property damage only crashes.
- Drivers aged 85+ years had the lowest rate per licensed driver of total crashes (24.3).
- Drivers aged 80-84 years had the lowest rate per licensed driver of fatal crashes (0.07).

# Drivers

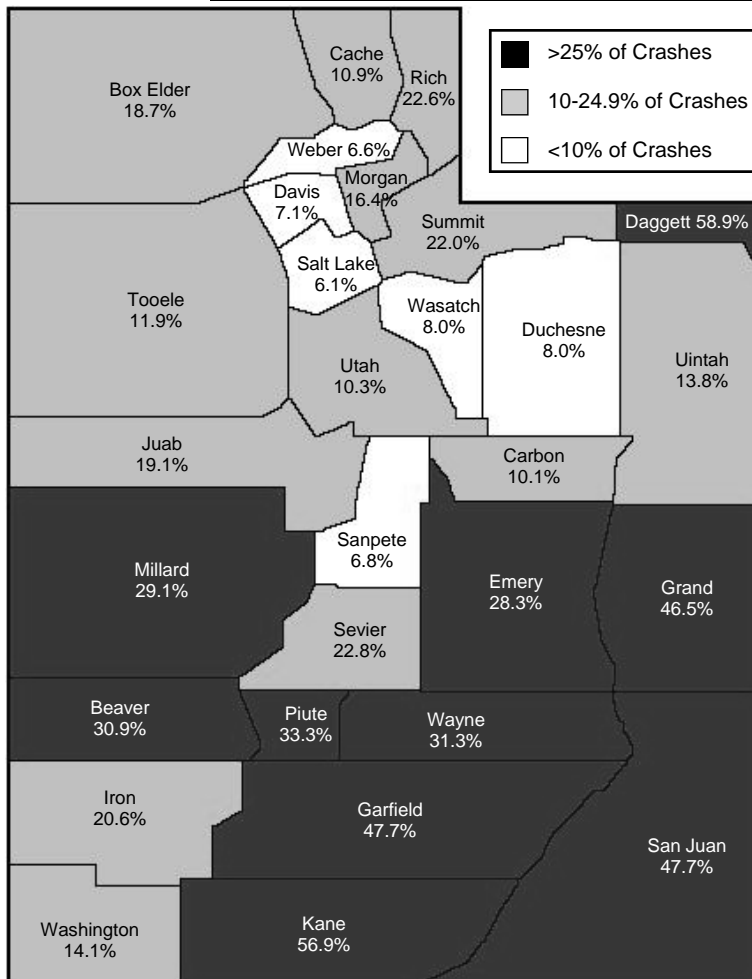
## Driver Gender (Utah 2007)

Drivers								
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
Gender	#	%	#	%	#	%	#	%
Male	43,150	57.9%	19,330	55.4%	285	76.6%	62,765	57.2%
Female	28,457	38.2%	14,937	42.8%	84	22.6%	43,478	39.6%
Unknown	2,873	3.9%	645	1.8%	3	0.8%	3,521	3.2%
<b>Total</b>	<b>74,480</b>	<b>100.0%</b>	<b>34,912</b>	<b>100.0%</b>	<b>372</b>	<b>100.0%</b>	<b>109,764</b>	<b>100.0%</b>

- Males represented 57.2% of all drivers in a crash and 76.6% of drivers in fatal crashes.

## Out-of-State Drivers (Utah 2007)

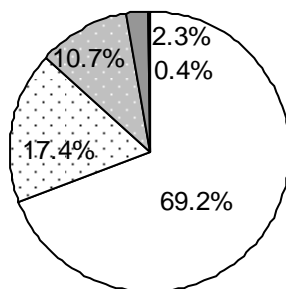
Drivers								
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
License State	#	%	#	%	#	%	#	%
Utah	66,307	89.0%	31,454	90.1%	288	77.4%	98,049	89.3%
Out-Of-State	6,897	9.3%	3,088	8.8%	79	21.2%	10,064	9.2%
Unknown	1,276	1.7%	370	1.1%	5	1.3%	1,651	1.5%
<b>Total</b>	<b>74,480</b>	<b>100.0%</b>	<b>34,912</b>	<b>100.0%</b>	<b>372</b>	<b>100.0%</b>	<b>109,764</b>	<b>100.0%</b>



- Although out-of-state licensed drivers represented 9.2% of all drivers in crashes, they represented 21.2% of drivers in fatal crashes.
- There were several counties that had a disproportionate amount of out-of-state drivers in crashes. Most notably in Daggett (58.9%), Kane (56.9%), San Juan (47.7%), Garfield (47.7%), and Grand (46.5%) where half of the drivers in crashes were out-of-state drivers. These drivers may place an extra burden on the residents and medical services in these counties.

## Crash Conditions

### Crash Severity (Utah 2007)



- ☐ No Injury
- ☐ Possible Injury
- ☐ Non-Incapacitating Injury
- ☐ Incapacitating Injury
- ☒ Death

- For crashes that occurred in Utah during 2007, 69.2% resulted in property damage only, 30.4% resulted in some level of injury, and 0.4% involved a death.

### Month (Utah 2007)

Crashes									
	Days in Month	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
			Rate		Rate		Rate		Rate
Month	#	#	per Day	#	per Day	#	per Day	#	per Day
January	31	4,274	137.9	1,564	50.5	15	0.48	5,853	188.8
February	28	3,282	117.2	1,256	44.9	11	0.39	4,549	162.5
March	31	3,198	103.2	1,462	47.2	23	0.74	4,683	151.1
April	30	2,940	98.0	1,506	50.2	26	0.87	4,472	149.1
May	31	3,359	108.4	1,608	51.9	19	0.61	4,986	160.8
June	30	3,315	110.5	1,555	51.8	25	0.83	4,895	163.2
July	31	3,112	100.4	1,568	50.6	31	1.00	4,711	152.0
August	31	3,283	105.9	1,715	55.3	22	0.71	5,020	161.9
September	30	3,391	113.0	1,660	55.3	24	0.80	5,075	169.2
October	31	3,695	119.2	1,632	52.6	26	0.84	5,353	172.7
November	30	3,507	116.9	1,502	50.1	19	0.63	5,028	167.6
December	31	5,012	161.7	1,591	51.3	17	0.55	6,620	213.5
<b>Total</b>	<b>365</b>	<b>42,368</b>	<b>116.1</b>	<b>18,619</b>	<b>51.0</b>	<b>258</b>	<b>0.71</b>	<b>61,245</b>	<b>167.8</b>

- Total crash rates per day were highest in December and January.
- The highest rates per day for fatal crashes occurred during July, April, October, and June.

### Day of Week (Utah 2007)

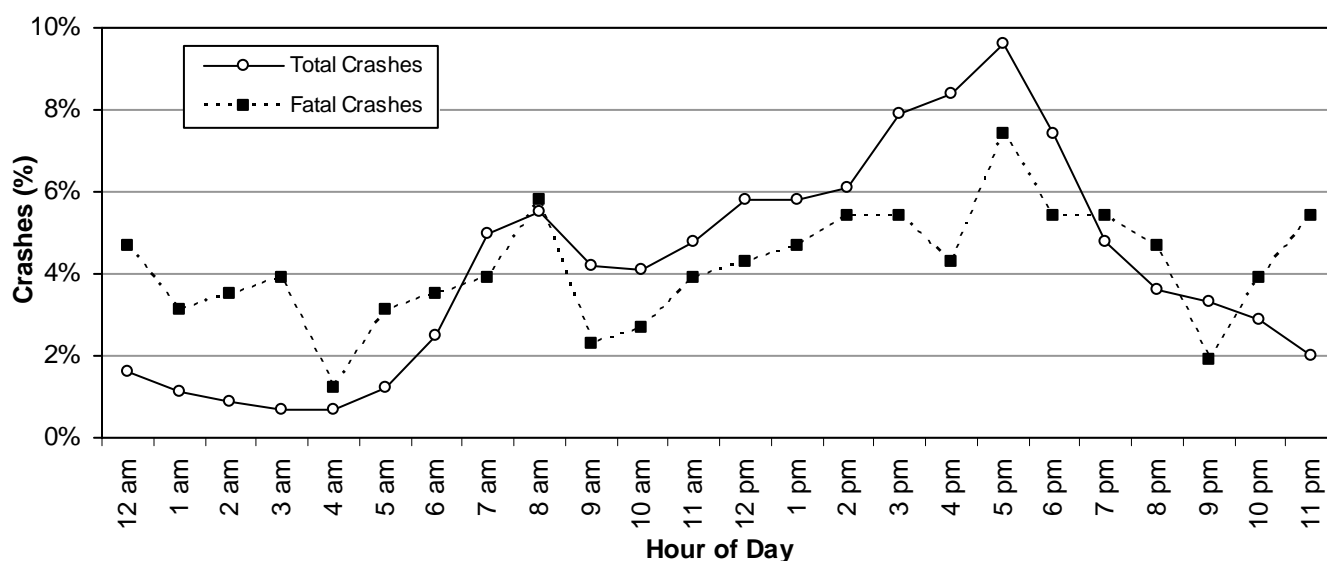
Crashes								
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
Day of Week	#	%	#	%	#	%	#	%
Sunday	3,088	7.3%	1,563	8.4%	48	18.6%	4,699	7.7%
Monday	6,470	15.3%	2,808	15.1%	28	10.9%	9,306	15.2%
Tuesday	6,144	14.5%	2,821	15.2%	36	14.0%	9,001	14.7%
Wednesday	6,475	15.3%	2,732	14.7%	39	15.1%	9,246	15.1%
Thursday	6,949	16.4%	2,883	15.5%	32	12.4%	9,864	16.1%
Friday	7,567	17.9%	3,241	17.4%	22	8.5%	10,830	17.7%
Saturday	5,675	13.4%	2,571	13.8%	53	20.5%	8,299	13.6%
<b>Total</b>	<b>42,368</b>	<b>100.0%</b>	<b>18,619</b>	<b>100.0%</b>	<b>258</b>	<b>100.0%</b>	<b>61,245</b>	<b>100.0%</b>

- The highest percentage of total crashes occurred on Friday (17.7%).
- The highest percentage of fatal crashes occurred on Saturday (20.5%).
- Crashes on the weekend were 2.4 times more likely to be fatal than weekday crashes.

# Crash Conditions

## Hour (Utah 2007)

Hour	Crashes							
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Midnight	628	1.5%	335	1.8%	12	4.7%	975	1.6%
1 a.m.	471	1.1%	221	1.2%	8	3.1%	700	1.1%
2 a.m.	373	0.9%	181	1.0%	9	3.5%	563	0.9%
3 a.m.	298	0.7%	138	0.7%	10	3.9%	446	0.7%
4 a.m.	323	0.8%	115	0.6%	3	1.2%	441	0.7%
5 a.m.	530	1.3%	201	1.1%	8	3.1%	739	1.2%
6 a.m.	1,122	2.6%	414	2.2%	9	3.5%	1,545	2.5%
7 a.m.	2,237	5.3%	834	4.5%	10	3.9%	3,081	5.0%
8 a.m.	2,426	5.7%	911	4.9%	15	5.8%	3,352	5.5%
9 a.m.	1,855	4.4%	686	3.7%	6	2.3%	2,547	4.2%
10 a.m.	1,766	4.2%	727	3.9%	7	2.7%	2,500	4.1%
11 a.m.	2,050	4.8%	865	4.6%	10	3.9%	2,925	4.8%
Noon	2,502	5.9%	1,057	5.7%	11	4.3%	3,570	5.8%
1 p.m.	2,451	5.8%	1,096	5.9%	12	4.7%	3,559	5.8%
2 p.m.	2,537	6.0%	1,195	6.4%	14	5.4%	3,746	6.1%
3 p.m.	3,269	7.7%	1,527	8.2%	14	5.4%	4,810	7.9%
4 p.m.	3,526	8.3%	1,595	8.6%	11	4.3%	5,132	8.4%
5 p.m.	4,070	9.6%	1,797	9.7%	19	7.4%	5,886	9.6%
6 p.m.	3,106	7.3%	1,436	7.7%	14	5.4%	4,556	7.4%
7 p.m.	1,920	4.5%	993	5.3%	14	5.4%	2,927	4.8%
8 p.m.	1,476	3.5%	714	3.8%	12	4.7%	2,202	3.6%
9 p.m.	1,389	3.3%	643	3.5%	5	1.9%	2,037	3.3%
10 p.m.	1,217	2.9%	556	3.0%	10	3.9%	1,783	2.9%
11 p.m.	826	1.9%	382	2.1%	14	5.4%	1,222	2.0%
Unknown	0	0.0%	0	0.0%	1	0.4%	1	0.0%
<b>Total</b>	<b>42,368</b>	<b>100.0%</b>	<b>18,619</b>	<b>100.0%</b>	<b>258</b>	<b>100.0%</b>	<b>61,245</b>	<b>100.0%</b>



- Total crashes were more likely to occur between 3:00 p.m. and 6:59 p.m., with a peak at 5:00 p.m. (evening rush hour). Fatal crashes were highest during the hours of 8:00 a.m., 2:00-7:59 p.m., and 11 p.m.

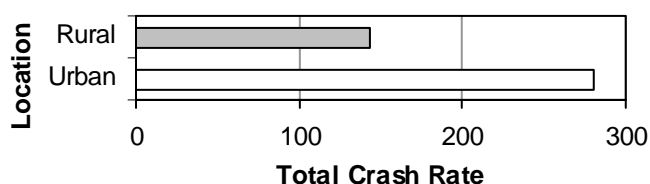


## Crash Conditions

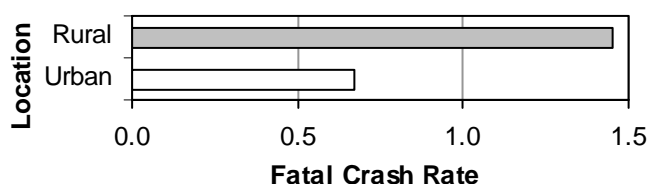
### Urban/Rural Location (Utah 2007)

Crashes								
Location	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	Rate per		Rate per		Rate per		Rate per	
	100 Million		100 Million		100 Million		100 Million	
	#	VMT	#	VMT	#	VMT	#	VMT
Urban	32,123	192.5	14,459	86.6	111	0.67	46,693	279.8
Rural	10,245	101.1	4,160	41.0	147	1.45	14,552	143.6
<b>Total</b>	<b>42,368</b>	<b>157.9</b>	<b>18,619</b>	<b>69.4</b>	<b>258</b>	<b>0.96</b>	<b>61,245</b>	<b>228.3</b>

### Total Crash Rates (Utah 2007)



### Fatal Crash Rates (Utah 2007)



- While urban areas had a higher rate of total crashes per vehicle mile traveled, rural areas had a higher rate of fatal crashes per vehicle mile traveled.
- Crashes occurring in rural areas were 4.3 times more likely to result in a death than crashes in urban areas.

### Road Surface Condition (Utah 2007)

Crashes								
Road Surface Condition	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Dry	32,978	77.8%	15,395	82.7%	229	88.8%	48,602	79.4%
Wet	3,574	8.4%	1,573	8.4%	15	5.8%	5,162	8.4%
Snow/Slush	3,338	7.9%	798	4.3%	9	3.5%	4,145	6.8%
Ice	1,370	3.2%	398	2.1%	3	1.2%	1,771	2.9%
Other	299	0.7%	229	1.2%	1	0.4%	529	0.9%
Unknown	809	1.9%	226	1.2%	1	0.4%	1,036	1.7%
<b>Total</b>	<b>42,368</b>	<b>100.0%</b>	<b>18,619</b>	<b>100.0%</b>	<b>258</b>	<b>100.0%</b>	<b>61,245</b>	<b>100.0%</b>

- Most (79.4%) crashes occur when roads are dry.
- Crashes on dry roads were twice as likely to be fatal compared to all other road surface conditions.

### Light Condition (Utah 2007)

Crashes								
Light Condition	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Daylight	28,937	68.3%	12,972	69.7%	136	52.7%	42,045	68.7%
Dark	10,486	24.7%	4,580	24.6%	110	42.6%	15,176	24.8%
Dawn/Dusk	2,198	5.2%	905	4.9%	11	4.3%	3,114	5.1%
Unknown	747	1.8%	162	0.9%	1	0.4%	910	1.5%
<b>Total</b>	<b>42,368</b>	<b>100.0%</b>	<b>18,619</b>	<b>100.0%</b>	<b>258</b>	<b>100.0%</b>	<b>61,245</b>	<b>100.0%</b>

- The majority (68.7%) of crashes occur during daylight.
- Nearly one-half (42.6%) of fatal crashes occur during dark conditions.

## Crash Conditions

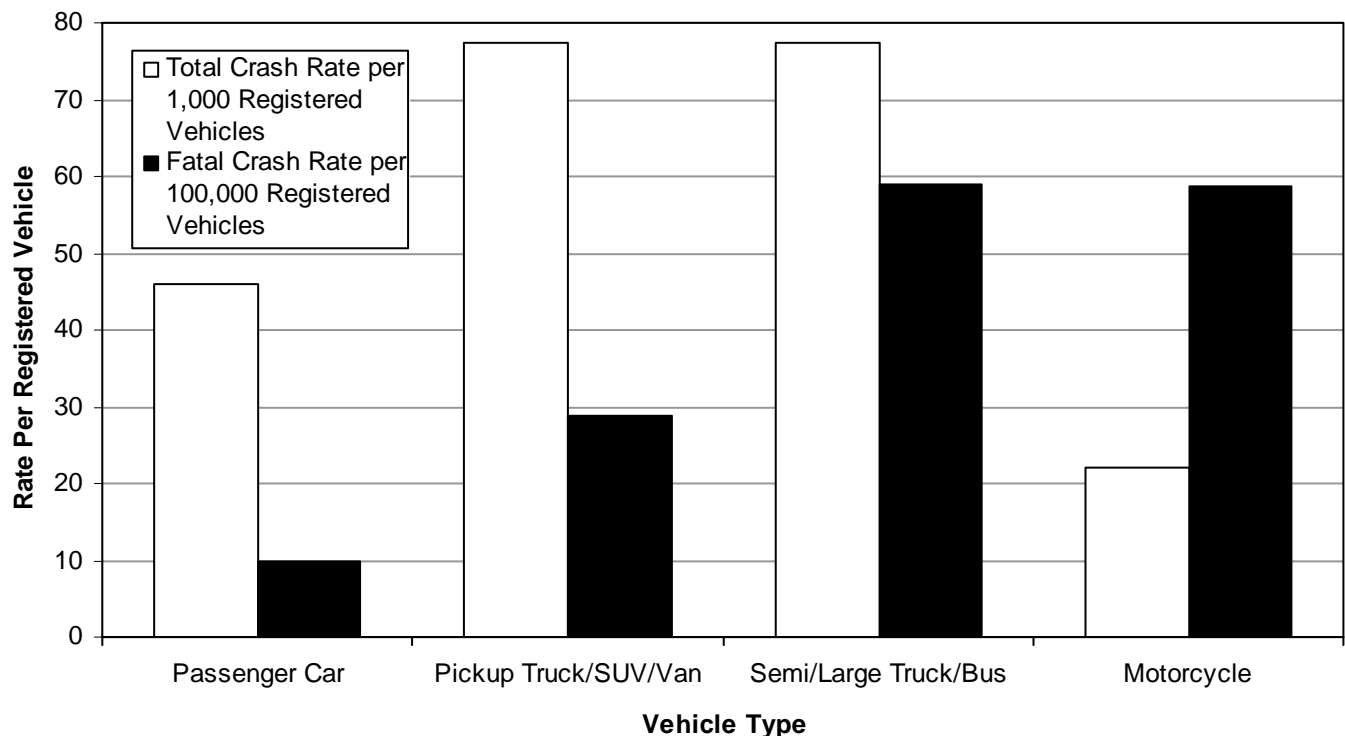
### Vehicle Type (Utah 2007)



Vehicles								
Vehicle Type	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Passenger Car	40,182	52.0%	19,189	54.0%	129	34.5%	59,500	52.6%
Pickup Truck	14,062	18.2%	5,557	15.6%	82	21.9%	19,701	17.4%
SUV	13,063	16.9%	5,891	16.6%	64	17.1%	19,018	16.8%
Van	4,334	5.6%	2,282	6.4%	23	6.1%	6,639	5.9%
Semi/Large Truck	3,512	4.5%	931	2.6%	36	9.6%	4,479	4.0%
Motorcycle	202	0.3%	1,009	2.8%	33	8.8%	1,244	1.1%
Bus	307	0.4%	87	0.2%	1	0.3%	395	0.3%
Other	273	0.4%	210	0.6%	4	1.1%	487	0.4%
Unknown	1,375	1.8%	379	1.1%	2	0.5%	1,756	1.6%
<b>Total</b>	<b>77,310</b>	<b>100.0%</b>	<b>35,535</b>	<b>100.0%</b>	<b>374</b>	<b>100.0%</b>	<b>113,219</b>	<b>100.0%</b>



### Crash Rates by Vehicle Type (Utah 2007)



- When comparing vehicle types it is important to keep in mind that different vehicle types may have different usage patterns and thus different exposure. For example, semi/large truck may travel more miles per vehicle.
- Passenger car represented 64.8% of registered vehicles in Utah, pickup truck/SUV/van 29.2%, semi/large truck/bus 3.1%, and motorcycle 2.8%.
- For total crashes, passenger car (52.6%) and pickup truck (17.4%) were the leading vehicle types.
- Semi/large truck/bus and pickup truck/SUV/van had the highest total crash rates per registered vehicle.
- For fatal crashes, passenger car (34.5%) and pickup truck (21.9%) were the leading vehicle types.
- Semi/large truck/bus and motorcycle had the highest fatal crash rates per registered vehicle.
- While motorcycles represented 1.1% of vehicles in total crashes, they represented 8.8% of vehicles in fatal crashes. In fact, crashes involving a motorcycle were 8.9 times more likely to be fatal than crashes involving other vehicles.

## Crash Conditions

### Vehicle Maneuver Prior to Crash (Utah 2007)

Vehicles								
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
Vehicle Maneuver	#	%	#	%	#	%	#	%
Straight Ahead	41,736	54.0%	20,350	57.3%	321	85.8%	62,407	55.1%
Stopped in Traffic Lane	8,018	10.4%	4,732	13.3%	13	3.5%	12,763	11.3%
Turning Left	7,406	9.6%	4,156	11.7%	16	4.3%	11,578	10.2%
Slowing in Traffic Lane	5,542	7.2%	2,419	6.8%	6	1.6%	7,967	7.0%
Turning Right	3,817	4.9%	1,129	3.2%	2	0.5%	4,948	4.4%
Parked	3,204	4.1%	731	2.1%	0	0.0%	3,935	3.5%
Changing Lanes	2,654	3.4%	653	1.8%	3	0.8%	3,310	2.9%
Backing	1,663	2.2%	154	0.4%	2	0.5%	1,819	1.6%
Entering Traffic Lane	753	1.0%	294	0.8%	0	0.0%	1,047	0.9%
Making U-turn	756	1.0%	286	0.8%	0	0.0%	1,042	0.9%
Overtaking/Passing	562	0.7%	202	0.6%	7	1.9%	771	0.7%
Leaving Traffic Lane	212	0.3%	109	0.3%	0	0.0%	321	0.3%
Parking Maneuvers	112	0.1%	11	0.0%	0	0.0%	123	0.1%
Other	383	0.5%	141	0.4%	3	0.8%	527	0.5%
Unknown	492	0.6%	168	0.5%	1	0.3%	661	0.6%
<b>Total</b>	<b>77,310</b>	<b>100.0%</b>	<b>35,535</b>	<b>100.0%</b>	<b>374</b>	<b>100.0%</b>	<b>113,219</b>	<b>100.0%</b>

- For total crashes, straight ahead (55.1%), stopped in traffic lane (11.3%), and turning left (10.2%) were the leading vehicle maneuvers prior to the crash.
- For fatal crashes, straight ahead (85.8%), turning left (4.3%), and stopped in traffic lane (3.5%) were the leading vehicle maneuvers prior to the crash.

### Speed Limit (Utah 2007)

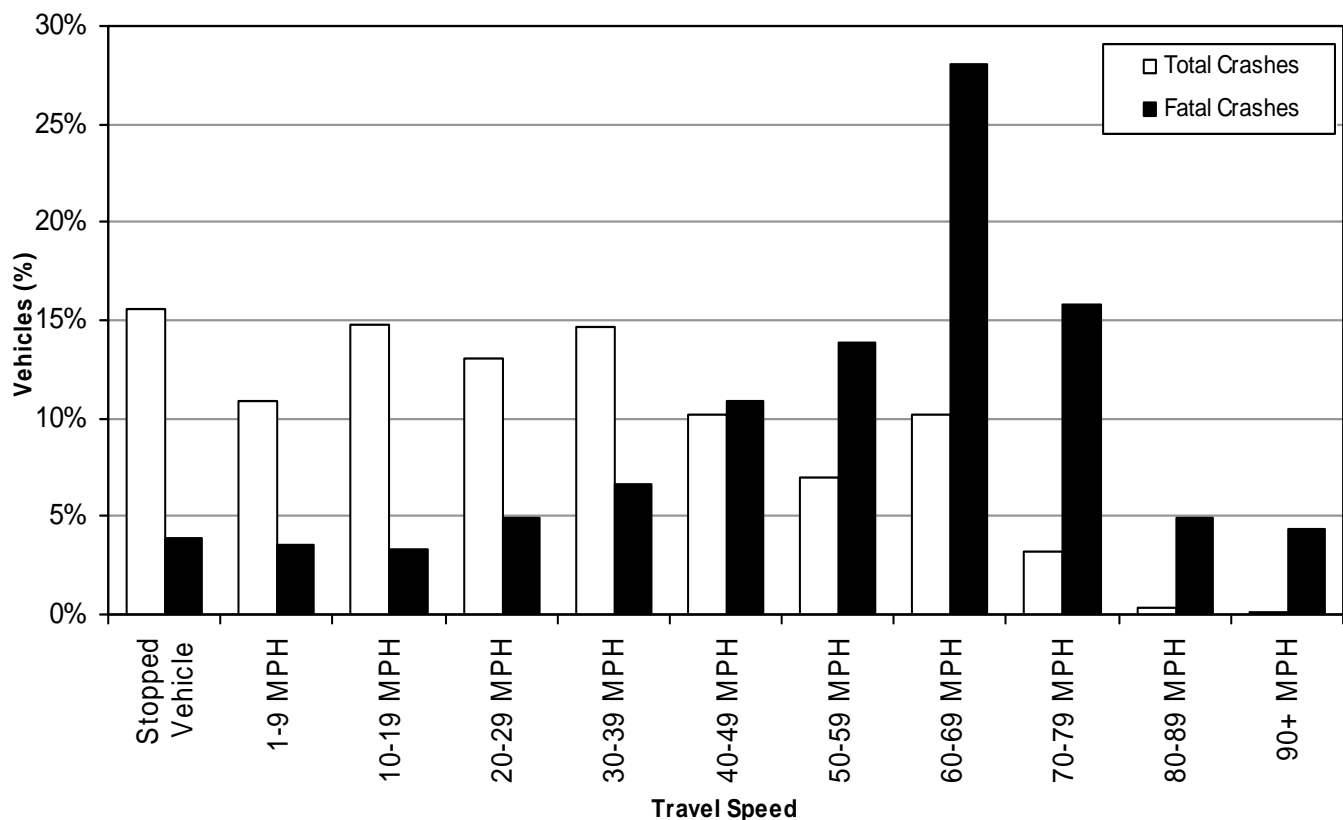
Vehicles								
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
Speed Limit	#	%	#	%	#	%	#	%
5-15 MPH	526	0.7%	149	0.4%	0	0.0%	675	0.6%
20-25 MPH	8,693	11.2%	3,135	8.8%	16	4.3%	11,844	10.5%
30-35 MPH	15,920	20.6%	8,657	24.4%	43	11.5%	24,620	21.7%
40-45 MPH	15,426	20.0%	8,830	24.8%	82	21.9%	24,338	21.5%
50-55 MPH	5,160	6.7%	2,600	7.3%	57	15.2%	7,817	6.9%
60-65 MPH	14,310	18.5%	4,991	14.0%	112	29.9%	19,413	17.1%
70-75 MPH	1,785	2.3%	783	2.2%	54	14.4%	2,622	2.3%
Unknown	15,490	20.0%	6,390	18.0%	10	2.7%	21,890	19.3%
<b>Total</b>	<b>77,310</b>	<b>100.0%</b>	<b>35,535</b>	<b>100.0%</b>	<b>374</b>	<b>100.0%</b>	<b>113,219</b>	<b>100.0%</b>

- The speed limit on the roadway was 30-45 MPH for over half (53.6% where speed limit was known) of the total vehicles in crashes.
- Fatal crashes were more likely to occur with higher speed limits. The speed limit was 60 MPH or higher for nearly one-half (45.6% where speed limit was known) of the vehicles in fatal crashes.
- Crashes where the speed limit was 50 MPH or higher were 3.3 times more likely to be fatal.
- Studies show that a 5% increase in average speed leads to a 10% increase in injury crashes and a 20% increase in fatal crashes. A 5% decrease in speed leads to a 10% decrease in injury crashes and a 20% decrease in fatal crashes.

## Crash Conditions

### Travel Speed (Utah 2007)

Vehicles								
Travel Speed	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Stopped Vehicle	8,028	10.4%	4,738	13.3%	12	3.2%	<b>12,778</b>	<b>11.3%</b>
1-9 MPH	6,518	8.4%	2,414	6.8%	11	2.9%	<b>8,943</b>	<b>7.9%</b>
10-19 MPH	8,646	11.2%	3,521	9.9%	10	2.7%	<b>12,177</b>	<b>10.8%</b>
20-29 MPH	7,491	9.7%	3,229	9.1%	15	4.0%	<b>10,735</b>	<b>9.5%</b>
30-39 MPH	7,660	9.9%	4,280	12.0%	20	5.3%	<b>11,960</b>	<b>10.6%</b>
40-49 MPH	5,225	6.8%	3,121	8.8%	33	8.8%	<b>8,379</b>	<b>7.4%</b>
50-59 MPH	3,950	5.1%	1,731	4.9%	42	11.2%	<b>5,723</b>	<b>5.1%</b>
60-69 MPH	6,098	7.9%	2,191	6.2%	85	22.7%	<b>8,374</b>	<b>7.4%</b>
70-79 MPH	1,712	2.2%	826	2.3%	48	12.8%	<b>2,586</b>	<b>2.3%</b>
80-89 MPH	140	0.2%	134	0.4%	15	4.0%	<b>289</b>	<b>0.3%</b>
90+ MPH	35	0.0%	68	0.2%	13	3.5%	<b>116</b>	<b>0.1%</b>
Unknown	21,807	28.2%	9,282	26.1%	70	18.7%	<b>31,159</b>	<b>27.5%</b>
<b>Total</b>	<b>77,310</b>	<b>100.0%</b>	<b>35,535</b>	<b>100.0%</b>	<b>374</b>	<b>100.0%</b>	<b>113,219</b>	<b>100.0%</b>



- Over half (53.4% where travel speed was known) of vehicles in total crashes were traveling 1-39 MPH.
- Vehicles in fatal crashes were more likely to be traveling at higher speeds. Two-thirds (66.8% where travel speed was known) of vehicles in fatal crashes were traveling 50 MPH or higher.
- Crashes involving vehicles traveling 50 MPH or higher were 7.7 times more likely to be fatal.
- The higher the speed the greater the amount of energy that must be absorbed in a crash, hence there is more likelihood of serious injury.
- Drivers become increased risks to themselves and other people on the highway due to higher speeds.

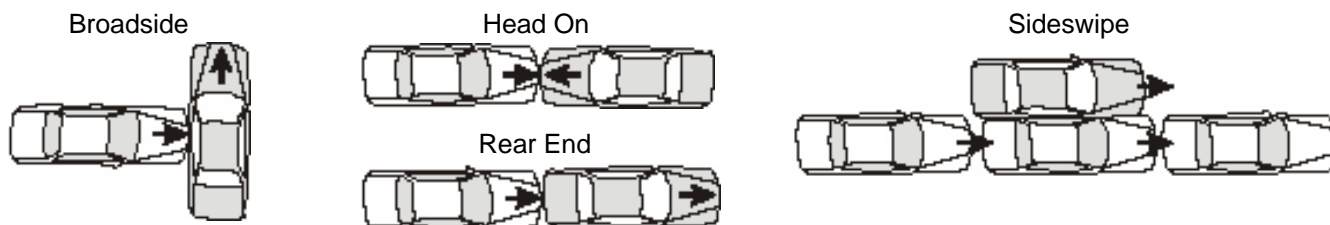
## Crash Conditions

### First Harmful Event (Utah 2007)

First Harmful Event	Crashes							
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Collision with Another Motor Vehicle	28,743	67.8%	12,486	67.1%	95	36.8%	41,324	67.5%
Collision with Animal	2,658	6.3%	218	1.2%	4	1.6%	2,880	4.7%
Collision with Concrete/Cable Barrier	1,459	3.4%	530	2.8%	9	3.5%	1,998	3.3%
Overturn/Rollover	726	1.7%	1,012	5.4%	69	26.7%	1,807	3.0%
Collision with Post, Pole, or Support	1,215	2.9%	476	2.6%	10	3.9%	1,701	2.8%
Collision with Other Fixed Object	965	2.3%	376	2.0%	0	0.0%	1,341	2.2%
Collision with Parked Vehicle	1,036	2.4%	220	1.2%	0	0.0%	1,256	2.1%
Collision with Other Non-Fixed Object	967	2.3%	279	1.5%	0	0.0%	1,246	2.0%
Collision with Fence	666	1.6%	185	1.0%	3	1.2%	854	1.4%
Collision with Pedestrian	50	0.1%	607	3.3%	30	11.6%	687	1.1%
Collision with Embankment	376	0.9%	284	1.5%	12	4.7%	672	1.1%
Collision with Bicyclist	70	0.2%	584	3.1%	6	2.3%	660	1.1%
Collision with Tree/Shrubbery	301	0.7%	205	1.1%	2	0.8%	508	0.8%
Collision with Guardrail	313	0.7%	138	0.7%	3	1.2%	454	0.7%
Collision with Ditch	258	0.6%	179	1.0%	5	1.9%	442	0.7%
Other Non-Collision	170	0.4%	113	0.6%	0	0.0%	283	0.5%
Collision with Mailbox/Fire Hydrant	229	0.5%	53	0.3%	0	0.0%	282	0.5%
Cargo/Equipment Loss or Shift	218	0.5%	20	0.1%	0	0.0%	238	0.4%
Collision with Thrown or Fallen Object	200	0.5%	23	0.1%	0	0.0%	223	0.4%
Fire/Explosion	167	0.4%	2	0.0%	0	0.0%	169	0.3%
Collision with Crash Cushion	110	0.3%	33	0.2%	0	0.0%	143	0.2%
Fell/Jumped from Vehicle	15	0.0%	81	0.4%	9	3.5%	105	0.2%
Jackknife	78	0.2%	20	0.1%	0	0.0%	98	0.2%
Collision with Bridge	40	0.1%	20	0.1%	0	0.0%	60	0.1%
Collision with Culvert	35	0.1%	23	0.1%	0	0.0%	58	0.1%
Collision with Work Zone/Equipment	42	0.1%	14	0.1%	0	0.0%	56	0.1%
Collision with Train	27	0.1%	20	0.1%	1	0.4%	48	0.1%
Immersion	14	0.0%	7	0.0%	0	0.0%	21	0.0%
Unknown	1,220	2.9%	411	2.2%	0	0.0%	1,631	2.7%
<b>Total</b>	<b>42,368</b>	<b>100.0%</b>	<b>18,619</b>	<b>100.0%</b>	<b>258</b>	<b>100.0%</b>	<b>61,245</b>	<b>100.0%</b>

- For all crashes, the leading first harmful event was collision with another motor vehicle.
- For total crashes, collision with animal (4.7%) and collision with concrete/cable barrier (3.3%) were the next highest first harmful events. See page 34 for more information on collisions with animals.
- For fatal crashes, overturn/rollover (26.7%) and collision with pedestrian (11.6%) were the next highest first harmful events.
- Overturn/rollover was 12 times more likely to result in a death than other first harmful events.

### Collision Examples



## Crash Conditions

### Collision Description (Utah 2007)

Crashes (Two or More Motor Vehicles)								
Collision Description	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Rear End	13,335	42.3%	6,107	45.3%	17	17.2%	19,459	43.1%
Broadside	9,224	29.2%	5,242	38.9%	35	35.4%	14,501	32.1%
Sideswipe	4,945	15.7%	902	6.7%	8	8.1%	5,855	13.0%
Parked Vehicle	2,696	8.5%	501	3.7%	0	0.0%	3,197	7.1%
Head On	444	1.4%	535	4.0%	35	35.4%	1,014	2.2%
Backing Vehicle	288	0.9%	41	0.3%	0	0.0%	329	0.7%
Unknown	614	1.9%	164	1.2%	4	4.0%	782	1.7%
<b>Total</b>	<b>31,546</b>	<b>100.0%</b>	<b>13,492</b>	<b>100.0%</b>	<b>99</b>	<b>100.0%</b>	<b>45,137</b>	<b>100.0%</b>

- For all crashes, the leading collision types involving two or more motor vehicles were rear end (43.1%) and broadside (32.1%).
- For fatal crashes, the leading collision types were broadside (35.4%) and head on (35.4%).
- Head on collisions were 25 times more likely to result in a death than other collisions involving two or more motor vehicles.

### Number of Vehicles Involved (Utah 2007)

Crashes								
Vehicles Involved	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
1	10,821	25.5%	5,127	27.5%	159	61.6%	16,107	26.3%
2	28,697	67.7%	10,829	58.2%	86	33.3%	39,612	64.7%
3	2,421	5.7%	2,086	11.2%	11	4.3%	4,518	7.4%
4	353	0.8%	453	2.4%	1	0.4%	807	1.3%
5 or more	76	0.2%	124	0.7%	1	0.4%	201	0.3%
<b>Total</b>	<b>42,368</b>	<b>100.0%</b>	<b>18,619</b>	<b>100.0%</b>	<b>258</b>	<b>100.0%</b>	<b>61,245</b>	<b>100.0%</b>

- While the majority (64.7%) of all crashes involved two motor vehicles, 61.6% of fatal crashes involved only one motor vehicle.

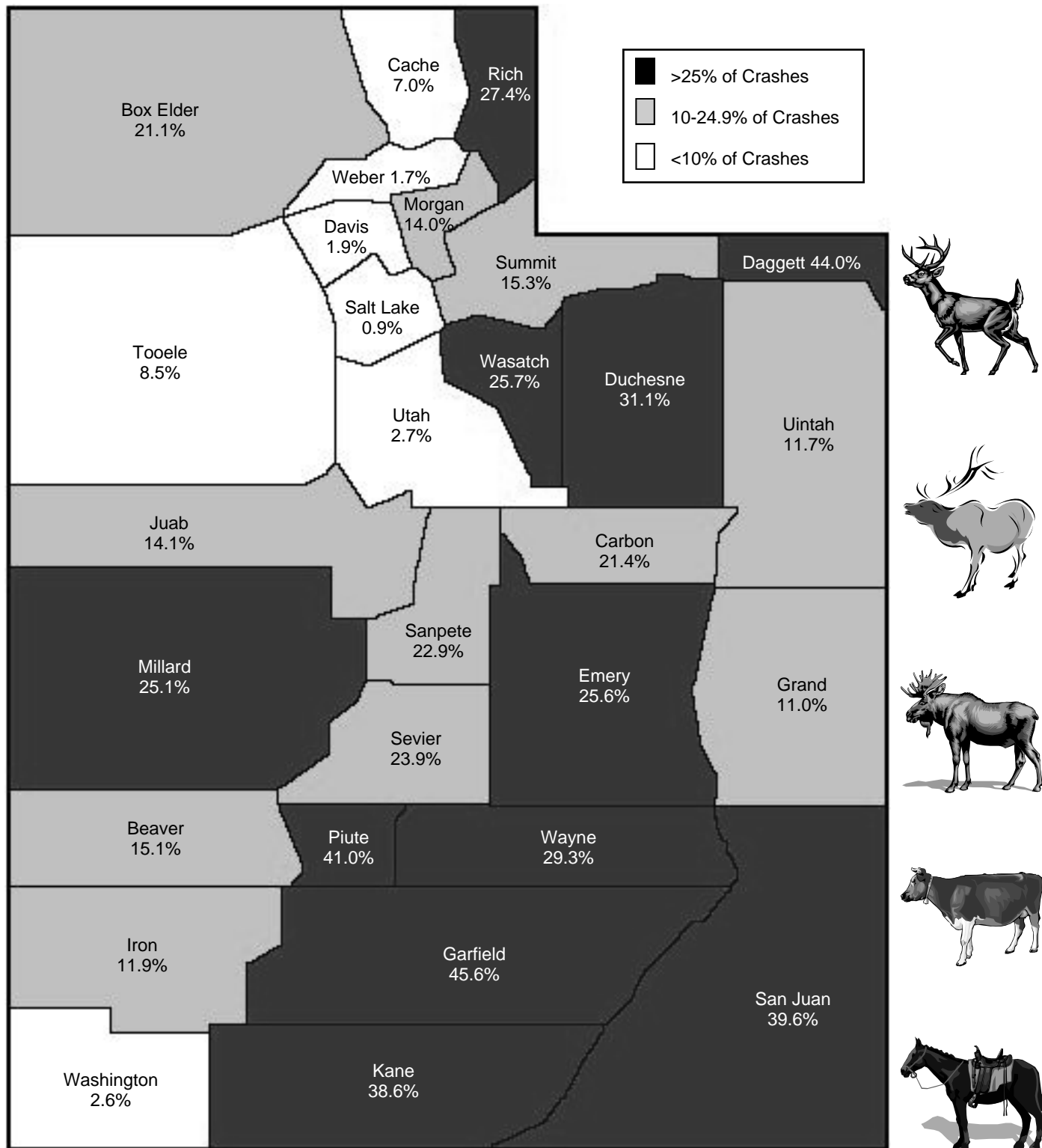
### Driver Distraction (Utah 2007)

Crashes								
Driver Distraction	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
None	32,964	77.8%	13,620	73.2%	131	50.8%	46,715	76.3%
Cell Phone	706	1.7%	437	2.3%	4	1.6%	1,147	1.9%
Passengers	459	1.1%	343	1.8%	3	1.2%	805	1.3%
Radio/CD/DVD etc.	239	0.6%	143	0.8%	0	0.0%	382	0.6%
Other Electronic Device	94	0.2%	52	0.3%	2	0.8%	148	0.2%
Other	2,280	5.4%	1,429	7.7%	19	7.4%	3,728	6.1%
Unknown	5,626	13.3%	2,595	13.9%	99	38.4%	8,320	13.6%
<b>Total</b>	<b>42,368</b>	<b>100.0%</b>	<b>18,619</b>	<b>100.0%</b>	<b>258</b>	<b>100.0%</b>	<b>61,245</b>	<b>100.0%</b>

- For all crashes where driver distraction was known, 11.7% of crashes involved a distracted driver. Cell phone was the leading driver distraction (18.5% of distractions). Driving demands the full attention of the driver.

## Crash Conditions

### Percent of Crashes Involving Animals by County (Utah 2007)



- There were 2,891 collisions with animals, 2,480 (85.8%) involved a wild animal and 411 (14.2%) involved a domestic animal.
- Garfield (45.6%), Daggett (44.0%), and Piute (41.0%) had the highest percent of crashes involving an animal.



## Crash Conditions

### Violations (Utah 2007)

Drivers								
Violations	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Following Too Close	2,635	29.6%	991	25.4%	1	3.3%	3,627	28.2%
Improper Lane Change/Travel	2,285	25.6%	902	23.1%	1	3.3%	3,188	24.8%
Speed	912	10.2%	306	7.8%	1	3.3%	1,219	9.5%
Improper Turn	377	4.2%	242	6.2%	0	0.0%	619	4.8%
Driving Under the Influence	280	3.1%	280	7.2%	4	13.3%	564	4.4%
License Violation	357	4.0%	198	5.1%	1	3.3%	556	4.3%
Insurance Violation	330	3.7%	153	3.9%	1	3.3%	484	3.8%
Negligent Collision	225	2.5%	128	3.3%	0	0.0%	353	2.7%
Improper Lookout	232	2.6%	116	3.0%	0	0.0%	348	2.7%
Improper Start or Stop	204	2.3%	72	1.8%	0	0.0%	276	2.1%
Equipment Violation	218	2.4%	51	1.3%	0	0.0%	269	2.1%
Failure to Yield Right of Way	163	1.8%	68	1.7%	4	13.3%	235	1.8%
Hit and Run	160	1.8%	43	1.1%	2	6.7%	205	1.6%
Failure to Stop at Red Light	74	0.8%	70	1.8%	0	0.0%	144	1.1%
Failure to Stop at Stop Sign	77	0.9%	61	1.6%	0	0.0%	138	1.1%
Failure to Obey Traffic Control Device	57	0.6%	48	1.2%	0	0.0%	105	0.8%
Registration Violation	71	0.8%	20	0.5%	0	0.0%	91	0.7%
Improper Backing	77	0.9%	3	0.1%	0	0.0%	80	0.6%
Wrong Side of Road	35	0.4%	38	1.0%	0	0.0%	73	0.6%
Improper Passing	46	0.5%	24	0.6%	0	0.0%	70	0.5%
Alcohol/Drug Violation, Other than DUI	27	0.3%	15	0.4%	1	3.3%	43	0.3%
Reckless Driving	18	0.2%	23	0.6%	2	6.7%	43	0.3%
Careless Driving	24	0.3%	13	0.3%	1	3.3%	38	0.3%
Seatbelt/Child Restraint	6	0.1%	29	0.7%	0	0.0%	35	0.3%
Vehicle Homicide	0	0.0%	0	0.0%	10	33.3%	10	0.1%
Other Moving Violation	12	0.1%	7	0.2%	1	3.3%	20	0.2%
Other Non-Moving Violation	14	0.2%	8	0.2%	0	0.0%	22	0.2%
<b>Total</b>	<b>8,916</b>	<b>100.0%</b>	<b>3,909</b>	<b>100.0%</b>	<b>30</b>	<b>100.0%</b>	<b>12,855</b>	<b>100.0%</b>

- There were 12,855 citations issued at the scene of the crash. The most common violations were for following too close (28.2%), improper lane change/travel (24.8%), and speed (9.5%).
- The leading violations in fatal crashes were for vehicle homicide (33.3%), driving under the influence (13.3%), and failure to yield right of way (13.3%).

## Crash Conditions

### Contributing Factors (Utah 2007)

Drivers/Vehicles								
Contributing Factors	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Followed Too Closely	9,798	16.0%	4,485	14.3%	4	0.8%	14,287	15.3%
Failed to Yield Right of Way	7,226	11.8%	4,305	13.7%	32	6.7%	11,563	12.4%
Speed Too Fast	6,052	9.9%	2,631	8.4%	91	19.1%	8,774	9.4%
Other Improper Driving	4,170	6.8%	2,260	7.2%	5	1.0%	6,435	6.9%
Driver Distraction	3,778	6.2%	2,404	7.6%	23	4.8%	6,205	6.7%
Failed to Keep in Proper Lane	3,645	6.0%	1,699	5.4%	21	4.4%	5,365	5.8%
Vision Obscured by Weather Condition	3,199	5.2%	1,128	3.6%	0	0.0%	4,327	4.6%
Improper Turn	2,370	3.9%	1,013	3.2%	2	0.4%	3,385	3.6%
Improper Lane Change	2,390	3.9%	662	2.1%	3	0.6%	3,055	3.3%
Disregard Traffic Signal/Sign	1,583	2.6%	1,430	4.5%	12	2.5%	3,025	3.2%
Hit and Run	1,862	3.0%	473	1.5%	4	0.8%	2,339	2.5%
Driving Under the Influence	1,200	2.0%	1,067	3.4%	58	12.2%	2,325	2.5%
Ran Off Road	1,316	2.2%	992	3.2%	17	3.6%	2,325	2.5%
Overcorrected	1,192	1.9%	859	2.7%	13	2.7%	2,064	2.2%
Swerved or Evasive Action	1,311	2.1%	726	2.3%	8	1.7%	2,045	2.2%
Vehicle Other Defective Condition	1,257	2.1%	504	1.6%	10	2.1%	1,771	1.9%
Improper Backing	1,338	2.2%	101	0.3%	1	0.2%	1,440	1.5%
Vision Obscured by Moving Vehicle	814	1.3%	526	1.7%	0	0.0%	1,340	1.4%
Asleep/Fatigue	695	1.1%	587	1.9%	35	7.3%	1,317	1.4%
Improper Parking/Stopping	633	1.0%	265	0.8%	2	0.4%	900	1.0%
Driver Emotionally Upset	427	0.7%	447	1.4%	0	0.0%	874	0.9%
Reckless/Aggressive Driving	440	0.7%	342	1.1%	88	18.4%	870	0.9%
Other Driver Condition	440	0.7%	376	1.2%	0	0.0%	816	0.9%
Vehicle Brakes	515	0.8%	267	0.8%	4	0.8%	786	0.8%
Vision Obscured by Other	468	0.8%	278	0.9%	1	0.2%	747	0.8%
Improper Passing	536	0.9%	141	0.4%	3	0.6%	680	0.7%
Vision Obscured by Parked Vehicle	475	0.8%	196	0.6%	0	0.0%	671	0.7%
Vision Obscured by Building, Sign, etc.	369	0.6%	292	0.9%	0	0.0%	661	0.7%
Vehicle Tires	466	0.8%	166	0.5%	10	2.1%	642	0.7%
Vision Obscured by Glare	311	0.5%	232	0.7%	0	0.0%	543	0.6%
Wrong Side/Wrong Way	223	0.4%	150	0.5%	29	6.1%	402	0.4%
Driver Illness	166	0.3%	200	0.6%	1	0.2%	367	0.4%
Disregard Road Markings	174	0.3%	87	0.3%	0	0.0%	261	0.3%
Vision Obscured by Vegetation	129	0.2%	45	0.1%	0	0.0%	174	0.2%
Windshield or Other Window Obscured	106	0.2%	64	0.2%	0	0.0%	170	0.2%
Improper Signal	112	0.2%	29	0.1%	0	0.0%	141	0.2%
<b>Total</b>	<b>61,186</b>	<b>100.0%</b>	<b>31,429</b>	<b>100.0%</b>	<b>477</b>	<b>100.0%</b>	<b>93,092</b>	<b>100.0%</b>

- Some form of poor driver performance is present in the majority of crashes. The leading contributing factors for all crashes were followed too closely (15.3%), failed to yield right of way (12.4%), and speed too fast (9.4%).
- The leading contributing factors in fatal crashes were speed too fast (19.1%), reckless/aggressive driving (18.4%), and driving under the influence (12.2%).

# Occupant Protection

2

## Section 2: Occupant Protection

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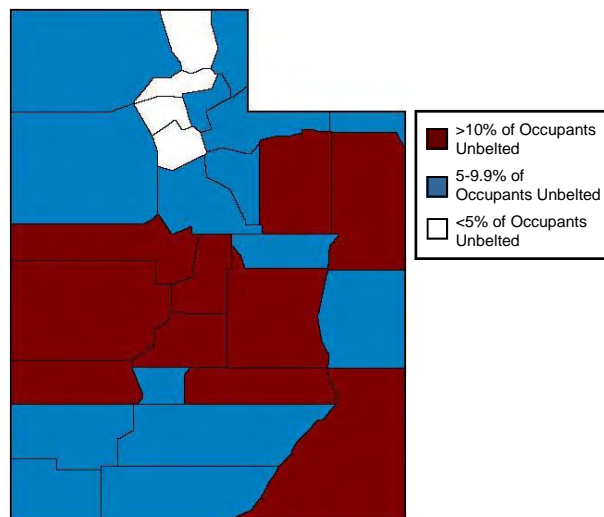
**Utah Department of Public Safety  
Highway Safety Office**

# Occupant Protection



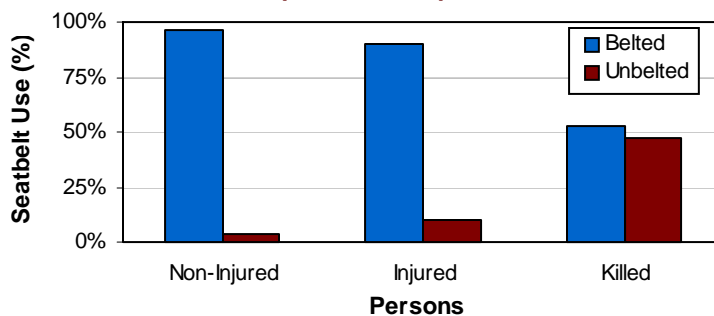
- Unbelted crash occupants were 17 times more likely to die in a crash than belted occupants.
- An estimated 145 lives were saved because of seatbelt use. (National Highway Traffic Safety Administration)
- Occupants in pickup trucks and SUVs were the least likely of those who died to be restrained.

### Percent of Unbelted Occupants in Total Crashes by County (Utah 2007)



- Crash occupants in rural counties were twice as likely to be unbelted than urban occupants.

### Seatbelt Use by Injury Severity (Utah 2007)

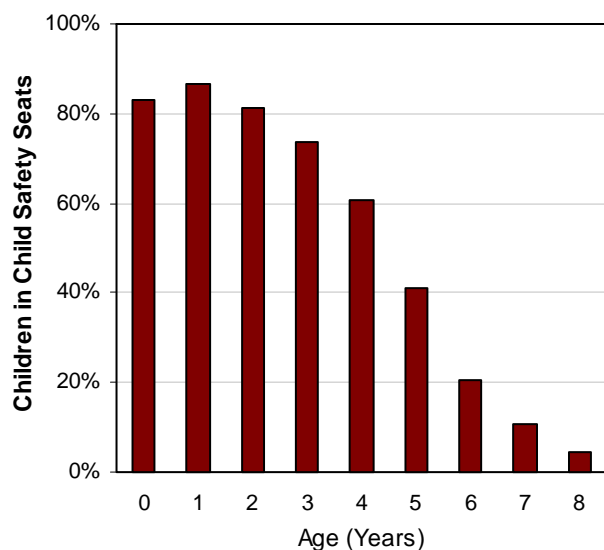


- Over 95% of persons who survived a crash wore a seatbelt compared to only half (53%) of the persons killed.

# Occupant Protection

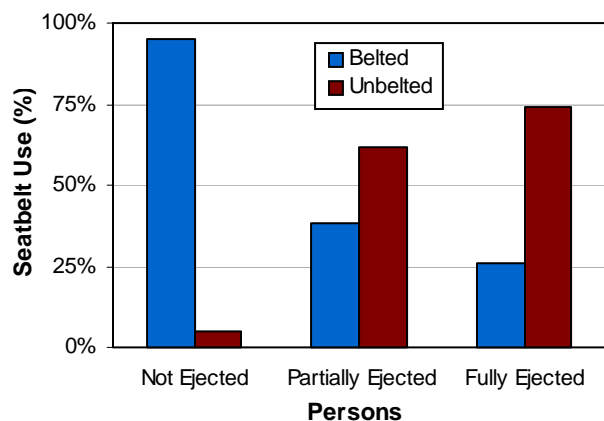


## Percent of Children Aged 0-8 Years in Crashes Using Child Safety Seats (Utah 2007)



- The older the child the less likely they were using a child safety seat.
- While 85% of children 0-1 years were in a child safety seat at the time of the crash, only 60% of 4-year-olds, 21% of 6-year-olds, and 5% of 8-year-olds were in a child safety seat.
- The decrease in child safety seat use for children aged 4-8 years is concerning and indicates that children are moving to adult-sized seatbelts too early.

## Ejection and Seatbelt Use (Utah 2007)



- 74% of crash occupants fully ejected from a motor vehicle were unbelted.
- Unbelted occupants were 56 times more likely to be fully ejected than belted occupants.

## Child Safety Seat Recommendations:

- Infants should be placed in a rear-facing safety seat until they are at least 20 pounds and 1 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 at least 1 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 4'9" tall and the seatbelt fits properly. Booster seats help position an adult-size seatbelt for a safer fit on children.
- 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.

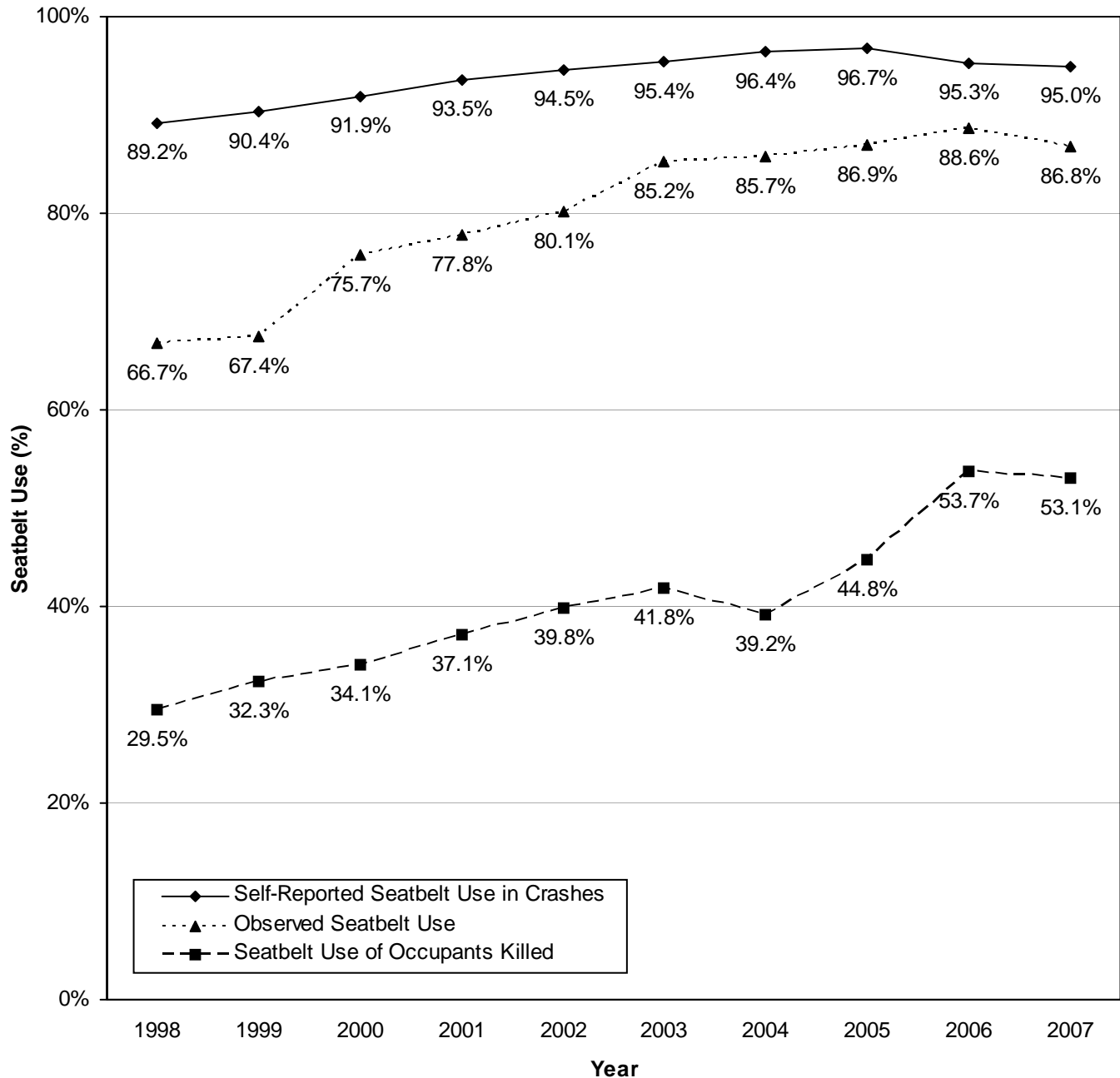
## Safety Restraint Laws (Effective May 2008):

- Utah law requires all motor vehicle occupants to wear a seatbelt. This is a secondary enforcement law for drivers and passengers age 19 years and older. This means an adult may be issued a citation and a \$45 fine only when the police officer has stopped the vehicle for another reason.
- The law is a primary enforcement law for drivers and passengers under age 19 years.
  - ⇒ Children age 7 years and under must ride in an approved child safety seat; and
  - ⇒ Children aged 8 to 18 years must ride in an appropriate child restraint or seatbelt.
  - ⇒ There are a few exemptions to the law. Contact the Highway Safety Office for more information.

This primary enforcement law means a person may be stopped and issued a citation for simply not buckling up.



## Seatbelt Use of Occupants In Crashes and Observational Studies (Utah 1998-2007)



- Historically, there have been differences between self-reported seatbelt use of people in crashes and seatbelt use observed in observational studies. The difference may be due to over-reporting by the people in crashes.
- The 10-year trend shows an increase of seatbelt use in crashes, observational studies, and among occupants killed.
- In 2007, the observational seatbelt use decreased to 86.8% from 88.6% in 2006. The year 2006 had the highest observed seatbelt use ever in Utah.
- The 2007 self-reported seatbelt use of people in crashes decreased to 95.0% from 95.3% in 2006.
- Seatbelt use among occupants killed decreased from 53.7% in 2006 to 53.1% in 2007.

## Counties

### Seatbelt Use of Persons by County (Utah 2007)

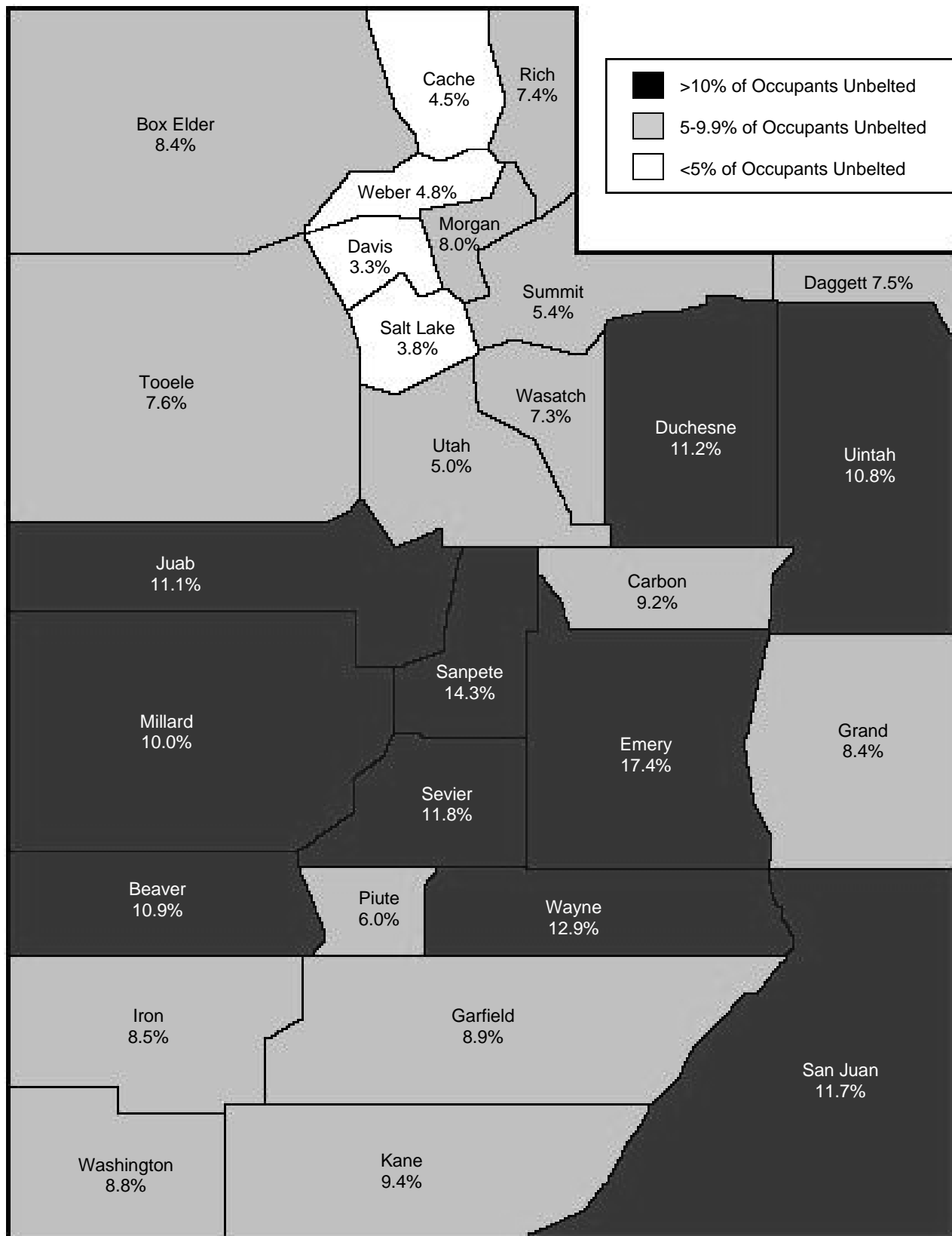
County	Persons											
	Non-Injured			Injured			Killed			Total		
	Belted	Unbelted	%	Belted	Unbelted	%	Belted	Unbelted	%	Belted	Unbelted	%
County	#	#	%	#	#	%	#	#	%	#	#	%
Emery	319	43	11.9%	49	32	39.5%	3	3	50.0%	371	78	17.4%
Sanpete	356	34	8.7%	121	46	27.5%	2	0	0.0%	479	80	14.3%
Wayne	55	5	8.3%	6	4	40.0%	0	0	0.0%	61	9	12.9%
Sevier	588	51	8.0%	129	43	25.0%	2	2	50.0%	719	96	11.8%
San Juan	336	22	6.1%	85	24	22.0%	3	10	76.9%	424	56	11.7%
Duchesne	587	57	8.9%	90	27	23.1%	2	2	50.0%	679	86	11.2%
Juab	461	36	7.2%	135	34	20.1%	3	5	62.5%	599	75	11.1%
Beaver	307	12	3.8%	51	32	38.6%	2	0	0.0%	360	44	10.9%
Uintah	1,115	87	7.2%	173	68	28.2%	4	2	33.3%	1,292	157	10.8%
Millard	549	24	4.2%	191	55	22.4%	8	4	33.3%	748	83	10.0%
Kane	277	15	5.1%	40	18	31.0%	2	0	0.0%	319	33	9.4%
Carbon	570	39	6.4%	99	26	20.8%	1	3	75.0%	670	68	9.2%
Garfield	261	13	4.7%	56	17	23.3%	1	1	50.0%	318	31	8.9%
Washington	4,755	366	7.1%	973	180	15.6%	7	9	56.3%	5,735	555	8.8%
Iron	1,424	105	6.9%	265	49	15.6%	0	3	100.0%	1,689	157	8.5%
Grand	207	12	5.5%	74	11	12.9%	1	3	75.0%	282	26	8.4%
Box Elder	1,159	60	4.9%	279	66	19.1%	8	7	46.7%	1,446	133	8.4%
Morgan	212	14	6.2%	29	7	19.4%	0	0	0.0%	241	21	8.0%
Tooele	1,236	64	4.9%	259	52	16.7%	2	7	77.8%	1,497	123	7.6%
Daggett	61	4	6.2%	1	0	0.0%	0	1	100.0%	62	5	7.5%
Rich	88	6	6.4%	24	3	11.1%	0	0	0.0%	112	9	7.4%
Wasatch	967	49	4.8%	162	36	18.2%	5	4	44.4%	1,134	89	7.3%
Piute	39	1	2.5%	8	1	11.1%	0	1	100.0%	47	3	6.0%
Summit	1,537	71	4.4%	238	27	10.2%	3	3	50.0%	1,778	101	5.4%
Utah	17,111	687	3.9%	3,421	386	10.1%	11	5	31.3%	20,543	1,078	5.0%
Weber	9,355	395	4.1%	1,843	167	8.3%	6	5	45.5%	11,204	567	4.8%
Cache	4,088	142	3.4%	672	79	10.5%	3	1	25.0%	4,763	222	4.5%
Salt Lake	49,791	1,601	3.1%	8,793	705	7.4%	18	10	35.7%	58,602	2,316	3.8%
Davis	10,574	298	2.7%	2,051	138	6.3%	7	1	12.5%	12,632	437	3.3%
<b>Statewide</b>	<b>108,385</b>	<b>4,313</b>	<b>3.8%</b>	<b>20,317</b>	<b>2,333</b>	<b>10.3%</b>	<b>104</b>	<b>92</b>	<b>46.9%</b>	<b>128,806</b>	<b>6,738</b>	<b>5.0%</b>

- Seatbelt use is reported for occupants in a passenger car, light truck, van, SUV, or large truck. Occupants are considered "belted" if they were reported as using a shoulder/lap belt, lap belt, or a child safety seat at the scene of the crash.
- Seatbelt use is self-reported by crash occupants in the majority of crashes and may be inflated due to over-reporting by the people in crashes.
- The officer determines seatbelt use in the event of a fatal or severe injury crash.
- The majority of persons in crashes reported wearing a seatbelt (95.0%).
- Emery (17.4%), Sanpete (14.3%), and Wayne (12.9%) counties had the highest percentage of occupants that were unbelted.
- Nearly half (46.9%) of vehicle occupants killed in crashes in Utah were unbelted.
- Daggett (100%), Iron (100%), and Piute (100%) counties had the highest percentage of occupant deaths that were unbelted.



## Counties

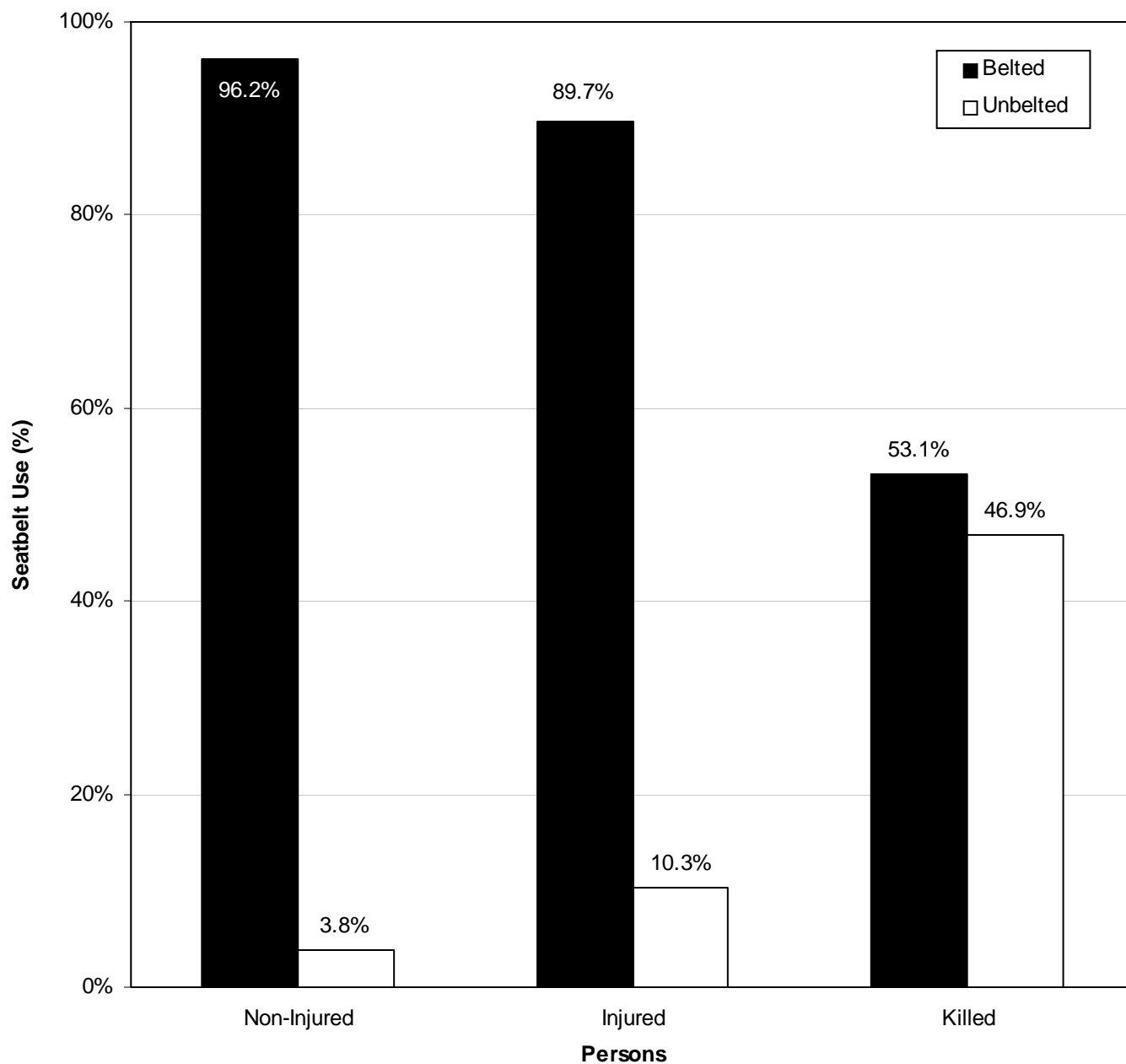
### Unbelted Occupants in Total Crashes by County (Utah 2007)



## Vehicle Occupants

### Seatbelt Use by Injury Severity (Utah 2007)

Persons								
	Non-Injured		Injured		Killed		Total	
Seatbelt Use	#	%	#	%	#	%	#	%
Belted	108,385	96.2%	20,317	89.7%	104	53.1%	128,806	95.0%
Unbelted	4,313	3.8%	2,333	10.3%	92	46.9%	6,738	5.0%
<b>Total</b>	<b>112,698</b>	<b>100.0%</b>	<b>22,650</b>	<b>100.0%</b>	<b>196</b>	<b>100.0%</b>	<b>135,544</b>	<b>100.0%</b>

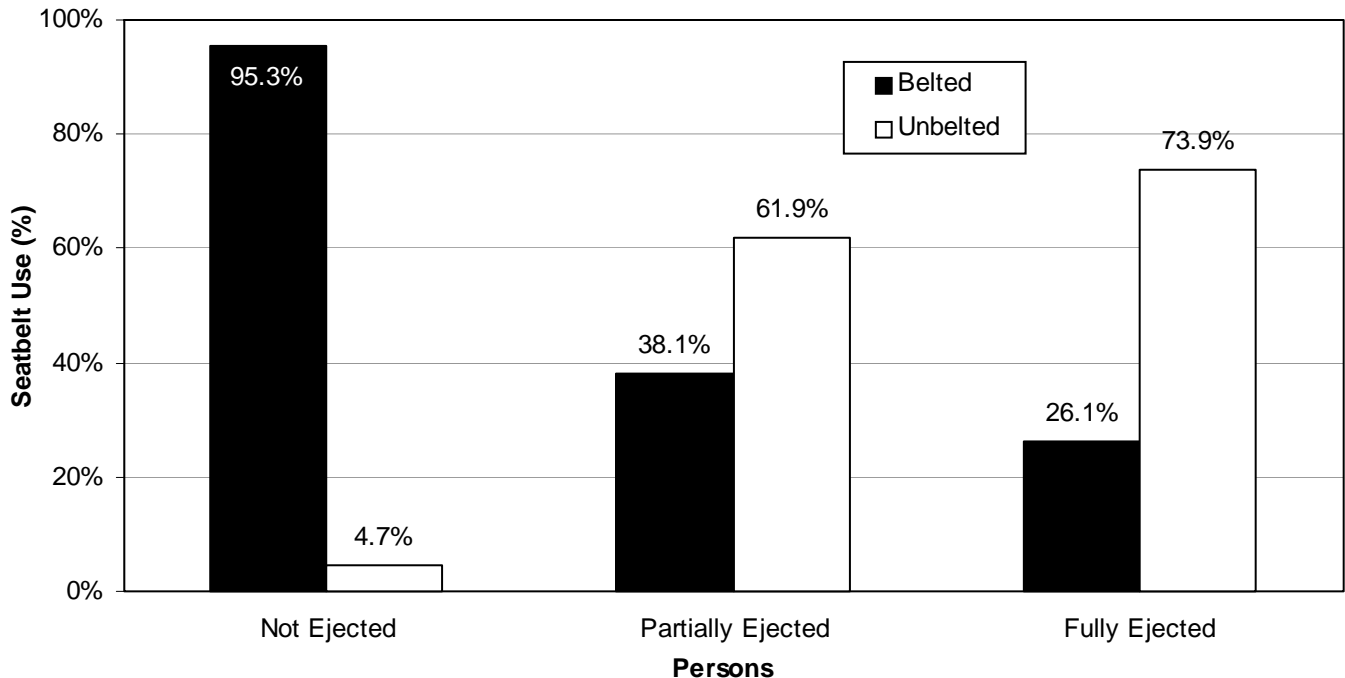


- Over 95% of persons who survived a crash reported wearing a seatbelt.
- In contrast, only half (53.1%) of the persons killed in a crash were belted.
- Unbelted crash occupants were 17 times more likely to be killed than belted crash occupants.

## Vehicle Occupants

### Ejection and Seatbelt Use (Utah 2007)

Persons								
Seatbelt Use	Not Ejected		Partially Ejected		Fully Ejected		Total	
	#	%	#	%	#	%	#	%
Belted	128,664	95.3%	32	38.1%	110	26.1%	128,806	95.0%
Unbelted	6,374	4.7%	52	61.9%	312	73.9%	6,738	5.0%
<b>Total</b>	<b>135,038</b>	<b>100.0%</b>	<b>84</b>	<b>100.0%</b>	<b>422</b>	<b>100.0%</b>	<b>135,544</b>	<b>100.0%</b>



- There is an inverse relationship between ejection from a motor vehicle and seatbelt use.
- The majority of crash occupants fully ejected from a motor vehicle (73.9%) were unbelted compared to only 3.9% of crash occupants not ejected from a motor vehicle.
- Unbelted occupants were 56 times more likely to be fully ejected from a motor vehicle compared to belted occupants.
- Ejection from the vehicle is one of the most injurious events that can happen to a person in a crash. Seatbelts are effective in preventing total ejections.

### Ejection and Seatbelt Use of Persons Killed (Utah 2007)

Persons Killed								
Seatbelt Use	Not Ejected		Partially Ejected		Fully Ejected		Total	
	#	%	#	%	#	%	#	%
Belted	81	77.9%	8	7.7%	15	14.4%	104	100.0%
Unbelted	30	32.6%	3	3.3%	59	64.1%	92	100.0%
<b>Total</b>	<b>111</b>	<b>56.6%</b>	<b>11</b>	<b>5.6%</b>	<b>74</b>	<b>37.8%</b>	<b>196</b>	<b>100.0%</b>

- Nearly two-thirds (64.1%) of unbelted occupants killed were fully ejected compared to 14.4% of belted occupants killed.

## Vehicle Occupants

### Seatbelt Use by Age of Crash Occupants (Utah 2007)

Persons									
Age	Seatbelt Use	Non-Injured		Injured		Killed		Total	
		#	%	#	%	#	%	#	%
0-4	Belted	5,308	97.1%	521	91.4%	5	83.3%	5,834	96.6%
	Unbelted	157	2.9%	49	8.6%	1	16.7%	207	3.4%
5-9	Belted	3,627	96.1%	556	86.5%	4	66.7%	4,187	94.6%
	Unbelted	149	3.9%	87	13.5%	2	33.3%	238	5.4%
10-14	Belted	3,157	95.6%	595	86.1%	3	75.0%	3,755	93.9%
	Unbelted	145	4.4%	96	13.9%	1	25.0%	242	6.1%
15-19	Belted	17,988	95.1%	3,195	84.8%	13	40.6%	21,196	93.3%
	Unbelted	919	4.9%	574	15.2%	19	59.4%	1,512	6.7%
20-24	Belted	16,338	96.0%	3,101	87.2%	10	34.5%	19,449	94.4%
	Unbelted	673	4.0%	455	12.8%	19	65.5%	1,147	5.6%
25-29	Belted	12,744	96.1%	2,411	89.8%	8	47.1%	15,163	95.0%
	Unbelted	511	3.9%	273	10.2%	9	52.9%	793	5.0%
30-34	Belted	9,383	96.6%	1,780	90.7%	10	66.7%	11,173	95.5%
	Unbelted	335	3.4%	182	9.3%	5	33.3%	522	4.5%
35-39	Belted	7,563	96.5%	1,453	91.8%	7	63.6%	9,023	95.6%
	Unbelted	278	3.5%	130	8.2%	4	36.4%	412	4.4%
40-44	Belted	6,527	96.3%	1,290	92.5%	5	41.7%	7,822	95.6%
	Unbelted	248	3.7%	105	7.5%	7	58.3%	360	4.4%
45-49	Belted	6,290	97.0%	1,215	93.4%	4	50.0%	7,509	96.3%
	Unbelted	197	3.0%	86	6.6%	4	50.0%	287	3.7%
50-54	Belted	5,115	96.3%	1,120	94.3%	7	58.3%	6,242	95.9%
	Unbelted	195	3.7%	68	5.7%	5	41.7%	268	4.1%
55-59	Belted	4,018	96.7%	899	93.6%	5	55.6%	4,922	96.1%
	Unbelted	137	3.3%	61	6.4%	4	44.4%	202	3.9%
60-64	Belted	2,925	96.9%	656	93.2%	7	77.8%	3,588	96.1%
	Unbelted	95	3.1%	48	6.8%	2	22.2%	145	3.9%
65-69	Belted	1,940	96.8%	423	94.2%	3	75.0%	2,366	96.3%
	Unbelted	64	3.2%	26	5.8%	1	25.0%	91	3.7%
70-74	Belted	1,372	96.6%	301	93.8%	3	100.0%	1,676	96.0%
	Unbelted	49	3.4%	20	6.2%	0	0.0%	69	4.0%
75-79	Belted	1,075	96.3%	271	92.5%	1	50.0%	1,347	95.5%
	Unbelted	41	3.7%	22	7.5%	1	50.0%	64	4.5%
80-84	Belted	702	97.0%	175	94.1%	4	80.0%	881	96.3%
	Unbelted	22	3.0%	11	5.9%	1	20.0%	34	3.7%
85+	Belted	399	96.1%	93	89.4%	5	62.5%	497	94.3%
	Unbelted	16	3.9%	11	10.6%	3	37.5%	30	5.7%
Unknown	Belted	1,914	95.9%	262	90.0%	0	0.0%	2,176	95.0%
	Unbelted	82	4.1%	29	10.0%	4	100.0%	115	5.0%
<b>Total</b>	<b>Belted</b>	<b>108,385</b>	<b>96.2%</b>	<b>20,317</b>	<b>89.7%</b>	<b>104</b>	<b>53.1%</b>	<b>128,806</b>	<b>95.0%</b>
	<b>Unbelted</b>	<b>4,313</b>	<b>3.8%</b>	<b>2,333</b>	<b>10.3%</b>	<b>92</b>	<b>46.9%</b>	<b>6,738</b>	<b>5.0%</b>

- Overall, crash occupants aged 15-19 years (6.7%), 10-14 years (6.1%), and 20-24 years (4.8%) had the highest percentages of being unbelted.
- For persons killed, crash occupants aged 15-49 years had the highest percentages of being unbelted.

## Vehicle Occupants

### Seatbelt Use by Gender of Crash Occupants (Utah 2007)

Persons									
Gender	Seatbelt Use	Non-Injured		Injured		Killed		Total	
		#	%	#	%	#	%	#	%
Female	Belted	46,585	96.5%	11,730	91.9%	40	55.6%	58,355	95.5%
	Unbelted	1,686	3.5%	1,028	8.1%	32	44.4%	2,746	4.5%
Male	Belted	61,374	95.9%	8,522	86.8%	64	52.9%	69,960	94.6%
	Unbelted	2,603	4.1%	1,300	13.2%	57	47.1%	3,960	5.4%
Unknown	Belted	426	94.7%	65	92.9%	0	0.0%	491	93.9%
	Unbelted	24	5.3%	5	7.1%	3	0.0%	32	6.1%
<b>Total</b>	<b>Belted</b>	<b>108,385</b>	<b>96.2%</b>	<b>20,317</b>	<b>89.7%</b>	<b>104</b>	<b>53.1%</b>	<b>128,806</b>	<b>95.0%</b>
	<b>Unbelted</b>	<b>4,313</b>	<b>3.8%</b>	<b>2,333</b>	<b>10.3%</b>	<b>92</b>	<b>46.9%</b>	<b>6,738</b>	<b>5.0%</b>

- Overall, female (95.5%) crash occupants seatbelt use was slightly higher than males (94.6%).
- For persons killed, female crash occupants had higher seatbelt use (55.6%) than males (52.9%).

### Seatbelt Use by Occupant Placement (Utah 2007)

Persons									
Occupant Placement	Seatbelt Use	Non-Injured		Injured		Killed		Total	
		#	%	#	%	#	%	#	%
Driver	Belted	77,638	96.8%	14,194	91.7%	69	58.0%	91,901	95.9%
	Unbelted	2,547	3.2%	1,287	8.3%	50	42.0%	3,884	4.1%
Front Seat Passenger	Belted	15,887	93.9%	4,018	86.7%	22	55.0%	19,927	92.3%
	Unbelted	1,028	6.1%	618	13.3%	18	45.0%	1,664	7.7%
Back Seat Passenger	Belted	14,539	95.6%	2,070	84.2%	13	54.2%	16,622	93.9%
	Unbelted	671	4.4%	389	15.8%	11	45.8%	1,071	6.1%
Other/Unknown	Belted	321	82.7%	35	47.3%	0	0.0%	356	74.9%
	Unbelted	67	17.3%	39	52.7%	13	100.0%	119	25.1%
<b>Total</b>	<b>Belted</b>	<b>108,385</b>	<b>96.2%</b>	<b>20,317</b>	<b>89.7%</b>	<b>104</b>	<b>53.1%</b>	<b>128,806</b>	<b>95.0%</b>
	<b>Unbelted</b>	<b>4,313</b>	<b>3.8%</b>	<b>2,333</b>	<b>10.3%</b>	<b>92</b>	<b>46.9%</b>	<b>6,738</b>	<b>5.0%</b>

- Among all occupants, drivers reported the highest seatbelt use (95.9%) compared to persons in other seating locations.
- For persons killed, back seat passengers were the least likely to be wearing a seatbelt (54.2%).

### Seatbelt Use by Vehicle Type (Utah 2007)

Persons Killed						
Vehicle Type	Restraint Used		Restraint Not Used		Total	
	#	%	#	%	#	%
Passenger Car	58	71.6%	23	28.4%	81	100.0%
Van	5	71.4%	2	28.6%	7	100.0%
Semi/Large Truck	5	55.6%	4	44.4%	9	100.0%
SUV	17	38.6%	27	61.4%	44	100.0%
Pickup Truck	19	34.5%	36	65.5%	55	100.0%
<b>Total</b>	<b>104</b>	<b>53.1%</b>	<b>92</b>	<b>46.9%</b>	<b>196</b>	<b>100.0%</b>

- Occupants in pickup trucks (65.5%) and SUVs (61.4%) were the least likely of those who died to be restrained.

## Children and Restraint Use

### Restraint Use for Children Age 0 to 8 Years by Seating Location (Utah 2007)

Child Occupants									
Seating Location	Restraint Use	Ages 0-1		Ages 2-4		Ages 5-8		Total	
		#	%	#	%	#	%	#	%
Front Seat	Child Safety Seat	75	55.6%	64	37.2%	37	7.1%	176	21.2%
	Seatbelt Only	29	21.5%	76	44.2%	436	83.5%	541	65.3%
	Unrestrained	31	23.0%	32	18.6%	49	9.4%	112	13.5%
Second Row	Child Safety Seat	1,913	87.4%	2,075	74.3%	559	22.4%	4,547	60.8%
	Seatbelt Only	238	10.9%	637	22.8%	1,832	73.4%	2,707	36.2%
	Unrestrained	39	1.8%	80	2.9%	106	4.2%	225	3.0%
Third/Fourth Row	Child Safety Seat	163	84.5%	356	72.2%	131	22.9%	650	51.7%
	Seatbelt Only	23	11.9%	123	24.9%	404	70.6%	550	43.7%
	Unrestrained	7	3.6%	14	2.8%	37	6.5%	58	4.6%
<b>Total</b>	<b>Child Safety Seat</b>	<b>2,151</b>	<b>85.4%</b>	<b>2,495</b>	<b>72.2%</b>	<b>727</b>	<b>20.2%</b>	<b>5,373</b>	<b>56.2%</b>
	<b>Seatbelt Only</b>	<b>290</b>	<b>11.5%</b>	<b>836</b>	<b>24.2%</b>	<b>2,672</b>	<b>74.4%</b>	<b>3,798</b>	<b>39.7%</b>
	<b>Unrestrained</b>	<b>77</b>	<b>3.1%</b>	<b>126</b>	<b>3.6%</b>	<b>192</b>	<b>5.3%</b>	<b>395</b>	<b>4.1%</b>

- The older the child the less likely they were using a child safety seat.
- The majority of 0-1-year-olds (85.4%) were in a child safety seat at the time of the crash, compared to 72.2% of 2-4 year-olds and 20.2% of 5-8 year-olds. The drastic decrease in child safety seat use for children aged 5-8 years is concerning. This indicates that children are moving to adult-sized seatbelts too early.
- 0-1-year-olds were 23 times more likely to be in a child safety seat at the time of the crash than 5-8 year-olds.
- Children riding in the front seat were the least likely to be using a child safety seat and the most likely to be unrestrained.
- Children riding in a back seat were 5.5 times more likely to be using a child safety seat than children riding in the front seat.

### Growing Up Safe: It's a four-step process



1. **Rear-facing seats:** For the best possible protection keep infants in the back seat, in rear-facing child safety seats, as long as possible up to the height or weight limit of the particular seat. At a minimum, keep infants rear-facing until age 1 and at least 20 pounds.
2. **Forward-facing seats:** When children outgrow their rear-facing seats they should ride in forward-facing child safety seats, in the back seat, until they reach the upper weight or height limit of the particular seat (usually around age 4 and 40 pounds).
3. **Booster seats:** Once children outgrow their forward-facing seats, they should ride in booster seats, in the back seat, until the vehicle seatbelts fit properly. Seatbelts fit properly when the lap belt lays across the upper thighs and the shoulder belt fits across the chest (usually at age 8 or when they are 4'9" tall).
4. **Seatbelts:** When children outgrow their booster seats, they can use the adult seatbelt in the back seat if it fits properly.

# Alcohol-Impaired Drivers

2

## Section 3: Alcohol-Impaired Drivers

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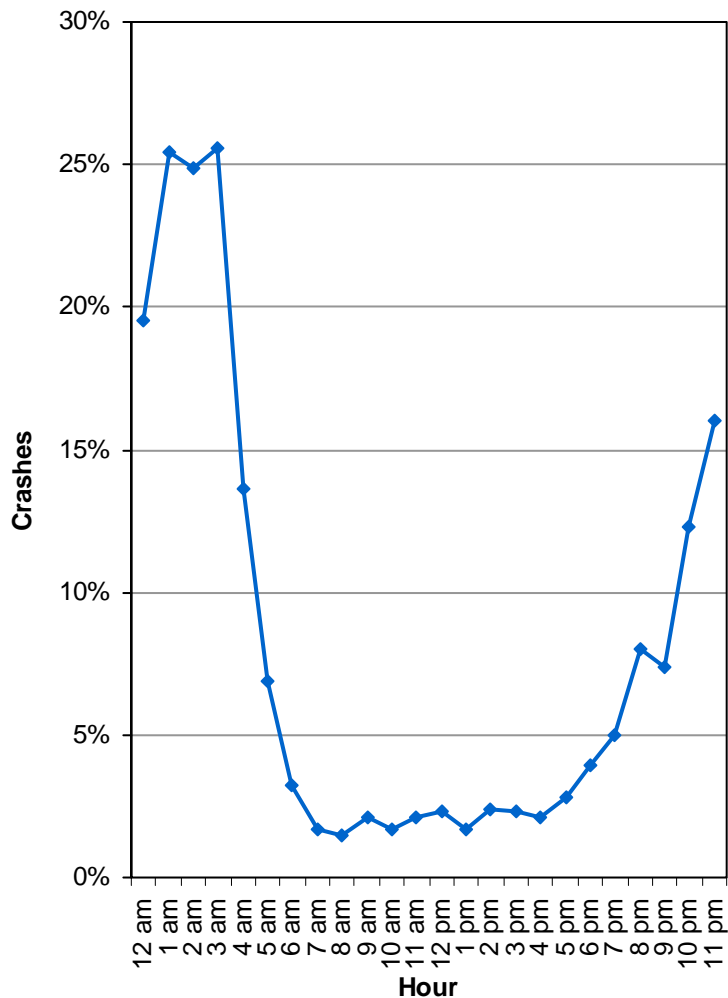
### Did you know in 2007:

- 2,718 alcohol-impaired driver crashes occurred in Utah which resulted in 1,900 injured persons and 42 deaths.
- Alcohol-impaired driver crashes were 3.6 times more likely to be fatal than other crashes.
- The number of alcohol-impaired driver fatal crashes increased 16% in 2007 from 2006.

## Alcohol-Impaired Drivers

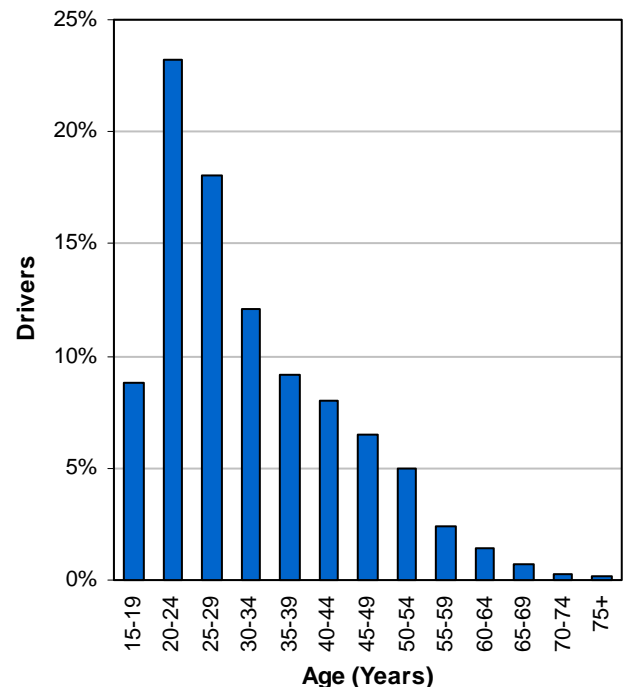


**Percent of Total Crashes with an Alcohol-Impaired Driver by Hour (Utah 2007)**



- While 4% of total crashes involved an alcohol-impaired driver, nearly one-fifth (18%) of crashes occurring during the hours of 10:00 p.m.-4:59 a.m. involved an alcohol-impaired driver.

**Age of Alcohol-Impaired Drivers in Crashes (Utah 2007)**



- Drivers aged 20 to 24 years had the most alcohol-impaired crashes.
- Of the impaired drivers, 341 (12%) were under the age of 21 years.



### Previous DUI (Utah 2007)

- 16% of the alcohol-impaired drivers in fatal crashes were previously convicted of driving under the influence in the past three years.

## Alcohol-Impaired Drivers in Different Types of Fatal Crashes



### Pedestrian-Motor Vehicle Crashes

Of the 32 pedestrians killed, two (6%) were killed by an impaired driver.



### Bicyclist-Motor Vehicle Crashes

Of the six bicyclists killed, none were killed by an impaired driver.



### Motorcycle Crashes

Of the 33 motorcyclists killed, four (12%) were killed by an impaired driver.



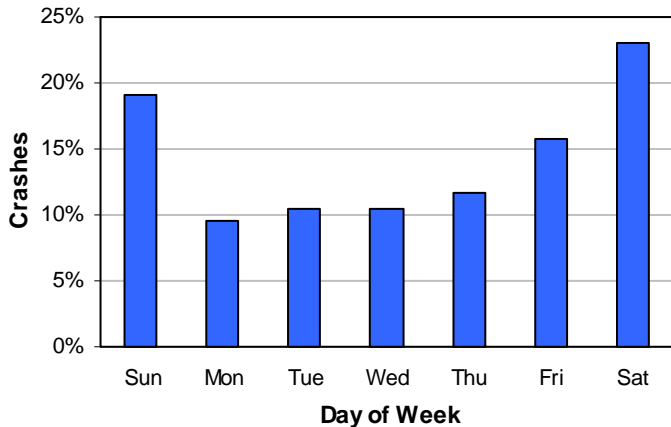
### Teenage Driver Crashes

Of the 47 teenage drivers in fatal crashes, four (9%) were impaired by alcohol.

## Alcohol-Impaired Drivers

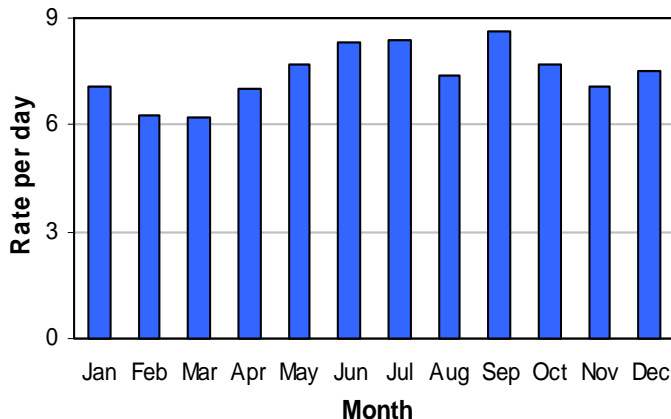


### Alcohol-Impaired Driver Crashes by Day of the Week (Utah 2007)



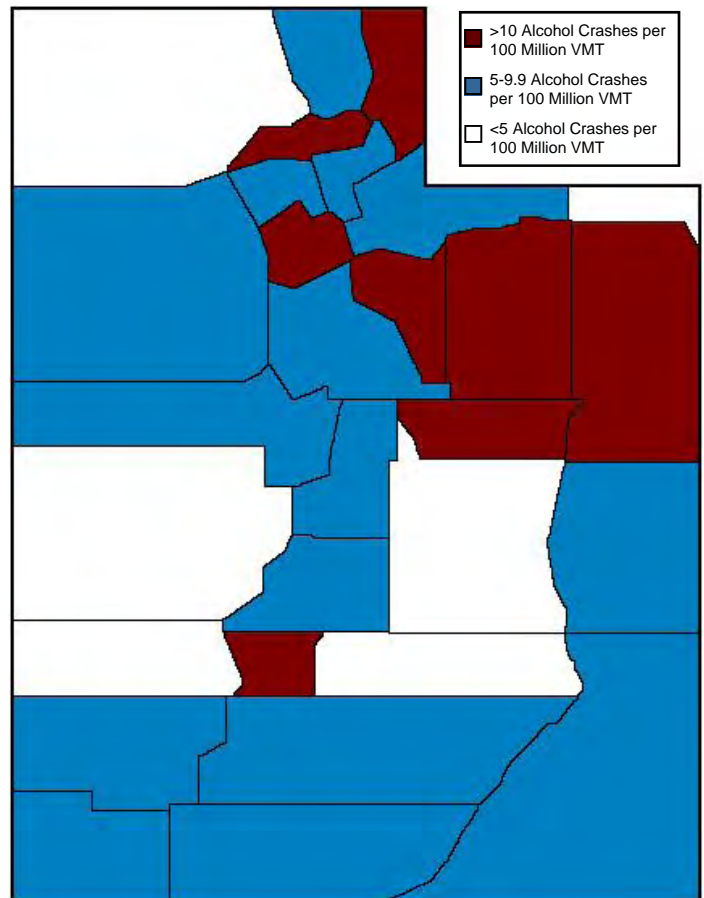
- The highest percentage of alcohol-impaired driver crashes occurred on Saturday (23%).

### Alcohol-Impaired Driver Crashes by Month (Utah 2007)



- The highest rates per day of alcohol-impaired driver crashes occurred in September, July, and June.

### Alcohol-Impaired Driver Crashes by County (Utah 2007)



- Uintah, Salt Lake, and Weber Counties had the highest rates of alcohol-impaired driver crashes per vehicle miles traveled (VMT).
- Wayne, Beaver, and Daggett Counties had the lowest rates of alcohol-impaired driver crashes per VMT.

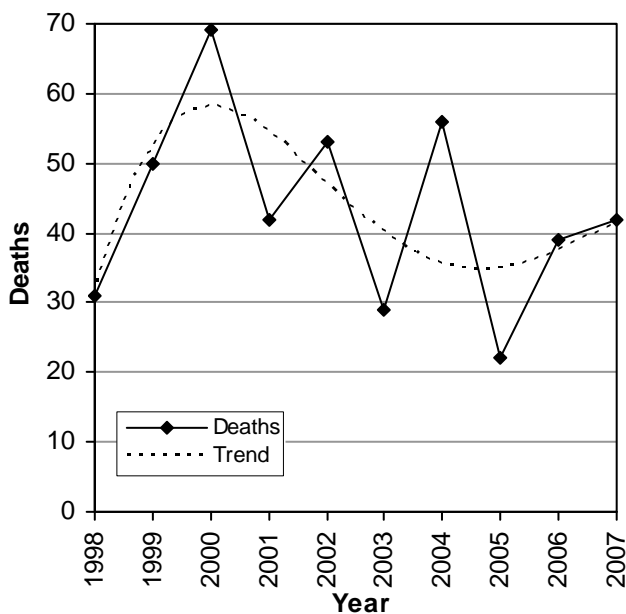
## Alcohol-Impaired Driver Fatal Crashes (Utah 1998-2007)

Alcohol-Impaired Driver Crashes						
Year	Deaths			Fatal Crashes		
	All #	Alcohol #	%	All #	Alcohol #	%
1998	350	31	8.9%	308	30	9.7%
1999	360	50	13.9%	318	47	14.8%
2000	373	69	18.5%	318	59	18.6%
2001	291	42	14.4%	258	38	14.7%
2002	328	53	16.2%	274	47	17.2%
2003	309	29	9.4%	262	24	9.2%
2004	296	56	18.9%	260	50	19.2%
2005	282	22	7.8%	235	21	8.9%
2006	287	39	13.6%	249	32	12.9%
2007	299	42	14.0%	260	37	14.2%
<b>Total</b>	<b>3,175</b>	<b>433</b>	<b>13.6%</b>	<b>2,742</b>	<b>385</b>	<b>14.0%</b>

**NOTE:** Beginning with the Utah Crash Summary 2007, the definition of impaired driver crashes changed. Numbers in the Utah Crash Summary 2007 have been changed to meet the new definition. Due to the change, numbers in the Utah Crash Summary 2007 will be different from previous editions of the Utah Crash Summary.

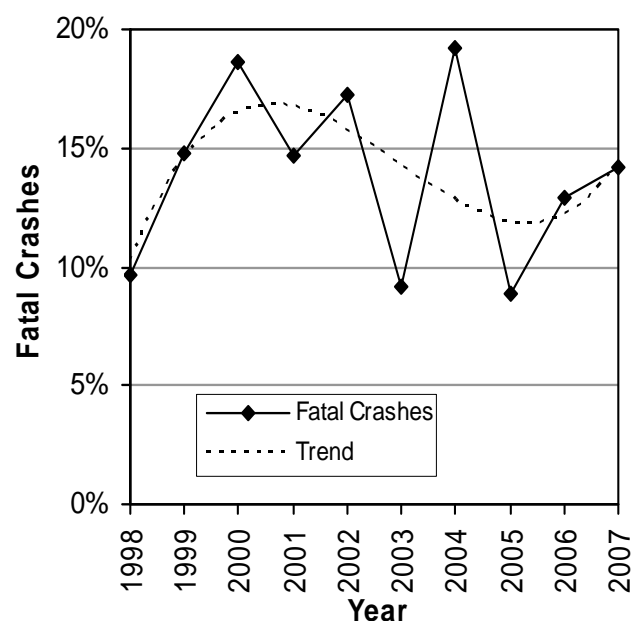
- Over the past 10 years, the percentage of alcohol-impaired driving deaths and fatal crashes has fluctuated around 15% of all deaths and fatal crashes.
- On average, 43 people die a year in Utah from alcohol-impaired driver crashes.

## Alcohol-Impaired Driver Deaths (Utah 1998-2007)



- The number of alcohol-impaired driver deaths has shown an increasing trend over the last few years after seeing a decreasing trend the previous years.

## Alcohol-Impaired Driver Fatal Crashes (Utah 1998-2007)

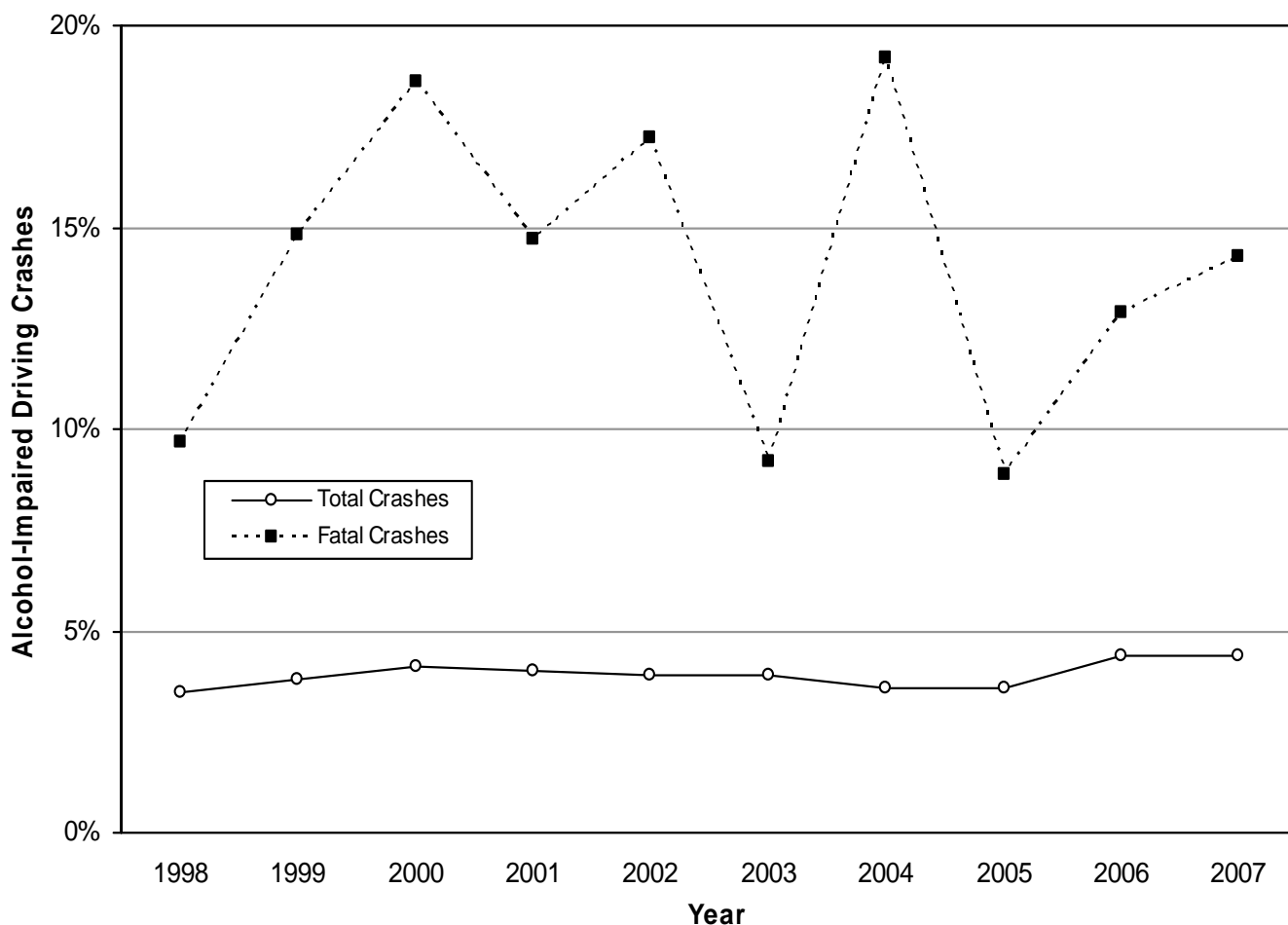


- The percentage of alcohol-impaired driver fatal crashes has shown a small increasing trend over the last few years after seeing a decreasing trend the previous years.

## Trends

### Alcohol-Impaired Driver Crashes (Utah 1998-2007)

Alcohol-Impaired Driver Crashes												
	Property Damage Only			Injury			Fatal			Total		
	All	Alcohol		All	Alcohol		All	Alcohol		All	Alcohol	
Year	#	#	%	#	#	%	#	#	%	#	#	%
1998	34,337	799	2.3%	19,427	1,062	5.5%	308	30	9.7%	54,072	1,891	3.5%
1999	32,971	842	2.6%	19,513	1,137	5.8%	318	47	14.8%	52,802	2,026	3.8%
2000	33,269	951	2.9%	19,564	1,152	5.9%	318	59	18.6%	53,151	2,162	4.1%
2001	33,113	932	2.8%	19,332	1,152	6.0%	258	38	14.7%	52,703	2,122	4.0%
2002	33,542	924	2.8%	19,552	1,117	5.7%	274	47	17.2%	53,368	2,088	3.9%
2003	31,842	904	2.8%	18,285	1,024	5.6%	262	24	9.2%	50,389	1,952	3.9%
2004	34,222	878	2.6%	19,423	1,020	5.3%	260	50	19.2%	53,905	1,948	3.6%
2005	35,158	898	2.6%	19,545	1,058	5.4%	235	21	8.9%	54,938	1,977	3.6%
2006	37,674	1,261	3.3%	18,264	1,195	6.5%	249	32	12.9%	56,187	2,488	4.4%
2007	42,368	1,441	3.4%	18,619	1,240	6.7%	258	37	14.3%	61,245	2,718	4.4%
Total	348,496	9,830	2.8%	191,524	11,157	5.8%	2,740	385	14.1%	542,760	21,372	3.9%



- Over the past 10 years, 3.9% of total crashes involved alcohol-impaired drivers compared with 14.1% of fatal crashes.
- Alcohol-impaired driver crashes were 3.6 times more likely to be fatal than crashes not involving an alcohol-impaired driver.

## Counties

### Alcohol-Impaired Driver Crashes by County (Utah 2007)

Alcohol-Impaired Driver Crashes								
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
		Rate		Rate		Rate		Rate
		per 100		per 100		per 100		per 100
		Million		Million		Million		Million
County	#	VMT	#	VMT	#	VMT	#	VMT
Uintah	26	7.4	27	7.7	1	0.28	54	15.4
Salt Lake	682	7.8	538	6.1	8	0.09	1,228	14.0
Weber	126	7.7	94	5.8	4	0.24	224	13.7
Piute	0	0.0	3	9.6	1	3.20	4	12.8
Carbon	17	5.9	17	5.9	2	0.69	36	12.4
Wasatch	23	7.5	13	4.3	0	0.00	36	11.8
Duchesne	11	4.7	14	6.0	0	0.00	25	10.6
Rich	4	8.0	1	2.0	0	0.00	5	10.0
Washington	66	4.8	71	5.1	0	0.00	137	9.9
Sanpete	11	4.7	9	3.8	2	0.85	22	9.4
Utah	176	4.7	145	3.9	4	0.11	325	8.7
Tooele	30	3.3	38	4.2	3	0.33	71	7.8
Davis	108	4.3	86	3.4	1	0.04	195	7.7
Cache	35	3.6	40	4.1	0	0.00	75	7.6
Summit	39	5.0	19	2.4	1	0.13	59	7.6
Garfield	4	3.3	5	4.2	0	0.00	9	7.5
Grand	8	2.8	12	4.2	0	0.00	20	7.0
Kane	5	3.3	5	3.3	0	0.00	10	6.6
San Juan	7	2.5	8	2.9	2	0.72	17	6.1
Sevier	11	2.6	14	3.3	0	0.00	25	6.0
Morgan	6	4.2	2	1.4	0	0.00	8	5.6
Iron	17	2.4	19	2.7	2	0.28	38	5.4
Juab	5	1.2	13	3.1	3	0.72	21	5.0
Millard	5	1.1	16	3.5	0	0.00	21	4.6
Box Elder	12	1.3	20	2.2	2	0.22	34	3.7
Emery	4	1.1	7	1.9	1	0.28	12	3.3
Daggett	1	3.0	0	0.0	0	0.00	1	3.0
Beaver	2	0.8	4	1.6	0	0.00	6	2.3
Wayne	0	0.0	0	0.0	0	0.00	0	0.0
<b>Statewide</b>	<b>1,441</b>	<b>5.4</b>	<b>1,240</b>	<b>4.6</b>	<b>37</b>	<b>0.14</b>	<b>2,718</b>	<b>10.1</b>

- Uintah (15.4), Salt Lake (14.0), and Weber (13.7) counties had the highest rates of alcohol-impaired driver total crashes per 100 million vehicle miles traveled.
- Wayne (0.0), Beaver (2.3), and Daggett (3.0) counties had the lowest rates of alcohol-impaired driver total crashes per 100 million vehicle miles traveled.

## Persons Involved

### Persons in Alcohol-Impaired Driver Crashes (Utah 2007)

Persons (Alcohol-Impaired Driver Crashes)								
Person Type	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Driver	2,772	71.7%	1,296	68.2%	27	64.3%	<b>4,095</b>	<b>70.5%</b>
Passenger	1,091	28.2%	581	30.6%	13	31.0%	<b>1,685</b>	<b>29.0%</b>
Pedestrian	3	0.1%	17	0.9%	2	4.8%	<b>22</b>	<b>0.4%</b>
Bicyclist	0	0.0%	6	0.3%	0	0.0%	<b>6</b>	<b>0.1%</b>
<b>Total</b>	<b>3,866</b>	<b>100.0%</b>	<b>1,900</b>	<b>100.0%</b>	<b>42</b>	<b>100.0%</b>	<b>5,808</b>	<b>100.0%</b>

- Drivers accounted for the majority of persons involved (70.5%) and persons killed (64.3%) in alcohol-impaired driver crashes.
- Of the 27 drivers killed in alcohol-impaired driver crashes, 24 (88.9%) were impaired drivers, and three (11.1%) were victims of an impaired driver.

### Seatbelt Use of Persons Killed in Alcohol-Impaired Driver Crashes (Utah 2007)

- 18 of the 28 (64.3%) motor vehicle occupants killed in alcohol-impaired driver crashes where seatbelt use was known were unbelted.

### Alcohol-Impaired Drivers in Different Types of Fatal Crashes (Utah 2007)



#### Pedestrian-Motor Vehicle Crashes

- Of the 32 pedestrians killed, two (6.3%) were killed by an impaired driver.



#### Bicyclist-Motor Vehicle Crashes

- Of the six bicyclists killed, none were killed by an impaired driver.



#### Motorcycle Crashes

- Of the 34 motorcycle drivers in fatal crashes, two were impaired by alcohol (5.9%). Two additional motorcyclists were killed by an impaired driver.

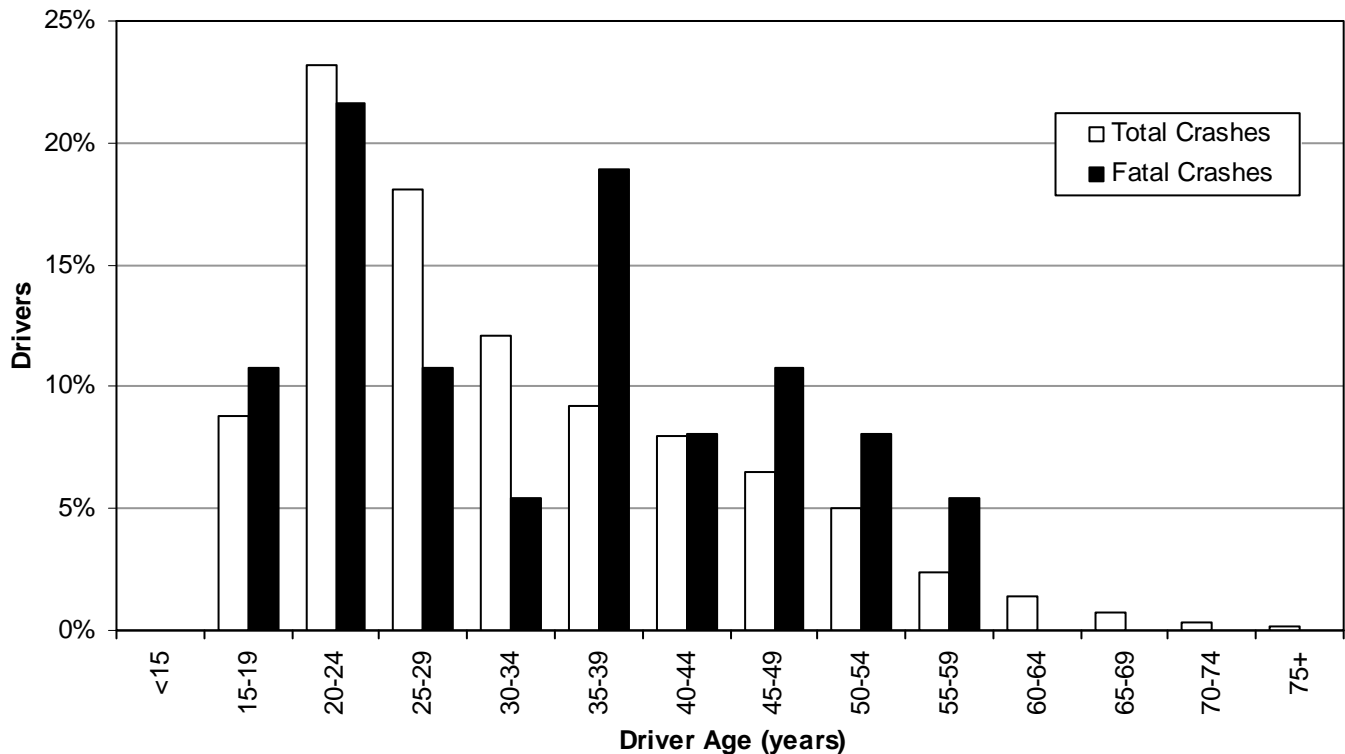


#### Teenage Driver Crashes

- Of the 47 teenage drivers (aged 15 to 19 years) in fatal crashes, four were impaired by alcohol (8.5%).

**Drivers****Age of Alcohol-Impaired Drivers in Crashes (Utah 2007)**

<b>Alcohol-Impaired Drivers</b>								
	<b>PDO Crashes</b>		<b>Injury Crashes</b>		<b>Fatal Crashes</b>		<b>Total</b>	
<b>Age</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>
<15	0	0.0%	0	0.0%	0	0.0%	0	0.0%
15-19	132	9.0%	107	8.6%	4	10.8%	243	8.8%
20-24	331	22.7%	297	23.8%	8	21.6%	636	23.2%
25-29	253	17.3%	241	19.3%	4	10.8%	498	18.1%
30-34	171	11.7%	159	12.7%	2	5.4%	332	12.1%
35-39	129	8.8%	116	9.3%	7	18.9%	252	9.2%
40-44	117	8.0%	99	7.9%	3	8.1%	219	8.0%
45-49	96	6.6%	78	6.2%	4	10.8%	178	6.5%
50-54	69	4.7%	64	5.1%	3	8.1%	136	5.0%
55-59	40	2.7%	25	2.0%	2	5.4%	67	2.4%
60-64	25	1.7%	13	1.0%	0	0.0%	38	1.4%
65-69	8	0.5%	10	0.8%	0	0.0%	18	0.7%
70-74	3	0.2%	4	0.3%	0	0.0%	7	0.3%
75+	4	0.3%	2	0.2%	0	0.0%	6	0.2%
Unknown	82	5.6%	34	2.7%	0	0.0%	116	4.2%
<b>Total</b>	<b>1,460</b>	<b>100.0%</b>	<b>1,249</b>	<b>100.0%</b>	<b>37</b>	<b>100.0%</b>	<b>2,746</b>	<b>100.0%</b>



- Drivers aged 20-24 years had the highest percentage of total alcohol-impaired driver crashes (23.2%) and fatal crashes (21.6%).
- 341 (12.4%) of the impaired drivers in total crashes were under the age of 21 years.
- Seven of the 37 (18.9%) impaired drivers in fatal crashes were under the age of 21 years.
- There is a rapid decline of impaired drivers as age increases with less than 10% of impaired drivers over the age of 55 years (5.0%).

## Drivers

### Gender of Alcohol-Impaired Drivers in Crashes (Utah 2007)

Alcohol-Impaired Drivers								
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
Gender	#	%	#	%	#	%	#	%
Male	1,065	72.9%	963	77.1%	31	83.8%	2,059	75.0%
Female	328	22.5%	267	21.4%	6	16.2%	601	21.9%
Unknown	67	4.6%	19	1.5%	0	0.0%	86	3.1%
<b>Total</b>	<b>1,460</b>	<b>100.0%</b>	<b>1,249</b>	<b>100.0%</b>	<b>37</b>	<b>100.0%</b>	<b>2,746</b>	<b>100.0%</b>

- Male drivers were much more likely to be an alcohol-impaired driver in a crash. Male drivers represented 75.0% of the impaired drivers in total crashes and 83.8% of impaired drivers in fatal crashes.

### Alcohol-Impaired Drivers in Fatal Crashes by Blood Alcohol Concentration (Utah 2007)

Alcohol-Impaired Drivers in Fatal Crashes		
	Drivers	
BAC	#	%
.08 - .15	14	37.8%
.16 - .23	18	48.6%
.24 - .31	4	10.8%
.32+	1	2.7%
<b>Total</b>	<b>37</b>	<b>100.0%</b>

- 23 out of the 37 (62.2%) drivers in fatal crashes who tested positive for alcohol had blood alcohol concentration (BAC) levels at or above twice the legal limit of 0.08.

### Previous Driving Under the Influence Convictions of Alcohol-Impaired Drivers in Fatal Crashes (Utah 2007)

- Of the 37 alcohol-impaired drivers in fatal crashes, six drivers (16.2%) had been previously convicted of driving under the influence in the past three years.

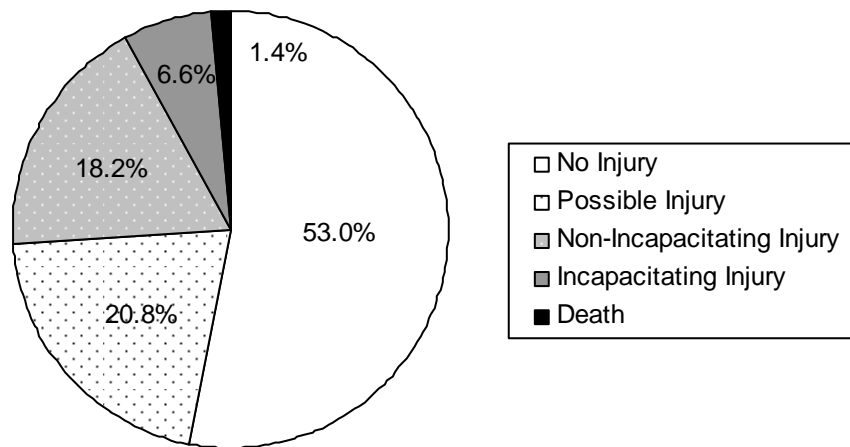
### Drug-Impaired Drivers in Crashes (Utah 2007)

- There were an additional 172 drivers impaired by drugs, 78 (45.3%) in property damage only crashes, 79 (45.9%) in injury crashes, and 15 (8.7%) in fatal crashes.
- Cannabinoids (THC, marijuana) and stimulants (methamphetamine, cocaine) were the most common drugs for drug-impaired drivers in fatal crashes.



## Crash Conditions

### Alcohol-Impaired Driver Crash Severity (Utah 2007)



- A higher percentage of alcohol-impaired driver crashes (45.6%) resulted in a non-fatal injury compared to all motor vehicle crashes that resulted in a non-fatal injury (30.4%).
- In addition, a higher percentage of alcohol-impaired driver crashes were fatal (1.4%) compared to all motor vehicle crashes (0.4%).

### Alcohol-Impaired Driver Crashes by Month (Utah 2007)

Alcohol-Impaired Driver Crashes									
		PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	Days in		Rate		Rate		Rate		Rate
	Month		per		per		per		per
Month	#	#	Day	#	Day	#	Day	#	Day
January	31	130	4.2	89	2.9	1	0.03	220	7.1
February	28	109	3.9	66	2.4	1	0.04	176	6.3
March	31	95	3.1	96	3.1	2	0.06	193	6.2
April	30	104	3.5	103	3.4	4	0.13	211	7.0
May	31	114	3.7	123	4.0	3	0.10	240	7.7
June	30	135	4.5	110	3.7	4	0.13	249	8.3
July	31	122	3.9	132	4.3	5	0.16	259	8.4
August	31	107	3.5	119	3.8	3	0.10	229	7.4
September	30	136	4.5	117	3.9	6	0.20	259	8.6
October	31	135	4.4	98	3.2	5	0.16	238	7.7
November	30	114	3.8	95	3.2	3	0.10	212	7.1
December	31	140	4.5	92	3.0	0	0.00	232	7.5
Total	365	1,441	3.9	1,240	3.4	37	0.10	2,718	7.4

- Overall, the highest rates per day of alcohol-impaired driver crashes were in September (8.6), July (8.4), and June (8.3), with the lowest rate per day in March (6.2).
- The highest rates per day of fatal alcohol-impaired driver crashes occurred in September (0.20), July (0.16), and October (0.16).

## Crash Conditions

### Alcohol-Impaired Driver Crashes by Day of Week (Utah 2007)

Alcohol-Impaired Driver Crashes								
Day of Week	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Sunday	269	18.7%	241	19.4%	8	21.6%	518	19.1%
Monday	148	10.3%	111	9.0%	2	5.4%	261	9.6%
Tuesday	135	9.4%	145	11.7%	2	5.4%	282	10.4%
Wednesday	149	10.3%	132	10.6%	4	10.8%	285	10.5%
Thursday	180	12.5%	136	11.0%	3	8.1%	319	11.7%
Friday	231	16.0%	194	15.6%	4	10.8%	429	15.8%
Saturday	329	22.8%	281	22.7%	14	37.8%	624	23.0%
<b>Total</b>	<b>1,441</b>	<b>100.0%</b>	<b>1,240</b>	<b>100.0%</b>	<b>37</b>	<b>100.0%</b>	<b>2,718</b>	<b>100.0%</b>

- The highest percentage of alcohol-impaired driver total crashes (23.0%) and fatal crashes (37.8%) occurred on Saturday.

### Alcohol-Impaired Driver Crashes by Hour (Utah 2007)

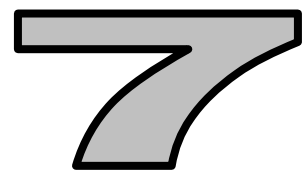
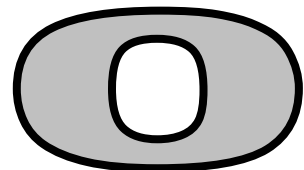
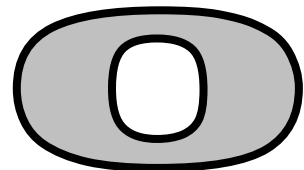
Alcohol-Impaired Driver Crashes								
Hour	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Midnight	100	6.9%	85	6.9%	5	13.5%	190	7.0%
1 a.m.	89	6.2%	85	6.9%	4	10.8%	178	6.5%
2 a.m.	71	4.9%	68	5.5%	1	2.7%	140	5.2%
3 a.m.	59	4.1%	52	4.2%	3	8.1%	114	4.2%
4 a.m.	37	2.6%	23	1.9%	0	0.0%	60	2.2%
5 a.m.	34	2.4%	15	1.2%	2	5.4%	51	1.9%
6 a.m.	24	1.7%	25	2.0%	0	0.0%	49	1.8%
7 a.m.	32	2.2%	19	1.5%	0	0.0%	51	1.9%
8 a.m.	27	1.9%	24	1.9%	0	0.0%	51	1.9%
9 a.m.	36	2.5%	17	1.4%	0	0.0%	53	1.9%
10 a.m.	21	1.5%	22	1.8%	0	0.0%	43	1.6%
11 a.m.	29	2.0%	30	2.4%	2	5.4%	61	2.2%
Noon	47	3.3%	36	2.9%	0	0.0%	83	3.1%
1 p.m.	32	2.2%	29	2.3%	0	0.0%	61	2.2%
2 p.m.	46	3.2%	42	3.4%	1	2.7%	89	3.3%
3 p.m.	60	4.2%	49	4.0%	1	2.7%	110	4.0%
4 p.m.	56	3.9%	50	4.0%	0	0.0%	106	3.9%
5 p.m.	96	6.7%	66	5.3%	0	0.0%	162	6.0%
6 p.m.	91	6.3%	86	6.9%	1	2.7%	178	6.5%
7 p.m.	62	4.3%	82	6.6%	2	5.4%	146	5.4%
8 p.m.	91	6.3%	81	6.5%	4	10.8%	176	6.5%
9 p.m.	84	5.8%	63	5.1%	4	10.8%	151	5.6%
10 p.m.	113	7.8%	103	8.3%	3	8.1%	219	8.1%
11 p.m.	104	7.2%	88	7.1%	3	8.1%	195	7.2%
Unknown	0	0.0%	0	0.0%	1	2.7%	1	0.0%
<b>Total</b>	<b>1,441</b>	<b>100.0%</b>	<b>1,240</b>	<b>100.0%</b>	<b>37</b>	<b>100.0%</b>	<b>2,718</b>	<b>100.0%</b>

- Alcohol-impaired driver total crashes peaked in the evening and early morning hours (5:00 p.m. to 2:59 a.m.). Fatal alcohol-impaired driver crashes varied by hour and peaked at midnight.

# Teenage Drivers

## Section 4: Teenage Drivers

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# 2007 Utah Crash Facts

## Utah Department of Public Safety Highway Safety Office

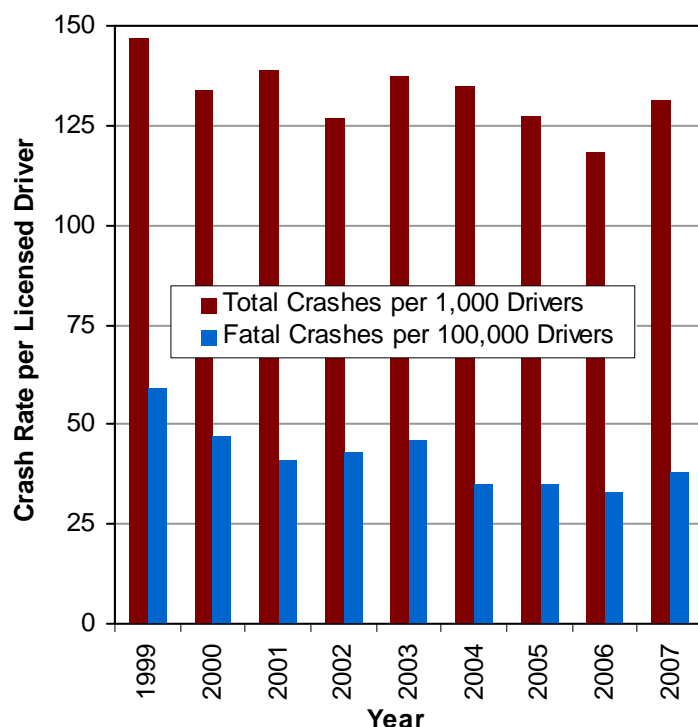
### Did you know in 2007:

- Teenage drivers represented 7% of the licensed drivers in Utah, yet they were in one-quarter (24%) of all motor vehicle crashes.
- Teenage drivers were in 14,844 motor vehicle crashes which resulted in 7,405 injured persons and 51 deaths.
- Nearly one out of five (18%) fatal crashes in Utah involved a teenage driver.

## Teenage Drivers (15-19 years)

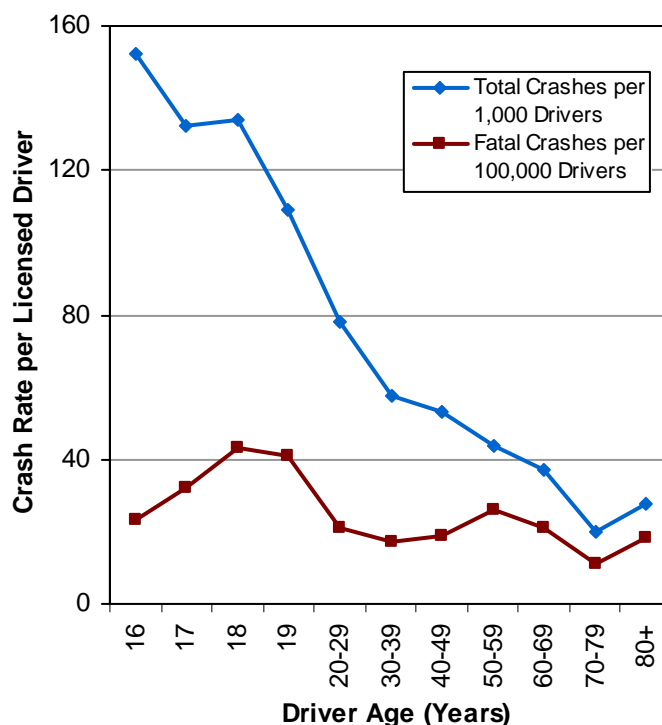


### Teenage Driver Crash Rates per Licensed Driver (Utah 1999-2007)



- The teen driver total crash rate per licensed driver increased 11% in 2007 from 2006.

### Crash Rates per Licensed Driver by Age (Utah 2007)



- Drivers aged 16 years had the highest total crash rate per licensed driver.

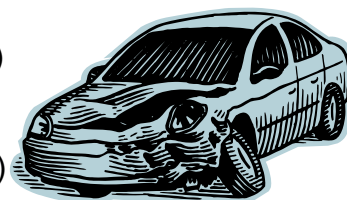
### Leading Contributing Factors of Teenage Driver Crashes (Utah 2007)

#### All Teenage Driver Crashes

1. Followed Too Closely (20%)
2. Failed to Yield Right of Way (16%)
3. Speed Too Fast (12%)
4. Driver Distraction (10%)
5. Failed to Keep in Proper Lane (6%)

#### Fatal Teenage Driver Crashes

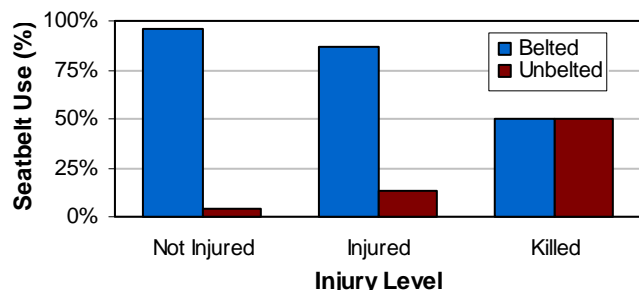
1. Speed Too Fast (43%)
2. Reckless/Aggressive Driving (30%)
3. Asleep/Fatigue (17%)
4. Driving Under the Influence (11%)
5. Failed to Keep in Proper Lane (9%)
5. Wrong Side/Wrong Way (9%)



## Teenage Drivers (15-19 years)



### Seatbelt Use of Teen Drivers and Their Passengers (Utah 2007)

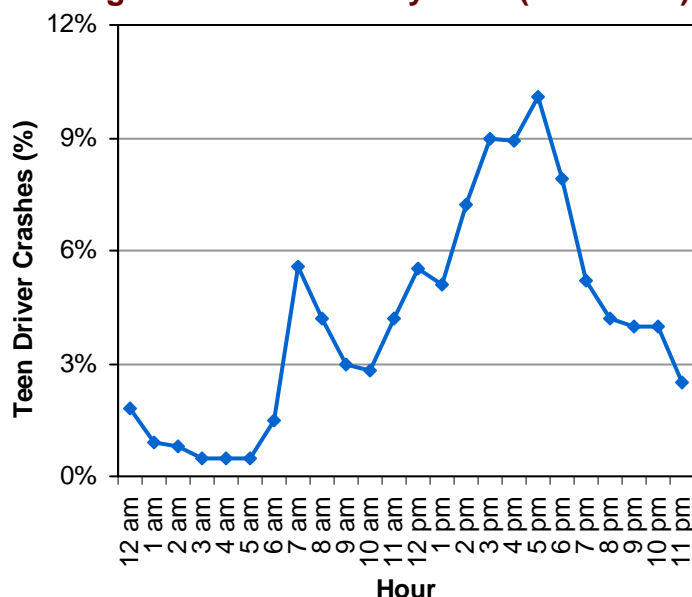


- 50% of teen drivers and their passengers killed in crashes were unbelted.
- Teen drivers and their passengers that were unbelted were 16 times more likely than belted occupants to be killed in a crash.

### Number of Occupants in Teen-Driven Vehicles (Utah 2007)

Crashes where the teen-driven vehicle contained four or more occupants were 4.1 times more likely to be fatal than crashes involving vehicles with fewer occupants.

### Teenage Driver Crashes by Hour (Utah 2007)



- Teenage-driver crashes peaked during after-school hours (2:00 p.m.-6:59 p.m.).

### Graduated Driver Licensing (GDL) Law in Utah

GDL allows beginning drivers the chance to build experience before they are exposed to more high-risk situations, such as carrying teen passengers and nighttime driving. Easing young drivers onto the roadways can reduce the number of traffic crashes involving young drivers.

#### Learner Permit

A person must be at least 15 years old to apply for a learner permit. An applicant who is under 18 years of age is required to hold a learner permit for six months before applying for a license.

#### Supervised Driving

All individuals under 18 years of age applying for a license must complete 40 hours of driving, of which at least 10 hours must be during night hours. This allows beginning drivers to practice and gain supervised experience.

#### Driver License

A person must be at least 16 years of age to get a driver license. All individuals who have never been licensed to drive a motor vehicle must complete an approved driver education course.

#### Night-time Restrictions

Anyone under the age of 17 years may not drive from midnight to 5:00 a.m. except in a limited number of situations. The majority of fatal teen crashes take place at night.

#### Passenger Restrictions

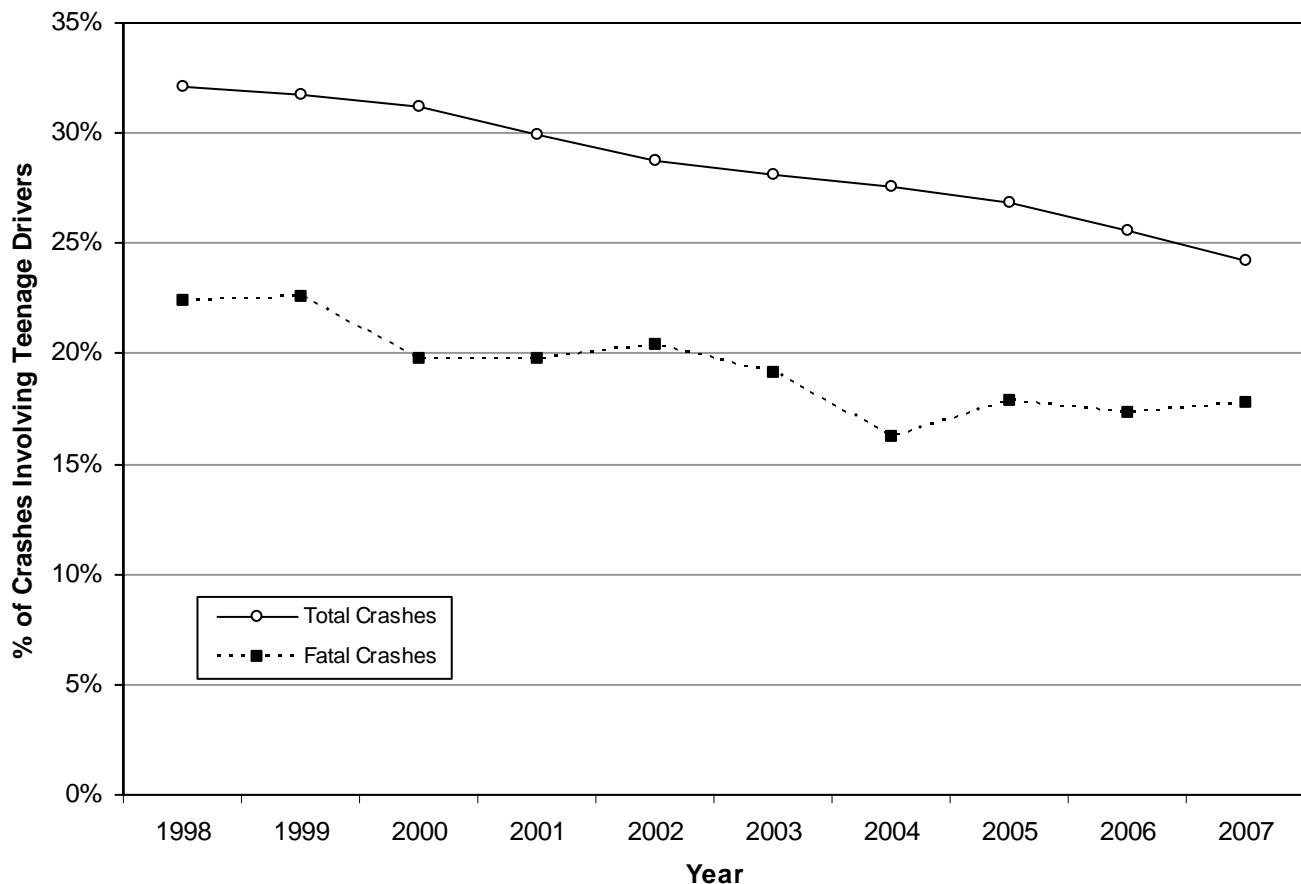
For the first six months of licensure, teen drivers can not drive with any passenger who is not an immediate family member with a few exceptions. Teen drivers are more likely to crash with passengers in the car, especially teen passengers. The more passengers, the greater the risk.

#### 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 law enforcement solely for that offense.

## Teenage Driver Crashes (Utah 1998-2007)

Teenage Driver Crashes												
	Property Damage Only			Injury			Fatal			Total		
	All	Teen Driver		All	Teen Driver		All	Teen Driver		All	Teen Driver	
Year	#	#	%	#	#	%	#	#	%	#	#	%
1998	34,337	10,916	31.8%	19,427	6,377	32.8%	308	69	22.4%	54,072	17,362	32.1%
1999	32,971	10,406	31.6%	19,513	6,281	32.2%	318	72	22.6%	52,802	16,759	31.7%
2000	33,269	10,252	30.8%	19,564	6,263	32.0%	318	63	19.8%	53,151	16,578	31.2%
2001	33,113	9,686	29.3%	19,332	6,006	31.1%	258	51	19.8%	52,703	15,743	29.9%
2002	33,542	9,478	28.3%	19,552	5,776	29.5%	274	56	20.4%	53,368	15,310	28.7%
2003	31,842	8,807	27.7%	18,285	5,321	29.1%	262	50	19.1%	50,389	14,178	28.1%
2004	34,222	9,397	27.5%	19,423	5,431	28.0%	260	42	16.2%	53,905	14,870	27.6%
2005	35,158	9,225	26.2%	19,545	5,434	27.8%	235	42	17.9%	54,938	14,701	26.8%
2006	37,674	9,427	25.0%	18,264	4,928	27.0%	249	43	17.3%	56,187	14,398	25.6%
2007	42,368	9,990	23.6%	18,619	4,808	25.8%	258	46	17.8%	61,245	14,844	24.2%
Total	348,496	97,584	28.0%	191,524	56,625	29.6%	2,740	534	19.5%	542,760	154,743	28.5%



- Teenage drivers (aged 15-19 years) are a special concern because of their high crash rates and lack of driving experience.
- The 10-year trend shows that 28.5% of all crashes in Utah involved a teenage driver with a decreasing trend since 1998.
- Fatal teenage driver crashes have also shown a decreasing trend. In 1998 the percentage of fatal teenage driver crashes was 22.4% and reached a low in 2004 of 16.2%.

## Counties

### Teenage Driver Crashes by County (Utah 2007)

Teenage Driver Crashes												
	PDO Crashes			Injury Crashes			Fatal Crashes			Total		
	All	Teen Driver		All	Teen Driver		All	Teen Driver		All	Teen Driver	
County	#	#	%	#	#	%	#	#	%	#	#	%
Davis	3,657	1,007	27.5%	1,736	513	29.6%	17	3	17.6%	5,410	1,523	28.2%
Sanpete	258	77	29.8%	130	33	25.4%	5	0	0.0%	393	110	28.0%
Utah	6,425	1,781	27.7%	3,083	877	28.4%	22	2	9.1%	9,530	2,660	27.9%
Cache	1,600	421	26.3%	615	186	30.2%	4	3	75.0%	2,219	610	27.5%
Washington	1,522	434	28.5%	897	231	25.8%	16	4	25.0%	2,435	669	27.5%
Weber	3,202	845	26.4%	1,645	465	28.3%	23	6	26.1%	4,870	1,316	27.0%
Iron	637	158	24.8%	256	67	26.2%	8	0	0.0%	901	225	25.0%
Morgan	132	32	24.2%	39	9	23.1%	0	0	0.0%	171	41	24.0%
Salt Lake	18,839	4,210	22.3%	7,995	1,965	24.6%	49	16	32.7%	26,883	6,191	23.0%
Uintah	636	142	22.3%	216	53	24.5%	9	2	22.2%	861	197	22.9%
Carbon	345	68	19.7%	108	29	26.9%	5	1	20.0%	458	98	21.4%
Tooele	599	118	19.7%	262	65	24.8%	8	0	0.0%	869	183	21.1%
Box Elder	643	103	16.0%	260	80	30.8%	15	0	0.0%	918	183	19.9%
Wasatch	523	93	17.8%	191	43	22.5%	10	2	20.0%	724	138	19.1%
Sevier	387	70	18.1%	142	32	22.5%	7	0	0.0%	536	102	19.0%
Wayne	41	8	19.5%	17	3	17.6%	0	0	0.0%	58	11	19.0%
Duchesne	396	66	16.7%	101	25	24.8%	4	0	0.0%	501	91	18.2%
Millard	272	46	16.9%	148	29	19.6%	11	3	27.3%	431	78	18.1%
Beaver	156	25	16.0%	54	9	16.7%	2	0	0.0%	212	34	16.0%
Juab	249	40	16.1%	112	19	17.0%	7	0	0.0%	368	59	16.0%
Emery	190	29	15.3%	61	12	19.7%	6	0	0.0%	257	41	16.0%
Summit	836	128	15.3%	243	34	14.0%	5	2	40.0%	1,084	164	15.1%
Garfield	150	19	12.7%	51	5	9.8%	3	1	33.3%	204	25	12.3%
Rich	57	7	12.3%	27	3	11.1%	0	0	0.0%	84	10	11.9%
Kane	166	21	12.7%	49	5	10.2%	5	0	0.0%	220	26	11.8%
San Juan	234	21	9.0%	88	11	12.5%	9	1	11.1%	331	33	10.0%
Grand	142	15	10.6%	81	5	6.2%	5	0	0.0%	228	20	8.8%
Piute	29	3	10.3%	8	0	0.0%	2	0	0.0%	39	3	7.7%
Daggett	45	3	6.7%	4	0	0.0%	1	0	0.0%	50	3	6.0%
Statewide	42,368	9,990	23.6%	18,619	4,808	25.8%	258	46	17.8%	61,245	14,844	24.2%

- Overall, Davis (28.2%), Sanpete (28.0%), and Utah (27.9%) counties had the highest percentages of crashes involving a teenage driver.
- Cache (75.0%), Summit (40.0%), Garfield (33.3%), and Salt Lake (32.7%) counties had the highest percentages of fatal crashes involving a teenage driver.
- Overall, Daggett (6.0%), Piute (7.7%), and Grand (8.8%) counties had the lowest percentages of crashes involving a teenage driver.
- Statewide, teenage driver crashes represented 24.2% of all crashes and 17.8% of all fatal crashes.



## Persons Involved

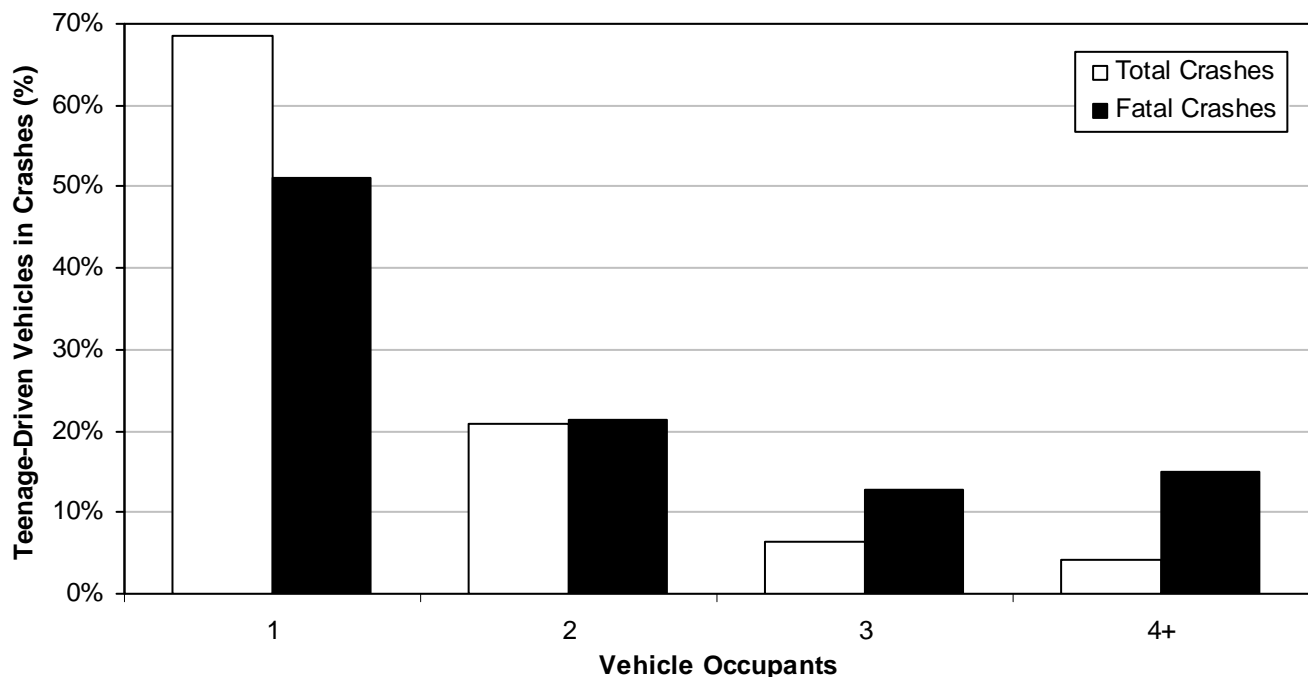
### Seatbelt Use of Teen Drivers and Their Passengers (Utah 2007)

Persons (Teen Driver and Passengers)								
Seatbelt Use	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Belted	17,553	95.9%	3,164	87.2%	13	50.0%	20,730	94.4%
Unbelted	759	4.1%	465	12.8%	13	50.0%	1,237	5.6%
<b>Total</b>	<b>18,312</b>	<b>100.0%</b>	<b>3,629</b>	<b>100.0%</b>	<b>26</b>	<b>100.0%</b>	<b>21,967</b>	<b>100.0%</b>

- Overall, most teen drivers and their passengers reported wearing a seatbelt (94.4%).
- Only 50.0% of occupants killed in teenage driven vehicles were wearing a seatbelt.
- In fact, teen drivers and their passengers that were unbelted were 16 times more likely than belted occupants to be killed in a crash.

### Number of Occupants in Teenage Driven Vehicles (Utah 2007)

Teenage Driven Vehicles								
Number of Occupants	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
1	7,947	71.8%	3,265	61.9%	24	51.1%	11,236	68.5%
2	2,117	19.1%	1,305	24.7%	10	21.3%	3,432	20.9%
3	620	5.6%	426	8.1%	6	12.8%	1,052	6.4%
4 or more	385	3.5%	279	5.3%	7	14.9%	671	4.1%
<b>Total</b>	<b>11,069</b>	<b>100.0%</b>	<b>5,275</b>	<b>100.0%</b>	<b>47</b>	<b>100.0%</b>	<b>16,391</b>	<b>100.0%</b>



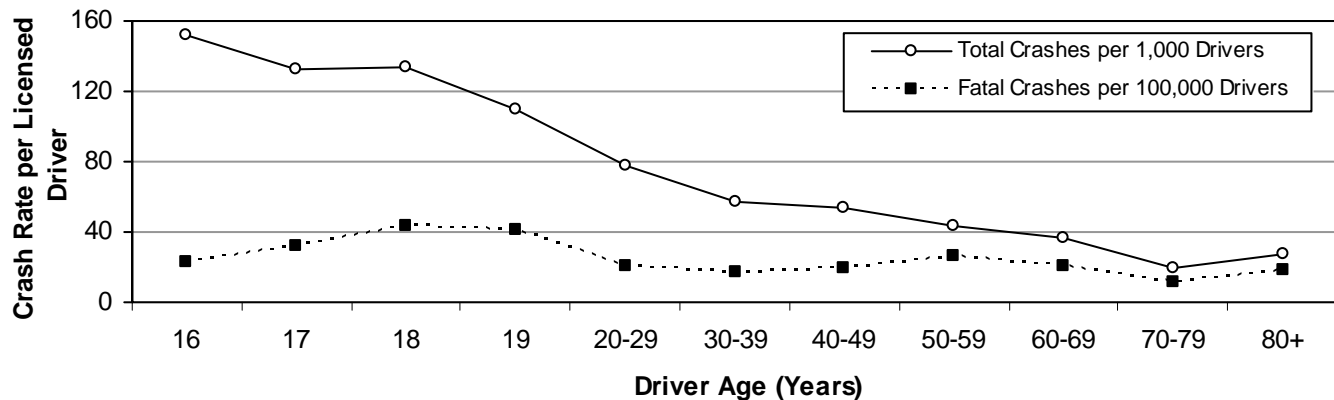
- Over two-thirds of teenage driven vehicles (68.5%) in crashes contained only the teenage driver.
- Crashes where the teenage driven vehicle contained four or more occupants were 4.1 times more likely to be fatal than crashes involving teenage driven vehicles with fewer occupants.

## Drivers

### Age of Teenage Drivers in Crashes (Utah 2007)

Teenage Drivers												
Age	PDO Crashes			Injury Crashes			Fatal Crashes			Total		
	#	%	Rate per 1,000 Drivers	#	%	Rate per 1,000 Drivers	#	%	Rate per 1,000 Drivers	#	%	Rate per 1,000 Drivers
15	150	1.4%	n/a	89	1.7%	n/a	2	4.3%	n/a	241	1.5%	n/a
16	2,283	20.6%	106.7	971	18.4%	45.4	5	10.6%	0.23	3,259	19.9%	152.3
17	2,804	25.3%	88.5	1,369	26.0%	43.2	10	21.3%	0.32	4,183	25.5%	132.1
18	3,179	28.7%	91.4	1,468	27.8%	42.2	15	31.9%	0.43	4,662	28.4%	134.0
19	2,653	24.0%	71.7	1,378	26.1%	37.2	15	31.9%	0.41	4,046	24.7%	109.3
<b>Total</b>	<b>11,069</b>	<b>100.0%</b>	<b>88.6</b>	<b>5,275</b>	<b>100.0%</b>	<b>42.2</b>	<b>47</b>	<b>100.0%</b>	<b>0.38</b>	<b>16,391</b>	<b>100.0%</b>	<b>131.2</b>

### Crash Rate of Licensed Drivers by Age (Utah 2007)



- Drivers aged 16 years had the highest total crash rate per licensed driver (152.3).
- Drivers aged 18 years had the highest fatal crash rate per licensed driver (0.43).

### Gender of Teenage Drivers in Crashes (Utah 2007)

Teenage Drivers								
Gender	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Male	5,906	53.4%	2,662	50.5%	36	76.6%	8,604	52.5%
Female	5,106	46.1%	2,589	49.1%	11	23.4%	7,706	47.0%
Unknown	57	0.5%	24	0.5%	0	0.0%	81	0.5%
<b>Total</b>	<b>11,069</b>	<b>100.0%</b>	<b>5,275</b>	<b>100.0%</b>	<b>47</b>	<b>100.0%</b>	<b>16,391</b>	<b>100.0%</b>

- The majority of teen drivers in all motor vehicle crashes (52.5%) and fatal crashes (76.6%) were male.
- Male teen drivers were 2.9 times more likely to be in a fatal crash than female teen drivers.

### Previous Driving Violations of Teens in Fatal Crashes (Utah 2007)

- Of the 47 teenage drivers in fatal crashes, 24 (51.1%) had been previously convicted of a moving traffic violation in the past three years.

### Alcohol Involvement of Teenage Drivers (Utah 2007)

- Of the 47 teenage drivers in fatal crashes, five (10.6%) were impaired by alcohol.

## Crash Conditions

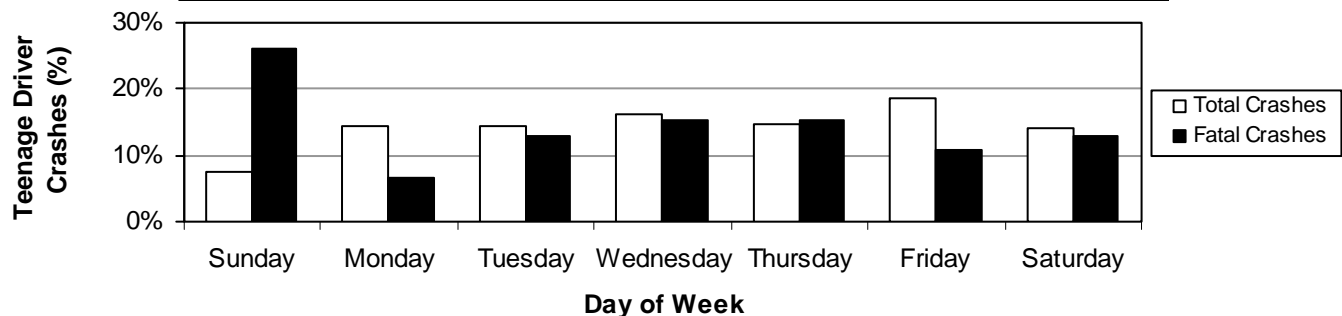
### Teenage Driver Crashes by Month (Utah 2007)

Teenage Driver Crashes									
	Days in Month	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
Month	#	#	Rate per Day	#	Rate per Day	#	Rate per Day	#	Rate per Day
January	31	983	31.7	398	12.8	2	0.06	1,383	44.6
February	28	771	27.5	336	12.0	4	0.14	1,111	39.7
March	31	769	24.8	407	13.1	4	0.13	1,180	38.1
April	30	712	23.7	407	13.6	4	0.13	1,123	37.4
May	31	837	27.0	405	13.1	2	0.06	1,244	40.1
June	30	733	24.4	384	12.8	3	0.10	1,120	37.3
July	31	680	21.9	377	12.2	1	0.03	1,058	34.1
August	31	796	25.7	429	13.8	8	0.26	1,233	39.8
September	30	896	29.9	443	14.8	3	0.10	1,342	44.7
October	31	905	29.2	450	14.5	7	0.23	1,362	43.9
November	30	805	26.8	388	12.9	2	0.07	1,195	39.8
December	31	1,103	35.6	384	12.4	6	0.19	1,493	48.2
<b>Total</b>	<b>365</b>	<b>9,990</b>	<b>27.4</b>	<b>4,808</b>	<b>13.2</b>	<b>46</b>	<b>0.13</b>	<b>14,844</b>	<b>40.7</b>

- Overall, December (48.2), September (44.7), and January (44.6) had the highest rates per day for teenage driver crashes.
- The highest rates per day of fatal teenage driver crashes occurred in August (0.26) and October (0.23).

### Teenage Driver Crashes by Day of Week (Utah 2007)

Teenage Driver Crashes								
Day of Week	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Sunday	630	6.3%	363	7.5%	12	26.1%	1,005	6.8%
Monday	1,519	15.2%	736	15.3%	3	6.5%	2,258	15.2%
Tuesday	1,455	14.6%	735	15.3%	6	13.0%	2,196	14.8%
Wednesday	1,519	15.2%	705	14.7%	7	15.2%	2,231	15.0%
Thursday	1,639	16.4%	738	15.3%	7	15.2%	2,384	16.1%
Friday	1,827	18.3%	868	18.1%	5	10.9%	2,700	18.2%
Saturday	1,401	14.0%	663	13.8%	6	13.0%	2,070	13.9%
<b>Total</b>	<b>9,990</b>	<b>100.0%</b>	<b>4,808</b>	<b>100.0%</b>	<b>46</b>	<b>100.0%</b>	<b>14,844</b>	<b>100.0%</b>

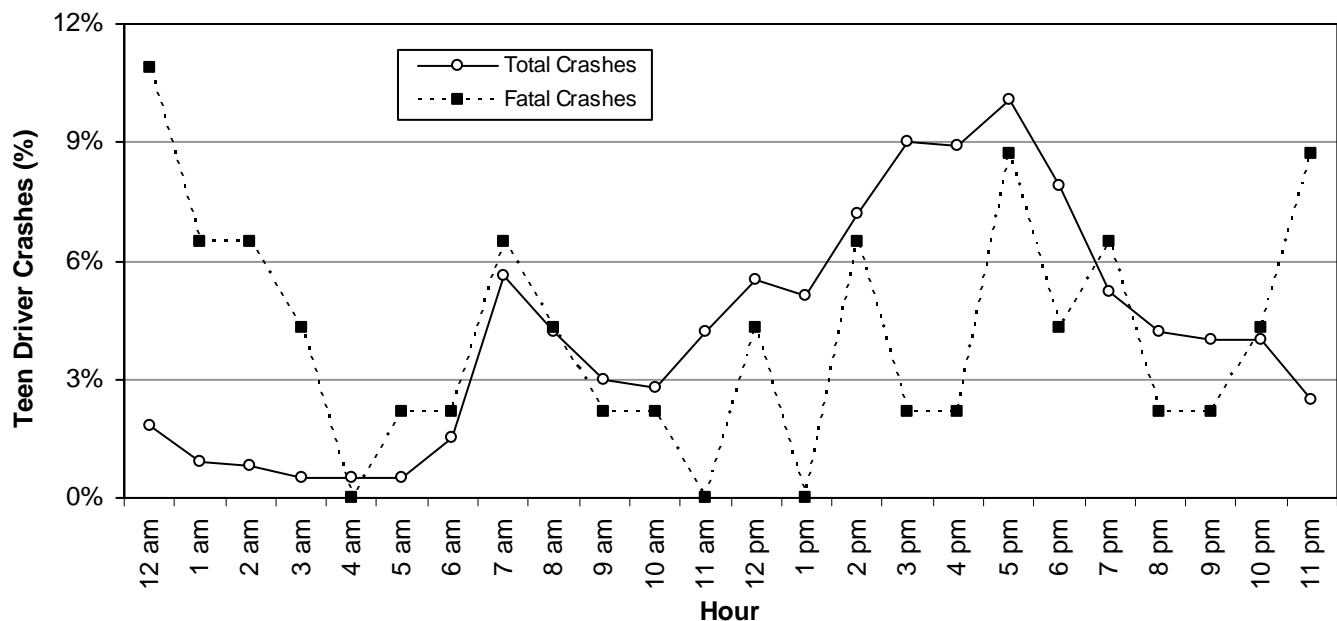


- Overall, the highest percentage of teenage driver crashes occurred on Friday (18.2%).
- The highest percentage of fatal teenage driver crashes occurred on Sunday (26.1%).
- Teenage driver crashes that occurred on Sunday were 4.9 times more likely to be fatal than on other days of the week.

## Crash Conditions

### Teenage Driver Crashes by Hour (Utah 2007)

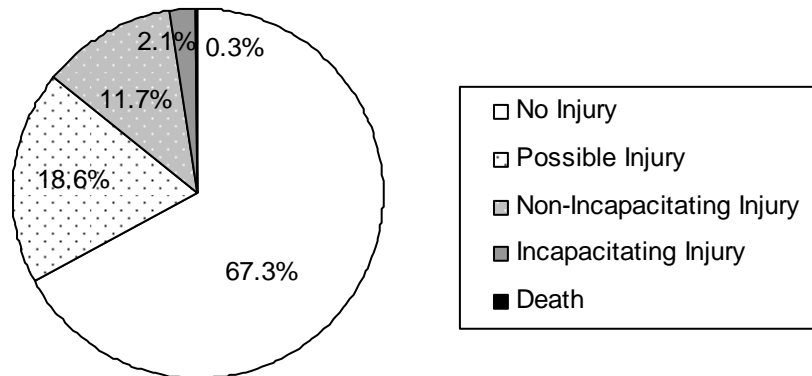
Teenage Driver Crashes								
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
Hour	#	%	#	%	#	%	#	%
Midnight	162	1.6%	105	2.2%	5	10.9%	272	1.8%
1 a.m.	97	1.0%	28	0.6%	3	6.5%	128	0.9%
2 a.m.	67	0.7%	44	0.9%	3	6.5%	114	0.8%
3 a.m.	43	0.4%	34	0.7%	2	4.3%	79	0.5%
4 a.m.	49	0.5%	20	0.4%	0	0.0%	69	0.5%
5 a.m.	53	0.5%	26	0.5%	1	2.2%	80	0.5%
6 a.m.	149	1.5%	69	1.4%	1	2.2%	219	1.5%
7 a.m.	576	5.8%	248	5.2%	3	6.5%	827	5.6%
8 a.m.	454	4.5%	169	3.5%	2	4.3%	625	4.2%
9 a.m.	308	3.1%	130	2.7%	1	2.2%	439	3.0%
10 a.m.	284	2.8%	136	2.8%	1	2.2%	421	2.8%
11 a.m.	445	4.5%	185	3.8%	0	0.0%	630	4.2%
Noon	571	5.7%	243	5.1%	2	4.3%	816	5.5%
1 p.m.	498	5.0%	264	5.5%	0	0.0%	762	5.1%
2 p.m.	739	7.4%	326	6.8%	3	6.5%	1,068	7.2%
3 p.m.	903	9.0%	433	9.0%	1	2.2%	1,337	9.0%
4 p.m.	894	8.9%	420	8.7%	1	2.2%	1,315	8.9%
5 p.m.	1,010	10.1%	491	10.2%	4	8.7%	1,505	10.1%
6 p.m.	772	7.7%	404	8.4%	2	4.3%	1,178	7.9%
7 p.m.	488	4.9%	281	5.8%	3	6.5%	772	5.2%
8 p.m.	410	4.1%	216	4.5%	1	2.2%	627	4.2%
9 p.m.	391	3.9%	208	4.3%	1	2.2%	600	4.0%
10 p.m.	386	3.9%	201	4.2%	2	4.3%	589	4.0%
11 p.m.	241	2.4%	127	2.6%	4	8.7%	372	2.5%
<b>Total</b>	<b>9,990</b>	<b>100.0%</b>	<b>4,808</b>	<b>100.0%</b>	<b>46</b>	<b>100.0%</b>	<b>14,844</b>	<b>100.0%</b>



- Teenage driver total crashes were highest from 2:00 p.m. to 6:59 p.m. (after-school hours).
- Fatal teenage driver crashes varied throughout the day and peaked during the 12:00 a.m. hour.

## Crash Conditions

### Teenage Driver Crash Severity (Utah 2007)



- Similar to all motor vehicle crashes, nearly one-third (32.4%) of teenage driver crashes resulted in some level of non-fatal injury.
- The percentage of fatal teenage driver crashes (0.3%) was similar to all fatal motor vehicle crashes (0.4%).

### Urban/Rural Location of Teenage Driver Crashes (Utah 2007)

Teenage Driver Crashes								
Location	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	Rate per	#	Rate per	#	Rate per	#	Rate per
		100 Million		100 Million		100 Million		100 Million
		VMT		VMT		VMT		VMT
Urban	7,843	47.0	3,820	22.9	27	0.16	11,690	70.1
Rural	2,147	21.2	988	9.7	19	0.19	3,154	31.1
<b>Total</b>	<b>9,990</b>	<b>37.2</b>	<b>4,808</b>	<b>17.9</b>	<b>46</b>	<b>0.17</b>	<b>14,844</b>	<b>55.3</b>

- While urban areas had a higher rate of total teenage driver crashes per vehicle mile traveled, rural areas had a higher rate of fatal teenage driver crashes per vehicle mile traveled.
- Teenage driver crashes occurring in rural areas were 2.6 times more likely to result in a death than teenage driver crashes in urban areas.

### Teenage Driver Vehicle Type (Utah 2007)

Teenage Driver Vehicles								
Vehicle Type	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Passenger Car	7,519	67.9%	3,572	67.7%	20	42.6%	11,111	67.8%
SUV	1,611	14.6%	743	14.1%	11	23.4%	2,365	14.4%
Pickup Truck	1,459	13.2%	596	11.3%	10	21.3%	2,065	12.6%
Van	369	3.3%	187	3.5%	1	2.1%	557	3.4%
Motorcycle	12	0.1%	106	2.0%	5	10.6%	123	0.8%
Semi/Large Truck	42	0.4%	14	0.3%	0	0.0%	56	0.3%
Bus	3	0.0%	1	0.0%	0	0.0%	4	0.0%
Other	5	0.0%	31	0.6%	0	0.0%	36	0.2%
Unknown	49	0.4%	25	0.5%	0	0.0%	74	0.5%
<b>Total</b>	<b>11,069</b>	<b>100.0%</b>	<b>5,275</b>	<b>100.0%</b>	<b>47</b>	<b>100.0%</b>	<b>16,391</b>	<b>100.0%</b>

- For total teen driver crashes, passenger car (67.8%) and SUV (14.4%) were the leading vehicle types.
- For fatal teenage driver crashes, passenger car (42.6%) and SUV (23.4%) were the leading vehicle types.

## Crash Conditions

### First Harmful Event of Teenage Driver Crashes (Utah 2007)

Teenage Driver Crashes								
First Harmful Event	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Collision with Another Motor Vehicle	7,794	78.0%	3,680	76.5%	20	43.5%	11,494	77.4%
Collision with Concrete/Cable Barrier	249	2.5%	94	2.0%	3	6.5%	346	2.3%
Overturn/Rollover	133	1.3%	179	3.7%	10	21.7%	322	2.2%
Collision with Post, Pole, or Support	205	2.1%	98	2.0%	1	2.2%	304	2.0%
Collision with Other Fixed Object	199	2.0%	81	1.7%	0	0.0%	280	1.9%
Collision with Other Non-fixed Object	181	1.8%	66	1.4%	0	0.0%	247	1.7%
Collision with Animal	206	2.1%	29	0.6%	0	0.0%	235	1.6%
Collision with Fence	181	1.8%	43	0.9%	2	4.3%	226	1.5%
Collision with Parked Vehicle	151	1.5%	49	1.0%	0	0.0%	200	1.3%
Collision with Embankment	80	0.8%	58	1.2%	0	0.0%	138	0.9%
Collision with Tree/Shrubbery	79	0.8%	56	1.2%	1	2.2%	136	0.9%
Collision with Ditch	58	0.6%	42	0.9%	2	4.3%	102	0.7%
Collision with Pedestrian	9	0.1%	75	1.6%	4	8.7%	88	0.6%
Collision with Guardrail	59	0.6%	25	0.5%	1	2.2%	85	0.6%
Collision with Bicyclist	12	0.1%	71	1.5%	1	2.2%	84	0.6%
Collision with Mailbox/Fire Hydrant	53	0.5%	14	0.3%	0	0.0%	67	0.5%
Other Non-collision	30	0.3%	24	0.5%	0	0.0%	54	0.4%
Collision with Crash Cushion	18	0.2%	10	0.2%	0	0.0%	28	0.2%
Collision with Thrown or Fallen Object	17	0.2%	3	0.1%	0	0.0%	20	0.1%
Fell/Jumped from Vehicle	2	0.0%	15	0.3%	1	2.2%	18	0.1%
Cargo/Equipment Loss or Shift	11	0.1%	5	0.1%	0	0.0%	16	0.1%
Collision with Culvert	7	0.1%	3	0.1%	0	0.0%	10	0.1%
Fire/Explosion	10	0.1%	0	0.0%	0	0.0%	10	0.1%
Jackknife	6	0.1%	2	0.0%	0	0.0%	8	0.1%
Collision with Bridge	4	0.0%	3	0.1%	0	0.0%	7	0.0%
Collision with Work Zone/Equipment	5	0.1%	2	0.0%	0	0.0%	7	0.0%
Immersion	3	0.0%	4	0.1%	0	0.0%	7	0.0%
Collision with Train	3	0.0%	2	0.0%	0	0.0%	5	0.0%
Unknown	225	2.3%	75	1.6%	0	0.0%	300	2.0%
<b>Total</b>	<b>9,990</b>	<b>100.0%</b>	<b>4,808</b>	<b>100.0%</b>	<b>46</b>	<b>100.0%</b>	<b>14,844</b>	<b>100.0%</b>

- For all teenage driver crashes, the leading first harmful event was collision with another motor vehicle. See next page for descriptions of different collision types.
- For total crashes, collision with concrete/cable barrier (2.3%), overturn/rollover (2.2%), and collision with post, pole, or support (2.0%) were the next highest first harmful events.
- For fatal crashes, overturn/rollover (21.7%) and collision with pedestrian (8.7%) were the next highest first harmful events.
- Compared to drivers of all ages, teenage drivers were more likely to have a collision with another motor vehicle (77.4% to 67.5%).
- Overturn/rollover was 12 times more likely to result in a death than other first harmful events involving teenage drivers.

## Crash Conditions

### Collision Description of Teenage Driver Crashes (Utah 2007)

Teenage Driver Crashes (Two or More Motor Vehicles)								
Collision Description	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Rear End	3,698	44.5%	1,765	44.9%	2	10.0%	5,465	44.6%
Broadside	2,793	33.6%	1,595	40.6%	7	35.0%	4,395	35.9%
Sideswipe	1,102	13.3%	238	6.1%	3	15.0%	1,343	11.0%
Parked Vehicle	428	5.2%	113	2.9%	0	0.0%	541	4.4%
Head On	139	1.7%	168	4.3%	8	40.0%	315	2.6%
Backing Vehicle	57	0.7%	8	0.2%	0	0.0%	65	0.5%
Unknown	92	1.1%	42	1.1%	0	0.0%	134	1.1%
<b>Total</b>	<b>8,309</b>	<b>100.0%</b>	<b>3,929</b>	<b>100.0%</b>	<b>20</b>	<b>100.0%</b>	<b>12,258</b>	<b>100.0%</b>

- Overall, most teenage driver crashes were rear end (44.6%) and broadside (35.9%) collisions.
- For fatal teenage driver crashes, head on (40.0%) and broadside (35.0%) were the leading collision types.

### Teenage Driver Vehicle Maneuver Prior to Crash (Utah 2007)

Teenage Driver Vehicles								
Vehicle Maneuver	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Straight Ahead	6,329	57.2%	3,240	61.4%	43	91.5%	9,612	58.6%
Turning Left	1,412	12.8%	823	15.6%	0	0.0%	2,235	13.6%
Stopped in Traffic Lane	775	7.0%	409	7.8%	1	2.1%	1,185	7.2%
Slowing in Traffic Lane	791	7.1%	315	6.0%	0	0.0%	1,106	6.7%
Turning Right	547	4.9%	176	3.3%	0	0.0%	723	4.4%
Changing Lanes	449	4.1%	99	1.9%	0	0.0%	548	3.3%
Backing	258	2.3%	27	0.5%	0	0.0%	285	1.7%
Making U-turn	170	1.5%	66	1.3%	0	0.0%	236	1.4%
Entering Traffic Lane	138	1.2%	38	0.7%	0	0.0%	176	1.1%
Overtaking/Passing	81	0.7%	33	0.6%	2	4.3%	116	0.7%
Leaving Traffic Lane	31	0.3%	18	0.3%	0	0.0%	49	0.3%
Parked	14	0.1%	8	0.2%	0	0.0%	22	0.1%
Parking Maneuvers	16	0.1%	0	0.0%	0	0.0%	16	0.1%
Other	36	0.3%	20	0.4%	1	2.1%	57	0.3%
Unknown	22	0.2%	3	0.1%	0	0.0%	25	0.2%
<b>Total</b>	<b>11,069</b>	<b>100.0%</b>	<b>5,275</b>	<b>100.0%</b>	<b>47</b>	<b>100.0%</b>	<b>16,391</b>	<b>100.0%</b>

- For total crashes, straight ahead (58.6%), turning left (13.6%), and stopped in traffic lane (7.2%) were the leading vehicle maneuvers prior to the crash.
- For fatal crashes, straight ahead (91.5%) and overtaking/passing (4.3%) were the leading vehicle maneuvers prior to the crash.

## Crash Conditions

### Speed Limit of Teenage Driver Crashes (Utah 2007)

Teenage Driver Vehicles								
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
Speed Limit	#	%	#	%	#	%	#	%
5-15 MPH	89	0.8%	24	0.5%	0	0.0%	113	0.7%
20-25 MPH	1,849	16.7%	665	12.6%	3	6.4%	2,517	15.4%
30-35 MPH	2,763	25.0%	1,370	26.0%	6	12.8%	4,139	25.3%
40-45 MPH	2,510	22.7%	1,411	26.7%	13	27.7%	3,934	24.0%
50-55 MPH	685	6.2%	368	7.0%	6	12.8%	1,059	6.5%
60-65 MPH	1,347	12.2%	520	9.9%	15	31.9%	1,882	11.5%
70-75 MPH	132	1.2%	84	1.6%	4	8.5%	220	1.3%
Unknown	1,694	15.3%	833	15.8%	0	0.0%	2,527	15.4%
<b>Total</b>	<b>11,069</b>	<b>100.0%</b>	<b>5,275</b>	<b>100.0%</b>	<b>47</b>	<b>100.0%</b>	<b>16,391</b>	<b>100.0%</b>

- Over half (58.2% where speed limit was known) of total teenage driver crashes occurred where the speed limit was 30-45 MPH.
- Fatal teenage driver crashes were more likely to occur where there were higher speed limits. Over one-half (53.2%) of fatal teenage driver crashes occurred where the speed limit was 50 MPH or higher.
- Teenage driver crashes where the speed limit was 50 MPH or higher were 3.8 times more likely to be fatal.
- Studies show that a 5% increase in average speed leads to a 10% increase in injury crashes and a 20% increase in fatal crashes. A 5% decrease in speed leads to a 10% decrease in injury crashes and a 20% decrease in fatal crashes.

### Travel Speed of Teenage Driver Vehicles in Crashes (Utah 2007)

Teenage Driver Vehicles								
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
Travel Speed	#	%	#	%	#	%	#	%
Stopped Vehicle	776	7.0%	410	7.8%	1	2.1%	1,187	7.2%
1-9 MPH	1,039	9.4%	376	7.1%	0	0.0%	1,415	8.6%
10-19 MPH	1,568	14.2%	635	12.0%	0	0.0%	2,203	13.4%
20-29 MPH	1,413	12.8%	544	10.3%	1	2.1%	1,958	11.9%
30-39 MPH	1,397	12.6%	750	14.2%	2	4.3%	2,149	13.1%
40-49 MPH	888	8.0%	564	10.7%	7	14.9%	1,459	8.9%
50-59 MPH	444	4.0%	270	5.1%	7	14.9%	721	4.4%
60-69 MPH	588	5.3%	276	5.2%	9	19.1%	873	5.3%
70-79 MPH	249	2.2%	133	2.5%	7	14.9%	389	2.4%
80-89 MPH	28	0.3%	19	0.4%	4	8.5%	51	0.3%
90+ MPH	8	0.1%	12	0.2%	2	4.3%	22	0.1%
Unknown	2,671	24.1%	1,286	24.4%	7	14.9%	3,964	24.2%
<b>Total</b>	<b>11,069</b>	<b>100.0%</b>	<b>5,275</b>	<b>100.0%</b>	<b>47</b>	<b>100.0%</b>	<b>16,391</b>	<b>100.0%</b>

- Half (50.8% where travel speed was known) of teenage driver vehicles in total crashes were traveling 10-39 MPH.
- Teenage driver vehicles in fatal crashes were more likely to be traveling at higher speeds. Nearly three-fourths (72.5% where travel speed was known) of teenage driver vehicles in fatal crashes were traveling 50 MPH or higher.
- Compared to drivers of all ages, crashes involving teenage drivers were more likely to occur at lower speeds.
- Crashes involving teenage driver vehicles traveling 50 MPH or higher were 13 times more likely to be fatal.
- The higher the speed the greater the amount of energy that must be absorbed in a crash, hence there is more likelihood of serious injury.



## Crash Conditions

### Teenage Driver Crash Violations (Utah 2007)

Teenage Drivers								
Violations	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Following Too Close	423	28.2%	160	25.2%	0	0.0%	583	27.3%
Improper Lane Change/Travel	406	27.0%	154	24.3%	0	0.0%	560	26.2%
Speed	154	10.3%	54	8.5%	1	25.0%	209	9.8%
Improper Turn	75	5.0%	45	7.1%	0	0.0%	120	5.6%
Negligent Collision	64	4.3%	51	8.0%	0	0.0%	115	5.4%
Improper Lookout	68	4.5%	21	3.3%	0	0.0%	89	4.2%
License Violation	63	4.2%	26	4.1%	0	0.0%	89	4.2%
Insurance Violation	56	3.7%	22	3.5%	0	0.0%	78	3.6%
Improper Start or Stop	24	1.6%	9	1.4%	0	0.0%	33	1.5%
Failure to Stop at Stop Sign	18	1.2%	14	2.2%	0	0.0%	32	1.5%
Failure to Yield Right of Way	21	1.4%	8	1.3%	0	0.0%	29	1.4%
Hit and Run	22	1.5%	3	0.5%	0	0.0%	25	1.2%
Failure to Obey Traffic Control Device	11	0.7%	10	1.6%	0	0.0%	21	1.0%
Driving Under the Influence	9	0.6%	10	1.6%	1	25.0%	20	0.9%
Failure to Stop at Red Light	10	0.7%	9	1.4%	0	0.0%	19	0.9%
Registration Violation	16	1.1%	3	0.5%	0	0.0%	19	0.9%
Equipment Violation	13	0.9%	5	0.8%	0	0.0%	18	0.8%
Wrong Side of Road	8	0.5%	6	0.9%	0	0.0%	14	0.7%
Careless Driving	9	0.6%	3	0.5%	0	0.0%	12	0.6%
Improper Passing	8	0.5%	4	0.6%	0	0.0%	12	0.6%
Seatbelt/Child Restraint	3	0.2%	9	1.4%	0	0.0%	12	0.6%
Alcohol/Drug Violation, Other than DUI	6	0.4%	3	0.5%	0	0.0%	9	0.4%
Reckless Driving	4	0.3%	4	0.6%	1	25.0%	9	0.4%
Improper Backing	8	0.5%	0	0.0%	0	0.0%	8	0.4%
Vehicle Homicide	0	0.0%	0	0.0%	1	25.0%	1	0.0%
Other Moving Violation	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Other Non-Moving Violation	2	0.1%	1	0.2%	0	0.0%	3	0.1%
<b>Total</b>	<b>1,501</b>	<b>100.0%</b>	<b>634</b>	<b>100.0%</b>	<b>4</b>	<b>100.0%</b>	<b>2,139</b>	<b>100.0%</b>

- There were 2,139 citations issued to teenage drivers at the scene of the crash. The most common violations were for following too close (27.3%), improper lane change/travel (26.2%), and speed (9.8%).

## Crash Conditions

### Contributing Factors of Teenage Driver Crashes (Utah 2007)

Teenage Drivers/Vehicles								
Contributing Factors	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Followed Too Closely	2,035	17.5%	919	15.3%	0	0.0%	2,954	16.7%
Failed to Yield Right of Way	1,525	13.1%	903	15.0%	2	2.9%	2,430	13.7%
Speed Too Fast	1,271	10.9%	535	8.9%	20	29.4%	1,826	10.3%
Driver Distraction	919	7.9%	598	9.9%	1	1.5%	1,518	8.6%
Other Improper Driving	785	6.7%	431	7.2%	0	0.0%	1,216	6.9%
Failed to Keep in Proper Lane	635	5.5%	308	5.1%	4	5.9%	947	5.3%
Improper Turn	470	4.0%	225	3.7%	0	0.0%	695	3.9%
Vision Obscured by Weather Condition	511	4.4%	148	2.5%	0	0.0%	659	3.7%
Improper Lane Change	421	3.6%	109	1.8%	0	0.0%	530	3.0%
Disregard Traffic Signal/Sign	272	2.3%	246	4.1%	1	1.5%	519	2.9%
Ran Off Road	295	2.5%	196	3.3%	3	4.4%	494	2.8%
Overcorrected	286	2.5%	162	2.7%	1	1.5%	449	2.5%
Swerved or Evasive Action	254	2.2%	137	2.3%	2	2.9%	393	2.2%
Asleep/Fatigue	163	1.4%	128	2.1%	8	11.8%	299	1.7%
Vehicle Other Defective Condition	161	1.4%	92	1.5%	0	0.0%	253	1.4%
Vision Obscured by Moving Vehicle	137	1.2%	90	1.5%	0	0.0%	227	1.3%
Improper Backing	204	1.8%	21	0.3%	0	0.0%	225	1.3%
Driver Emotionally Upset	104	0.9%	96	1.6%	0	0.0%	200	1.1%
Driving Under the Influence	105	0.9%	87	1.4%	5	7.4%	197	1.1%
Vehicle Brakes	115	1.0%	69	1.1%	0	0.0%	184	1.0%
Improper Parking/Stopping	124	1.1%	57	0.9%	0	0.0%	181	1.0%
Hit and Run	143	1.2%	36	0.6%	0	0.0%	179	1.0%
Reckless/Aggressive Driving	85	0.7%	60	1.0%	14	20.6%	159	0.9%
Other Driver Condition	87	0.7%	63	1.0%	0	0.0%	150	0.8%
Improper Passing	82	0.7%	22	0.4%	0	0.0%	104	0.6%
Vehicle Tires	74	0.6%	28	0.5%	2	2.9%	104	0.6%
Vision Obscured by Parked Vehicle	77	0.7%	27	0.4%	0	0.0%	104	0.6%
Vision Obscured by Glare	57	0.5%	46	0.8%	0	0.0%	103	0.6%
Vision Obscured by Other	53	0.5%	39	0.6%	0	0.0%	92	0.5%
Wrong Side/Wrong Way	49	0.4%	32	0.5%	4	5.9%	85	0.5%
Vision Obscured by Building, Sign, etc.	33	0.3%	32	0.5%	0	0.0%	65	0.4%
Disregard Road Markings	25	0.2%	19	0.3%	1	1.5%	45	0.3%
Driver Illness	20	0.2%	20	0.3%	0	0.0%	40	0.2%
Windshield or Other Window Obscured	25	0.2%	14	0.2%	0	0.0%	39	0.2%
Vision Obscured by Vegetation	18	0.2%	8	0.1%	0	0.0%	26	0.1%
Improper Signal	16	0.1%	8	0.1%	0	0.0%	24	0.1%
<b>Total</b>	<b>11,636</b>	<b>100.0%</b>	<b>6,011</b>	<b>100.0%</b>	<b>68</b>	<b>100.0%</b>	<b>17,715</b>	<b>100.0%</b>

- Some form of poor driver performance is present in the majority of crashes. The leading contributing factors for all teenage driver crashes were followed too closely (16.7%), failed to yield right of way (13.7%), and speed too fast (10.3%).
- The leading contributing factors in fatal teenage driver crashes were speed too fast (29.4%) and reckless/aggressive driving (20.6%).
- Compared to drivers of all ages, teenage drivers were more likely to have a contributing factor of followed too closely, failure to yield right of way, speed too fast, and driver distraction.

# Speed

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## Section 5: Speed

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*Speed is a leading unsafe driving behavior that contributes to crashes.*

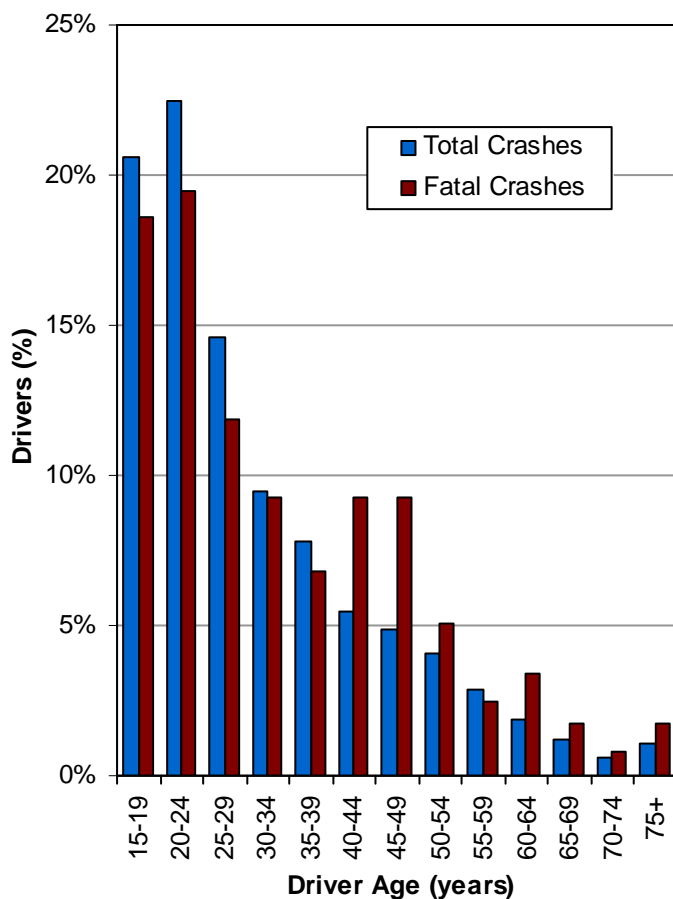
# Speed



### Did you know in 2007:

- 11,411 speed-related crashes occurred in Utah which resulted in 5,686 injured persons and 134 deaths.
- Speed was a factor in 43% of fatal crashes in 2007.
- Speed-related crashes were 3.4 times more likely to be fatal than other motor vehicle crashes.

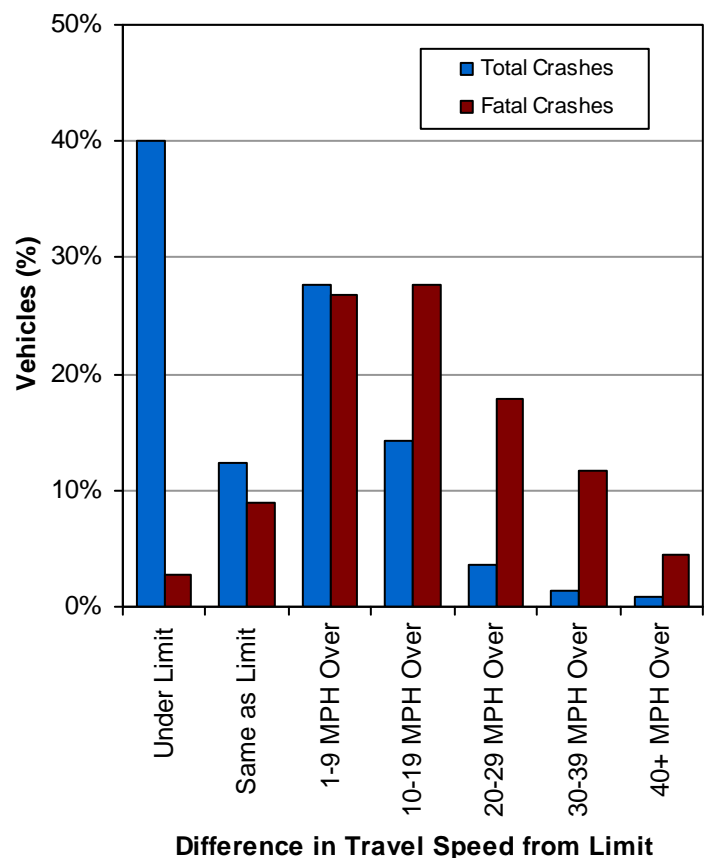
**Age of Drivers in Speed-Related Crashes (Utah 2007)**



- Drivers aged 15-24 years had the highest percentage of total speed-related crashes and fatal crashes.



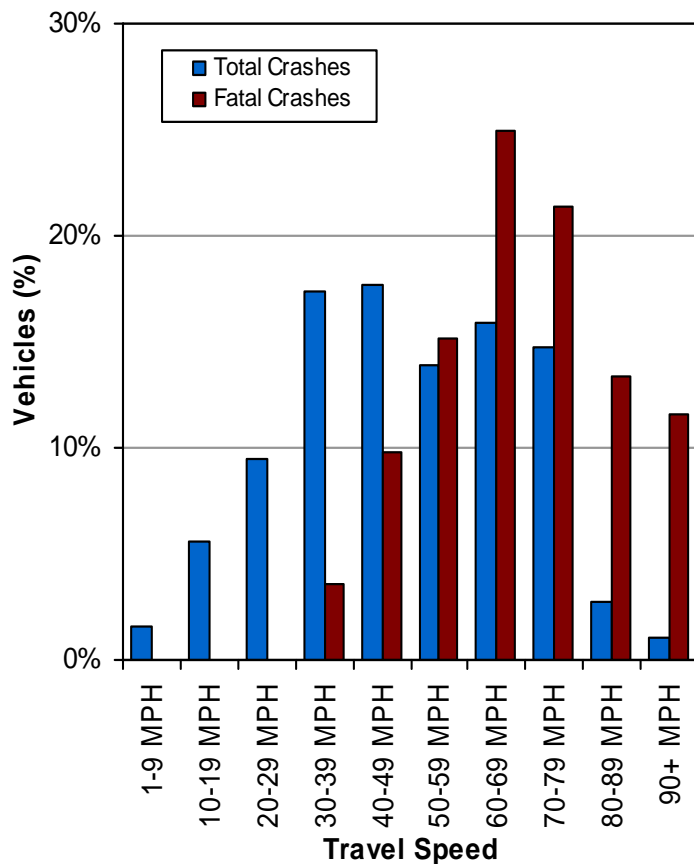
**Speed-Related Crashes by Difference in Travel Speed From Speed Limit (Utah 2007)**



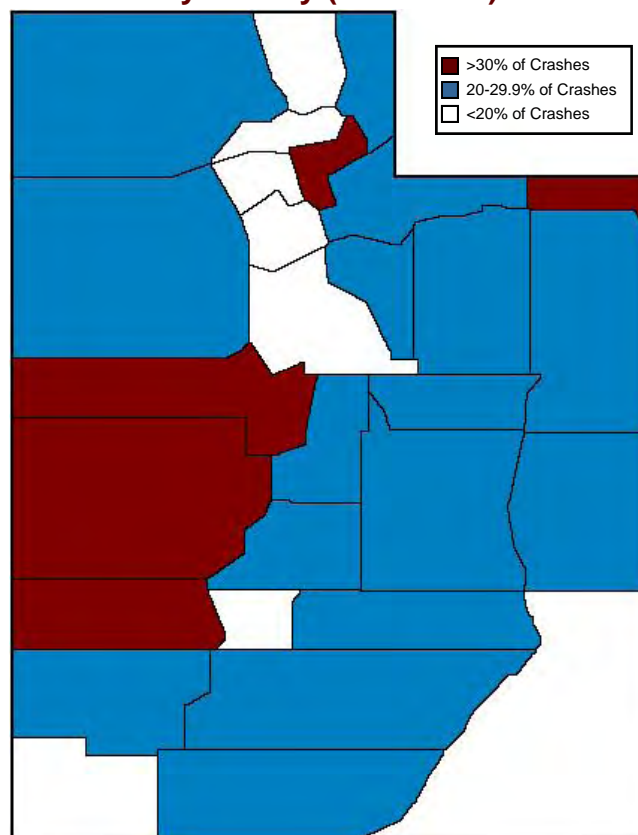
- Speed-related vehicles in fatal crashes were more likely to be exceeding the posted speed limit by greater amounts.
- Drivers become increased risks to themselves and other people on the highway due to higher speeds.

## Speed-Related Crashes by Travel Speed (Utah 2007)

# Speed



## Percent of Crashes Speed-Related by County (Utah 2007)



- Speed-related vehicles in fatal crashes were more likely to be traveling at higher speeds.
- The higher the speed the greater the amount of energy that must be absorbed in a crash, hence there is more likelihood of serious injury.

- Beaver, Millard, Morgan, Daggett, and Juab Counties had the highest percent of crashes that were speed-related.

Speeding is one of the most common factors contributing to traffic crashes.

Speeding is dangerous because it:

- Magnifies drivers' errors;
- Extends the distance necessary to stop a vehicle;
- Increases the distance a vehicle travels while the driver reacts to a situation;
- Reduces a driver's ability to steer safely around curves or objects in the roadway;
- Decreases the effectiveness of vehicle design features, such as air bags and seatbelts;
- Reduces the stability of the vehicle structure;
- Increases the number of crashes;
- Increases the severity of crashes. For every 10 MPH over 50 MPH, the risk of death in a crash is doubled.

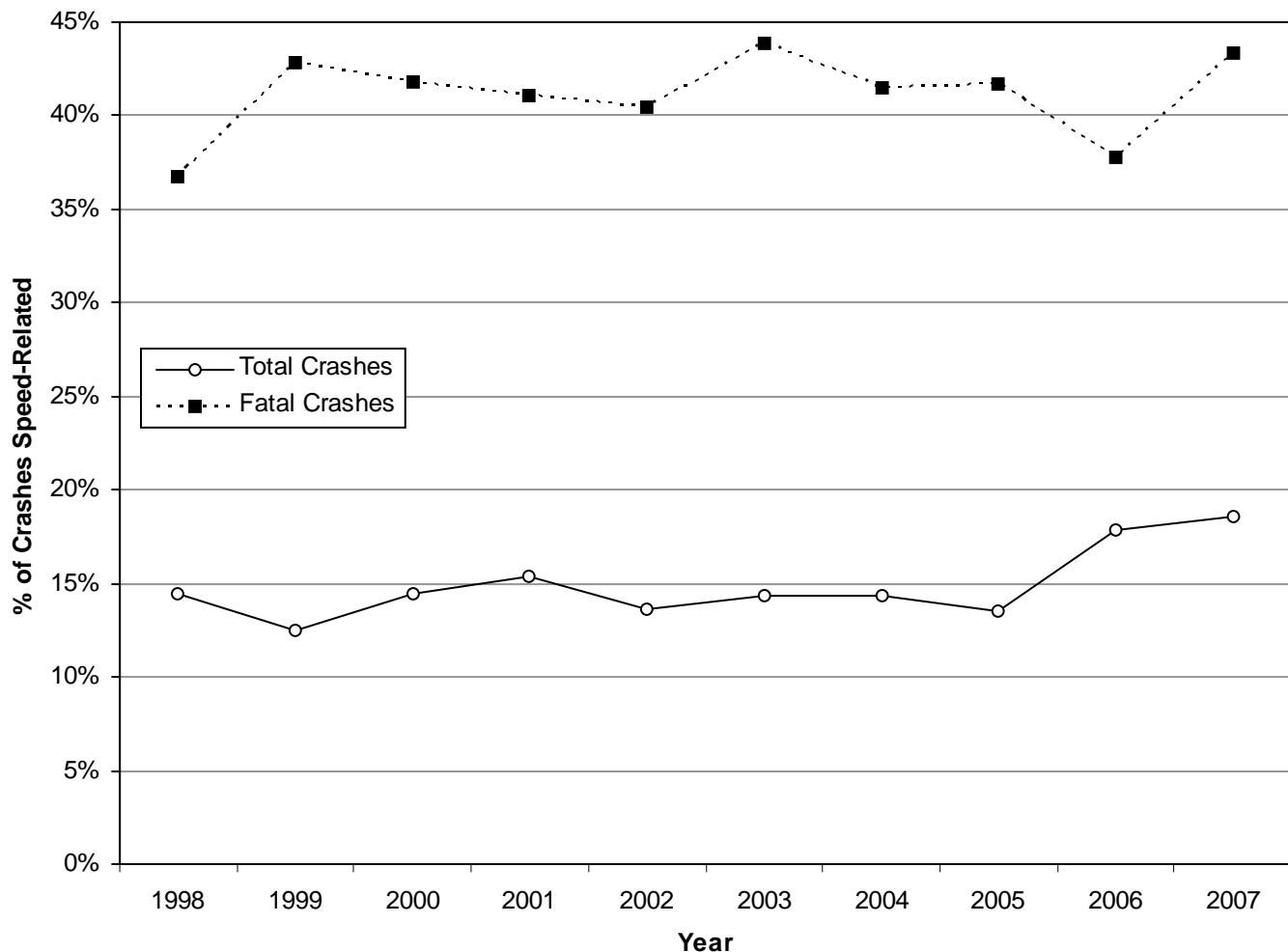


Drivers need to remember there is a reason for speed limits. The roadways are a dangerous place and the speed limits are designed to protect everyone—drivers, passengers, and pedestrians. The posted speed limit is the law. Slow down and obey speed limits.



## Speed-Related Crashes (Utah 1998-2007)

Speed-Related Crashes												
	Property Damage Only			Injury			Fatal			Total		
	All	Speed	Speed	All	Speed	Speed	All	Speed	Speed	All	Speed	Speed
Year	#	#	%	#	#	%	#	#	%	#	#	%
1998	34,337	4,717	13.7%	19,427	2,981	15.3%	308	113	36.7%	54,072	7,811	14.4%
1999	32,971	3,836	11.6%	19,513	2,652	13.6%	318	136	42.8%	52,802	6,624	12.5%
2000	33,269	4,687	14.1%	19,564	2,934	15.0%	318	133	41.8%	53,151	7,754	14.6%
2001	33,113	5,037	15.2%	19,332	3,003	15.5%	258	106	41.1%	52,703	8,146	15.5%
2002	33,542	4,379	13.1%	19,552	2,770	14.2%	274	111	40.5%	53,368	7,260	13.6%
2003	31,842	4,498	14.1%	18,285	2,604	14.2%	262	115	43.9%	50,389	7,217	14.3%
2004	34,222	4,836	14.1%	19,423	2,764	14.2%	260	108	41.5%	53,905	7,708	14.3%
2005	35,158	4,676	13.3%	19,545	2,653	13.6%	235	98	41.7%	54,938	7,427	13.5%
2006	37,674	6,450	17.1%	18,264	3,539	19.4%	249	94	37.8%	56,187	10,083	17.9%
2007	42,368	7,612	18.0%	18,619	3,687	19.8%	258	112	43.4%	61,245	11,411	18.6%
<b>Total</b>	<b>348,496</b>	<b>50,728</b>	<b>14.6%</b>	<b>191,524</b>	<b>29,587</b>	<b>15.4%</b>	<b>2,740</b>	<b>1,126</b>	<b>41.1%</b>	<b>542,760</b>	<b>81,441</b>	<b>15.0%</b>



- Speed-related crashes are a concern because of the increased potential for severe injury and death.
- The 10-year trend shows that 15.0% of total crashes and 41.1% of fatal crashes in Utah are speed-related.
- Speed was a factor in 51.9% of fatal crashes in 2007 where speed was known.

## Counties

### Speed-Related Crashes by County (Utah 2007)

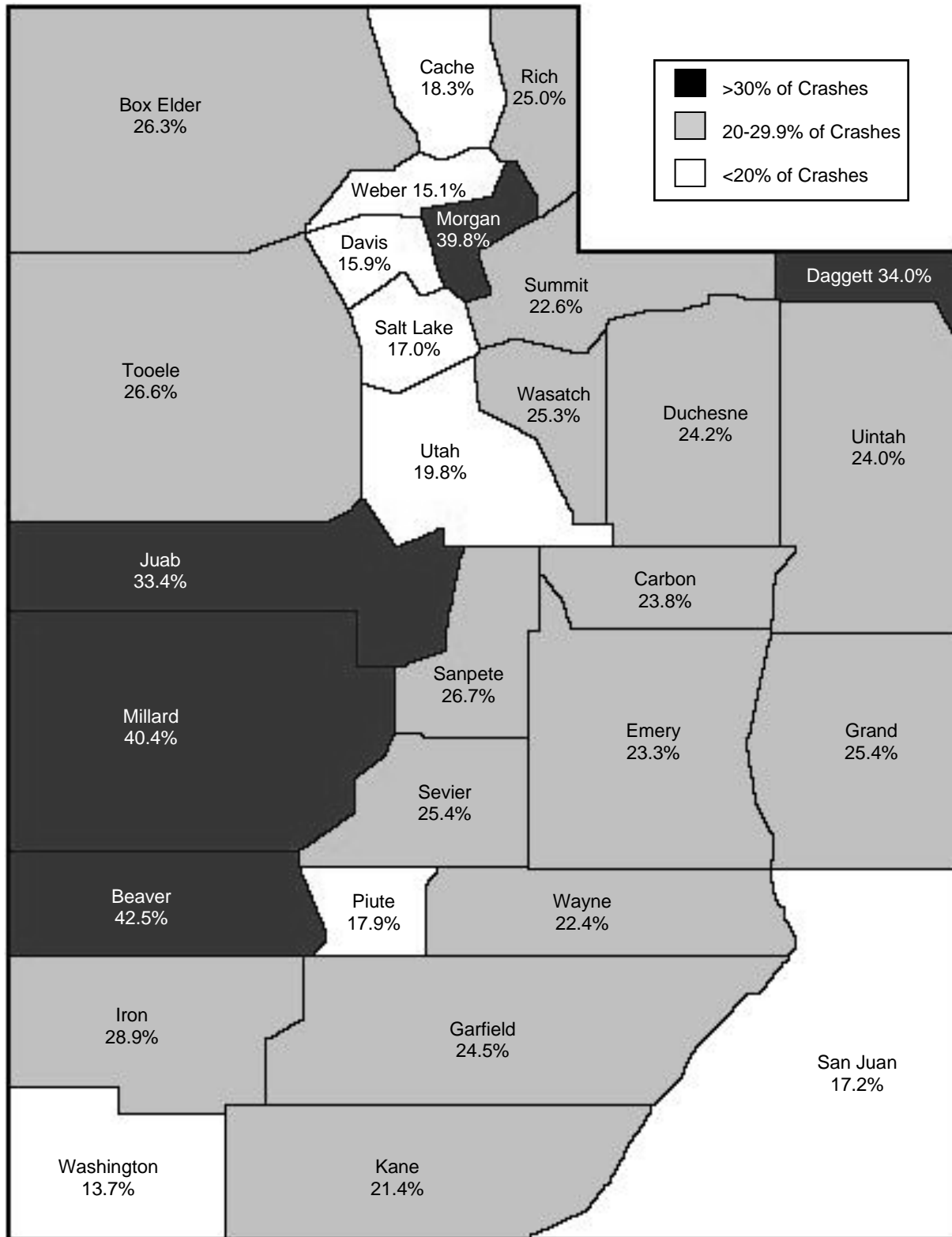
Speed-Related Crashes								
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
		Rate		Rate		Rate		Rate
		per 100		per 100		per 100		per 100
		Million		Million		Million		Million
County	#	VMT	#	VMT	#	VMT	#	VMT
Wasatch	117	38.3	60	19.6	6	1.96	183	59.9
Uintah	131	37.2	73	20.8	3	0.85	207	58.9
Salt Lake	3,213	36.5	1,335	15.2	21	0.24	4,569	51.9
Daggett	14	42.5	2	6.1	1	3.04	17	51.6
Duchesne	76	32.3	42	17.9	3	1.28	121	51.5
Utah	1,214	32.5	659	17.6	11	0.29	1,884	50.4
Morgan	51	35.7	17	11.9	0	0.00	68	47.6
Weber	479	29.3	243	14.9	13	0.80	735	45.0
Sanpete	56	23.9	48	20.5	1	0.43	105	44.8
Rich	14	28.1	7	14.0	0	0.00	21	42.1
Garfield	27	22.5	21	17.5	2	1.67	50	41.7
Cache	275	28.0	132	13.5	0	0.00	407	41.5
Millard	102	22.2	67	14.6	5	1.09	174	37.8
Carbon	63	21.7	42	14.5	4	1.38	109	37.6
Iron	169	24.0	88	12.5	3	0.43	260	36.9
Beaver	59	23.0	30	11.7	1	0.39	90	35.1
Davis	593	23.5	262	10.4	4	0.16	859	34.1
Sevier	93	22.1	41	9.8	2	0.48	136	32.4
Wayne	11	27.4	2	5.0	0	0.00	13	32.4
Summit	161	20.7	79	10.2	5	0.64	245	31.5
Kane	29	19.1	16	10.6	2	1.32	47	31.0
Juab	84	20.2	34	8.2	5	1.20	123	29.6
Box Elder	159	17.4	79	8.6	3	0.33	241	26.3
Tooele	147	16.1	80	8.8	4	0.44	231	25.3
Washington	168	12.2	162	11.7	4	0.29	334	24.2
Piute	5	16.0	2	6.4	0	0.00	7	22.4
San Juan	37	13.2	16	5.7	4	1.43	57	20.4
Grand	26	9.1	30	10.5	2	0.70	58	20.2
Emery	39	10.8	18	5.0	3	0.83	60	16.7
<b>Statewide</b>	<b>7,612</b>	<b>28.4</b>	<b>3,687</b>	<b>13.7</b>	<b>112</b>	<b>0.42</b>	<b>11,411</b>	<b>42.5</b>

- Wasatch (59.9), Uintah (58.9), and Salt Lake (51.9) counties had the highest rates of speed-related total crashes per 100 million vehicle miles traveled.
- Daggett (3.04), Wasatch (1.96), and Garfield (1.67) counties had the highest rates of fatal speed-related crashes per 100 million vehicle miles traveled.
- Emery (16.7), Grand (20.2), and San Juan (20.4) counties had the lowest rates of speed-related total crashes per 100 million vehicle miles traveled.



## Counties

### Percent of Crashes Speed-Related by County (Utah 2007)

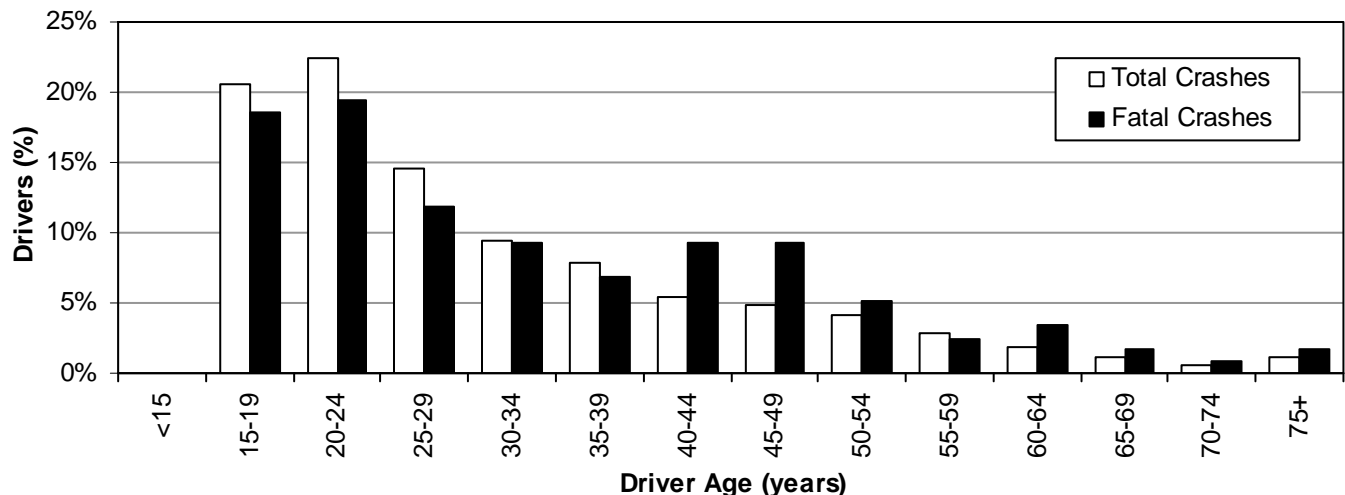


- Beaver (42.5%), Millard (40.4%), and Morgan (39.8%) counties had the highest percent of crashes that were speed-related.

## Drivers

### Age of Drivers in Speed-Related Crashes (Utah 2007)

Speed-Related Drivers								
Age	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
<15	1	0.0%	1	0.0%	0	0.0%	2	0.0%
15-19	1,642	20.6%	806	20.7%	22	18.6%	2,470	20.6%
20-24	1,814	22.7%	859	22.1%	23	19.5%	2,696	22.5%
25-29	1,159	14.5%	581	14.9%	14	11.9%	1,754	14.6%
30-34	745	9.3%	377	9.7%	11	9.3%	1,133	9.5%
35-39	628	7.9%	301	7.7%	8	6.8%	937	7.8%
40-44	444	5.6%	208	5.3%	11	9.3%	663	5.5%
45-49	397	5.0%	179	4.6%	11	9.3%	587	4.9%
50-54	327	4.1%	161	4.1%	6	5.1%	494	4.1%
55-59	226	2.8%	121	3.1%	3	2.5%	350	2.9%
60-64	147	1.8%	76	2.0%	4	3.4%	227	1.9%
65-69	83	1.0%	58	1.5%	2	1.7%	143	1.2%
70-74	49	0.6%	25	0.6%	1	0.8%	75	0.6%
75+	80	1.0%	51	1.3%	2	1.7%	133	1.1%
Unknown	236	3.0%	86	2.2%	0	0.0%	322	2.7%
<b>Total</b>	<b>7,978</b>	<b>100.0%</b>	<b>3,890</b>	<b>100.0%</b>	<b>118</b>	<b>100.0%</b>	<b>11,986</b>	<b>100.0%</b>



- Drivers aged 15-24 years had the highest percentage of total speed-related crashes and fatal crashes.

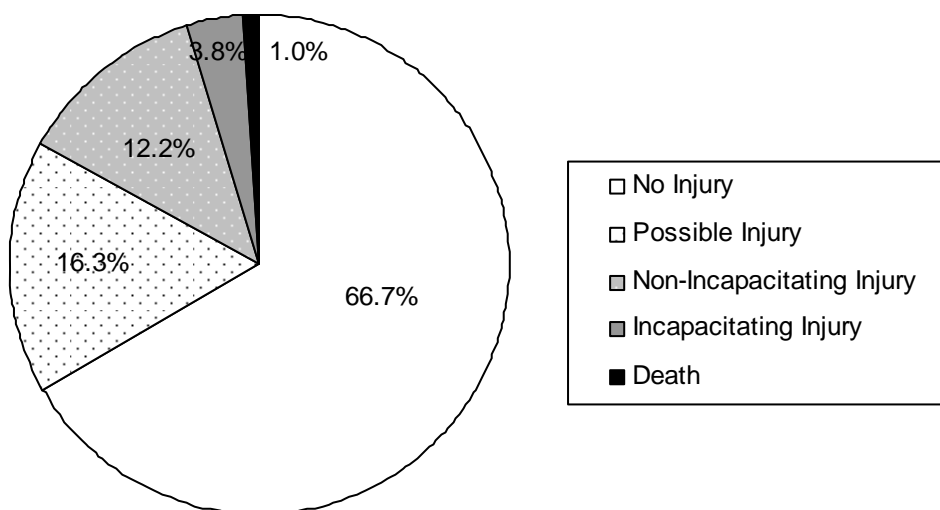
### Gender of Drivers in Speed-Related Crashes (Utah 2007)

Speed-Related Drivers								
Gender	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Male	5,121	64.2%	2,504	64.4%	99	83.9%	7,724	64.4%
Female	2,662	33.4%	1,335	34.3%	19	16.1%	4,016	33.5%
Unknown	195	2.4%	51	1.3%	0	0.0%	246	2.1%
<b>Total</b>	<b>7,978</b>	<b>100.0%</b>	<b>3,890</b>	<b>100.0%</b>	<b>118</b>	<b>100.0%</b>	<b>11,986</b>	<b>100.0%</b>

- Male drivers represented 64.4% of the drivers in speed-related total crashes and 83.9% of the drivers in speed-related fatal crashes.

## Crash Conditions

### Speed-Related Crash Severity (Utah 2007)



- The percentage of speed-related crashes that resulted in a non-fatal injury (32.3%) was higher than the percentage of all motor vehicle crashes that resulted in a non-fatal injury (30.4%).
- In addition, a higher percentage of speed-related crashes were fatal (1.0%) compared to all motor vehicle crashes (0.4%).
- Speed-related crashes were 3.4 times more likely to be fatal than other motor vehicle crashes.

### Speed-Related Crashes by Urban/Rural Location (Utah 2007)

Speed-Related Crashes								
Location	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
		Rate per		Rate per		Rate per		Rate per
	#	100 Million	#	100 Million	#	100 Million	#	100 Million
		VMT		VMT		VMT		VMT
Urban	5,499	33.0	2,499	15.0	49	0.29	8,047	48.2
Rural	2,113	20.8	1,188	11.7	63	0.62	3,364	33.2
<b>Total</b>	<b>7,612</b>	<b>28.4</b>	<b>3,687</b>	<b>13.7</b>	<b>112</b>	<b>0.42</b>	<b>11,411</b>	<b>42.5</b>

- While urban areas had a higher rate of total speed-related crashes per vehicle mile traveled, rural areas had a higher rate of fatal speed-related crashes per vehicle mile traveled.
- Speed-related crashes occurring in rural areas were 3.1 times more likely to result in a death than speed-related crashes in urban areas.

## Crash Conditions

### Speed-Related Crashes by Month (Utah 2007)

Speed-Related Crashes									
		PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	Days in		Rate		Rate		Rate		Rate
Month	Month	#	per Day	#	per Day	#	per Day	#	per Day
January	31	1,202	38.8	415	13.4	2	0.06	1,619	52.2
February	28	770	27.5	307	11.0	3	0.11	1,080	38.6
March	31	496	16.0	279	9.0	10	0.32	785	25.3
April	30	355	11.8	229	7.6	15	0.50	599	20.0
May	31	387	12.5	278	9.0	5	0.16	670	21.6
June	30	370	12.3	261	8.7	10	0.33	641	21.4
July	31	367	11.8	298	9.6	12	0.39	677	21.8
August	31	399	12.9	272	8.8	13	0.42	684	22.1
September	30	478	15.9	291	9.7	13	0.43	782	26.1
October	31	529	17.1	282	9.1	14	0.45	825	26.6
November	30	539	18.0	262	8.7	8	0.27	809	27.0
December	31	1,720	55.5	513	16.5	7	0.23	2,240	72.3
<b>Total</b>	<b>365</b>	<b>7,612</b>	<b>20.9</b>	<b>3,687</b>	<b>10.1</b>	<b>112</b>	<b>0.31</b>	<b>11,411</b>	<b>31.3</b>

- Overall, December (72.3), January (52.2), and February (38.6) had the highest rates of speed-related crashes per day.
- April (0.50) and October (0.45) had the highest rates per day of fatal speed-related crashes.

### Speed-Related Crashes by Day of Week (Utah 2007)

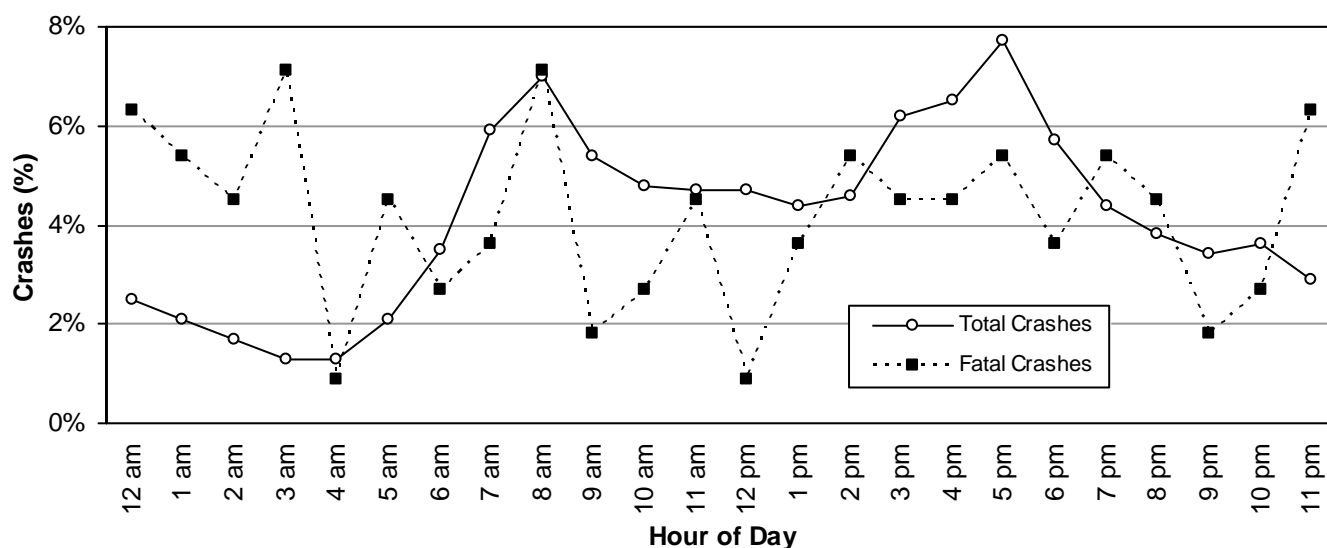
Speed-Related Crashes								
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
Day of Week	#	%	#	%	#	%	#	%
Sunday	718	9.4%	430	11.7%	27	24.1%	1,175	10.3%
Monday	1,016	13.3%	492	13.3%	10	8.9%	1,518	13.3%
Tuesday	868	11.4%	487	13.2%	14	12.5%	1,369	12.0%
Wednesday	962	12.6%	486	13.2%	15	13.4%	1,463	12.8%
Thursday	1,423	18.7%	589	16.0%	10	8.9%	2,022	17.7%
Friday	1,388	18.2%	612	16.6%	7	6.3%	2,007	17.6%
Saturday	1,237	16.3%	591	16.0%	29	25.9%	1,857	16.3%
<b>Total</b>	<b>7,612</b>	<b>100.0%</b>	<b>3,687</b>	<b>100.0%</b>	<b>112</b>	<b>100.0%</b>	<b>11,411</b>	<b>100.0%</b>

- The highest percentage of speed-related total crashes occurred on Thursday (17.7%) while the highest percentage of fatal crashes occurred on Saturday (25.9%).
- The lowest percentage of speed-related total crashes (10.3%) occurred on Sunday while the lowest percentage of fatal crashes (6.3%) occurred on Friday.
- One-half of fatal speed-related crashes occurred on Saturday and Sunday.

## Crash Conditions

### Speed-Related Crashes by Hour (Utah 2007)

Speed-Related Crashes								
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
Hour	#	%	#	%	#	%	#	%
Midnight	163	2.1%	111	3.0%	7	6.3%	281	2.5%
1 a.m.	150	2.0%	78	2.1%	6	5.4%	234	2.1%
2 a.m.	124	1.6%	68	1.8%	5	4.5%	197	1.7%
3 a.m.	99	1.3%	46	1.2%	8	7.2%	153	1.3%
4 a.m.	98	1.3%	44	1.2%	1	0.9%	143	1.3%
5 a.m.	170	2.2%	67	1.8%	5	4.5%	242	2.1%
6 a.m.	284	3.7%	113	3.1%	3	2.7%	400	3.5%
7 a.m.	493	6.5%	175	4.7%	4	3.6%	672	5.9%
8 a.m.	572	7.5%	215	5.8%	8	7.2%	795	7.0%
9 a.m.	463	6.1%	150	4.1%	2	1.8%	615	5.4%
10 a.m.	381	5.0%	169	4.6%	3	2.7%	553	4.8%
11 a.m.	360	4.7%	168	4.6%	5	4.5%	533	4.7%
Noon	356	4.7%	177	4.8%	1	0.9%	534	4.7%
1 p.m.	338	4.4%	161	4.4%	4	3.6%	503	4.4%
2 p.m.	334	4.4%	181	4.9%	6	5.4%	521	4.6%
3 p.m.	439	5.8%	268	7.3%	5	4.5%	712	6.2%
4 p.m.	462	6.1%	271	7.4%	5	4.5%	738	6.5%
5 p.m.	612	8.0%	256	6.9%	6	5.4%	874	7.7%
6 p.m.	424	5.6%	217	5.9%	4	3.6%	645	5.7%
7 p.m.	300	3.9%	194	5.3%	6	5.4%	500	4.4%
8 p.m.	278	3.7%	154	4.2%	5	4.5%	437	3.8%
9 p.m.	244	3.2%	146	4.0%	2	1.8%	392	3.4%
10 p.m.	261	3.4%	146	4.0%	3	2.7%	410	3.6%
11 p.m.	207	2.7%	112	3.0%	7	6.3%	326	2.9%
<b>Total</b>	<b>7,612</b>	<b>100.0%</b>	<b>3,687</b>	<b>100.0%</b>	<b>111</b>	<b>100.0%</b>	<b>11,410</b>	<b>100.0%</b>



- Total speed-related crashes peaked in the late afternoon/evening (3:00 p.m. to 6:59 p.m.), with another peak in the morning (7:00 a.m. to 9:59 a.m.).
- Fatal speed-related crashes varied by hour and were highest during the 3:00 a.m. and 8:00 a.m. hours.

## Crash Conditions

### Speed-Related Crashes by Vehicle Type (Utah 2007)

Speed-Related Vehicles								
Vehicle Type	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Passenger Car	4,474	56.1%	1,962	50.4%	41	34.7%	<b>6,477</b>	<b>54.0%</b>
Pickup Truck	1,439	18.0%	691	17.8%	31	26.3%	<b>2,161</b>	<b>18.0%</b>
SUV	1,375	17.2%	684	17.6%	20	16.9%	<b>2,079</b>	<b>17.3%</b>
Van	316	4.0%	188	4.8%	5	4.2%	<b>509</b>	<b>4.2%</b>
Semi/Large Truck	270	3.4%	103	2.6%	6	5.1%	<b>379</b>	<b>3.2%</b>
Motorcycle	27	0.3%	206	5.3%	14	11.9%	<b>247</b>	<b>2.1%</b>
Bus	5	0.1%	4	0.1%	0	0.0%	<b>9</b>	<b>0.1%</b>
Other	8	0.1%	38	1.0%	1	0.8%	<b>47</b>	<b>0.4%</b>
Unknown	63	0.8%	14	0.4%	0	0.0%	<b>77</b>	<b>0.6%</b>
<b>Total</b>	<b>7,977</b>	<b>100.0%</b>	<b>3,890</b>	<b>100.0%</b>	<b>118</b>	<b>100.0%</b>	<b>11,985</b>	<b>100.0%</b>

- For total speed-related crashes, passenger car (54.0%) and pickup truck (18.0%) were the leading vehicle types.
- For fatal speed-related crashes, passenger car (34.7%) and pickup truck (26.3%) were the leading vehicle types.

### Speed-Related Crashes by Speed Limit (Utah 2007)

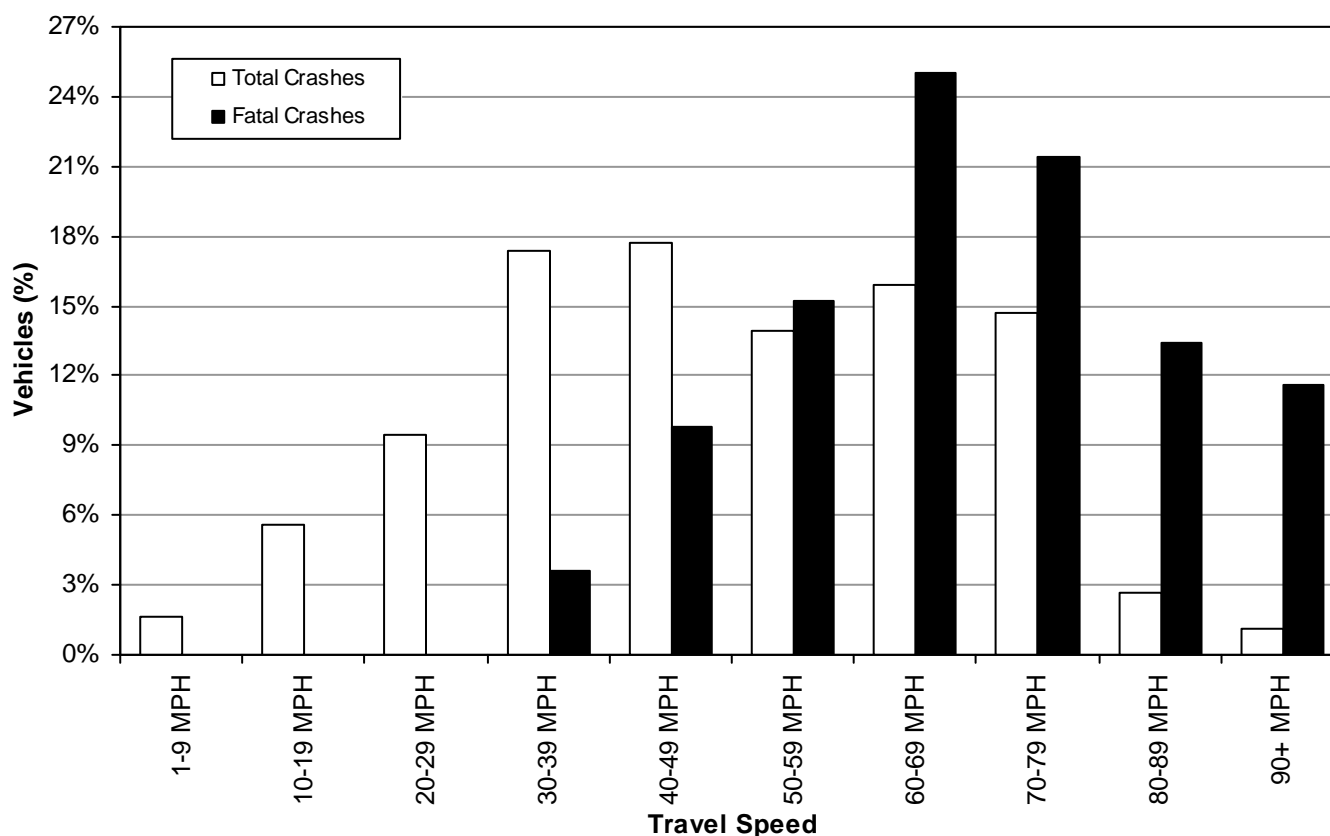
Speed-Related Vehicles								
Speed Limit	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
5-15 MPH	67	0.8%	31	0.8%	0	0.0%	<b>98</b>	<b>0.8%</b>
20-25 MPH	1,094	13.7%	521	13.4%	7	5.9%	<b>1,622</b>	<b>13.5%</b>
30-35 MPH	1,073	13.5%	734	18.9%	13	11.0%	<b>1,820</b>	<b>15.2%</b>
40-45 MPH	977	12.2%	617	15.9%	33	28.0%	<b>1,627</b>	<b>13.6%</b>
50-55 MPH	725	9.1%	363	9.3%	15	12.7%	<b>1,103</b>	<b>9.2%</b>
60-65 MPH	2,915	36.5%	1,099	28.3%	36	30.5%	<b>4,050</b>	<b>33.8%</b>
70-75 MPH	545	6.8%	258	6.6%	14	11.9%	<b>817</b>	<b>6.8%</b>
Unknown	581	7.3%	267	6.9%	0	0.0%	<b>848</b>	<b>7.1%</b>
<b>Total</b>	<b>7,977</b>	<b>100.0%</b>	<b>3,890</b>	<b>100.0%</b>	<b>118</b>	<b>100.0%</b>	<b>11,985</b>	<b>100.0%</b>

- Over one-third (36.4% where speed limit was known) of total speed-related crashes occurred where the speed limit was 60-65 MPH.
- Fatal speed-related crashes were more likely to occur where there were higher speed limits. Over one-half (55.1%) of fatal speed-related crashes occurred where the speed limit was 50 MPH or higher.
- When compared to all crashes, speed-related crashes were more likely to occur on roads with higher speed limits.
- Studies show that a 5% increase in average speed leads to a 10% increase in injury crashes and a 20% increase in fatal crashes. A 5% decrease in speed leads to a 10% decrease in injury crashes and a 20% decrease in fatal crashes.

## Crash Conditions

### Speed-Related Crashes by Travel Speed (Utah 2007)

Speed-Related Vehicles								
Travel Speed	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
1-9 MPH	138	1.7%	33	0.8%	0	0.0%	171	1.4%
10-19 MPH	465	5.8%	127	3.3%	0	0.0%	592	4.9%
20-29 MPH	771	9.7%	230	5.9%	0	0.0%	1,001	8.4%
30-39 MPH	1,215	15.2%	621	16.0%	4	3.4%	1,840	15.4%
40-49 MPH	1,168	14.6%	692	17.8%	11	9.3%	1,871	15.6%
50-59 MPH	957	12.0%	494	12.7%	17	14.4%	1,468	12.2%
60-69 MPH	1,122	14.1%	537	13.8%	28	23.7%	1,687	14.1%
70-79 MPH	1,004	12.6%	524	13.5%	24	20.3%	1,552	12.9%
80-89 MPH	138	1.7%	134	3.4%	15	12.7%	287	2.4%
90+ MPH	35	0.4%	68	1.7%	13	11.0%	116	1.0%
Unknown	964	12.1%	430	11.1%	6	5.1%	1,400	11.7%
<b>Total</b>	<b>7,977</b>	<b>100.0%</b>	<b>3,890</b>	<b>100.0%</b>	<b>118</b>	<b>100.0%</b>	<b>11,985</b>	<b>100.0%</b>

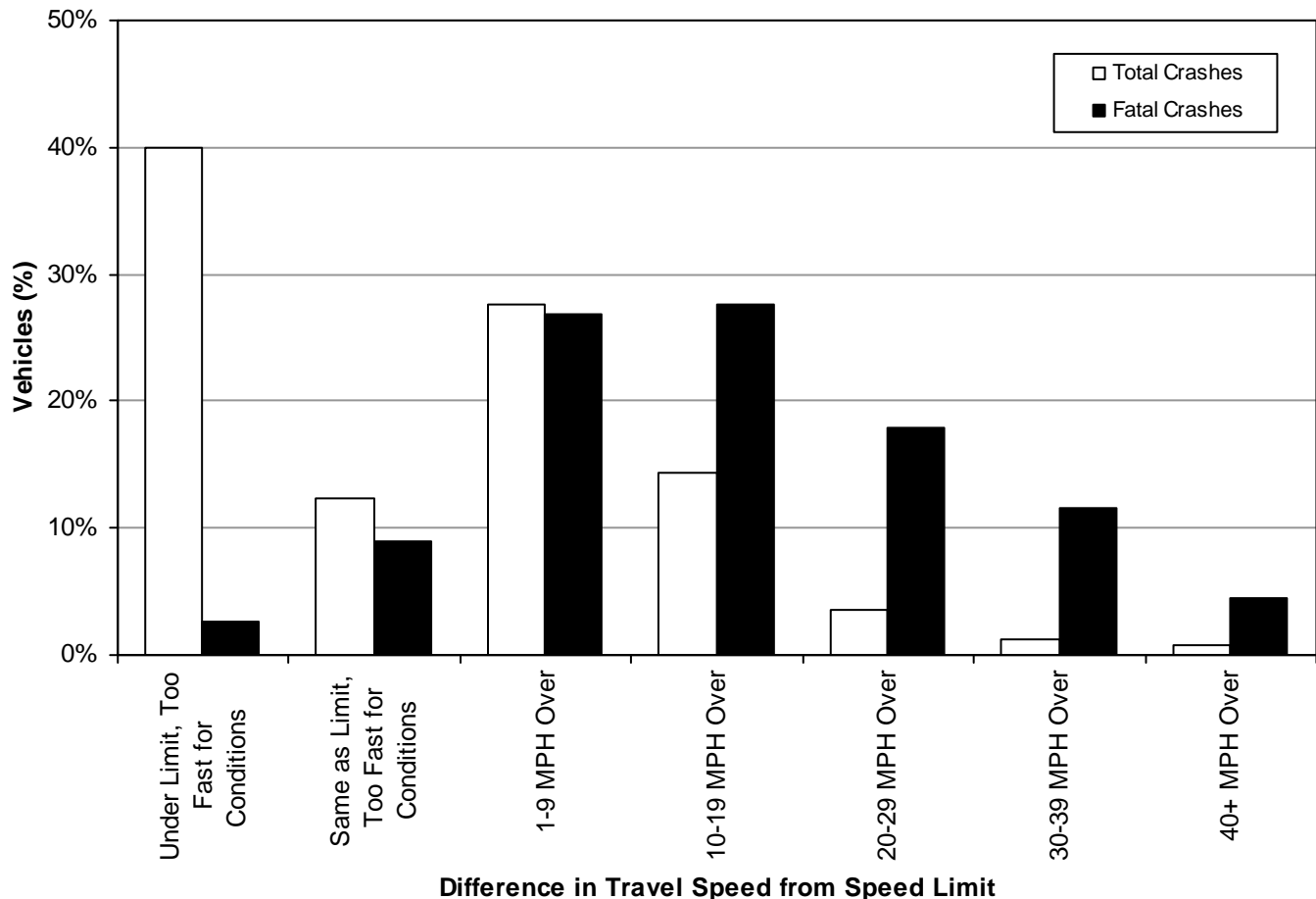


- Over one-third (35.1% where travel speed was known) of vehicles in total speed-related crashes were traveling 30-49 MPH.
- Over two-thirds (71.4% where travel speed was known) of vehicles in fatal speed-related crashes were traveling 60 MPH or higher.
- Speed-related vehicles in fatal crashes were more likely to be traveling at higher speeds. The higher the speed the greater the amount of energy that must be absorbed in a crash, hence there is more likelihood of serious injury.
- Drivers become increased risks to themselves and other people on the highway due to higher speeds.

## Crash Conditions

### Speed-Related Crashes by Difference in Travel Speed From Speed Limit (Utah 2007)

Speed-Related Vehicles								
Travel Speed vs. Speed Limit	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Under Speed Limit, Too Fast for Conditions	3,144	39.4%	1,001	25.7%	3	2.5%	<b>4,148</b>	<b>34.6%</b>
Same as Speed Limit, Too Fast for Conditions	893	11.2%	380	9.8%	10	8.5%	<b>1,283</b>	<b>10.7%</b>
1-9 MPH Over Speed Limit	1,775	22.3%	1,053	27.1%	30	25.4%	<b>2,858</b>	<b>23.8%</b>
10-19 MPH Over Speed Limit	808	10.1%	646	16.6%	31	26.3%	<b>1,485</b>	<b>12.4%</b>
20-29 MPH Over Speed Limit	169	2.1%	183	4.7%	20	16.9%	<b>372</b>	<b>3.1%</b>
30-39 MPH Over Speed Limit	52	0.7%	65	1.7%	13	11.0%	<b>130</b>	<b>1.1%</b>
40+ MPH Over Speed Limit	21	0.3%	57	1.5%	5	4.2%	<b>83</b>	<b>0.7%</b>
Unknown	1,115	14.0%	505	13.0%	6	5.1%	<b>1,626</b>	<b>13.6%</b>
<b>Total</b>	<b>7,977</b>	<b>100.0%</b>	<b>3,890</b>	<b>100.0%</b>	<b>118</b>	<b>100.0%</b>	<b>11,985</b>	<b>100.0%</b>



- It is troubling to see that 4,928 vehicles in total crashes were traveling over the posted speed limit.
- Speed-related vehicles in fatal crashes were more likely to be exceeding the posted speed limit by greater amounts.
- Speed-related vehicles in total crashes were more likely to be traveling too fast for conditions.
- Nearly nine out of every ten speed-related vehicles (88.4% where speed was known) in fatal crashes were traveling over the posted speed limit.



# Motorcycles

## Section 6: Motorcycles

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# 2007 Utah Crash Facts

## Utah Department of Public Safety Highway Safety Office

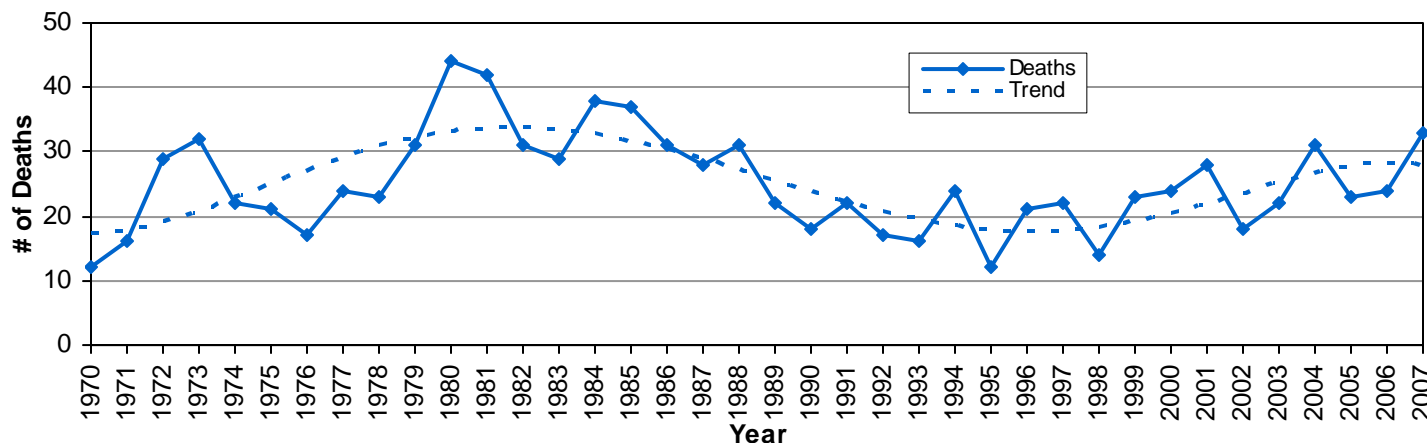
### Did you know in 2007:

- There were 1,215 motorcycle crashes in Utah, resulting in 1,077 injured motorcyclists and 33 motorcyclist deaths.
- Motorcyclists accounted for 0.9% of persons in crashes and 11.0% of deaths.
- Compared to 2006, there was a 20% increase in the motorcyclist death rate per registered motorcycle.
- Motorcycle crashes were 7 times more likely to result in a death than other crashes.

## Motorcycles

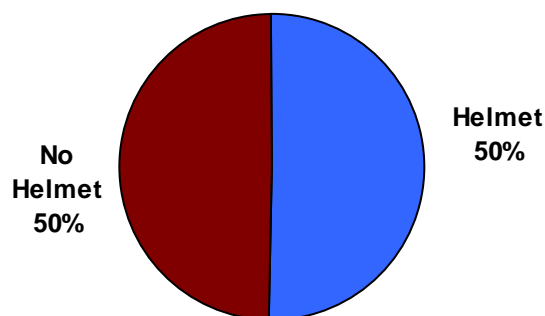


### Motorcyclist Deaths (Utah 1970-2007)



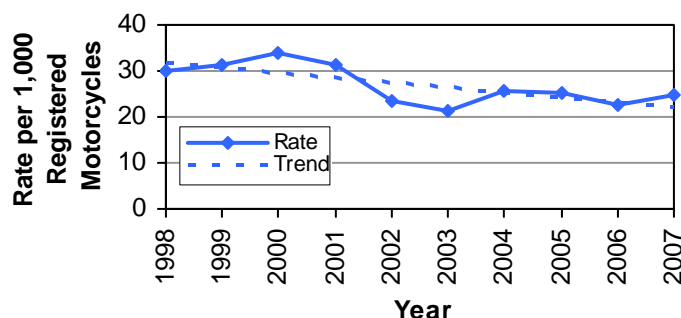
- Motorcyclist deaths are on the rise after seeing declining motorcyclist deaths in the 1990s.
- The 33 motorcyclist deaths in 2007 were the highest total since 1985.

### Helmet Use of Motorcyclists in Crashes (Utah 2007)



- Only 50% of motorcyclists wore a helmet.
- Utah law requires anyone under the age of 18 years riding a motorcycle to wear a helmet.

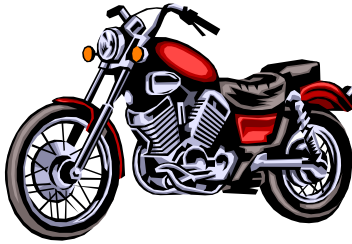
### Motorcyclist Crash Rates per Registered Motorcycles (Utah 1998-2007)



- The rate of motorcyclists in crashes per registered motorcycles increased in 2007 after two years of decreases.

## Leading Motorcyclist Contributing Factors in Crashes (Utah 2007)

1. Speed Too Fast (13%)
2. Followed Too Closely (8%)
3. Swerved or Evasive Action (6%)
4. Failed to Keep in Proper Lane (5%)
5. Ran Off Road (5%)



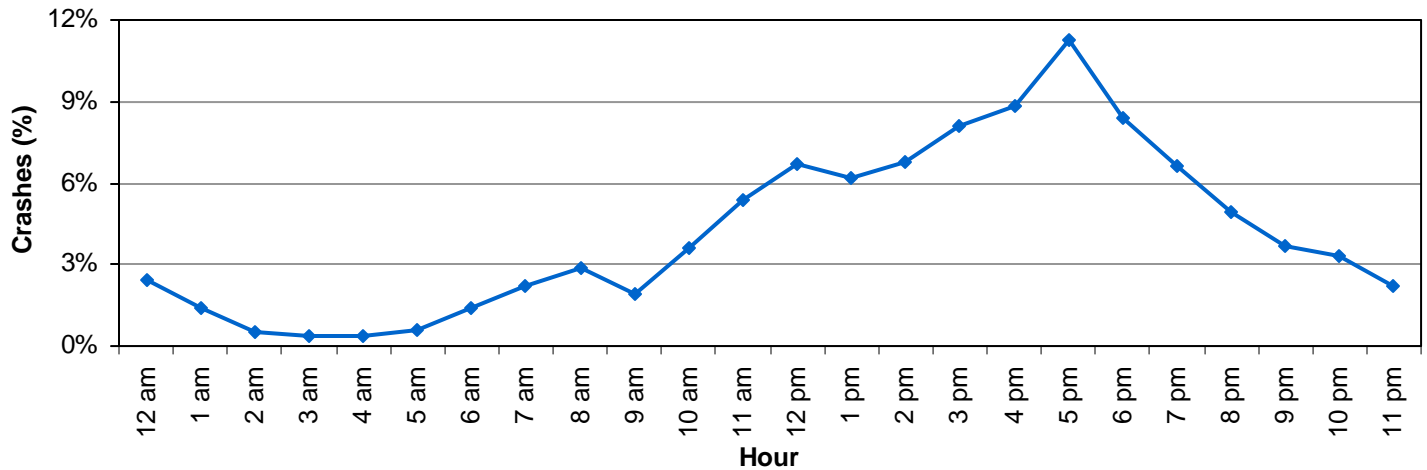
# Motorcycles



### Left Turns

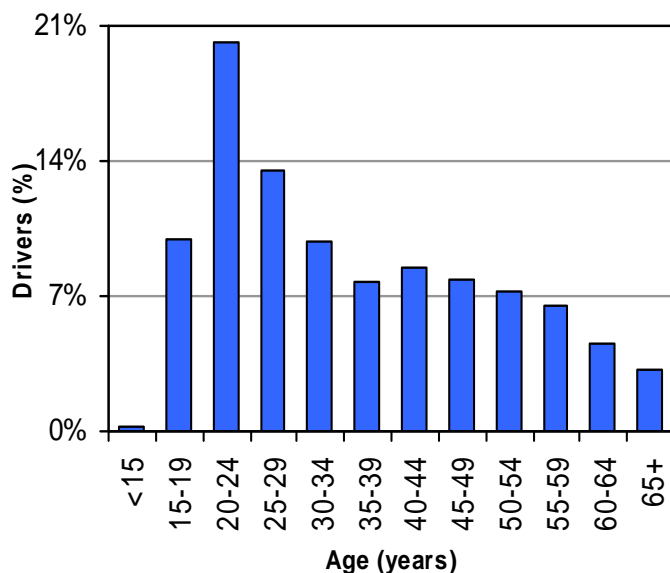
Nearly one-third (29%) of drivers who hit motorcycles were turning left. Drivers need to watch for motorcycles before turning.

## Motorcycle Crashes by Hour of Day (Utah 2007)

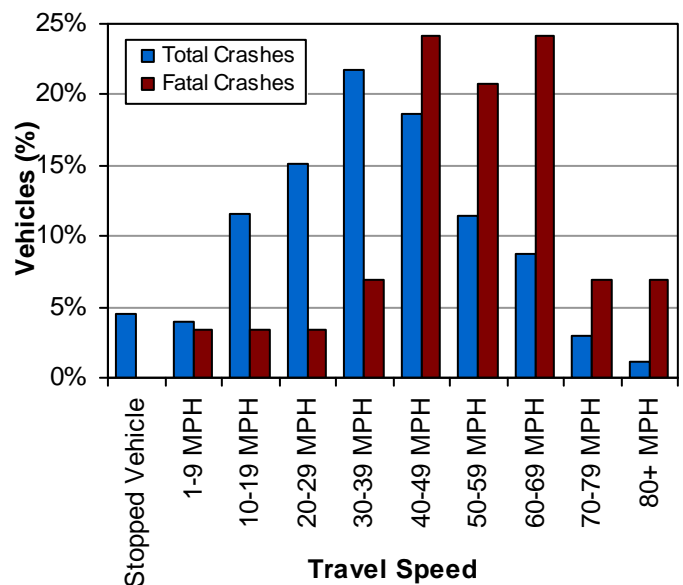


- Nearly two-thirds (63%) of total motorcycle crashes occurred between 12:00 p.m. and 7:59 p.m.

## Age of Motorcycle Drivers in All Crashes (Utah 2007)



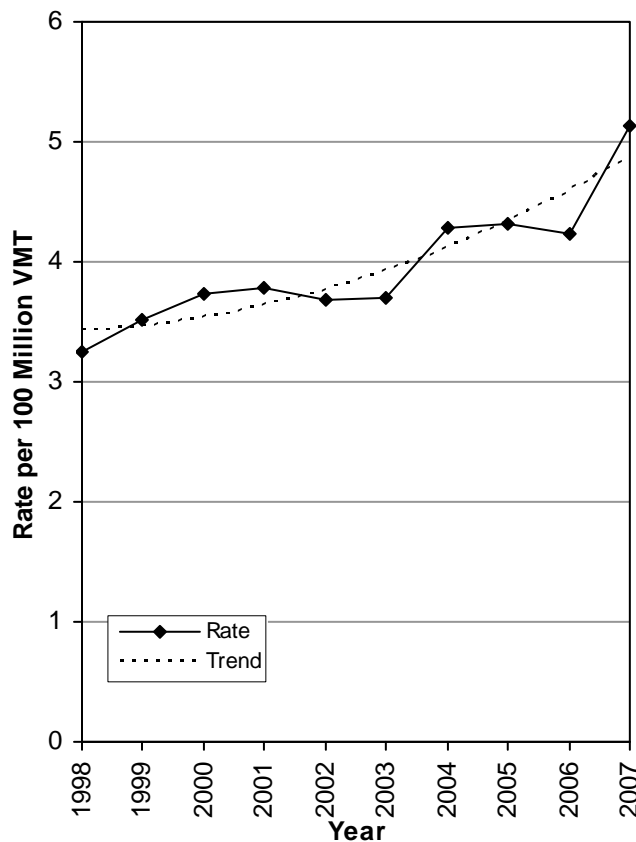
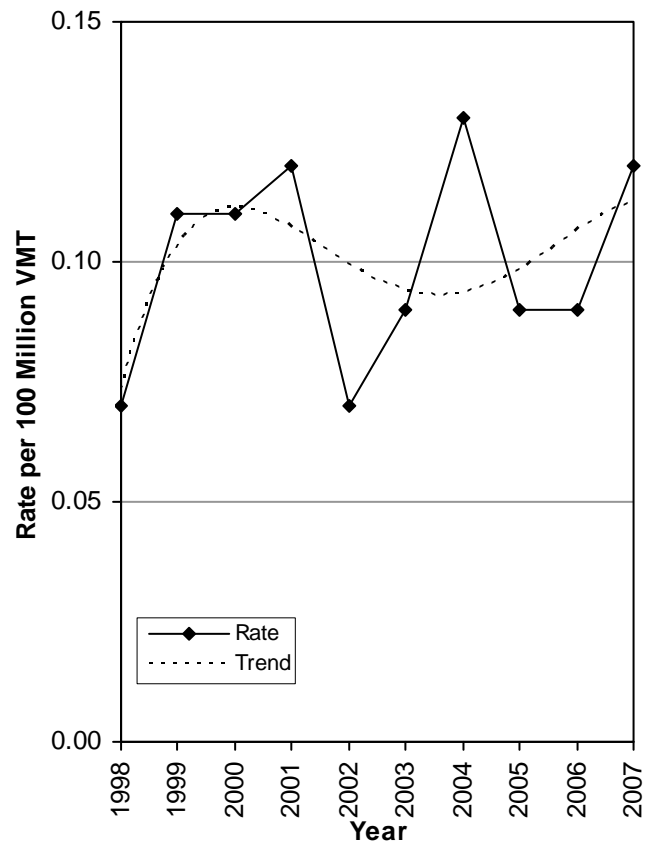
## Travel Speed of Motorcycles in Crashes (Utah 2007)



- Over one-half (54%) of motorcycle drivers in crashes were under the age of 35 years.
- Most (83%) of the motorcycles in fatal crashes were traveling 40 MPH or higher.

**Motorcyclists in Crashes (Utah 1998-2007)**

<b>Motorcyclists (Driver and Passenger)</b>								
<b>Year</b>	<b>Non-Injured</b>		<b>Injured</b>		<b>Killed</b>		<b>Total</b>	
	<b>#</b>	<b>Rate per 100 Million VMT</b>	<b>#</b>	<b>Rate per 100 Million VMT</b>	<b>#</b>	<b>Rate per 100 Million VMT</b>	<b>#</b>	<b>Rate per 100 Million VMT</b>
1998	93	0.44	584	2.75	14	0.07	691	3.25
1999	76	0.35	671	3.07	23	0.11	770	3.52
2000	124	0.55	694	3.08	24	0.11	842	3.74
2001	124	0.53	733	3.13	28	0.12	885	3.78
2002	130	0.53	755	3.09	18	0.07	903	3.69
2003	134	0.56	730	3.05	22	0.09	886	3.70
2004	149	0.60	877	3.56	31	0.13	1,057	4.29
2005	192	0.76	871	3.47	23	0.09	1,086	4.32
2006	186	0.71	899	3.44	24	0.09	1,109	4.24
2007	270	1.01	1,077	4.02	33	0.12	1,380	5.14
<b>Total</b>	<b>1,478</b>	<b>0.62</b>	<b>7,891</b>	<b>3.29</b>	<b>240</b>	<b>0.10</b>	<b>9,609</b>	<b>4.00</b>

**Motorcyclist Crash Rates per VMT (Utah 1998-2007)****Motorcyclist Death Rates per VMT (Utah 1998-2007)**

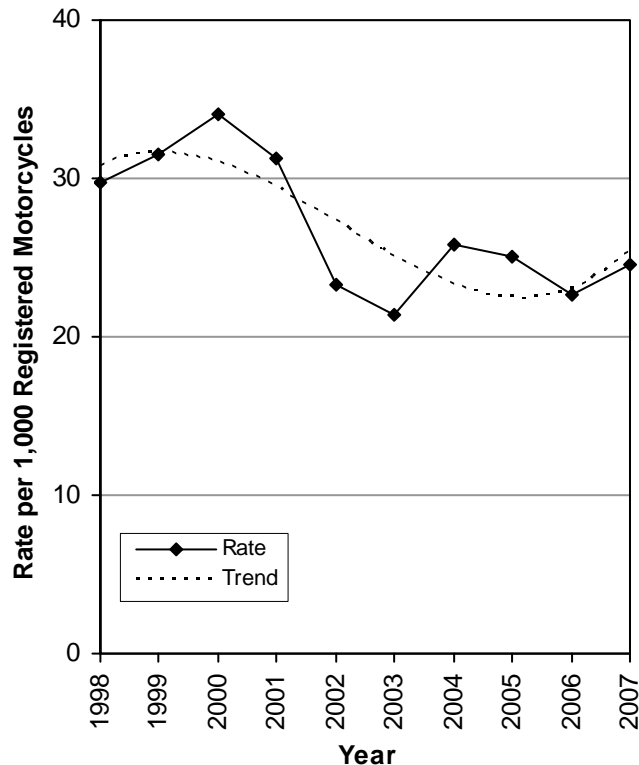
- Overall, the rate of motorcyclists in crashes has shown an increasing trend since 1998.
- 2007 had the highest (5.14) rate of total motorcyclists in crashes per VMT.
- The rate of motorcyclists killed in crashes has varied over time fluctuating around the 10-year rate of 0.10 per 100 million VMT.

## Trends

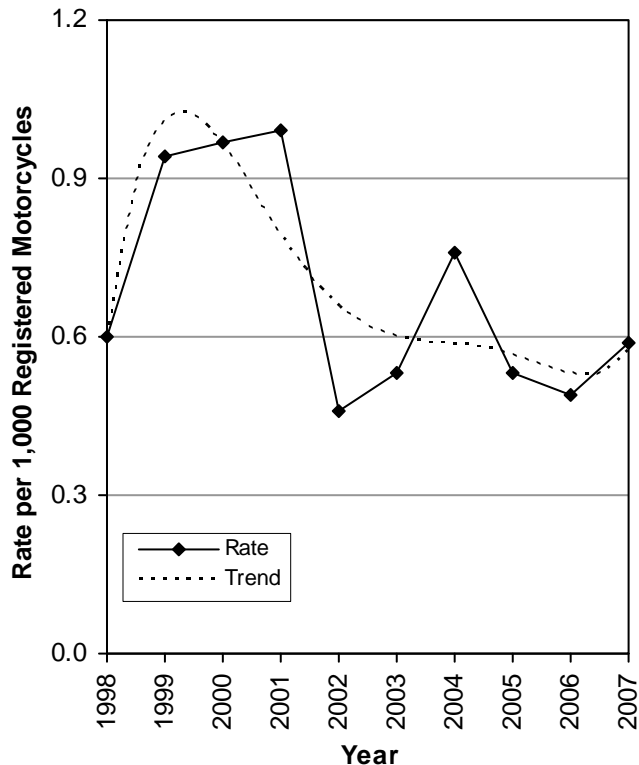
### Crash Rates per Registered Motorcycles (Utah 1998-2007)

Motorcyclists (Driver and Passenger)									
Year	Registered Motorcycles	Non-Injured		Injured		Killed		Total	
		#	Rate per 1,000 Registered Motorcycles	#	Rate per 1,000 Registered Motorcycles	#	Rate per 1,000 Registered Motorcycles	#	Rate per 1,000 Registered Motorcycles
1998	23,175	93	4.0	584	25.2	14	0.60	691	29.8
1999	24,470	76	3.1	671	27.4	23	0.94	770	31.5
2000	24,674	124	5.0	694	28.1	24	0.97	842	34.1
2001	28,291	124	4.4	733	25.9	28	0.99	885	31.3
2002	38,787	130	3.4	755	19.5	18	0.46	903	23.3
2003	41,421	134	3.2	730	17.6	22	0.53	886	21.4
2004	40,964	149	3.6	877	21.4	31	0.76	1,057	25.8
2005	43,271	192	4.4	871	20.1	23	0.53	1,086	25.1
2006	48,949	186	3.8	899	18.4	24	0.49	1,109	22.7
2007	56,146	270	4.8	1,077	19.2	33	0.59	1,380	24.6
<b>Total</b>	<b>370,148</b>	<b>1,478</b>	<b>4.0</b>	<b>7,891</b>	<b>21.3</b>	<b>240</b>	<b>0.65</b>	<b>9,609</b>	<b>26.0</b>

#### Motorcyclist Total Crash Rates per Registered Motorcycles (Utah 1998-2007)



#### Motorcyclist Death Rates per Registered Motorcycles (Utah 1998-2007)



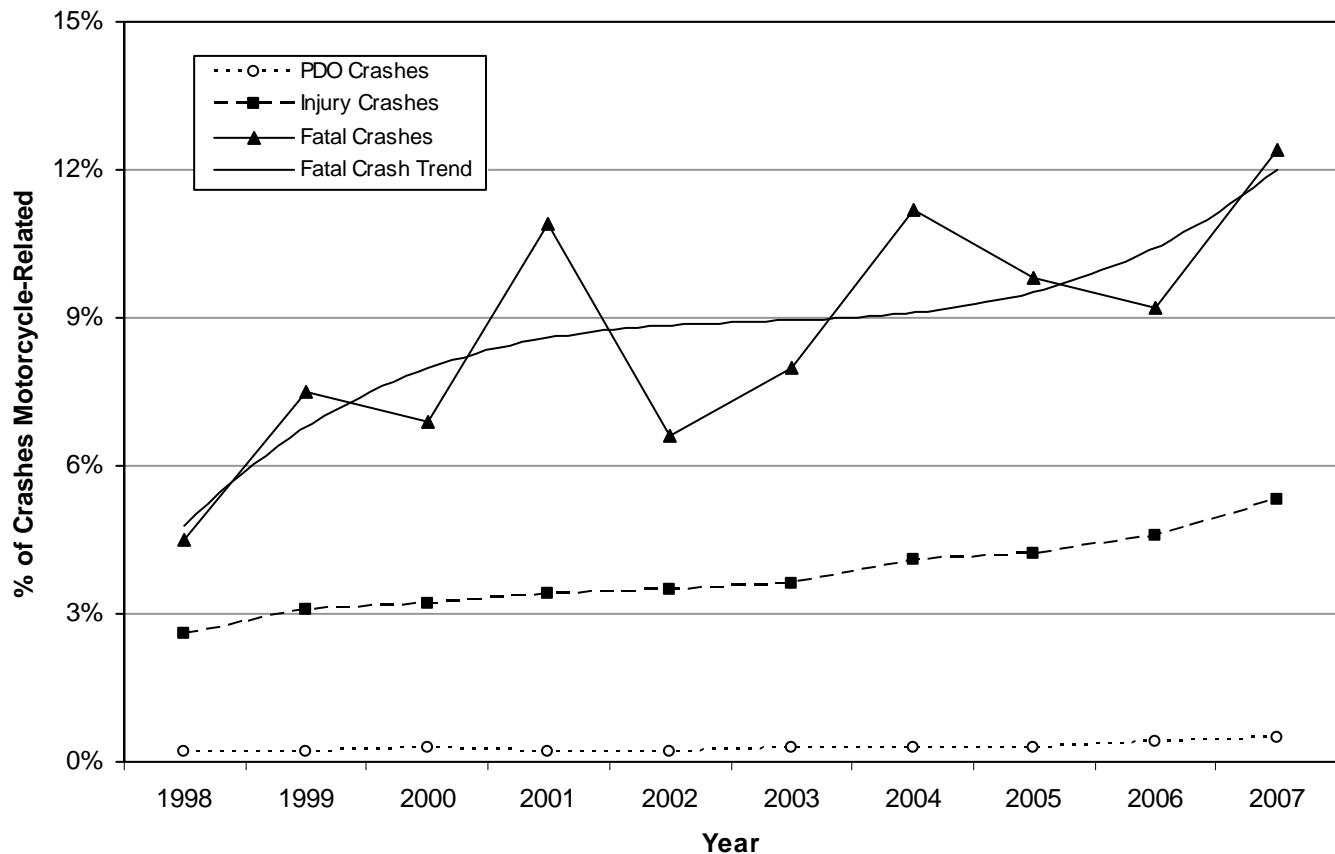
- The rate of total motorcyclists in crashes per registered motorcycles increased 8% in 2007 after two years of decreases.

- The motorcyclist death rate per registered motorcycle increased 20% in 2007 after two years of decreases.

## Motorcycle Crashes (Utah 1998-2007)

Motorcycle Crashes												
Year	Property Damage Only			Injury			Fatal			Total		
	All	Mtrcy	Mtrcy	All	Mtrcy	Mtrcy	All	Mtrcy	Mtrcy	All	Mtrcy	Mtrcy
	#	#	%	#	#	%	#	#	%	#	#	%
1998	34,337	66	0.2%	19,427	509	2.6%	308	14	4.5%	54,072	589	1.1%
1999	32,971	52	0.2%	19,513	602	3.1%	318	24	7.5%	52,802	678	1.3%
2000	33,269	88	0.3%	19,564	624	3.2%	318	22	6.9%	53,151	734	1.4%
2001	33,113	82	0.2%	19,332	648	3.4%	258	28	10.9%	52,703	758	1.4%
2002	33,542	81	0.2%	19,552	689	3.5%	274	18	6.6%	53,368	788	1.5%
2003	31,842	84	0.3%	18,285	661	3.6%	262	21	8.0%	50,389	766	1.5%
2004	34,222	104	0.3%	19,423	805	4.1%	260	29	11.2%	53,905	938	1.7%
2005	35,158	117	0.3%	19,545	829	4.2%	235	23	9.8%	54,938	969	1.8%
2006	37,749	135	0.4%	18,189	835	4.6%	249	23	9.2%	56,187	993	1.8%
2007	42,368	199	0.5%	18,619	984	5.3%	258	32	12.4%	61,245	1,215	2.0%
<b>Total</b>	<b>348,571</b>	<b>1,008</b>	<b>0.3%</b>	<b>191,449</b>	<b>7,186</b>	<b>3.8%</b>	<b>2,740</b>	<b>234</b>	<b>8.5%</b>	<b>542,760</b>	<b>8,428</b>	<b>1.6%</b>

## Percent of Crashes Involving a Motorcycle (Utah 1998-2007)



- The 10-year trend shows that motorcycle crashes represent 0.3% of property damage only crashes, 3.8% of injury crashes, and 8.5% of fatal crashes.
- Motorcycles are over-represented in fatal crashes accounting for 8.5% of fatal crashes compared to 1.6% of total crashes.
- During the last 10 years, the highest percent of fatal crashes involving motorcycles occurred in 2007 (12.4%).

## Counties

### Motorcyclists in Crashes by County (Utah 2007)

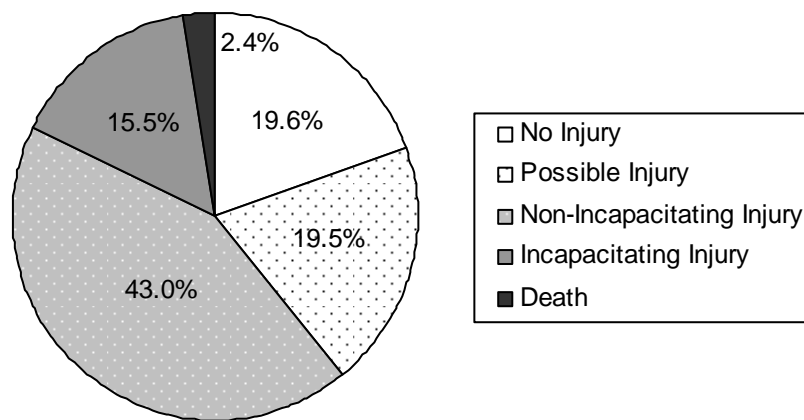
Motorcyclists (Driver and Passenger)								
	Non-Injured		Injured		Killed		Total	
		Rate		Rate		Rate		Rate
		per 100		per 100		per 100		per 100
		Million		Million		Million		Million
County	#	VMT	#	VMT	#	VMT	#	VMT
Rich	2	4.0	9	18.0	0	0.0	11	22.0
Wayne	1	2.5	7	17.4	0	0.0	8	19.9
Kane	6	4.0	14	9.2	3	2.0	23	15.2
Garfield	4	3.3	10	8.3	1	0.8	15	12.5
Morgan	4	2.8	11	7.7	0	0.0	15	10.5
Daggett	0	0.0	3	9.1	0	0.0	3	9.1
Weber	33	2.0	110	6.7	4	0.2	147	9.0
Washington	13	0.9	81	5.9	2	0.1	96	6.9
Grand	4	1.4	14	4.9	0	0.0	18	6.3
Cache	13	1.3	48	4.9	0	0.0	61	6.2
San Juan	1	0.4	14	5.0	2	0.7	17	6.1
Utah	22	0.6	203	5.4	2	0.1	227	6.1
Wasatch	5	1.6	13	4.3	0	0.0	18	5.9
Uintah	1	0.3	17	4.8	2	0.6	20	5.7
Salt Lake	124	1.4	345	3.9	9	0.1	478	5.4
Duchesne	1	0.4	11	4.7	0	0.0	12	5.1
Carbon	3	1.0	9	3.1	0	0.0	12	4.1
Davis	19	0.8	72	2.9	3	0.1	94	3.7
Iron	1	0.1	19	2.7	0	0.0	20	2.8
Emery	4	1.1	6	1.7	0	0.0	10	2.8
Millard	2	0.4	7	1.5	3	0.7	12	2.6
Sanpete	0	0.0	5	2.1	0	0.0	5	2.1
Summit	1	0.1	15	1.9	0	0.0	16	2.1
Beaver	4	1.6	0	0.0	1	0.4	5	2.0
Sevier	1	0.2	6	1.4	1	0.2	8	1.9
Tooele	0	0.0	16	1.8	0	0.0	16	1.8
Box Elder	1	0.1	10	1.1	0	0.0	11	1.2
Juab	0	0.0	2	0.5	0	0.0	2	0.5
Piute	0	0.0	0	0.0	0	0.0	0	0.0
<b>Statewide</b>	<b>270</b>	<b>1.0</b>	<b>1,077</b>	<b>4.0</b>	<b>33</b>	<b>0.1</b>	<b>1,380</b>	<b>5.1</b>

- Rich (22.0), Wayne (19.9), and Kane (15.2) counties had the highest rates of motorcyclists in crashes per vehicle miles traveled.
- Piute County had no motorcyclists in crashes.
- Kane (2.0), Garfield (0.8), Millard (0.7), and San Juan (0.7) counties had the highest rates of motorcyclists killed in crashes.



## Motorcyclists

### Injury Severity of Motorcyclists in Crashes (Utah 2007)



- The percentage of motorcyclists sustaining a non-fatal injury (78.0%) was much higher than the percentage of all motor vehicle crash occupants sustaining a non-fatal injury (17.7%).
- The percentage of motorcyclists killed in crashes (2.4%) was higher than the percentage for all persons killed in motor vehicle crashes (0.2%).
- Motorcycle crashes were 7 times more likely to result in a death than other motor vehicle crashes.

### Occupant Placement of Motorcyclists in Crashes (Utah 2007)

Motorcyclists (Driver and Passenger)								
Occupant Placement	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Driver	233	86.3%	971	90.2%	30	90.9%	1,234	89.4%
Passenger	37	13.7%	106	9.8%	3	9.1%	146	10.6%
<b>Total</b>	<b>270</b>	<b>100.0%</b>	<b>1077</b>	<b>100.0%</b>	<b>33</b>	<b>100.0%</b>	<b>1,380</b>	<b>100.0%</b>

- Drivers accounted for the majority of motorcyclists in a crash (89.4%) and motorcyclists killed (90.9%).

### Gender of Motorcyclists in Crashes (Utah 2007)

Motorcyclists (Driver and Passenger)								
Gender	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Male	215	79.6%	900	83.6%	29	87.9%	1144	82.9%
Female	39	14.4%	172	16.0%	4	12.1%	215	15.6%
Unknown	16	5.9%	5	0.5%	0	0.0%	21	1.5%
<b>Total</b>	<b>270</b>	<b>100.0%</b>	<b>1077</b>	<b>100.0%</b>	<b>33</b>	<b>100.0%</b>	<b>1,380</b>	<b>100.0%</b>

- The majority of all motorcyclists (82.9%) and motorcyclists killed (87.9%) in crashes were male.

## Motorcyclists

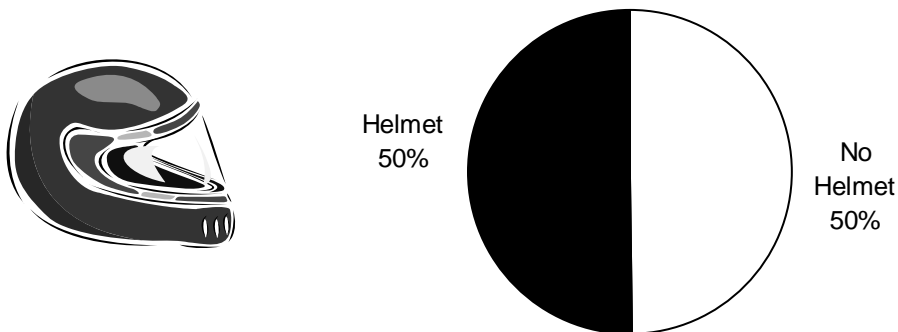
### Age of Motorcyclists in Crashes (Utah 2007)

Motorcyclists (Driver and Passenger)								
	Non-Injured		Injured		Killed		Total	
Age	#	%	#	%	#	%	#	%
0-4	2	0.7%	1	0.1%	0	0.0%	3	0.2%
5-9	3	1.1%	4	0.4%	0	0.0%	7	0.5%
10-14	1	0.4%	9	0.8%	0	0.0%	10	0.7%
15-19	22	8.1%	124	11.5%	4	12.1%	150	10.9%
20-24	46	17.0%	210	19.5%	7	21.2%	263	19.1%
25-29	29	10.7%	145	13.5%	1	3.0%	175	12.7%
30-34	24	8.9%	104	9.7%	1	3.0%	129	9.3%
35-39	27	10.0%	79	7.3%	0	0.0%	106	7.7%
40-44	24	8.9%	86	8.0%	2	6.1%	112	8.1%
45-49	20	7.4%	86	8.0%	4	12.1%	110	8.0%
50-54	16	5.9%	78	7.2%	4	12.1%	98	7.1%
55-59	20	7.4%	67	6.2%	2	6.1%	89	6.4%
60-64	15	5.6%	42	3.9%	2	6.1%	59	4.3%
65+	5	1.9%	30	2.8%	6	18.2%	41	3.0%
Unknown	16	5.9%	12	1.1%	0	0.0%	28	2.0%
<b>Total</b>	<b>270</b>	<b>100.0%</b>	<b>1077</b>	<b>100.0%</b>	<b>33</b>	<b>100.0%</b>	<b>1,380</b>	<b>100.0%</b>

- Overall, the largest percentages of motorcyclists in crashes were aged 20-24 years (19.1%), 25-29 years (12.7%), and 15-19 years (10.9%).
- The highest percentages of motorcyclist deaths were aged 20-24 years (21.2%) and 65+ years (18.2%).

### Helmet Use of Motorcyclists in Crashes (Utah 2007)

Motorcyclists (Driver and Passenger)								
	Non-Injured		Injured		Killed		Total	
Helmet Use	#	%	#	%	#	%	#	%
Helmet Worn	90	33.3%	497	46.1%	18	54.5%	605	43.8%
Helmet Not Worn	70	25.9%	513	47.6%	14	42.4%	597	43.3%
Unknown	110	40.7%	67	6.2%	1	3.0%	178	12.9%
<b>Total</b>	<b>270</b>	<b>100.0%</b>	<b>1077</b>	<b>100.0%</b>	<b>33</b>	<b>100.0%</b>	<b>1,380</b>	<b>100.0%</b>



- Only 50.3% of the motorcyclists in crashes wore a helmet, where helmet use was known.
- 14 of the 33 motorcyclists killed in crashes (42.4%) were not wearing a helmet.

## Motorcycle Drivers

### Motorcycle Driver Age (Utah 2007)

Motorcycle Drivers								
Age	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
<15	2	0.9%	0	0.0%	0	0.0%	2	0.2%
15-19	16	6.9%	103	10.6%	5	14.7%	124	10.0%
20-24	44	19.0%	199	20.6%	6	17.6%	249	20.2%
25-29	26	11.2%	138	14.3%	2	5.9%	166	13.5%
30-34	24	10.3%	96	9.9%	1	2.9%	121	9.8%
35-39	23	9.9%	72	7.4%	0	0.0%	95	7.7%
40-44	23	9.9%	80	8.3%	2	5.9%	105	8.5%
45-49	18	7.8%	74	7.6%	4	11.8%	96	7.8%
50-54	14	6.0%	70	7.2%	5	14.7%	89	7.2%
55-59	19	8.2%	59	6.1%	2	5.9%	80	6.5%
60-64	13	5.6%	40	4.1%	2	5.9%	55	4.5%
65+	5	2.2%	29	3.0%	5	14.7%	39	3.2%
Unknown	5	2.2%	8	0.8%	0	0.0%	13	1.1%
<b>Total</b>	<b>232</b>	<b>100.0%</b>	<b>968</b>	<b>100.0%</b>	<b>34</b>	<b>100.0%</b>	<b>1,234</b>	<b>100.0%</b>

- Over one-half (53.6%) of the motorcycle drivers in crashes were under the age of 35 years.

### Motorcycle Driver Gender (Utah 2007)

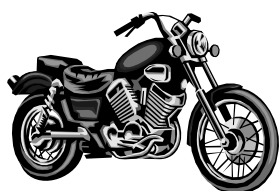
Motorcycle Drivers								
Gender	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Male	207	89.2%	877	90.6%	33	97.1%	1,117	90.5%
Female	20	8.6%	91	9.4%	1	2.9%	112	9.1%
Unknown	5	2.2%	0	0.0%	0	0.0%	5	0.4%
<b>Total</b>	<b>232</b>	<b>100.0%</b>	<b>968</b>	<b>100.0%</b>	<b>34</b>	<b>100.0%</b>	<b>1,234</b>	<b>100.0%</b>

- The majority of motorcycle drivers in total crashes (90.5%) and fatal crashes (97.1%) were male.

### License Status of Motorcycle Drivers (Utah 2007)

Motorcycle Drivers								
Motorcycle License Status	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Yes	60	25.9%	353	36.5%	26	76.5%	439	35.6%
No	113	48.7%	486	50.2%	8	23.5%	607	49.2%
Unknown	59	25.4%	129	13.3%	0	0.0%	188	15.2%
<b>Total</b>	<b>232</b>	<b>100.0%</b>	<b>968</b>	<b>100.0%</b>	<b>34</b>	<b>100.0%</b>	<b>1,234</b>	<b>100.0%</b>

- Less than one-half (42.0% of known) of motorcycle drivers in total crashes had a motorcycle license.
- Of the 34 motorcycle drivers in fatal crashes, eight (23.5%) did not have a motorcycle license.
- In addition, only 8.8% of motorcycle drivers in a crash completed the Utah Motorcycle Rider Training Program.



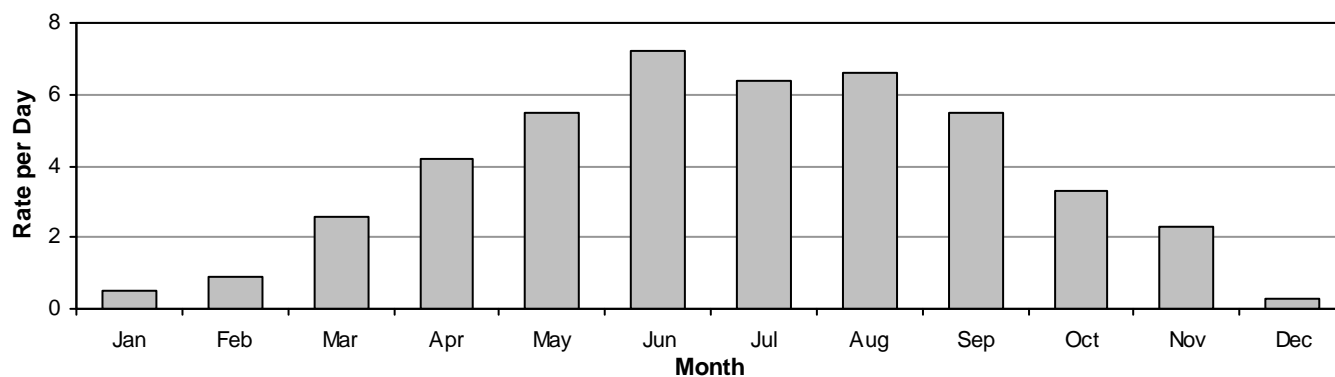
### Alcohol Involvement of Motorcycle Drivers (Utah 2007)

- Of the 34 motorcycle drivers in fatal crashes, two (5.9%) were impaired by alcohol.

## Motorcycle Crash Conditions

### Motorcyclists in Crashes by Month (Utah 2007)

Motorcyclists (Driver and Passenger)									
	Days in	Non-Injured		Injured		Killed		Total	
	Month		Rate		Rate		Rate		Rate
Month	#	#	per Day	#	per Day	#	per Day	#	per Day
January	31	5	0.2	8	0.3	1	0.03	14	0.5
February	28	3	0.1	23	0.8	0	0.00	26	0.9
March	31	17	0.5	60	1.9	4	0.13	81	2.6
April	30	30	1.0	94	3.1	2	0.07	126	4.2
May	31	26	0.8	143	4.6	3	0.10	172	5.5
June	30	43	1.4	167	5.6	5	0.17	215	7.2
July	31	29	0.9	160	5.2	9	0.29	198	6.4
August	31	37	1.2	164	5.3	4	0.13	205	6.6
September	30	33	1.1	132	4.4	1	0.03	166	5.5
October	31	30	1.0	68	2.2	3	0.10	101	3.3
November	30	14	0.5	53	1.8	1	0.03	68	2.3
December	31	3	0.1	5	0.2	0	0.00	8	0.3
<b>Total</b>	<b>365</b>	<b>270</b>	<b>0.7</b>	<b>1,077</b>	<b>3.0</b>	<b>33</b>	<b>0.09</b>	<b>1,380</b>	<b>3.8</b>



- May through September had the highest rates per day of total motorcycle crashes. Very few motorcycle crashes occurred in the winter months, likely due to the decrease in motorcycle riding in the winter.

### Motorcyclists in Crashes by Day of Week (Utah 2007)

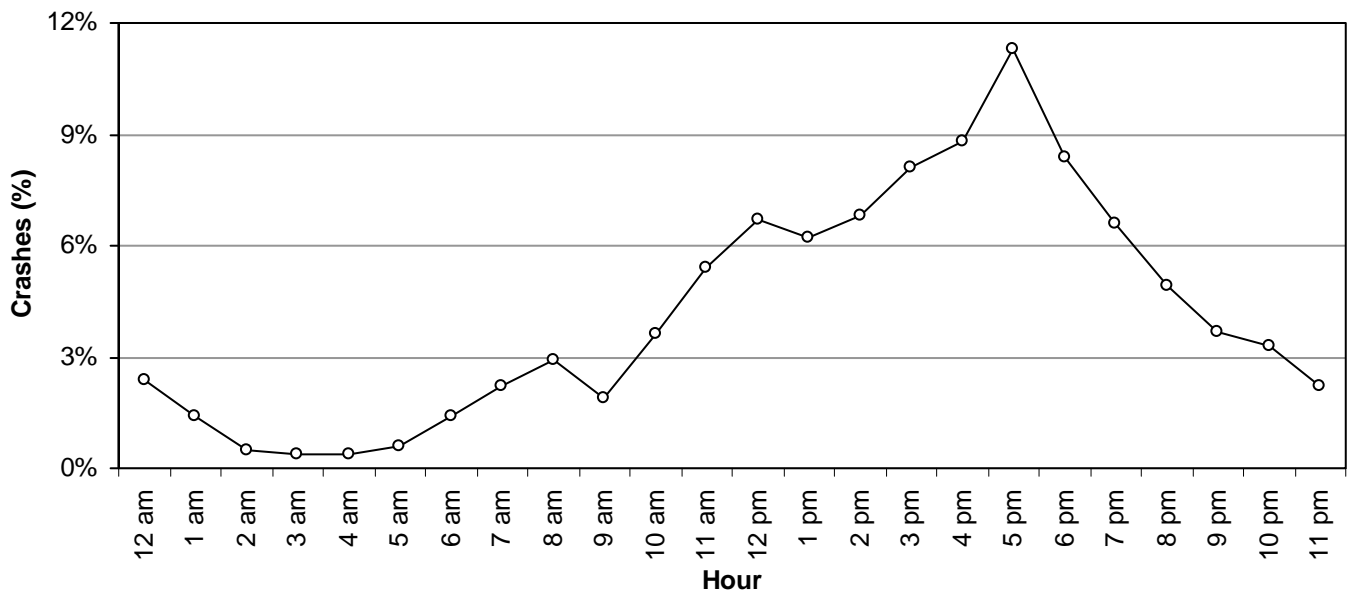
Motorcyclists (Driver and Passenger)								
	Non-Injured		Injured		Killed		Total	
Day of Week	#	%	#	%	#	%	#	%
Sunday	41	15.2%	181	16.8%	5	15.2%	227	16.4%
Monday	30	11.1%	123	11.4%	3	9.1%	156	11.3%
Tuesday	35	13.0%	119	11.0%	7	21.2%	161	11.7%
Wednesday	44	16.3%	152	14.1%	7	21.2%	203	14.7%
Thursday	28	10.4%	127	11.8%	2	6.1%	157	11.4%
Friday	37	13.7%	178	16.5%	0	0.0%	215	15.6%
Saturday	55	20.4%	197	18.3%	9	27.3%	261	18.9%
<b>Total</b>	<b>270</b>	<b>100.0%</b>	<b>1,077</b>	<b>100.0%</b>	<b>33</b>	<b>100.0%</b>	<b>1,380</b>	<b>100.0%</b>

- Over one-third (35.4%) of total motorcycle crashes occurred on the weekend (Saturday and Sunday).
- Fatal motorcycle crashes occurred most frequently on Saturday (27.3%).

## Motorcycle Crash Conditions

### Motorcyclists in Crashes by Hour (Utah 2007)

Motorcyclists (Driver and Passenger)								
Hour	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Midnight	2	0.7%	30	2.8%	1	3.0%	33	2.4%
1 a.m.	3	1.1%	15	1.4%	1	3.0%	19	1.4%
2 a.m.	0	0.0%	7	0.6%	0	0.0%	7	0.5%
3 a.m.	2	0.7%	2	0.2%	1	3.0%	5	0.4%
4 a.m.	0	0.0%	5	0.5%	0	0.0%	5	0.4%
5 a.m.	1	0.4%	7	0.6%	0	0.0%	8	0.6%
6 a.m.	7	2.6%	13	1.2%	0	0.0%	20	1.4%
7 a.m.	8	3.0%	22	2.0%	1	3.0%	31	2.2%
8 a.m.	9	3.3%	29	2.7%	2	6.1%	40	2.9%
9 a.m.	4	1.5%	22	2.0%	0	0.0%	26	1.9%
10 a.m.	8	3.0%	42	3.9%	0	0.0%	50	3.6%
11 a.m.	14	5.2%	57	5.3%	3	9.1%	74	5.4%
Noon	22	8.1%	70	6.5%	1	3.0%	93	6.7%
1 p.m.	23	8.5%	60	5.6%	2	6.1%	85	6.2%
2 p.m.	23	8.5%	65	6.0%	6	18.2%	94	6.8%
3 p.m.	17	6.3%	92	8.5%	3	9.1%	112	8.1%
4 p.m.	28	10.4%	92	8.5%	1	3.0%	121	8.8%
5 p.m.	36	13.3%	118	11.0%	2	6.1%	156	11.3%
6 p.m.	19	7.0%	96	8.9%	1	3.0%	116	8.4%
7 p.m.	9	3.3%	79	7.3%	3	9.1%	91	6.6%
8 p.m.	14	5.2%	51	4.7%	2	6.1%	67	4.9%
9 p.m.	11	4.1%	40	3.7%	0	0.0%	51	3.7%
10 p.m.	7	2.6%	36	3.3%	3	9.1%	46	3.3%
11 p.m.	3	1.1%	27	2.5%	0	0.0%	30	2.2%
<b>Total</b>	<b>270</b>	<b>100.0%</b>	<b>1,077</b>	<b>100.0%</b>	<b>33</b>	<b>100.0%</b>	<b>1,380</b>	<b>100.0%</b>



- Nearly two-thirds (62.9%) of total motorcycle crashes occurred between 12:00 p.m. and 7:59 p.m.
- Motorcyclist deaths were highest at 2:00 p.m. (18.2%).

## Motorcycle Crash Conditions

### Motorcycle Crashes by First Harmful Event (Utah 2007)

Motorcycle Crashes								
First Harmful Event	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Collision with Another Motor Vehicle	123	61.8%	431	43.8%	19	59.4%	573	47.2%
Overturn/Rollover	8	4.0%	130	13.2%	0	0.0%	138	11.4%
Fell/Jumped from Vehicle	6	3.0%	56	5.7%	5	15.6%	67	5.5%
Collision with Other Fixed Object	10	5.0%	49	5.0%	0	0.0%	59	4.9%
Other Non-collision	4	2.0%	48	4.9%	0	0.0%	52	4.3%
Collision with Animal	9	4.5%	38	3.9%	3	9.4%	50	4.1%
Collision with Concrete/Cable Barrier	4	2.0%	22	2.2%	2	6.3%	28	2.3%
Collision with Ditch	2	1.0%	15	1.5%	0	0.0%	17	1.4%
Collision with Embankment	2	1.0%	13	1.3%	1	3.1%	16	1.3%
Collision with Other Non-fixed Object	4	2.0%	11	1.1%	0	0.0%	15	1.2%
Collision with Tree/Shrubbery	0	0.0%	14	1.4%	0	0.0%	14	1.2%
Collision with Bicyclist/Pedestrian	1	0.5%	10	1.0%	0	0.0%	11	0.9%
Collision with Post, Pole, or Support	3	1.5%	7	0.7%	0	0.0%	10	0.8%
Collision with Parked Vehicle	2	1.0%	5	0.5%	0	0.0%	7	0.6%
Collision with Fence	1	0.5%	3	0.3%	1	3.1%	5	0.4%
Collision with Guardrail	0	0.0%	4	0.4%	1	3.1%	5	0.4%
Collision with Thrown or Fallen Object	1	0.5%	2	0.2%	0	0.0%	3	0.2%
Unknown	19	9.5%	126	12.8%	0	0.0%	145	11.9%
<b>Total</b>	<b>199</b>	<b>100.0%</b>	<b>984</b>	<b>100.0%</b>	<b>32</b>	<b>100.0%</b>	<b>1,215</b>	<b>100.0%</b>

- For all motorcycle crashes, the leading first harmful event was collision with another motor vehicle.
- For total motorcycle crashes, overturn/rollover (11.4%) and fell/jumped from vehicle (5.5%) were the next highest first harmful events.
- For fatal crashes, fell/jumped from vehicle (15.6%), collision with animal (9.4%), and collision with concrete/cable barrier (6.3%) were the next highest first harmful events.

### Motorcycle Crashes by Collision Description (Utah 2007)

Motorcycle Crashes (Two or More Motor Vehicles)								
Collision Description	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Broadside	36	25.5%	257	50.2%	9	47.4%	302	44.9%
Rear End	65	46.1%	125	24.4%	5	26.3%	195	29.0%
Sideswipe	13	9.2%	54	10.5%	1	5.3%	68	10.1%
Parked Vehicle	17	12.1%	16	3.1%	0	0.0%	33	4.9%
Head On	0	0.0%	19	3.7%	4	21.1%	23	3.4%
Backing Vehicle	0	0.0%	2	0.4%	0	0.0%	2	0.3%
Unknown	10	7.1%	39	7.6%	0	0.0%	49	7.3%
<b>Total</b>	<b>141</b>	<b>100.0%</b>	<b>512</b>	<b>100.0%</b>	<b>19</b>	<b>100.0%</b>	<b>672</b>	<b>100.0%</b>

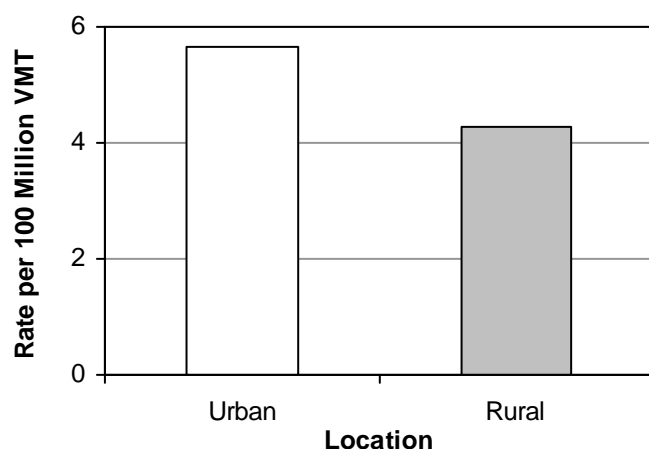
- For all motorcycle crashes, the leading collision types involving two or more motor vehicles were broadside (44.9%) and rear end (29.0%).
- For fatal motorcycle crashes, the leading collision types were broadside (47.4%) and rear end (26.3%).

## Motorcycle Crash Conditions

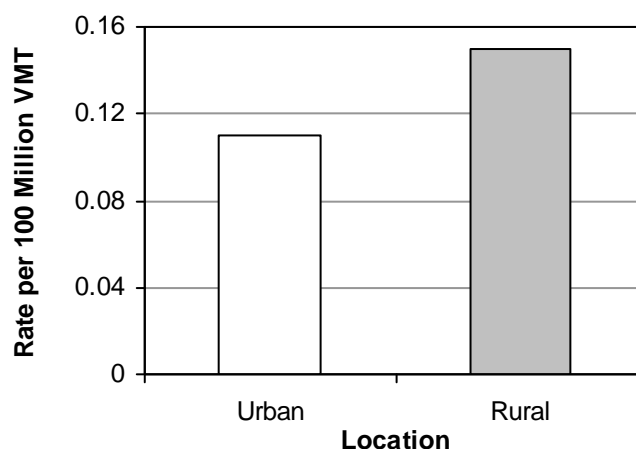
### Urban/Rural Location of Motorcyclists in Crashes (Utah 2007)

Motorcyclists (Driver and Passenger)								
Location	Non-Injured		Injured		Killed		Total	
	#	Rate per 100 Million VMT	#	Rate per 100 Million VMT	#	Rate per 100 Million VMT	#	Rate per 100 Million VMT
	#	VMT	#	VMT	#	VMT	#	VMT
Urban	198	1.19	730	4.37	18	0.11	946	5.67
Rural	72	0.71	347	3.42	15	0.15	434	4.28
Total	270	1.01	1,077	4.02	33	0.12	1,380	5.14

### Urban/Rural Motorcyclist Crash Rates per VMT (Utah 2007)



### Urban/Rural Motorcyclist Fatal Rates per VMT (Utah 2007)



- Urban areas had a higher rate of total motorcycle crashes than rural areas, while rural areas had a higher rate of fatal motorcycle crashes than urban areas.

### Speed Limit (Utah 2007)

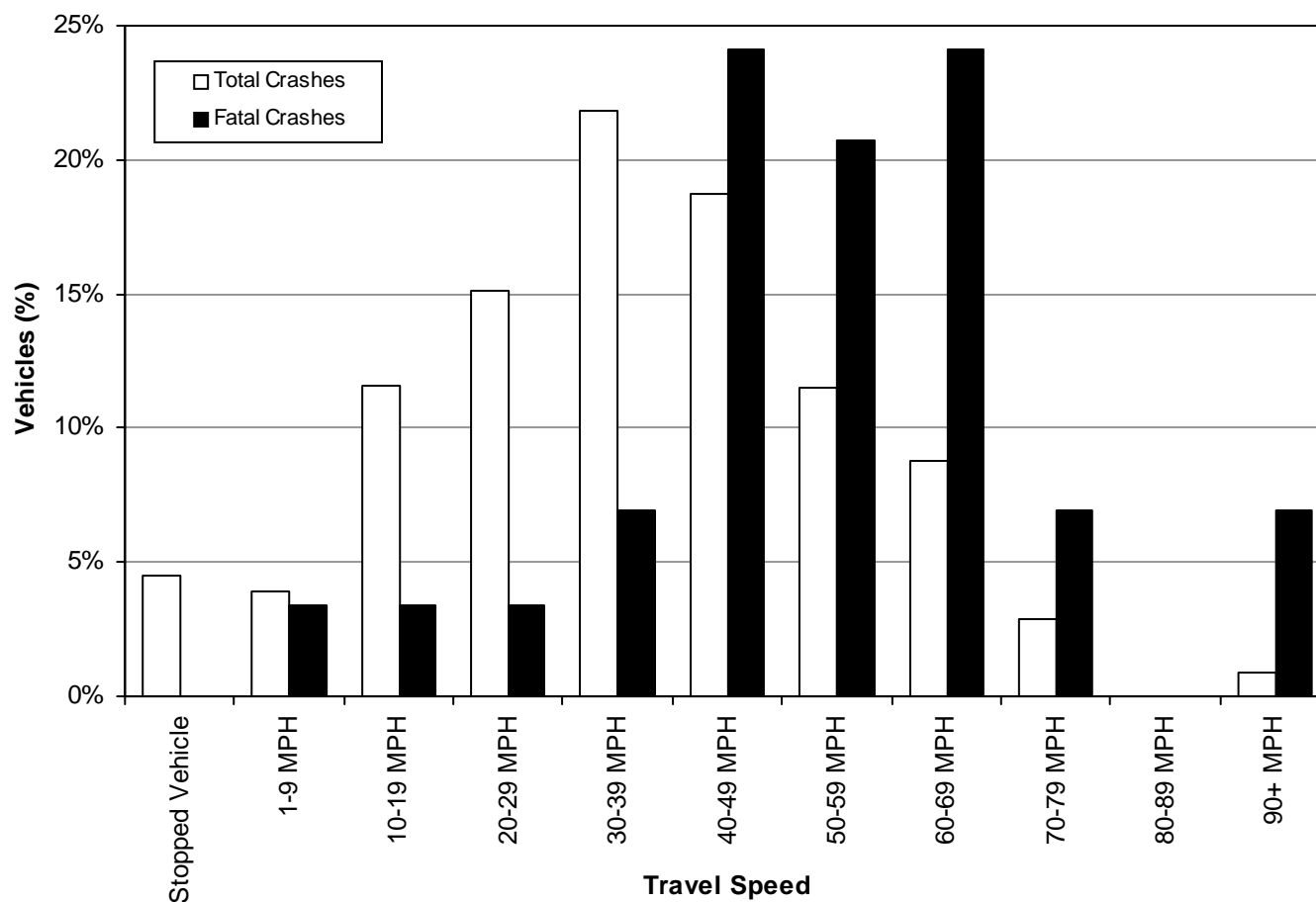
Motorcycles								
Speed Limit	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
5-15 MPH	1	0.5%	7	0.7%	0	0.0%	8	0.6%
20-25 MPH	20	9.9%	132	13.1%	1	2.9%	153	12.3%
30-35 MPH	40	19.8%	260	25.8%	4	11.8%	304	24.4%
40-45 MPH	36	17.8%	233	23.1%	17	50.0%	286	23.0%
50-55 MPH	29	14.4%	113	11.2%	8	23.5%	150	12.0%
60-65 MPH	24	11.9%	107	10.6%	3	8.8%	134	10.8%
70-75 MPH	2	1.0%	14	1.4%	1	2.9%	17	1.4%
Unknown	50	24.8%	143	14.2%	0	0.0%	193	15.5%
Total	202	100.0%	1,009	100.0%	34	100.0%	1,245	100.0%

- Over half (56.1% where speed limit was known) of total motorcycle crashes occurred where the speed limit was 30-45 MPH.
- Nearly three-fourths (73.5%) of fatal motorcycle crashes occurred where the speed limit was 40-55 MPH.

## Motorcycle Crash Conditions

### Travel Speed (Utah 2007)

Motorcycles								
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
Travel Speed	#	%	#	%	#	%	#	%
Stopped Vehicle	17	8.4%	26	2.6%	0	0.0%	43	3.5%
1-9 MPH	13	6.4%	23	2.3%	1	2.9%	37	3.0%
10-19 MPH	18	8.9%	92	9.1%	1	2.9%	111	8.9%
20-29 MPH	18	8.9%	126	12.5%	1	2.9%	145	11.6%
30-39 MPH	26	12.9%	181	17.9%	2	5.9%	209	16.8%
40-49 MPH	15	7.4%	157	15.6%	7	20.6%	179	14.4%
50-59 MPH	12	5.9%	92	9.1%	6	17.6%	110	8.8%
60-69 MPH	12	5.9%	65	6.4%	7	20.6%	84	6.7%
70-79 MPH	2	1.0%	24	2.4%	2	5.9%	28	2.2%
80-89 MPH	0	0.0%	3	0.3%	0	0.0%	3	0.2%
90+ MPH	1	0.5%	6	0.6%	2	5.9%	9	0.7%
Unknown	68	33.7%	214	21.2%	5	14.7%	287	23.1%
<b>Total</b>	<b>202</b>	<b>100.0%</b>	<b>1,009</b>	<b>100.0%</b>	<b>34</b>	<b>100.0%</b>	<b>1,245</b>	<b>100.0%</b>



- Over half (55.6% where travel speed was known) of motorcycles in total crashes were traveling 20-49 MPH.
- Motorcycles in fatal crashes were more likely to be traveling at higher speeds. Most (82.8% where travel speed was known) of the motorcycles in fatal crashes were traveling 40 MPH or higher.
- The higher the speed the greater the amount of energy that must be absorbed in a crash, hence there is more likelihood of serious injury.



## Motorcycle Crash Conditions

### Motorcycle Maneuver Prior to Crash (Utah 2007)

Motorcycles								
Vehicle Maneuver	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Straight Ahead	116	57.4%	772	76.5%	28	82.4%	916	73.6%
Turning Left	17	8.4%	58	5.7%	1	2.9%	76	6.1%
Slowing in Traffic Lane	10	5.0%	48	4.8%	1	2.9%	59	4.7%
Turning Right	16	7.9%	39	3.9%	1	2.9%	56	4.5%
Stopped in Traffic Lane	17	8.4%	26	2.6%	0	0.0%	43	3.5%
Overtaking/Passing	0	0.0%	22	2.2%	2	5.9%	24	1.9%
Changing Lanes	2	1.0%	15	1.5%	0	0.0%	17	1.4%
Entering Traffic Lane	5	2.5%	10	1.0%	0	0.0%	15	1.2%
Parked	10	5.0%	2	0.2%	0	0.0%	12	1.0%
Making U-turn	2	1.0%	4	0.4%	0	0.0%	6	0.5%
Leaving Traffic Lane	0	0.0%	4	0.4%	0	0.0%	4	0.3%
Backing	1	0.5%	2	0.2%	0	0.0%	3	0.2%
Other	4	2.0%	5	0.5%	1	2.9%	10	0.8%
Unknown	2	1.0%	2	0.2%	0	0.0%	4	0.3%
<b>Total</b>	<b>202</b>	<b>100.0%</b>	<b>1009</b>	<b>100.0%</b>	<b>34</b>	<b>100.0%</b>	<b>1,245</b>	<b>100.0%</b>

- For all motorcycle crashes, the leading motorcycle maneuvers prior to the crash were straight ahead (73.6%), turning left (6.1%), and turning right (4.5%).
- For fatal crashes, the leading motorcycle maneuver prior to the crash was straight ahead (82.4%).

### Maneuver of Other Vehicle Prior to Motorcycle Crash (Utah 2007)

Vehicles Other than Motorcycles (Motorcycle Crash)								
Vehicle Maneuver	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Straight Ahead	60	39.5%	160	30.1%	12	60.0%	232	33.0%
Turning Left	27	17.8%	169	31.8%	6	30.0%	202	28.7%
Stopped in Traffic Lane	11	7.2%	51	9.6%	0	0.0%	62	8.8%
Slowing in Traffic Lane	16	10.5%	32	6.0%	1	5.0%	49	7.0%
Turning Right	10	6.6%	33	6.2%	0	0.0%	43	6.1%
Parked	9	5.9%	17	3.2%	0	0.0%	26	3.7%
Making U-turn	3	2.0%	22	4.1%	0	0.0%	25	3.6%
Changing Lanes	1	0.7%	20	3.8%	1	5.0%	22	3.1%
Entering Traffic Lane	3	2.0%	15	2.8%	0	0.0%	18	2.6%
Backing	8	5.3%	3	0.6%	0	0.0%	11	1.6%
Overtaking/Passing	2	1.3%	6	1.1%	0	0.0%	8	1.1%
Leaving Traffic Lane	1	0.7%	1	0.2%	0	0.0%	2	0.3%
Other	1	0.7%	2	0.4%	0	0.0%	3	0.4%
Unknown	0	0.0%	1	0.2%	0	0.0%	1	0.1%
<b>Total</b>	<b>152</b>	<b>100.0%</b>	<b>532</b>	<b>100.0%</b>	<b>20</b>	<b>100.0%</b>	<b>704</b>	<b>100.0%</b>

- For all motorcycle crashes, the leading maneuvers of vehicles other than motorcycles prior to the crash were straight ahead (33.0%), turning left (28.7%), and stopped in traffic lane (8.8%).
- For fatal motorcycle crashes, the leading maneuvers of vehicles other than motorcycles prior to the crash were straight ahead (60.0%) and turning left (30.0%).

## Motorcycle Crash Conditions

### Contributing Factors of Drivers Other than Motorcyclists in Motorcycle Crashes (Utah 2007)

Drivers/Vehicles Other than Motorcycles (Motorcycle Crash)								
Contributing Factors	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Failed to Yield Right of Way	21	14.6%	198	37.4%	5	26.3%	224	32.3%
Improper Turn	12	8.3%	56	10.6%	2	10.5%	70	10.1%
Followed Too Closely	25	17.4%	30	5.7%	1	5.3%	56	8.1%
Driver Distraction	13	9.0%	31	5.8%	0	0.0%	44	6.3%
Other Improper Driving	11	7.6%	30	5.7%	0	0.0%	41	5.9%
Improper Lane Change	3	2.1%	25	4.7%	1	5.3%	29	4.2%
Vision Obscured by Moving Vehicle	3	2.1%	18	3.4%	0	0.0%	21	3.0%
Failed to Keep in Proper Lane	5	3.5%	15	2.8%	0	0.0%	20	2.9%
Defective Condition of Vehicle	9	6.3%	8	1.5%	0	0.0%	17	2.5%
Hit and Run	3	2.1%	13	2.5%	1	5.3%	17	2.5%
Speed Too Fast	5	3.5%	11	2.1%	0	0.0%	16	2.3%
Driving Under the Influence	5	3.5%	7	1.3%	2	10.5%	14	2.0%
Disregard Traffic Signal/Sign	1	0.7%	10	1.9%	2	10.5%	13	1.9%
Vision Obscured by Glare	2	1.4%	11	2.1%	0	0.0%	13	1.9%
Improper Backing	6	4.2%	4	0.8%	0	0.0%	10	1.4%
Driver Emotionally Upset	4	2.8%	5	0.9%	0	0.0%	9	1.3%
Vision Obscured by Other	1	0.7%	8	1.5%	0	0.0%	9	1.3%
Vision Obscured by Parked Vehicle	1	0.7%	8	1.5%	0	0.0%	9	1.3%
Improper Parking/Stopping	4	2.8%	3	0.6%	0	0.0%	7	1.0%
Other Driver Condition	3	2.1%	4	0.8%	0	0.0%	7	1.0%
Swerved or Evasive Action	0	0.0%	7	1.3%	0	0.0%	7	1.0%
Reckless/Aggressive Driving	3	2.1%	0	0.0%	3	15.8%	6	0.9%
Vision Obscured by Building, Sign, etc.	1	0.7%	3	0.6%	0	0.0%	4	0.6%
Asleep/Fatigue	0	0.0%	3	0.6%	0	0.0%	3	0.4%
Disregard Road Markings	0	0.0%	3	0.6%	0	0.0%	3	0.4%
Improper Signal	0	0.0%	3	0.6%	0	0.0%	3	0.4%
Ran Off Road	0	0.0%	3	0.6%	0	0.0%	3	0.4%
Vision Obscured by Vegetation	0	0.0%	3	0.6%	0	0.0%	3	0.4%
Vision Obscured by Weather Condition	0	0.0%	3	0.6%	0	0.0%	3	0.4%
Windshield or Other Window Obscured	1	0.7%	2	0.4%	0	0.0%	3	0.4%
Wrong Side/Wrong Way	0	0.0%	1	0.2%	2	10.5%	3	0.4%
Driver Illness	1	0.7%	1	0.2%	0	0.0%	2	0.3%
Improper Passing	1	0.7%	1	0.2%	0	0.0%	2	0.3%
Overcorrected	0	0.0%	2	0.4%	0	0.0%	2	0.3%
<b>Total</b>	<b>144</b>	<b>100.0%</b>	<b>530</b>	<b>100.0%</b>	<b>19</b>	<b>100.0%</b>	<b>693</b>	<b>100.0%</b>

- Failed to yield right of way (32.3%), improper turn (10.1%), and followed too closely (8.1%) were the leading contributing factors for drivers other than motorcyclists in all motorcycle crashes.
- The leading contributing factors of drivers other than motorcyclists in fatal motorcycle crashes were failed to yield right of way (26.3%) and reckless/aggressive driving (15.8%).

## Motorcycle Crash Conditions

### Motorcycle Crash Violations (Utah 2007)

Motorcycle Drivers								
Violations	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Improper Lane Change/Travel	6	40.0%	15	20.5%	0	0.0%	21	23.9%
Following Too Close	3	20.0%	11	15.1%	0	0.0%	14	15.9%
Driving Under the Influence	2	13.3%	6	8.2%	0	0.0%	8	9.1%
Speed	1	6.7%	7	9.6%	0	0.0%	8	9.1%
Insurance Violation	1	6.7%	6	8.2%	0	0.0%	7	8.0%
License Violation	0	0.0%	7	9.6%	0	0.0%	7	8.0%
Registration Violation	0	0.0%	5	6.8%	0	0.0%	5	5.7%
Negligent Collision	0	0.0%	3	4.1%	0	0.0%	3	3.4%
Reckless Driving	0	0.0%	3	4.1%	0	0.0%	3	3.4%
Hit and Run	0	0.0%	2	2.7%	0	0.0%	2	2.3%
Improper Lookout	0	0.0%	2	2.7%	0	0.0%	2	2.3%
Improper Turn	1	6.7%	1	1.4%	0	0.0%	2	2.3%
Equipment Violation	0	0.0%	1	1.4%	0	0.0%	1	1.1%
Failure to Stop at Stop Sign	1	6.7%	0	0.0%	0	0.0%	1	1.1%
Improper Passing	0	0.0%	1	1.4%	0	0.0%	1	1.1%
Improper Start or Stop	0	0.0%	1	1.4%	0	0.0%	1	1.1%
Wrong Side of Road	0	0.0%	1	1.4%	0	0.0%	1	1.1%
Other Moving Violation	0	0.0%	1	1.4%	0	0.0%	1	1.1%
<b>Total</b>	<b>15</b>	<b>100.0%</b>	<b>73</b>	<b>100.0%</b>	<b>0</b>	<b>0.0%</b>	<b>88</b>	<b>100.0%</b>

- There were 88 citations issued at the scene of the crash to motorcyclists. The most common moving violations were for improper lane change/travel (23.9%), following too close (15.9%), driving under the influence (9.1%), and speed (9.1%).

## Motorcycle Crash Conditions

### Contributing Factors in Motorcycle Crashes (Utah 2007)

Motorcycle Drivers/Vehicles								
Contributing Factors	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Speed Too Fast	21	14.9%	144	15.9%	11	42.3%	176	16.4%
Other Improper Driving	15	10.6%	99	10.9%	0	0.0%	114	10.6%
Followed Too Closely	22	15.6%	83	9.2%	0	0.0%	105	9.8%
Swerved or Evasive Action	5	3.5%	75	8.3%	1	3.8%	81	7.6%
Failed to Keep in Proper Lane	9	6.4%	63	7.0%	1	3.8%	73	6.8%
Ran Off Road	6	4.3%	65	7.2%	0	0.0%	71	6.6%
Reckless/Aggressive Driving	4	2.8%	42	4.6%	7	26.9%	53	4.9%
Driving Under the Influence	5	3.5%	40	4.4%	2	7.7%	47	4.4%
Failed to Yield Right of Way	12	8.5%	34	3.8%	1	3.8%	47	4.4%
Driver Distraction	6	4.3%	37	4.1%	0	0.0%	43	4.0%
Overcorrected	2	1.4%	34	3.8%	0	0.0%	36	3.4%
Vehicle Other Defective Condition	3	2.1%	27	3.0%	0	0.0%	30	2.8%
Vision Obscured by Moving Vehicle	4	2.8%	14	1.5%	0	0.0%	18	1.7%
Disregard Traffic Signal/Sign	2	1.4%	15	1.7%	0	0.0%	17	1.6%
Vehicle Tires	1	0.7%	15	1.7%	0	0.0%	16	1.5%
Improper Lane Change	3	2.1%	12	1.3%	0	0.0%	15	1.4%
Vision Obscured by Other	1	0.7%	14	1.5%	0	0.0%	15	1.4%
Improper Passing	0	0.0%	12	1.3%	2	7.7%	14	1.3%
Other Driver Condition	2	1.4%	12	1.3%	0	0.0%	14	1.3%
Improper Turn	4	2.8%	9	1.0%	0	0.0%	13	1.2%
Vision Obscured by Weather Condition	2	1.4%	9	1.0%	0	0.0%	11	1.0%
Vehicle Brakes	2	1.4%	7	0.8%	0	0.0%	9	0.8%
Hit and Run	2	1.4%	6	0.7%	0	0.0%	8	0.7%
Improper Parking/Stopping	1	0.7%	7	0.8%	0	0.0%	8	0.7%
Vision Obscured by Glare	0	0.0%	7	0.8%	0	0.0%	7	0.7%
Driver Emotionally Upset	2	1.4%	4	0.4%	0	0.0%	6	0.6%
Disregard Road Markings	0	0.0%	5	0.6%	0	0.0%	5	0.5%
Vision Obscured by Building, Sign, etc.	1	0.7%	4	0.4%	0	0.0%	5	0.5%
Vision Obscured by Parked Vehicle	1	0.7%	3	0.3%	0	0.0%	4	0.4%
Wrong Side/Wrong Way	1	0.7%	2	0.2%	1	3.8%	4	0.4%
Asleep/Fatigue	1	0.7%	1	0.1%	0	0.0%	2	0.2%
Improper Backing	1	0.7%	1	0.1%	0	0.0%	2	0.2%
Vision Obscured by Vegetation	0	0.0%	2	0.2%	0	0.0%	2	0.2%
Driver Illness	0	0.0%	1	0.1%	0	0.0%	1	0.1%
<b>Total</b>	<b>141</b>	<b>100.0%</b>	<b>905</b>	<b>100.0%</b>	<b>26</b>	<b>100.0%</b>	<b>1,072</b>	<b>100.0%</b>

- Speed too fast (16.4%), followed too closely (9.8%), and swerved or evasive action (7.6%) were the leading contributing factors for all motorcycle crashes.
- The leading contributing factors for fatal crashes were speed too fast (42.3%) and reckless/aggressive driving (26.9%).

# Pedestrians

## Section 7: Pedestrians

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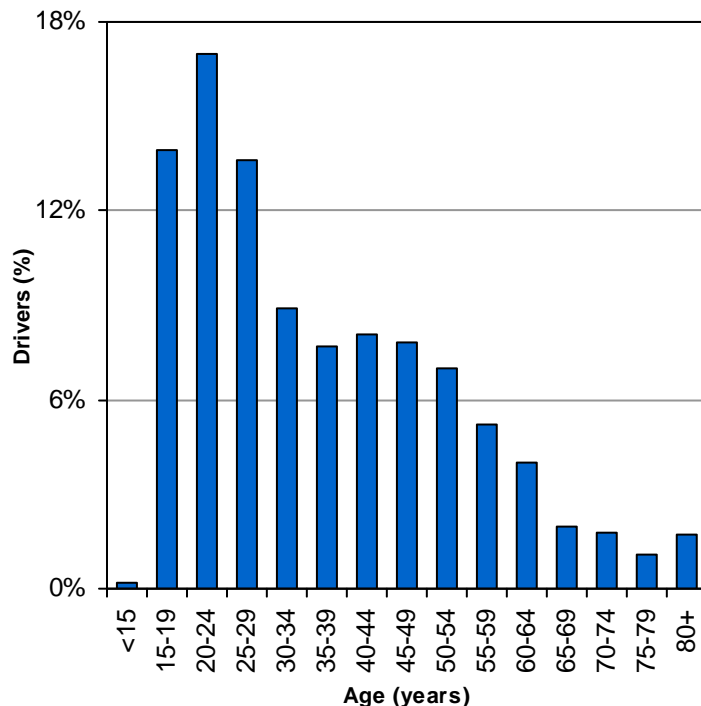
### Did you know in 2007:

- 778 pedestrians were struck by motor vehicles; 681 were injured and 32 were killed.
- Pedestrians accounted for 1% of persons in crashes and 11% of deaths.
- Pedestrian crashes were 11 times more likely to result in a death than other crashes.

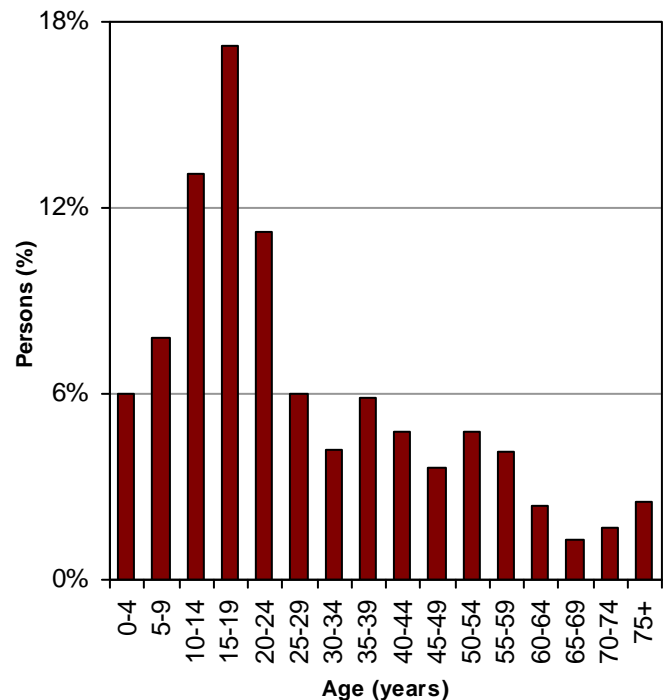
## Pedestrians



**Age of Drivers in Pedestrian-Motor Vehicle Crashes (Utah 2007)**



**Age of Pedestrians in Pedestrian-Motor Vehicle Crashes (Utah 2007)**



- Over half (53%) of drivers in pedestrian-motor vehicle crashes were aged 15-34 years.

- Over half (57%) of the pedestrians in crashes were under 25 years of age.

### Leading Contributing Factors of Drivers in Pedestrian Crashes (Utah 2007)

1. Failed to Yield Right of Way (27%)
2. Driver Distraction (8%)
3. Hit and Run (8%)
4. Vision Obscured by Weather (5%)
5. Speed Too Fast (4%)



### Leading Contributing Factors of Pedestrians in Crashes (Utah 2007)

1. Improper Crossing (12%)
  2. Darting (9%)
  3. In Roadway (7%)
- 41% of pedestrians had no contributing factor in the crash.

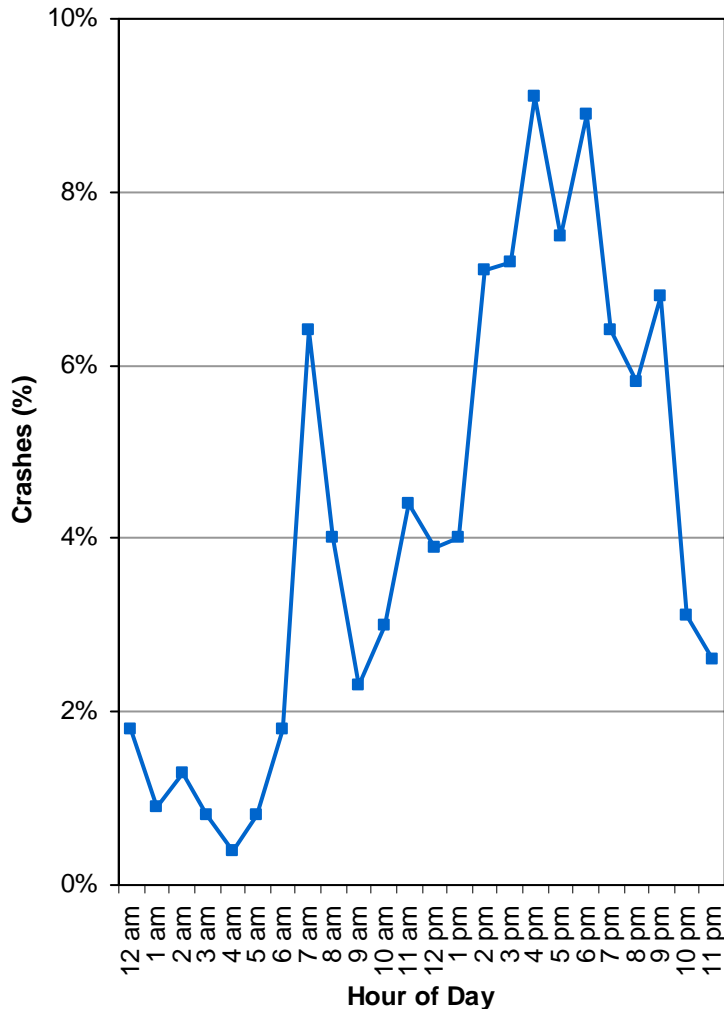


One-fourth (28%) of drivers who hit pedestrians were turning. Drivers need to watch for pedestrians before turning.

## Pedestrians



### Pedestrian-Motor Vehicle Crashes by Hour (Utah 2007)

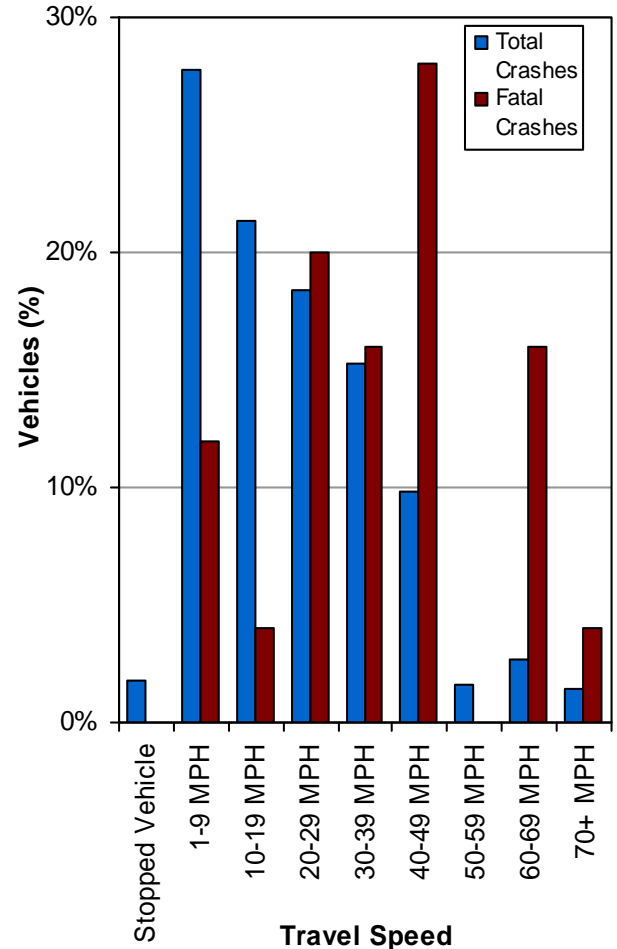


- Pedestrian-motor vehicle crashes occurred most often between 2:00 p.m.-6:59 p.m.

### Location of Pedestrians in Crashes (Utah 2007)

1. Marked Crosswalk (36%)
2. In Roadway Not at Intersection/Crosswalk (34%)
3. Shoulder (11%)
4. Unmarked Crosswalk (8%)
5. Sidewalk (4%)

### Pedestrian-Motor Vehicle Crashes by Vehicle Travel Speed (Utah 2007)



- The higher the speed of the vehicle the more likely the pedestrian was injured or killed in a crash.
- Pedestrians hit by a vehicle traveling 30 MPH or higher were 4.4 times more likely to die.

### Motor Vehicle Action Prior to Crash (Utah 2007)

1. Straight Ahead (55%)
2. Turning Left (14%)
3. Turning Right (14%)
4. Parked (7%)
5. Backing (4%)

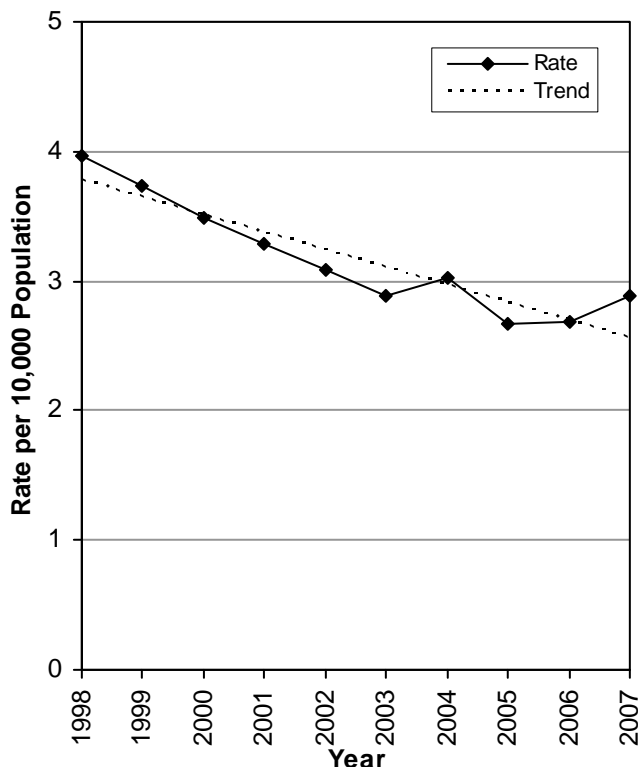




## Pedestrians in Crashes (Utah 1998-2007)

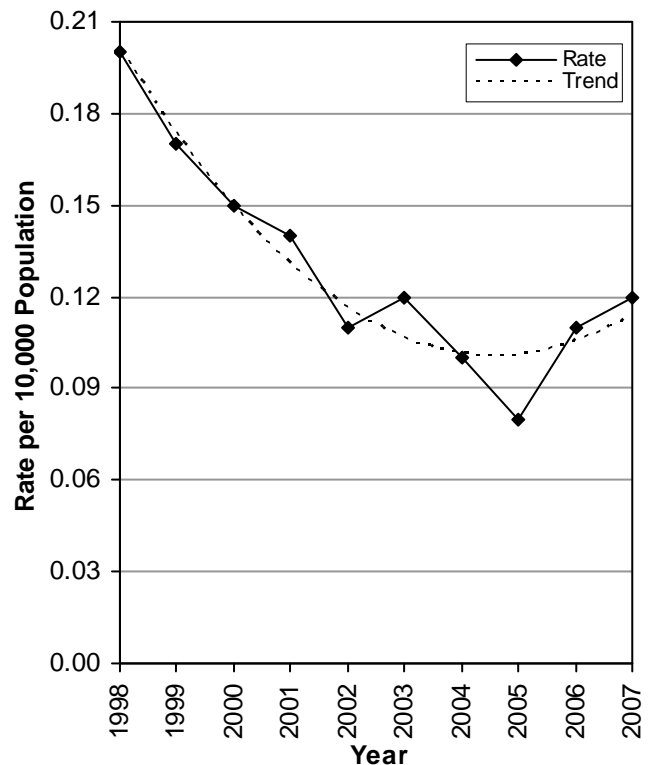
Pedestrians								
Year	Non-Injured		Injured		Killed		Total	
	#	Rate per 10,000 Pop.	#	Rate per 10,000 Pop.	#	Rate per 10,000 Pop.	#	Rate per 10,000 Pop.
1998	33	0.15	774	3.61	43	0.20	850	3.97
1999	32	0.15	748	3.41	38	0.17	818	3.73
2000	44	0.20	708	3.15	33	0.15	785	3.49
2001	39	0.17	682	2.97	33	0.14	754	3.28
2002	32	0.14	664	2.84	25	0.11	721	3.08
2003	42	0.18	616	2.58	28	0.12	686	2.88
2004	45	0.18	675	2.73	25	0.10	745	3.02
2005	35	0.14	626	2.46	20	0.08	681	2.67
2006	55	0.21	617	2.36	29	0.11	701	2.68
2007	65	0.24	681	2.52	32	0.12	778	2.88
<b>Total</b>	<b>422</b>	<b>0.18</b>	<b>6,791</b>	<b>2.84</b>	<b>306</b>	<b>0.13</b>	<b>7,519</b>	<b>3.14</b>

### Pedestrian Crash Rates Per Population (Utah 1998-2007)



- Over the last 10 years, total pedestrian crash rates per population have followed a decreasing trend.
- In 2007, the total rate per population of pedestrians in crashes increased 7.5% from 2006.
- 2005 had the lowest rate per population of total pedestrians in crashes (2.67).

### Pedestrian Death Rates Per Population (Utah 1998-2007)



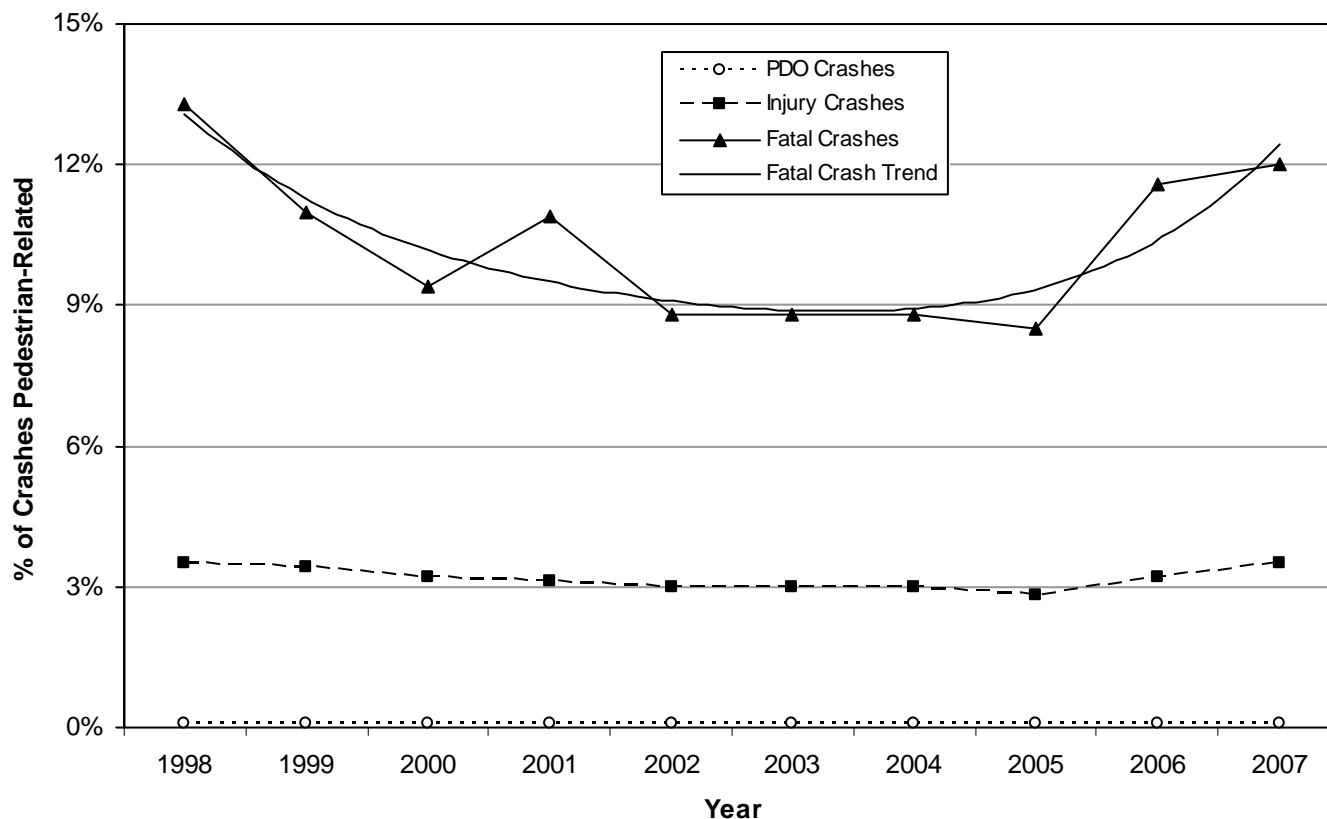
- Pedestrian death rates per population have shown an increasing trend over the last two years.
- The 2007 pedestrian death rate per population was the highest since 2001.
- 2005 had the lowest rate per population of pedestrians killed in crashes (0.08).

## Trends

### Pedestrian-Motor Vehicle Crashes (Utah 1998-2007)

Pedestrian-Motor Vehicle Crashes												
	Property Damage Only			Injury			Fatal			Total		
	All	Ped	Ped	All	Ped	Ped	All	Ped	Ped	All	Ped	Ped
Year	#	#	%	#	#	%	#	#	%	#	#	%
1998	34,337	28	0.1%	19,427	679	3.5%	308	41	13.3%	54,072	748	1.4%
1999	32,971	24	0.1%	19,513	661	3.4%	318	35	11.0%	52,802	720	1.4%
2000	33,269	31	0.1%	19,564	626	3.2%	318	30	9.4%	53,151	687	1.3%
2001	33,113	30	0.1%	19,332	597	3.1%	258	28	10.9%	52,703	655	1.2%
2002	33,542	28	0.1%	19,552	584	3.0%	274	24	8.8%	53,368	636	1.2%
2003	31,842	36	0.1%	18,285	540	3.0%	262	23	8.8%	50,389	599	1.2%
2004	34,222	37	0.1%	19,423	583	3.0%	260	23	8.8%	53,905	643	1.2%
2005	35,158	28	0.1%	19,545	552	2.8%	235	20	8.5%	54,938	600	1.1%
2006	37,749	33	0.1%	18,189	580	3.2%	249	29	11.6%	56,187	642	1.1%
2007	42,368	40	0.1%	18,619	653	3.5%	258	31	12.0%	61,245	724	1.2%
Total	348,571	315	0.1%	191,449	6,055	3.2%	2,740	284	10.4%	542,760	6,654	1.2%

### Percent of Crashes Pedestrian-Related (Utah 1998-2007)



- The 10-year trend shows that pedestrian-motor vehicle crashes represent 0.1% of property damage only crashes, 3.2% of injury crashes, and 10.4% of fatal crashes.
- Pedestrians are over-represented in fatal crashes accounting for 10.4% of fatal crashes compared to 1.2% of total crashes.
- From 2006 to 2007, the number of total crashes that involved a pedestrian increased 12.8%.
- During the last 10 years, the highest percent of fatal crashes involving pedestrians occurred in 1998 (13.3%).

## Counties

### Pedestrians in Crashes by County (Utah 2007)

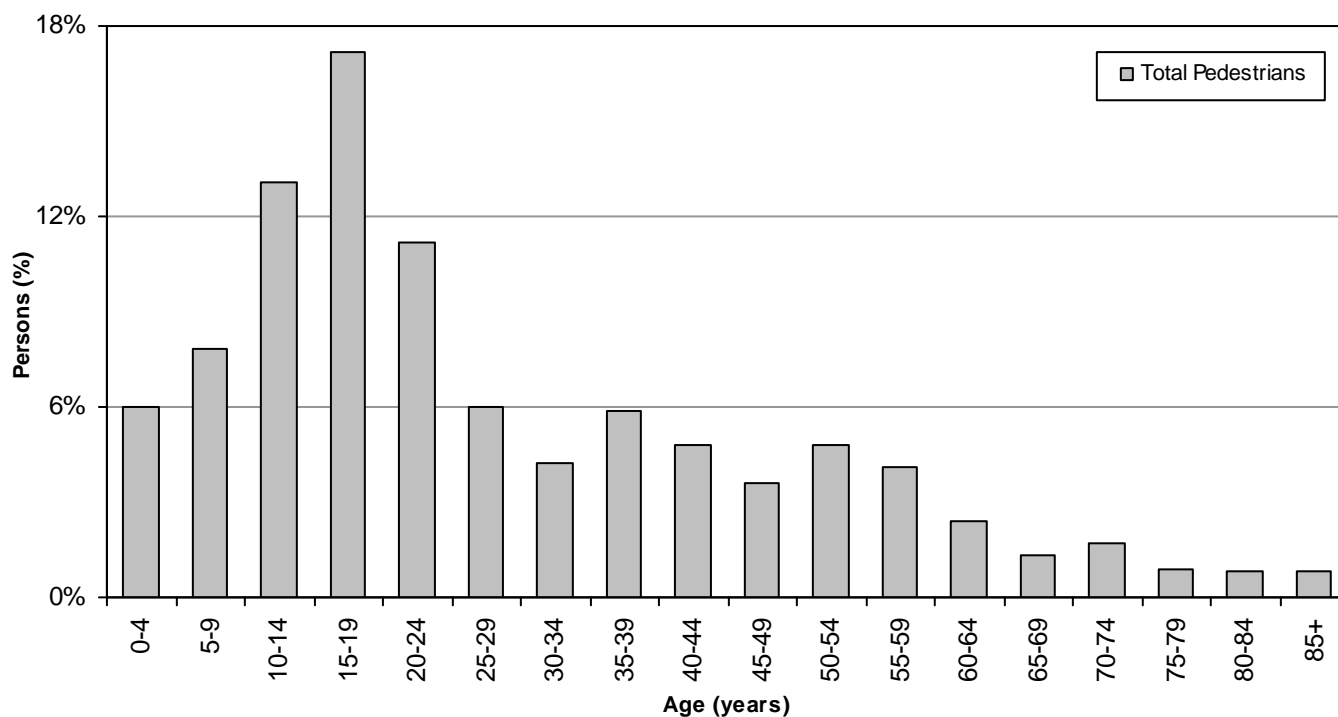
Pedestrians								
County	Non-Injured		Injured		Killed		Total	
	#	Rate	#	Rate	#	Rate	#	Rate
		per		per		per		per
		10,000		10,000		10,000		10,000
	#	Pop.	#	Pop.	#	Pop.	#	Pop.
Carbon	1	0.51	7	3.55	0	0.00	8	4.05
Wayne	0	0.00	1	3.80	0	0.00	1	3.80
Salt Lake	26	0.26	328	3.22	9	0.09	363	3.56
Wasatch	0	0.00	6	2.73	1	0.46	7	3.19
Weber	2	0.09	63	2.85	5	0.23	70	3.17
Juab	1	1.04	2	2.07	0	0.00	3	3.11
Utah	17	0.34	124	2.47	5	0.10	146	2.91
Davis	10	0.34	68	2.30	6	0.20	84	2.84
Uintah	0	0.00	7	2.43	0	0.00	7	2.43
Iron	0	0.00	8	1.79	2	0.45	10	2.23
Grand	0	0.00	2	2.19	0	0.00	2	2.19
Cache	1	0.09	18	1.65	1	0.09	20	1.83
Summit	2	0.52	5	1.30	0	0.00	7	1.82
Tooele	2	0.35	7	1.24	1	0.18	10	1.77
Washington	2	0.14	21	1.49	1	0.07	24	1.70
Box Elder	1	0.21	6	1.26	1	0.21	8	1.68
Beaver	0	0.00	1	1.55	0	0.00	1	1.55
San Juan	0	0.00	2	1.35	0	0.00	2	1.35
Sevier	0	0.00	2	0.98	0	0.00	2	0.98
Millard	0	0.00	1	0.75	0	0.00	1	0.75
Duchesne	0	0.00	1	0.62	0	0.00	1	0.62
Sanpete	0	0.00	1	0.38	0	0.00	1	0.38
Daggett	0	0.00	0	0.00	0	0.00	0	0.00
Emery	0	0.00	0	0.00	0	0.00	0	0.00
Garfield	0	0.00	0	0.00	0	0.00	0	0.00
Kane	0	0.00	0	0.00	0	0.00	0	0.00
Morgan	0	0.00	0	0.00	0	0.00	0	0.00
Piute	0	0.00	0	0.00	0	0.00	0	0.00
Rich	0	0.00	0	0.00	0	0.00	0	0.00
<b>Statewide</b>	<b>65</b>	<b>0.24</b>	<b>681</b>	<b>2.52</b>	<b>32</b>	<b>0.12</b>	<b>778</b>	<b>2.88</b>

- Carbon (4.05), Wayne (3.80), and Salt Lake (3.56) counties had the highest rates of pedestrians in crashes per 10,000 population.
- Daggett, Emery, Garfield, Kane, Morgan, Piute, and Rich counties had no pedestrians in crashes.
- Wasatch (0.46) and Iron (0.45) counties had the highest rates of pedestrians killed in crashes per 10,000 population.

## Pedestrians

### Age of Pedestrians in Crashes (Utah 2007)

Pedestrians								
	Non-Injured		Injured		Killed		Total	
Age	#	%	#	%	#	%	#	%
0-4	5	7.7%	40	5.9%	2	6.3%	47	6.0%
5-9	5	7.7%	55	8.1%	1	3.1%	61	7.8%
10-14	13	20.0%	89	13.1%	0	0.0%	102	13.1%
15-19	17	26.2%	115	16.9%	2	6.3%	134	17.2%
20-24	3	4.6%	80	11.7%	4	12.5%	87	11.2%
25-29	3	4.6%	42	6.2%	2	6.3%	47	6.0%
30-34	2	3.1%	29	4.3%	2	6.3%	33	4.2%
35-39	5	7.7%	40	5.9%	1	3.1%	46	5.9%
40-44	2	3.1%	32	4.7%	3	9.4%	37	4.8%
45-49	0	0.0%	25	3.7%	3	9.4%	28	3.6%
50-54	2	3.1%	30	4.4%	5	15.6%	37	4.8%
55-59	1	1.5%	30	4.4%	1	3.1%	32	4.1%
60-64	1	1.5%	16	2.3%	2	6.3%	19	2.4%
65-69	1	1.5%	9	1.3%	0	0.0%	10	1.3%
70-74	3	4.6%	9	1.3%	1	3.1%	13	1.7%
75-79	0	0.0%	7	1.0%	0	0.0%	7	0.9%
80-84	0	0.0%	6	0.9%	0	0.0%	6	0.8%
85+	0	0.0%	3	0.4%	3	9.4%	6	0.8%
Unknown	2	3.1%	24	3.5%	0	0.0%	26	3.3%
<b>Total</b>	<b>65</b>	<b>100.0%</b>	<b>681</b>	<b>100.0%</b>	<b>32</b>	<b>100.0%</b>	<b>778</b>	<b>100.0%</b>



- Overall, the largest percentages of pedestrians in crashes were aged 15-19 years (17.2%), 10-14 years (13.1%), and 20-24 years (11.2%).
- The highest percentage of pedestrian deaths occurred in the 50-54 year age group (15.6%).

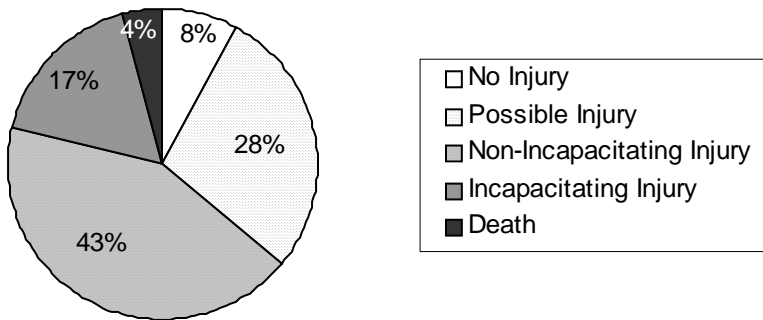
## Pedestrians

### Gender of Pedestrians in Crashes (Utah 2007)

Pedestrians								
Gender	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Male	46	70.8%	403	59.2%	18	56.3%	<b>467</b>	<b>60.0%</b>
Female	17	26.2%	270	39.6%	14	43.8%	<b>301</b>	<b>38.7%</b>
Unknown	2	3.1%	8	1.2%	0	0.0%	<b>10</b>	<b>1.3%</b>
<b>Total</b>	<b>65</b>	<b>100.0%</b>	<b>681</b>	<b>100.0%</b>	<b>32</b>	<b>100.0%</b>	<b>778</b>	<b>100.0%</b>

- The majority of all pedestrians hit (60.0%) and pedestrians killed (56.3%) in crashes were male.

### Injury Severity of Pedestrians in Crashes (Utah 2007)



- 87.5% of pedestrians in crashes sustained an injury compared to 17.7% of all persons in crashes.
- The percentage of pedestrians killed in crashes (4.1%) was much higher than the percentage for all persons killed in motor vehicle crashes (0.2%).
- In fact, pedestrian crashes were 11 times more likely to result in a death than other motor vehicle crashes.

### Contributing Factors of Pedestrians in Crashes (Utah 2007)

Pedestrians								
Contributing Factors	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
None	20	30.8%	197	28.9%	15	46.9%	<b>232</b>	<b>29.8%</b>
Improper Crossing	5	7.7%	77	11.3%	4	12.5%	<b>86</b>	<b>11.1%</b>
Darting	4	6.2%	60	8.8%	0	0.0%	<b>64</b>	<b>8.2%</b>
In Roadway (standing, kneeling, lying)	4	6.2%	42	6.2%	5	15.6%	<b>51</b>	<b>6.6%</b>
Not Visible	3	4.6%	20	2.9%	8	25.0%	<b>31</b>	<b>4.0%</b>
Inattentive	1	1.5%	25	3.7%	0	0.0%	<b>26</b>	<b>3.3%</b>
Failure to Obey Traffic Signs/Signals	1	1.5%	23	3.4%	0	0.0%	<b>24</b>	<b>3.1%</b>
Failure to Yield Right of Way	2	3.1%	12	1.8%	0	0.0%	<b>14</b>	<b>1.8%</b>
Wrong Side of Road	0	0.0%	3	0.4%	0	0.0%	<b>3</b>	<b>0.4%</b>
Other	7	10.8%	26	3.8%	0	0.0%	<b>33</b>	<b>4.2%</b>
Unknown	18	27.7%	196	28.8%	0	0.0%	<b>214</b>	<b>27.5%</b>
<b>Total</b>	<b>65</b>	<b>100.0%</b>	<b>681</b>	<b>100.0%</b>	<b>32</b>	<b>100.0%</b>	<b>778</b>	<b>100.0%</b>

- Improper crossing (15.2% of known), darting (11.3% of known), and in roadway (9.0% of known) were the leading contributing factors for pedestrians in total pedestrian-motor vehicle crashes.
- Not visible (25.0%) and in roadway (15.6%) were the leading contributing factors for pedestrians killed.
- No contributing factors were listed for 46.9% of the pedestrians killed and 41.1% (of known) of total pedestrians.
- Other contributing factors to consider are drivers (see page 126), roadways (such as high speeds, traffic volumes, number of lanes to cross, inadequate pedestrian crossings), and vehicles (such as vehicle size).



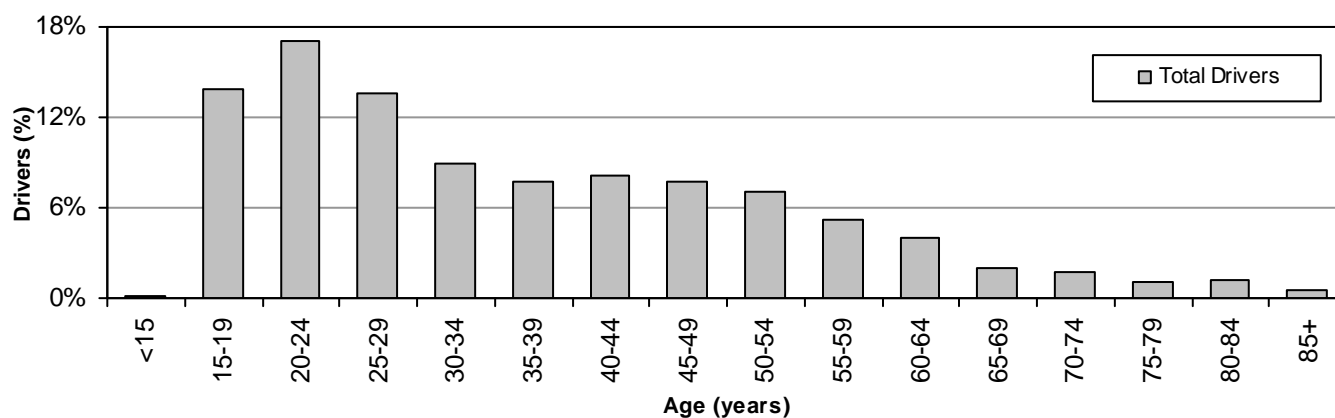
### Alcohol Involvement of Drivers (Utah 2007)

- Two (6.3%) pedestrians were killed by a drunk driver.

## Drivers

### Driver Age (Utah 2007)

Drivers (Pedestrian-Motor Vehicle Crashes)								
Age	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
<15	0	0.0%	1	0.2%	0	0.0%	1	0.1%
15-19	4	8.3%	83	12.5%	4	12.1%	91	12.2%
20-24	5	10.4%	102	15.4%	4	12.1%	111	14.9%
25-29	6	12.5%	80	12.0%	3	9.1%	89	11.9%
30-34	4	8.3%	53	8.0%	1	3.0%	58	7.8%
35-39	5	10.4%	39	5.9%	6	18.2%	50	6.7%
40-44	1	2.1%	48	7.2%	4	12.1%	53	7.1%
45-49	3	6.3%	47	7.1%	1	3.0%	51	6.8%
50-54	1	2.1%	41	6.2%	4	12.1%	46	6.2%
55-59	3	6.3%	29	4.4%	2	6.1%	34	4.6%
60-64	3	6.3%	22	3.3%	1	3.0%	26	3.5%
65-69	1	2.1%	11	1.7%	1	3.0%	13	1.7%
70-74	0	0.0%	12	1.8%	0	0.0%	12	1.6%
75-79	0	0.0%	6	0.9%	1	3.0%	7	0.9%
80-84	0	0.0%	8	1.2%	0	0.0%	8	1.1%
85+	0	0.0%	2	0.3%	1	3.0%	3	0.4%
Unknown	12	25.0%	80	12.0%	0	0.0%	92	12.3%
<b>Total</b>	<b>48</b>	<b>100.0%</b>	<b>664</b>	<b>100.0%</b>	<b>33</b>	<b>100.0%</b>	<b>745</b>	<b>100.0%</b>



- Over half (53.4% of known) of drivers in total pedestrian-motor vehicle crashes were aged 15-34 years.
- The percentage of drivers in fatal pedestrian-motor vehicle crashes was highest for those aged 35-39 years (18.2%).

### Driver Gender (Utah 2007)

Drivers (Pedestrian-Motor Vehicle Crashes)								
Gender	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Male	31	64.6%	351	52.9%	25	75.8%	407	54.6%
Female	11	22.9%	246	37.0%	8	24.2%	265	35.6%
Unknown	6	12.5%	67	10.1%	0	0.0%	73	9.8%
<b>Total</b>	<b>48</b>	<b>100.0%</b>	<b>664</b>	<b>100.0%</b>	<b>33</b>	<b>100.0%</b>	<b>745</b>	<b>100.0%</b>

- Most drivers in total pedestrian crashes (60.6% of known) and fatal crashes (75.8%) were male.

## Pedestrian-Motor Vehicle Crash Conditions

### Urban/Rural Location (Utah 2007)

Pedestrians								
	Non-Injured		Injured		Killed		Total	
		Rate per		Rate per		Rate per		Rate per
		10,000		10,000		10,000		10,000
Location	#	Pop.	#	Pop.	#	Pop.	#	Pop.
Urban	55	0.30	583	3.21	25	0.14	663	3.64
Rural	10	0.11	98	1.11	7	0.08	115	1.31
<b>Total</b>	<b>65</b>	<b>0.24</b>	<b>681</b>	<b>2.52</b>	<b>32</b>	<b>0.12</b>	<b>778</b>	<b>2.88</b>

- Urban areas had higher rates per population for both total pedestrian-motor vehicle crashes and deaths.

### Pedestrian-Motor Vehicle Crashes by Month (Utah 2007)

Pedestrians									
	Non-Injured		Injured		Killed		Total		
	Days in		Rate		Rate		Rate		Rate
	Month		per		per		per		per
Month	#	#	Day	#	Day	#	Day	#	Day
January	31	8	0.26	61	1.97	5	0.16	74	2.39
February	28	5	0.18	46	1.64	1	0.04	52	1.86
March	31	8	0.26	48	1.55	2	0.06	58	1.87
April	30	1	0.03	62	2.07	4	0.13	67	2.23
May	31	7	0.23	65	2.10	2	0.06	74	2.39
June	30	4	0.13	56	1.87	1	0.03	61	2.03
July	31	3	0.10	40	1.29	3	0.10	46	1.48
August	31	6	0.19	58	1.87	0	0.00	64	2.06
September	30	8	0.27	59	1.97	2	0.07	69	2.30
October	31	3	0.10	66	2.13	3	0.10	72	2.32
November	30	2	0.07	71	2.37	1	0.03	74	2.47
December	31	10	0.32	49	1.58	8	0.26	67	2.16
<b>Total</b>	<b>365</b>	<b>65</b>	<b>0.18</b>	<b>681</b>	<b>1.87</b>	<b>32</b>	<b>0.09</b>	<b>778</b>	<b>2.13</b>

- November (2.47), January (2.39), and May (2.39) had the highest rates per day of total pedestrian-motor vehicle crashes.
- December (0.26) and January (0.16) had the highest rates per day of pedestrian deaths.

### Pedestrian-Motor Vehicle Crashes by Day of Week (Utah 2007)

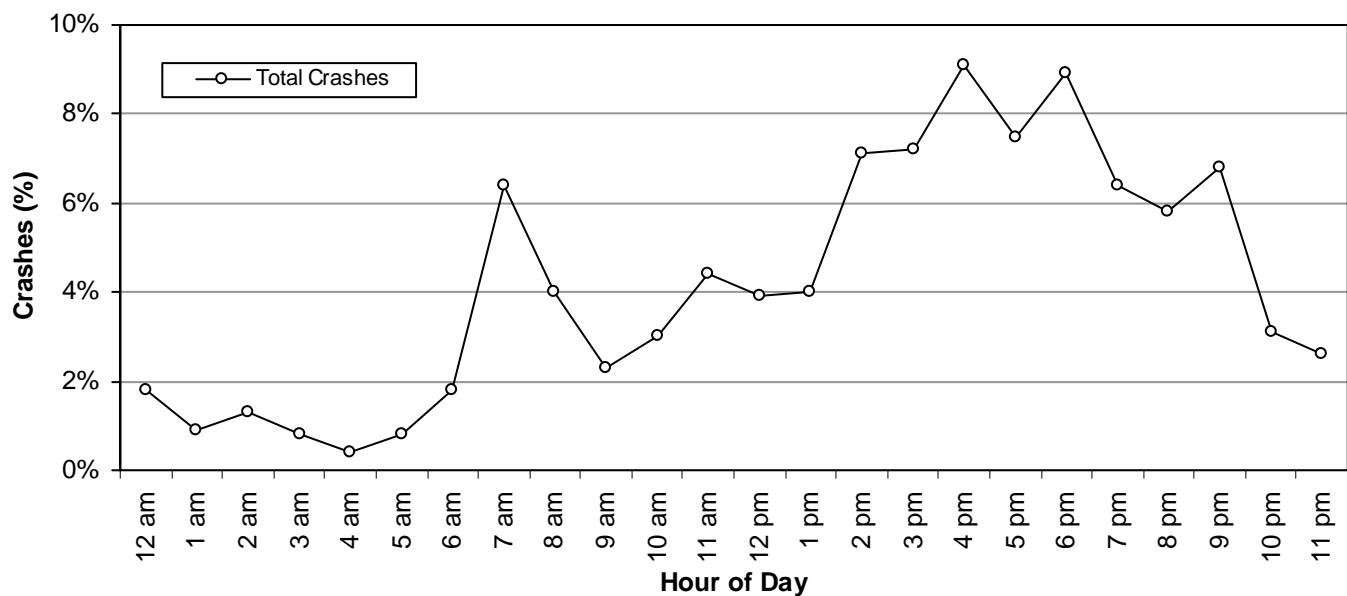
Pedestrians								
	Non-Injured		Injured		Killed		Total	
Day of Week	#	%	#	%	#	%	#	%
Sunday	6	9.2%	56	8.2%	5	15.6%	67	8.6%
Monday	9	13.8%	97	14.2%	3	9.4%	109	14.0%
Tuesday	11	16.9%	123	18.1%	6	18.8%	140	18.0%
Wednesday	10	15.4%	108	15.9%	8	25.0%	126	16.2%
Thursday	8	12.3%	111	16.3%	3	9.4%	122	15.7%
Friday	14	21.5%	102	15.0%	1	3.1%	117	15.0%
Saturday	7	10.8%	84	12.3%	6	18.8%	97	12.5%
<b>Total</b>	<b>65</b>	<b>100.0%</b>	<b>681</b>	<b>100.0%</b>	<b>32</b>	<b>100.0%</b>	<b>778</b>	<b>100.0%</b>

- The highest percentage of total pedestrian-motor vehicle crashes (18.0%) occurred on Tuesday.
- The highest percentage of fatal pedestrian-motor vehicle crashes (25.0%) occurred on Wednesday.

## Pedestrian-Motor Vehicle Crash Conditions

### Pedestrian-Motor Vehicle Crashes by Hour (Utah 2007)

Pedestrians								
	Non-Injured		Injured		Killed		Total	
Hour	#	%	#	%	#	%	#	%
Midnight	2	3.1%	10	1.5%	2	6.3%	14	1.8%
1 a.m.	0	0.0%	6	0.9%	1	3.1%	7	0.9%
2 a.m.	1	1.5%	8	1.2%	1	3.1%	10	1.3%
3 a.m.	0	0.0%	6	0.9%	0	0.0%	6	0.8%
4 a.m.	0	0.0%	3	0.4%	0	0.0%	3	0.4%
5 a.m.	0	0.0%	5	0.7%	1	3.1%	6	0.8%
6 a.m.	0	0.0%	12	1.8%	2	6.3%	14	1.8%
7 a.m.	4	6.2%	44	6.5%	2	6.3%	50	6.4%
8 a.m.	2	3.1%	28	4.1%	1	3.1%	31	4.0%
9 a.m.	3	4.6%	15	2.2%	0	0.0%	18	2.3%
10 a.m.	3	4.6%	19	2.8%	1	3.1%	23	3.0%
11 a.m.	2	3.1%	31	4.6%	1	3.1%	34	4.4%
Noon	1	1.5%	26	3.8%	3	9.4%	30	3.9%
1 p.m.	1	1.5%	30	4.4%	0	0.0%	31	4.0%
2 p.m.	9	13.8%	45	6.6%	1	3.1%	55	7.1%
3 p.m.	5	7.7%	51	7.5%	0	0.0%	56	7.2%
4 p.m.	11	16.9%	59	8.7%	1	3.1%	71	9.1%
5 p.m.	5	7.7%	50	7.3%	3	9.4%	58	7.5%
6 p.m.	7	10.8%	60	8.8%	2	6.3%	69	8.9%
7 p.m.	2	3.1%	46	6.8%	2	6.3%	50	6.4%
8 p.m.	0	0.0%	43	6.3%	2	6.3%	45	5.8%
9 p.m.	4	6.2%	49	7.2%	0	0.0%	53	6.8%
10 p.m.	3	4.6%	19	2.8%	2	6.3%	24	3.1%
11 p.m.	0	0.0%	16	2.3%	4	12.5%	20	2.6%
<b>Total</b>	<b>65</b>	<b>100.0%</b>	<b>681</b>	<b>100.0%</b>	<b>32</b>	<b>100.0%</b>	<b>778</b>	<b>100.0%</b>



- Total pedestrian-motor vehicle crashes were more likely to occur between 2:00 p.m. and 6:59 p.m.
- Fatal pedestrian-motor vehicle crashes were highest during the 11:00 p.m. hour.



## Pedestrian-Motor Vehicle Crash Conditions

### Pedestrian Location in Crashes (Utah 2007)

Pedestrians								
Pedestrian Location	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Marked Crosswalk	14	21.5%	183	26.9%	10	31.3%	207	26.6%
In Roadway (not at intersection/crosswalk)	19	29.2%	161	23.6%	16	50.0%	196	25.2%
Shoulder	3	4.6%	59	8.7%	3	9.4%	65	8.4%
Unmarked Crosswalk	1	1.5%	41	6.0%	1	3.1%	43	5.5%
Sidewalk	0	0.0%	21	3.1%	1	3.1%	22	2.8%
Median	0	0.0%	4	0.6%	0	0.0%	4	0.5%
Outside Right of Way	0	0.0%	2	0.3%	0	0.0%	2	0.3%
Path/Trail (bike or shared use)	0	0.0%	1	0.1%	0	0.0%	1	0.1%
Other	4	6.2%	26	3.8%	1	3.1%	31	4.0%
Unknown	24	36.9%	183	26.9%	0	0.0%	207	26.6%
<b>Total</b>	<b>65</b>	<b>100.0%</b>	<b>681</b>	<b>100.0%</b>	<b>32</b>	<b>100.0%</b>	<b>778</b>	<b>100.0%</b>

- For total crashes, 43.8% (of known) occurred in a crosswalk (marked or unmarked) and 34.3% (of known) occurred in roadway not at intersection or crosswalk.
- For fatal crashes, 50.0% occurred in roadway and 34.4% occurred in a crosswalk (marked or unmarked).
- A crosswalk exists at every intersection regardless of whether or not it is painted.

### Vehicle Maneuver Prior to Crash (Utah 2007)

Vehicles (Pedestrian-Motor Vehicle Crashes)								
Vehicle Maneuver	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Straight Ahead	28	53.8%	372	52.5%	30	90.9%	430	54.2%
Turning Left	4	7.7%	107	15.1%	0	0.0%	111	14.0%
Turning Right	5	9.6%	102	14.4%	0	0.0%	107	13.5%
Parked	5	9.6%	46	6.5%	0	0.0%	51	6.4%
Backing	0	0.0%	28	3.9%	2	6.1%	30	3.8%
Slowing in Traffic Lane	5	9.6%	14	2.0%	0	0.0%	19	2.4%
Entering Traffic Lane	1	1.9%	9	1.3%	0	0.0%	10	1.3%
Stopped in Traffic Lane	2	3.8%	7	1.0%	1	3.0%	10	1.3%
Changing Lanes	0	0.0%	5	0.7%	0	0.0%	5	0.6%
Overtaking/Passing	1	1.9%	3	0.4%	0	0.0%	4	0.5%
Leaving Traffic Lane	0	0.0%	3	0.4%	0	0.0%	3	0.4%
Parking Maneuvers	0	0.0%	2	0.3%	0	0.0%	2	0.3%
Making U-turn	0	0.0%	1	0.1%	0	0.0%	1	0.1%
Other	1	1.9%	1	0.1%	0	0.0%	2	0.3%
Unknown	0	0.0%	9	1.3%	0	0.0%	9	1.1%
<b>Total</b>	<b>52</b>	<b>100.0%</b>	<b>709</b>	<b>100.0%</b>	<b>33</b>	<b>100.0%</b>	<b>794</b>	<b>100.0%</b>

- For total pedestrian-motor vehicle crashes, the leading vehicle maneuvers prior to the crash were straight ahead (54.2%), turning left (14.0%), and turning right (13.5%).
- For fatal pedestrian-motor vehicle crashes, the leading vehicle maneuver prior to the crash was straight ahead (90.9%).

## Pedestrian-Motor Vehicle Crash Conditions

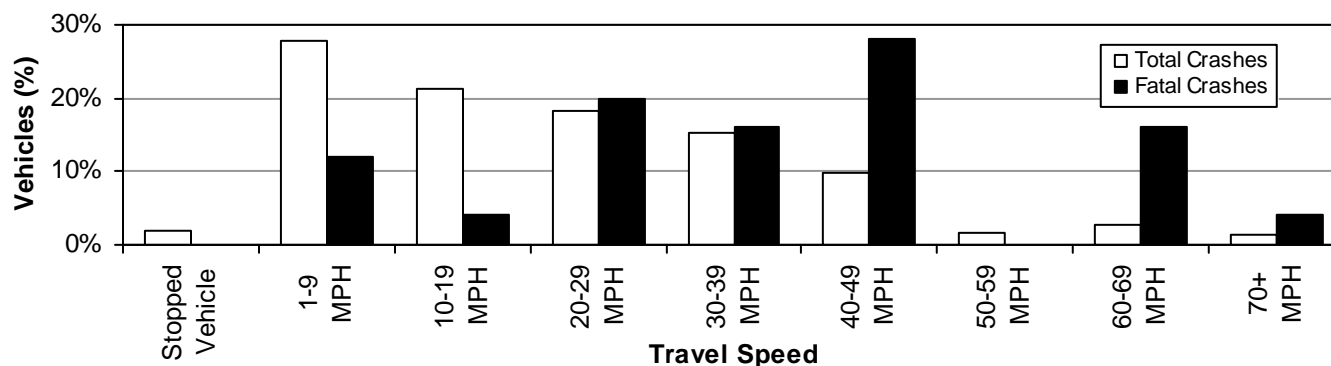
### Pedestrian-Motor Vehicle Crashes by Speed Limit (Utah 2007)

Vehicles (Pedestrian-Motor Vehicle Crashes)								
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
Speed Limit	#	%	#	%	#	%	#	%
5-15 MPH	1	1.9%	9	1.3%	0	0.0%	10	1.3%
20-25 MPH	11	21.2%	162	22.8%	6	18.2%	179	22.5%
30-35 MPH	12	23.1%	184	26.0%	9	27.3%	205	25.8%
40-45 MPH	6	11.5%	111	15.7%	11	33.3%	128	16.1%
50-55 MPH	0	0.0%	18	2.5%	1	3.0%	19	2.4%
60-65 MPH	2	3.8%	16	2.3%	4	12.1%	22	2.8%
70-75 MPH	2	3.8%	6	0.8%	1	3.0%	9	1.1%
Unknown	18	34.6%	203	28.6%	1	3.0%	222	28.0%
<b>Total</b>	<b>52</b>	<b>100.0%</b>	<b>709</b>	<b>100.0%</b>	<b>33</b>	<b>100.0%</b>	<b>794</b>	<b>100.0%</b>

- The majority (89.5% of known) of total pedestrian crashes occurred where the speed limit was 20-45 MPH.
- Fatal pedestrian-motor vehicle crashes occurred most often where the speed limit was 30-45 MPH (60.6%).

### Travel Speed of Vehicles in Pedestrian Crashes (Utah 2007)

Vehicles (Pedestrian-Motor Vehicle Crashes)								
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
Travel Speed	#	%	#	%	#	%	#	%
Stopped Vehicle	2	3.8%	7	1.0%	0	0.0%	9	1.1%
1-9 MPH	8	15.4%	131	18.5%	3	9.1%	142	17.9%
10-19 MPH	5	9.6%	103	14.5%	1	3.0%	109	13.7%
20-29 MPH	3	5.8%	86	12.1%	5	15.2%	94	11.8%
30-39 MPH	7	13.5%	67	9.4%	4	12.1%	78	9.8%
40-49 MPH	2	3.8%	41	5.8%	7	21.2%	50	6.3%
50-59 MPH	1	1.9%	7	1.0%	0	0.0%	8	1.0%
60-69 MPH	1	1.9%	9	1.3%	4	12.1%	14	1.8%
70+ MPH	1	1.9%	5	0.7%	1	3.0%	7	0.9%
Unknown	22	42.3%	253	35.7%	8	24.2%	283	35.6%
<b>Total</b>	<b>52</b>	<b>100.0%</b>	<b>709</b>	<b>100.0%</b>	<b>33</b>	<b>100.0%</b>	<b>794</b>	<b>100.0%</b>



- The higher the speed of the vehicle the more likely the pedestrian was injured or killed in a crash.
- The majority (82.8% of known) of vehicles in total pedestrian-motor vehicle crashes were traveling 1-39 MPH.
- The majority (64.0% of known) of vehicles in fatal pedestrian crashes were traveling 20-49 MPH.
- Pedestrians hit by a vehicle traveling 30 MPH or higher were 4.4 times more likely to die.
- Studies show that 5% of pedestrians die when struck by a vehicle traveling at 20 mph or less. This compares with death rates of 40% at 30 mph, 80% at 40 mph, and nearly 100% at 50 mph.

## Pedestrian-Motor Vehicle Crash Conditions

### Type of Vehicles in Pedestrian-Motor Vehicle Crashes (Utah 2007)

Vehicles (Pedestrian-Motor Vehicle Crashes)								
Vehicle Type	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Passenger Car	22	42.3%	379	53.5%	15	45.5%	416	52.4%
SUV	11	21.2%	115	16.2%	8	24.2%	134	16.9%
Pickup Truck	11	21.2%	116	16.4%	3	9.1%	130	16.4%
Van	2	3.8%	47	6.6%	4	12.1%	53	6.7%
Semi/Large Truck	2	3.8%	12	1.7%	2	6.1%	16	2.0%
Bus	0	0.0%	10	1.4%	0	0.0%	10	1.3%
Motorcycle	1	1.9%	2	0.3%	0	0.0%	3	0.4%
Other	0	0.0%	2	0.3%	1	3.0%	3	0.4%
Unknown	3	5.8%	26	3.7%	0	0.0%	29	3.7%
<b>Total</b>	<b>52</b>	<b>100.0%</b>	<b>709</b>	<b>100.0%</b>	<b>33</b>	<b>100.0%</b>	<b>794</b>	<b>100.0%</b>

- The largest percentages of vehicles in total pedestrian-motor vehicle crashes were passenger car (52.4%), SUV (16.9%), and pickup truck (16.4%).
- Passenger car (45.5%) and SUV (24.2%) were in the most fatal pedestrian-motor vehicle crashes.

### Pedestrian-Motor Vehicle Crash Violations (Utah 2007)

Drivers (Pedestrian-Motor Vehicle Crashes)								
Violations	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Failure to Yield Right of Way	1	20.0%	11	39.3%	3	33.3%	15	35.7%
Driving Under the Influence	0	0.0%	2	7.1%	1	11.1%	3	7.1%
Improper Lane Change/Travel	1	20.0%	2	7.1%	0	0.0%	3	7.1%
License Violation	1	20.0%	2	7.1%	0	0.0%	3	7.1%
Speed	1	20.0%	2	7.1%	0	0.0%	3	7.1%
Hit and Run	0	0.0%	1	3.6%	1	11.1%	2	4.8%
Improper Turn	0	0.0%	2	7.1%	0	0.0%	2	4.8%
Insurance Violation	0	0.0%	2	7.1%	0	0.0%	2	4.8%
Vehicle Homicide	0	0.0%	0	0.0%	2	22.2%	2	4.8%
Failure to Obey Traffic Control Device	0	0.0%	1	3.6%	0	0.0%	1	2.4%
Following Too Close	1	20.0%	0	0.0%	0	0.0%	1	2.4%
Improper Start or Stop	0	0.0%	1	3.6%	0	0.0%	1	2.4%
Negligent Collision	0	0.0%	1	3.6%	0	0.0%	1	2.4%
Reckless Driving	0	0.0%	1	3.6%	0	0.0%	1	2.4%
Other Moving Violation	0	0.0%	0	0.0%	2	22.2%	2	4.8%
<b>Total</b>	<b>5</b>	<b>100.0%</b>	<b>28</b>	<b>100.0%</b>	<b>9</b>	<b>100.0%</b>	<b>42</b>	<b>100.0%</b>

- There were 42 citations issued to drivers at the scene of the crash. Failure to yield right of way (35.7%) was the leading violation for total pedestrian-motor vehicle crashes.
- The leading violation in fatal pedestrian-motor vehicle crashes was failure to yield right of way.

## Pedestrian-Motor Vehicle Crash Conditions

### Contributing Factors in Pedestrian Crashes (Utah 2007)

Drivers/Vehicles (Pedestrian-Motor Vehicle Crashes)								
Contributing Factors	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Failed to Yield Right of Way	4	10.5%	185	27.8%	10	28.6%	199	27.0%
Other Improper Driving	7	18.4%	74	11.1%	1	2.9%	82	11.1%
Driver Distraction	2	5.3%	55	8.3%	2	5.7%	59	8.0%
Hit and Run	2	5.3%	33	5.0%	3	8.6%	38	5.1%
Vision Obscured by Weather Condition	3	7.9%	32	4.8%	0	0.0%	35	4.7%
Speed Too Fast	2	5.3%	21	3.2%	7	20.0%	30	4.1%
Vision Obscured by Glare	2	5.3%	25	3.8%	0	0.0%	27	3.7%
Vision Obscured by Parked Vehicle	1	2.6%	25	3.8%	0	0.0%	26	3.5%
Vision Obscured by Other	0	0.0%	21	3.2%	1	2.9%	22	3.0%
Vehicle Other Defective Condition	2	5.3%	17	2.6%	1	2.9%	20	2.7%
Failed to Keep in Proper Lane	4	10.5%	14	2.1%	1	2.9%	19	2.6%
Improper Backing	0	0.0%	17	2.6%	1	2.9%	18	2.4%
Reckless/Aggressive Driving	0	0.0%	13	2.0%	4	11.4%	17	2.3%
Vision Obscured by Moving Vehicle	1	2.6%	16	2.4%	0	0.0%	17	2.3%
Driver Emotionally Upset	0	0.0%	16	2.4%	0	0.0%	16	2.2%
Disregard Traffic Signal/Sign	1	2.6%	13	2.0%	0	0.0%	14	1.9%
Driving Under the Influence	1	2.6%	10	1.5%	3	8.6%	14	1.9%
Improper Turn	0	0.0%	13	2.0%	0	0.0%	13	1.8%
Ran Off Road	0	0.0%	9	1.4%	0	0.0%	9	1.2%
Vision Obscured by Building, Sign	1	2.6%	7	1.1%	0	0.0%	8	1.1%
Followed Too Closely	3	7.9%	4	0.6%	0	0.0%	7	0.9%
Swerved or Evasive Action	1	2.6%	6	0.9%	0	0.0%	7	0.9%
Overcorrected	0	0.0%	6	0.9%	0	0.0%	6	0.8%
Improper Lane Change	0	0.0%	4	0.6%	0	0.0%	4	0.5%
Improper Parking/Stopping	1	2.6%	3	0.5%	0	0.0%	4	0.5%
Other Driver Condition	0	0.0%	4	0.6%	0	0.0%	4	0.5%
Vehicle Brakes	0	0.0%	4	0.6%	0	0.0%	4	0.5%
Vehicle Tires	0	0.0%	3	0.5%	1	2.9%	4	0.5%
Windshield or Other Window Obscured	0	0.0%	4	0.6%	0	0.0%	4	0.5%
Disregard Road Markings	0	0.0%	3	0.5%	0	0.0%	3	0.4%
Asleep/Fatigue	0	0.0%	2	0.3%	0	0.0%	2	0.3%
Improper Passing	0	0.0%	2	0.3%	0	0.0%	2	0.3%
Vision Obscured by Vegetation	0	0.0%	2	0.3%	0	0.0%	2	0.3%
Driver Illness	0	0.0%	1	0.2%	0	0.0%	1	0.1%
Wrong Side/Wrong Way	0	0.0%	1	0.2%	0	0.0%	1	0.1%
<b>Total</b>	<b>38</b>	<b>100.0%</b>	<b>665</b>	<b>100.0%</b>	<b>35</b>	<b>100.0%</b>	<b>738</b>	<b>100.0%</b>

- Failed to yield right of way (27.0%), driver distraction (8.0%), and hit and run (5.1%) were the leading contributing factors in total pedestrian-motor vehicle crashes.
- Failed to yield right of way (28.6%) and speed too fast (20.0%) were the leading contributing factors in fatal pedestrian-motor vehicle crashes.

# Bicyclists

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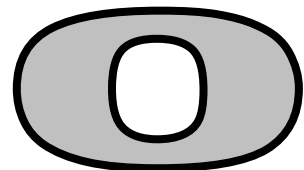
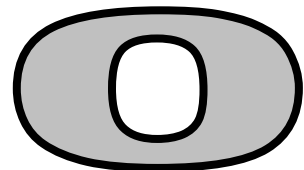
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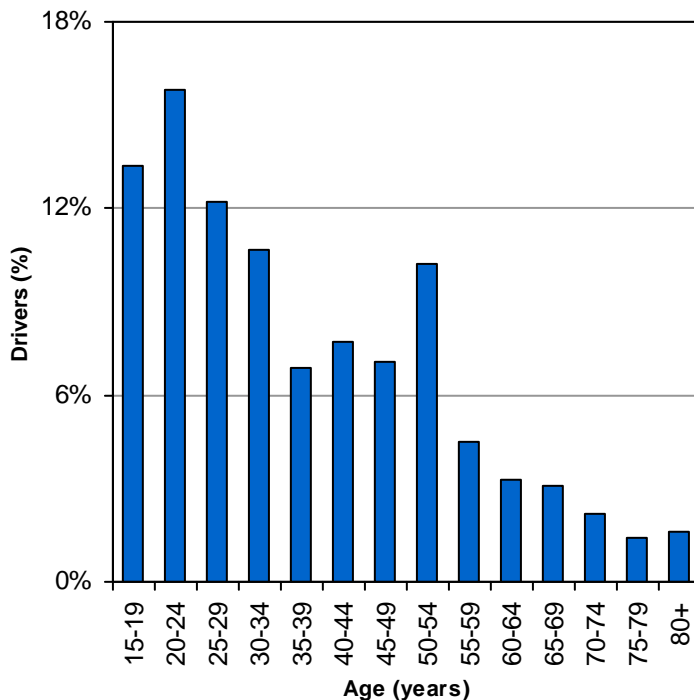
### Did you know in 2007:

- 643 bicyclists were hit by motor vehicles; 584 were injured and 6 were killed.
- Utah's bicyclist crash rate per population decreased 8% from 2006.
- Bicycle crashes were 2.3 times more likely to result in a death than other crashes.

## Bicyclists

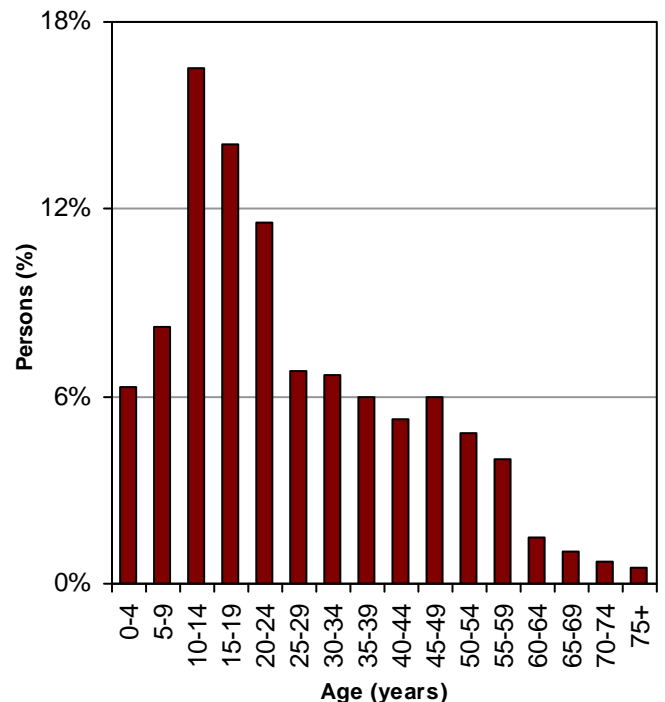


**Age of Drivers in Bicycle-Motor Vehicle Crashes (Utah 2007)**



- Over half (52%) of drivers in bicycle-motor vehicle crashes were aged 15-34 years.

**Age of Bicyclists in Bicycle-Motor Vehicle Crashes (Utah 2007)**



- Over half (57%) of the bicyclists in crashes were under 25 years of age.

**Leading Contributing Factors of Drivers in Bicyclist Crashes (Utah 2007)**

1. Failed to Yield Right of Way (34%)
2. Driver Distraction (4%)
2. Improper Turn (4%)
4. Hit and Run (4%)
5. Vision Obscured by Glare (4%)



**Leading Contributing Factors of Bicyclists in Crashes (Utah 2007)**

1. Wrong Side of Road (10%)
  2. Improper Crossing (9%)
  3. Inattentive (5%)
- 33% of bicyclists had no contributing factor in the crash.

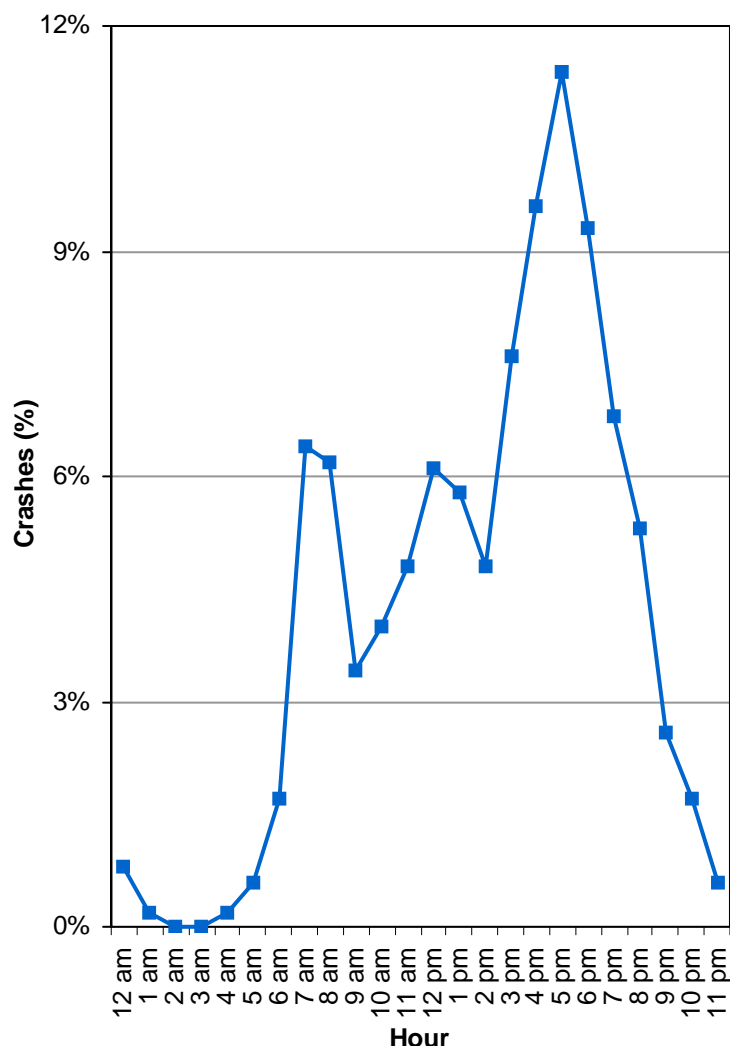


## Bicyclists



One-half (50%) of motor vehicles that hit bicyclists were turning. Drivers need to watch for bicycles before turning.

### Bicycle-Motor Vehicle Crashes by Hour (Utah 2007)

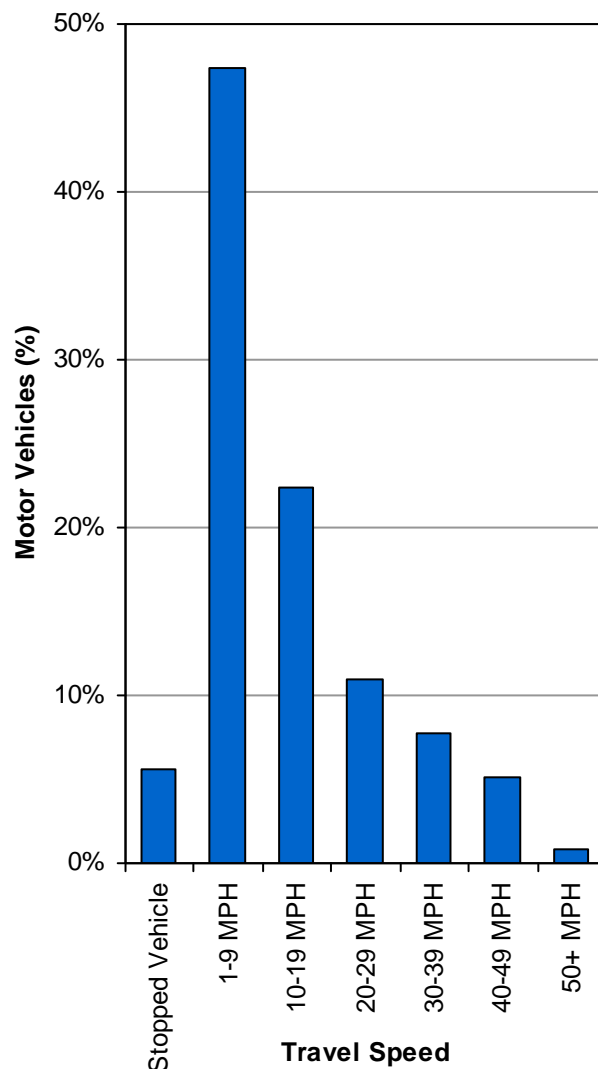


- Bicycle-motor vehicle crashes occurred most often between 3:00 p.m.-6:59 p.m.

### Location of Bicyclists in Crashes (Utah 2007)

1. Marked Crosswalk (27%)
2. In Roadway Not at Intersection/Crosswalk (22%)
3. Shoulder (17%)
3. Sidewalk (17%)
5. Unmarked Crosswalk (9%)

### Bicycle-Motor Vehicle Crashes by Motor Vehicle Travel Speed (Utah 2007)



- Over two-thirds (70%) of bicyclist crashes occurred when the motor vehicle was traveling 1-19 MPH.

### Motor Vehicle Action Prior to Crash (Utah 2007)

1. Straight Ahead (37%)
2. Turning Right (32%)
3. Turning Left (17%)
4. Stopped (4%)
5. Entering Traffic (3%)

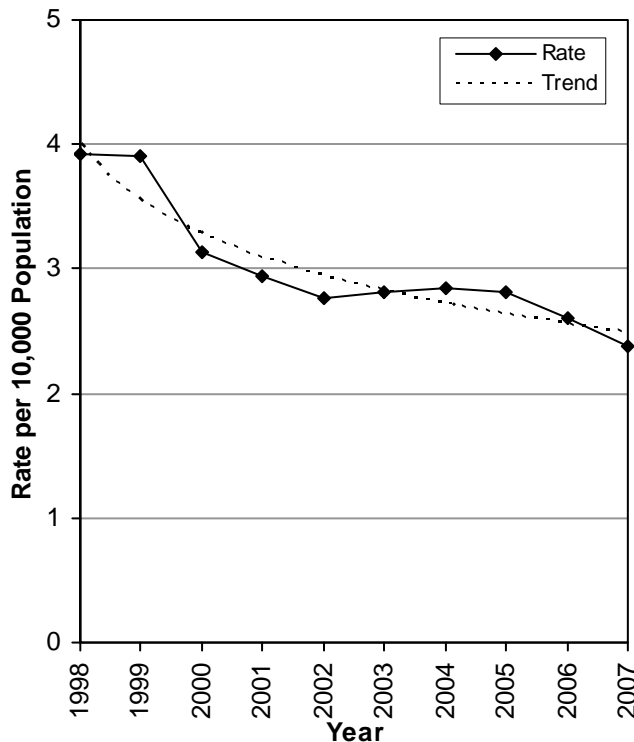




## Bicyclists in Crashes (Utah 1998-2007)

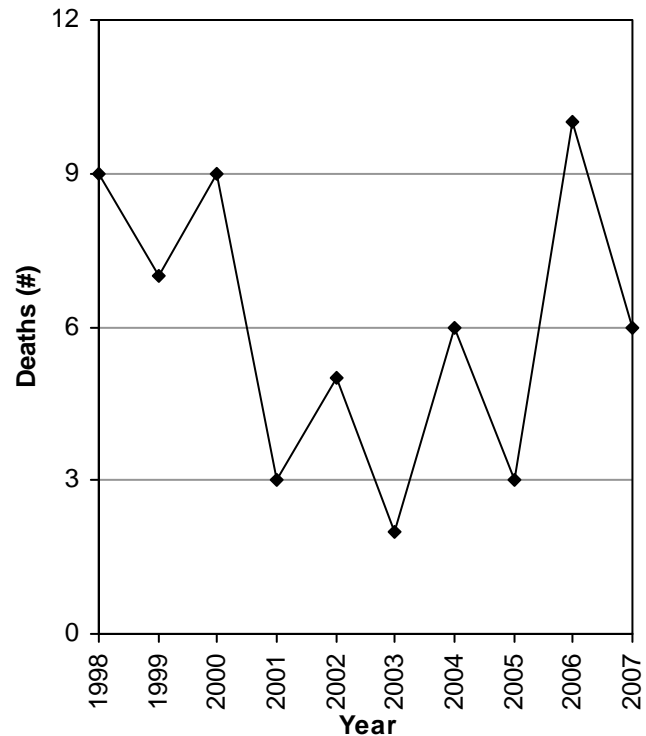
Bicyclists								
Year	Non-Injured		Injured		Killed		Total	
	#	Rate per	#	Rate per	#	Rate per	#	Rate per
		10,000		10,000		10,000		10,000
	Pop.		Pop.		Pop.		Pop.	
1998	72	0.34	758	3.54	9	0.042	839	3.92
1999	72	0.33	777	3.54	7	0.032	856	3.90
2000	62	0.28	635	2.83	9	0.040	706	3.14
2001	48	0.21	625	2.72	3	0.013	676	2.94
2002	50	0.21	590	2.52	5	0.021	645	2.76
2003	48	0.20	621	2.60	2	0.008	671	2.81
2004	49	0.20	648	2.62	6	0.024	703	2.85
2005	61	0.24	654	2.57	3	0.012	718	2.82
2006	79	0.30	592	2.26	10	0.038	681	2.60
2007	53	0.20	584	2.16	6	0.022	643	2.38
Total	594	0.25	6,484	2.71	60	0.025	7,138	2.98

### Bicyclist Crash Rates Per Population (Utah 1998-2007)



- Over the last 10 years, the rates of total bicyclists in crashes has followed a decreasing trend.
- In 2007, the total rate per population of bicyclists in crashes decreased 8.5% from the 2006 rate.
- 2007 had the lowest bicyclist crash rate per population (2.38).

### Bicyclist Deaths (Utah 1998-2007)



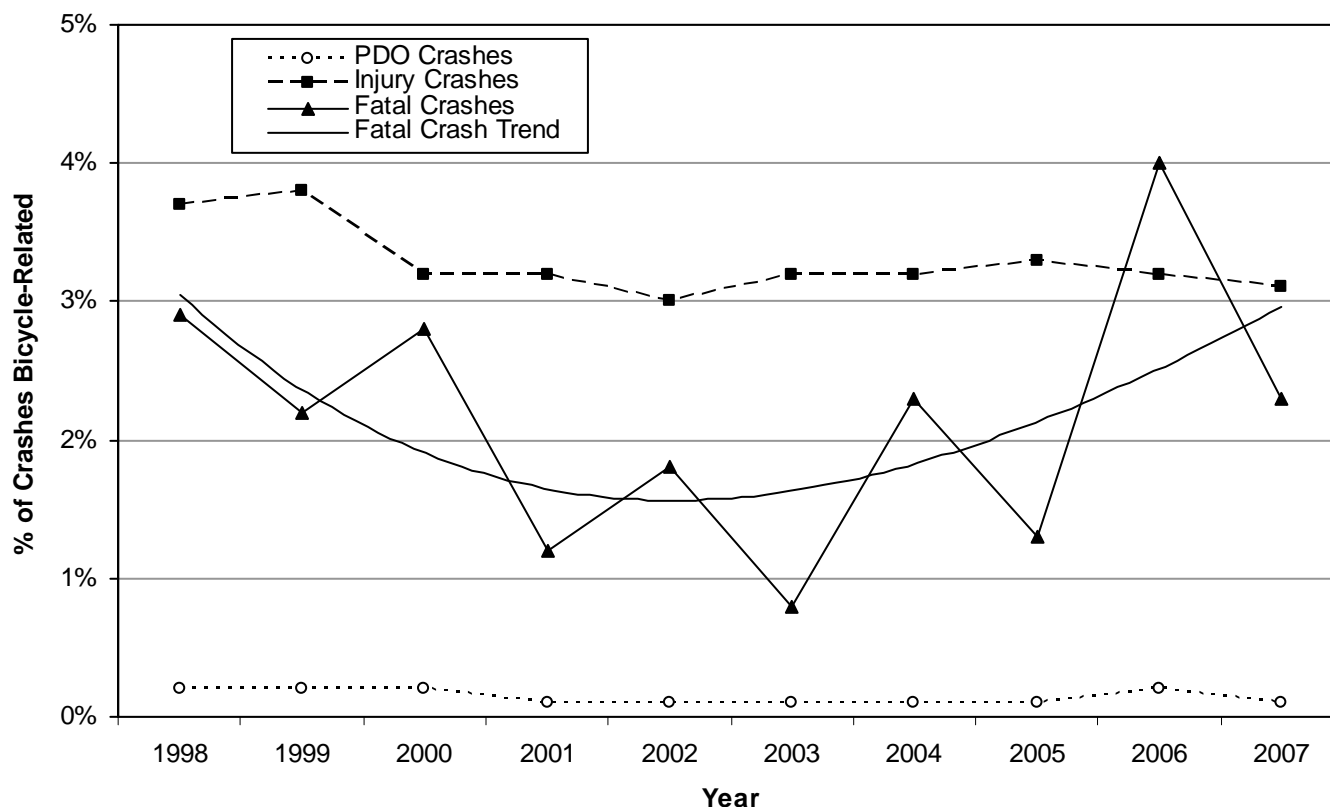
- On average, six bicyclists are killed in crashes every year.
- In 2007, there were six bicyclists killed in crashes.
- Because of the small number of bicyclist deaths, it is difficult to compare increases and decreases from year to year.

## Trends

### Bicycle-Motor Vehicle Crashes (Utah 1998-2007)

Bicycle-Motor Vehicle Crashes												
Year	Property Damage Only			Injury			Fatal			Total		
	All #	Bike #	Bike %	All #	Bike #	Bike %	All #	Bike #	Bike %	All #	Bike #	Bike %
1998	34,337	67	0.2%	19,427	728	3.7%	308	9	2.9%	54,072	804	1.5%
1999	32,971	66	0.2%	19,513	732	3.8%	318	7	2.2%	52,802	805	1.5%
2000	33,269	58	0.2%	19,564	625	3.2%	318	9	2.8%	53,151	692	1.3%
2001	33,113	42	0.1%	19,332	609	3.2%	258	3	1.2%	52,703	654	1.2%
2002	33,542	44	0.1%	19,552	585	3.0%	274	5	1.8%	53,368	634	1.2%
2003	31,842	39	0.1%	18,285	589	3.2%	262	2	0.8%	50,389	630	1.3%
2004	34,222	45	0.1%	19,423	626	3.2%	260	6	2.3%	53,905	677	1.3%
2005	35,158	50	0.1%	19,545	637	3.3%	235	3	1.3%	54,938	690	1.3%
2006	37,749	71	0.2%	18,189	589	3.2%	249	10	4.0%	56,187	670	1.2%
2007	42,368	46	0.1%	18,619	579	3.1%	258	6	2.3%	61,245	631	1.0%
<b>Total</b>	<b>348,571</b>	<b>528</b>	<b>0.2%</b>	<b>191,449</b>	<b>6,299</b>	<b>3.3%</b>	<b>2,740</b>	<b>60</b>	<b>2.2%</b>	<b>542,760</b>	<b>6,887</b>	<b>1.3%</b>

### Percent of Crashes Bicycle-Related (Utah 1998-2007)



- The 10-year trend shows that bicycle-motor vehicle crashes represent 0.2% of property damage only crashes, 3.3% of injury crashes, and 2.2% of fatal crashes.
- During the last 10 years, 6,887 crashes involved a bicyclist. There are approximately 630 injury crashes and six fatal crashes involving bicyclists a year.
- In 2007, there were six fatal bicycle-motor vehicle crashes which represented 2.3% of all fatal crashes. Because of the small number of fatal bicycle-motor vehicle crashes, it is difficult to compare increases and decreases from year to year.

## Counties

### Bicyclists in Crashes by County (Utah 2007)

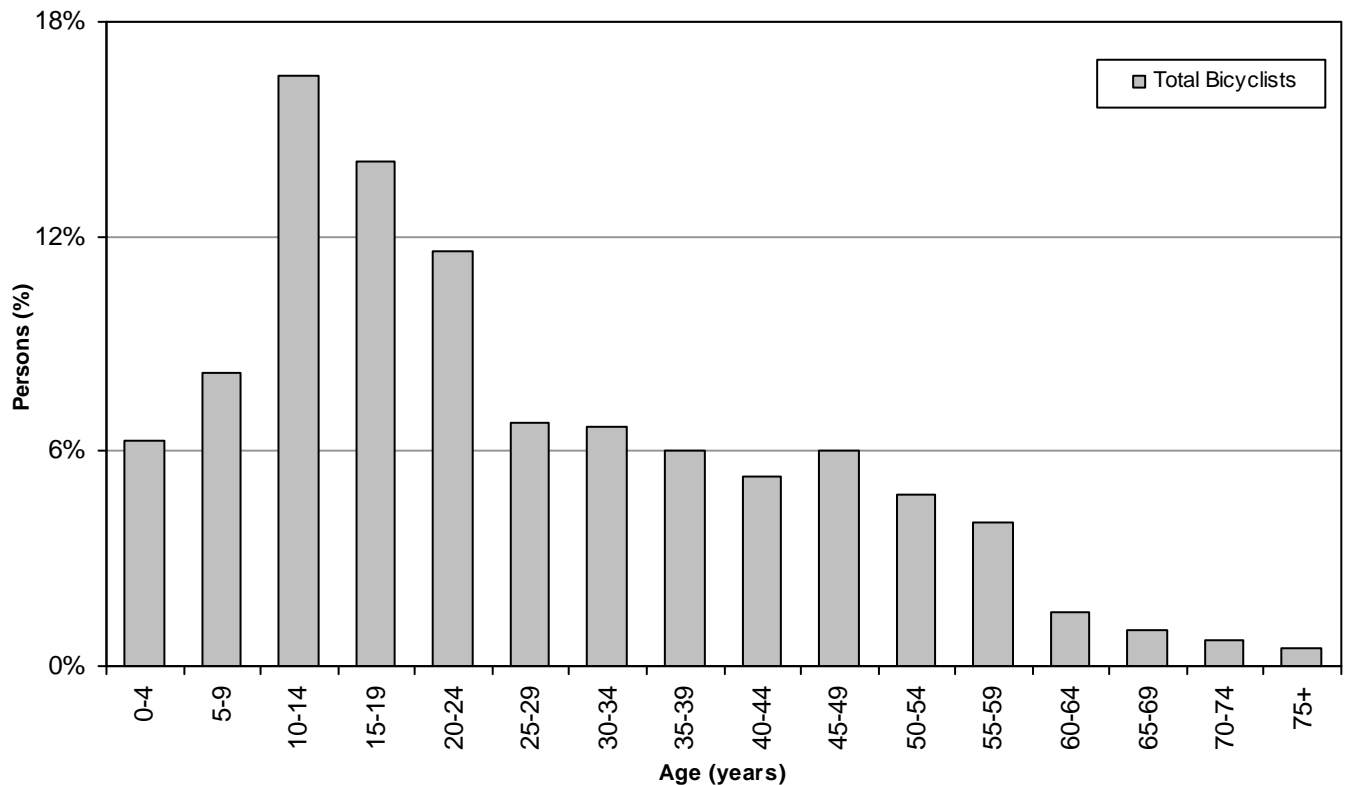
Bicyclists								
	Non-Injured		Injured		Killed		Total	
		Rate per		Rate per		Rate per		Rate per
		10,000		10,000		10,000		10,000
County	#	Pop.	#	Pop.	#	Pop.	#	Pop.
Salt Lake	33	0.32	306	3.00	2	0.02	341	3.35
Cache	3	0.28	24	2.20	1	0.09	28	2.57
Utah	4	0.08	109	2.17	0	0.00	113	2.25
Grand	0	0.00	2	2.19	0	0.00	2	2.19
Davis	2	0.07	58	1.96	0	0.00	60	2.03
Weber	6	0.27	33	1.49	1	0.05	40	1.81
Iron	0	0.00	8	1.79	0	0.00	8	1.79
Uintah	1	0.35	4	1.39	0	0.00	5	1.74
Washington	0	0.00	23	1.63	0	0.00	23	1.63
Carbon	0	0.00	3	1.52	0	0.00	3	1.52
Wasatch	0	0.00	3	1.37	0	0.00	3	1.37
Box Elder	0	0.00	4	0.84	1	0.21	5	1.05
Tooele	1	0.18	4	0.71	0	0.00	5	0.88
Summit	0	0.00	3	0.78	0	0.00	3	0.78
Sanpete	1	0.38	0	0.00	1	0.38	2	0.76
Duchesne	1	0.62	0	0.00	0	0.00	1	0.62
Sevier	1	0.49	0	0.00	0	0.00	1	0.49
Beaver	0	0.00	0	0.00	0	0.00	0	0.00
Daggett	0	0.00	0	0.00	0	0.00	0	0.00
Emery	0	0.00	0	0.00	0	0.00	0	0.00
Garfield	0	0.00	0	0.00	0	0.00	0	0.00
Juab	0	0.00	0	0.00	0	0.00	0	0.00
Kane	0	0.00	0	0.00	0	0.00	0	0.00
Millard	0	0.00	0	0.00	0	0.00	0	0.00
Morgan	0	0.00	0	0.00	0	0.00	0	0.00
Piute	0	0.00	0	0.00	0	0.00	0	0.00
Rich	0	0.00	0	0.00	0	0.00	0	0.00
San Juan	0	0.00	0	0.00	0	0.00	0	0.00
Wayne	0	0.00	0	0.00	0	0.00	0	0.00
<b>Statewide</b>	<b>53</b>	<b>0.20</b>	<b>584</b>	<b>2.16</b>	<b>6</b>	<b>0.02</b>	<b>643</b>	<b>2.38</b>

- Salt Lake (3.35), Cache (2.57), and Utah (2.25) counties had the highest rates per population of total bicyclists in crashes per 10,000 population.
- Beaver, Daggett, Emery, Garfield, Juab, Kane, Millard, Morgan, Piute, Rich, San Juan, and Wayne counties had no bicyclists in crashes.

# Bicyclists

## Age of Bicyclists in Crashes (Utah 2007)

Bicyclists								
	Non-Injured		Injured		Killed		Total	
Age	#	%	#	%	#	%	#	%
0-4	6	11.3%	32	5.5%	0	0.0%	38	5.9%
5-9	3	5.7%	46	7.9%	0	0.0%	49	7.6%
10-14	4	7.5%	95	16.3%	0	0.0%	99	15.4%
15-19	10	18.9%	75	12.8%	0	0.0%	85	13.2%
20-24	8	15.1%	62	10.6%	0	0.0%	70	10.9%
25-29	4	7.5%	37	6.3%	0	0.0%	41	6.4%
30-34	5	9.4%	34	5.8%	1	16.7%	40	6.2%
35-39	2	3.8%	34	5.8%	0	0.0%	36	5.6%
40-44	4	7.5%	27	4.6%	1	16.7%	32	5.0%
45-49	1	1.9%	33	5.7%	2	33.3%	36	5.6%
50-54	0	0.0%	29	5.0%	0	0.0%	29	4.5%
55-59	0	0.0%	24	4.1%	0	0.0%	24	3.7%
60-64	0	0.0%	9	1.5%	0	0.0%	9	1.4%
65-69	0	0.0%	5	0.9%	1	16.7%	6	0.9%
70-74	0	0.0%	3	0.5%	1	16.7%	4	0.6%
75+	0	0.0%	3	0.5%	0	0.0%	3	0.5%
Unknown	6	11.3%	36	6.2%	0	0.0%	42	6.5%
<b>Total</b>	<b>53</b>	<b>100.0%</b>	<b>584</b>	<b>100.0%</b>	<b>6</b>	<b>100.0%</b>	<b>643</b>	<b>100.0%</b>



- Overall, the largest percentages of bicyclists in crashes were aged 10-14 years (16.5% of known), 15-19 years (14.1% of known), and 20-24 years (11.6% of known).
- Where age was known, over half (50.4%) of the bicyclists in crashes were 5-24 years.

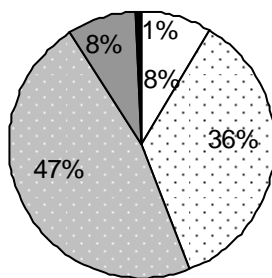
# Bicyclists

## Gender of Bicyclists in Crashes (Utah 2007)

Bicyclists								
	Non-Injured		Injured		Killed		Total	
Gender	#	%	#	%	#	%	#	%
Male	45	84.9%	454	77.7%	5	83.3%	504	78.4%
Female	4	7.5%	127	21.7%	1	16.7%	132	20.5%
Unknown	4	7.5%	3	0.5%	0	0.0%	7	1.1%
<b>Total</b>	<b>53</b>	<b>100.0%</b>	<b>584</b>	<b>100.0%</b>	<b>6</b>	<b>100.0%</b>	<b>643</b>	<b>100.0%</b>

- The majority of all bicyclists (78.4%) and bicyclists killed (83.3%) in crashes were male.

## Injury Severity of Bicyclists in Crashes (Utah 2007)



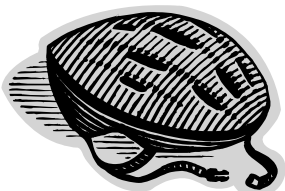
- ☐ No Injury
- ☐ Possible Injury
- ☐ Non-Incapacitating Injury
- ☐ Incapacitating Injury
- ☒ Death

- 90.8% of bicyclists in crashes sustained a non-fatal injury compared to 17.7% of all persons in motor vehicle crashes.
- The percentage of bicyclists killed in crashes (0.9%) was higher than the percentage for all persons killed in motor vehicle crashes (0.2%).
- Bicycle crashes were 2.3 times more likely to result in a death than other motor vehicle crashes.

## Contributing Factors of Bicyclists in Crashes (Utah 2007)

Bicyclists								
	Non-Injured		Injured		Killed		Total	
Contributing Factors	#	%	#	%	#	%	#	%
None	11	20.8%	137	23.5%	3	50.0%	151	23.5%
Wrong Side of Road	6	11.3%	58	9.9%	0	0.0%	64	10.0%
Improper Crossing	3	5.7%	53	9.1%	2	33.3%	58	9.0%
Inattentive	4	7.5%	29	5.0%	0	0.0%	33	5.1%
Failure to Obey Traffic Signs/Signals	2	3.8%	29	5.0%	1	16.7%	32	5.0%
Failure to Yield Right of Way	1	1.9%	27	4.6%	0	0.0%	28	4.4%
Darting	4	7.5%	23	3.9%	0	0.0%	27	4.2%
Not Visible	0	0.0%	26	4.5%	0	0.0%	26	4.0%
In Roadway (standing, kneeling, lying)	1	1.9%	8	1.4%	0	0.0%	9	1.4%
Other	1	1.9%	28	4.8%	0	0.0%	29	4.5%
Unknown	20	37.7%	166	28.4%	0	0.0%	186	28.9%
<b>Total</b>	<b>53</b>	<b>100.0%</b>	<b>584</b>	<b>100.0%</b>	<b>6</b>	<b>100.0%</b>	<b>643</b>	<b>100.0%</b>

- Wrong side of road (14.0% of known), improper crossing (12.7% of known), and inattentive (7.2% of known) were the leading contributing factors for bicyclists in total crashes.
- No bicyclist contributing factors were listed for 50.0% of the bicyclists killed and 33.0% (of known) of the total bicyclists in bicyclist-motor vehicle crashes.
- Other contributing factors to consider are driver contributing factors (see page 142), roadway contributing factors (such as high speeds, traffic volumes, inadequate on-road bicycle facilities, poor road maintenance), and vehicle contributing factors (such as vehicle design, vehicle size).



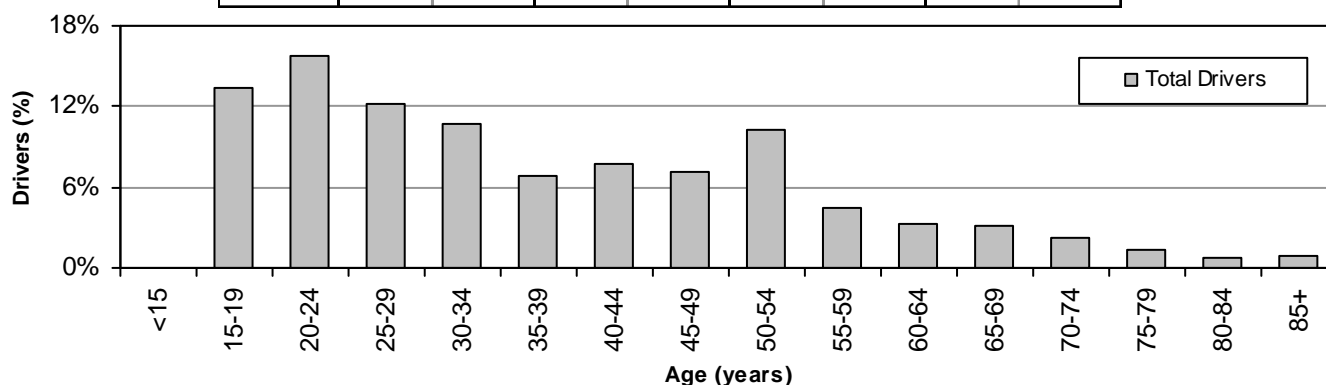
## Bicyclists and Helmet Use (Utah 2007)

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

## Motor Vehicle Drivers

### Driver Age (Utah 2007)

Drivers (Bicycle-Motor Vehicle Crashes)								
Age	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
<15	0	0.0%	0	0.0%	0	0.0%	0	0.0%
15-19	5	10.6%	72	12.3%	1	16.7%	78	12.2%
20-24	9	19.1%	83	14.2%	0	0.0%	92	14.4%
25-29	4	8.5%	66	11.3%	1	16.7%	71	11.1%
30-34	4	8.5%	58	9.9%	0	0.0%	62	9.7%
35-39	2	4.3%	37	6.3%	1	16.7%	40	6.3%
40-44	3	6.4%	41	7.0%	1	16.7%	45	7.1%
45-49	2	4.3%	39	6.7%	0	0.0%	41	6.4%
50-54	4	8.5%	54	9.2%	1	16.7%	59	9.3%
55-59	4	8.5%	22	3.8%	0	0.0%	26	4.1%
60-64	0	0.0%	19	3.3%	0	0.0%	19	3.0%
65-69	1	2.1%	16	2.7%	1	16.7%	18	2.8%
70-74	2	4.3%	11	1.9%	0	0.0%	13	2.0%
75-79	1	2.1%	7	1.2%	0	0.0%	8	1.3%
80-84	0	0.0%	4	0.7%	0	0.0%	4	0.6%
85+	1	2.1%	4	0.7%	0	0.0%	5	0.8%
Unknown	5	10.6%	51	8.7%	0	0.0%	56	8.8%
<b>Total</b>	<b>47</b>	<b>100.0%</b>	<b>584</b>	<b>100.0%</b>	<b>6</b>	<b>100.0%</b>	<b>637</b>	<b>100.0%</b>



- Over half (52.2% of known) of drivers in total bicycle-motor vehicle crashes were aged 15-34 years.

### Driver Gender (Utah 2007)

Drivers (Bicycle-Motor Vehicle Crashes)								
Gender	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Male	24	51.1%	282	48.3%	4	66.7%	310	48.7%
Female	18	38.3%	266	45.5%	2	33.3%	286	44.9%
Unknown	5	10.6%	36	6.2%	0	0.0%	41	6.4%
<b>Total</b>	<b>47</b>	<b>100.0%</b>	<b>584</b>	<b>100.0%</b>	<b>6</b>	<b>100.0%</b>	<b>637</b>	<b>100.0%</b>

- The majority of drivers in total bicycle-motor vehicle crashes (52.0% of known) and fatal bicycle-motor vehicle crashes (66.7%) were male.

### Alcohol Involvement of Motor Vehicle Drivers (Utah 2007)

- Of the six bicyclists killed, none were killed by a drunk driver.



## Bicycle-Motor Vehicle Crash Conditions

### Urban/Rural Location (Utah 2007)

Bicyclists								
	Non-Injured		Injured		Killed		Total	
		Rate per		Rate per		Rate per		Rate per
		10,000		10,000		10,000		10,000
Location	#	Pop.	#	Pop.	#	Pop.	#	Pop.
Urban	45	0.25	506	2.78	3	0.02	554	3.05
Rural	8	0.09	78	0.89	3	0.03	89	1.01
Total	53	0.20	584	2.16	6	0.02	643	2.38

- Urban areas had a higher bicycle-motor vehicle total crash rate per 10,000 population.

### Bicycle-Motor Vehicle Crashes by Month (Utah 2007)

Bicyclists									
Month	Days in Month	Non-Injured		Injured		Killed		Total	
		Rate per		Rate per		Rate per		Rate per	
		#	Day	#	Day	#	Day	#	Day
January	31	2	0.1	12	0.4	0	0.00	14	0.5
February	28	3	0.1	10	0.4	0	0.00	13	0.5
March	31	4	0.1	39	1.3	0	0.00	43	1.4
April	30	3	0.1	55	1.8	1	0.03	59	2.0
May	31	5	0.2	67	2.2	1	0.03	73	2.4
June	30	9	0.3	77	2.6	0	0.00	86	2.9
July	31	11	0.4	64	2.1	0	0.00	75	2.4
August	31	3	0.1	83	2.7	0	0.00	86	2.8
September	30	8	0.3	68	2.3	2	0.07	78	2.6
October	31	2	0.1	68	2.2	0	0.00	70	2.3
November	30	1	0.0	30	1.0	1	0.03	32	1.1
December	31	2	0.1	11	0.4	1	0.03	14	0.5
Total	365	53	0.1	584	1.6	6	0.02	643	1.8

- June (2.9), August (2.8), and September (2.6) had the highest rates per day of total bicycle-motor vehicle crashes.
- September (0.07) had the highest rate per day of bicyclist deaths.

### Bicycle-Motor Vehicle Crashes by Day of Week (Utah 2007)

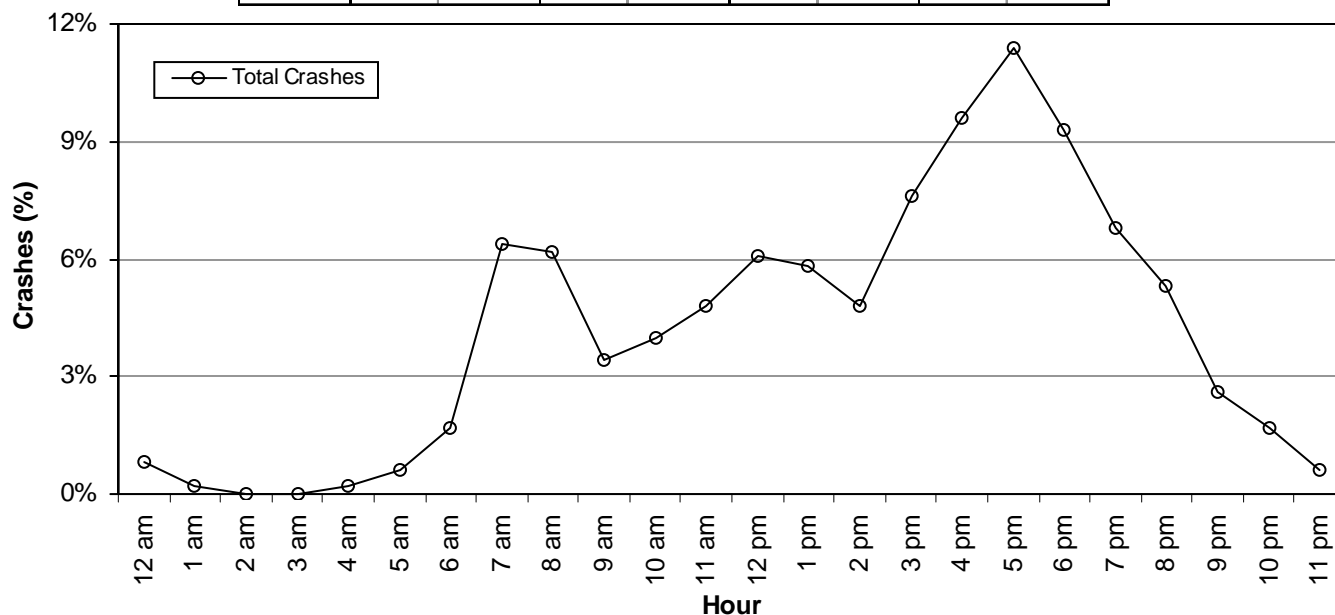
Bicyclists									
Day of Week	Non-Injured		Injured		Killed		Total		
	#	%	#	%	#	%	#	%	
Sunday	3	5.7%	32	5.5%	0	0.0%	35	5.4%	
Monday	9	17.0%	104	17.8%	1	16.7%	114	17.7%	
Tuesday	9	17.0%	97	16.6%	0	0.0%	106	16.5%	
Wednesday	11	20.8%	83	14.2%	1	16.7%	95	14.8%	
Thursday	6	11.3%	98	16.8%	1	16.7%	105	16.3%	
Friday	9	17.0%	105	18.0%	2	33.3%	116	18.0%	
Saturday	6	11.3%	65	11.1%	1	16.7%	72	11.2%	
Total	53	100.0%	584	100.0%	6	100.0%	643	100.0%	

- The highest percentage of total bicycle-motor vehicle crashes (18.0%) and fatal bicycle-motor vehicle crashes (33.3%) occurred on Friday.

## Bicycle-Motor Vehicle Crash Conditions

### Bicycle-Motor Vehicle Crashes by Hour (Utah 2007)

Bicyclists								
Hour	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Midnight	1	1.9%	4	0.7%	0	0.0%	5	0.8%
1 a.m.	0	0.0%	1	0.2%	0	0.0%	1	0.2%
2 a.m.	0	0.0%	0	0.0%	0	0.0%	0	0.0%
3 a.m.	0	0.0%	0	0.0%	0	0.0%	0	0.0%
4 a.m.	0	0.0%	1	0.2%	0	0.0%	1	0.2%
5 a.m.	1	1.9%	3	0.5%	0	0.0%	4	0.6%
6 a.m.	0	0.0%	10	1.7%	1	16.7%	11	1.7%
7 a.m.	2	3.8%	39	6.7%	0	0.0%	41	6.4%
8 a.m.	2	3.8%	38	6.5%	0	0.0%	40	6.2%
9 a.m.	2	3.8%	20	3.4%	0	0.0%	22	3.4%
10 a.m.	3	5.7%	21	3.6%	2	33.3%	26	4.0%
11 a.m.	0	0.0%	31	5.3%	0	0.0%	31	4.8%
Noon	5	9.4%	34	5.8%	0	0.0%	39	6.1%
1 p.m.	6	11.3%	31	5.3%	0	0.0%	37	5.8%
2 p.m.	3	5.7%	28	4.8%	0	0.0%	31	4.8%
3 p.m.	8	15.1%	41	7.0%	0	0.0%	49	7.6%
4 p.m.	4	7.5%	57	9.8%	1	16.7%	62	9.6%
5 p.m.	3	5.7%	70	12.0%	0	0.0%	73	11.4%
6 p.m.	3	5.7%	56	9.6%	1	16.7%	60	9.3%
7 p.m.	3	5.7%	40	6.8%	1	16.7%	44	6.8%
8 p.m.	5	9.4%	29	5.0%	0	0.0%	34	5.3%
9 p.m.	2	3.8%	15	2.6%	0	0.0%	17	2.6%
10 p.m.	0	0.0%	11	1.9%	0	0.0%	11	1.7%
11 p.m.	0	0.0%	4	0.7%	0	0.0%	4	0.6%
<b>Total</b>	<b>53</b>	<b>100.0%</b>	<b>584</b>	<b>100.0%</b>	<b>6</b>	<b>100.0%</b>	<b>643</b>	<b>100.0%</b>



- Total bicycle-motor vehicle crashes were highest between 3:00 p.m. and 6:59 p.m.
- Fatal bicycle-motor vehicle crashes were highest at 10:00 a.m.



## Bicycle-Motor Vehicle Crash Conditions

### Bicyclist Location in Bicycle-Motor Vehicle Crashes (Utah 2007)

Bicyclist Location	Bicyclists							
	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Marked Crosswalk	9	17.0%	115	19.7%	1	16.7%	125	19.4%
In Roadway (not at intersection or crosswalk)	2	3.8%	97	16.6%	2	33.3%	101	15.7%
Shoulder	6	11.3%	73	12.5%	1	16.7%	80	12.4%
Sidewalk	9	17.0%	71	12.2%	0	0.0%	80	12.4%
Unmarked Crosswalk	0	0.0%	39	6.7%	2	33.3%	41	6.4%
Bike Path	0	0.0%	15	2.6%	0	0.0%	15	2.3%
Outside Right of Way	1	1.9%	3	0.5%	0	0.0%	4	0.6%
Median	0	0.0%	3	0.5%	0	0.0%	3	0.5%
Shared Use Path/Trail	0	0.0%	3	0.5%	0	0.0%	3	0.5%
Other	2	3.8%	16	2.7%	0	0.0%	18	2.8%
Unknown	24	45.3%	149	25.5%	0	0.0%	173	26.9%
<b>Total</b>	<b>53</b>	<b>100.0%</b>	<b>584</b>	<b>100.0%</b>	<b>6</b>	<b>100.0%</b>	<b>643</b>	<b>100.0%</b>

- For total crashes, the largest percentages of bicyclist location prior to the crash were marked crosswalk (26.6% of known), in roadway not at intersection or crosswalk (21.5% of known), shoulder (17.0% of known), and sidewalk (17.0% of known).
- For fatal crashes, 50% occurred in a crosswalk (marked or unmarked).
- Bicycles are considered vehicles and have a legal right to the road.

### Motor Vehicle Maneuver Prior to Crash (Utah 2007)

Motor Vehicles (Bicycle-Motor Vehicle Crashes)								
Vehicle Maneuver	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Straight Ahead	17	35.4%	213	36.3%	6	100.0%	236	36.9%
Turning Right	20	41.7%	185	31.6%	0	0.0%	205	32.0%
Turning Left	3	6.3%	107	18.3%	0	0.0%	110	17.2%
Stopped in Traffic Lane	4	8.3%	18	3.1%	0	0.0%	22	3.4%
Entering Traffic Lane	0	0.0%	18	3.1%	0	0.0%	18	2.8%
Backing	1	2.1%	12	2.0%	0	0.0%	13	2.0%
Slowing in Traffic Lane	0	0.0%	9	1.5%	0	0.0%	9	1.4%
Making U-turn	1	2.1%	6	1.0%	0	0.0%	7	1.1%
Overtaking/Passing	0	0.0%	4	0.7%	0	0.0%	4	0.6%
Parked	1	2.1%	2	0.3%	0	0.0%	3	0.5%
Changing Lanes	1	2.1%	0	0.0%	0	0.0%	1	0.2%
Leaving Traffic Lane	0	0.0%	1	0.2%	0	0.0%	1	0.2%
Other	0	0.0%	7	1.2%	0	0.0%	7	1.1%
Unknown	0	0.0%	4	0.7%	0	0.0%	4	0.6%
<b>Total</b>	<b>48</b>	<b>100.0%</b>	<b>586</b>	<b>100.0%</b>	<b>6</b>	<b>100.0%</b>	<b>640</b>	<b>100.0%</b>

- For total bicycle-motor vehicle crashes, the leading motor vehicle maneuvers prior to the crash were straight ahead (36.9%), turning right (32.0%), and turning left (17.2%).
- For fatal bicycle-motor vehicle crashes, straight ahead was the only driver action prior to the crash.

## Bicycle-Motor Vehicle Crash Conditions

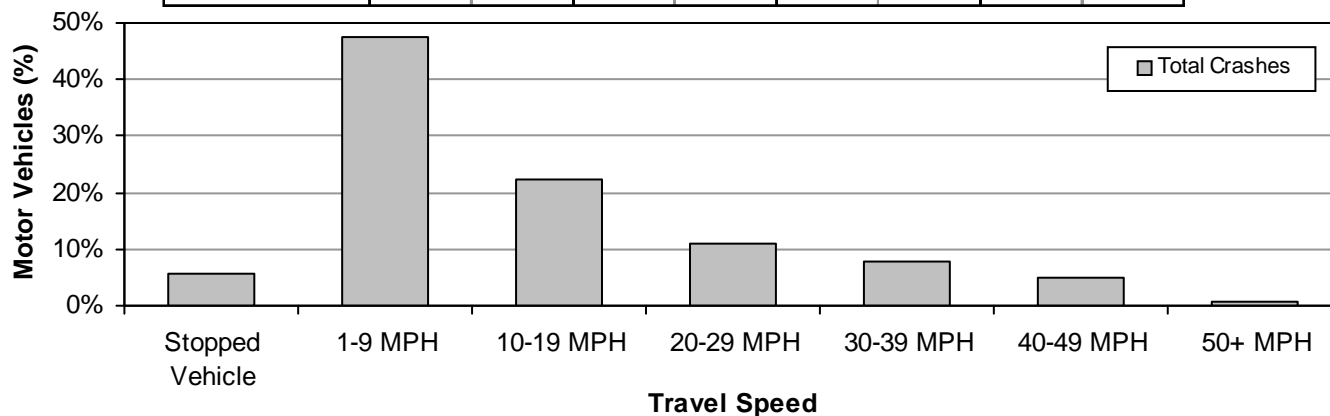
### Bicycle-Motor Vehicle Crashes by Speed Limit (Utah 2007)

Motor Vehicles (Bicycle-Motor Vehicle Crashes)								
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
Speed Limit	#	%	#	%	#	%	#	%
5-15 MPH	1	2.1%	13	2.2%	0	0.0%	14	2.2%
20-25 MPH	6	12.5%	148	25.3%	0	0.0%	154	24.1%
30-35 MPH	15	31.3%	137	23.4%	3	50.0%	155	24.2%
40-45 MPH	5	10.4%	67	11.4%	1	16.7%	73	11.4%
50-55 MPH	0	0.0%	11	1.9%	0	0.0%	11	1.7%
60-65 MPH	0	0.0%	1	0.2%	2	33.3%	3	0.5%
70-75 MPH	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Unknown	21	43.8%	209	35.7%	0	0.0%	230	35.9%
<b>Total</b>	<b>48</b>	<b>100.0%</b>	<b>586</b>	<b>100.0%</b>	<b>6</b>	<b>100.0%</b>	<b>640</b>	<b>100.0%</b>

- Almost all (93.2% of known) of total bicycle-motor vehicle crashes occurred where the speed limit was 20-45 MPH.
- Fatal bicycle-motor vehicle crashes occurred most often where the speed limit was 30-35 MPH (50.0%).

### Travel Speed of Motor Vehicles in Bicycle Crashes (Utah 2007)

Motor Vehicles (Bicycle-Motor Vehicle Crash)								
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
Travel Speed	#	%	#	%	#	%	#	%
Stopped Vehicle	4	8.3%	18	3.1%	0	0.0%	22	3.4%
1-9 MPH	25	52.1%	161	27.5%	0	0.0%	186	29.1%
10-19 MPH	4	8.3%	84	14.3%	0	0.0%	88	13.8%
20-29 MPH	1	2.1%	41	7.0%	1	16.7%	43	6.7%
30-39 MPH	3	6.3%	25	4.3%	2	33.3%	30	4.7%
40-49 MPH	0	0.0%	20	3.4%	0	0.0%	20	3.1%
50-59 MPH	0	0.0%	1	0.2%	0	0.0%	1	0.2%
60-69 MPH	0	0.0%	0	0.0%	2	33.3%	2	0.3%
70+ MPH	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Unknown	11	22.9%	236	40.3%	1	16.7%	248	38.8%
<b>Total</b>	<b>48</b>	<b>100.0%</b>	<b>586</b>	<b>100.0%</b>	<b>6</b>	<b>100.0%</b>	<b>640</b>	<b>100.0%</b>



- For total bicycle-motor vehicle crashes, the leading travel speeds for motor vehicles were 1-9 MPH (47.4% of known) and 10-19 MPH (22.4% of known).
- For fatal bicycle-motor vehicle crashes, the leading travel speeds for motor vehicles were 30-39 MPH and 60-69 MPH.

## Bicycle-Motor Vehicle Crash Conditions

### Type of Motor Vehicles in Bicycle Crashes (Utah 2007)

Motor Vehicles (Bicycle-Motor Vehicle Crashes)								
Motor Vehicle Type	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Passenger Car	27	56.3%	308	52.6%	4	66.7%	339	53.0%
SUV	6	12.5%	113	19.3%	0	0.0%	119	18.6%
Pickup Truck	10	20.8%	82	14.0%	0	0.0%	92	14.4%
Van	3	6.3%	48	8.2%	1	16.7%	52	8.1%
Motorcycle	0	0.0%	6	1.0%	0	0.0%	6	0.9%
Semi/Large Truck	0	0.0%	6	1.0%	0	0.0%	6	0.9%
Bus	0	0.0%	4	0.7%	0	0.0%	4	0.6%
Other	0	0.0%	3	0.5%	1	16.7%	4	0.6%
Unknown	2	4.2%	16	2.7%	0	0.0%	18	2.8%
<b>Total</b>	<b>48</b>	<b>100.0%</b>	<b>586</b>	<b>100.0%</b>	<b>6</b>	<b>100.0%</b>	<b>640</b>	<b>100.0%</b>

- The largest percentages of motor vehicles in total bicycle-motor vehicle crashes were passenger car (53.0%), SUV (18.6%), and pickup truck (14.4%).
- Passenger car (66.7%) was the leading motor vehicle type in fatal bicycle-motor vehicle crashes.

### Bicycle-Motor Vehicle Crash Violations (Utah 2007)

Drivers (Bicycle-Motor Vehicle Crashes)								
Violations	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Failure to Yield Right of Way	1	33.3%	3	23.1%	0	0.0%	4	23.5%
Improper Lookout	0	0.0%	4	30.8%	0	0.0%	4	23.5%
Hit and Run	1	33.3%	1	7.7%	0	0.0%	2	11.8%
Insurance Violation	1	33.3%	1	7.7%	0	0.0%	2	11.8%
Failure to Obey Traffic Control Device	0	0.0%	1	7.7%	0	0.0%	1	5.9%
Failure to Stop at Red Light	0	0.0%	0	0.0%	1	100.0%	1	5.9%
Failure to Stop at Stop Sign	0	0.0%	1	7.7%	0	0.0%	1	5.9%
Improper Turn	0	0.0%	1	7.7%	0	0.0%	1	5.9%
License Violation	0	0.0%	1	7.7%	0	0.0%	1	5.9%
<b>Total</b>	<b>3</b>	<b>100.0%</b>	<b>13</b>	<b>100.0%</b>	<b>1</b>	<b>100.0%</b>	<b>17</b>	<b>100.0%</b>

- There were 17 citations issued at the scene of the crash to motor vehicle drivers. Failure to yield right of way (23.5%) and improper lookout (23.5%) were the leading violations for total bicycle-motor vehicle crashes.

## Bicycle-Motor Vehicle Crash Conditions

### Contributing Factors in Bicycle Crashes (Utah 2007)

Drivers/Motor Vehicles (Bicycle-Motor Vehicle Crashes)								
Contributing Factors	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Failed to Yield Right of Way	16	48.5%	196	39.9%	1	33.3%	213	40.4%
Other Improper Driving	3	9.1%	56	11.4%	0	0.0%	59	11.2%
Driver Distraction	0	0.0%	27	5.5%	0	0.0%	27	5.1%
Improper Turn	1	3.0%	26	5.3%	0	0.0%	27	5.1%
Hit and Run	3	9.1%	23	4.7%	0	0.0%	26	4.9%
Vision Obscured by Glare	0	0.0%	25	5.1%	0	0.0%	25	4.7%
Speed Too Fast	0	0.0%	15	3.1%	0	0.0%	15	2.8%
Vision Obscured by Parked Vehicle	2	6.1%	12	2.4%	0	0.0%	14	2.7%
Vision Obscured by Moving Vehicle	0	0.0%	13	2.6%	0	0.0%	13	2.5%
Vision Obscured by Vegetation	1	3.0%	10	2.0%	0	0.0%	11	2.1%
Vision Obscured by Building, Sign	0	0.0%	10	2.0%	0	0.0%	10	1.9%
Driver Emotionally Upset	0	0.0%	9	1.8%	0	0.0%	9	1.7%
Vision Obscured by Other	0	0.0%	9	1.8%	0	0.0%	9	1.7%
Disregard Traffic Signal/Sign	0	0.0%	7	1.4%	1	33.3%	8	1.5%
Vehicle Defective Condition	1	3.0%	7	1.4%	0	0.0%	8	1.5%
Improper Backing	1	3.0%	6	1.2%	0	0.0%	7	1.3%
Driving Under the Influence	0	0.0%	5	1.0%	0	0.0%	5	0.9%
Failed to Keep in Proper Lane	0	0.0%	4	0.8%	1	33.3%	5	0.9%
Vision Obscured by Weather Condition	1	3.0%	4	0.8%	0	0.0%	5	0.9%
Disregard Road Markings	0	0.0%	4	0.8%	0	0.0%	4	0.8%
Improper Parking/Stopping	1	3.0%	3	0.6%	0	0.0%	4	0.8%
Followed Too Closely	1	3.0%	2	0.4%	0	0.0%	3	0.6%
Improper Lane Change	0	0.0%	3	0.6%	0	0.0%	3	0.6%
Other Driver Condition	0	0.0%	3	0.6%	0	0.0%	3	0.6%
Reckless/Aggressive Driving	0	0.0%	3	0.6%	0	0.0%	3	0.6%
Swerved or Evasive Action	0	0.0%	3	0.6%	0	0.0%	3	0.6%
Driver Illness	1	3.0%	1	0.2%	0	0.0%	2	0.4%
Improper Passing	0	0.0%	2	0.4%	0	0.0%	2	0.4%
Wrong Side/Wrong Way	0	0.0%	2	0.4%	0	0.0%	2	0.4%
Overcorrected	1	3.0%	0	0.0%	0	0.0%	1	0.2%
Windshield or Other Window Obscured	0	0.0%	1	0.2%	0	0.0%	1	0.2%
<b>Total</b>	<b>33</b>	<b>100.0%</b>	<b>491</b>	<b>100.0%</b>	<b>3</b>	<b>100.0%</b>	<b>527</b>	<b>100.0%</b>

- Failed to yield right of way (40.4%), driver distraction (5.1%), and improper turn (5.1%) were the leading contributing factors in total bicycle-motor vehicle crashes.

# Appendix

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## Appendix

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## Population, Vehicle Miles Traveled, Injuries, and Deaths (Utah 1970-2007)

Persons						
			Injuries		Deaths	
		Vehicle Miles		Rate Per 100		Rate Per 100
Year	Population	Traveled (VMT)	#	Million VMT	#	Million VMT
1970	1,066,000	6,108,000,000	17,076	279.6	335	5.48
1971	1,101,150	6,544,000,000	18,073	276.2	337	5.15
1972	1,135,100	6,969,000,000	18,261	262.0	382	5.48
1973	1,168,950	7,274,000,000	18,415	253.2	361	4.96
1974	1,196,950	7,457,000,000	16,268	218.2	228	3.06
1975	1,233,900	7,942,000,000	17,762	223.6	274	3.45
1976	1,272,050	8,420,000,000	18,315	217.5	254	3.02
1977	1,315,950	9,054,000,000	19,728	217.9	360	3.98
1978	1,363,750	9,826,000,000	21,029	214.0	376	3.83
1979	1,415,950	9,811,000,000	20,798	212.0	328	3.34
1980	1,474,000	10,645,000,000	17,828	167.5	335	3.15
1981	1,515,000	10,733,000,000	18,090	168.5	364	3.39
1982	1,558,000	10,947,000,000	17,538	160.2	296	2.70
1983	1,595,000	11,228,000,000	18,910	168.4	283	2.52
1984	1,622,000	11,642,000,000	20,487	176.0	315	2.71
1985	1,643,000	12,035,000,000	21,346	177.4	303	2.52
1986	1,663,000	12,253,000,000	21,350	174.2	312	2.55
1987	1,678,000	12,679,000,000	19,237	151.7	297	2.34
1988	1,690,000	13,229,853,875	19,066	144.1	297	2.24
1989	1,706,000	13,933,977,565	19,843	142.4	303	2.17
1990	1,729,227	14,649,064,030	20,608	140.7	272	1.86
1991	1,780,870	15,390,400,930	19,540	127.0	271	1.76
1992	1,838,149	16,263,289,670	22,490	138.3	269	1.65
1993	1,889,393	17,055,044,750	25,763	151.1	303	1.78
1994	1,946,721	18,091,944,321	28,436	157.2	343	1.90
1995	1,995,228	18,798,488,669	28,343	150.8	325	1.73
1996	2,042,893	19,433,341,748	30,711	158.0	321	1.65
1997	2,099,409	20,407,590,239	31,238	153.1	366	1.79
1998	2,141,632	21,236,980,216	30,232	142.4	350	1.65
1999	2,193,014	21,867,355,694	29,959	137.0	360	1.65
2000	2,246,553	22,517,131,427	30,086	133.6	373	1.66
2001	2,295,971	23,398,734,621	29,375	125.5	291	1.24
2002	2,338,761	24,438,992,554	30,433	124.5	328	1.34
2003	2,385,358	23,963,242,376	28,352	118.3	309	1.29
2004	2,469,230	24,641,658,091	29,638	120.3	296	1.20
2005	2,547,389	25,129,538,952	29,221	116.3	282	1.12
2006	2,615,129	26,166,885,473	27,433	104.8	287	1.10
2007	2,699,554	26,824,244,333	27,420	102.2	299	1.11
<b>Total</b>	<b>67,668,231</b>	<b>579,004,759,534</b>	<b>878,698</b>	<b>151.8</b>	<b>11,985</b>	<b>2.07</b>

POPULATION SOURCE: State of Utah Population Estimates, Demographic and Economic Analysis, [www.governor.utah.gov/dea](http://www.governor.utah.gov/dea)

VEHICLE MILES TRAVELED SOURCE: Utah Highway Performance Monitoring System, [www.udot.utah.gov](http://www.udot.utah.gov)

## Crashes (Utah 1970-2007)

Crashes								
	Property Damage Only		Injury		Fatal		Total	
		Rate Per 100		Rate Per 100		Rate Per 100		Rate Per 100
Year	#	Million VMT	#	Million VMT	#	Million VMT	#	Million VMT
1970	24,168	395.7	10,722	175.5	276	4.52	35,166	575.7
1971	27,429	419.1	11,399	174.2	280	4.28	39,108	597.6
1972	27,914	400.5	11,630	166.9	312	4.48	39,856	571.9
1973	26,220	360.5	11,710	161.0	304	4.18	38,234	525.6
1974	20,637	276.7	10,560	141.6	204	2.74	31,401	421.1
1975	24,740	311.5	11,441	144.1	245	3.08	36,426	458.7
1976	22,435	266.4	11,685	138.8	225	2.67	34,345	407.9
1977	25,562	282.3	12,652	139.7	310	3.42	38,524	425.5
1978	28,946	294.6	13,423	136.6	315	3.21	42,684	434.4
1979	26,732	272.5	13,449	137.1	287	2.93	40,468	412.5
1980	21,589	202.8	11,701	109.9	292	2.74	33,582	315.5
1981	23,844	222.2	11,824	110.2	321	2.99	35,989	335.3
1982	26,425	241.4	11,504	105.1	263	2.40	38,192	348.9
1983	28,419	253.1	12,317	109.7	253	2.25	40,989	365.1
1984	33,738	289.8	13,477	115.8	274	2.35	47,489	407.9
1985	33,684	279.9	13,917	115.6	270	2.24	47,871	397.8
1986	32,426	264.6	13,988	114.2	276	2.25	46,690	381.0
1987	33,386	263.3	13,599	107.3	271	2.14	47,256	372.7
1988	35,614	269.2	13,377	101.1	258	1.95	49,249	372.3
1989	37,110	266.3	13,941	100.1	269	1.93	51,320	368.3
1990	37,823	258.2	14,632	99.9	236	1.61	52,691	359.7
1991	33,443	217.3	13,763	89.4	229	1.49	47,435	308.2
1992	34,760	213.7	15,665	96.3	235	1.44	50,660	311.5
1993	38,357	224.9	17,088	100.2	259	1.52	55,704	326.6
1994	40,243	222.4	18,726	103.5	303	1.67	59,272	327.6
1995	37,532	199.7	19,828	105.5	284	1.51	57,644	306.6
1996	40,225	207.0	20,988	108.0	292	1.50	61,505	316.5
1997	33,512	164.2	21,131	103.5	309	1.51	54,952	269.3
1998	34,337	161.7	19,427	91.5	308	1.45	54,072	254.6
1999	32,971	150.8	19,513	89.2	318	1.45	52,802	241.5
2000	33,269	147.7	19,564	86.9	318	1.41	53,151	236.0
2001	33,113	141.5	19,332	82.6	258	1.10	52,703	225.2
2002	33,542	137.2	19,552	80.0	274	1.12	53,368	218.4
2003	31,842	132.9	18,285	76.3	262	1.09	50,389	210.3
2004	34,222	138.9	19,423	78.8	260	1.06	53,905	218.8
2005	35,158	139.9	19,545	77.8	235	0.94	54,938	218.6
2006	37,674	144.0	18,264	69.8	249	0.95	56,187	214.7
2007	42,368	157.9	18,619	69.4	258	0.96	61,245	228.3
<b>Total</b>	<b>1,205,409</b>	<b>208.2</b>	<b>581,661</b>	<b>100.5</b>	<b>10,392</b>	<b>1.79</b>	<b>1,797,462</b>	<b>310.4</b>

## County Population and Vehicle Miles Traveled (Utah 2007)

County		
County	Vehicle Miles Traveled	Population
Beaver	256,056,502	6,466
Box Elder	915,253,384	47,491
Cache	980,858,779	109,022
Carbon	290,210,793	19,730
Daggett	32,946,533	969
Davis	2,520,879,593	296,029
Duchesne	235,057,772	16,163
Emery	359,607,553	10,461
Garfield	119,839,052	4,872
Grand	287,000,666	9,125
Iron	705,076,284	44,813
Juab	416,231,534	9,654
Kane	151,567,592	6,440
Millard	459,793,726	13,414
Morgan	142,725,364	9,265
Piute	31,273,031	1,385
Rich	49,909,317	2,162
Salt Lake	8,795,336,836	1,018,904
San Juan	279,380,331	14,807
Sanpete	234,613,884	26,464
Sevier	420,130,782	20,442
Summit	777,266,807	38,412
Tooele	912,517,523	56,536
Uintah	351,701,949	28,806
Utah	3,736,343,198	501,447
Wasatch	305,710,283	21,951
Washington	1,382,098,903	140,908
Wayne	40,181,829	2,635
Weber	1,634,674,536	220,781
<b>Statewide</b>	<b>26,824,244,333</b>	<b>2,699,554</b>

VEHICLE MILES TRAVELED SOURCE: Utah Highway Performance Monitoring System, [www.udot.utah.gov](http://www.udot.utah.gov)

POPULATION SOURCE: State of Utah Population Estimates, Demographic and Economic Analysis, [www.governor.utah.gov/dea](http://www.governor.utah.gov/dea)

## Number of Registered Vehicles by Vehicle Type (Utah 2005-2007)

Vehicles					
Year	Heavy Truck	Light Truck	Motorcycle	Passenger Car	Total
2005	58,645	552,931	43,271	1,205,430	1,860,277
2006	60,765	564,280	48,949	1,243,041	1,917,035
2007	62,860	585,413	56,146	1,297,242	2,001,661
<b>Total</b>	<b>182,270</b>	<b>1,702,624</b>	<b>148,366</b>	<b>3,745,713</b>	<b>5,778,973</b>

SOURCE: Utah State Tax Commission, Economic and Statistical Unit

Utah Crash Summary 2007



## Number of Licensed Drivers by Age (Utah 2007)

Licensed Drivers	
Driver Age	#
15-19	124,884
20-24	198,768
25-29	219,909
30-34	189,206
35-39	159,695
40-44	140,857
45-49	148,254
50-54	138,262
55-59	115,388
60-64	89,567
65-69	65,700
70-74	50,381
75-79	39,505
80-84	26,763
85+	17,124
<b>Total</b>	<b>1,724,263</b>

SOURCE: Utah Department of Public Safety, Driver License Division

## Important Changes in Utah Motor Vehicle Laws

<b>1915</b>	Driving age established at 16 years and older.
<b>1926</b>	Stop sign law implemented.
<b>1935</b>	Alcohol drinking age set at 21 years and older.
<b>1967</b>	Illegal to operate a motor vehicle at or above .08 BAC.
<b>1969</b>	Motorcycle helmet required for all ages on roads with speed limits 35 mph or higher.
<b>1973</b>	Maximum speed limit lowered to 55 mph.
<b>1977</b>	Motorcycle helmet required only for riders under 18 years on all roads.
<b>1985</b>	First child restraint law.
<b>1986</b>	First seatbelt law.
<b>1987</b>	Maximum speed limit raised to 65 mph.
<b>1992</b>	Illegal for drivers under age 21 years to drive with any detectable amount of alcohol.
<b>1996</b>	Maximum speed limit raised to 75 mph.
<b>1997</b>	Increased age that children need to be restrained from up to eight years to up to 10 years.
<b>1998</b>	First Graduated Driver License law implemented.
<b>2000</b>	Secondary seatbelt law for drivers and all passengers of motor vehicles.
<b>2000</b>	Increased age for use of child restraints up to age four years.
<b>2007</b>	Increased age for use of child restraints up to age eight years.

## Changes in Crash Reporting

<b>1991</b>	Amount of property damage required for reportable crashes increased from \$400 to \$750.
<b>1996</b>	Amount of property damage required for reportable crashes increased to \$1,000.
<b>1997</b>	Private property crashes excluded. Private property crashes accounted for approximately 10% of crashes in previous years.
<b>2006</b>	State of Utah Investigating Officer's Report of Traffic Crash DI-9 Form updated.

## Glossary

**Alcohol-Impaired Driver Crash:** A crash in which the driver was cited for driving under the influence, the alcohol test was positive, or if the investigating officer reported alcohol use.

**Alcohol-Impaired Driver Fatal Crash:** A crash resulting in one or more deaths involving at least one driver with a blood alcohol concentration of .08 grams per deciliter or above.

**Contributing Factor:** The circumstances reported by the investigating officer surrounding a crash that contributed to the crash or the crash severity.

**Crash Rate:** Crashes per 100 million vehicle miles traveled unless otherwise specified.

**Death Rate:** Traffic deaths per 100 million vehicle miles traveled unless otherwise specified.

**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.

**Fatality Analysis Reporting System (FARS):** National data system containing data on all fatal traffic crashes in the U.S.

**Incapacitating Injury:** Any injury, other than a fatal injury, which prevents the injured person from walking, driving, or normally continuing the activities the person was capable of performing before the injury occurred. Often defined as needing help from the scene.

**Injury Crash:** A crash in which one or more persons sustained a possible injury, non-incapacitating injury, or an incapacitating injury.

**Miles per Hour (MPH):** A unit of speed expressing the distance traveled (in miles) to the time spent traveling (in hours).

**Motorcycle Crash:** A crash involving a motorcycle or moped.

**Non-Incapacitating Injury:** Any injury, other than a fatal injury or an incapacitating injury, which is evident to observers at the scene of the crash in which the injury occurred. Examples: bruise, cut, bloody nose.

**Out-of-State Driver:** A driver licensed from a state/country other than Utah who is in a crash. Some of these drivers may reside in Utah and have not yet applied for a Utah driver license.

**Possible Injury:** Complaint of pain without visible injury.

**Property Damage Only (PDO) Crash:** A crash which results in damage to the motor vehicle or other property but without injury or death to any person.

**Rural:** Counties with 0-100 persons per square mile. Rural counties in Utah are Beaver, Box Elder, Cache, Carbon, Daggett, Duchesne, Emery, Garfield, Grand, Iron, Juab, Kane, Millard, Morgan, Piute, Rich, San Juan, Sanpete, Sevier, Summit, Tooele, Uintah, Wasatch, Washington, and Wayne.

**Seatbelt Use:** Seatbelt use is reported for occupants in a passenger car, light truck, van, SUV, or large truck. 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. 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. The seatbelt use rate may be inflated if crash occupants report using a seatbelt when they did not use one. In the case of fatal or severe injury crashes, the officer determines seatbelt use.

**Speed Crash:** A crash where a driver was charged with a speeding offense, a vehicle exceeded posted speed limits, or if the officer indicated that street racing, driving too fast for conditions, or exceeding the posted speed limit was a contributing factor in the crash.

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

**Urban:** Counties with more than 100 persons per square mile. Urban counties in Utah are Davis, Salt Lake, Utah, and Weber.

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



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