

# Utah Crash Summary



State of Utah

Department of Public Safety

# Utah Crash Summary 2010



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## Introduction

**Purpose:** The annual Utah Crash Summary, as specified by Utah Code under Section 41-6a-406, 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 motor vehicle deaths, injuries, and crashes. This report is designed to heighten awareness about traffic safety issues 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:** This crash data comes from traffic crash reports completed by law enforcement officers throughout Utah who investigate crash scenes on public roadways. Information is collected when a crash involves injuries, deaths, or at least \$1,500 property damage. Crash reports are forwarded to the Utah Department of Public Safety for central collection.

**Fatal Crashes:** Additional detailed information is collected on fatal crashes and compiled into the Fatality Analysis Reporting System (FARS). FARS is a national data system collecting data on all fatal traffic crashes in the U.S. FARS was used for the data on fatal crashes.

**Fact Sheets:** Each section of the crash summary is accompanied by a 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 at [www.highwaysafety.utah.gov](http://www.highwaysafety.utah.gov).

**Suggested Citation:** Utah Department of Public Safety, Highway Safety Office. *Utah Crash Summary 2010*. Salt Lake City, UT: Utah Department of Public Safety, 2012.

## Executive Summary

Significant progress has been made to reduce motor vehicle crashes in Utah, with a rapid decline in the injury and fatal crash rates over the last 40 years. If Utah had the same fatal crash rate in 2010 as 1970 there would have been 1,206 additional deaths in 2010. These reductions can be attributed to a variety of factors, including:

- Traffic safety programs that have increased public awareness of traffic safety issues;
- Aggressive media and enforcement programs targeting driver behavior;
- Legislation mandating seat belt and child safety seat use, graduated driver licensing, and enhanced penalties for impaired and distracted driving;
- 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. In 2010, there were 49,368 reported traffic crashes on public roadways in Utah. These crashes involved 123,894 people, with 21,675 injured and 253 people killed. Traffic deaths were the second lowest total in Utah since 1974.

Utah made progress in the following areas in 2010 when compared to 2009:

- The Utah death rate per vehicle miles traveled is still below the overall U.S. rate;
- Reported traffic crashes decreased from 51,367 in 2009 to 49,368 in 2010;
- The crash rate per miles traveled decreased 5% from 2009;
- Child safety seat use among ages 0-8 years increased for the seventh straight year;
- The number of motorcyclists killed decreased 30%;
- The number of crashes involving an alcohol-impaired driver decreased 15%;
- The number of speed-related crashes decreased 12%;
- The number of crashes involving a teenage driver decreased 9%;
- The number of unrestrained occupant deaths decreased 4%.

As improvements are made and progress continues, traffic safety needs to remain a top priority. Some areas of concern in Utah during 2010 include:

- Traffic deaths increased from 244 in 2009 to 253 in 2010;
- Speed was a factor in 45% of fatal crashes;
- The number of fatal crashes in urban areas increased 24%;
- The number of pedestrians in crashes increased 24%;
- The number of bicyclists in crashes increased 4%.

The *Utah Crash Summary 2010* contains further details regarding Utah motor vehicle crashes.

The Utah Department of Public Safety, Highway Safety Office invites users of this Crash Summary to help promote motor vehicle safety in Utah. The numbers in the Crash Summary represent lost lives, injured people, and lives changed. Utah has set a goal of zero fatalities because the loss of even one life is too many. This is a goal we can all live with.

# 2010 Utah Crash Synopsis

## All Crashes

Category	#	% of Total*
<b>Total Crashes</b>	<b>49,368</b>	
Urban	36,925	75%
Property Damage Only	34,155	69%
Injury	14,995	30%
Rural	12,443	25%
Inclement Weather	11,702	24%
Followed Too Closely	10,921	22%
Teenage Driver	10,097	20%
Speed	9,716	20%
Failed to Yield	8,905	18%
Senior (Age 65+) Driver	5,531	11%
Distracted Driving	4,353	9%
Large Truck	3,250	7%
Animal-Related	2,864	6%
Disregard Traffic Signal/Sign	2,551	5%
Alcohol-Impaired Driver	1,723	3%
Motorcycle	1,049	2%
Drowsy Driving	961	2%
Pedestrian-Motor Vehicle	781	2%
Bicycle-Motor Vehicle	754	2%
Fatal	218	<1%
<b>Total Persons in Crashes</b>	<b>123,894</b>	
Drivers	86,136	70%
Followed Too Closely Crash	34,688	28%
Teenage Driver Crash	28,988	23%
Inclement Weather Crash	27,123	22%
Failed to Yield Crash	25,753	21%
Speed Crash	22,579	18%
Injured Persons	21,675	17%
Senior (Age 65+) Driver Crash	15,059	12%
Children (Ages 0-14 Years)	13,428	11%
Distracted Driving Crash	11,915	10%
Large Truck Crash	8,284	7%
Disregard Traffic Signal/Sign Crash	7,626	6%
Animal-Related Crash	4,482	4%
Alcohol-Impaired Driver Crash	3,496	3%
Unrestrained Occupants	3,376	3%
Drowsy Driving Crash	1,782	1%
Motorcyclists	1,190	1%
Pedestrians	863	1%
Bicyclists	773	1%
Deaths	253	<1%

## Fatal Crashes

Category	#	% of Total*
<b>Fatal Crashes</b>	<b>218</b>	
Urban	110	50%
Rural	108	50%
Speed	99	45%
Inclement Weather	50	23%
Senior (Age 65+) Driver	45	21%
Failed to Yield	30	14%
Large Truck	30	14%
Teenage Driver	30	14%
Pedestrian-Motor Vehicle	27	12%
Alcohol-Impaired Driver	24	11%
Motorcycle	20	9%
Distracted Driving	17	8%
Red Light/Stop Sign Running	16	7%
Bicycle-Motor Vehicle	7	3%
Drowsy Driving	7	3%
Followed Too Closely	7	3%
Animal-Related	5	2%
<b>Deaths</b>	<b>253</b>	
Drivers	149	59%
Speed Crash	118	47%
Unrestrained Occupants	87	34%
Inclement Weather Crash	59	23%
Senior (Age 65+) Driver Crash	51	20%
Large Truck Crash	38	15%
Teenage Driver Crash	38	15%
Failed to Yield Crash	34	13%
Pedestrians	28	11%
Alcohol-Impaired Driver Crash	25	10%
Motorcyclists	21	8%
Children (Ages 0-14 Years)	20	8%
Distracted Driving Crash	19	8%
Red Light/Stop Sign Running Crash	18	7%
Drowsy Driving Crash	10	4%
Bicyclists	7	3%
Followed Too Closely Crash	7	3%
Animal-Related Crash	6	2%

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



## 2010 Utah Crash Facts

- In an average day in Utah, there were 135 motor vehicle crashes involving 339 people with 59 people injured and 1 person killed.
- First motor vehicle crash occurred January 1, 2010 at 12:00 a.m. and the last crash occurred December 31, 2010 at 11:48 p.m.
- First fatal motor vehicle crash occurred January 5, 2010 at 7:06 a.m. and the last fatal crash occurred December 31, 2010 at 11:40 p.m.
- Wednesday, December 29, 2010 had the most crashes with 496 crashes and both Sunday, April 11, 2010 and Sunday, April 25, 2010 had the fewest crashes with 41.
- 109 lives were estimated to be saved at current seat belt use rates. (National Highway Traffic Safety Administration, 2009 data)
- It is estimated that 44 additional lives would have been saved if everyone had been wearing seat belts.
- A motor vehicle crash occurred every 10 minutes.
- A person was injured in a crash every 24 minutes.
- A teenage-driver crash occurred every 52 minutes.
- A speed-related crash occurred every 54 minutes.
- A driver age 65 years or older was in a crash every 95 minutes.
- A distracted driver crash occurred every 2 hours.
- 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 5 hours.
- A motorcyclist was in a crash every 7 hours.
- A pedestrian was hit by a motor vehicle every 10 hours.
- A bicyclist was hit by a motor vehicle every 11 hours.
- A person died in a crash every 34 hours.
- The youngest person in a motor vehicle crash was four days-old and the oldest person was 105 years-old.
- The youngest person killed in a motor vehicle crash was 10 months-old and the oldest person killed was 93 years-old.
- The estimated statewide economic loss due to motor vehicle crashes in Utah was \$1.37 billion. (National Highway Traffic Safety Administration)
- Hospital and emergency department charges for the treatment of Utah residents in motor vehicle crashes were \$118 million. (Utah Department of Health)
- 4.6% of licensed drivers were in a crash.
- 4.5% of Utah residents were in a crash.
- 4.3% of registered vehicles were in a crash.
- 1.7% of deaths in Utah involved a motor vehicle crash.
- 0.2% of people in a crash died.
- A person was in a crash every 215,000 miles driven in Utah.



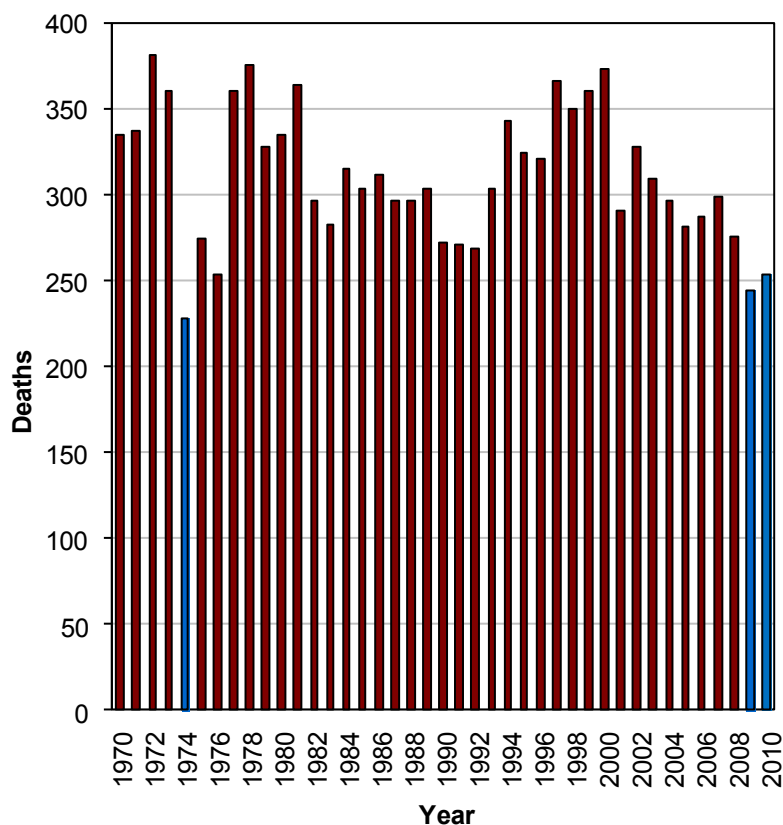
## Did you know in 2010:

- 49,368 motor vehicle crashes occurred in Utah which resulted in 21,675 injured persons and 253 deaths.
- The Utah death rate per mile traveled was lower than the U.S. rate.
- A motor vehicle crash occurred in Utah every 10 minutes, a person was injured in a crash every 24 minutes, and a person died in a crash every 34 hours.

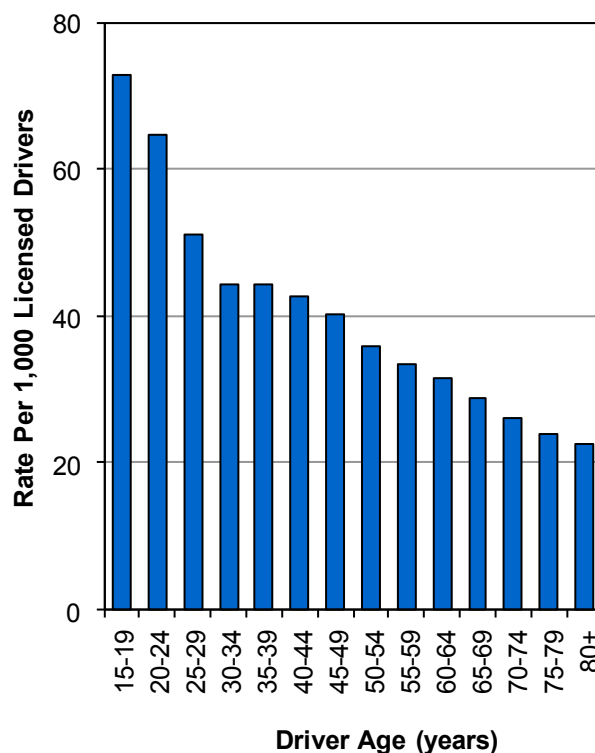
## Overview



### Deaths by Year (Utah 1970-2010)



### Crash Rates per Licensed Drivers by Age (Utah 2010)



- 2010 had the second lowest deaths in Utah since 1974.

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

## Crash Summary (Utah 2010)

### Leading Crash Types

1. Inclement Weather Crashes (24%)
2. Followed Too Closely Crashes (22%)
3. Teen Driver Crashes (20%)
4. Speed Crashes (20%)
5. Failed to Yield Crashes (18%)

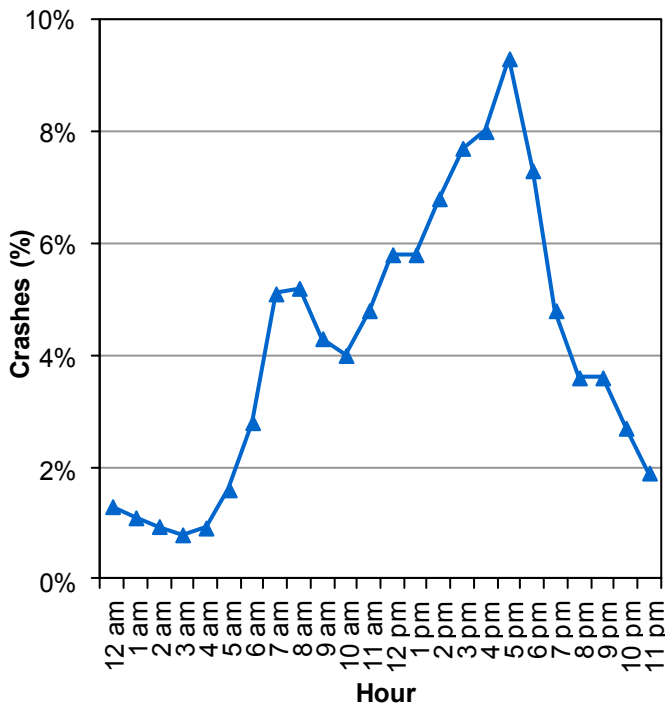
### Leading Causes of Death

1. Speed (47%)
2. Failed to Keep in Proper Lane (38%)
3. Unrestrained Occupants (34%)
4. Failed to Yield (13%)
5. Drunk Driving (10%)

## Overview



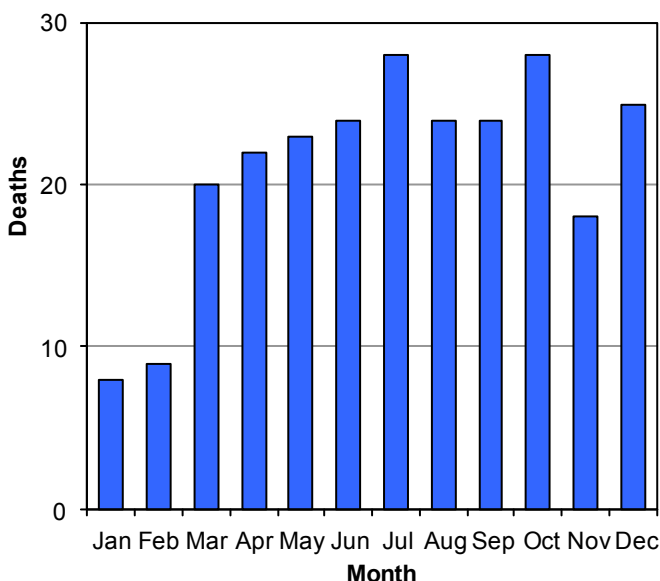
### Motor Vehicle Crashes by Hour (Utah 2010)



- Crashes were highest between 2:00 p.m. and 6:59 p.m.

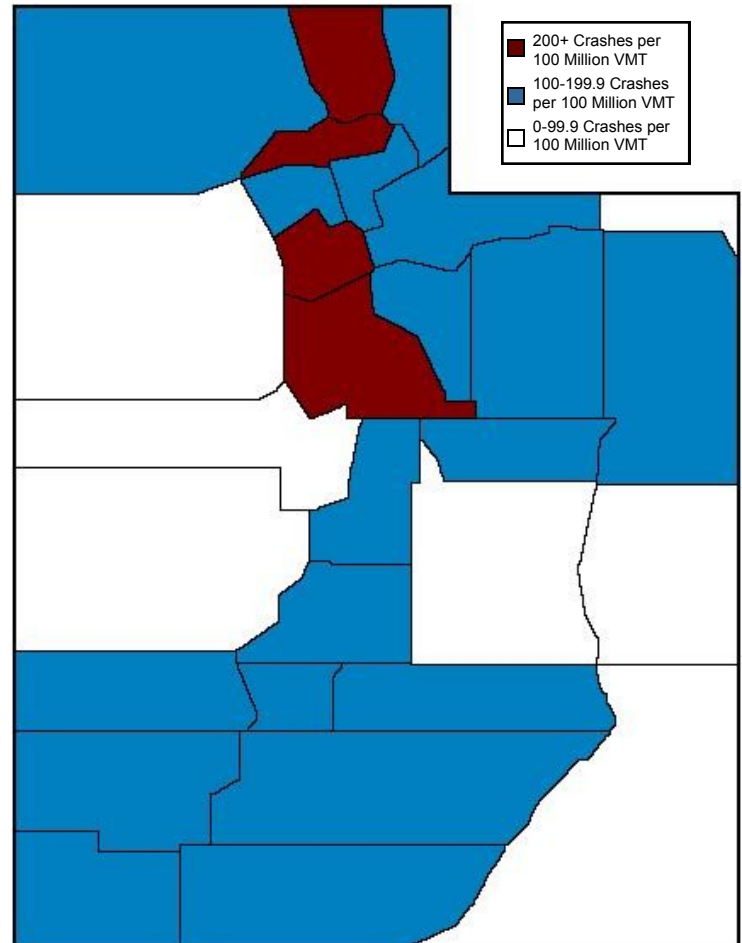
**Vehicle rollovers were the most deadly event, being 5.6 times more likely to result in a death than other crashes.**

### Deaths by Month (Utah 2010)



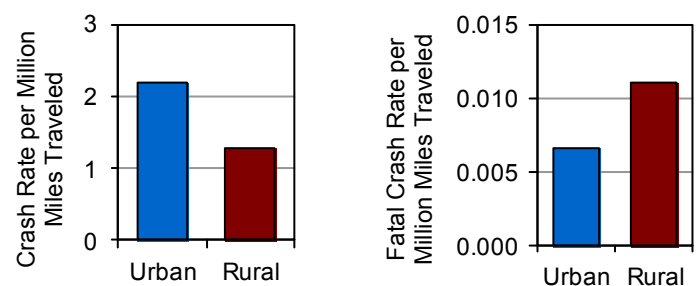
- July and October had the most deaths.

### County Crash Rates by Miles Traveled (Utah 2010)



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

### Urban/Rural Location (Utah 2010)



- Urban areas had a higher rate of total crashes per vehicle mile traveled while rural areas had a higher fatal crash rate.
- Rural crashes were 2.9 times more likely to be fatal than urban crashes.



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

*Wearing a seat belt is one of the best ways to decrease injuries and deaths in motor vehicle crashes.*

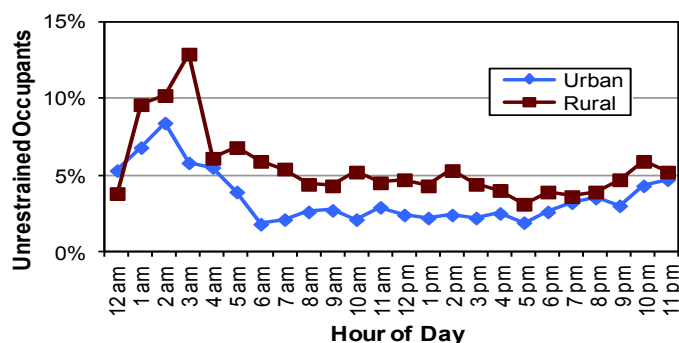
# Occupant Protection



## Did you know in 2010:

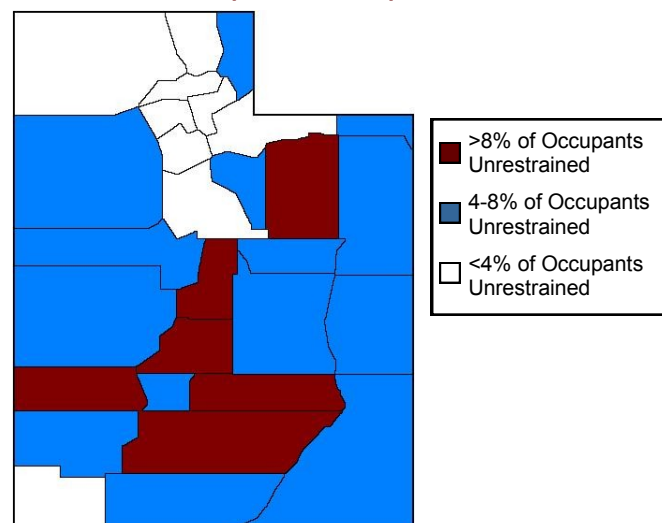
- Unrestrained crash occupants were 31 times more likely to die in a crash than restrained occupants.
- An estimated 109 lives were saved because of restraint use. (National Highway Traffic Safety Administration)
- While overall traffic deaths increased the number of unrestrained occupant deaths decreased.

### Unrestrained Crash Occupants by Hour, Rural vs. Urban (Utah 2010)



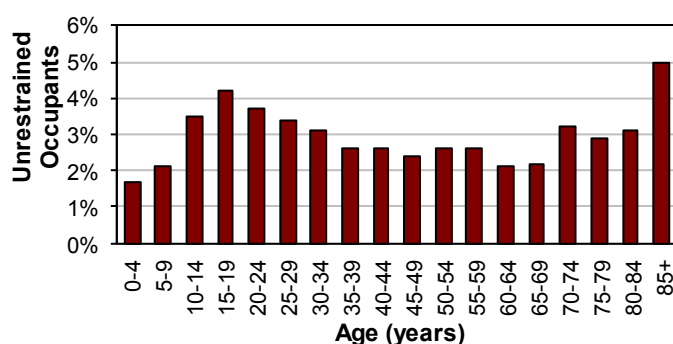
- 10:00 p.m. to 5:59 a.m. had the highest percentage of unrestrained crash occupants.
- Rural areas had lower restraint use for nearly every hour of the day than urban areas.

### Unrestrained Crash Occupants by County (Utah 2010)



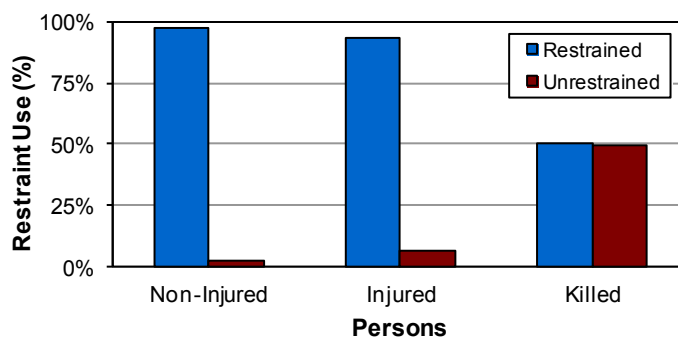
- Occupants in rural crashes were 1.8 times more likely to be unrestrained than urban occupants.

### Unrestrained Crash Occupants by Age (Utah 2010)



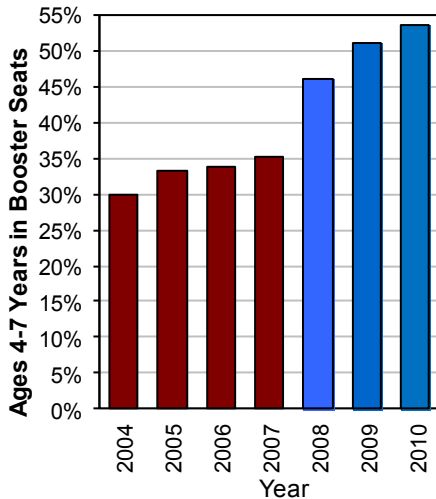
- The highest percentage of unrestrained crash occupants were 85+ and 10-29 years.

### Restraint Use by Injury Severity (Utah 2010)



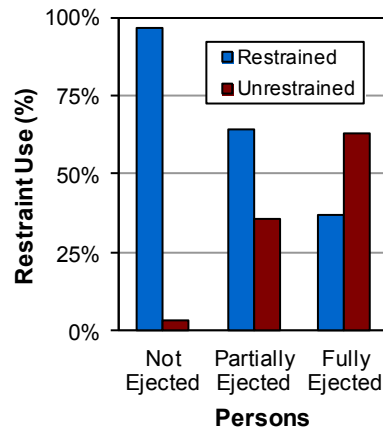
- Over 97% of persons who survived a crash were restrained compared to half (51%) of the persons killed.

## Effectiveness of Booster Seat Law (Utah 2004-2010)



- In 2008, a law was passed increasing the age of child safety seat use from up to age 4 years to up to age 8 years.
- In 2010, booster seat use among ages 4-7 years in crashes increased to 54%.
- Booster seat use increased 52% since passage of the law.

## Ejection and Restraint Use (Utah 2010)



- 63% of crash occupants fully ejected from a motor vehicle were unrestrained.
- Unrestrained occupants were 55 times more likely to be fully ejected than restrained occupants.

## Occupant Protection



### 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 seat belt fits properly. Booster seats help position an adult-size seat belt for a safer fit on children.
- The safest place for any child aged 12 and under is in the back seat of the vehicle.

### Seat Belt 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 the arm or behind the back.

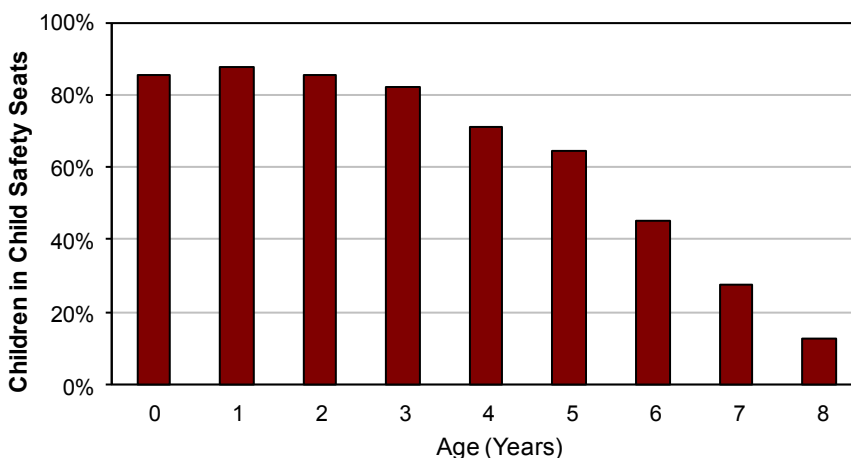
### Safety Restraint Laws:

- Utah law requires all motor vehicle occupants to wear a seat belt. 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.
  - ⇒ Children aged 8 to 18 years must ride in an appropriate child restraint or seat belt.
  - ⇒ 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.



## Percent of Children Aged 0-8 Years in Crashes Using Child Safety Seats (Utah 2010)



- The older the child the less likely they were using a child safety seat.
- While 88% of children 0-1 years in a crash were in a child safety seat, only 71% of 4-year-olds, 45% of 6-year-olds, and 13% 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 seat belts too early.

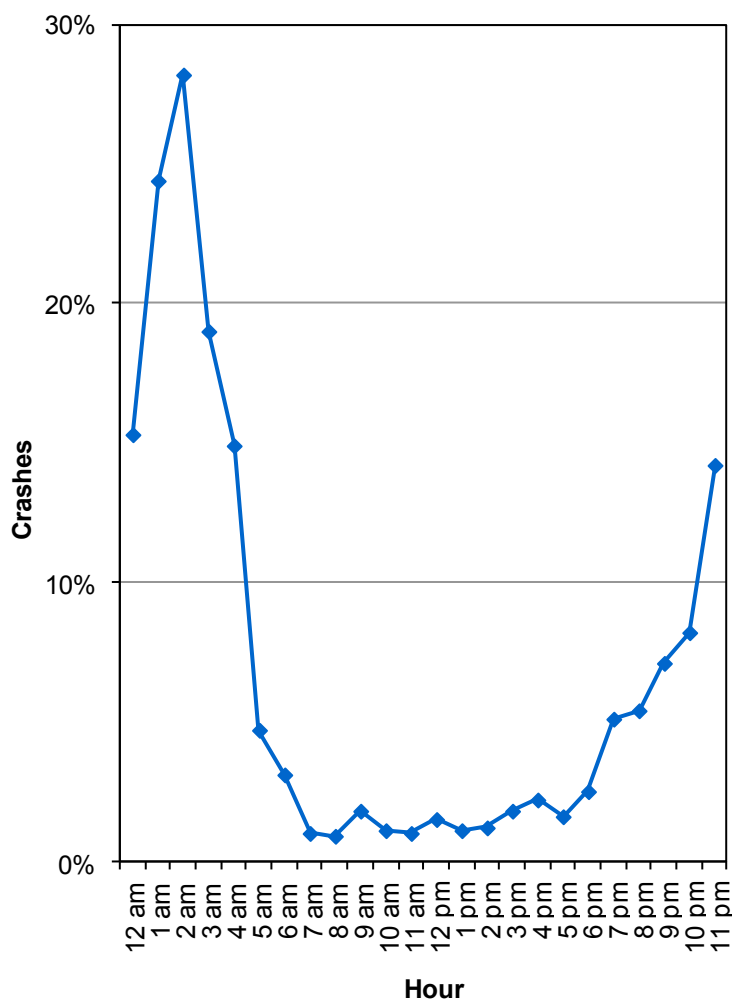
## Did you know in 2010:

- 1,723 alcohol-impaired driver crashes occurred in Utah which resulted in 1,150 injured persons and 25 deaths.
- Alcohol-impaired driver crashes were 3.5 times more likely to be fatal than other crashes.
- The number of alcohol-impaired driver fatal crashes decreased 14% in 2010 from 2009.

## Alcohol-Impaired Drivers

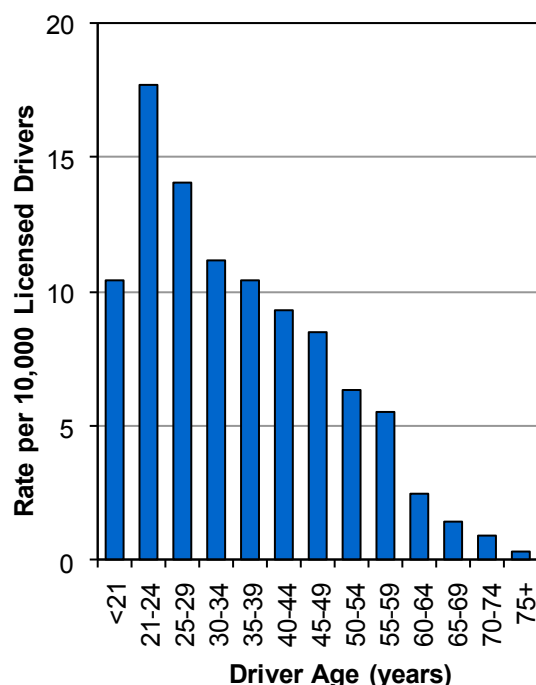


**Percent of Total Crashes with an Alcohol-Impaired Driver by Hour (Utah 2010)**



- While 4% of total crashes involved an alcohol-impaired driver, nearly one-fifth (19%) of crashes occurring during the hours of 11:00 p.m.-4:59 a.m. involved an alcohol-impaired driver.

**Rate of Alcohol-Impaired Drivers in Crashes per Licensed Driver (Utah 2010)**



- Drivers aged 21 to 24 years had the highest rates of alcohol-impaired crashes.
- Of the impaired drivers, 199 (12%) were under the age of 21 years.



## Previous DUI (Utah 2010)

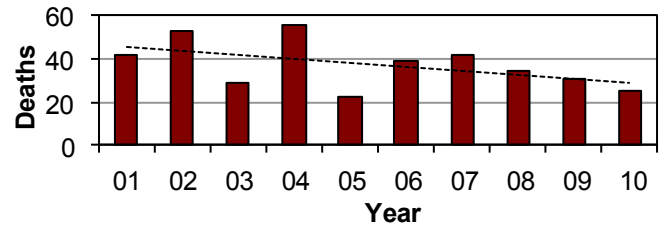
- 17% of the alcohol-impaired drivers in fatal crashes were previously convicted of driving under the influence in the past three years.

## Alcohol-Impaired Driver Crashes (Utah 2001-2010)

## Alcohol-Impaired Drivers

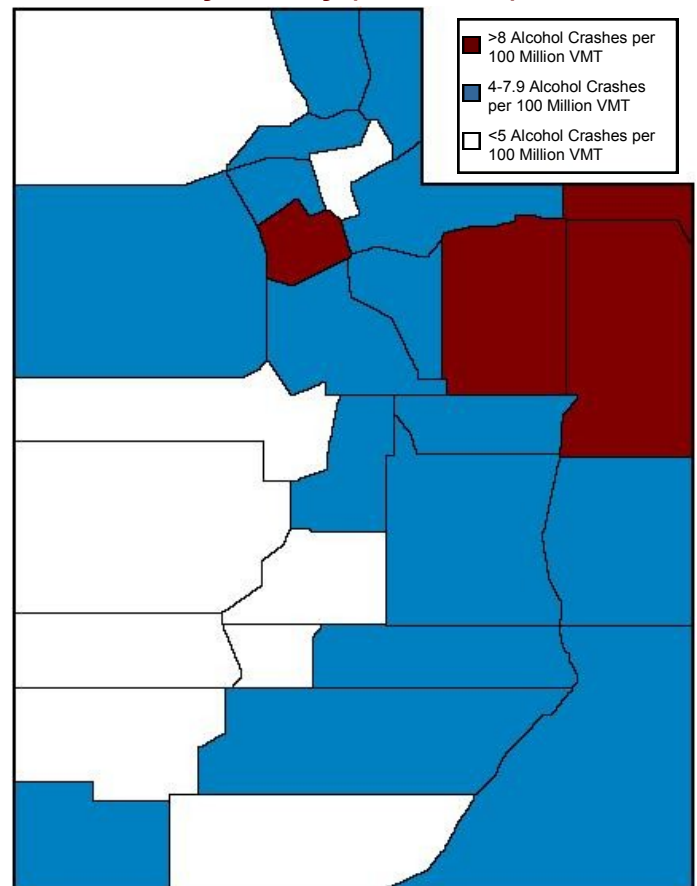


### Deaths from Alcohol-Impaired Drivers (Utah 2001-2010)

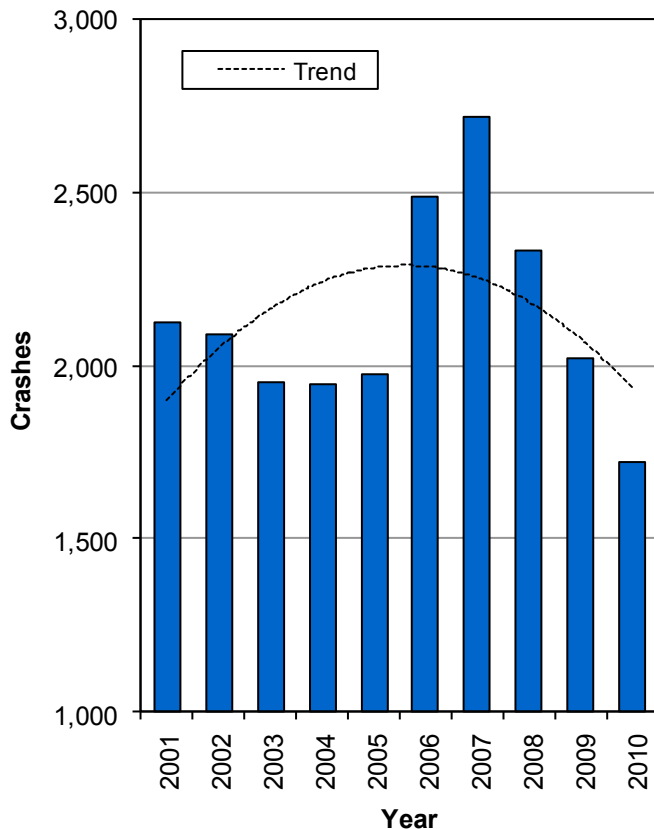


- The number of deaths from alcohol-impaired drivers has fluctuated from year to year with a slight decreasing trend over the last 10 years.

### Alcohol-Impaired Driver Crashes by County (Utah 2010)

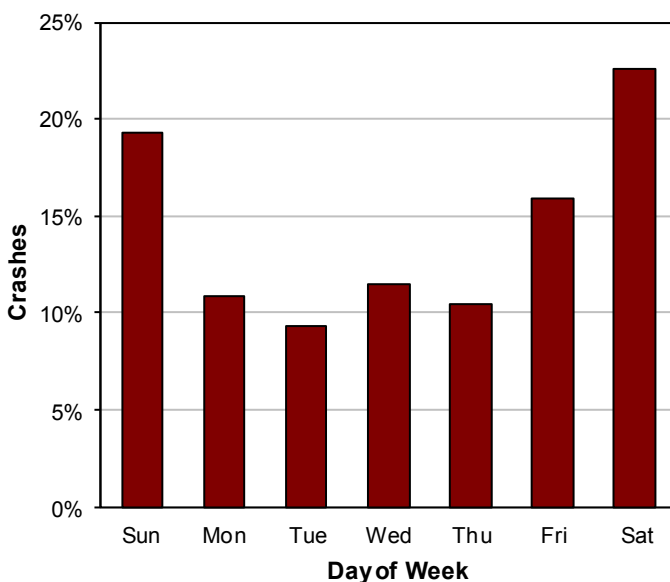


- Uintah, Salt Lake, and Daggett Counties had the highest rates of alcohol-impaired driver crashes per vehicle miles traveled (VMT).
- Piute, Sevier, and Box Elder Counties had the lowest rates of alcohol-impaired driver crashes per VMT.



- The number of alcohol-impaired driver crashes has shown a decreasing trend over the last three years.

### Alcohol-Impaired Driver Crashes by Day of the Week (Utah 2010)



- The highest percentage of alcohol-impaired driver crashes occurred on weekends (42%).

*Speed is the leading unsafe driving behavior that contributes to deaths.*

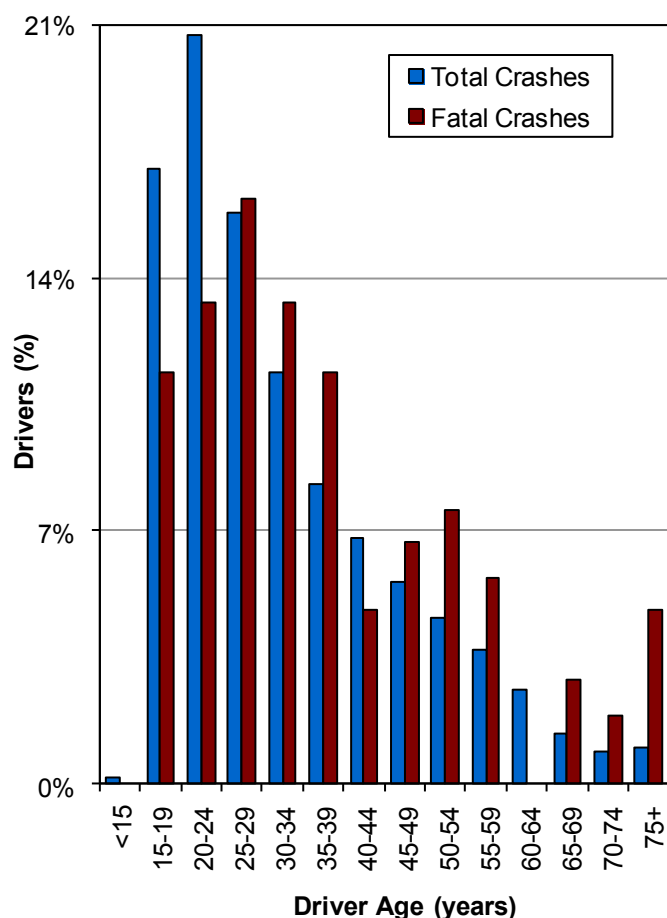
## Speed



### Did you know in 2010:

- 9,716 speed-related crashes occurred in Utah which resulted in 4,673 injured persons and 118 deaths.
- Speed was a factor in 45% of fatal crashes in 2010.
- Speed-related crashes were 3.4 times more likely to be fatal than other motor vehicle crashes.

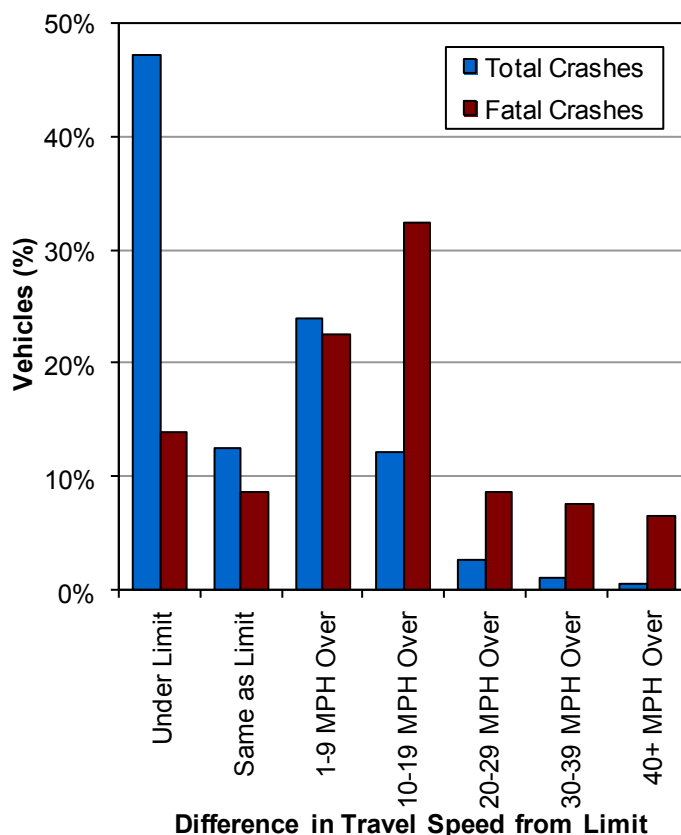
### Age of Drivers in Speed-Related Crashes (Utah 2010)



- Drivers aged 15-29 years had the highest percentage of total speed-related crashes.



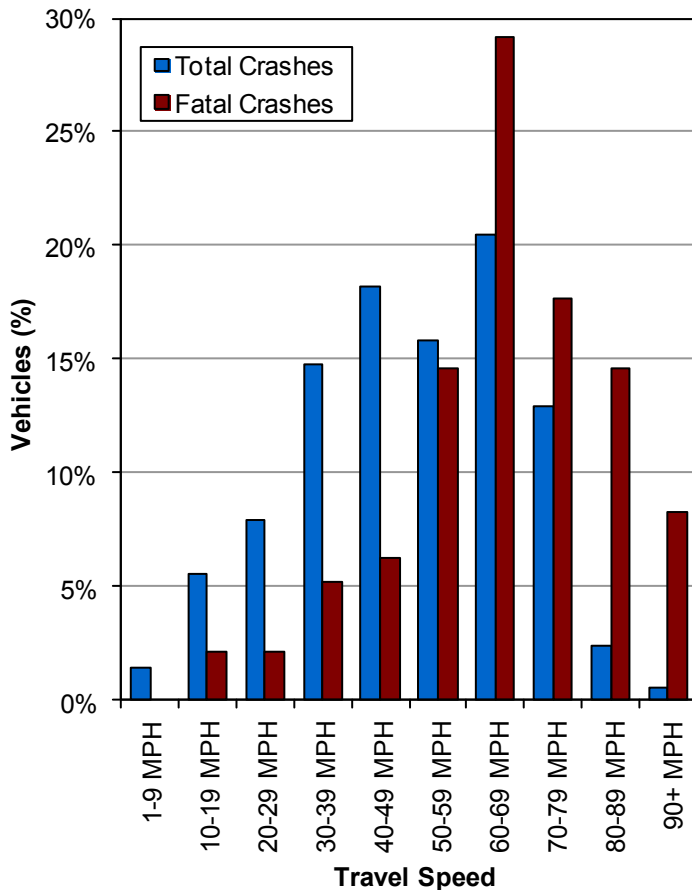
### Speed-Related Crashes by Difference in Travel Speed From Speed Limit (Utah 2010)



- 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 roadway due to higher speeds.



## Speed-Related Crashes by Travel Speed (Utah 2010)

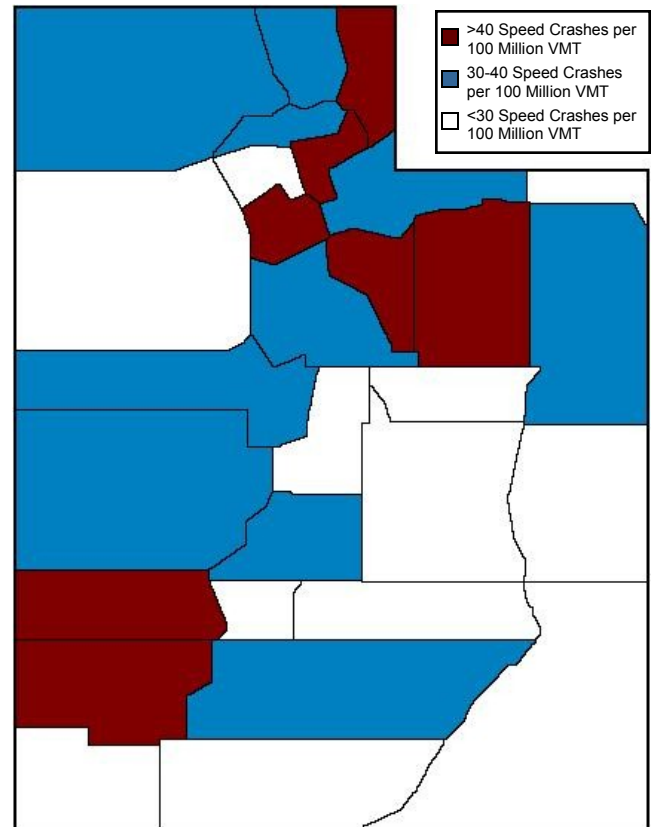


- Speed-related vehicles in fatal crashes were more likely to be traveling at higher speeds.
- The higher the speed the greater the amount of energy that must be absorbed in a crash, hence there is more chance of serious injury or death.

# Speed



## Speed-Related Crash Rates by County (Utah 2010)



- Morgan, Rich, Wasatch, and Beaver Counties had the highest speed-related crash rates per miles traveled.

Speeding is one of the leading 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 road;
- Decreases the effectiveness of vehicle design features, such as seat belts;
- 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.



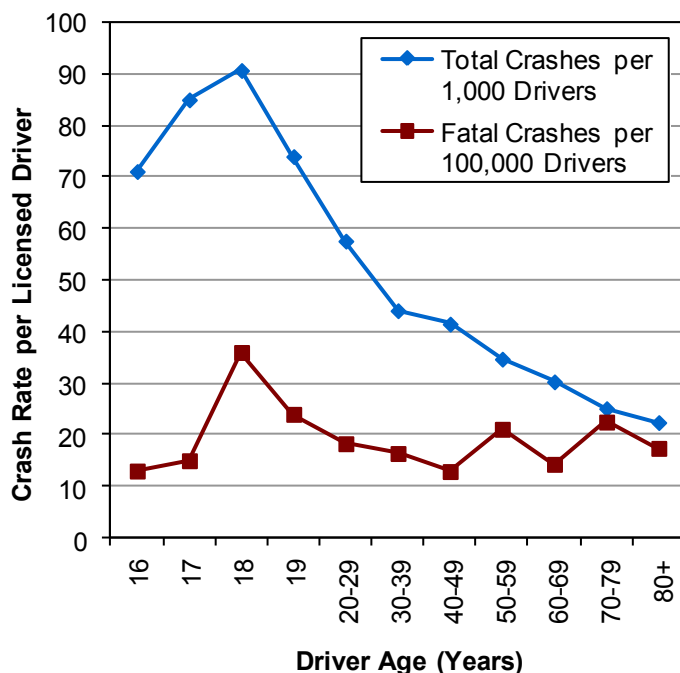
## Did you know in 2010:

- Teenage drivers represented 8% of the licensed drivers in Utah, yet they were in nearly one-fourth (21%) of all motor vehicle crashes.
- Teenage drivers were in 10,097 motor vehicle crashes which resulted in 4,805 injured persons and 38 deaths.
- Teenage drivers were 1.7 times more likely to be in a crash than drivers of other ages.
- Although teen drivers have the highest crash rates of any drivers, teen driver crashes have decreased the last ten years.

## Teenage Drivers (15-19 years)

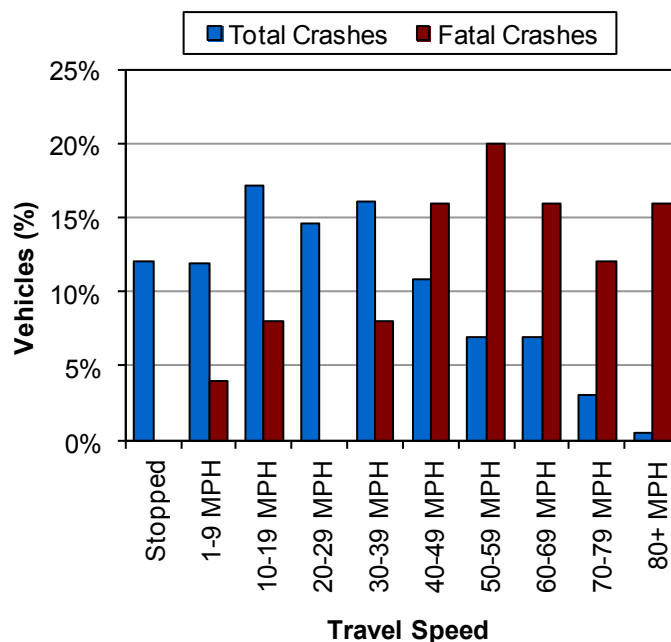


### Crash Rates per Licensed Driver by Age (Utah 2010)



- Drivers aged 18 years had the highest total crash rate per licensed driver.

### Teenage Driver Crashes by Travel Speed (Utah 2010)



- Crashes involving teenage driver vehicles traveling 50 MPH or higher were 8.5 times more likely to be fatal.

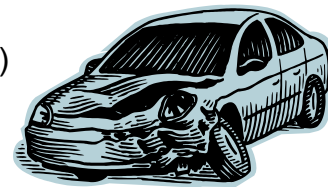
### Leading Contributing Factors of Teenage Driver Crashes (Utah 2010)

#### All Teenage Driver Crashes

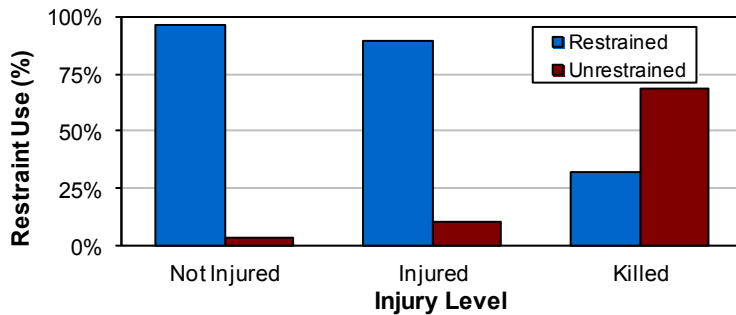
1. Followed Too Closely (21%)
2. Failed to Yield Right of Way (18%)
3. Speed Too Fast (13%)
4. Failed to Keep in Proper Lane (9%)
5. Driver Distraction (9%)

#### Fatal Teenage Driver Crashes

1. Speed Too Fast (37%)
1. Failed to Keep in Proper Lane (37%)
3. Ran Off Road (33%)
4. Failed to Yield Right of Way (27%)
5. Driver Distraction (20%)

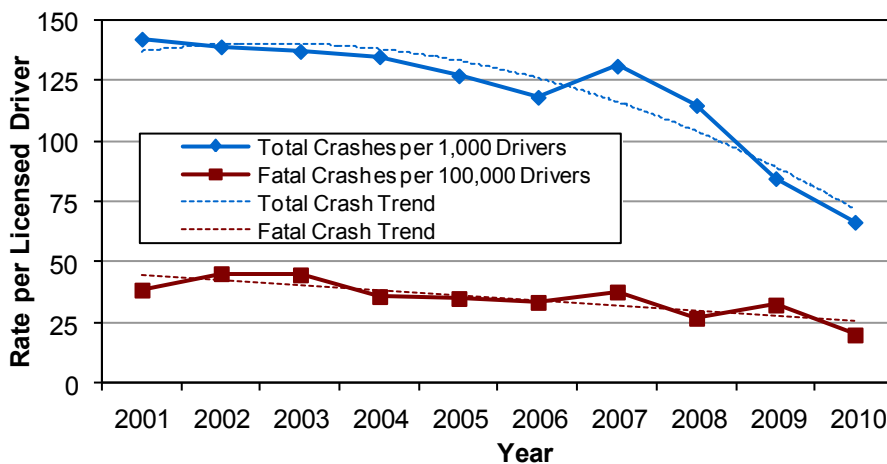


## Restraint Use of Teen Drivers and Their Passengers (Utah 2010)



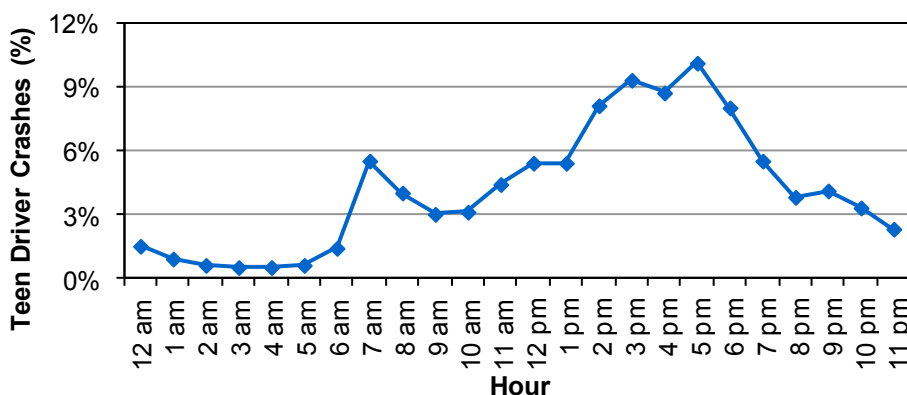
- 68% of teen drivers and their passengers killed in crashes were unrestrained.
- Unrestrained teen drivers and their passengers were 50 times more likely than restrained occupants to be killed in a crash.

## Teenage Driver Crash Trend (Utah 2001-2010)



- The teenage driver crash rate per licensed driver decreased 53% from 2001 to 2010.

## Teenage Driver Crashes by Hour (Utah 2010)



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

# Teenage Drivers (15-19 years)



## 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. Anyone who is under 18 years of age is required to hold a learner permit for six months before applying for a license.

### Supervised Driving

Everyone 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. Everyone who has 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.

### Seat Belt 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.

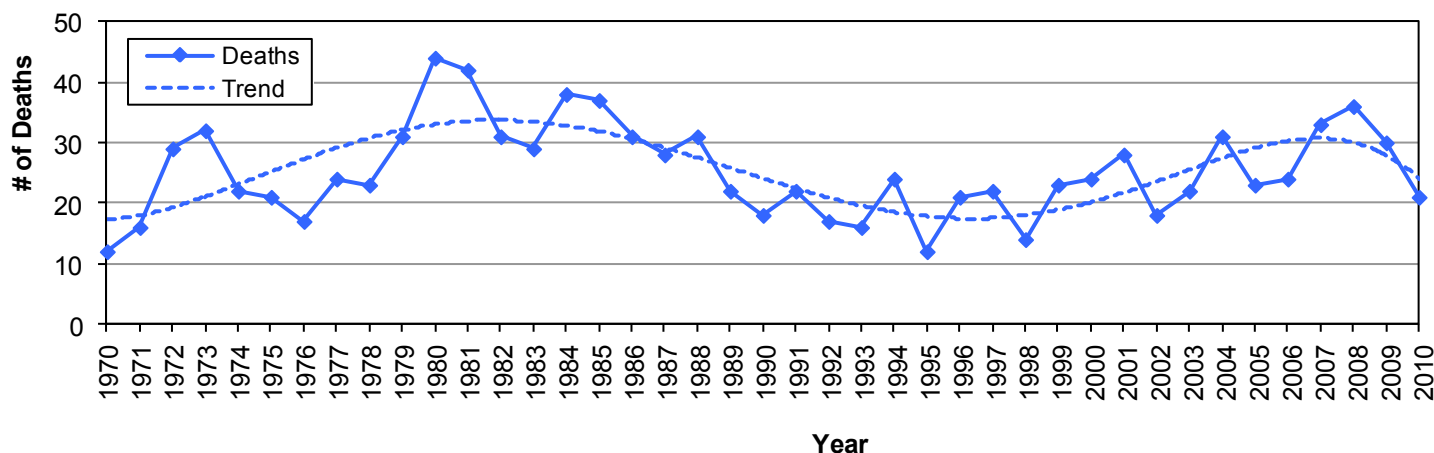
## Did you know in 2010:

- There were 1,049 motorcycle crashes in Utah, resulting in 979 injured motorcyclists and 21 motorcyclist deaths.
- Motorcyclists accounted for 1% of persons in crashes and 8% of deaths.
- Compared to 2009, there was a 4% decrease in the number of motorcyclists in crashes.
- Motorcycle crashes were 4.7 times more likely to result in a death than other crashes.

## Motorcycles

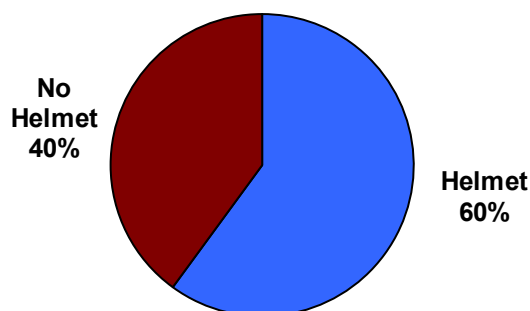


### Motorcyclist Deaths (Utah 1970-2010)



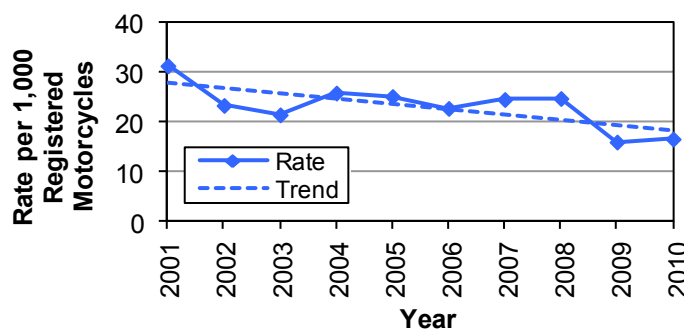
- Motorcyclist deaths are declining the past two years after seeing a rising trend in deaths.
- The 36 motorcyclist deaths in 2008 were the highest total since 1985.

### Helmet Use of Motorcyclists in Crashes (Utah 2010)



- Only 60% of motorcyclists wore a helmet.
- Utah law requires anyone under the age of 18 years riding a motorcycle to wear a helmet.

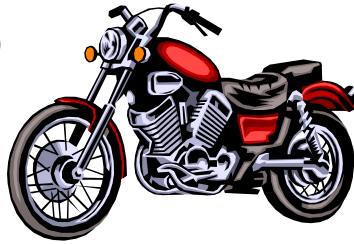
### Motorcyclist Crash Rates per Registered Motorcycles (Utah 2001-2010)



- The rate of motorcyclists in crashes per registered motorcycles was the second lowest rate in the past 10 years.

## Leading Motorcyclist Contributing Factors in Crashes (Utah 2010)

1. Speed Too Fast (14%)
2. Failed to Keep in Proper Lane (12%)
3. Followed Too Closely (10%)
4. Swerved or Evasive Action (8%)
5. Ran Off Road (7%)



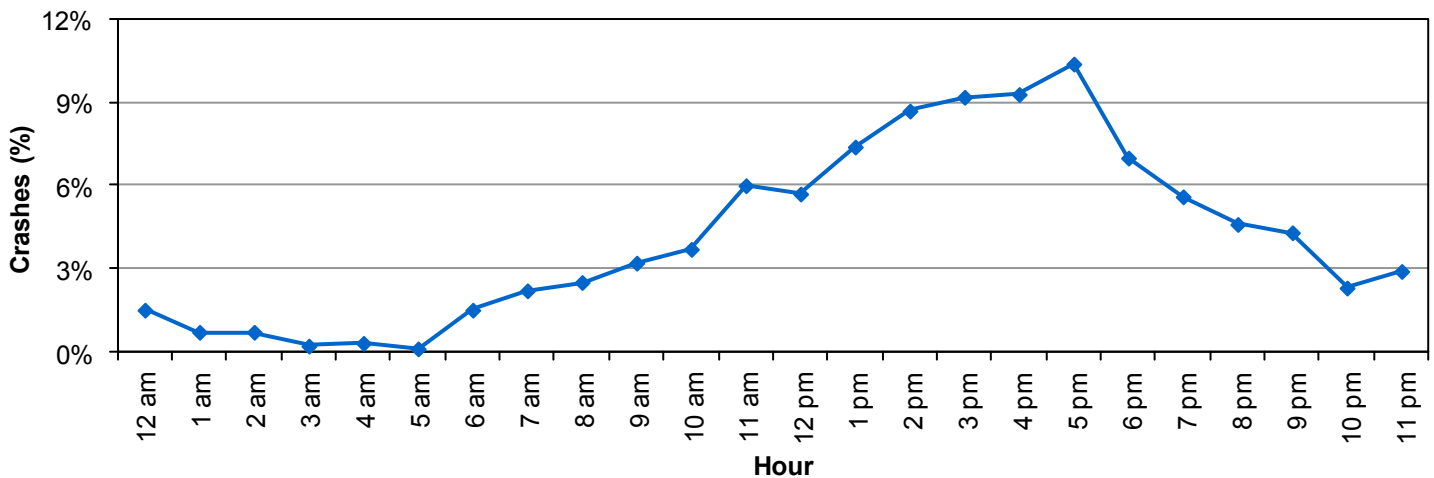
# Motorcycles



### Left Turns

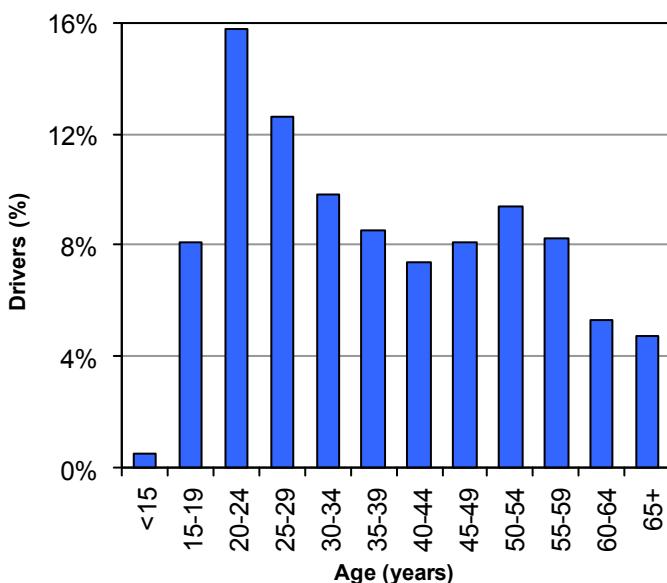
Over one-fourth (29%) of drivers who hit motorcycles were turning left. Drivers need to watch for motorcycles before turning.

## Motorcyclists In Crashes by Hour of Day (Utah 2010)



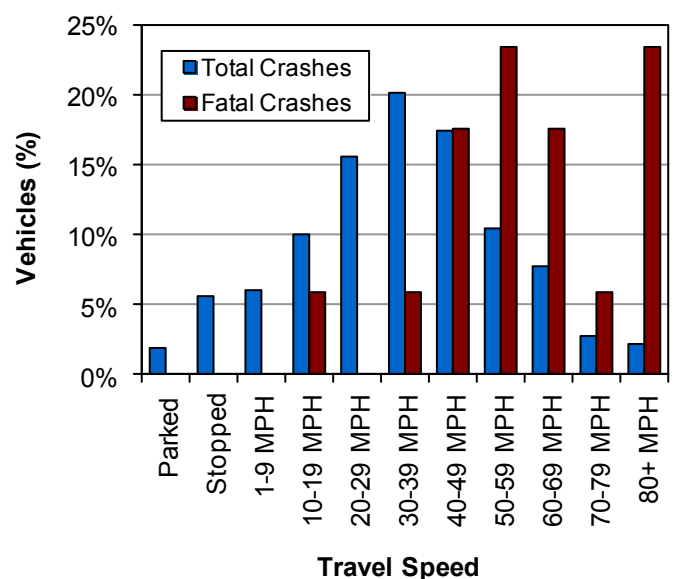
- Nearly two-thirds (64%) of motorcycle crashes occurred between 11:00 a.m. and 6:59 p.m.

## Age of Motorcycle Drivers in All Crashes (Utah 2010)



- Nearly one-half (47%) of motorcycle drivers in crashes were under the age of 35 years.

## Travel Speed of Motorcycles in Crashes (Utah 2010)



- Most (88%) of the motorcycles in fatal crashes were traveling 40 MPH or higher.



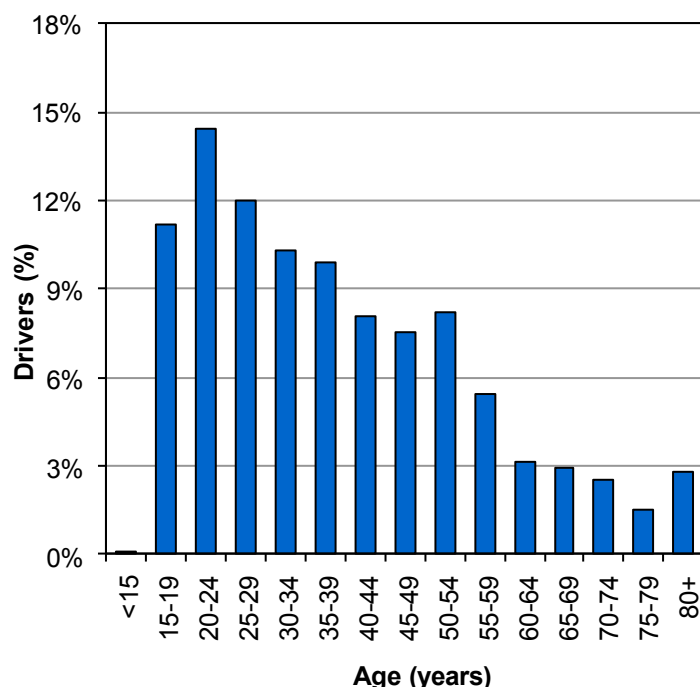
## Did you know in 2010:

- 863 pedestrians were struck by motor vehicles; 759 were injured and 28 were killed.
- Pedestrians accounted for 1% of persons in crashes and 11% of deaths.
- Pedestrian crashes were 9 times more likely to result in a death than other crashes.

## Pedestrians

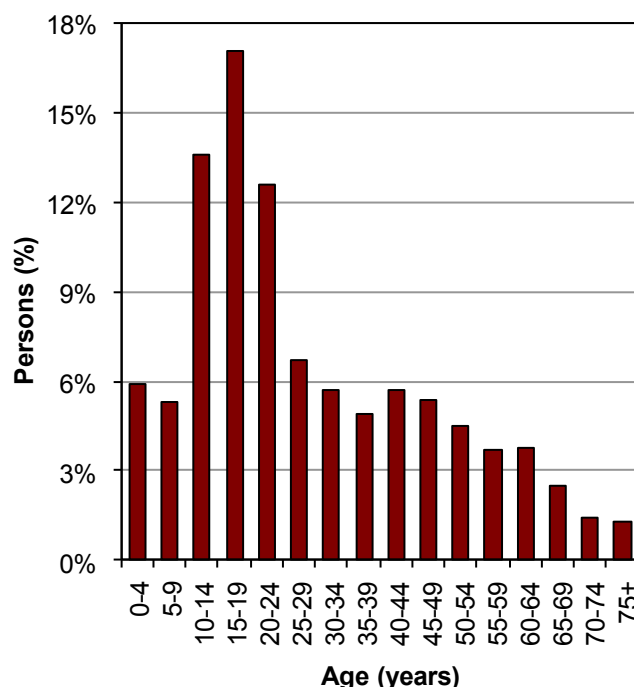


### Age of Drivers in Pedestrian-Motor Vehicle Crashes (Utah 2010)



- Over half (58%) of drivers in pedestrian-motor vehicle crashes were under 40 years.

### Age of Pedestrians in Pedestrian-Motor Vehicle Crashes (Utah 2010)



- Over half (55%) of the pedestrians in crashes were under 25 years of age.

### Leading Contributing Factors of Drivers in Pedestrian Crashes (Utah 2010)

1. Failed to Yield Right of Way (33%)
2. Hit and Run (11%)
3. Driver Distraction (9%)
4. Vision Obscured by Weather (4%)
5. Improper Backing (3%)



### Leading Contributing Factors of Pedestrians in Crashes (Utah 2010)

1. Improper Crossing (16%)
  2. Darting (9%)
  3. In Roadway Improperly (7%)
- 50% of pedestrians had no contributing factor in the crash.

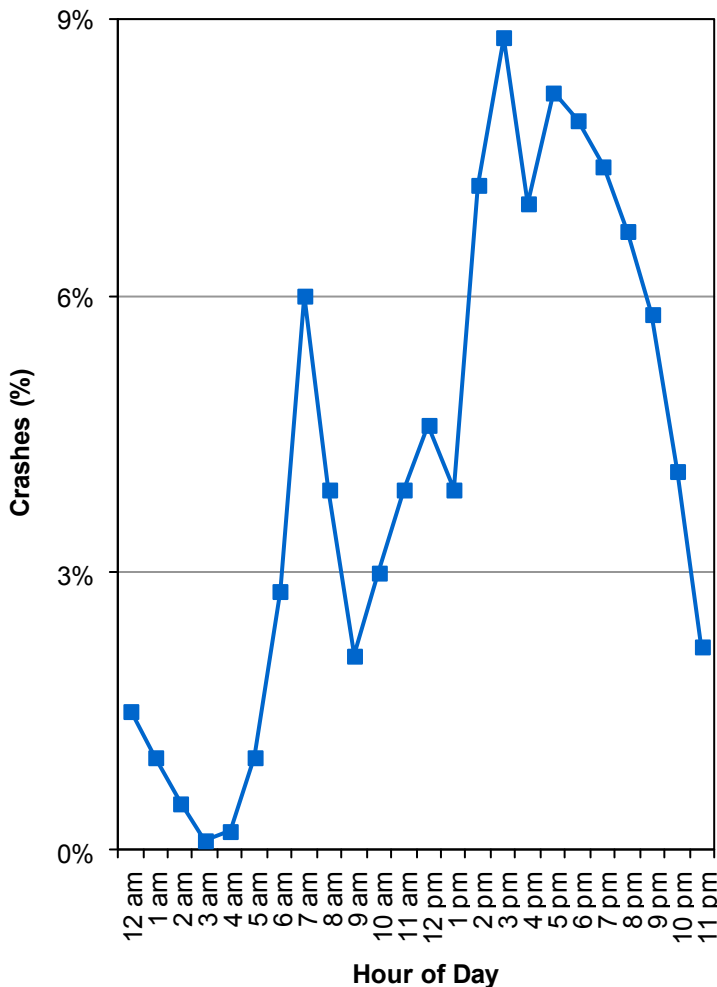


# Pedestrians



Nearly one-third (31%) of drivers who hit pedestrians were turning. Drivers need to watch for pedestrians before turning.

## Pedestrian-Motor Vehicle Crashes by Hour (Utah 2010)

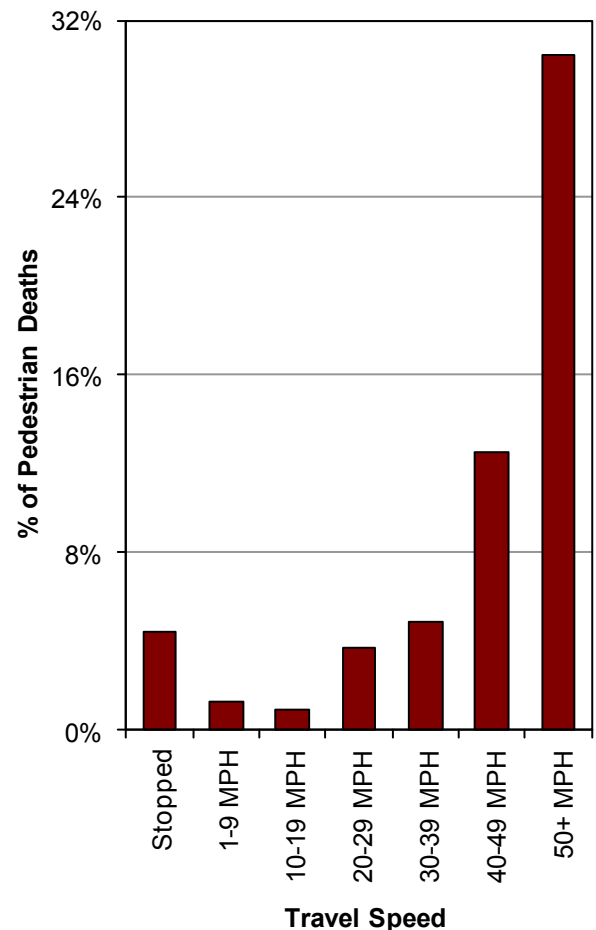


- Pedestrian-motor vehicle crashes occurred most often between 2:00 p.m.-7:59 p.m.

## Location of Pedestrians in Crashes (Utah 2010)

1. Marked Crosswalk (38%)
2. In Roadway Not at Intersection/Crosswalk (29%)
3. Shoulder (10%)
4. Unmarked Crosswalk (9%)
5. Sidewalk (6%)

## Percent of Pedestrian Deaths by Vehicle Travel Speed (Utah 2010)



- 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 40 MPH or higher were 9.8 times more likely to die.

## Motor Vehicle Action Prior to Crash (Utah 2010)

1. Straight Ahead (49%)
2. Turning Right (18%)
3. Turning Left (14%)
4. Stopped/Slowing (6%)
5. Backing (5%)



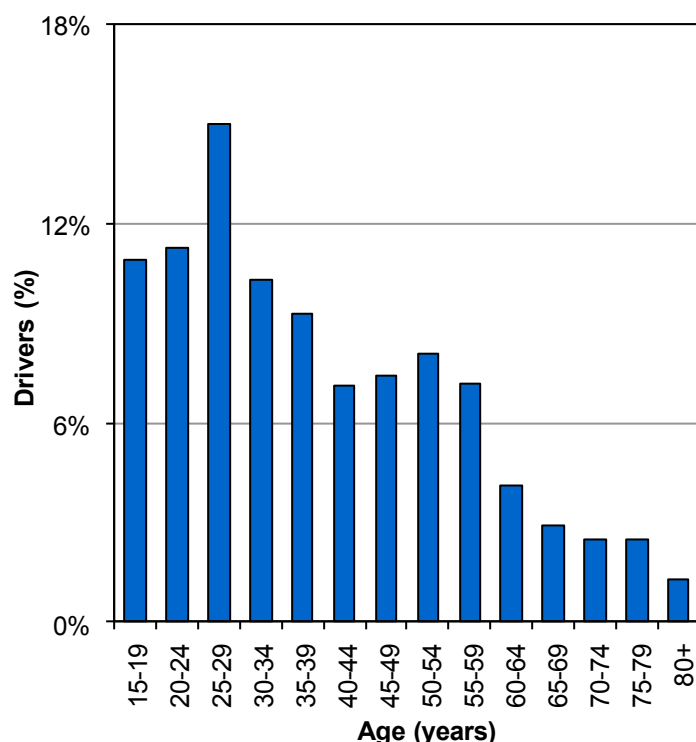
## Did you know in 2010:

- 773 bicyclists were hit by motor vehicles; 680 were injured and 7 were killed.
- Utah's bicyclist crash rate per population increased 6% from 2009.

## Bicyclists

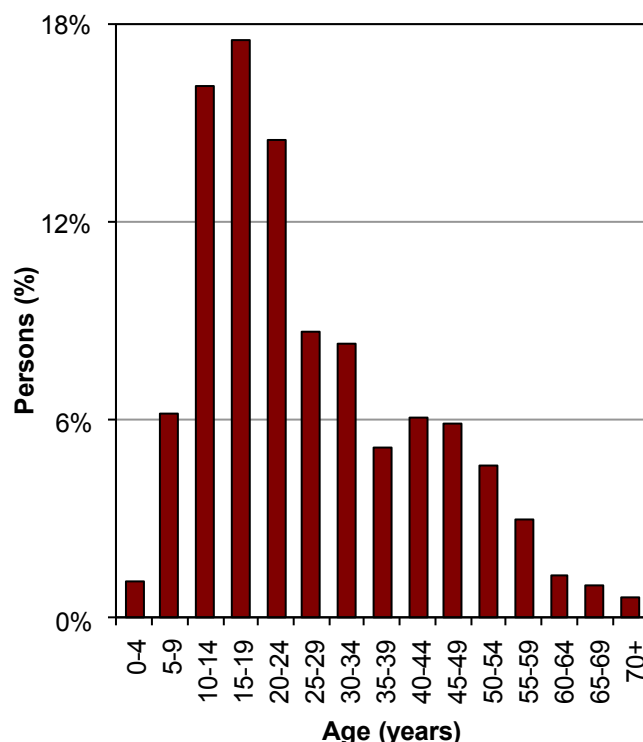


### Age of Drivers in Bicycle-Motor Vehicle Crashes (Utah 2010)



- Over half (57%) of drivers in bicycle-motor vehicle crashes were under 40 years.

### Age of Bicyclists in Bicycle-Motor Vehicle Crashes (Utah 2010)



- Over half (55%) of the bicyclists in crashes were under 25 years of age.

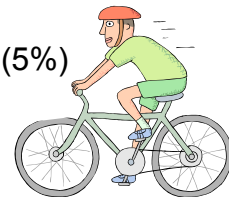
### Leading Contributing Factors of Drivers in Bicyclist Crashes (Utah 2010)

1. Fail to Yield Right of Way (43%)
2. Hit and Run (6%)
3. Vision Obscured by Glare (5%)
4. Improper Turn (4%)
5. Driver Distraction (3%)



### Leading Contributing Factors of Bicyclists in Crashes (Utah 2010)

1. Wrong Side of Road (11%)
  2. Improper Crossing (10%)
  3. Disregard Traffic Sign/Signal (5%)
- 45% of bicyclists had no contributing factor in the crash.

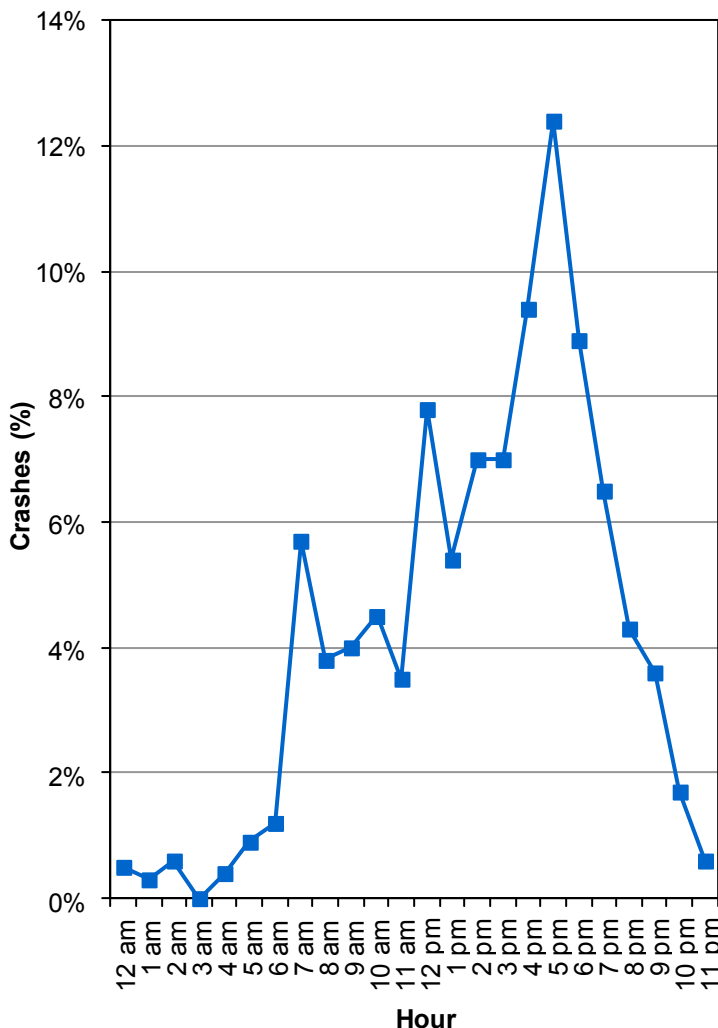


## Bicyclists



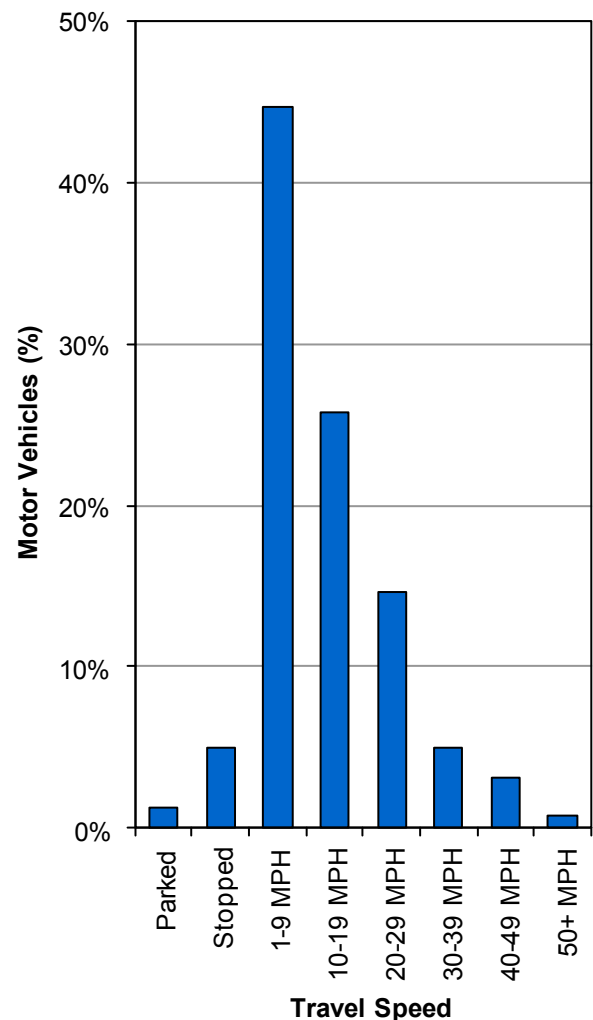
Over one-half (53%) of motor vehicles that hit bicyclists were turning. Drivers need to watch for bicycles before turning.

### Bicycle-Motor Vehicle Crashes by Hour (Utah 2010)



- Bicycle-motor vehicle crashes occurred most often between 4:00 p.m.-6:59 p.m.

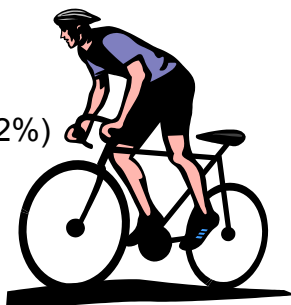
### Bicycle-Motor Vehicle Crashes by Motor Vehicle Travel Speed (Utah 2010)



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

### Location of Bicyclists in Crashes (Utah 2010)

1. Marked Crosswalk (28%)
2. In Roadway (Not at Intersection) (22%)
3. Shoulder (17%)
4. Sidewalk (15%)
5. Unmarked Crosswalk (9%)



### Motor Vehicle Action Prior to Crash (Utah 2010)

1. Straight Ahead (36%)
2. Turning Right (36%)
3. Turning Left (17%)
4. Entering/Leaving Traffic (3%)
5. Stopped/Slowing (3%)

# Overview

## Section 1: Overview

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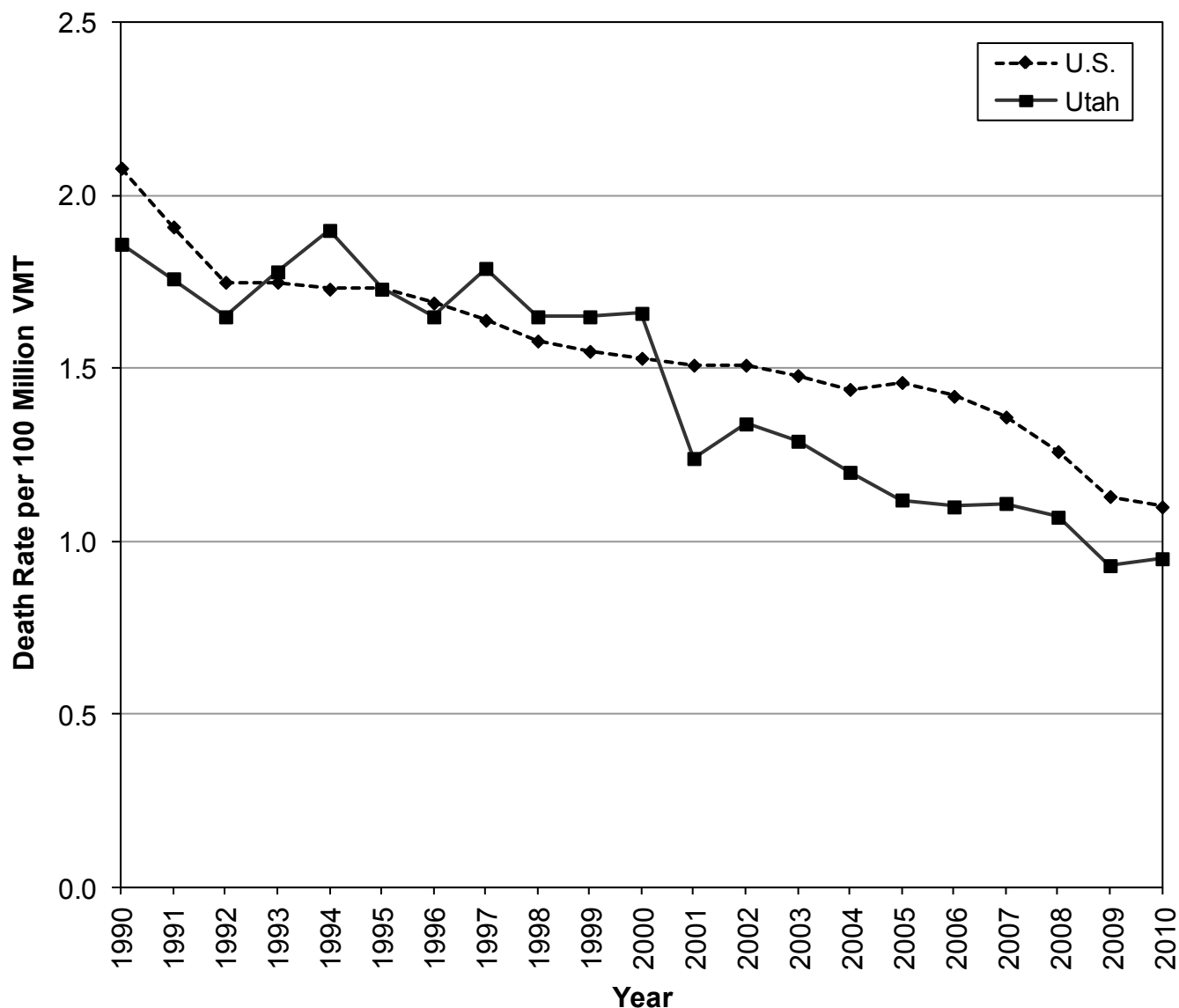
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## Trends

### Utah vs. U.S. Death Rate per 100 Million Vehicle Miles Traveled, 1990-2010

	Death Rate per Miles Traveled																				
	Year																				
U.S.	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	1.26	1.15	1.10
Utah	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	1.07	0.93	0.95



U.S. SOURCE: National Highway Traffic Safety Administration

- In 2010, the Utah death rate per 100 million vehicle miles traveled was 0.95 which was lower than the U.S. rate of 1.10.
- The Utah death rate per 100 million vehicle miles traveled has been lower than the U.S. rate since 2001. This somewhat dispels the notion that drivers in Utah are worse than other drivers in the U.S.

## Trends

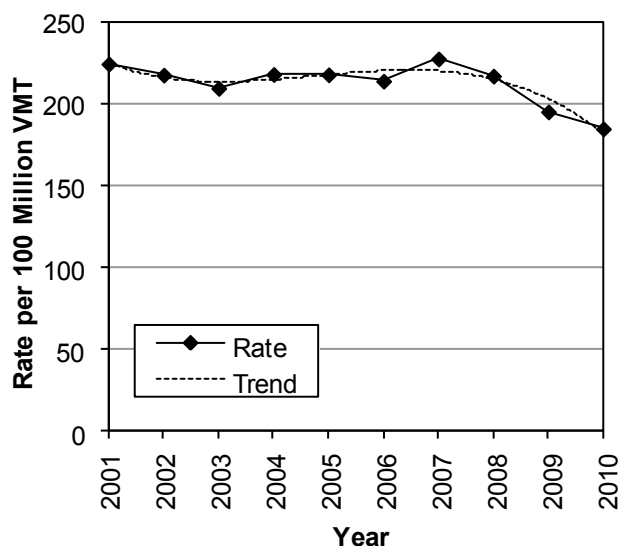
## Crashes (Utah 2001-2010)

Crashes								
Year	Property Damage Only		Injury		Fatal		Total	
	#	Rate per 100 Million VMT	#	Rate per 100 Million VMT	#	Rate per 100 Million VMT	#	Rate per 100 Million VMT
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
2008	38,997	150.7	17,125	66.2	245	0.95	56,367	217.8
2009	35,398	135.0	15,752	60.1	217	0.83	51,367	195.9
2010	34,155	128.3	14,995	56.3	218	0.82	49,368	185.5
<b>Total</b>	<b>356,469</b>	<b>140.7</b>	<b>180,892</b>	<b>71.4</b>	<b>2,476</b>	<b>0.98</b>	<b>539,837</b>	<b>213.1</b>

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

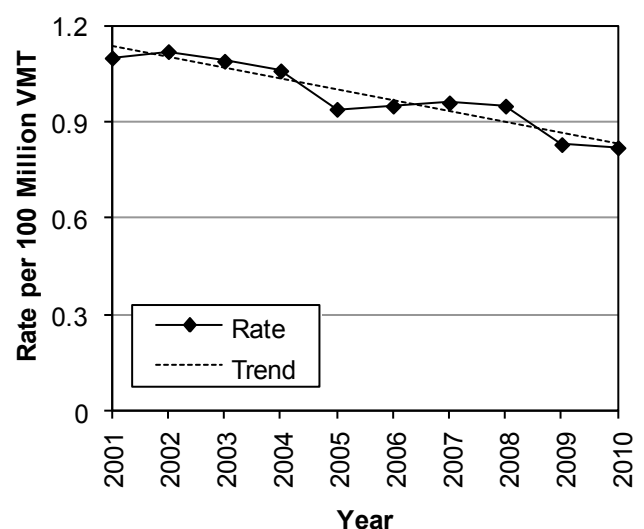
- During the last 10 years, 539,837 motor vehicle crashes occurred in Utah. On average, there are 54,000 crashes a year of which 18,100 involve injuries and 248 involve deaths.
- In 2010, total crashes decreased 3.9% from 2009.
- The 2010 total crash rate per 100 million VMT in Utah was 185.5, a 5.3% decrease from 2009.

## Crash Rates Per 100 Million Vehicle Miles Traveled (Utah 2001-2010)



- The 2010 total crash rate was the lowest on record (see Appendix for records back to 1947).
- There was a 17.6% decrease in the total crash rate from 2001-2010.

## Fatal Crash Rates Per 100 Million Vehicle Miles Traveled (Utah 2001-2010)



- There has been a decreasing trend in fatal crash rates over the last 10 years.
- There was a 25% decrease in the fatal crash rate from 2001-2010.

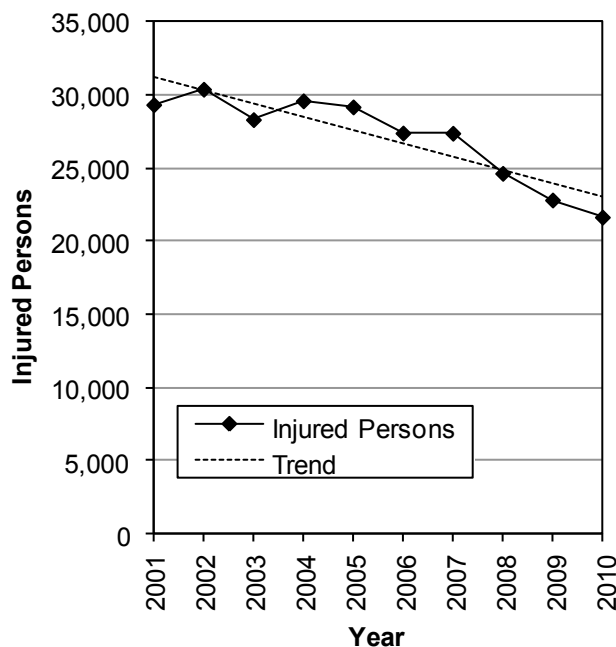
## Trends

### Persons Involved (Utah 2001-2010)

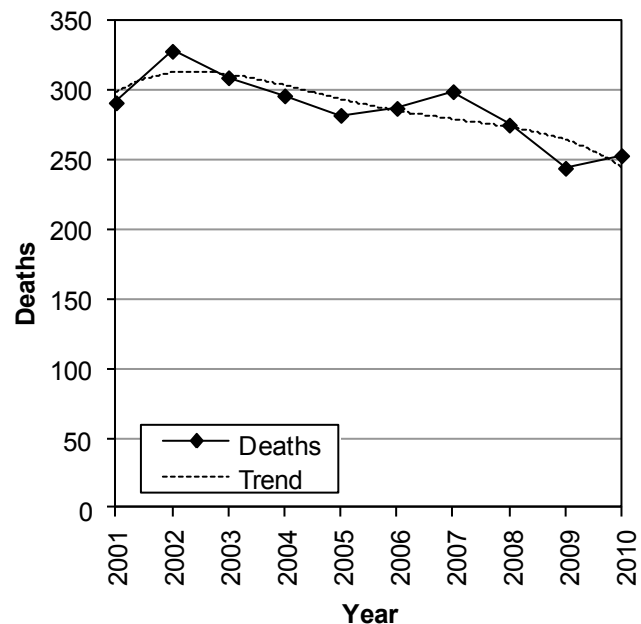
Persons								
Year	Non-Injured		Injured		Killed		Total	
	#	Rate per 100 Million VMT	#	Rate per 100 Million VMT	#	Rate per 100 Million VMT	#	Rate per 100 Million VMT
2001	108,427	463.4	29,375	125.5	291	1.24	138,093	590.2
2002	109,878	449.6	30,433	124.5	328	1.34	140,639	575.5
2003	104,660	436.8	28,352	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
2008	113,744	439.4	24,673	95.3	276	1.07	138,693	535.8
2009	103,956	396.5	22,847	87.1	244	0.93	127,047	484.6
2010	101,966	383.1	21,675	81.4	253	0.95	123,894	465.5
<b>Total</b>	<b>1,112,919</b>	<b>439.4</b>	<b>271,067</b>	<b>107.0</b>	<b>2,865</b>	<b>1.13</b>	<b>1,386,851</b>	<b>547.6</b>

- During the last 10 years, nearly 1.4 million people have been in a crash. On average over the past 10 years, approximately 27,000 people are injured and 290 people are killed in motor vehicle crashes a year.
- Utah experienced a 3.7% increase in the number of crash deaths in 2010 from 2009.
- The injury rate per miles traveled decreased for the sixth year in a row.
- 3,153 less people were in a crash in Utah in 2010; an 2.5% decrease from 2009.

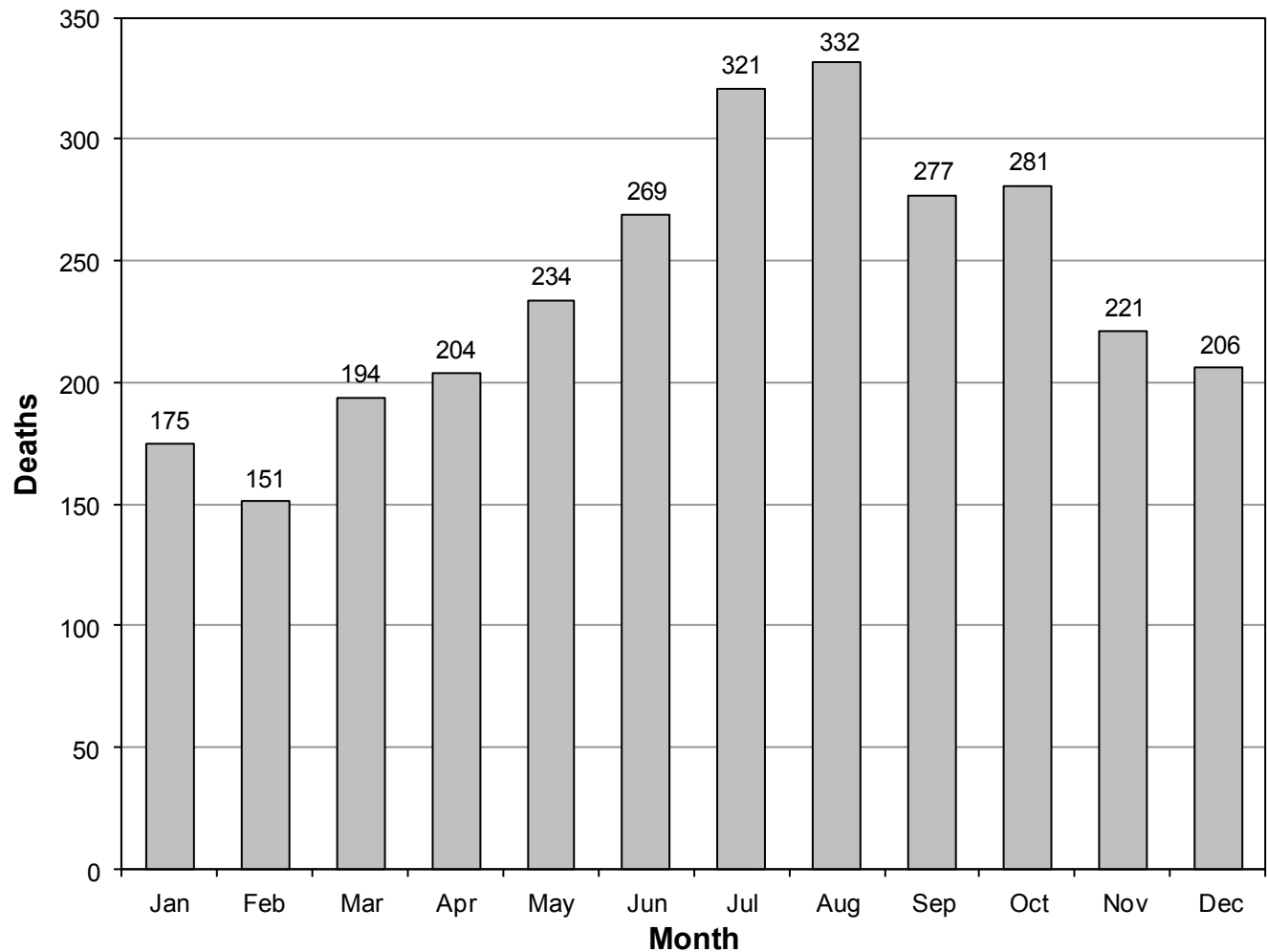
### Injured Persons by Year (Utah 2001-2010)



### Deaths by Year (Utah 2001-2010)



- There was a 26.2% decrease in the number of people injured over the last 10 years.
- Deaths in 2010 were at the second lowest total in Utah since 1974, trailing only 2009.

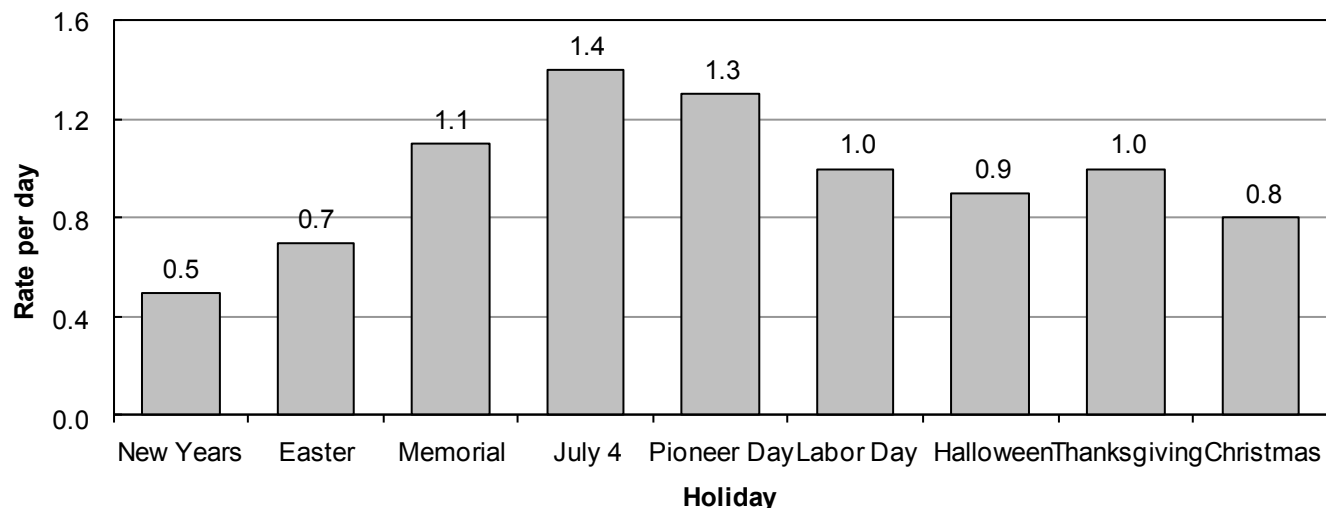
**Deaths by Month (Utah 2001-2010)**

Deaths													
Year	Month												Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
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
2008	23	9	12	12	31	30	29	32	23	28	25	22	276
2009	15	17	27	24	21	20	25	32	19	18	13	13	244
2010	8	9	20	22	23	24	28	24	24	28	18	25	253
<b>Total</b>	<b>175</b>	<b>151</b>	<b>194</b>	<b>204</b>	<b>234</b>	<b>269</b>	<b>321</b>	<b>332</b>	<b>277</b>	<b>281</b>	<b>221</b>	<b>206</b>	<b>2,865</b>

- In the last 10 years, August (332) and July (321) had the highest total number of motor vehicle crash deaths while February (151) had the fewest.
- In 2010, July and October (28) had the highest number of deaths while January (8) had the fewest.

## Trends

### Holiday Death Rate Per Day (Utah 2001-2010)



Holiday Deaths																				
Year	New Years		Easter		Memorial Day		4th of July		Pioneer Day		Labor Day		Hallow- een		Thanks- giving		Christmas		Total	
	#	Rate per Day	#	Rate per Day	#	Rate per Day	#	Rate per Day	#	Rate per Day	#	Rate per Day	#	Rate per Day	#	Rate per Day	#	Rate per Day	#	Rate per Day
2001	3	0.8	2	0.7	5	1.3	2	0.7	8	2.7	4	1.0	1	0.3	7	1.4	3	1.0	35	1.1
2002	2	0.7	2	0.7	9	2.3	8	1.6	9	3.0	3	0.8	6	1.2	7	1.4	0	0.0	46	1.3
2003	3	1.0	1	0.3	2	0.5	4	1.0	7	1.4	7	1.8	4	1.0	2	0.4	8	1.6	38	1.0
2004	1	0.2	4	1.3	3	0.8	5	1.7	0	0.0	4	1.0	1	0.3	7	1.4	2	0.7	27	0.8
2005	5	1.7	2	0.7	7	1.8	9	2.3	4	1.3	3	0.8	11	2.8	4	0.8	2	0.7	47	1.4
2006	0	0.0	3	1.0	2	0.5	1	0.3	7	1.8	6	1.5	1	0.3	8	1.6	10	2.5	38	1.1
2007	0	0.0	2	0.7	2	0.5	3	1.0	4	1.3	6	1.5	5	1.7	6	1.2	1	0.3	29	1.0
2008	2	0.7	0	0.0	5	1.3	12	3.0	4	0.8	2	0.5	0	0.0	3	0.6	1	0.2	29	0.8
2009	1	0.2	4	1.3	4	1.0	1	0.3	1	0.3	2	0.5	1	0.3	0	0.0	0	0.0	14	0.4
2010	2	0.5	2	0.7	3	0.8	4	1.3	2	0.7	3	0.8	0	0.0	6	1.2	0	0.0	22	0.7
Total	19	0.5	22	0.7	42	1.1	49	1.4	46	1.3	40	1.0	30	0.9	50	1.0	27	0.8	325	1.0

- 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 4th of July Holiday (1.4) and the Pioneer Day Holiday (1.3) had the highest rates of deaths while the New Years Holiday (0.5) had the lowest rate.
- In 2010, the 4th of July Holiday had the highest death rate per day (1.3) while the Halloween Holiday and Christmas Holiday had the lowest rates (0.0).
- The 2010 holiday death rate per day was 0.7 which was the same rate per day for all 2010 days (0.7).

Note: Because of the differing lengths of holiday periods, 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 through Monday).
- If a holiday occurred on Friday, then it was considered a four day holiday (Thursday through Sunday).
- If a holiday occurred on Thursday, then it was considered a five day holiday (Wednesday through Sunday).



# Counties

## Crashes by County (Utah 2010)

County	Crashes							
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	Rate per 100 Million VMT	#	Rate per 100 Million VMT	#	Rate per 100 Million VMT	#	Rate per 100 Million VMT
Salt Lake	15,027	173.7	6,422	74.3	57	0.7	21,506	248.6
Weber	2,606	158.1	1,249	75.8	17	1.0	3,872	234.9
Cache	1,509	174.3	474	54.7	4	0.5	1,987	229.5
Utah	4,968	131.1	2,595	68.5	26	0.7	7,589	200.2
Duchesne	345	148.5	93	40.0	8	3.4	446	191.9
Wasatch	402	124.2	151	46.6	1	0.3	554	171.1
Rich	56	117.5	21	44.1	2	4.2	79	165.7
Garfield	122	107.6	54	47.6	2	1.8	178	157.0
Davis	2,698	100.4	1,250	46.5	10	0.4	3,958	147.2
Uintah	403	107.7	134	35.8	5	1.3	542	144.8
Kane	152	105.1	48	33.2	1	0.7	201	139.0
Carbon	327	108.7	86	28.6	1	0.3	414	137.6
Summit	772	107.3	209	29.0	5	0.7	986	137.0
Wayne	38	90.3	18	42.8	0	0.0	56	133.0
Sevier	283	86.0	143	43.5	4	1.2	430	130.7
Morgan	130	97.2	43	32.1	0	0.0	173	129.3
Iron	621	86.6	259	36.1	6	0.8	886	123.6
Washington	1,019	74.2	623	45.3	14	1.0	1,656	120.5
Piute	27	90.3	7	23.4	0	0.0	34	113.7
Box Elder	758	82.1	270	29.2	12	1.3	1,040	112.6
Beaver	212	83.5	61	24.0	1	0.4	274	107.9
Sanpete	151	69.2	70	32.1	7	3.2	228	104.4
Juab	253	64.8	93	23.8	6	1.5	352	90.2
Emery	201	62.2	75	23.2	5	1.5	281	87.0
Millard	269	57.4	132	28.1	6	1.3	407	86.8
Tooele	454	54.0	267	31.7	9	1.1	730	86.8
Daggett	18	57.2	8	25.4	1	3.2	27	85.8
San Juan	187	57.3	65	19.9	2	0.6	254	77.8
Grand	147	46.6	75	23.8	6	1.9	228	72.3
<b>Statewide</b>	<b>34,155</b>	<b>128.3</b>	<b>14,995</b>	<b>56.3</b>	<b>218</b>	<b>0.8</b>	<b>49,368</b>	<b>185.5</b>

- Salt Lake (248.6), Weber (234.9), and Cache (229.5) counties had the highest total crash rates per miles traveled.
- Grand (72.3), San Juan (77.8), and Daggett (85.8) counties had the lowest total crash rates per miles traveled.
- Rich (4.2), Duchesne (3.4), Sanpete (3.2), and Daggett (3.2) counties had the highest fatal crash rates per miles traveled.
- Morgan, Piute, and Wayne counties had no fatal crashes.

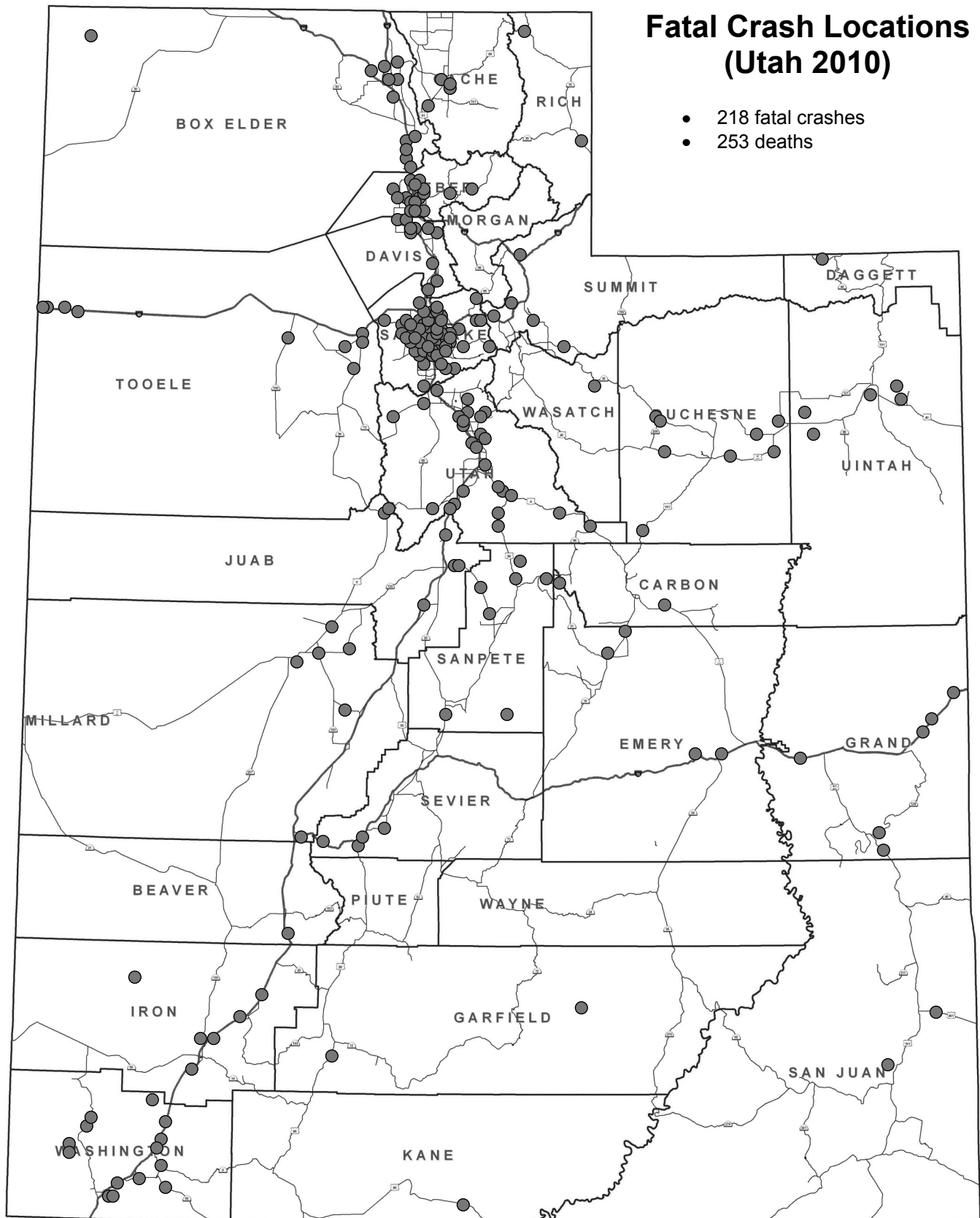
## Counties

### Persons in Crashes by County (Utah 2010)

County	Non-Injured			Injured			Killed			Total		
	#	Rate per 100 Million VMT	Rate per 10,000 Pop.	#	Rate per 100 Million VMT	Rate per 10,000 Pop.	#	Rate per 100 Million VMT	Rate per 10,000 Pop.	#	Rate per 100 Million VMT	Rate per 10,000 Pop.
Salt Lake	45,455	525.5	428.8	9,039	104.5	85.3	61	0.7	0.6	54,555	630.8	514.7
Weber	8,108	491.9	350.8	1,780	108.0	77.0	21	1.3	0.9	9,909	601.2	428.7
Cache	4,456	514.6	383.4	702	81.1	60.4	6	0.7	0.5	5,164	596.4	444.3
Utah	16,324	430.6	302.0	3,775	99.6	69.8	32	0.8	0.6	20,131	531.0	372.4
Davis	9,213	342.7	294.4	1,776	66.1	56.8	10	0.4	0.3	10,999	409.1	351.5
Wasatch	991	306.1	415.7	212	65.5	88.9	1	0.3	0.4	1,204	371.8	505.1
Duchesne	634	272.8	358.8	148	63.7	83.8	10	4.3	5.7	792	340.8	448.2
Washington	3,644	265.2	246.3	914	66.5	61.8	17	1.2	1.1	4,575	332.9	309.2
Uintah	967	258.3	303.8	196	52.4	61.6	6	1.6	1.9	1,169	312.3	367.3
Iron	1,748	243.8	367.0	461	64.3	96.8	8	1.1	1.7	2,217	309.3	465.5
Summit	1,898	263.8	461.3	297	41.3	72.2	5	0.7	1.2	2,200	305.8	534.7
Rich	112	234.9	480.5	28	58.7	120.1	2	4.2	8.6	142	297.9	609.2
Sevier	718	218.2	339.7	240	72.9	113.6	5	1.5	2.4	963	292.7	455.7
Garfield	236	208.2	450.8	76	67.0	145.2	3	2.6	5.7	315	277.9	601.7
Carbon	702	233.3	349.2	113	37.6	56.2	2	0.7	1.0	817	271.5	406.4
Kane	299	206.8	435.7	78	53.9	113.7	3	2.1	4.4	380	262.8	553.7
Beaver	534	210.3	798.0	98	38.6	146.4	1	0.4	1.5	633	249.3	945.9
Box Elder	1,800	195.0	358.1	448	48.5	89.1	12	1.3	2.4	2,260	244.8	449.6
Morgan	215	160.7	212.5	58	43.3	57.3	0	0.0	0.0	273	204.0	269.8
Piute	52	173.9	351.6	9	30.1	60.9	0	0.0	0.0	61	204.0	412.4
Sanpete	325	148.8	115.6	105	48.1	37.3	7	3.2	2.5	437	200.1	155.4
Wayne	60	142.5	222.8	23	54.6	85.4	0	0.0	0.0	83	197.2	308.2
Tooele	1,141	135.6	189.8	418	49.7	69.5	12	1.4	2.0	1,571	186.7	261.3
Millard	661	140.9	474.2	207	44.1	148.5	7	1.5	5.0	875	186.6	627.7
Juab	551	141.2	531.2	153	39.2	147.5	7	1.8	6.7	711	182.1	685.4
Emery	443	137.1	401.5	122	37.8	110.6	5	1.5	4.5	570	176.5	516.6
Daggett	31	98.5	313.8	12	38.1	121.5	1	3.2	10.1	44	139.9	445.3
Grand	325	103.1	337.0	101	32.0	104.7	7	2.2	7.3	433	137.3	449.0
San Juan	323	99.0	203.0	86	26.4	54.1	2	0.6	1.3	411	125.9	258.3
<b>Statewide</b>	<b>101,966</b>	<b>383.1</b>	<b>358.0</b>	<b>21,675</b>	<b>81.4</b>	<b>76.1</b>	<b>253</b>	<b>1.0</b>	<b>0.9</b>	<b>123,894</b>	<b>465.5</b>	<b>435.0</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:
  - Salt Lake (630.8), Weber (601.2), and Cache (596.4) counties had the highest rates of total persons in crashes per 100 million vehicle miles traveled.
  - Duchesne (4.3), Rich (4.2), Sanpete (3.2), and Daggett (3.2) counties had the highest rates of persons killed per 100 million vehicle miles traveled.
- Rate per 10,000 population:
  - Beaver (945.9), Juab (685.4), and Millard (627.7) counties had the highest rates of total persons in crashes per 10,000 population.
  - Daggett (10.1), Rich (8.6), and Grand (7.3) counties had the highest rates of persons killed per 10,000 population.

## Counties



## Counties

### County Crash Comparison (Utah 2010)

County Crash Comparison										
County	Fatal Crash Rate per VMT Rank	Overall Crash Rate per VMT Rank	Percent of Crash Occupants Unrestrained Rank	Drunk Driving Crash Rate per VMT Rank	Speed Crash Rate per VMT Rank	Teen Driver Crash Rate per VMT Rank	Motorcycle Crash Rate per VMT Rank	Pedestrian Crash Rate per Pop. Rank	Bicyclist Crash Rate per Pop. Rank	Total County Highway Safety Ranking
Duchesne	2	5	5	4	5	11	6	19	18	8.3
Salt Lake	20	1	27	2	7	3	13	3	1	8.6
Weber	14	2	21	6	15	2	9	4	5	8.7
Garfield	6	8	4	13	16	17	4	13	8	9.9
Wasatch	26	6	19	15	3	8	10	2	4	10.3
Rich	1	7	16	20	2	5	1	24	18	10.4
Uintah	9	10	9	1	17	7	21	14	13	11.2
Utah	19	4	26	19	10	4	8	8	3	11.2
Cache	22	3	28	18	14	1	11	7	2	11.8
Summit	17	13	25	8	8	16	16	5	6	12.7
Sanpete	3	22	3	14	23	14	14	23	17	14.8
Wayne	29	14	1	7	19	19	2	24	18	14.8
Sevier	12	15	2	28	12	15	24	17	9	14.9
Carbon	25	12	14	11	18	10	15	21	12	15.3
Washington	15	18	24	12	27	9	12	10	11	15.3
Iron	16	17	17	25	6	13	20	15	10	15.4
Morgan	27	16	23	21	1	12	3	20	18	15.7
Davis	24	9	29	16	20	6	23	9	7	15.9
Tooele	13	26	13	9	24	21	17	11	15	16.6
Beaver	23	21	6	22	4	23	29	6	18	16.9
Juab	8	23	18	24	13	24	25	1	18	17.1
Kane	18	11	8	23	25	22	5	24	18	17.1
Grand	5	29	10	10	28	28	22	12	18	18.0
Daggett	4	27	15	3	29	27	19	24	18	18.4
Emery	7	24	7	17	22	25	28	22	14	18.4
San Juan	21	28	11	5	26	29	7	24	18	18.8
Box Elder	10	20	22	27	11	20	26	18	16	18.9
Millard	11	25	20	26	9	26	27	16	18	19.8
Piute	28	19	12	29	21	18	18	24	18	20.8
Note:	Rank 1-15 Above State Avg.	Rank 1-5 Above State Avg.	Rank 1-24 Above State Avg.	Rank 1-7 Above State Avg.	Rank 1-15 Above State Avg.	Rank 1-4 Above State Avg.	Rank 1-14 Above State Avg.	Rank 1-5 Above State Avg.	Rank 1-3 Above State Avg.	Total Safety Ranking Average = 14.7

This is a comparison developed to evaluate the different counties using a County Highway Safety Ranking. Each County is ranked with 1 being the lowest (or worst) ranking and 29 being the highest (or best) ranking on various categories. The bottom row shows what counties ranked above the state average for that category. Counties above the state average are marked in gray for that category. To arrive at an overall ranking, the rankings within the nine different categories were added together and divided by nine.

- Duchesne, Salt Lake, and Weber Counties were the worst overall counties. Duchesne County was among the worst ten counties for six of the nine categories.
- Piute, Millard, and Box Elder Counties were the best overall counties. Piute County was below the state average in every category except one.

# Cities

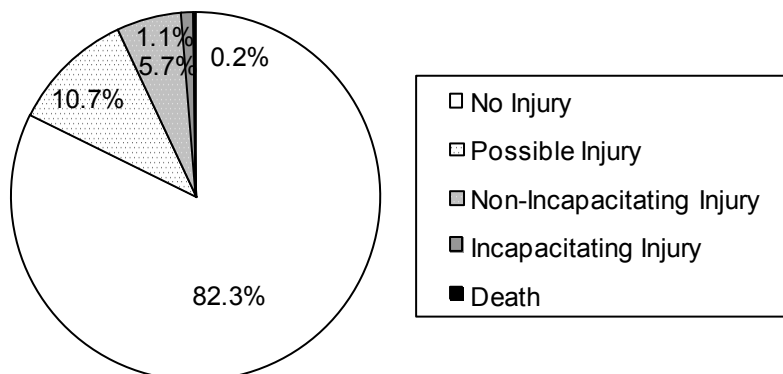
## Crashes by City (Utah 2010)

Total Crash Rate for Cities With Population 5,000+ or 50+ Crashes											
Rank by Rate	Rank by Total	City	Population	Total Crashes	Rate per 10,000 Pop.	Rank by Rate	Rank by Total	City	Population	Total Crashes	Rate per 10,000 Pop.
1	49	Marriott-Slaterville	1,701	141	828.9	49	29	Cedar City	28,857	412	142.8
2	65	Uintah	1,322	94	711.0	50	14	St. George	72,897	997	136.8
3	59	Willard	1,772	115	649.0	51	55	Santaquin	9,128	124	135.8
4	33	Park City	7,547	355	470.4	52	33	Magna	26,505	355	133.9
5	30	Riverdale	8,426	387	459.3	53	28	Cottonwood Heights	33,433	444	132.8
6	12	South Salt Lake	23,617	1,068	452.2	54	17	South Jordan	50,418	658	130.5
7	5	Murray	46,746	1,809	387.0	55	39	Payson	18,294	236	129.0
8	4	Taylorsville	58,652	1,922	327.7	56	72	Harrisville	5,567	71	127.5
9	15	Midvale	27,964	909	325.1	57	64	Richfield	7,551	95	125.8
10	36	Lindon	10,070	306	303.9	58	49	Heber	11,362	141	124.1
11	11	Draper	40,532	1,141	281.5	59	67	Tremonton	7,647	91	119.0
12	26	North Salt Lake	16,322	459	281.2	60	27	Riverton	38,753	447	115.3
13	2	Sandy	87,461	2,437	278.6	61	37	Kaysville	27,300	305	111.7
14	10	Logan	48,174	1,201	249.3	62	31	Pleasant Grove	33,509	368	109.8
15	42	Vernal	9,089	222	244.3	63	75	South Weber	6,051	64	105.8
16	1	Salt Lake City	186,440	4,456	239.0	64	68	Pleasant View	7,979	83	104.0
17	52	Farr West	5,928	138	232.8	65	19	Millcreek	62,139	594	95.6
18	56	West Bountiful	5,265	122	231.7	66	82	Moab	5,046	47	93.1
19	57	Sunset	5,122	117	228.4	67	44	Washington	18,761	173	92.2
20	71	Wellsville	3,432	73	212.7	68	46	Saratoga Springs	17,781	159	89.4
21	81	Fillmore	2,435	50	205.3	69	38	Tooele	31,605	255	80.7
22	43	Price	8,715	178	204.2	70	62	Hurricane	13,748	108	78.6
23	77	Beaver	3,112	63	202.4	71	80	Providence	7,075	51	72.1
24	23	Holladay	26,472	523	197.6	72	85	Nibley	5,438	39	71.7
25	20	Springville	29,466	577	195.8	73	79	Hyrum	7,609	54	71.0
26	32	Farmington	18,275	357	195.3	74	54	Brigham City	17,899	127	71.0
27	24	American Fork	26,263	508	193.4	75	78	Mapleton	7,979	56	70.2
28	73	Morgan	3,687	70	189.9	76	75	Smithfield	9,495	64	67.4
29	8	Ogden	82,825	1,546	186.7	77	87	Plain City	5,476	35	63.9
30	35	South Ogden	16,532	307	185.7	78	61	North Ogden	17,357	110	63.4
31	69	Perry	4,512	79	175.1	79	65	Highland	15,523	94	60.6
32	63	Roosevelt	6,046	105	173.7	80	86	Salem	6,423	38	59.2
33	51	North Logan	8,269	140	169.3	81	48	Syracuse	24,331	143	58.8
34	53	Bluffdale	7,598	128	168.5	82	60	Clinton	20,426	112	54.8
35	20	Spanish Fork	34,691	577	166.3	83	40	Bountiful	42,552	228	53.6
36	18	Roy	36,884	610	165.4	84	58	Herriman	21,785	116	53.2
37	25	Clearfield	30,112	496	164.7	85	83	Grantsville	8,893	42	47.2
38	45	Woods Cross	9,761	160	163.9	86	83	Washington Terrace	9,067	42	46.3
39	9	Orem	88,328	1,410	159.6	87	87	West Point	9,511	35	36.8
40	13	Layton	67,311	1,067	158.5	88	89	Hooper	7,218	26	36.0
41	16	Lehi	47,407	741	156.3	89	74	Eagle Mountain	21,415	68	31.8
42	7	West Jordan	103,712	1,620	156.2	90	93	Santa Clara	6,003	16	26.7
43	3	West Valley City	129,480	1,977	152.7	91	92	Ivins	6,753	17	25.2
44	6	Provo	112,488	1,710	152.0	92	90	Alpine	9,555	22	23.0
45	22	Kearns	35,731	535	149.7	93	94	Enoch	5,803	13	22.4
46	40	Centerville	15,335	228	148.7	94	91	Cedar Hills	9,796	20	20.4
47	47	West Haven	10,272	152	148.0	95	95	Ephraim	6,135	6	9.8
48	70	Nephi	5,389	77	142.9			<b>Total</b>	<b>2,763,885</b>	<b>41,264</b>	<b>149.3</b>

- The above table only includes cities with a population of 5,000+ or 50+ crashes.
- The ten cities with the highest rates of total crashes per population were Marriott-Slaterville, Uintah, Willard, Park City, Riverdale, South Salt Lake, Murray, Taylorsville, Midvale, and Lindon.
- The ten cities with the highest total number of crashes were Salt Lake City, Sandy, West Valley City, Taylorsville, Murray, Provo, West Jordan, Ogden, Orem, and Logan.

## Persons Involved

### Injury Severity (Utah 2010)



- Although many people were injured and killed in motor vehicle crashes, the majority (82.3%) of persons in crashes did not sustain a known injury at the crash scene. See Glossary in the Appendix for injury definitions.
- Persons in the same crash sustain different levels of injury. Many factors influence injury patterns including seat belt use, seating position, and vehicle safety equipment.

### Person Placement (Utah 2010)

Persons								
Person Placement	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Driver	72,053	70.7%	13,934	64.3%	149	58.9%	86,136	69.5%
Passenger	29,751	29.2%	6,302	29.1%	69	27.3%	36,122	29.2%
Pedestrian	76	0.1%	759	3.5%	28	11.1%	863	0.7%
Bicyclist	86	0.1%	680	3.1%	7	2.8%	773	0.6%
<b>Total</b>	<b>101,966</b>	<b>100.0%</b>	<b>21,675</b>	<b>100.0%</b>	<b>253</b>	<b>100.0%</b>	<b>123,894</b>	<b>100.0%</b>

- Pedestrians in a crash had the greatest risk of being killed. In fact, pedestrian crashes were 9.1 times more likely to be fatal than other crashes.

### Gender of Persons in Crashes (Utah 2010)

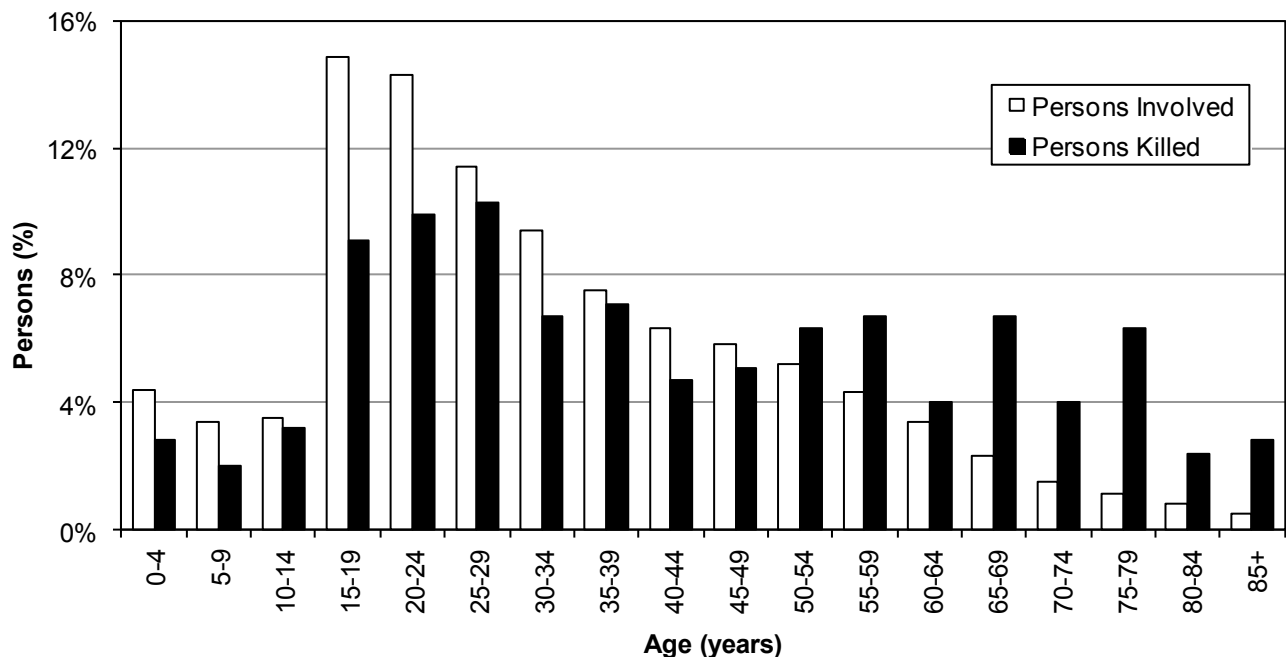
Persons								
Gender	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Male	54,850	53.8%	10,025	46.3%	150	59.3%	65,025	52.5%
Female	43,876	43.0%	11,408	52.6%	103	40.7%	55,387	44.7%
Unknown	3,240	3.2%	242	1.1%	0	0.0%	3,482	2.8%
<b>Total</b>	<b>101,966</b>	<b>100.0%</b>	<b>21,675</b>	<b>100.0%</b>	<b>253</b>	<b>100.0%</b>	<b>123,894</b>	<b>100.0%</b>

- Males comprised over half (52.5%) of all persons in crashes and nearly two-thirds (59.3%) of deaths, while females sustained more injuries (52.6%) than males.
- Males were 1.2 times more likely to die than females in a crash.

## Persons Involved

### Age of Persons in Crashes (Utah 2010)

Age	Persons							
	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
0-4	4,692	4.6%	547	2.5%	7	2.8%	<b>5,246</b>	<b>4.2%</b>
5-9	3,384	3.3%	627	2.9%	5	2.0%	<b>4,016</b>	<b>3.2%</b>
10-14	3,344	3.3%	814	3.8%	8	3.2%	<b>4,166</b>	<b>3.4%</b>
15-19	14,584	14.3%	2,984	13.8%	23	9.1%	<b>17,591</b>	<b>14.2%</b>
20-24	13,794	13.5%	3,085	14.2%	25	9.9%	<b>16,904</b>	<b>13.6%</b>
25-29	10,986	10.8%	2,403	11.1%	26	10.3%	<b>13,415</b>	<b>10.8%</b>
30-34	9,069	8.9%	1,984	9.2%	17	6.7%	<b>11,070</b>	<b>8.9%</b>
35-39	7,258	7.1%	1,595	7.4%	18	7.1%	<b>8,871</b>	<b>7.2%</b>
40-44	6,046	5.9%	1,420	6.6%	12	4.7%	<b>7,478</b>	<b>6.0%</b>
45-49	5,550	5.4%	1,299	6.0%	13	5.1%	<b>6,862</b>	<b>5.5%</b>
50-54	4,942	4.8%	1,174	5.4%	16	6.3%	<b>6,132</b>	<b>4.9%</b>
55-59	4,100	4.0%	1,003	4.6%	17	6.7%	<b>5,120</b>	<b>4.1%</b>
60-64	3,222	3.2%	753	3.5%	10	4.0%	<b>3,985</b>	<b>3.2%</b>
65-69	2,141	2.1%	531	2.5%	17	6.7%	<b>2,689</b>	<b>2.2%</b>
70-74	1,462	1.4%	345	1.6%	10	4.0%	<b>1,817</b>	<b>1.5%</b>
75-79	984	1.0%	263	1.2%	16	6.3%	<b>1,263</b>	<b>1.0%</b>
80-84	741	0.7%	167	0.8%	6	2.4%	<b>914</b>	<b>0.7%</b>
85+	452	0.4%	122	0.6%	7	2.8%	<b>581</b>	<b>0.5%</b>
Unknown	5,215	5.1%	550	2.5%	0	0.0%	<b>5,765</b>	<b>4.7%</b>
<b>Total</b>	<b>101,966</b>	<b>100.0%</b>	<b>21,666</b>	<b>100.0%</b>	<b>253</b>	<b>100.0%</b>	<b>123,885</b>	<b>100.0%</b>



- The largest proportion of persons in crashes were aged 15-29 years (40.2%).
- The largest proportion of persons killed were aged 15-24 years (27.8%).
- The average age of a person in a crash was 32 years. The average age of a person killed was 42 years.
- While persons aged 65 years and older represented a small proportion of the persons in crashes (5.9%), they were 4.4 times more likely than all other age groups to die.

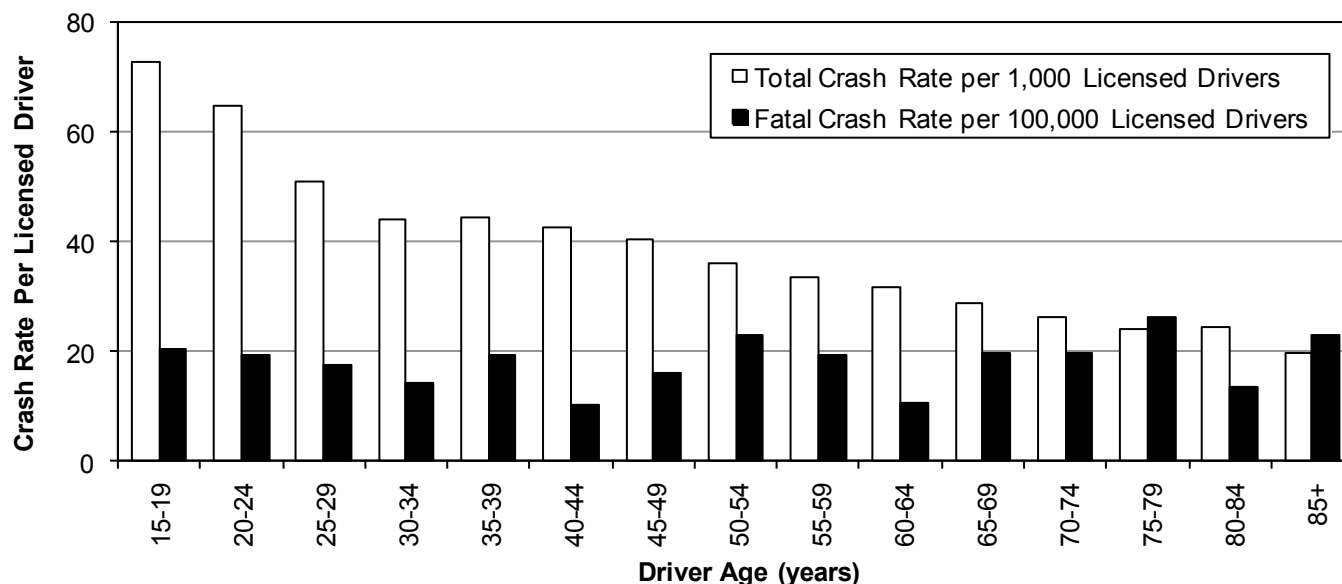


## Drivers

### Driver Age (Utah 2010)

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	36	0.1%	n/a	37	0.1%	n/a	1	0.3%	n/a	74	0.1%	n/a
15-19	7,573	12.9%	49.9	3,449	12.7%	22.7	31	9.6%	0.20	11,053	12.8%	72.8
20-24	8,720	14.9%	43.8	4,138	15.2%	20.8	38	11.7%	0.19	12,896	15.0%	64.8
25-29	7,469	12.7%	34.6	3,491	12.8%	16.2	38	11.7%	0.18	10,998	12.8%	51.0
30-34	6,316	10.8%	29.8	2,981	10.9%	14.1	30	9.3%	0.14	9,327	10.8%	44.1
35-39	5,183	8.8%	30.0	2,420	8.9%	14.0	33	10.2%	0.19	7,636	8.9%	44.3
40-44	4,332	7.4%	28.9	2,055	7.5%	13.7	15	4.6%	0.10	6,402	7.4%	42.7
45-49	3,888	6.6%	26.9	1,909	7.0%	13.2	23	7.1%	0.16	5,820	6.8%	40.3
50-54	3,576	6.1%	24.7	1,586	5.8%	10.9	33	10.2%	0.23	5,195	6.0%	35.9
55-59	2,863	4.9%	22.1	1,437	5.3%	11.1	25	7.7%	0.19	4,325	5.0%	33.4
60-64	2,275	3.9%	21.5	1,041	3.8%	9.8	11	3.4%	0.10	3,327	3.9%	31.5
65-69	1,459	2.5%	19.1	719	2.6%	9.4	15	4.6%	0.20	2,193	2.5%	28.7
70-74	954	1.6%	17.1	488	1.8%	8.7	11	3.4%	0.20	1,453	1.7%	26.1
75-79	653	1.1%	15.5	341	1.3%	8.1	11	3.4%	0.26	1,005	1.2%	23.9
80-84	481	0.8%	16.1	244	0.9%	8.2	4	1.2%	0.13	729	0.8%	24.4
85+	282	0.5%	12.9	138	0.5%	6.3	5	1.5%	0.23	425	0.5%	19.5
Unknown	2,525	4.3%	n/a	753	2.8%	n/a	0	0.0%	n/a	3,278	3.8%	n/a
<b>Total</b>	<b>58,585</b>	<b>100.0%</b>	<b>31.6</b>	<b>27,227</b>	<b>100.0%</b>	<b>14.7</b>	<b>324</b>	<b>100.0%</b>	<b>0.18</b>	<b>86,136</b>	<b>100.0%</b>	<b>46.5</b>

### Crash Rate of Licensed Drivers by Age (Utah 2010)



- Drivers aged 15-19 years had the highest rates per licensed driver of total crashes, injury crashes, and property damage only crashes. Drivers aged 75-79 years had the highest rates per driver of fatal crashes.
- Drivers aged 85+ years had the lowest rate per licensed driver of total crashes (19.5).
- Drivers aged 40-44 years and 60-64 years had the lowest rate per licensed driver of fatal crashes (0.10).
- The average age of a driver was 37 years. The average age of a driver in a fatal crash was 42 years.

# Drivers

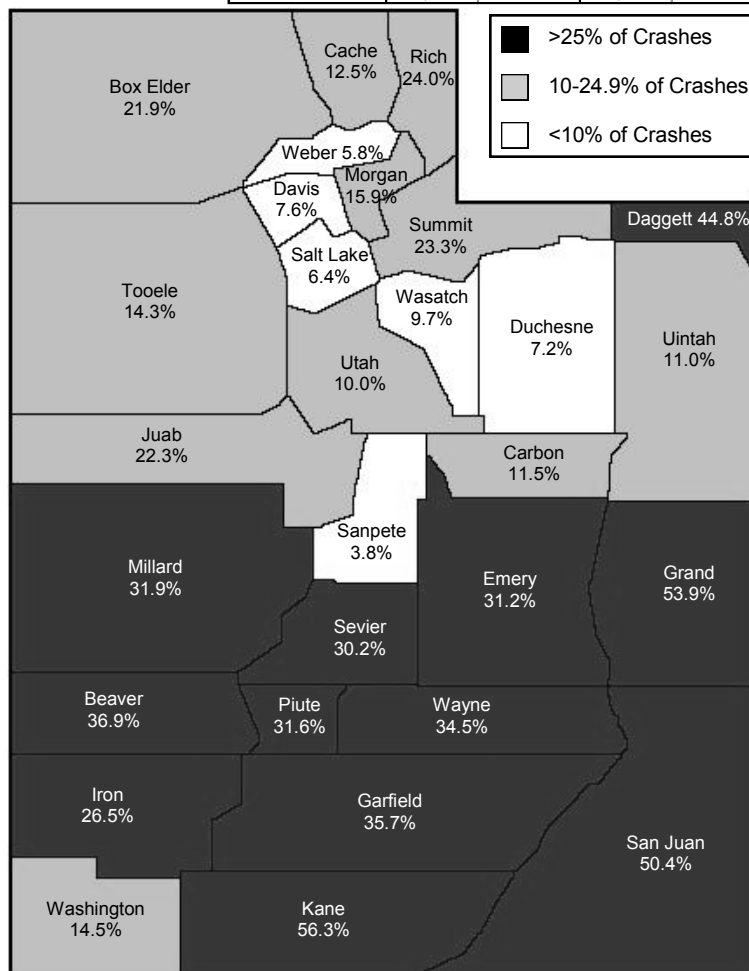
## Driver Gender (Utah 2010)

Drivers												
Gender	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
Male	32,865	56.1%	35.1	14,631	53.7%	15.6	215	66.4%	0.23	47,711	55.4%	50.9
Female	23,536	40.2%	25.7	12,039	44.2%	13.2	109	33.6%	0.12	35,684	41.4%	39.0
Unknown	2,184	3.7%	n/a	557	2.0%	n/a	0	0.0%	n/a	2,741	3.2%	n/a
<b>Total</b>	<b>58,585</b>	<b>100.0%</b>	<b>31.6</b>	<b>27,227</b>	<b>100.0%</b>	<b>14.7</b>	<b>324</b>	<b>100.0%</b>	<b>0.18</b>	<b>86,136</b>	<b>100.0%</b>	<b>46.5</b>

- Males represented 55.4% of all drivers in a crash and 66.4% of drivers in fatal crashes.
- Based off of licensed drivers, females are better drivers than males. Male drivers had higher rates of total crashes and fatal crashes. Male drivers were 1.5 times more likely to be in a fatal crash than female drivers.

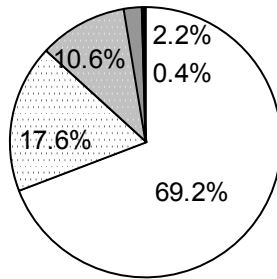
## Out-of-State Drivers (Utah 2010)

Drivers								
License State	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Utah	49,693	84.8%	23,515	86.4%	274	84.6%	73,482	85.3%
Out-Of-State	5,513	9.4%	2,431	8.9%	49	15.1%	7,993	9.3%
Unknown	3,379	5.8%	1,281	4.7%	1	0.3%	4,661	5.4%
<b>Total</b>	<b>58,585</b>	<b>100.0%</b>	<b>27,227</b>	<b>100.0%</b>	<b>324</b>	<b>100.0%</b>	<b>86,136</b>	<b>100.0%</b>



## Crash Conditions

### Crash Severity (Utah 2010)



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

- For crashes that occurred in Utah during 2010, 69.2% resulted in property damage only, 30.4% resulted in some level of injury, and 0.4% involved a death.

### Month (Utah 2010)

Crashes									
Month	# of Days	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
		#	Rate per Day	#	Rate per Day	#	Rate per Day	#	Rate per Day
January	31	2,905	93.7	1,030	33.2	6	0.19	3,941	127.1
February	28	2,191	78.3	946	33.8	8	0.29	3,145	112.3
March	31	2,490	80.3	1,174	37.9	18	0.58	3,682	118.8
April	30	2,498	83.3	1,161	38.7	21	0.70	3,680	122.7
May	31	2,460	79.4	1,177	38.0	22	0.71	3,659	118.0
June	30	2,638	87.9	1,296	43.2	18	0.60	3,952	131.7
July	31	2,596	83.7	1,268	40.9	23	0.74	3,887	125.4
August	31	2,703	87.2	1,327	42.8	21	0.68	4,051	130.7
September	30	2,743	91.4	1,398	46.6	21	0.70	4,162	138.7
October	31	2,865	92.4	1,410	45.5	25	0.81	4,300	138.7
November	30	3,741	124.7	1,377	45.9	15	0.50	5,133	171.1
December	31	4,325	139.5	1,431	46.2	20	0.65	5,776	186.3
<b>Total</b>	<b>365</b>	<b>34,155</b>	<b>93.6</b>	<b>14,995</b>	<b>41.1</b>	<b>218</b>	<b>0.60</b>	<b>49,368</b>	<b>135.3</b>

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

### Day of Week (Utah 2010)

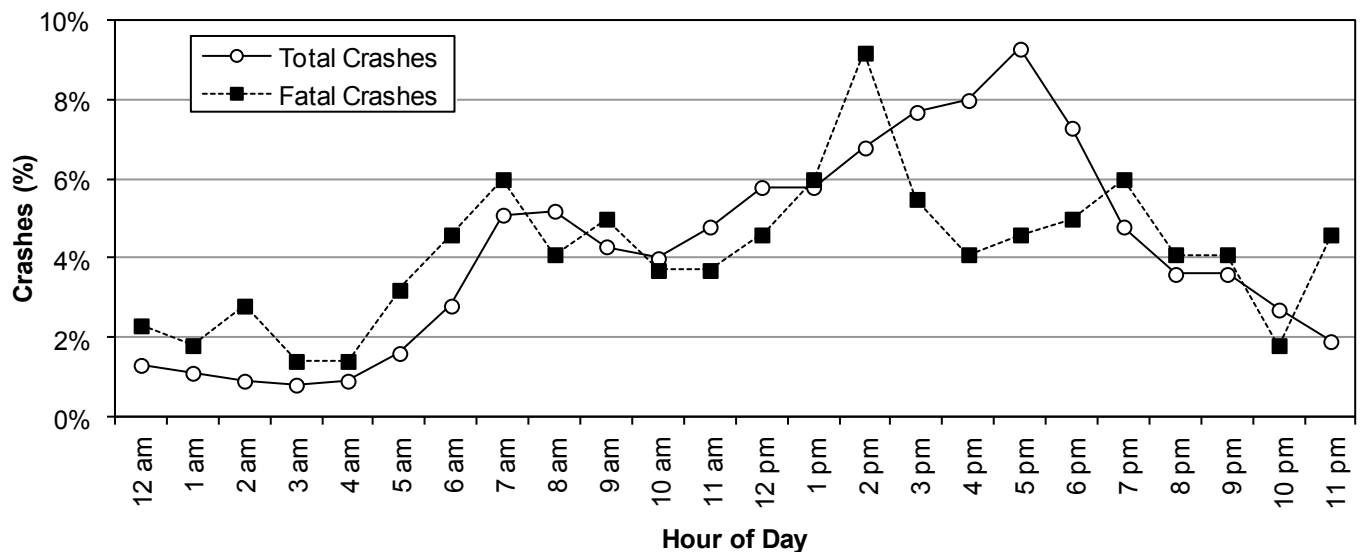
Crashes								
Day of Week	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Sunday	2,952	8.6%	1,307	8.7%	25	11.5%	4,284	8.7%
Monday	5,190	15.2%	2,334	15.6%	31	14.2%	7,555	15.3%
Tuesday	5,161	15.1%	2,219	14.8%	29	13.3%	7,409	15.0%
Wednesday	5,624	16.5%	2,314	15.4%	19	8.7%	7,957	16.1%
Thursday	5,293	15.5%	2,227	14.9%	43	19.7%	7,563	15.3%
Friday	5,694	16.7%	2,494	16.6%	24	11.0%	8,212	16.6%
Saturday	4,241	12.4%	2,100	14.0%	47	21.6%	6,388	12.9%
<b>Total</b>	<b>34,155</b>	<b>100.0%</b>	<b>14,995</b>	<b>100.0%</b>	<b>218</b>	<b>100.0%</b>	<b>49,368</b>	<b>100.0%</b>

- The highest percentage of total crashes occurred on Friday (16.6%) and Wednesday (16.1%).
- The highest percentage of fatal crashes occurred on Saturday (21.6%) and Thursday (19.7%).
- Crashes on the weekend were 1.8 times more likely to be fatal than weekday crashes.

# Crash Conditions

## Hour (Utah 2010)

Hour	Crashes							
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Midnight	439	1.3%	204	1.4%	5	2.3%	648	1.3%
1 a.m.	391	1.1%	155	1.0%	4	1.8%	550	1.1%
2 a.m.	288	0.8%	145	1.0%	6	2.8%	439	0.9%
3 a.m.	275	0.8%	112	0.7%	3	1.4%	390	0.8%
4 a.m.	299	0.9%	122	0.8%	3	1.4%	424	0.9%
5 a.m.	598	1.8%	175	1.2%	7	3.2%	780	1.6%
6 a.m.	1,020	3.0%	366	2.4%	10	4.6%	1,396	2.8%
7 a.m.	1,792	5.2%	692	4.6%	13	6.0%	2,497	5.1%
8 a.m.	1,906	5.6%	657	4.4%	9	4.1%	2,572	5.2%
9 a.m.	1,528	4.5%	576	3.8%	11	5.0%	2,115	4.3%
10 a.m.	1,382	4.0%	604	4.0%	8	3.7%	1,994	4.0%
11 a.m.	1,686	4.9%	697	4.6%	8	3.7%	2,391	4.8%
Noon	1,952	5.7%	911	6.1%	10	4.6%	2,873	5.8%
1 p.m.	1,922	5.6%	914	6.1%	13	6.0%	2,849	5.8%
2 p.m.	2,312	6.8%	1,044	7.0%	20	9.2%	3,376	6.8%
3 p.m.	2,585	7.6%	1,196	8.0%	12	5.5%	3,793	7.7%
4 p.m.	2,629	7.7%	1,319	8.8%	9	4.1%	3,957	8.0%
5 p.m.	3,040	8.9%	1,518	10.1%	10	4.6%	4,568	9.3%
6 p.m.	2,531	7.4%	1,045	7.0%	11	5.0%	3,587	7.3%
7 p.m.	1,607	4.7%	754	5.0%	13	6.0%	2,374	4.8%
8 p.m.	1,180	3.5%	579	3.9%	9	4.1%	1,768	3.6%
9 p.m.	1,210	3.5%	538	3.6%	9	4.1%	1,757	3.6%
10 p.m.	936	2.7%	395	2.6%	4	1.8%	1,335	2.7%
11 p.m.	647	1.9%	277	1.8%	10	4.6%	934	1.9%
Unknown	0	0.0%	0	0.0%	1	0.5%	1	0.0%
<b>Total</b>	<b>34,155</b>	<b>100.0%</b>	<b>14,995</b>	<b>100.0%</b>	<b>218</b>	<b>100.0%</b>	<b>49,368</b>	<b>100.0%</b>



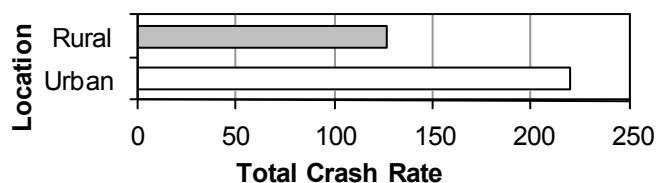
- Total crashes were more likely to occur between 2:00 p.m. and 6:59 p.m., with a peak at 5:00 p.m.
- Fatal crashes were highest during the 2:00 p.m. hour.

## Crash Conditions

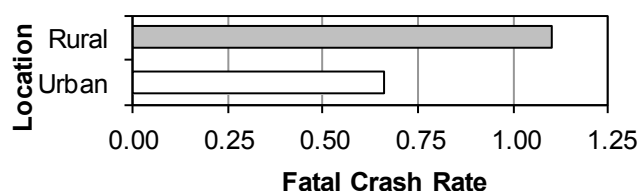
### Urban/Rural Location (Utah 2010)

Crashes								
Location	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	Rate per 100 Million VMT	#	Rate per 100 Million VMT	#	Rate per 100 Million VMT	#	Rate per 100 Million VMT
Urban	25,299	150.8	11,516	68.6	110	0.66	36,925	220.1
Rural	8,856	90.0	3,479	35.4	108	1.10	12,443	126.4
<b>Total</b>	<b>34,155</b>	<b>128.3</b>	<b>14,995</b>	<b>56.3</b>	<b>218</b>	<b>0.82</b>	<b>49,368</b>	<b>185.5</b>

### Total Crash Rates (Utah 2010)



### Fatal Crash Rates (Utah 2010)



- 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 2.9 times more likely to result in a death than crashes in urban areas.

### Road Surface Condition (Utah 2010)

Crashes								
Road Surface Condition	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Dry	25,003	73.2%	11,829	78.9%	164	75.2%	36,996	74.9%
Wet	3,788	11.1%	1,663	11.1%	27	12.4%	5,478	11.1%
Snow/Slush	3,406	10.0%	782	5.2%	14	6.4%	4,202	8.5%
Ice	1,304	3.8%	424	2.8%	8	3.7%	1,736	3.5%
Other	202	0.6%	174	1.2%	1	0.5%	377	0.8%
Unknown	452	1.3%	123	0.8%	4	1.8%	579	1.2%
<b>Total</b>	<b>34,155</b>	<b>100.0%</b>	<b>14,995</b>	<b>100.0%</b>	<b>218</b>	<b>100.0%</b>	<b>49,368</b>	<b>100.0%</b>

- Most (74.9%) crashes occurred when roads were dry.

### Light Condition (Utah 2010)

Crashes								
Light Condition	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Daylight	23,131	67.7%	10,528	70.2%	134	61.5%	33,793	68.5%
Dark	9,171	26.9%	3,716	24.8%	73	33.5%	12,960	26.3%
Dawn/Dusk	1,849	5.4%	750	5.0%	10	4.6%	2,609	5.3%
Unknown	4	0.0%	1	0.0%	1	0.5%	6	0.0%
<b>Total</b>	<b>34,155</b>	<b>100.0%</b>	<b>14,995</b>	<b>100.0%</b>	<b>218</b>	<b>100.0%</b>	<b>49,368</b>	<b>100.0%</b>

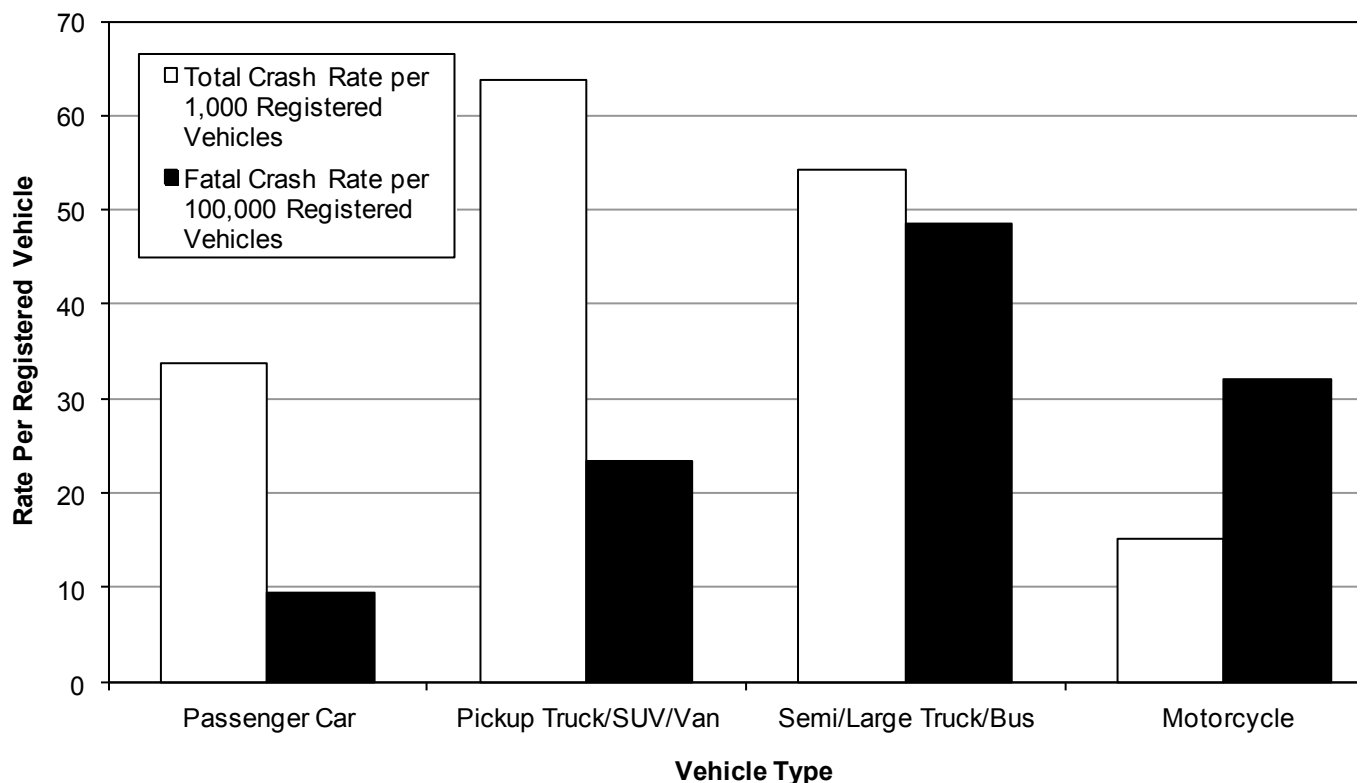
- The majority (68.5%) of crashes occurred during daylight.
- Over one-third (33.5%) of fatal crashes occurred during dark conditions.

## Crash Conditions

### Vehicle Type (Utah 2010)

Vehicle Type	Vehicles							
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Passenger Car	30,718	50.4%	14,413	52.1%	127	38.3%	45,258	50.9%
SUV	11,973	19.6%	5,434	19.6%	47	14.2%	17,454	19.6%
Pickup Truck	10,794	17.7%	4,124	14.9%	68	20.5%	14,986	16.8%
Van	3,421	5.6%	1,693	6.1%	23	6.9%	5,137	5.8%
Semi/Large Truck	2,441	4.0%	637	2.3%	29	8.7%	3,107	3.5%
Motorcycle	142	0.2%	918	3.3%	23	6.9%	1,083	1.2%
Bus	283	0.5%	75	0.3%	2	0.6%	360	0.4%
Other	179	0.3%	177	0.6%	13	3.9%	369	0.4%
Unknown	1,006	1.7%	198	0.7%	0	0.0%	1,204	1.4%
<b>Total</b>	<b>60,957</b>	<b>100.0%</b>	<b>27,669</b>	<b>100.0%</b>	<b>332</b>	<b>100.0%</b>	<b>88,958</b>	<b>100.0%</b>

### Crash Rates by Vehicle Type (Utah 2010)



- 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 64.9% of registered vehicles in Utah, pickup truck/SUV/van 28.5%, motorcycle 3.5%, and semi/large truck/bus 3.1%.
- For total crashes, passenger car (50.9%) and SUV (19.6%) were the leading vehicle types.
- Pickup truck/SUV/van and semi/large truck/bus had the highest total crash rates per registered vehicle.
- For fatal crashes, passenger car (38.3%) and pickup truck (20.5%) were the leading vehicle types.
- Semi/large truck/bus and motorcycle had the highest fatal crash rates per registered vehicle.
- While motorcycles represented 1.2% of vehicles in total crashes, they represented 6.9% of vehicles in fatal crashes. Crashes involving a motorcycle were 6.1 times more likely to be fatal than crashes of other vehicles.

## Crash Conditions

### Vehicle Maneuver Prior to Crash (Utah 2010)

Vehicle Maneuver	Vehicles							
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Straight Ahead	32,083	52.6%	15,383	55.6%	262	78.9%	47,728	53.7%
Stopped in Traffic Lane	6,062	9.9%	3,793	13.7%	6	1.8%	9,861	11.1%
Turning Left	5,249	8.6%	3,110	11.2%	21	6.3%	8,380	9.4%
Slowing in Traffic Lane	3,519	5.8%	1,810	6.5%	8	2.4%	5,337	6.0%
Turning Right	2,858	4.7%	1,003	3.6%	5	1.5%	3,866	4.3%
Parked	2,809	4.6%	514	1.9%	7	2.1%	3,330	3.7%
Changing Lanes	2,005	3.3%	459	1.7%	4	1.2%	2,468	2.8%
Backing	1,876	3.1%	134	0.5%	0	0.0%	2,010	2.3%
Entering Traffic Lane	634	1.0%	176	0.6%	1	0.3%	811	0.9%
Making U-turn	565	0.9%	201	0.7%	0	0.0%	766	0.9%
Overtaking/Passing	441	0.7%	173	0.6%	11	3.3%	625	0.7%
Parking Maneuvers	299	0.5%	20	0.1%	0	0.0%	319	0.4%
Leaving Traffic Lane	190	0.3%	91	0.3%	0	0.0%	281	0.3%
Other	473	0.8%	183	0.7%	5	1.5%	661	0.7%
Unknown	1,894	3.1%	619	2.2%	2	0.6%	2,515	2.8%
<b>Total</b>	<b>60,957</b>	<b>100.0%</b>	<b>27,669</b>	<b>100.0%</b>	<b>332</b>	<b>100.0%</b>	<b>88,958</b>	<b>100.0%</b>

- For total crashes, straight ahead (53.7%), stopped in traffic lane (11.1%), and turning left (9.4%) were the leading vehicle maneuvers prior to the crash.
- For fatal crashes, straight ahead (78.9%), turning left (6.3%), and overtaking/passing (3.3%) were the leading vehicle maneuvers prior to the crash.
- Overtaking/passing was one of the deadliest maneuvers to make as crashes were 4.8 times more likely to be fatal compared to other vehicle maneuvers.

### Speed Limit (Utah 2010)

Speed Limit	Vehicles							
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
5-15 MPH	888	1.5%	137	0.5%	1	0.3%	1,026	1.2%
20-25 MPH	5,979	9.8%	2,493	9.0%	16	4.8%	8,488	9.5%
30-35 MPH	11,085	18.2%	6,329	22.9%	45	13.6%	17,459	19.6%
40-45 MPH	11,548	18.9%	6,862	24.8%	52	15.7%	18,462	20.8%
50-55 MPH	3,640	6.0%	2,702	9.8%	64	19.3%	6,406	7.2%
60-65 MPH	10,212	16.8%	3,659	13.2%	94	28.3%	13,965	15.7%
70+ MPH	2,264	3.7%	862	3.1%	36	10.8%	3,162	3.6%
Unknown/None	15,341	25.2%	4,625	16.7%	24	7.2%	19,990	22.5%
<b>Total</b>	<b>60,957</b>	<b>100.0%</b>	<b>27,669</b>	<b>100.0%</b>	<b>332</b>	<b>100.0%</b>	<b>88,958</b>	<b>100.0%</b>

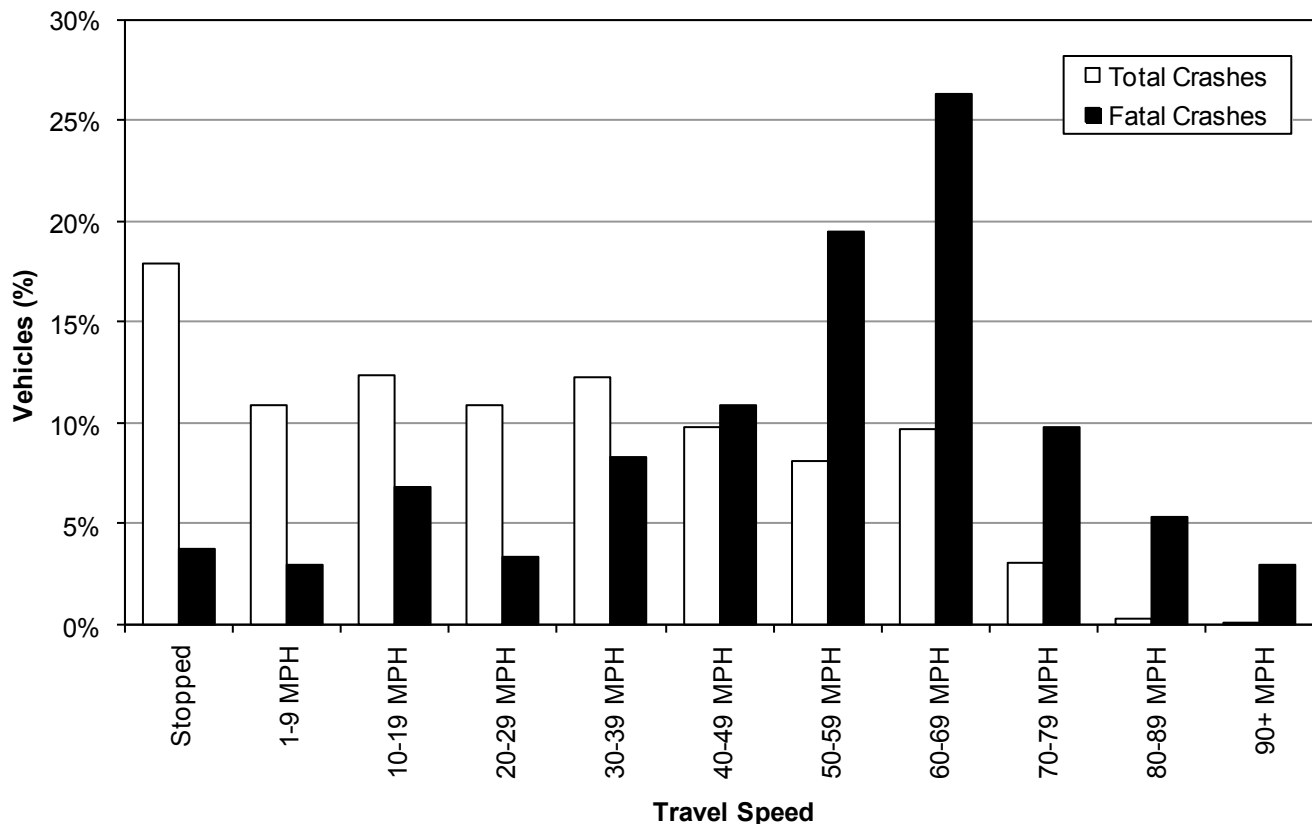
- The speed limit on the roadway was 30-45 MPH for over half (52.1% of known) of the total vehicles in crashes.
- Fatal crashes were more likely to occur with higher speed limits. The speed limit was 50 MPH or higher for nearly two-thirds (63.0% of known) of the vehicles in fatal crashes.
- Crashes where 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 2010)

Travel Speed	Vehicles							
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Parked	2,566	4.2%	477	1.7%	7	2.1%	3,050	3.4%
Stopped	7,622	12.5%	4,446	16.1%	10	3.0%	12,078	13.6%
1-9 MPH	5,380	8.8%	1,921	6.9%	8	2.4%	7,309	8.2%
10-19 MPH	5,864	9.6%	2,453	8.9%	18	5.4%	8,335	9.4%
20-29 MPH	5,037	8.3%	2,310	8.3%	9	2.7%	7,356	8.3%
30-39 MPH	5,247	8.6%	3,017	10.9%	22	6.6%	8,286	9.3%
40-49 MPH	4,184	6.9%	2,403	8.7%	29	8.7%	6,616	7.4%
50-59 MPH	3,804	6.2%	1,602	5.8%	52	15.7%	5,458	6.1%
60-69 MPH	4,746	7.8%	1,685	6.1%	70	21.1%	6,501	7.3%
70-79 MPH	1,470	2.4%	582	2.1%	26	7.8%	2,078	2.3%
80-89 MPH	94	0.2%	125	0.5%	14	4.2%	233	0.3%
90+ MPH	17	0.0%	32	0.1%	8	2.4%	57	0.1%
Unknown	14,926	24.5%	6,616	23.9%	59	17.8%	21,601	24.3%
<b>Total</b>	<b>60,957</b>	<b>100.0%</b>	<b>27,669</b>	<b>100.0%</b>	<b>332</b>	<b>100.0%</b>	<b>88,958</b>	<b>100.0%</b>



- Nearly half (46.4% 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. 63.9% (of known) of vehicles in fatal crashes were traveling 50 MPH or higher.
- Crashes involving vehicles traveling 50 MPH or higher were 6.2 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 and death.
- Drivers become increased risks to themselves and other people on the highway due to higher speeds.

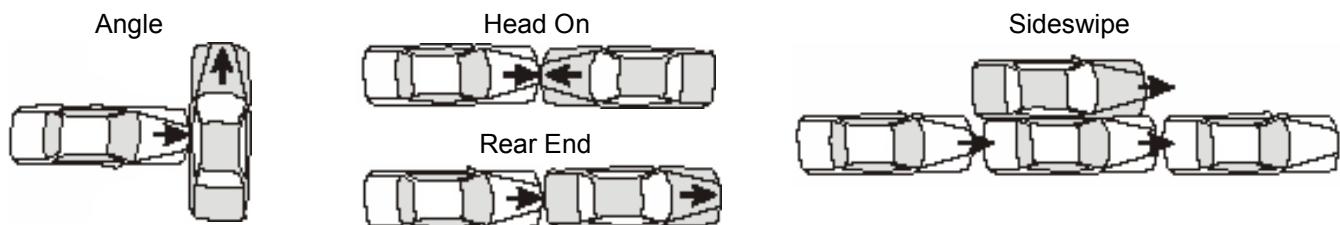
## Crash Conditions

### First Harmful Event (Utah 2010)

First Harmful Event	Crashes							
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Collision with Other Motor Vehicle	21,539	63.1%	9,538	63.6%	81	37.2%	<b>31,158</b>	<b>63.1%</b>
Collision with Animal	2,467	7.2%	193	1.3%	2	0.9%	<b>2,662</b>	<b>5.4%</b>
Collision with Concrete/Cable Barrier	1,758	5.1%	583	3.9%	9	4.1%	<b>2,350</b>	<b>4.8%</b>
Collision with Parked Vehicle	1,831	5.4%	299	2.0%	2	0.9%	<b>2,132</b>	<b>4.3%</b>
Collision with Post, Pole, or Support	1,250	3.7%	424	2.8%	13	6.0%	<b>1,687</b>	<b>3.4%</b>
Overturn/Rollover	679	2.0%	971	6.5%	36	16.5%	<b>1,686</b>	<b>3.4%</b>
Collision with Other Non-Fixed Object	668	2.0%	185	1.2%	1	0.5%	<b>854</b>	<b>1.7%</b>
Collision with Bicyclist	76	0.2%	663	4.4%	6	2.8%	<b>745</b>	<b>1.5%</b>
Collision with Fence	569	1.7%	157	1.0%	5	2.3%	<b>731</b>	<b>1.5%</b>
Collision with Other Fixed Object	530	1.6%	186	1.2%	1	0.5%	<b>717</b>	<b>1.5%</b>
Collision with Pedestrian	38	0.1%	644	4.3%	25	11.5%	<b>707</b>	<b>1.4%</b>
Collision with Embankment	368	1.1%	239	1.6%	13	6.0%	<b>620</b>	<b>1.3%</b>
Collision with Tree/Shrubbery	300	0.9%	164	1.1%	6	2.8%	<b>470</b>	<b>1.0%</b>
Collision with Guardrail	328	1.0%	110	0.7%	4	1.8%	<b>442</b>	<b>0.9%</b>
Other Non-Collision	241	0.7%	117	0.8%	0	0.0%	<b>358</b>	<b>0.7%</b>
Collision with Ditch	217	0.6%	137	0.9%	2	0.9%	<b>356</b>	<b>0.7%</b>
Collision with Mailbox/Fire Hydrant	214	0.6%	34	0.2%	1	0.5%	<b>249</b>	<b>0.5%</b>
Collision with Thrown or Fallen Object	190	0.6%	17	0.1%	2	0.9%	<b>209</b>	<b>0.4%</b>
Fell/Jumped from Vehicle	9	0.0%	143	1.0%	7	3.2%	<b>159</b>	<b>0.3%</b>
Fire/Explosion	153	0.4%	5	0.0%	0	0.0%	<b>158</b>	<b>0.3%</b>
Cargo/Equipment Loss or Shift	138	0.4%	12	0.1%	0	0.0%	<b>150</b>	<b>0.3%</b>
Jackknife	95	0.3%	10	0.1%	0	0.0%	<b>105</b>	<b>0.2%</b>
Collision with Crash Cushion	65	0.2%	30	0.2%	0	0.0%	<b>95</b>	<b>0.2%</b>
Collision with Work Zone/Equipment	46	0.1%	17	0.1%	0	0.0%	<b>63</b>	<b>0.1%</b>
Collision with Culvert	29	0.1%	27	0.2%	0	0.0%	<b>56</b>	<b>0.1%</b>
Collision with Bridge	30	0.1%	14	0.1%	0	0.0%	<b>44</b>	<b>0.1%</b>
Collision with Train	24	0.1%	12	0.1%	2	0.9%	<b>38</b>	<b>0.1%</b>
Immersion	3	0.0%	2	0.0%	0	0.0%	<b>5</b>	<b>0.0%</b>
Unknown	300	0.9%	62	0.4%	0	0.0%	<b>362</b>	<b>0.7%</b>
<b>Total</b>	<b>34,155</b>	<b>100.0%</b>	<b>14,995</b>	<b>100.0%</b>	<b>218</b>	<b>100.0%</b>	<b>49,368</b>	<b>100.0%</b>

- For all crashes, the leading first harmful event was collision with other motor vehicle (63.1%).
- For total crashes, collision with animal (5.4%) and collision with concrete/cable barrier (4.8%) were the next highest first harmful events. See page 46 for more information on collisions with animals.
- For fatal crashes, overturn/rollover (16.5%) and collision with pedestrian (11.5%) were the next highest first harmful events.
- Overturn/rollover was 5.7 times more likely to result in a death than other first harmful events.

### Collision Examples



## Crash Conditions

### Collision Description (Utah 2010)

Crashes (Two or More Motor Vehicles)								
Collision Description	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Rear End (front-to-rear)	9,434	39.6%	4,593	45.7%	10	11.1%	<b>14,037</b>	<b>41.3%</b>
Angle	7,288	30.6%	3,745	37.2%	41	45.6%	<b>11,074</b>	<b>32.6%</b>
Sideswipe	3,789	15.9%	785	7.8%	9	10.0%	<b>4,583</b>	<b>13.5%</b>
Parked Vehicle	2,095	8.8%	316	3.1%	7	7.8%	<b>2,418</b>	<b>7.1%</b>
Head On (front-to-front)	428	1.8%	487	4.8%	19	21.1%	<b>934</b>	<b>2.7%</b>
Rear to Side/Rear	341	1.4%	19	0.2%	1	1.1%	<b>361</b>	<b>1.1%</b>
Unknown/Other	458	1.9%	112	1.1%	3	3.3%	<b>573</b>	<b>1.7%</b>
<b>Total</b>	<b>23,833</b>	<b>100.0%</b>	<b>10,057</b>	<b>100.0%</b>	<b>90</b>	<b>100.0%</b>	<b>33,980</b>	<b>100.0%</b>

- For all crashes, the leading collision types involving two or more motor vehicles were rear end (41.3%) and angle (32.6%).
- The leading collision types in fatal crashes were angle (45.6%) and head on (21.1%).
- Head on collisions were 9.5 times more likely to result in a death than other collisions involving two or more motor vehicles.

### Number of Vehicles Involved (Utah 2010)

Crashes								
Vehicles Involved	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
1	9,825	28.8%	4,768	31.8%	126	57.8%	<b>14,719</b>	<b>29.8%</b>
2	22,244	65.1%	8,319	55.5%	78	35.8%	<b>30,641</b>	<b>62.1%</b>
3	1,778	5.2%	1,518	10.1%	7	3.2%	<b>3,303</b>	<b>6.7%</b>
4	255	0.7%	295	2.0%	6	2.8%	<b>556</b>	<b>1.1%</b>
5 or more	53	0.2%	95	0.6%	1	0.5%	<b>149</b>	<b>0.3%</b>
<b>Total</b>	<b>34,155</b>	<b>100.0%</b>	<b>14,995</b>	<b>100.0%</b>	<b>218</b>	<b>100.0%</b>	<b>49,368</b>	<b>100.0%</b>

- While the majority (70.2%) of all crashes involved two or more motor vehicles, 57.8% of fatal crashes involved only one motor vehicle.

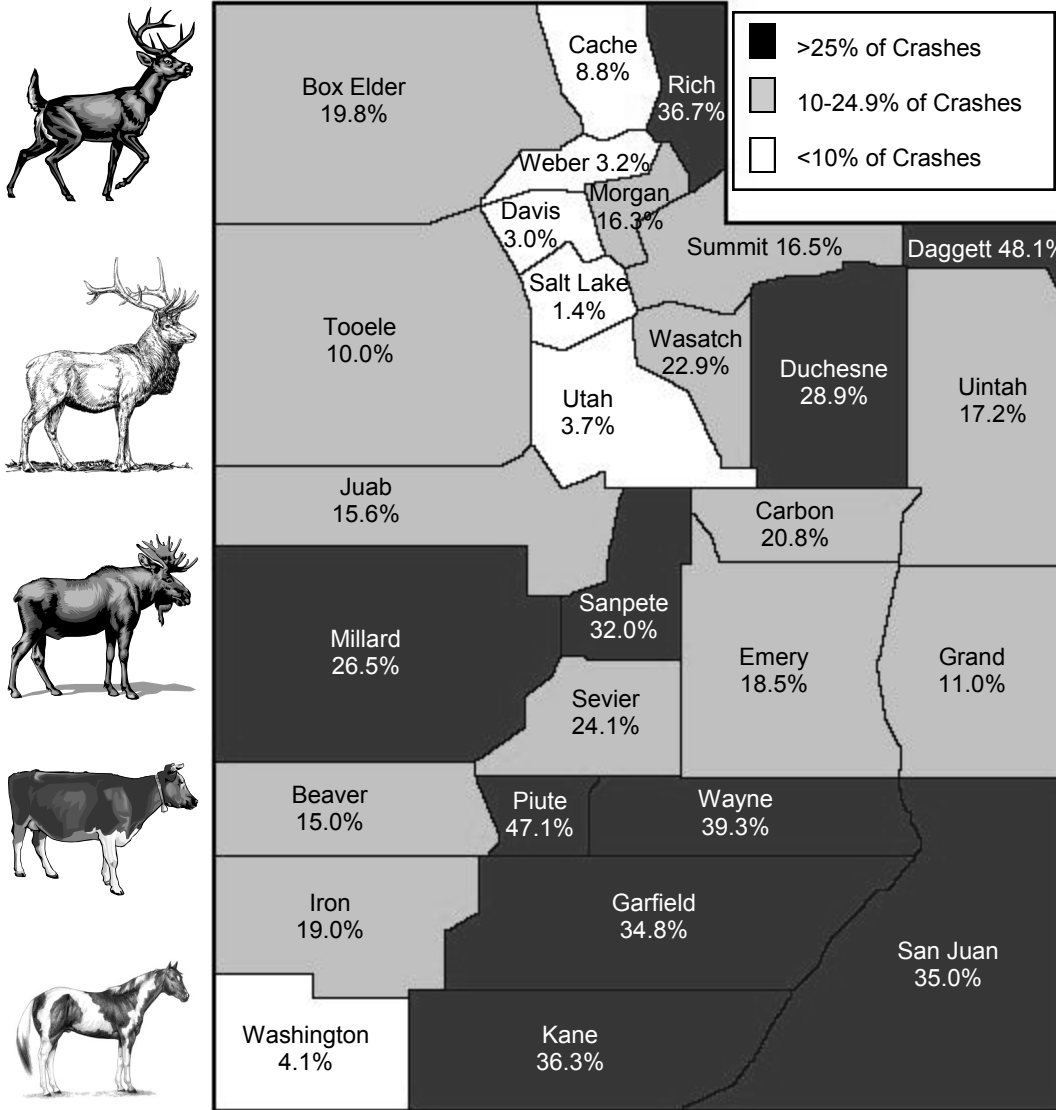
### Driver Distraction (Utah 2010)

Crashes								
Driver Distraction	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
None	25,750	75.4%	10,252	68.4%	139	63.8%	<b>36,141</b>	<b>73.2%</b>
Cell Phone	408	1.2%	263	1.8%	2	0.9%	<b>673</b>	<b>1.4%</b>
Passengers	331	1.0%	251	1.7%	3	1.4%	<b>585</b>	<b>1.2%</b>
Radio/CD/DVD etc.	173	0.5%	139	0.9%	3	1.4%	<b>315</b>	<b>0.6%</b>
Other Electronic Device	65	0.2%	55	0.4%	0	0.0%	<b>120</b>	<b>0.2%</b>
Other	1,657	4.9%	996	6.6%	9	4.1%	<b>2,662</b>	<b>5.4%</b>
Unknown	5,771	16.9%	3,039	20.3%	62	28.4%	<b>8,872</b>	<b>18.0%</b>
<b>Total</b>	<b>34,155</b>	<b>100.0%</b>	<b>14,995</b>	<b>100.0%</b>	<b>218</b>	<b>100.0%</b>	<b>49,368</b>	<b>100.0%</b>

- For all crashes where driver distraction was known, 10.8% of crashes involved a distracted driver. Cell phone was the leading driver distraction (15.5% of distractions). Driving demands the full attention of the driver.
- While these numbers are significant, they may not state the true size of the problem, since the identification of distraction and its role in the crash by law enforcement can be very difficult.

## Crash Conditions

### Percent of Crashes Involving Animals by County (Utah 2010)



- There were 2,864 collisions involving animals, 2,333 (81.5%) involved hitting a wild animal, 363 (12.7%) involved hitting a domestic animal, and 168 (5.9%) involved an unharmed animal causing evasive action.
- Daggett (48.1%), Piute (47.1%), and Wayne (39.3%) Counties had the highest percent of crashes involving an animal.

### Roadway Contributing Circumstances (Utah 2010)

Roadway Contributing Circumstances	Crashes							
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
None	26,945	78.9%	12,415	82.8%	165	75.7%	39,525	80.1%
Road Surface Condition (Wet/Icy/Snow/Etc.)	4,134	12.1%	1,298	8.7%	24	11.0%	5,456	11.1%
Animal/Non-Contact Veh/Ped/Bike Caused Evasive Action	576	1.7%	331	2.2%	9	4.1%	916	1.9%
Work Zone	519	1.5%	222	1.5%	3	1.4%	744	1.5%
Debris	374	1.1%	102	0.7%	1	0.5%	477	1.0%
Hole/Bump/Worn Surface/Shoulder/Traffic Control Device	135	0.4%	131	0.9%	3	1.4%	269	0.5%
Other	184	0.5%	69	0.5%	5	2.3%	258	0.5%
Unknown	1,288	3.8%	427	2.8%	8	3.7%	1,723	3.5%
<b>Total</b>	<b>34,155</b>	<b>100.0%</b>	<b>14,995</b>	<b>100.0%</b>	<b>218</b>	<b>100.0%</b>	<b>49,368</b>	<b>100.0%</b>

- 16.5% of crashes had a roadway contributing circumstance, where known.

## Crash Conditions

### Violations (Utah 2010)

Violations	Drivers							
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Following Too Close	4,003	17.8%	1,929	16.1%	0	0.0%	5,932	17.2%
Improper Lane Change/Travel	3,092	13.8%	1,147	9.6%	3	5.7%	4,242	12.3%
Failure to Yield Right of Way	1,772	7.9%	1,171	9.8%	6	11.3%	2,949	8.6%
Improper Lookout	1,789	8.0%	939	7.9%	0	0.0%	2,728	7.9%
Improper Turn	1,610	7.2%	942	7.9%	1	1.9%	2,553	7.4%
License Violation	1,303	5.8%	864	7.2%	4	7.5%	2,171	6.3%
Negligent Collision	1,391	6.2%	683	5.7%	0	0.0%	2,074	6.0%
Insurance Violation	1,219	5.4%	771	6.5%	3	5.7%	1,993	5.8%
Speed	1,414	6.3%	491	4.1%	3	5.7%	1,908	5.5%
Other/Unknown Moving Violation	846	3.8%	555	4.6%	1	1.9%	1,402	4.1%
Driving Under the Influence	704	3.1%	659	5.5%	5	9.4%	1,368	4.0%
Failure to Stop at Red Light	609	2.7%	572	4.8%	1	1.9%	1,182	3.4%
Hit and Run	661	2.9%	189	1.6%	3	5.7%	853	2.5%
Improper Start or Stop	274	1.2%	117	1.0%	0	0.0%	391	1.1%
Equipment Violation	297	1.3%	73	0.6%	0	0.0%	370	1.1%
Registration Violation	223	1.0%	124	1.0%	0	0.0%	347	1.0%
Failure to Stop at Stop Sign	202	0.9%	137	1.1%	1	1.9%	340	1.0%
Improper Backing	315	1.4%	23	0.2%	0	0.0%	338	1.0%
Alcohol/Drug Violation, Other than DUI	112	0.5%	105	0.9%	3	5.7%	220	0.6%
Wrong Side of Road/Wrong Way	114	0.5%	95	0.8%	0	0.0%	209	0.6%
Improper Passing	121	0.5%	48	0.4%	2	3.8%	171	0.5%
Failure to Obey Traffic Control Device	92	0.4%	66	0.6%	1	1.9%	159	0.5%
Reckless Driving	81	0.4%	65	0.5%	3	5.7%	149	0.4%
Careless Driving	75	0.3%	59	0.5%	2	3.8%	136	0.4%
Seat Belt/Child Restraint	21	0.1%	73	0.6%	0	0.0%	94	0.3%
Improper Signal	67	0.3%	16	0.1%	0	0.0%	83	0.2%
Other Non-Moving Violation	45	0.2%	28	0.2%	1	1.9%	74	0.2%
Texting	13	0.1%	7	0.1%	0	0.0%	20	0.1%
Vehicle Homicide	0	0.0%	0	0.0%	10	18.9%	10	0.0%
<b>Total</b>	<b>22,465</b>	<b>100.0%</b>	<b>11,948</b>	<b>100.0%</b>	<b>53</b>	<b>100.0%</b>	<b>34,466</b>	<b>100.0%</b>

- There were 34,466 citations issued at the scene of the crash. The most common violations were for following too close (17.2%), improper lane change/travel (12.3%), and failure to yield right of way (8.6%).
- The leading violations in fatal crashes were vehicle homicide (18.9%), failure to yield right of way (11.3%), and driving under the influence (9.4%).

## Crash Conditions

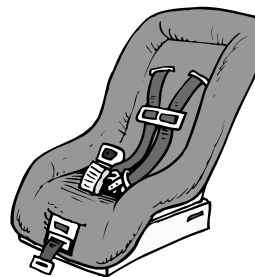
### Contributing Factors (Utah 2010)

Contributing Factors	Drivers/Vehicles							
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Followed Too Closely	7,591	15.1%	3,772	15.1%	8	1.5%	11,371	15.0%
Failed to Yield Right of Way	5,619	11.2%	3,408	13.7%	30	5.5%	9,057	11.9%
Speed Too Fast	5,431	10.8%	2,302	9.2%	80	14.5%	7,813	10.3%
Failed to Keep in Proper Lane	4,618	9.2%	2,054	8.2%	83	15.1%	6,755	8.9%
Other Improper Driving	3,437	6.8%	1,626	6.5%	3	0.5%	5,066	6.7%
Driver Distraction	2,701	5.4%	1,755	7.0%	17	3.1%	4,473	5.9%
Vision Obscured by Weather Condition	2,545	5.1%	834	3.3%	19	3.5%	3,398	4.5%
Disregard Traffic Signal/Sign	1,398	2.8%	1,192	4.8%	18	3.3%	2,608	3.4%
Improper Turn	1,771	3.5%	712	2.9%	2	0.4%	2,485	3.3%
Hit and Run	1,799	3.6%	487	2.0%	5	0.9%	2,291	3.0%
Ran Off Road	1,191	2.4%	840	3.4%	103	18.7%	2,134	2.8%
Improper Lane Change	1,622	3.2%	377	1.5%	6	1.1%	2,005	2.6%
Driving Under the Influence	984	2.0%	885	3.6%	41	7.5%	1,910	2.5%
Improper Backing	1,568	3.1%	93	0.4%	0	0.0%	1,661	2.2%
Overcorrected	910	1.8%	654	2.6%	30	5.5%	1,594	2.1%
Swerved or Evasive Action	1,014	2.0%	557	2.2%	21	3.8%	1,592	2.1%
Vehicle Other Defective Condition	869	1.7%	268	1.1%	3	0.5%	1,140	1.5%
Asleep/Fatigue	524	1.0%	429	1.7%	8	1.5%	961	1.3%
Improper Parking/Stopping	695	1.4%	247	1.0%	1	0.2%	943	1.2%
Vision Obscured by Moving Vehicle	462	0.9%	299	1.2%	7	1.3%	768	1.0%
Vehicle Tires	480	1.0%	182	0.7%	8	1.5%	670	0.9%
Reckless/Aggressive Driving	331	0.7%	260	1.0%	18	3.3%	609	0.8%
Other Driver Condition	357	0.7%	251	1.0%	0	0.0%	608	0.8%
Driver Emotional Prior to Crash	264	0.5%	233	0.9%	8	1.5%	505	0.7%
Improper Passing	365	0.7%	103	0.4%	11	2.0%	479	0.6%
Vehicle Brakes	298	0.6%	158	0.6%	3	0.5%	459	0.6%
Vision Obscured by Other	319	0.6%	135	0.5%	2	0.4%	456	0.6%
Vision Obscured by Glare	245	0.5%	175	0.7%	1	0.2%	421	0.6%
Vision Obscured by Parked Vehicle	274	0.5%	106	0.4%	4	0.7%	384	0.5%
Driver Illness/Medical	121	0.2%	184	0.7%	2	0.4%	307	0.4%
Wrong Side/Wrong Way	154	0.3%	129	0.5%	7	1.3%	290	0.4%
Disregard Road Markings	103	0.2%	65	0.3%	0	0.0%	168	0.2%
Vision Obscured by Physical Obstruction	82	0.2%	52	0.2%	0	0.0%	134	0.2%
Windshield or Other Window Obscured	92	0.2%	37	0.1%	1	0.2%	130	0.2%
Improper Signal	82	0.2%	23	0.1%	0	0.0%	105	0.1%
Vision Obscured by Vegetation	52	0.1%	42	0.2%	0	0.0%	94	0.1%
<b>Total</b>	<b>50,368</b>	<b>100.0%</b>	<b>24,926</b>	<b>100.0%</b>	<b>550</b>	<b>100.0%</b>	<b>75,844</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 (15.0%), failed to yield right of way (11.9%), and speed too fast (10.3%).
- The leading contributing factors in fatal crashes were ran off road (18.7%), failed to keep in proper lane (15.1%), and speed too fast (14.5%).



# Occupant Protection



2

## Section 2: Occupant Protection

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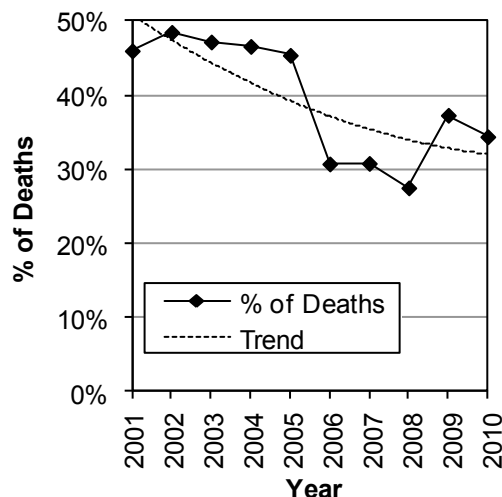
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## Trends

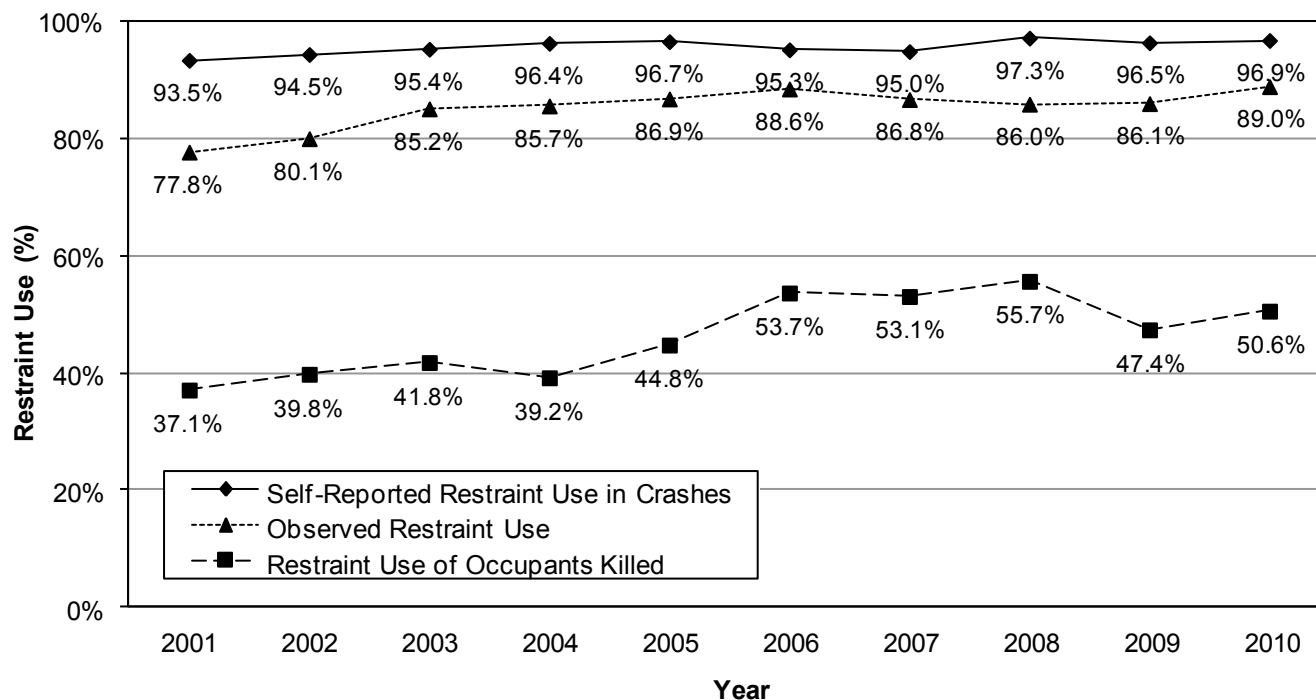
### Unrestrained Occupant Deaths (Utah 2001-2010)

Unrestrained Occupant Deaths			
Year	Deaths		
	All #	Unrestrained Occupants #	%
2001	291	134	46.0%
2002	328	159	48.5%
2003	309	146	47.2%
2004	296	138	46.6%
2005	282	128	45.4%
2006	287	88	30.7%
2007	299	92	30.8%
2008	276	78	28.3%
2009	244	91	37.3%
2010	253	87	34.4%
<b>Total</b>	<b>2,865</b>	<b>1,141</b>	<b>39.8%</b>



- Over the past 10 years, 39.8% of deaths have been to unrestrained occupants.
- On average, 114 people die a year in Utah who are unrestrained.
- The percentage of deaths to unrestrained occupants has shown a decreasing trend over the last 10 years.

### Restraint Use of Occupants In Crashes and Observational Studies (Utah 2001-2010)



- Historically, there have been differences between self-reported restraint use of people in crashes and seat belt 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 restraint use in crashes, observational studies, and occupants killed.
- In 2010, the observational seat belt use increased to 89.0% from 86.1% in 2009, this was the highest observed seat belt use ever in Utah.
- The 2010 self-reported restraint use of people in crashes increased to 96.9% from 96.5% in 2009.
- Restraint use among occupants killed increased from 47.4% in 2009 to 50.6% in 2010.

## Counties

### Restraint Use by County (Utah 2010)

County	Persons											
	Non-Injured			Injured			Killed			Total		
	Unres #	Restrained #	%	Unres #	Restrained #	%	Unres #	Restrained #	%	Unrestrained #	Restrained #	%
Davis	129	8,007	98.4%	75	1,420	95.0%	2	4	66.7%	206	9,431	97.9%
Cache	79	3,847	98.0%	27	531	95.2%	0	3	100.0%	106	4,381	97.6%
Salt Lake	855	40,003	97.9%	316	7,027	95.7%	19	19	50.0%	1,190	47,049	97.5%
Utah	302	14,096	97.9%	156	2,908	94.9%	10	13	56.5%	468	17,017	97.3%
Summit	30	1,561	98.1%	25	207	89.2%	2	0	0.0%	57	1,768	96.9%
Washington	58	3,287	98.3%	65	683	91.3%	7	5	41.7%	130	3,975	96.8%
Morgan	5	194	97.5%	3	33	91.7%	0	0	0.0%	8	227	96.6%
Box Elder	29	1,633	98.3%	39	327	89.3%	7	3	30.0%	75	1,963	96.3%
Weber	270	7,528	96.5%	96	1,461	93.8%	9	6	40.0%	375	8,995	96.0%
Millard	13	598	97.9%	16	173	91.5%	5	2	28.6%	34	773	95.8%
Wasatch	28	802	96.6%	14	145	91.2%	0	0	0.0%	42	947	95.8%
Juab	13	488	97.4%	14	115	89.1%	1	4	80.0%	28	607	95.6%
Iron	41	1,573	97.5%	50	328	86.8%	0	7	100.0%	91	1,908	95.4%
Rich	3	103	97.2%	1	16	94.1%	2	0	0.0%	6	119	95.2%
Daggett	0	25	100.0%	1	10	90.9%	1	0	0.0%	2	35	94.6%
Carbon	30	604	95.3%	12	67	84.8%	2	0	0.0%	44	671	93.8%
Tooele	33	838	96.2%	35	277	88.8%	6	5	45.5%	74	1,120	93.8%
Piute	1	38	97.4%	2	5	71.4%	0	0	0.0%	3	43	93.5%
Grand	13	224	94.5%	6	59	90.8%	3	3	50.0%	22	286	92.9%
San Juan	10	277	96.5%	15	45	75.0%	0	1	100.0%	25	323	92.8%
Uintah	35	786	95.7%	36	119	76.8%	1	3	75.0%	72	908	92.7%
Kane	13	260	95.2%	12	49	80.3%	1	2	66.7%	26	311	92.3%
Emery	14	317	95.8%	18	82	82.0%	2	1	33.3%	34	400	92.2%
Beaver	25	406	94.2%	17	66	79.5%	1	0	0.0%	43	472	91.7%
Duchesne	41	521	92.7%	16	109	87.2%	4	3	42.9%	61	633	91.2%
Garfield	11	201	94.8%	13	38	74.5%	1	2	66.7%	25	241	90.6%
Sanpete	15	239	94.1%	15	55	78.6%	1	1	50.0%	31	295	90.5%
Sevier	41	491	92.3%	48	142	74.7%	0	2	100.0%	89	635	87.7%
Wayne	8	49	86.0%	1	9	90.0%	0	0	0.0%	9	58	86.6%
<b>Statewide</b>	<b>2,145</b>	<b>88,996</b>	<b>97.6%</b>	<b>1,144</b>	<b>16,506</b>	<b>93.5%</b>	<b>87</b>	<b>89</b>	<b>50.6%</b>	<b>3,376</b>	<b>105,591</b>	<b>96.9%</b>

- Restraint use is reported for occupants in a passenger car, light truck, van, SUV, or large truck. Occupants are considered "Restrained" if they were reported as using a shoulder/lap belt, lap belt, or a child safety seat at the scene of the crash.
- Restraint 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 restraint use in the event of a fatal or severe injury crash.
- The majority of persons in crashes reported being restrained (96.9%).
- Davis (97.9%), Cache (97.6%), and Salt Lake (97.5%) counties had the highest percentage of occupants that were restrained.
- Wayne (86.6%), Sevier (87.7%), and Sanpete (90.5%) counties had the lowest percentage of occupants that were restrained.
- 50.6% of vehicle occupants killed in crashes in Utah were restrained.

## Vehicle Occupants

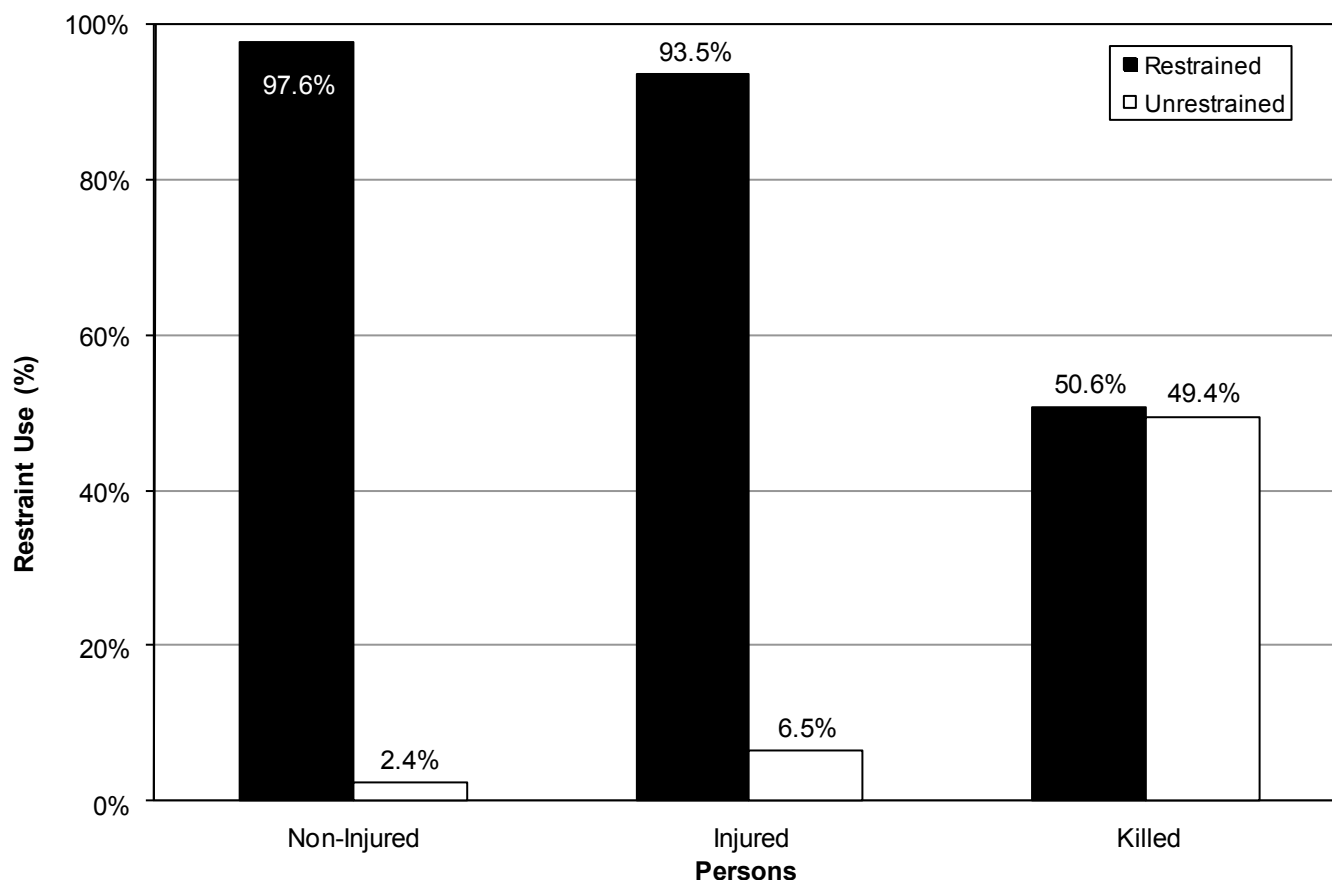
### Restraint Use by Urban/Rural Location (Utah 2010)

Persons												
Location	Non-Injured			Injured			Killed			Total		
	Unres	Restrained		Unres	Restrained		Unres	Restrained		Unrestrained	Restrained	
	#	#	%	#	#	%	#	#	%	#	#	%
Urban	1,556	69,634	97.8%	643	12,816	95.2%	40	42	51.2%	2,239	82,492	97.4%
Rural	589	19,362	97.0%	501	3,690	88.0%	47	47	50.0%	1,137	23,099	95.3%
Statewide	2,145	88,996	97.6%	1,144	16,506	93.5%	87	89	50.6%	3,376	105,591	96.9%

- Urban areas had a higher percentage of occupants that were restrained for all injury severity levels.
- Occupants in rural crashes were 1.8 times more likely to be unrestrained than occupants in urban crashes.

### Restraint Use by Injury Severity (Utah 2010)

Persons								
Restraint Use	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Restrained	88,996	97.6%	16,506	93.5%	89	50.6%	105,591	96.9%
Unrestrained	2,145	2.4%	1,144	6.5%	87	49.4%	3,376	3.1%
<b>Total</b>	<b>91,141</b>	<b>100.0%</b>	<b>17,650</b>	<b>100.0%</b>	<b>176</b>	<b>100.0%</b>	<b>108,967</b>	<b>100.0%</b>



- 97% of persons who survived a crash reported being restrained compared to only half of the persons killed.
- Unrestrained crash occupants were 31 times more likely to be killed than restrained crash occupants.

## Vehicle Occupants

### Restraint Use by Ejection (Utah 2010)

Ejection Status	Persons											
	Non-Injured			Injured			Killed			Total		
	Unres #	Restrained #	%	Unres #	Restrained #	%	Unres #	Restrained #	%	Unrestrained #	Restrained #	%
Not Ejected	2,145	88,996	97.6%	999	16,310	94.2%	39	76	66.1%	3,183	105,382	97.1%
Partially Ejected	0	0	n/a	19	45	70.3%	9	5	35.7%	28	50	64.1%
Fully Ejected	0	0	n/a	111	81	42.2%	39	8	17.0%	150	89	37.2%
<b>Total</b>	<b>2,145</b>	<b>88,996</b>	<b>97.6%</b>	<b>1,129</b>	<b>16,436</b>	<b>93.6%</b>	<b>87</b>	<b>89</b>	<b>50.6%</b>	<b>3,361</b>	<b>105,521</b>	<b>96.9%</b>

- There is an inverse relationship between ejection from a motor vehicle and restraint use.
- The majority (97.1%) of crash occupants not ejected from a motor vehicle were restrained compared to only 37.2% of crash occupants fully ejected from a motor vehicle.
- Unrestrained occupants were 55 times more likely to be fully ejected from a motor vehicle compared to restrained occupants.
- Ejection from the vehicle is one of the most harmful events that can happen to a person in a crash. Seat belts are effective in preventing total ejections.

### Restraint Use by Occupant Placement (Utah 2010)

Occupant Placement	Persons											
	Non-Injured			Injured			Killed			Total		
	Unres #	Restrained #	%	Unres #	Restrained #	%	Unres #	Restrained #	%	Unrestrained #	Restrained #	%
Driver	969	62,899	98.5%	582	11,348	95.1%	55	57	50.9%	1,606	74,304	97.9%
Front Seat	691	12,843	94.9%	305	3,245	91.4%	18	20	52.6%	1,014	16,108	94.1%
Back Seat	444	12,674	96.6%	244	1,817	88.2%	13	11	45.8%	701	14,502	95.4%
Other/Unknown	40	565	93.4%	11	89	89.0%	1	1	50.0%	52	655	92.6%
<b>Total</b>	<b>2,144</b>	<b>88,981</b>	<b>97.6%</b>	<b>1,142</b>	<b>16,499</b>	<b>93.5%</b>	<b>87</b>	<b>89</b>	<b>50.6%</b>	<b>3,373</b>	<b>105,569</b>	<b>96.9%</b>

- Among all occupants, drivers reported the highest restraint use (97.9%).

### Restraint Use by Vehicle Type (Utah 2010)

Vehicle Type	Persons											
	Non-Injured			Injured			Killed			Total		
	Unres #	Restrained #	%	Unres #	Restrained #	%	Unres #	Restrained #	%	Unrestrained #	Restrained #	%
Van	140	7,133	98.1%	71	1,217	94.5%	6	8	57.1%	217	8,358	97.5%
Passenger Car	985	44,047	97.8%	529	9,709	94.8%	44	54	55.1%	1,558	53,810	97.2%
SUV	420	20,243	98.0%	277	3,482	92.6%	15	14	48.3%	712	23,739	97.1%
Pickup Truck	430	14,718	97.2%	237	1,919	89.0%	21	10	32.3%	688	16,647	96.0%
Semi/Large Truck	170	2,775	94.2%	30	172	85.1%	1	3	75.0%	201	2,950	93.6%
<b>Total</b>	<b>2,145</b>	<b>88,916</b>	<b>97.6%</b>	<b>1,144</b>	<b>16,499</b>	<b>93.5%</b>	<b>87</b>	<b>89</b>	<b>50.6%</b>	<b>3,376</b>	<b>105,504</b>	<b>96.9%</b>

- Occupants in semi/large truck (93.6%) and pickup truck (96.0%) were the least likely to be restrained.

## Vehicle Occupants

### Restraint Use by Gender of Crash Occupants (Utah 2010)

Gender	Persons											
	Non-Injured			Injured			Killed			Total		
	Unres	Restrained		Unres	Restrained		Unres	Restrained		Unrestrained	Restrained	
	#	#	%	#	#	%	#	#	%	#	#	%
Female	897	39,927	97.8%	554	9,535	94.5%	44	40	47.6%	1,495	49,502	97.1%
Male	1,238	48,799	97.5%	586	6,947	92.2%	43	49	53.3%	1,867	55,795	96.8%
Unknown	10	270	96.4%	4	24	85.7%	0	0	n/a	14	294	95.5%
<b>Total</b>	<b>2,145</b>	<b>88,996</b>	<b>97.6%</b>	<b>1,144</b>	<b>16,506</b>	<b>93.5%</b>	<b>87</b>	<b>89</b>	<b>50.6%</b>	<b>3,376</b>	<b>105,591</b>	<b>96.9%</b>

- Overall, restraint use of female (97.1%) crash occupants was slightly higher than males (96.8%).
- For persons killed, male crash occupants had higher restraint use (53.3%) than females (47.6%).

### Restraint Use by Age of Crash Occupants (Utah 2010)

Age	Persons											
	Non-Injured			Injured			Killed			Total		
	Unres	Restrained		Unres	Restrained		Unres	Restrained		Unrestrained	Restrained	
	#	#	%	#	#	%	#	#	%	#	#	%
0-4	56	4,410	98.7%	25	455	94.8%	1	4	80.0%	82	4,869	98.3%
5-9	48	3,126	98.5%	31	474	93.9%	0	2	100.0%	79	3,602	97.9%
10-14	78	2,964	97.4%	47	489	91.2%	1	3	75.0%	126	3,456	96.5%
15-19	395	13,054	97.1%	258	2,207	89.5%	13	6	31.6%	666	15,267	95.8%
20-24	357	12,467	97.2%	195	2,348	92.3%	10	9	47.4%	562	14,824	96.3%
25-29	272	9,915	97.3%	131	1,870	93.5%	12	5	29.4%	415	11,790	96.6%
30-34	197	8,165	97.6%	102	1,536	93.8%	7	4	36.4%	306	9,705	96.9%
35-39	132	6,542	98.0%	66	1,263	95.0%	11	4	26.7%	209	7,809	97.4%
40-44	111	5,470	98.0%	60	1,129	95.0%	4	4	50.0%	175	6,603	97.4%
45-49	101	4,969	98.0%	43	1,024	96.0%	4	4	50.0%	148	5,997	97.6%
50-54	104	4,439	97.7%	36	916	96.2%	5	7	58.3%	145	5,362	97.4%
55-59	74	3,693	98.0%	40	777	95.1%	4	5	55.6%	118	4,475	97.4%
60-64	51	2,906	98.3%	21	603	96.6%	2	3	60.0%	74	3,512	97.9%
65-69	34	1,942	98.3%	15	439	96.7%	5	5	50.0%	54	2,386	97.8%
70-74	35	1,333	97.4%	18	287	94.1%	1	7	87.5%	54	1,627	96.8%
75-79	20	886	97.8%	10	232	95.9%	4	9	69.2%	34	1,127	97.1%
80-84	15	666	97.8%	10	144	93.5%	1	3	75.0%	26	813	96.9%
85+	16	403	96.2%	9	104	92.0%	2	5	71.4%	27	512	95.0%
Unknown	49	1,646	97.1%	27	209	88.6%	0	0	n/a	76	1,855	96.1%
<b>Total</b>	<b>2,145</b>	<b>88,996</b>	<b>97.6%</b>	<b>1,144</b>	<b>16,506</b>	<b>93.5%</b>	<b>87</b>	<b>89</b>	<b>50.6%</b>	<b>3,376</b>	<b>105,591</b>	<b>96.9%</b>

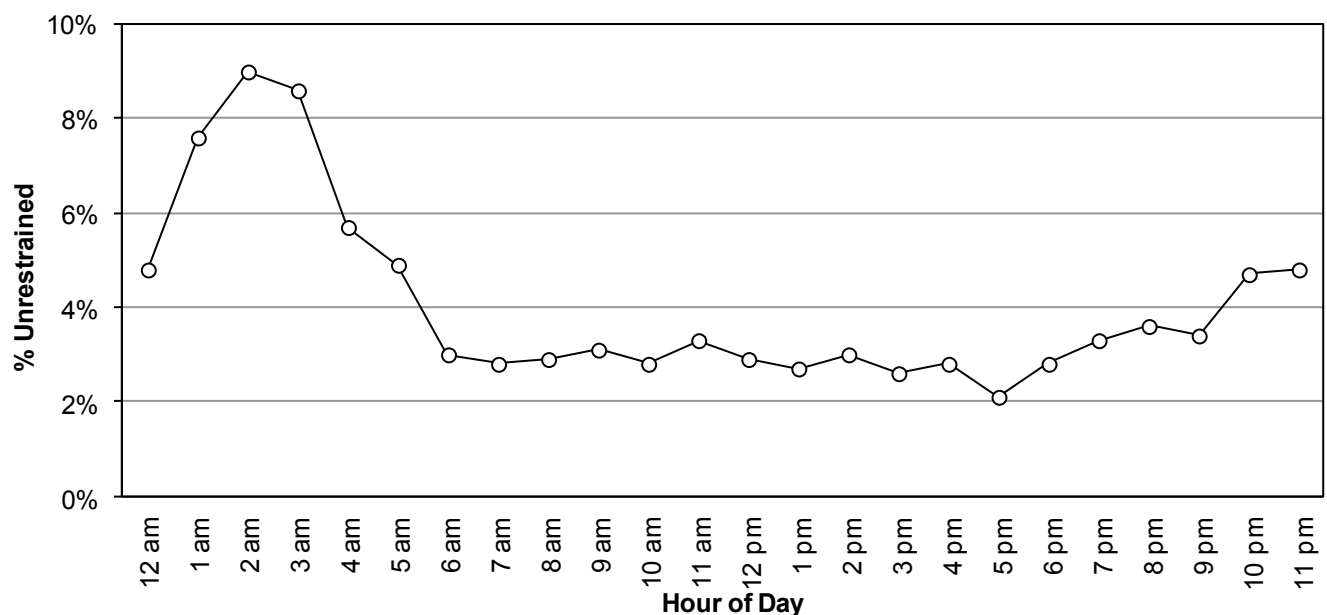
- Overall, crash occupants aged 85+ years (95.0%), 15-19 years (95.8%), and 20-24 years (96.3%) had the lowest percentages of being restrained.
- For persons killed, crash occupants aged 35-39 years (26.7%), 25-29 years (29.4%), 15-19 years (31.6%), and 30-34 years (36.4%) had the lowest percentages of being restrained.



## Vehicle Occupants

### Restraint Use by Hour (Utah 2010)

Persons						
Hour	Restrained		Unrestrained		Total	
	#	%	#	%	#	%
Midnight	964	95.2%	49	4.8%	1,013	100.0%
1 a.m.	728	92.4%	60	7.6%	788	100.0%
2 a.m.	533	91.0%	53	9.0%	586	100.0%
3 a.m.	459	91.4%	43	8.6%	502	100.0%
4 a.m.	542	94.3%	33	5.7%	575	100.0%
5 a.m.	1,043	95.1%	54	4.9%	1,097	100.0%
6 a.m.	2,254	97.0%	70	3.0%	2,324	100.0%
7 a.m.	4,642	97.2%	132	2.8%	4,774	100.0%
8 a.m.	5,050	97.1%	153	2.9%	5,203	100.0%
9 a.m.	4,078	96.9%	132	3.1%	4,210	100.0%
10 a.m.	4,067	97.2%	119	2.8%	4,186	100.0%
11 a.m.	5,286	96.7%	181	3.3%	5,467	100.0%
Noon	6,581	97.1%	200	2.9%	6,781	100.0%
1 p.m.	6,706	97.3%	185	2.7%	6,891	100.0%
2 p.m.	7,821	97.0%	243	3.0%	8,064	100.0%
3 p.m.	9,020	97.4%	241	2.6%	9,261	100.0%
4 p.m.	9,474	97.2%	272	2.8%	9,746	100.0%
5 p.m.	11,410	97.9%	247	2.1%	11,657	100.0%
6 p.m.	8,451	97.2%	247	2.8%	8,698	100.0%
7 p.m.	5,203	96.7%	177	3.3%	5,380	100.0%
8 p.m.	3,716	96.4%	139	3.6%	3,855	100.0%
9 p.m.	3,428	96.6%	122	3.4%	3,550	100.0%
10 p.m.	2,528	95.3%	126	4.7%	2,654	100.0%
11 p.m.	1,623	95.2%	82	4.8%	1,705	100.0%
<b>Total</b>	<b>105,607</b>	<b>96.9%</b>	<b>3,360</b>	<b>3.1%</b>	<b>108,967</b>	<b>100.0%</b>



- Vehicle occupants were least likely to be restrained at night (10:00 p.m. to 5:59 a.m.).

## Children and Restraint Use

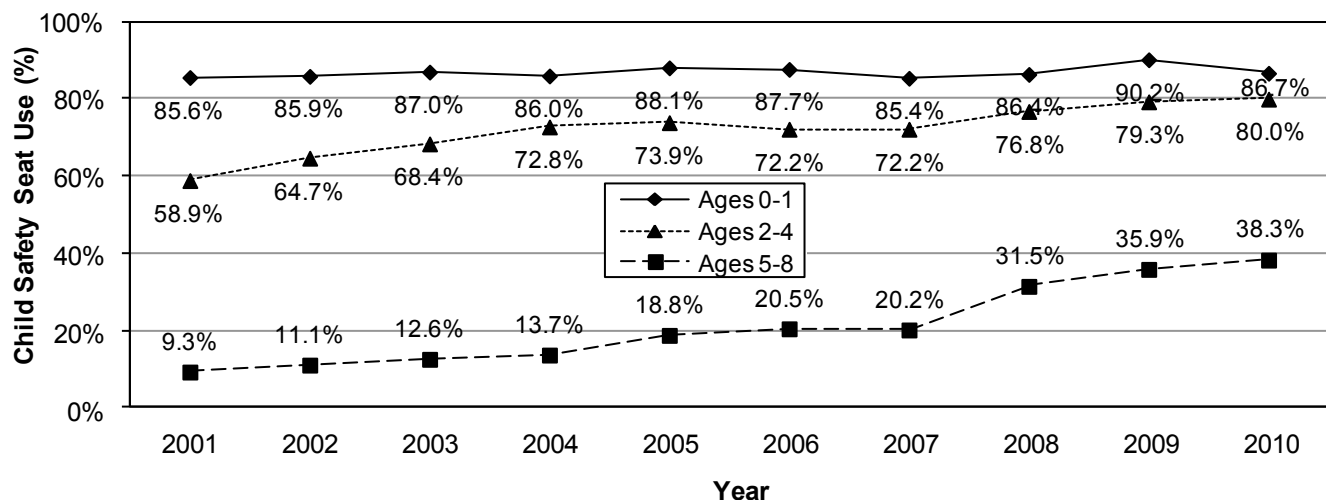
### Restraint Use for Children Age 0 to 8 Years (Utah 2010)

Child Occupants								
Restraint Use	Ages 0-1		Ages 2-4		Ages 5-8		Total	
	#	%	#	%	#	%	#	%
Child Safety Seat	1,703	86.7%	2,389	80.0%	1,139	38.3%	5,231	66.0%
Seat Belt Only	236	12.0%	541	18.1%	1,776	59.8%	2,553	32.2%
Unrestrained	25	1.3%	57	1.9%	57	1.9%	139	1.8%
<b>Total</b>	<b>1,964</b>	<b>100.0%</b>	<b>2,987</b>	<b>100.0%</b>	<b>2,972</b>	<b>100.0%</b>	<b>7,923</b>	<b>100.0%</b>

- The older the child the less likely they were using a child safety seat.
- 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 seat belts too early.

### Child Safety Seat Use by Children Age 0 to 8 Years (Utah 2001-2010)

Child Occupants												
Year	Ages 0-1			Ages 2-4			Ages 5-8			Total		
	No CSS	Child Safety Seat		No CSS	Child Safety Seat		No CSS	Child Safety Seat		No CSS	Child Safety Seat	
	#	#	%	#	#	%	#	#	%	#	#	%
2001	283	1,678	85.6%	1,378	1,971	58.9%	2,751	281	9.3%	4,412	3,930	47.1%
2002	279	1,696	85.9%	1,229	2,249	64.7%	2,953	368	11.1%	4,461	4,313	49.2%
2003	247	1,652	87.0%	1,070	2,320	68.4%	3,371	484	12.6%	4,688	4,456	48.7%
2004	275	1,688	86.0%	952	2,542	72.8%	3,577	567	13.7%	4,804	4,797	50.0%
2005	227	1,681	88.1%	960	2,721	73.9%	2,969	688	18.8%	4,156	5,090	55.1%
2006	267	1,897	87.7%	881	2,288	72.2%	2,654	683	20.5%	3,802	4,868	56.1%
2007	367	2,151	85.4%	961	2,495	72.2%	2,864	727	20.2%	4,192	5,373	56.2%
2008	286	1,822	86.4%	694	2,301	76.8%	2,125	978	31.5%	3,105	5,101	62.2%
2009	194	1,791	90.2%	606	2,326	79.3%	2,006	1,122	35.9%	2,806	5,239	65.1%
2010	261	1,703	86.7%	598	2,389	80.0%	1,833	1,139	38.3%	2,692	5,231	66.0%
<b>Total</b>	<b>2,686</b>	<b>17,759</b>	<b>86.9%</b>	<b>9,329</b>	<b>23,602</b>	<b>71.7%</b>	<b>27,103</b>	<b>7,037</b>	<b>20.6%</b>	<b>39,118</b>	<b>48,398</b>	<b>55.3%</b>



- The ten year trend shows an increase of child safety seat (CSS) use in crashes for ages 0-8 years.
- Ages 5-8 years showed the biggest gain in CSS use, increasing from 9.3% in 2001 to 38.3% in 2010.

# Alcohol-Impaired Drivers



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## Section 3: Alcohol-Impaired Drivers

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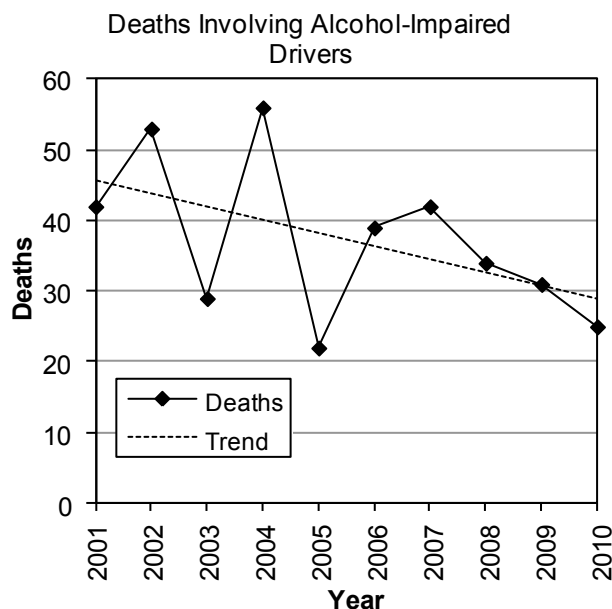
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## Trends

### Fatal Crashes Involving Alcohol-Impaired Drivers (Utah 2001-2010)

Alcohol-Impaired Driver Crashes						
Year	Deaths			Fatal Crashes		
	All #	Alcohol #	%	All #	Alcohol #	%
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%
2008	276	34	12.3%	244	32	13.1%
2009	244	31	12.7%	217	28	12.9%
2010	253	25	9.9%	218	24	11.0%
<b>Total</b>	<b>2,865</b>	<b>373</b>	<b>13.0%</b>	<b>2,477</b>	<b>333</b>	<b>13.4%</b>



- Over the past 10 years, the percentage of deaths and fatal crashes involving alcohol-impaired drivers has fluctuated around 13% of all deaths and fatal crashes.
- On average, 37 people die a year in Utah from alcohol-impaired driver crashes.

### Deaths Involving Alcohol-Impaired Drivers (Utah 2001-2010)

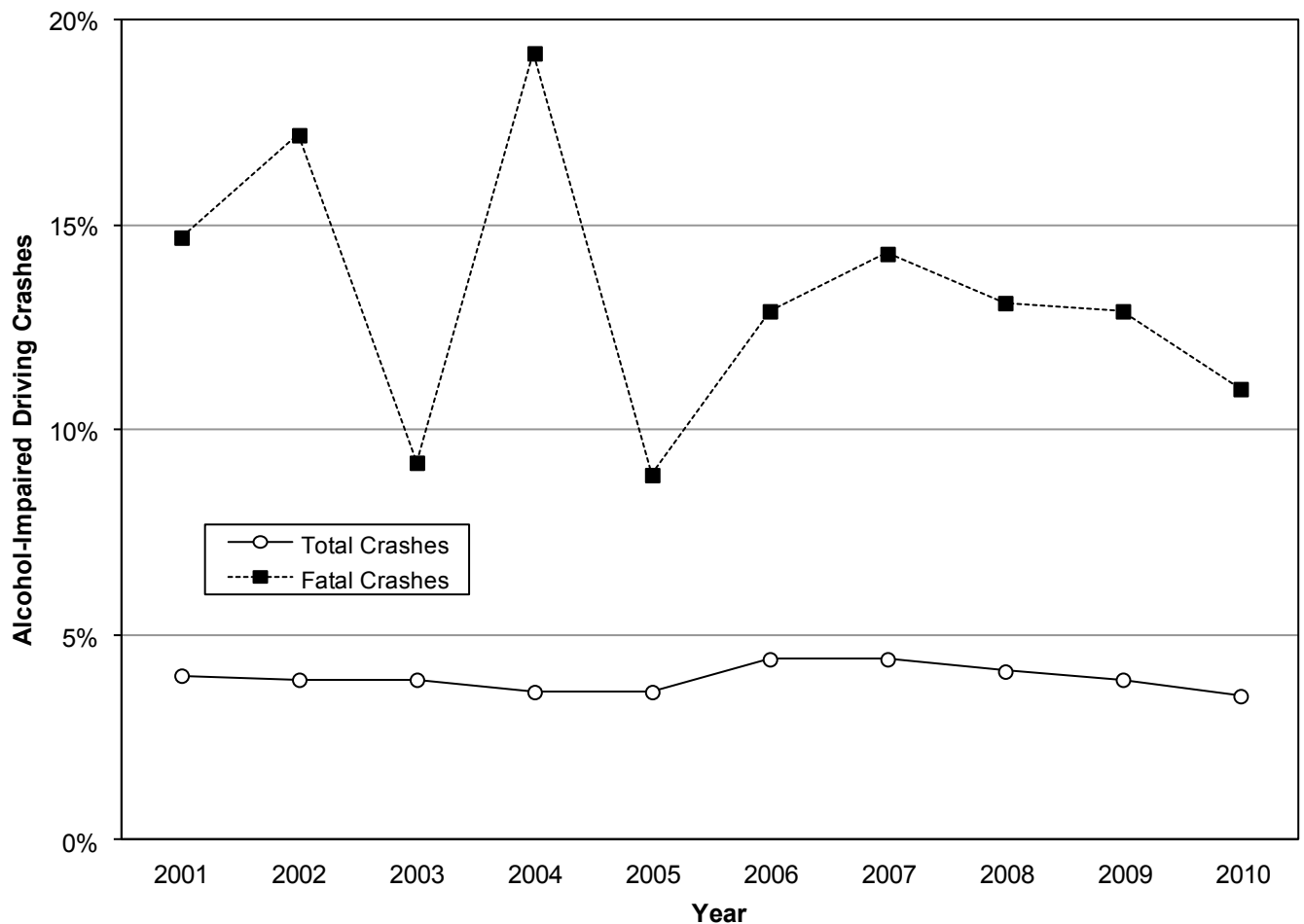
Deaths Involving Alcohol-Impaired Drivers by Person Type of Fatality														
Year	Drunk Driver		Passenger of Drunk Driver		Driver of Another Vehicle		Passenger of Another Vehicle		Pedestrian		Bicyclist		Total	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
2001	23	54.8%	11	26.2%	5	11.9%	1	2.4%	2	4.8%	0	0.0%	42	100.0%
2002	26	49.1%	14	26.4%	5	9.4%	7	13.2%	1	1.9%	0	0.0%	53	100.0%
2003	16	55.2%	7	24.1%	2	6.9%	1	3.4%	3	10.3%	0	0.0%	29	100.0%
2004	32	57.1%	12	21.4%	8	14.3%	3	5.4%	1	1.8%	0	0.0%	56	100.0%
2005	13	59.1%	6	27.3%	1	4.5%	0	0.0%	1	4.5%	1	4.5%	22	100.0%
2006	22	56.4%	7	17.9%	3	7.7%	6	15.4%	1	2.6%	0	0.0%	39	100.0%
2007	24	57.1%	9	21.4%	3	7.1%	4	9.5%	2	4.8%	0	0.0%	42	100.0%
2008	24	70.6%	8	23.5%	1	2.9%	1	2.9%	0	0.0%	0	0.0%	34	100.0%
2009	20	64.5%	6	19.4%	3	9.7%	1	3.2%	1	3.2%	0	0.0%	31	100.0%
2010	19	76.0%	3	12.0%	1	4.0%	0	0.0%	2	8.0%	0	0.0%	25	100.0%
Total	219	58.7%	83	22.3%	32	8.6%	24	6.4%	14	3.8%	1	0.3%	373	100.0%

- Of the 25 alcohol-impaired driver crash deaths in 2010, 19 (76%) were to the drunk driver, 3 (12%) deaths were to passengers of the drunk driver, 2 (8%) deaths were pedestrians, and 1 (4%) death was a driver of another vehicle in the crash.
- Over the past 10 years, 59% of deaths involving alcohol-impaired drivers were to the drunk driver.

## Trends

## Alcohol-Impaired Driver Crashes (Utah 2001-2010)

Alcohol-Impaired Driver Crashes												
Year	Property Damage Only			Injury			Fatal			Total		
	All	Alcohol		All	Alcohol		All	Alcohol		All	Alcohol	
	#	#	%	#	#	%	#	#	%	#	#	%
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%
2008	38,997	1,217	3.1%	17,125	1,081	6.3%	245	32	13.1%	56,367	2,330	4.1%
2009	35,398	1,108	3.1%	15,752	883	5.6%	217	28	12.9%	51,367	2,019	3.9%
2010	34,155	897	2.6%	14,995	802	5.3%	218	24	11.0%	49,368	1,723	3.5%
<b>Total</b>	<b>356,469</b>	<b>10,460</b>	<b>2.9%</b>	<b>180,892</b>	<b>10,572</b>	<b>5.8%</b>	<b>2,476</b>	<b>333</b>	<b>13.4%</b>	<b>539,837</b>	<b>21,365</b>	<b>4.0%</b>



- Over the past 10 years, 4.0% of total crashes involved alcohol-impaired drivers compared with 13.4% of fatal crashes.
- Over the past 10 years, alcohol-impaired driver crashes were 3.8 times more likely to be fatal than crashes not involving an alcohol-impaired driver.

## Counties

### Alcohol-Impaired Driver Crashes by County (Utah 2010)

Alcohol-Impaired Driver Crashes								
County	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	Rate per 100 Million VMT	#	Rate per 100 Million VMT	#	Rate per 100 Million VMT	#	Rate per 100 Million VMT
Uintah	25	6.7	20	5.3	2	0.53	47	12.6
Salt Lake	473	5.5	357	4.1	3	0.03	833	9.6
Daggett	1	3.2	2	6.4	0	0.00	3	9.5
Duchesne	10	4.3	10	4.3	2	0.86	22	9.5
San Juan	5	1.5	18	5.5	1	0.31	24	7.4
Weber	67	4.1	53	3.2	1	0.06	121	7.3
Wayne	1	2.4	2	4.8	0	0.00	3	7.1
Summit	28	3.9	18	2.5	1	0.14	47	6.5
Tooele	15	1.8	35	4.2	1	0.12	51	6.1
Grand	8	2.5	9	2.9	2	0.63	19	6.0
Carbon	9	3.0	8	2.7	0	0.00	17	5.6
Washington	30	2.2	44	3.2	0	0.00	74	5.4
Garfield	2	1.8	4	3.5	0	0.00	6	5.3
Sanpete	4	1.8	7	3.2	0	0.00	11	5.0
Wasatch	7	2.2	7	2.2	1	0.31	15	4.6
Davis	61	2.3	57	2.1	3	0.11	121	4.5
Emery	5	1.5	8	2.5	1	0.31	14	4.3
Cache	23	2.7	14	1.6	0	0.00	37	4.3
Utah	81	2.1	77	2.0	2	0.05	160	4.2
Rich	0	0.0	2	4.2	0	0.00	2	4.2
Morgan	1	0.7	4	3.0	0	0.00	5	3.7
Beaver	4	1.6	5	2.0	0	0.00	9	3.5
Kane	4	2.8	1	0.7	0	0.00	5	3.5
Juab	6	1.5	5	1.3	2	0.51	13	3.3
Iron	6	0.8	13	1.8	1	0.14	20	2.8
Millard	7	1.5	6	1.3	0	0.00	13	2.8
Box Elder	10	1.1	12	1.3	1	0.11	23	2.5
Sevier	4	1.2	4	1.2	0	0.00	8	2.4
Piute	0	0.0	0	0.0	0	0.00	0	0.0
<b>Statewide</b>	<b>897</b>	<b>3.4</b>	<b>802</b>	<b>3.0</b>	<b>24</b>	<b>0.09</b>	<b>1,723</b>	<b>6.5</b>

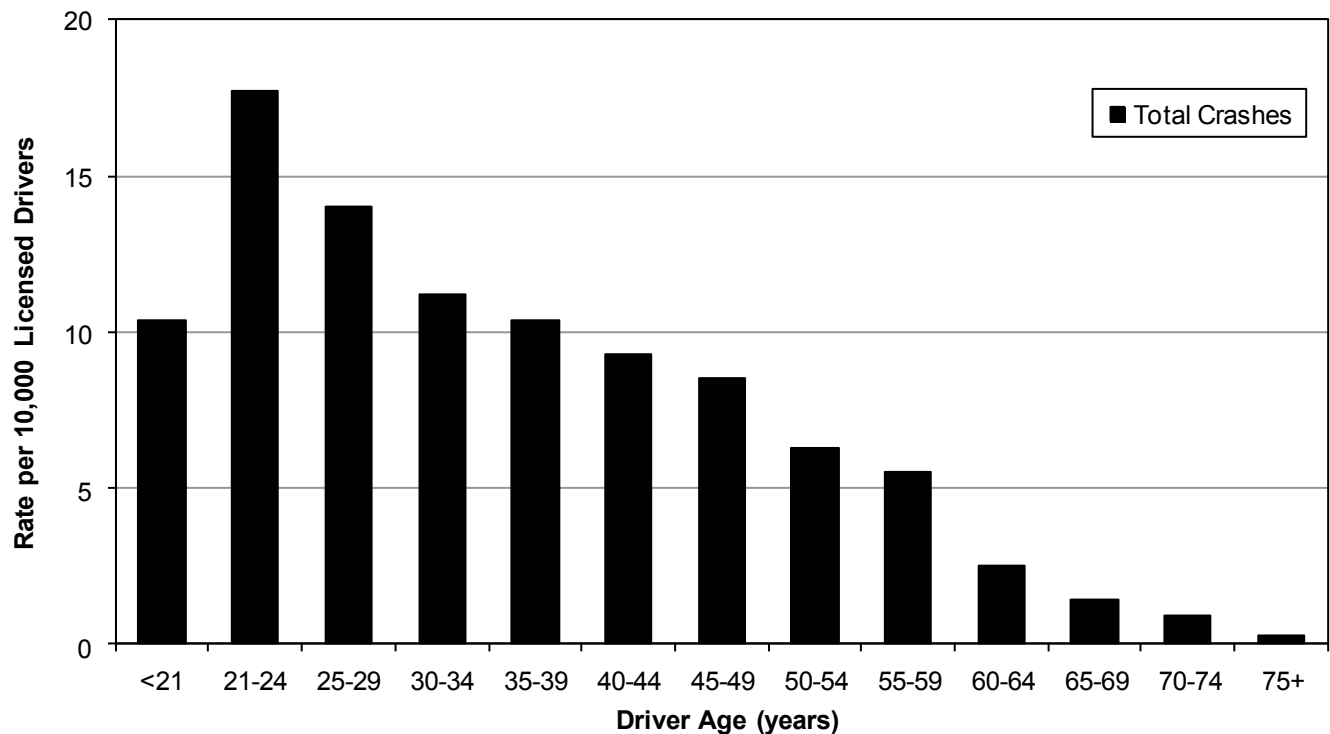
- Uintah (12.6), Salt Lake (9.6), Daggett (9.5), and Duchesne (9.5), counties had the highest rates of alcohol-impaired driver total crashes per 100 million vehicle miles traveled.
- Piute (0.0), Sevier (2.4), and Box Elder (2.5) counties had the lowest rates of alcohol-impaired driver total crashes per 100 million vehicle miles traveled.





**Age of Alcohol-Impaired Drivers in Crashes (Utah 2010)**

<b>Alcohol-Impaired Drivers</b>												
<b>Age</b>	<b>PDO Crashes</b>			<b>Injury Crashes</b>			<b>Fatal Crashes</b>			<b>Total</b>		
	<b>#</b>	<b>%</b>	<b>Rate per 10,000 Drivers</b>	<b>#</b>	<b>%</b>	<b>Rate per 10,000 Drivers</b>	<b>#</b>	<b>%</b>	<b>Rate per 10,000 Drivers</b>	<b>#</b>	<b>%</b>	<b>Rate per 10,000 Drivers</b>
<21	98	10.9%	5.1	98	12.1%	5.1	3	12.0%	0.16	199	11.5%	10.4
21-24	162	18.0%	10.1	118	14.6%	7.4	3	12.0%	0.19	283	16.3%	17.7
25-29	155	17.2%	7.2	143	17.7%	6.6	5	20.0%	0.23	303	17.5%	14.1
30-34	105	11.6%	5.0	128	15.8%	6.0	5	20.0%	0.24	238	13.7%	11.2
35-39	96	10.6%	5.6	83	10.3%	4.8	1	4.0%	0.06	180	10.4%	10.4
40-44	69	7.6%	4.6	68	8.4%	4.5	3	12.0%	0.20	140	8.1%	9.3
45-49	75	8.3%	5.2	45	5.6%	3.1	2	8.0%	0.14	122	7.0%	8.5
50-54	42	4.7%	2.9	47	5.8%	3.2	2	8.0%	0.14	91	5.2%	6.3
55-59	36	4.0%	2.8	34	4.2%	2.6	1	4.0%	0.08	71	4.1%	5.5
60-64	16	1.8%	1.5	10	1.2%	0.9	0	0.0%	0.00	26	1.5%	2.5
65-69	5	0.6%	0.7	6	0.7%	0.8	0	0.0%	0.00	11	0.6%	1.4
70-74	0	0.0%	0.0	5	0.6%	0.9	0	0.0%	0.00	5	0.3%	0.9
75+	1	0.1%	0.1	2	0.2%	0.2	0	0.0%	0.00	3	0.2%	0.3
Unknown	42	4.7%	n/a	21	2.6%	n/a	0	0.0%	n/a	63	3.6%	n/a
<b>Total</b>	<b>902</b>	<b>100.0%</b>	<b>4.9</b>	<b>808</b>	<b>100.0%</b>	<b>4.4</b>	<b>25</b>	<b>100.0%</b>	<b>0.14</b>	<b>1,735</b>	<b>100.0%</b>	<b>9.4</b>



- Drivers aged 21-24 years had the highest rate of total alcohol-impaired driver crashes (17.7).
- Drivers aged 30-34 years had the highest rate of alcohol-impaired driver fatal crashes (0.24).
- 199 (11.5%) of the impaired drivers in total crashes were under the age of 21 years.
- Three of the 25 (12.0%) 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 (6.7%).

## Drivers

### Gender of Alcohol-Impaired Drivers in Crashes (Utah 2010)

Alcohol-Impaired Drivers								
Gender	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Male	634	70.3%	592	73.3%	21	84.0%	1,247	71.9%
Female	243	26.9%	206	25.5%	4	16.0%	453	26.1%
Unknown	25	2.8%	10	1.2%	0	0.0%	35	2.0%
<b>Total</b>	<b>902</b>	<b>100.0%</b>	<b>808</b>	<b>100.0%</b>	<b>25</b>	<b>100.0%</b>	<b>1,735</b>	<b>100.0%</b>

- Male drivers were much more likely to be an alcohol-impaired driver in a crash. Male drivers represented 71.9% of the impaired drivers in total crashes and 84.0% of impaired drivers in fatal crashes.

### Drivers in Fatal Crashes by Blood Alcohol Concentration (Utah 2010)

All Drivers in Fatal Crashes		
BAC	Drivers	
	#	%
.00	102	31.5%
.01 - .07	2	0.6%
.08 - .15	11	3.4%
.16 - .23	9	2.8%
.24 - .31	4	1.2%
.32+	1	0.3%
Not Tested/Unknown	195	60.2%
<b>Total</b>	<b>324</b>	<b>100.0%</b>



- Of the 129 drivers in fatal crashes who were tested for alcohol, 102 (79.1%) had a blood alcohol concentration (BAC) of 0.00, 2 (1.6%) had a BAC of 0.01-0.07, and 25 (19.4%) were over the legal limit of 0.08.
- 14 out of the 25 (56.0%) drivers in fatal crashes who tested over the legal limit for alcohol had 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 2010)

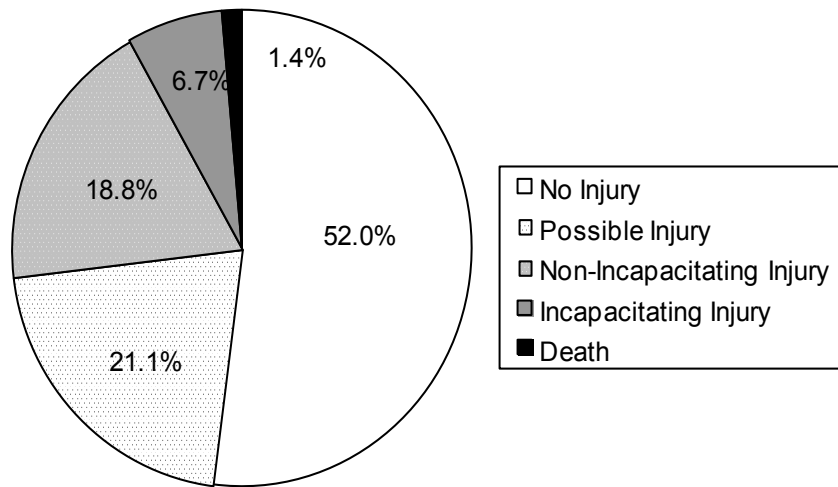
- Of the 25 alcohol-impaired drivers in fatal crashes, four drivers (16.0%) had been previously convicted of driving under the influence in the past three years.

### Drug-Impaired Drivers in Crashes (Utah 2010)

- There were an additional 537 drivers impaired by drugs only, 274 (51.0%) in property damage only crashes, 244 (45.4%) in injury crashes, and 19 (3.5%) in fatal crashes.
- Cannabinoids (marijuana), depressants (diazepam, nordiazepam), and stimulants (methamphetamine) were the most common drugs for drug-impaired drivers in fatal crashes.

## Crash Conditions

### Alcohol-Impaired Driver Crash Severity (Utah 2010)



- Alcohol-impaired driver crashes were more likely to have a death or injury than other crashes.
- A higher percentage of alcohol-impaired driver crashes (46.6%) resulted in an injury compared to all motor vehicle crashes that resulted in an 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 2010)

Alcohol-Impaired Driver Crashes									
Month	# of Days	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
		#	Rate per Day	#	Rate per Day	#	Rate per Day	#	Rate per Day
January	31	65	2.1	49	1.6	1	0.03	115	3.7
February	28	60	2.1	66	2.4	0	0.00	126	4.5
March	31	71	2.3	70	2.3	2	0.06	143	4.6
April	30	61	2.0	66	2.2	2	0.07	129	4.3
May	31	99	3.2	62	2.0	0	0.00	161	5.2
June	30	66	2.2	65	2.2	3	0.10	134	4.5
July	31	67	2.2	62	2.0	2	0.06	131	4.2
August	31	89	2.9	69	2.2	5	0.16	163	5.3
September	30	79	2.6	70	2.3	1	0.03	150	5.0
October	31	86	2.8	93	3.0	5	0.16	184	5.9
November	30	69	2.3	72	2.4	2	0.07	143	4.8
December	31	85	2.7	58	1.9	1	0.03	144	4.6
<b>Total</b>	<b>365</b>	<b>897</b>	<b>2.5</b>	<b>802</b>	<b>2.2</b>	<b>24</b>	<b>0.07</b>	<b>1,723</b>	<b>4.7</b>

- Overall, the highest rates per day of alcohol-impaired driver crashes were in October (5.9) and August (5.3) with the lowest rate per day in January (3.7).
- The highest rates per day of fatal alcohol-impaired driver crashes occurred in August and October.

## Crash Conditions

### Alcohol-Impaired Driver Crashes by Day of Week (Utah 2010)

Alcohol-Impaired Driver Crashes								
Day of Week	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Sunday	178	19.8%	152	19.0%	2	8.3%	332	19.3%
Monday	90	10.0%	91	11.3%	6	25.0%	187	10.9%
Tuesday	80	8.9%	79	9.9%	2	8.3%	161	9.3%
Wednesday	106	11.8%	91	11.3%	2	8.3%	199	11.5%
Thursday	109	12.2%	69	8.6%	3	12.5%	181	10.5%
Friday	139	15.5%	133	16.6%	2	8.3%	274	15.9%
Saturday	195	21.7%	187	23.3%	7	29.2%	389	22.6%
<b>Total</b>	<b>897</b>	<b>100.0%</b>	<b>802</b>	<b>100.0%</b>	<b>24</b>	<b>100.0%</b>	<b>1,723</b>	<b>100.0%</b>

- The highest percentage of alcohol-impaired driver total crashes occurred on Saturday and Sunday.
- The highest percentage of alcohol-impaired driver fatal crashes occurred on Saturday and Monday.

### Alcohol-Impaired Driver Crashes by Hour (Utah 2010)

Alcohol-Impaired Driver Crashes								
Hour	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Midnight	49	5.5%	49	6.1%	1	4.2%	99	5.7%
1 a.m.	84	9.4%	49	6.1%	1	4.2%	134	7.8%
2 a.m.	72	8.0%	51	6.4%	1	4.2%	124	7.2%
3 a.m.	34	3.8%	39	4.9%	1	4.2%	74	4.3%
4 a.m.	32	3.6%	30	3.7%	1	4.2%	63	3.7%
5 a.m.	22	2.5%	15	1.9%	0	0.0%	37	2.1%
6 a.m.	25	2.8%	16	2.0%	2	8.3%	43	2.5%
7 a.m.	11	1.2%	12	1.5%	1	4.2%	24	1.4%
8 a.m.	15	1.7%	9	1.1%	0	0.0%	24	1.4%
9 a.m.	18	2.0%	18	2.2%	2	8.3%	38	2.2%
10 a.m.	13	1.4%	8	1.0%	0	0.0%	21	1.2%
11 a.m.	16	1.8%	9	1.1%	0	0.0%	25	1.5%
Noon	19	2.1%	24	3.0%	0	0.0%	43	2.5%
1 p.m.	11	1.2%	21	2.6%	0	0.0%	32	1.9%
2 p.m.	20	2.2%	19	2.4%	2	8.3%	41	2.4%
3 p.m.	33	3.7%	35	4.4%	1	4.2%	69	4.0%
4 p.m.	34	3.8%	52	6.5%	0	0.0%	86	5.0%
5 p.m.	35	3.9%	39	4.9%	1	4.2%	75	4.4%
6 p.m.	53	5.9%	36	4.5%	0	0.0%	89	5.2%
7 p.m.	64	7.1%	54	6.7%	2	8.3%	120	7.0%
8 p.m.	47	5.2%	47	5.9%	2	8.3%	96	5.6%
9 p.m.	56	6.2%	67	8.4%	1	4.2%	124	7.2%
10 p.m.	65	7.2%	43	5.4%	1	4.2%	109	6.3%
11 p.m.	69	7.7%	60	7.5%	4	16.7%	133	7.7%
<b>Total</b>	<b>897</b>	<b>100.0%</b>	<b>802</b>	<b>100.0%</b>	<b>24</b>	<b>100.0%</b>	<b>1,723</b>	<b>100.0%</b>

- Alcohol-impaired driver total crashes peaked in the evening and early morning hours (7:00 p.m. to 2:59 a.m.).
- Fatal alcohol-impaired driver crashes varied by hour and peaked at 11:00 p.m.

# Speed



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## Section 4: Speed

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### Trends

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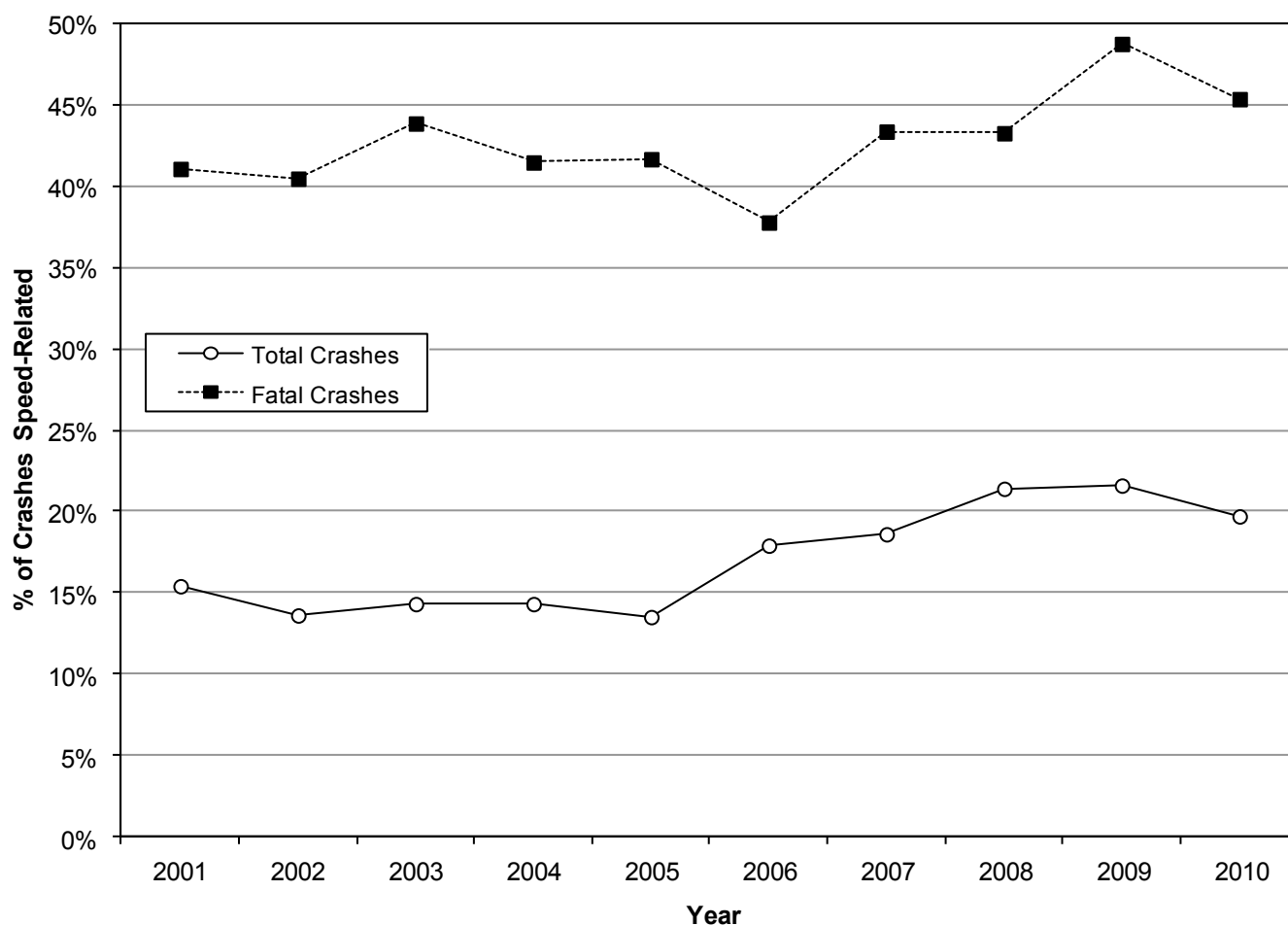
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## Trends

### Speed-Related Crashes (Utah 2001-2010)

Speed-Related Crashes												
Year	Property Damage Only			Injury			Fatal			Total		
	All #	Speed #	%	All #	Speed #	%	All #	Speed #	%	All #	Speed #	%
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%
2008	38,997	8,311	21.3%	17,125	3,622	21.2%	245	106	43.3%	56,367	12,039	21.4%
2009	35,398	7,607	21.5%	15,752	3,379	21.5%	217	106	48.8%	51,367	11,092	21.6%
2010	34,155	6,591	19.3%	14,995	3,026	20.2%	218	99	45.4%	49,368	9,716	19.7%
<b>Total</b>	<b>356,469</b>	<b>59,997</b>	<b>16.8%</b>	<b>180,892</b>	<b>31,047</b>	<b>17.2%</b>	<b>2,476</b>	<b>1,055</b>	<b>42.6%</b>	<b>539,837</b>	<b>92,099</b>	<b>17.1%</b>



- Speed-related crashes are a concern because of the increased potential for severe injury and death.
- The 10-year trend shows that 17.1% of total crashes and 42.6% of fatal crashes in Utah are speed-related.
- The percent of crashes that were speed-related decreased after four years of increasing.
- Speed was a factor in 55.3% of fatal crashes in 2010 where speed was known.



## Counties

### Speed-Related Crashes by County (Utah 2010)

Speed-Related Crashes								
County	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	Rate per 100 Million VMT	#	Rate per 100 Million VMT	#	Rate per 100 Million VMT	#	Rate per 100 Million VMT
Morgan	66	49.3	19	14.2	0	0.00	85	63.5
Rich	16	33.6	11	23.1	1	2.10	28	58.7
Wasatch	121	37.4	64	19.8	1	0.31	186	57.4
Beaver	96	37.8	39	15.4	1	0.39	136	53.6
Duchesne	67	28.8	35	15.1	3	1.29	105	45.2
Iron	184	25.7	119	16.6	4	0.56	307	42.8
Salt Lake	2,533	29.3	1,033	11.9	19	0.22	3,585	41.4
Summit	213	29.6	69	9.6	4	0.56	286	39.7
Millard	119	25.4	65	13.9	2	0.43	186	39.7
Utah	995	26.2	496	13.1	14	0.37	1,505	39.7
Box Elder	263	28.5	91	9.9	6	0.65	360	39.0
Sevier	73	22.2	51	15.5	1	0.30	125	38.0
Juab	100	25.6	43	11.0	5	1.28	148	37.9
Cache	236	27.3	90	10.4	2	0.23	328	37.9
Weber	423	25.7	178	10.8	7	0.42	608	36.9
Garfield	29	25.6	11	9.7	1	0.88	41	36.2
Uintah	80	21.4	40	10.7	3	0.80	123	32.9
Carbon	58	19.3	27	9.0	1	0.33	86	28.6
Wayne	6	14.3	6	14.3	0	0.00	12	28.5
Davis	509	18.9	223	8.3	6	0.22	738	27.5
Piute	7	23.4	1	3.3	0	0.00	8	26.7
Emery	51	15.8	32	9.9	3	0.93	86	26.6
Sanpete	32	14.7	22	10.1	1	0.46	55	25.2
Tooele	103	12.2	96	11.4	1	0.12	200	23.8
Kane	20	13.8	10	6.9	0	0.00	30	20.7
San Juan	33	10.1	25	7.7	1	0.31	59	18.1
Washington	121	8.8	110	8.0	11	0.80	242	17.6
Grand	34	10.8	19	6.0	0	0.00	53	16.8
Daggett	3	9.5	1	3.2	1	3.18	5	15.9
<b>Statewide</b>	<b>6,591</b>	<b>24.8</b>	<b>3,026</b>	<b>11.4</b>	<b>99</b>	<b>0.37</b>	<b>9,716</b>	<b>36.5</b>

- Morgan (63.5), Rich (58.7), and Wasatch (57.4) counties had the highest rates of speed-related total crashes per 100 million vehicle miles traveled.
- Daggett (3.18), Rich (2.10), and Duchesne (1.29) counties had the highest rates of fatal speed-related crashes per 100 million vehicle miles traveled.
- Daggett (15.9), Grand (16.8), and Washington (17.6) counties had the lowest rates of speed-related total crashes per 100 million vehicle miles traveled.

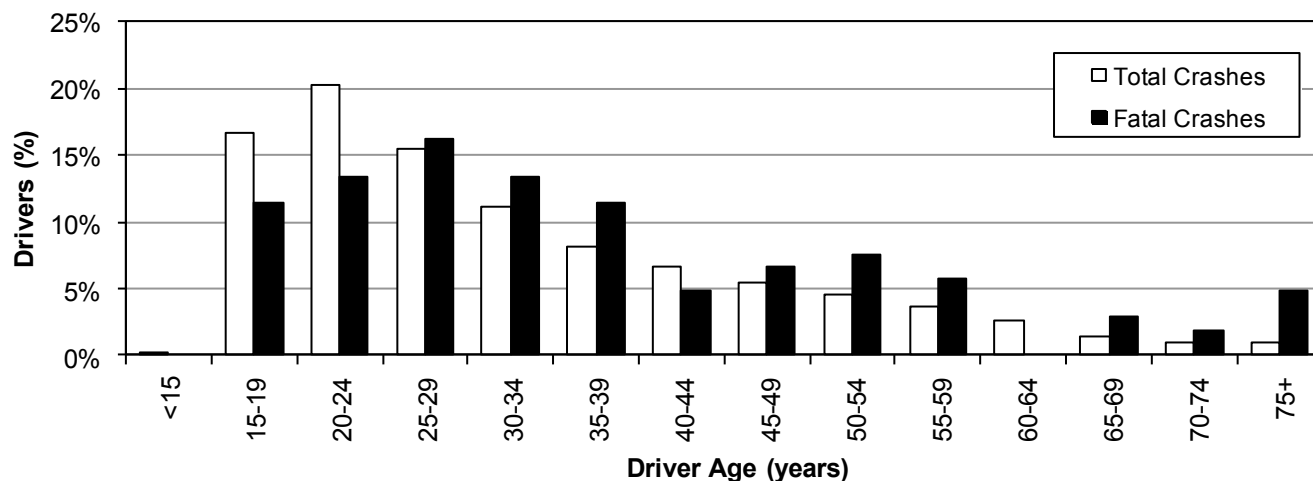


**Stop speeding before it stops you**

## Drivers

### Age of Drivers in Speed-Related Crashes (Utah 2010)

Speed-Related Drivers								
Age	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
<15	3	0.0%	13	0.4%	0	0.0%	16	0.2%
15-19	1,143	16.5%	549	17.2%	12	11.4%	1,704	16.6%
20-24	1,427	20.6%	633	19.8%	14	13.3%	2,074	20.3%
25-29	1,136	16.4%	437	13.7%	17	16.2%	1,590	15.5%
30-34	799	11.5%	330	10.3%	14	13.3%	1,143	11.2%
35-39	528	7.6%	293	9.2%	12	11.4%	833	8.1%
40-44	471	6.8%	209	6.5%	5	4.8%	685	6.7%
45-49	365	5.3%	193	6.0%	7	6.7%	565	5.5%
50-54	307	4.4%	145	4.5%	8	7.6%	460	4.5%
55-59	225	3.2%	139	4.4%	6	5.7%	370	3.6%
60-64	191	2.8%	75	2.3%	0	0.0%	266	2.6%
65-69	86	1.2%	52	1.6%	3	2.9%	141	1.4%
70-74	52	0.7%	41	1.3%	2	1.9%	95	0.9%
75+	58	0.8%	38	1.2%	5	4.8%	101	1.0%
Unknown	147	2.1%	46	1.4%	0	0.0%	193	1.9%
<b>Total</b>	<b>6,938</b>	<b>100.0%</b>	<b>3,193</b>	<b>100.0%</b>	<b>105</b>	<b>100.0%</b>	<b>10,236</b>	<b>100.0%</b>



- Younger drivers had the highest percentage of total speed-related crashes and fatal crashes.

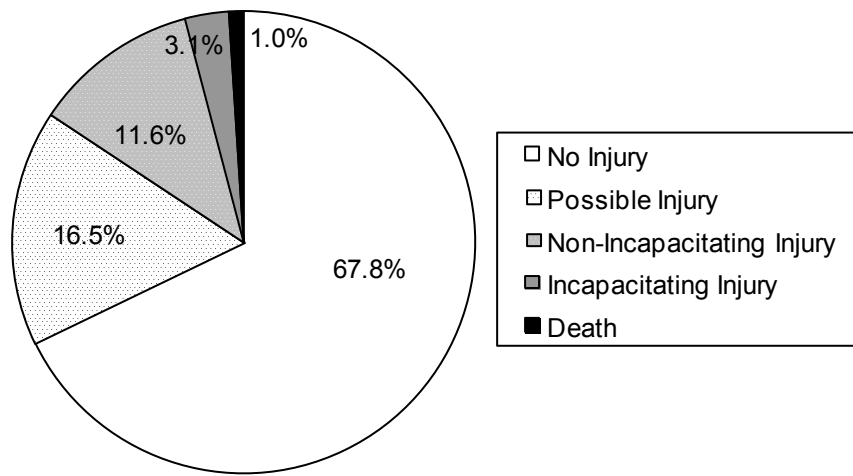
### Gender of Drivers in Speed-Related Crashes (Utah 2010)

Speed-Related Drivers								
Gender	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Male	4,347	62.7%	2,007	62.9%	73	69.5%	6,427	62.8%
Female	2,466	35.5%	1,156	36.2%	32	30.5%	3,654	35.7%
Unknown	125	1.8%	30	0.9%	0	0.0%	155	1.5%
<b>Total</b>	<b>6,938</b>	<b>100.0%</b>	<b>3,193</b>	<b>100.0%</b>	<b>105</b>	<b>100.0%</b>	<b>10,236</b>	<b>100.0%</b>

- Male drivers represented 62.8% of the drivers in speed-related total crashes and 69.5% of the drivers in speed-related fatal crashes.

## Crash Conditions

### Speed-Related Crash Severity (Utah 2010)

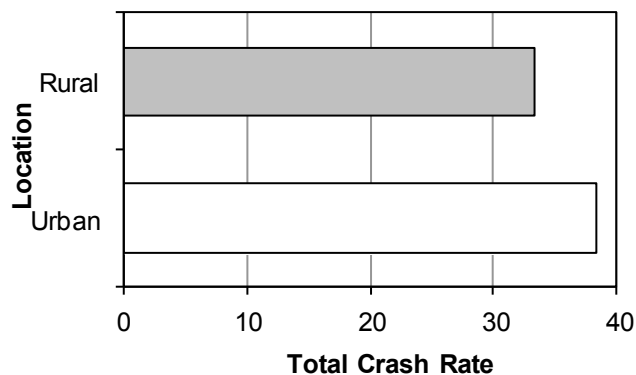


- A higher percentage of speed-related crashes were fatal (1.0%) compared to all motor vehicle crashes (0.4%).
- Speed-related crashes were 3.4 times more likely to be fatal than other motor vehicle crashes.
- The risk of death and severe injury is a direct exponential function of speed.

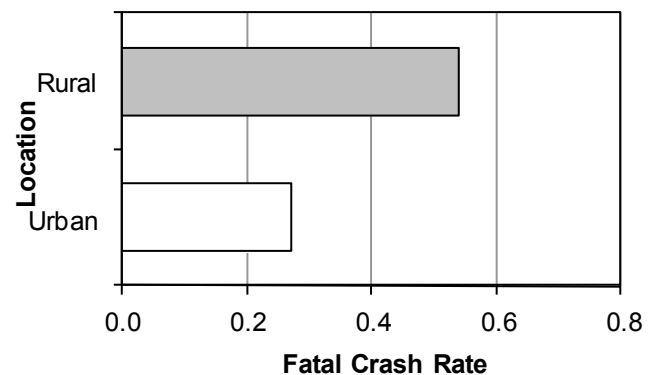
### Speed-Related Crashes by Urban/Rural Location (Utah 2010)

Speed-Related Crashes								
Location	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	Rate per 100 Million VMT	#	Rate per 100 Million VMT	#	Rate per 100 Million VMT	#	Rate per 100 Million VMT
Urban	4,460	26.6	1,930	11.5	46	0.27	6,436	38.4
Rural	2,131	21.7	1,096	11.1	53	0.54	3,280	33.3
<b>Total</b>	<b>6,591</b>	<b>24.8</b>	<b>3,026</b>	<b>11.4</b>	<b>99</b>	<b>0.37</b>	<b>9,716</b>	<b>36.5</b>

#### Total Crash Rates (Utah 2010)



#### Fatal Crash Rates (Utah 2010)



- 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 2.3 times more likely to result in a death than speed-related crashes in urban areas.

## Crash Conditions

### Speed-Related Crashes by Month (Utah 2010)

Speed-Related Crashes								
Month	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	Rate per Day	#	Rate per Day	#	Rate per Day	#	Rate per Day
January	815	26.3	279	9.0	1	0.03	1,095	35.3
February	442	15.8	206	7.4	2	0.07	650	23.2
March	474	15.3	248	8.0	12	0.39	734	23.7
April	495	16.5	246	8.2	11	0.37	752	25.1
May	329	10.6	203	6.5	8	0.26	540	17.4
June	273	9.1	222	7.4	11	0.37	506	16.9
July	252	8.1	189	6.1	7	0.23	448	14.5
August	276	8.9	185	6.0	10	0.32	471	15.2
September	285	9.5	211	7.0	8	0.27	504	16.8
October	388	12.5	249	8.0	8	0.26	645	20.8
November	1,068	35.6	353	11.8	6	0.20	1,427	47.6
December	1,494	48.2	435	14.0	15	0.48	1,944	62.7
<b>Total</b>	<b>6,591</b>	<b>18.1</b>	<b>3,026</b>	<b>8.3</b>	<b>99</b>	<b>0.27</b>	<b>9,716</b>	<b>26.6</b>

- Overall, December (62.7), November (47.5), and January (35.3) had the highest rates of speed-related crashes per day.
- December (0.48) and March (0.39) had the highest rates per day of fatal speed-related crashes.

### Speed-Related Crashes by Day of Week (Utah 2010)

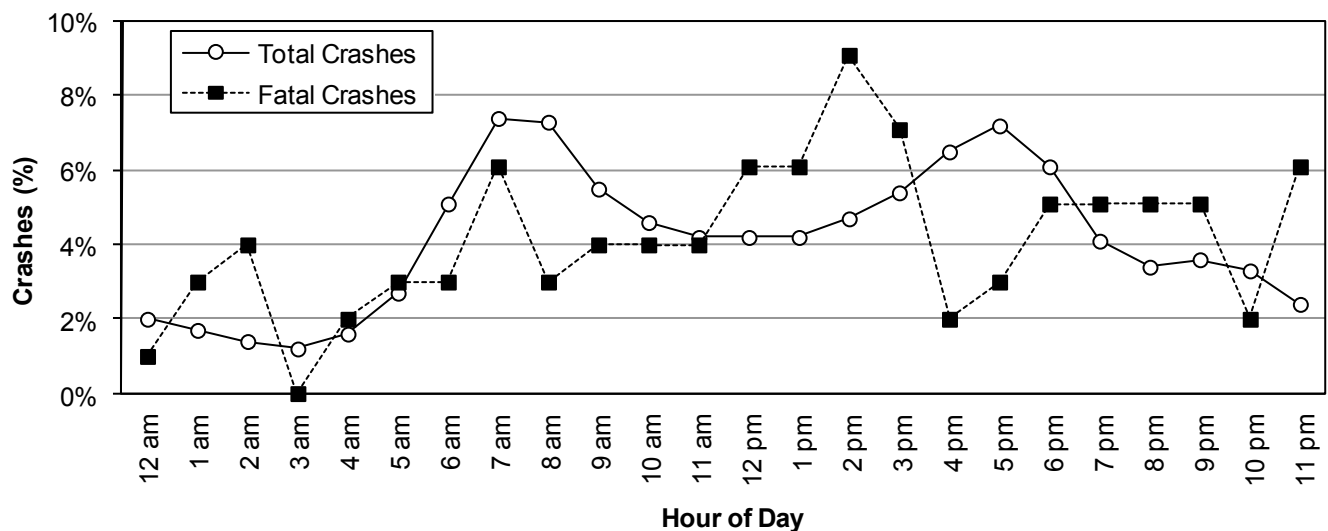
Speed-Related Crashes								
Day of Week	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Sunday	918	13.9%	398	13.2%	8	8.1%	1,324	13.6%
Monday	960	14.6%	451	14.9%	16	16.2%	1,427	14.7%
Tuesday	845	12.8%	385	12.7%	10	10.1%	1,240	12.8%
Wednesday	1,190	18.1%	478	15.8%	9	9.1%	1,677	17.3%
Thursday	928	14.1%	419	13.8%	20	20.2%	1,367	14.1%
Friday	901	13.7%	429	14.2%	9	9.1%	1,339	13.8%
Saturday	849	12.9%	466	15.4%	27	27.3%	1,342	13.8%
<b>Total</b>	<b>6,591</b>	<b>100.0%</b>	<b>3,026</b>	<b>100.0%</b>	<b>99</b>	<b>100.0%</b>	<b>9,716</b>	<b>100.0%</b>

- The highest percentage of speed-related total crashes occurred on Wednesday (17.2%) while the highest percentage of fatal crashes occurred on Saturday (27.3%).
- The lowest percentage of speed-related total crashes occurred on Tuesday (12.8%) while the lowest percentage of fatal crashes occurred on Sunday (8.1%).

## Crash Conditions

### Speed-Related Crashes by Hour (Utah 2010)

Speed-Related Crashes								
Hour	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Midnight	125	1.9%	71	2.3%	1	1.0%	197	2.0%
1 a.m.	109	1.7%	55	1.8%	3	3.0%	167	1.7%
2 a.m.	78	1.2%	58	1.9%	4	4.0%	140	1.4%
3 a.m.	75	1.1%	43	1.4%	0	0.0%	118	1.2%
4 a.m.	107	1.6%	43	1.4%	2	2.0%	152	1.6%
5 a.m.	204	3.1%	61	2.0%	3	3.0%	268	2.8%
6 a.m.	366	5.6%	128	4.2%	3	3.0%	497	5.1%
7 a.m.	519	7.9%	189	6.2%	6	6.1%	714	7.3%
8 a.m.	543	8.2%	161	5.3%	3	3.0%	707	7.3%
9 a.m.	403	6.1%	126	4.2%	4	4.0%	533	5.5%
10 a.m.	302	4.6%	143	4.7%	4	4.0%	449	4.6%
11 a.m.	273	4.1%	127	4.2%	4	4.0%	404	4.2%
Noon	260	3.9%	139	4.6%	6	6.1%	405	4.2%
1 p.m.	244	3.7%	160	5.3%	6	6.1%	410	4.2%
2 p.m.	277	4.2%	169	5.6%	9	9.1%	455	4.7%
3 p.m.	317	4.8%	201	6.6%	7	7.1%	525	5.4%
4 p.m.	426	6.5%	205	6.8%	2	2.0%	633	6.5%
5 p.m.	451	6.8%	249	8.2%	3	3.0%	703	7.2%
6 p.m.	409	6.2%	180	5.9%	5	5.1%	594	6.1%
7 p.m.	268	4.1%	129	4.3%	5	5.1%	402	4.1%
8 p.m.	215	3.3%	113	3.7%	5	5.1%	333	3.4%
9 p.m.	255	3.9%	94	3.1%	5	5.1%	354	3.6%
10 p.m.	216	3.3%	106	3.5%	2	2.0%	324	3.3%
11 p.m.	149	2.3%	76	2.5%	6	6.1%	231	2.4%
Unknown	0	0.0%	0	0.0%	1	1.0%	1	0.0%
<b>Total</b>	<b>6,591</b>	<b>100.0%</b>	<b>3,026</b>	<b>100.0%</b>	<b>99</b>	<b>100.0%</b>	<b>9,716</b>	<b>100.0%</b>



- Total speed-related crashes peaked in the morning (6:00 a.m. to 9:59 a.m.), with another peak in the late afternoon/evening (3:00 p.m. to 6:59 p.m.).
- Fatal speed-related crashes varied by hour and were highest during the 2:00 p.m. and 3:00 p.m. hours.

## Crash Conditions

### Speed-Related Crashes by Vehicle Type (Utah 2010)

Speed-Related Vehicles								
Vehicle Type	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Passenger Car	3,684	53.1%	1,483	46.4%	44	41.9%	5,211	50.9%
SUV	1,382	19.9%	691	21.6%	19	18.1%	2,092	20.4%
Pickup Truck	1,330	19.2%	579	18.1%	17	16.2%	1,926	18.8%
Van	293	4.2%	126	3.9%	5	4.8%	424	4.1%
Semi/Large Truck	198	2.9%	85	2.7%	5	4.8%	288	2.8%
Motorcycle	16	0.2%	178	5.6%	10	9.5%	204	2.0%
Bus	5	0.1%	2	0.1%	0	0.0%	7	0.1%
Other	8	0.1%	45	1.4%	5	4.8%	58	0.6%
Unknown	22	0.3%	4	0.1%	0	0.0%	26	0.3%
<b>Total</b>	<b>6,938</b>	<b>100.0%</b>	<b>3,193</b>	<b>100.0%</b>	<b>105</b>	<b>100.0%</b>	<b>10,236</b>	<b>100.0%</b>

- For total speed-related crashes, passenger car and SUV were the leading vehicle types.
- For fatal speed-related crashes, passenger car and SUV were the leading vehicle types.
- Motorcycle was overrepresented in speed-related crashes compared to other vehicle types in all crashes.
- Van was underrepresented in speed-related crashes compared to other vehicle types in all crashes.

### Speed-Related Crashes by Speed Limit (Utah 2010)

Speed-Related Vehicles								
Speed Limit	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
5-15 MPH	83	1.2%	28	0.9%	1	1.0%	112	1.1%
20-25 MPH	661	9.5%	345	10.8%	6	5.7%	1,012	9.9%
30-35 MPH	706	10.2%	443	13.9%	18	17.1%	1,167	11.4%
40-45 MPH	729	10.5%	432	13.5%	13	12.4%	1,174	11.5%
50-55 MPH	1,058	15.2%	441	13.8%	23	21.9%	1,522	14.9%
60-65 MPH	2,477	35.7%	942	29.5%	23	21.9%	3,442	33.6%
70+ MPH	836	12.0%	355	11.1%	17	16.2%	1,208	11.8%
Unknown	388	5.6%	207	6.5%	4	3.8%	599	5.9%
<b>Total</b>	<b>6,938</b>	<b>100.0%</b>	<b>3,193</b>	<b>100.0%</b>	<b>105</b>	<b>100.0%</b>	<b>10,236</b>	<b>100.0%</b>

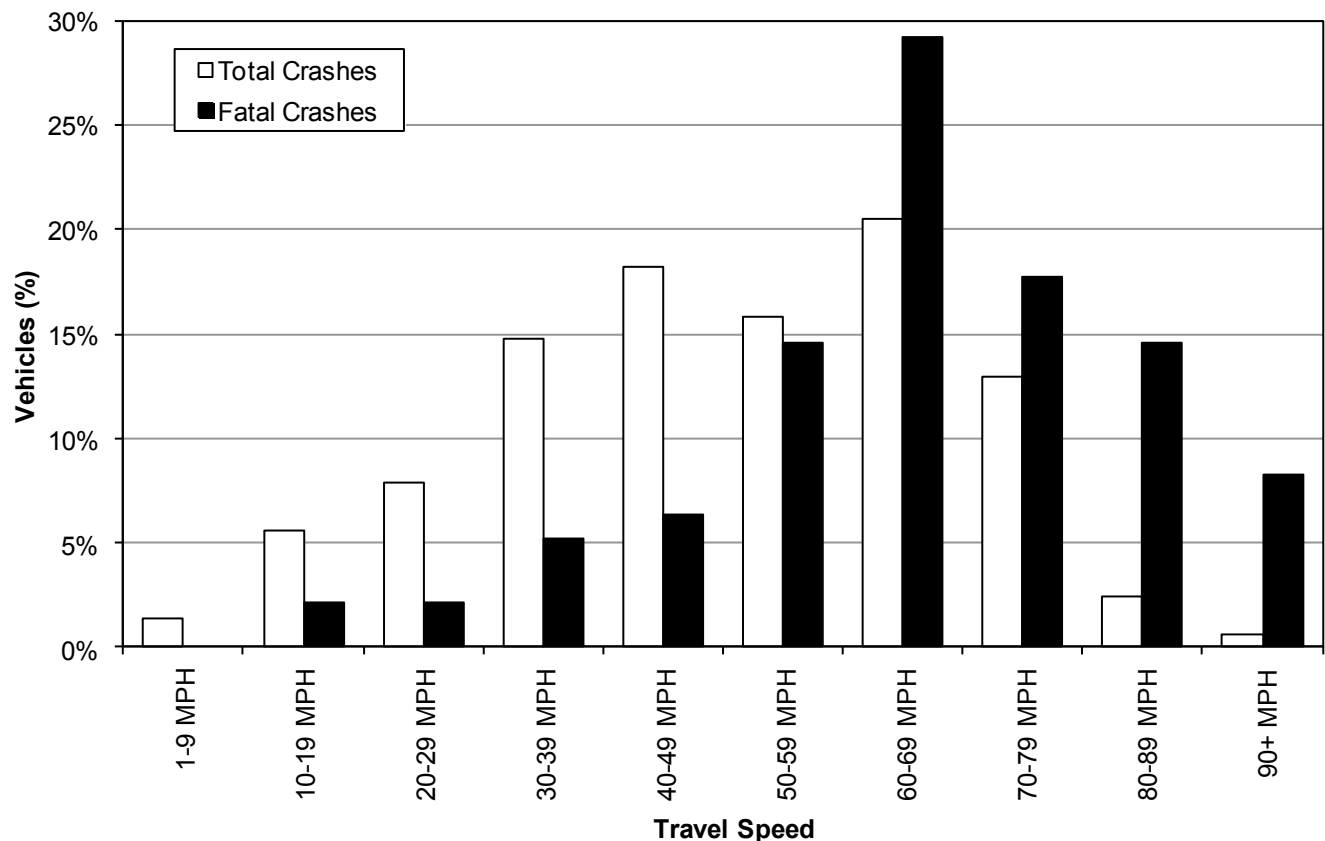
- Nearly two-thirds (64.1% of known) of total speed-related crashes occurred where the speed limit was 60 MPH or higher.
- Fatal speed-related crashes were more likely to occur where there were higher speed limits. Nearly two-thirds (62.4% of known) of fatal speed-related crashes occurred where the speed 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 2010)

Speed-Related Vehicles								
Travel Speed	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
1-9 MPH	97	1.4%	30	0.9%	0	0.0%	127	1.2%
10-19 MPH	408	5.9%	99	3.1%	2	1.9%	509	5.0%
20-29 MPH	564	8.1%	160	5.0%	2	1.9%	726	7.1%
30-39 MPH	901	13.0%	446	14.0%	5	4.8%	1,352	13.2%
40-49 MPH	1,098	15.8%	564	17.7%	6	5.7%	1,668	16.3%
50-59 MPH	969	14.0%	458	14.3%	14	13.3%	1,441	14.1%
60-69 MPH	1,260	18.2%	587	18.4%	28	26.7%	1,875	18.3%
70-79 MPH	807	11.6%	354	11.1%	17	16.2%	1,178	11.5%
80-89 MPH	86	1.2%	117	3.7%	14	13.3%	217	2.1%
90+ MPH	16	0.2%	31	1.0%	8	7.6%	55	0.5%
Unknown	732	10.6%	347	10.9%	9	8.6%	1,088	10.6%
<b>Total</b>	<b>6,938</b>	<b>100.0%</b>	<b>3,193</b>	<b>100.0%</b>	<b>105</b>	<b>100.0%</b>	<b>10,236</b>	<b>100.0%</b>

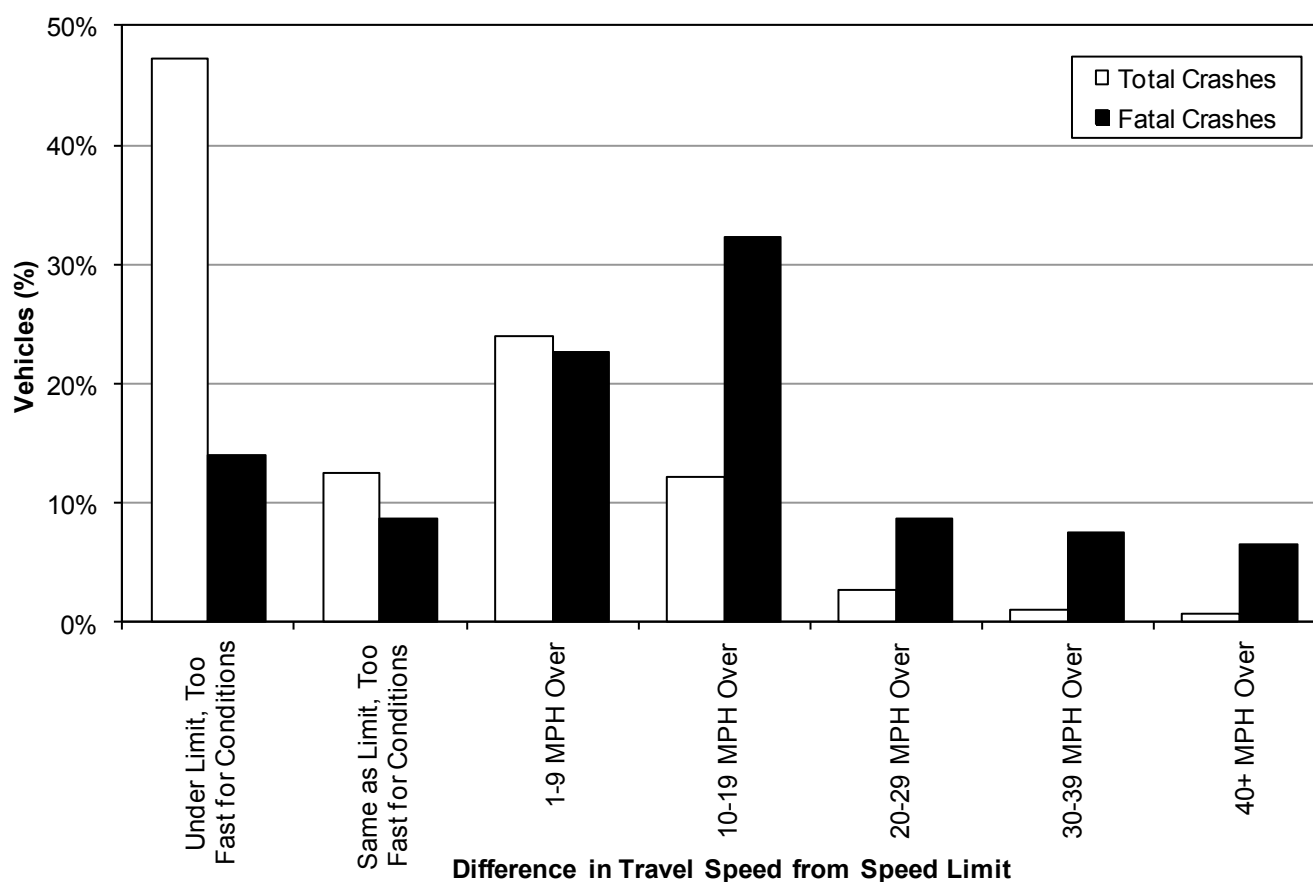


- 60-69 MPH (20.5% of known) and 40-49 MPH (18.2% of known) were the leading travel speeds of vehicles in total speed-related crashes.
- Two-thirds (69.8% of known) of vehicles in fatal speed-related crashes were traveling 60 MPH or higher.
- Speed-related vehicles in fatal crashes were more likely to 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 and death.
- 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 2010)

Speed-Related Vehicles								
Travel Speed vs. Speed Limit	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Under Limit, Too Fast for Conditions	3,201	46.1%	1,041	32.6%	13	12.4%	<b>4,255</b>	<b>41.6%</b>
Same as Limit, Too Fast for Conditions	784	11.3%	334	10.5%	8	7.6%	<b>1,126</b>	<b>11.0%</b>
1-9 MPH Over Speed Limit	1,371	19.8%	761	23.8%	21	20.0%	<b>2,153</b>	<b>21.0%</b>
10-19 MPH Over Speed Limit	625	9.0%	438	13.7%	30	28.6%	<b>1,093</b>	<b>10.7%</b>
20-29 MPH Over Speed Limit	100	1.4%	133	4.2%	8	7.6%	<b>241</b>	<b>2.4%</b>
30-39 MPH Over Speed Limit	33	0.5%	47	1.5%	7	6.7%	<b>87</b>	<b>0.8%</b>
40+ MPH Over Speed Limit	17	0.2%	29	0.9%	6	5.7%	<b>52</b>	<b>0.5%</b>
Unknown	807	11.6%	410	12.8%	12	11.4%	<b>1,229</b>	<b>12.0%</b>
<b>Total</b>	<b>6,938</b>	<b>100.0%</b>	<b>3,193</b>	<b>100.0%</b>	<b>105</b>	<b>100.0%</b>	<b>10,236</b>	<b>100.0%</b>



- It is troubling to see that 3,623 vehicles in crashes were known to be 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.
- Three out of every four speed-related vehicles (77.4% where speed was known) in fatal crashes were traveling over the posted speed limit.
- Speed increases the crash energy by the square of the speeds. When impact speed increases from 40 to 60 MPH (a 50% increase), the energy that needs to be managed increases by 125%.

# Teenage Drivers



2

## Section 5: Teenage Drivers

### Trends

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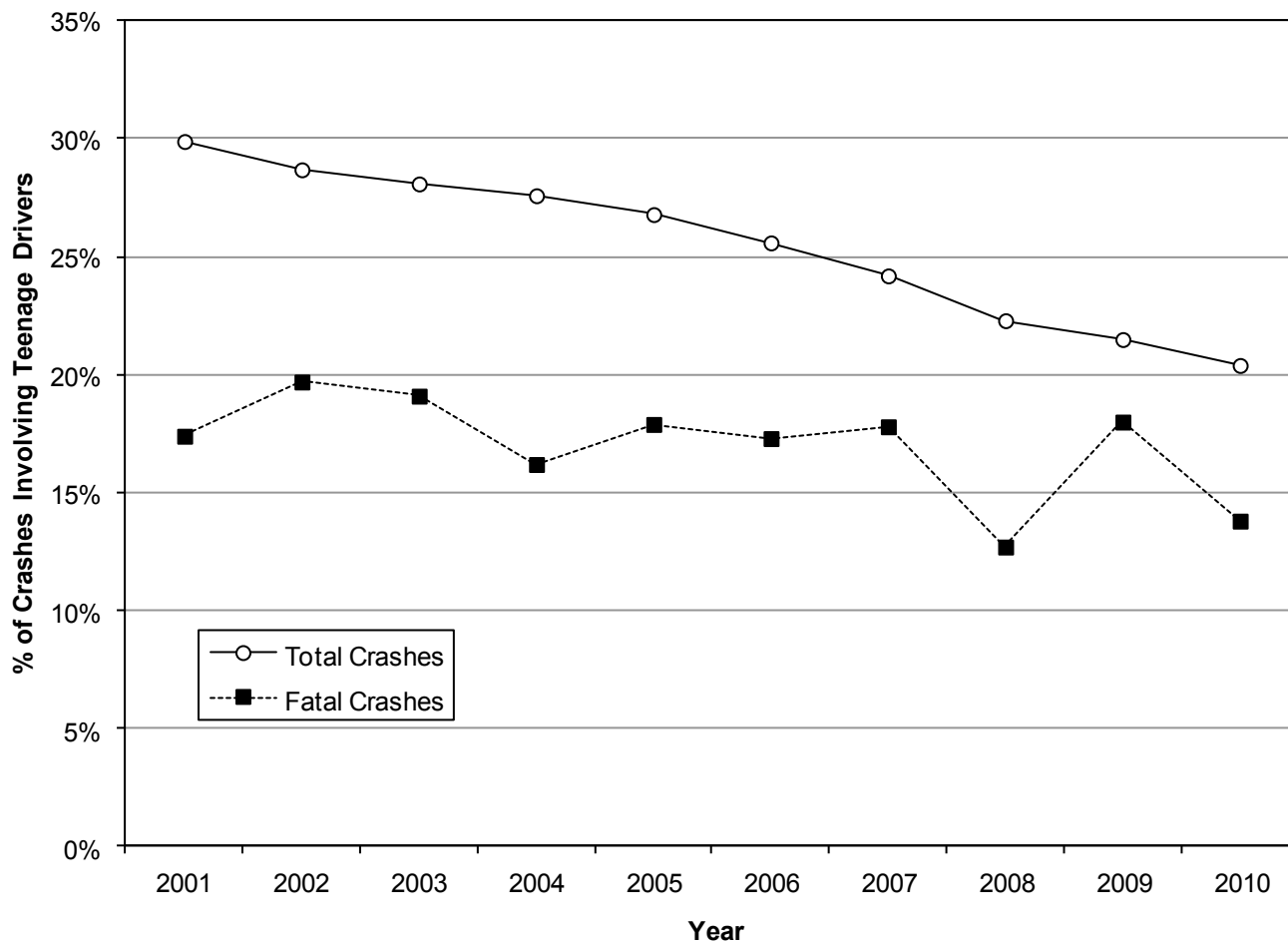
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## Trends

### Teenage Driver Crashes (Utah 2001-2010)

Teenage Driver Crashes												
Year	Property Damage Only			Injury			Fatal			Total		
	All	Teen Driver		All	Teen Driver		All	Teen Driver		All	Teen Driver	
	#	#	%	#	#	%	#	#	%	#	#	%
2001	33,113	9,686	29.3%	19,332	6,006	31.1%	258	45	17.4%	52,703	15,737	29.9%
2002	33,542	9,478	28.3%	19,552	5,776	29.5%	274	54	19.7%	53,368	15,308	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%
2008	38,997	8,512	21.8%	17,125	4,007	23.4%	245	31	12.7%	56,367	12,550	22.3%
2009	35,398	7,500	21.2%	15,752	3,495	22.2%	217	39	18.0%	51,367	11,034	21.5%
2010	34,155	6,886	20.2%	14,995	3,181	21.2%	218	30	13.8%	49,368	10,097	20.5%
Total	356,469	88,908	24.9%	180,892	48,387	26.7%	2,476	422	17.0%	539,837	137,717	25.5%



- 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 25.5% of all crashes in Utah involved a teenage driver with a decreasing trend over the last 10 years.

## Counties

### Teenage Driver Crashes by County (Utah 2010)

County	Teenage Driver Crashes											
	PDO Crashes			Injury Crashes			Fatal Crashes			Total		
	All #	Teen Driver #	%	All #	Teen Driver #	%	All #	Teen Driver #	%	All #	Teen Driver #	%
Cache	1,509	380	25.2%	474	151	31.9%	4	2	50.0%	1,987	533	26.8%
Washington	1,019	248	24.3%	623	161	25.8%	14	1	7.1%	1,656	410	24.8%
Davis	2,698	670	24.8%	1,250	301	24.1%	10	2	20.0%	3,958	973	24.6%
Weber	2,606	641	24.6%	1,249	275	22.0%	17	7	41.2%	3,872	923	23.8%
Utah	4,968	1,155	23.2%	2,595	607	23.4%	26	2	7.7%	7,589	1,764	23.2%
Rich	56	13	23.2%	21	4	19.0%	2	1	50.0%	79	18	22.8%
Sanpete	151	30	19.9%	70	20	28.6%	7	0	0.0%	228	50	21.9%
Uintah	403	83	20.6%	134	30	22.4%	5	0	0.0%	542	113	20.8%
Salt Lake	15,027	2,899	19.3%	6,422	1,266	19.7%	57	7	12.3%	21,506	4,172	19.4%
Morgan	130	25	19.2%	43	8	18.6%	0	0	0.0%	173	33	19.1%
Carbon	327	59	18.0%	86	19	22.1%	1	0	0.0%	414	78	18.8%
Iron	621	111	17.9%	259	53	20.5%	6	1	16.7%	886	165	18.6%
Wasatch	402	71	17.7%	151	26	17.2%	1	0	0.0%	554	97	17.5%
Tooele	454	73	16.1%	267	51	19.1%	9	0	0.0%	730	124	17.0%
Sevier	283	39	13.8%	143	27	18.9%	4	1	25.0%	430	67	15.6%
Piute	27	4	14.8%	7	1	14.3%	0	0	0.0%	34	5	14.7%
Box Elder	758	86	11.3%	270	51	18.9%	12	4	33.3%	1,040	141	13.6%
Duchesne	345	42	12.2%	93	17	18.3%	8	1	12.5%	446	60	13.5%
Summit	772	99	12.8%	209	29	13.9%	5	0	0.0%	986	128	13.0%
Wayne	38	4	10.5%	18	3	16.7%	0	0	0.0%	56	7	12.5%
Emery	201	23	11.4%	75	11	14.7%	5	0	0.0%	281	34	12.1%
Juab	253	24	9.5%	93	18	19.4%	6	0	0.0%	352	42	11.9%
Millard	269	26	9.7%	132	20	15.2%	6	1	16.7%	407	47	11.5%
Grand	147	17	11.6%	75	9	12.0%	6	0	0.0%	228	26	11.4%
Garfield	122	14	11.5%	54	6	11.1%	2	0	0.0%	178	20	11.2%
Daggett	18	2	11.1%	8	1	12.5%	1	0	0.0%	27	3	11.1%
Beaver	212	22	10.4%	61	7	11.5%	1	0	0.0%	274	29	10.6%
Kane	152	13	8.6%	48	6	12.5%	1	0	0.0%	201	19	9.5%
San Juan	187	13	7.0%	65	3	4.6%	2	0	0.0%	254	16	6.3%
<b>Statewide</b>	<b>34,155</b>	<b>6,886</b>	<b>20.2%</b>	<b>14,995</b>	<b>3,181</b>	<b>21.2%</b>	<b>218</b>	<b>30</b>	<b>13.8%</b>	<b>49,368</b>	<b>10,097</b>	<b>20.5%</b>

- Overall, Cache (26.8%), Washington (24.7%), and Davis (24.6%) counties had the highest percentages of crashes involving a teenage driver.
- Cache (50.0%), Rich (50.0%), and Weber (41.2%) counties had the highest percentages of fatal crashes involving a teenage driver.
- Overall, San Juan (6.3%), Kane (9.5%), and Beaver (10.6%) counties had the lowest percentages of crashes involving a teenage driver.
- Statewide, teenage driver crashes represented 20.4% of all crashes and 13.8% of all fatal crashes.



## Persons Involved

### Restraint Use of Teen Drivers and Their Passengers (Utah 2010)

Persons (Teen Driver and Passengers)								
Restraint Use	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Restrained	12,555	97.0%	2,062	89.6%	6	31.6%	14,623	95.8%
Unrestrained	394	3.0%	239	10.4%	13	68.4%	646	4.2%
<b>Total</b>	<b>12,949</b>	<b>100.0%</b>	<b>2,301</b>	<b>100.0%</b>	<b>19</b>	<b>100.0%</b>	<b>15,269</b>	<b>100.0%</b>

- Overall, most teen drivers and their passengers were restrained (95.8%).
- Only 31.6% of occupants killed in teenage driven vehicles were restrained.
- In fact, teen drivers and their passengers that were unrestrained were 50 times more likely than restrained occupants to be killed in a crash.

### Number of Occupants in Teenage Driven Vehicles (Utah 2010)

Teenage Driven Vehicles								
Number of Occupants	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
1	5,432	71.7%	2,103	61.0%	15	48.4%	7,550	68.3%
2	1,398	18.5%	860	24.9%	4	12.9%	2,262	20.5%
3	449	5.9%	258	7.5%	5	16.1%	712	6.4%
4 or more	294	3.9%	228	6.6%	7	22.6%	529	4.8%
<b>Total</b>	<b>7,573</b>	<b>100.0%</b>	<b>3,449</b>	<b>100.0%</b>	<b>31</b>	<b>100.0%</b>	<b>11,053</b>	<b>100.0%</b>

- Over two-thirds of teenage driven vehicles (68.3%) in crashes contained only the teenage driver.
- In comparison, one-half (48.4%) of the teenage driven vehicles in fatal crashes contained only the driver.
- The more occupants in the car the more likely a crash involved injury or death. Crashes where the teenage driven vehicle contained four or more occupants were 5.9 times more likely to be fatal than crashes involving teenage driven vehicles with fewer occupants.

## Drivers

### Gender of Teenage Drivers in Crashes (Utah 2010)

Teenage Drivers								
Gender	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Male	3,876	51.2%	1,697	49.2%	21	67.7%	5,594	50.6%
Female	3,681	48.6%	1,748	50.7%	10	32.3%	5,439	49.2%
Unknown	16	0.2%	4	0.1%	0	0.0%	20	0.2%
<b>Total</b>	<b>7,573</b>	<b>100.0%</b>	<b>3,449</b>	<b>100.0%</b>	<b>31</b>	<b>100.0%</b>	<b>11,053</b>	<b>100.0%</b>

- The majority of teen drivers in all motor vehicle crashes (50.6%) and fatal crashes (67.7%) were male.
- Crashes involving male teen drivers were 2.1 times more likely to be fatal than female teen driver crashes.

### Previous Driving Violations of Teens in Fatal Crashes (Utah 2010)

- Of the 31 teenage drivers in fatal crashes, 14 (45.2%) had been previously convicted of a moving traffic violation in the past three years.

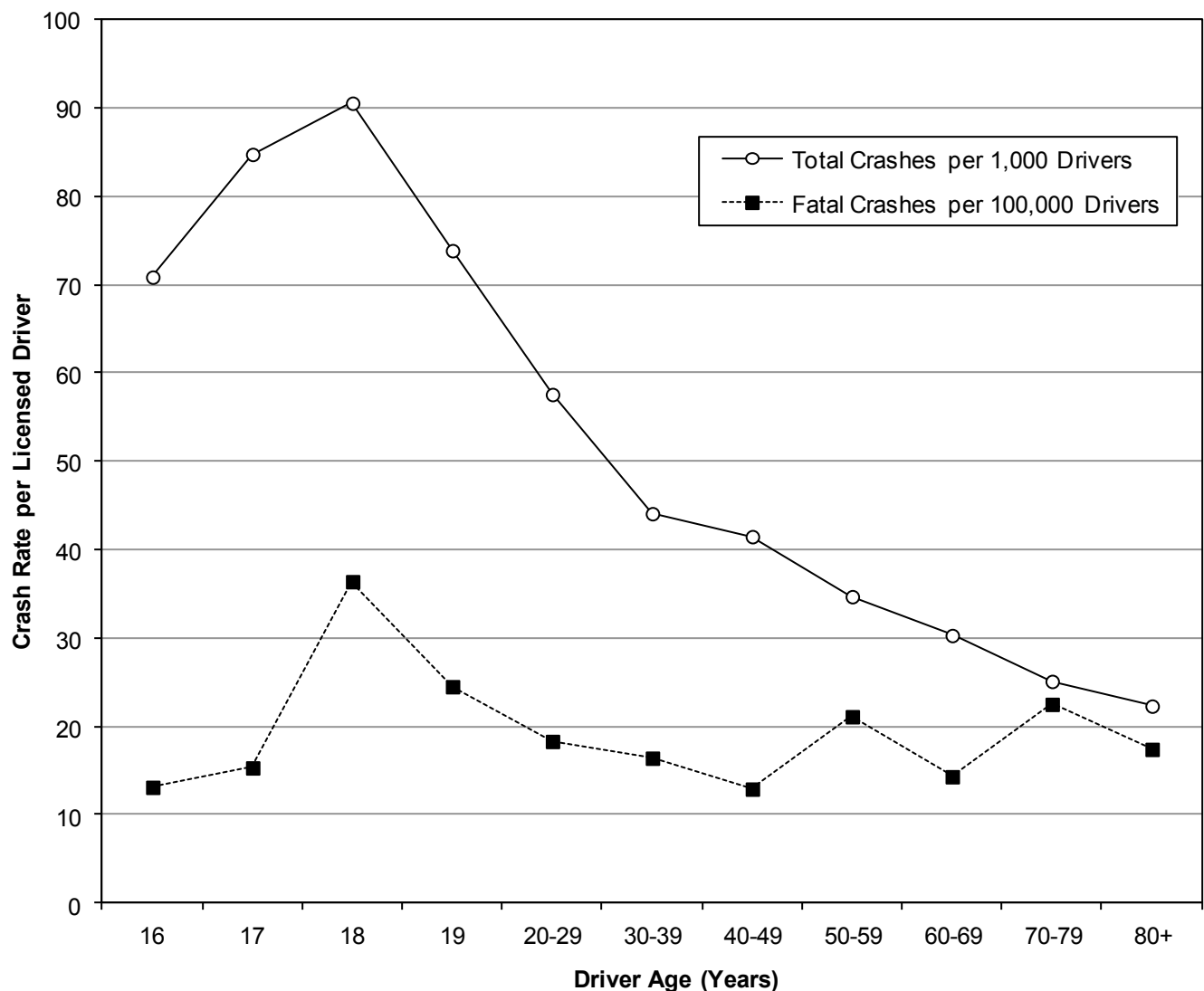
### Alcohol Involvement of Teenage Drivers (Utah 2010)

- Of the 31 teenage drivers in fatal crashes, three (9.7%) were impaired by alcohol.



**Age of Teenage Drivers in Crashes (Utah 2010)**

<b>Teenage Drivers</b>												
<b>Age</b>	<b>PDO Crashes</b>			<b>Injury Crashes</b>			<b>Fatal Crashes</b>			<b>Total</b>		
	<b>#</b>	<b>%</b>	<b>Rate per 1,000 Drivers</b>	<b>#</b>	<b>%</b>	<b>Rate per 1,000 Drivers</b>	<b>#</b>	<b>%</b>	<b>Rate per 1,000 Drivers</b>	<b>#</b>	<b>%</b>	<b>Rate per 1,000 Drivers</b>
15	105	1.4%	n/a	53	1.5%	n/a	0	0.0%	n/a	158	1.4%	n/a
16	1,505	19.9%	49.3	659	19.1%	21.6	4	12.9%	0.13	2,168	19.6%	71.1
17	1,903	25.1%	58.3	866	25.1%	26.5	5	16.1%	0.15	2,774	25.1%	85.0
18	2,216	29.3%	62.1	1,006	29.2%	28.2	13	41.9%	0.36	3,235	29.3%	90.7
19	1,844	24.3%	50.2	865	25.1%	23.5	9	29.0%	0.24	2,718	24.6%	74.0
<b>Total</b>	<b>7,573</b>	<b>100.0%</b>	<b>49.9</b>	<b>3,449</b>	<b>100.0%</b>	<b>22.7</b>	<b>31</b>	<b>100.0%</b>	<b>0.20</b>	<b>11,053</b>	<b>100.0%</b>	<b>72.8</b>

**Crash Rate of Licensed Drivers by Age (Utah 2010)**

- Drivers aged 18 years had the highest total crash rate per licensed driver.
- Drivers aged 18 years had the highest fatal crash rate per licensed driver.

## Crash Conditions

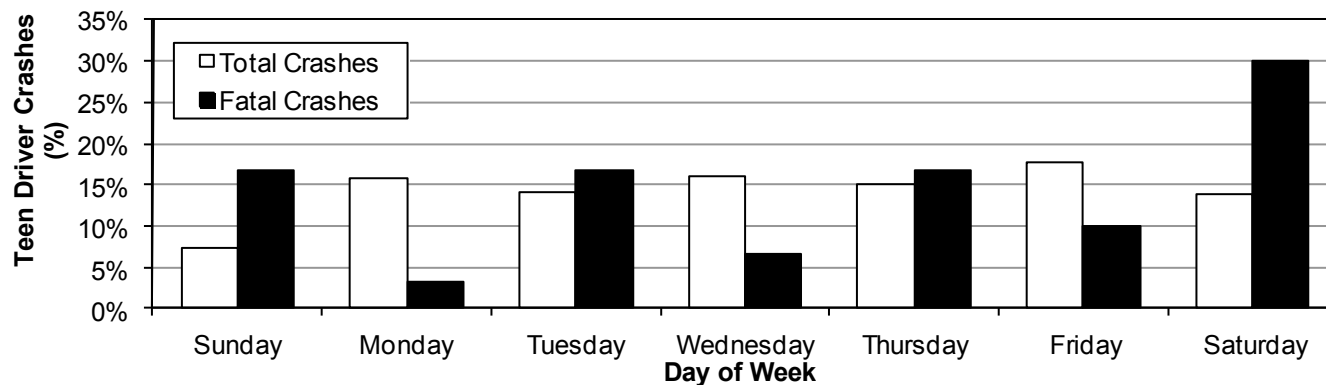
### Teenage Driver Crashes by Month (Utah 2010)

Teenage Driver Crashes								
Month	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	Rate per Day	#	Rate per Day	#	Rate per Day	#	Rate per Day
January	576	18.6	206	6.6	0	0.00	782	25.2
February	473	16.9	209	7.5	2	0.07	684	24.4
March	492	15.9	267	8.6	2	0.06	761	24.5
April	495	16.5	250	8.3	2	0.07	747	24.9
May	534	17.2	278	9.0	6	0.19	818	26.4
June	539	18.0	258	8.6	2	0.07	799	26.6
July	499	16.1	255	8.2	2	0.06	756	24.4
August	595	19.2	262	8.5	3	0.10	860	27.7
September	585	19.5	315	10.5	3	0.10	903	30.1
October	618	19.9	315	10.2	3	0.10	936	30.2
November	744	24.8	280	9.3	3	0.10	1,027	34.2
December	736	23.7	286	9.2	2	0.06	1,024	33.0
<b>Total</b>	<b>6,886</b>	<b>18.9</b>	<b>3,181</b>	<b>8.7</b>	<b>30</b>	<b>0.08</b>	<b>10,097</b>	<b>27.7</b>

- Overall, November (34.1) and December (33.0) had the highest rates per day for teenage driver crashes.
- The highest rate per day of fatal teenage driver crashes occurred in May (0.19).

### Teenage Driver Crashes by Day of Week (Utah 2010)

Teenage Driver Crashes								
Day of Week	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Sunday	480	7.0%	253	8.0%	5	16.7%	738	7.3%
Monday	1,096	15.9%	500	15.7%	1	3.3%	1,597	15.8%
Tuesday	977	14.2%	446	14.0%	5	16.7%	1,428	14.1%
Wednesday	1,132	16.4%	489	15.4%	2	6.7%	1,623	16.1%
Thursday	1,047	15.2%	475	14.9%	5	16.7%	1,527	15.1%
Friday	1,239	18.0%	543	17.1%	3	10.0%	1,785	17.7%
Saturday	915	13.3%	475	14.9%	9	30.0%	1,399	13.9%
<b>Total</b>	<b>6,886</b>	<b>100.0%</b>	<b>3,181</b>	<b>100.0%</b>	<b>30</b>	<b>100.0%</b>	<b>10,097</b>	<b>100.0%</b>

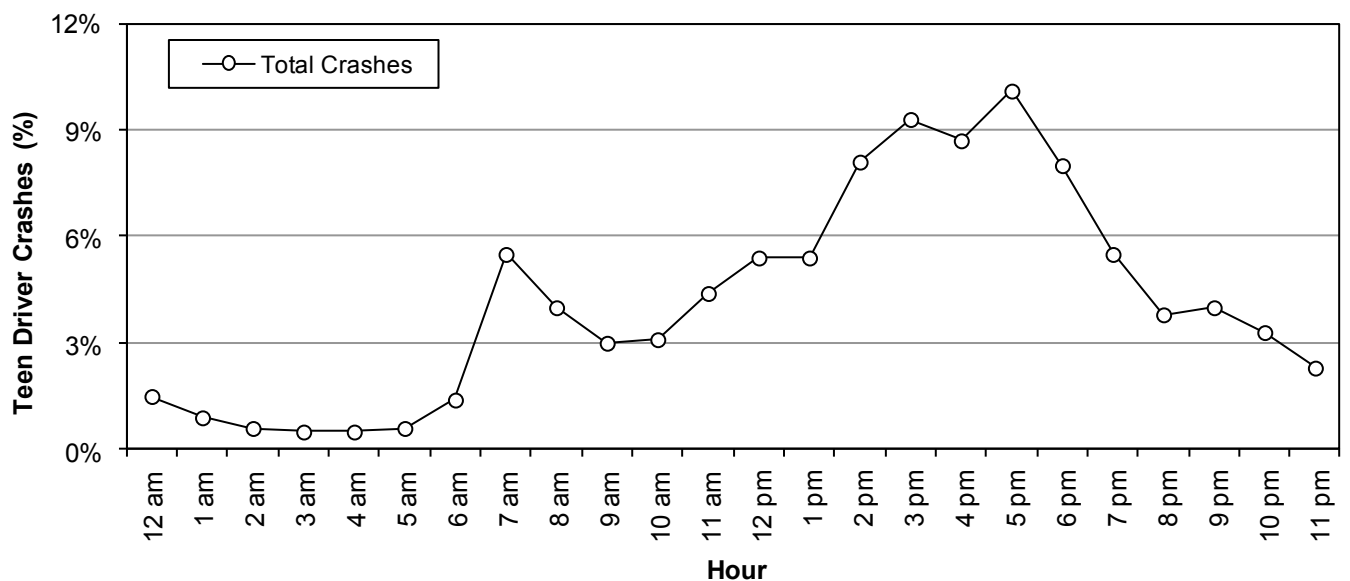


- Overall, the highest percentage of teenage driver crashes occurred on Friday (17.7%).
- The highest percentage of fatal teenage driver crashes occurred on Saturday (30.0%).

## Crash Conditions

### Teenage Driver Crashes by Hour (Utah 2010)

Teenage Driver Crashes								
Hour	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Midnight	96	1.4%	58	1.8%	2	6.7%	156	1.5%
1 a.m.	59	0.9%	32	1.0%	1	3.3%	92	0.9%
2 a.m.	28	0.4%	27	0.8%	1	3.3%	56	0.6%
3 a.m.	34	0.5%	17	0.5%	0	0.0%	51	0.5%
4 a.m.	31	0.5%	14	0.4%	1	3.3%	46	0.5%
5 a.m.	40	0.6%	20	0.6%	1	3.3%	61	0.6%
6 a.m.	100	1.5%	38	1.2%	1	3.3%	139	1.4%
7 a.m.	405	5.9%	150	4.7%	2	6.7%	557	5.5%
8 a.m.	295	4.3%	112	3.5%	1	3.3%	408	4.0%
9 a.m.	226	3.3%	81	2.5%	0	0.0%	307	3.0%
10 a.m.	231	3.4%	84	2.6%	0	0.0%	315	3.1%
11 a.m.	310	4.5%	130	4.1%	2	6.7%	442	4.4%
Noon	357	5.2%	190	6.0%	2	6.7%	549	5.4%
1 p.m.	368	5.3%	176	5.5%	0	0.0%	544	5.4%
2 p.m.	573	8.3%	244	7.7%	2	6.7%	819	8.1%
3 p.m.	682	9.9%	253	8.0%	3	10.0%	938	9.3%
4 p.m.	565	8.2%	313	9.8%	2	6.7%	880	8.7%
5 p.m.	682	9.9%	337	10.6%	2	6.7%	1,021	10.1%
6 p.m.	557	8.1%	246	7.7%	2	6.7%	805	8.0%
7 p.m.	356	5.2%	197	6.2%	1	3.3%	554	5.5%
8 p.m.	246	3.6%	133	4.2%	1	3.3%	380	3.8%
9 p.m.	280	4.1%	128	4.0%	1	3.3%	409	4.1%
10 p.m.	212	3.1%	124	3.9%	1	3.3%	337	3.3%
11 p.m.	153	2.2%	77	2.4%	1	3.3%	231	2.3%
<b>Total</b>	<b>6,886</b>	<b>100.0%</b>	<b>3,181</b>	<b>100.0%</b>	<b>30</b>	<b>100.0%</b>	<b>10,097</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 3:00 p.m. hour.

## Crash Conditions

### Speed Limit of Teenage Driver Crashes (Utah 2010)

Teenage Driver Vehicles								
Speed Limit	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
5-15 MPH	141	1.9%	23	0.7%	0	0.0%	164	1.5%
20-25 MPH	1,112	14.7%	408	11.8%	2	6.5%	1,522	13.8%
30-35 MPH	1,827	24.1%	864	25.1%	4	12.9%	2,695	24.4%
40-45 MPH	1,687	22.3%	963	27.9%	9	29.0%	2,659	24.1%
50-55 MPH	586	7.7%	296	8.6%	9	29.0%	891	8.1%
60-65 MPH	829	10.9%	331	9.6%	4	12.9%	1,164	10.5%
70+ MPH	149	2.0%	72	2.1%	3	9.7%	224	2.0%
Unknown	1,242	16.4%	492	14.3%	0	0.0%	1,734	15.7%
<b>Total</b>	<b>7,573</b>	<b>100.0%</b>	<b>3,449</b>	<b>100.0%</b>	<b>31</b>	<b>100.0%</b>	<b>11,053</b>	<b>100.0%</b>

- Over half (57.4% 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 with higher speed limits. The majority (80.6%) of fatal teenage driver crashes occurred where the speed limit was 40 MPH or higher.
- Teenage driver 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.

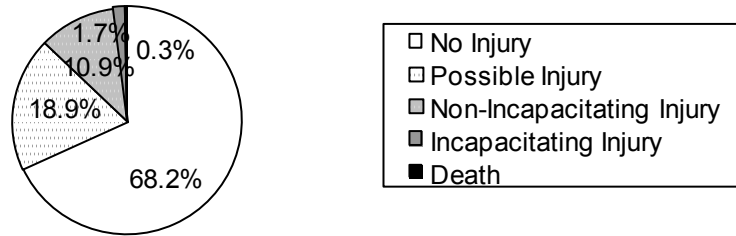
### Travel Speed of Teenage Driver Vehicles in Crashes (Utah 2010)

Teenage Driver Vehicles								
Travel Speed	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Stopped	693	9.2%	306	8.9%	0	0.0%	999	9.0%
1-9 MPH	739	9.8%	253	7.3%	1	3.2%	993	9.0%
10-19 MPH	996	13.2%	434	12.6%	2	6.5%	1,432	13.0%
20-29 MPH	852	11.3%	360	10.4%	0	0.0%	1,212	11.0%
30-39 MPH	883	11.7%	453	13.1%	2	6.5%	1,338	12.1%
40-49 MPH	544	7.2%	348	10.1%	4	12.9%	896	8.1%
50-59 MPH	392	5.2%	178	5.2%	5	16.1%	575	5.2%
60-69 MPH	414	5.5%	168	4.9%	4	12.9%	586	5.3%
70-79 MPH	165	2.2%	85	2.5%	3	9.7%	253	2.3%
80-89 MPH	12	0.2%	21	0.6%	2	6.5%	35	0.3%
90+ MPH	2	0.0%	6	0.2%	2	6.5%	10	0.1%
Unknown	1,881	24.8%	837	24.3%	6	19.4%	2,724	24.6%
<b>Total</b>	<b>7,573</b>	<b>100.0%</b>	<b>3,449</b>	<b>100.0%</b>	<b>31</b>	<b>100.0%</b>	<b>11,053</b>	<b>100.0%</b>

- Nearly half (47.8% of known) of teen 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. The majority (80.0% of known) of teenage driver vehicles in fatal crashes were traveling 40 MPH or higher.
- Crashes involving teenage driver vehicles traveling 40 MPH or higher were 10.2 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 Severity (Utah 2010)



- Similar to all motor vehicle crashes, nearly one-third (31.5%) 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%).

### Teenage Driver Crash Violations (Utah 2010)

Teenage Drivers								
Violations	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Following Too Close	788	19.5%	347	17.0%	0	0.0%	1,135	18.6%
Improper Lane Change/Travel	506	12.5%	196	9.6%	0	0.0%	702	11.5%
Improper Turn	369	9.1%	235	11.5%	0	0.0%	604	9.9%
Failure to Yield Right of Way	345	8.6%	215	10.5%	0	0.0%	560	9.2%
Improper Lookout	370	9.2%	166	8.1%	0	0.0%	536	8.8%
Negligent Collision	306	7.6%	158	7.7%	0	0.0%	464	7.6%
License Violation	200	5.0%	117	5.7%	0	0.0%	317	5.2%
Speed	226	5.6%	87	4.3%	2	18.2%	315	5.2%
Insurance Violation	185	4.6%	98	4.8%	0	0.0%	283	4.6%
Other Moving Violation	147	3.6%	102	5.0%	1	9.1%	250	4.1%
Failure to Stop at Red Light	101	2.5%	81	4.0%	0	0.0%	182	3.0%
Hit and Run	110	2.7%	36	1.8%	1	9.1%	147	2.4%
Driving Under the Influence	41	1.0%	46	2.2%	0	0.0%	87	1.4%
Failure to Stop at Stop Sign	41	1.0%	25	1.2%	0	0.0%	66	1.1%
Improper Backing	50	1.2%	5	0.2%	0	0.0%	55	0.9%
Equipment Violation	38	0.9%	13	0.6%	0	0.0%	51	0.8%
Reckless Driving	28	0.7%	21	1.0%	1	9.1%	50	0.8%
Careless Driving	26	0.6%	17	0.8%	1	9.1%	44	0.7%
Wrong Side of Road	25	0.6%	16	0.8%	0	0.0%	41	0.7%
Improper Start or Stop	35	0.9%	5	0.2%	0	0.0%	40	0.7%
Registration Violation	26	0.6%	9	0.4%	0	0.0%	35	0.6%
Alcohol/Drug Violation, Other than DUI	14	0.3%	10	0.5%	0	0.0%	24	0.4%
Improper Passing	17	0.4%	6	0.3%	1	9.1%	24	0.4%
Failure to Obey Traffic Control Device	12	0.3%	10	0.5%	1	9.1%	23	0.4%
Seat Belt/Child Restraint	4	0.1%	14	0.7%	0	0.0%	18	0.3%
Improper Signal	10	0.2%	5	0.2%	0	0.0%	15	0.2%
Other Non-Moving Violation	8	0.2%	4	0.2%	0	0.0%	12	0.2%
Texting	5	0.1%	2	0.1%	0	0.0%	7	0.1%
Vehicle Homicide	0	0.0%	0	0.0%	3	27.3%	3	0.0%
<b>Total</b>	<b>4,033</b>	<b>100.0%</b>	<b>2,046</b>	<b>100.0%</b>	<b>11</b>	<b>100.0%</b>	<b>6,090</b>	<b>100.0%</b>

- There were 6,086 citations issued to teenage drivers at the scene of the crash. The most common violations were for following too close (18.6%), improper lane change/travel (11.5%), and improper turn (9.9%).

## Crash Conditions

### Contributing Factors of Teenage Driver Crashes (Utah 2010)

Teenage Drivers/Vehicles								
Contributing Factors	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Followed Too Closely	1,480	17.9%	675	16.8%	1	1.3%	2,156	17.4%
Failed to Yield Right of Way	1,133	13.7%	698	17.4%	8	10.4%	1,839	14.9%
Speed Too Fast	889	10.8%	381	9.5%	11	14.3%	1,281	10.4%
Failed to Keep in Proper Lane	651	7.9%	275	6.8%	11	14.3%	937	7.6%
Driver Distraction	556	6.7%	346	8.6%	6	7.8%	908	7.3%
Other Improper Driving	538	6.5%	236	5.9%	1	1.3%	775	6.3%
Improper Turn	332	4.0%	143	3.6%	1	1.3%	476	3.9%
Vision Obscured by Weather Condition	318	3.8%	98	2.4%	2	2.6%	418	3.4%
Disregard Traffic Signal/Sign	235	2.8%	161	4.0%	2	2.6%	398	3.2%
Ran Off Road	217	2.6%	132	3.3%	10	13.0%	359	2.9%
Overcorrected	185	2.2%	117	2.9%	3	3.9%	305	2.5%
Improper Lane Change	216	2.6%	51	1.3%	1	1.3%	268	2.2%
Swerved or Evasive Action	141	1.7%	80	2.0%	3	3.9%	224	1.8%
Improper Backing	206	2.5%	13	0.3%	0	0.0%	219	1.8%
Asleep/Fatigue	105	1.3%	72	1.8%	1	1.3%	178	1.4%
Improper Parking/Stopping	128	1.5%	30	0.7%	0	0.0%	158	1.3%
Hit and Run	116	1.4%	30	0.7%	2	2.6%	148	1.2%
Driving Under the Influence	73	0.9%	64	1.6%	2	2.6%	139	1.1%
Vehicle Other Defective Condition	97	1.2%	36	0.9%	0	0.0%	133	1.1%
Reckless/Aggressive Driving	68	0.8%	56	1.4%	3	3.9%	127	1.0%
Vision Obscured by Moving Vehicle	75	0.9%	48	1.2%	1	1.3%	124	1.0%
Driver Emotional Prior to Crash	62	0.7%	44	1.1%	1	1.3%	107	0.9%
Vehicle Tires	75	0.9%	27	0.7%	1	1.3%	103	0.8%
Vehicle Brakes	53	0.6%	28	0.7%	0	0.0%	81	0.7%
Vision Obscured by Parked Vehicle	54	0.7%	24	0.6%	0	0.0%	78	0.6%
Other Driver Condition	37	0.4%	37	0.9%	0	0.0%	74	0.6%
Vision Obscured by Glare	43	0.5%	19	0.5%	0	0.0%	62	0.5%
Vision Obscured by Other	38	0.5%	19	0.5%	2	2.6%	59	0.5%
Improper Passing	44	0.5%	8	0.2%	3	3.9%	55	0.4%
Wrong Side/Wrong Way	29	0.4%	21	0.5%	1	1.3%	51	0.4%
Windshield or Other Window Obscured	26	0.3%	14	0.3%	0	0.0%	40	0.3%
Improper Signal	13	0.2%	8	0.2%	0	0.0%	21	0.2%
Disregard Road Markings	9	0.1%	8	0.2%	0	0.0%	17	0.1%
Vision Obscured by Building, Sign, etc.	11	0.1%	5	0.1%	0	0.0%	16	0.1%
Driver Illness/Medical	8	0.1%	6	0.1%	0	0.0%	14	0.1%
Vision Obscured by Vegetation	6	0.1%	8	0.2%	0	0.0%	14	0.1%
<b>Total</b>	<b>8,267</b>	<b>100.0%</b>	<b>4,018</b>	<b>100.0%</b>	<b>77</b>	<b>100.0%</b>	<b>12,362</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 (17.4%), failed to yield right of way (14.9%), and speed too fast (10.4%).
- The leading contributing factors in fatal teenage driver crashes were speed too fast (14.3%), failed to keep in proper lane (14.3%), and ran off road (13.0%).
- Compared to drivers of all ages, teenage drivers were more likely to have a contributing factor of failure to yield right of way, followed too closely, and driver distraction.



# Motorcycles



DRIVE AWARE. RIDE AWARE.



## Section 6: Motorcycles

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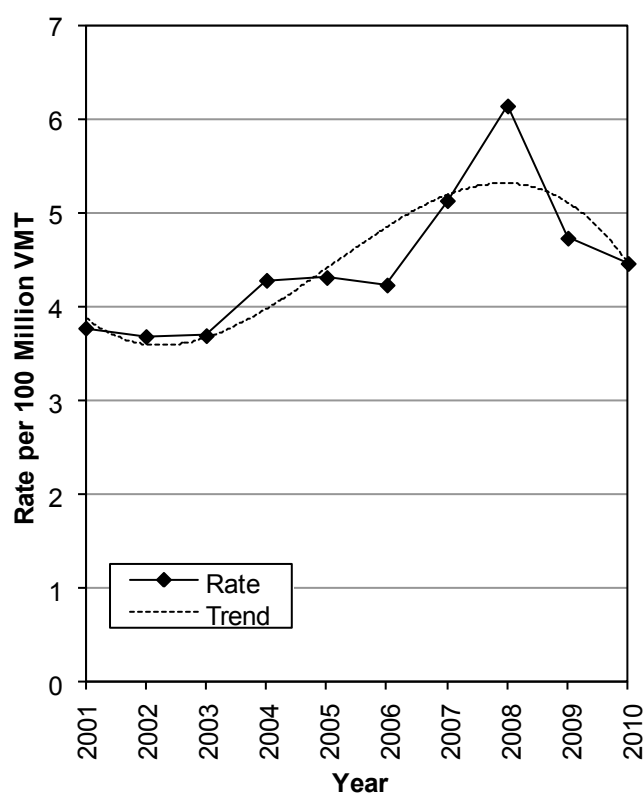
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## Trends

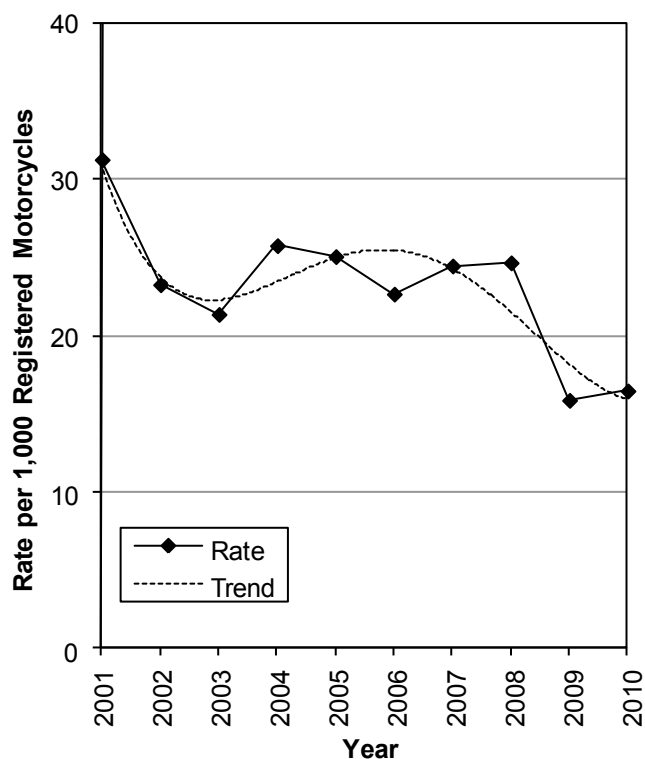
### Motorcyclists in Crashes (Utah 2001-2010)

Motorcyclists (Driver and Passenger)												
Year	Non-Injured			Injured			Killed			Total		
	#	Rate per 100 Million VMT	Rate per 1,000 Rgstrd Mtrcyls	#	Rate per 100 Million VMT	Rate per 1,000 Rgstrd Mtrcyls	#	Rate per 100 Million VMT	Rate per 1,000 Rgstrd Mtrcyls	#	Rate per 100 Million VMT	Rate per 1,000 Registered Motorcycles
2001	124	0.5	4.4	733	3.1	25.9	28	0.12	0.99	885	3.78	31.3
2002	130	0.5	3.4	755	3.1	19.5	18	0.07	0.46	903	3.69	23.3
2003	134	0.6	3.2	730	3.0	17.6	22	0.09	0.53	886	3.70	21.4
2004	149	0.6	3.6	877	3.6	21.4	31	0.13	0.76	1,057	4.29	25.8
2005	192	0.8	4.4	871	3.5	20.1	23	0.09	0.53	1,086	4.32	25.1
2006	186	0.7	3.8	899	3.4	18.4	24	0.09	0.49	1,109	4.24	22.7
2007	269	1.0	4.8	1,076	4.0	19.2	33	0.12	0.59	1,378	5.14	24.5
2008	255	1.0	4.0	1,301	5.0	20.2	36	0.14	0.56	1,592	6.15	24.7
2009	232	0.9	3.0	980	3.7	12.5	30	0.11	0.38	1,242	4.74	15.9
2010	190	0.7	2.6	979	3.7	13.6	21	0.08	0.29	1,190	4.47	16.5
Total	1,861	0.7	3.6	9,201	3.6	18.0	266	0.11	0.52	11,328	4.47	22.1

#### Motorcyclist Crash Rates per VMT (Utah 2001-2010)



#### Motorcyclist Crash Rates per Registered Motorcycles (Utah 2001-2010)



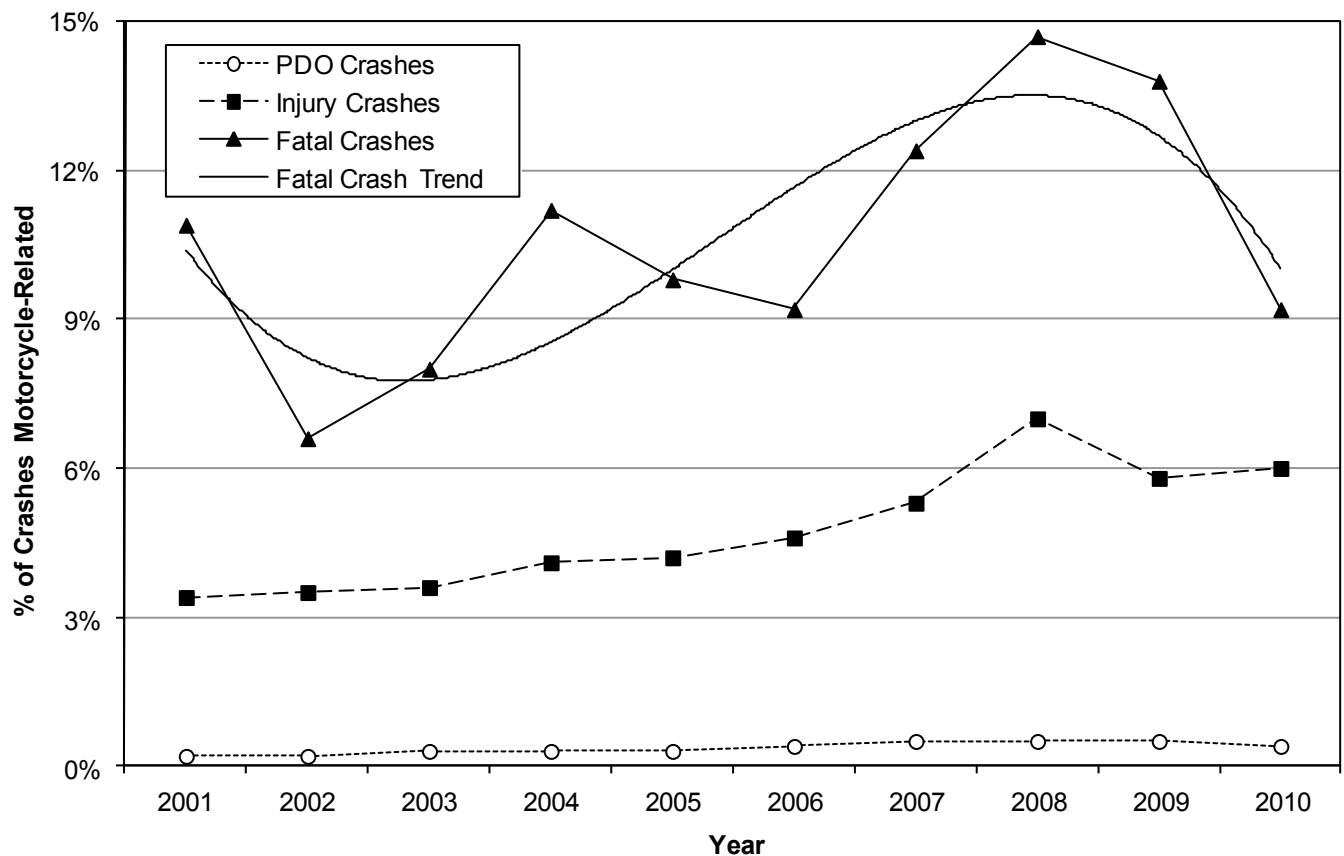
- The rate of motorcyclists in crashes per VMT has shown an increasing trend over the last 10 years.
- 2008 had the highest (6.15) rate of total motorcyclists in crashes per 100 million VMT.
- The rate of total motorcyclists in crashes per registered motorcycles has shown a decreasing trend over the last 10 years.

## Trends

## Motorcycle Crashes (Utah 2001-2010)

Motorcycle Crashes												
Year	Property Damage Only			Injury			Fatal			Total		
	All #	Motorcycle #	%	All #	Motorcycle #	%	All #	Motorcycle #	%	All #	Motorcycle #	%
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%
2008	38,997	177	0.5%	17,125	1,192	7.0%	245	36	14.7%	56,367	1,405	2.5%
2009	35,398	182	0.5%	15,752	914	5.8%	217	30	13.8%	51,367	1,126	2.2%
2010	34,155	137	0.4%	14,995	892	5.9%	218	20	9.2%	49,368	1,049	2.1%
<b>Total</b>	<b>356,544</b>	<b>1,298</b>	<b>0.4%</b>	<b>180,817</b>	<b>8,449</b>	<b>4.7%</b>	<b>2,476</b>	<b>260</b>	<b>10.5%</b>	<b>539,837</b>	<b>10,007</b>	<b>1.9%</b>

## Percent of Crashes Involving a Motorcycle (Utah 2001-2010)



- The 10-year trend shows that motorcycle crashes represent 0.4% of property damage only crashes, 4.7% of injury crashes, and 10.5% of fatal crashes.
- Motorcycles are over-represented in fatal crashes accounting for 10.5% of fatal crashes compared to 1.9% of total crashes.
- During the last 10 years, the highest percent of total crashes involving motorcycles occurred in 2008 (2.5%).

## Counties

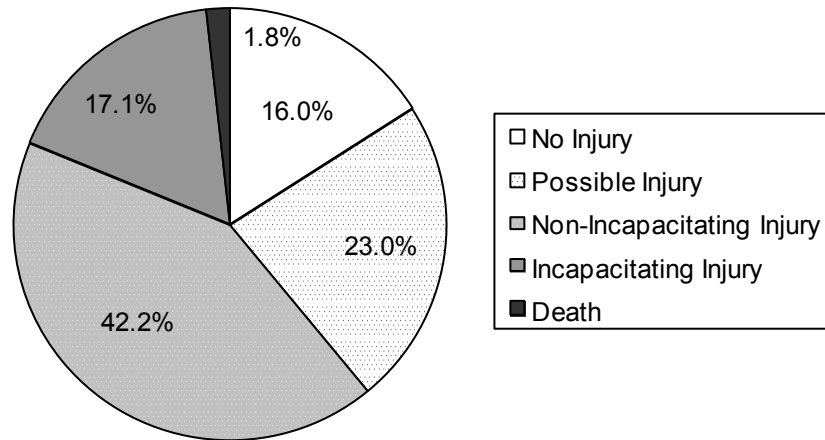
### Motorcyclists in Crashes by County (Utah 2010)

Motorcyclists (Driver and Passenger)								
County	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
Rich	1	2.1	8	16.8	0	0.00	9	18.9
Wayne	0	0.0	7	16.6	0	0.00	7	16.6
Morgan	2	1.5	19	14.2	0	0.00	21	15.7
Garfield	1	0.9	15	13.2	0	0.00	16	14.1
Kane	1	0.7	9	6.2	0	0.00	10	6.9
Duchesne	1	0.4	12	5.2	2	0.86	15	6.5
San Juan	3	0.9	17	5.2	0	0.00	20	6.1
Utah	16	0.4	191	5.0	4	0.11	211	5.6
Weber	21	1.3	67	4.1	2	0.12	90	5.5
Wasatch	3	0.9	14	4.3	0	0.00	17	5.3
Cache	9	1.0	36	4.2	0	0.00	45	5.2
Washington	8	0.6	58	4.2	1	0.07	67	4.9
Salt Lake	86	1.0	317	3.7	6	0.07	409	4.7
Sanpete	2	0.9	7	3.2	1	0.46	10	4.6
Carbon	1	0.3	12	4.0	0	0.00	13	4.3
Summit	3	0.4	23	3.2	2	0.28	28	3.9
Tooele	3	0.4	26	3.1	0	0.00	29	3.4
Piute	0	0.0	1	3.3	0	0.00	1	3.3
Daggett	0	0.0	1	3.2	0	0.00	1	3.2
Iron	1	0.1	21	2.9	0	0.00	22	3.1
Uintah	1	0.3	10	2.7	0	0.00	11	2.9
Grand	1	0.3	8	2.5	0	0.00	9	2.9
Davis	17	0.6	59	2.2	0	0.00	76	2.8
Sevier	3	0.9	6	1.8	0	0.00	9	2.7
Juab	0	0.0	7	1.8	2	0.51	9	2.3
Box Elder	3	0.3	16	1.7	0	0.00	19	2.1
Millard	2	0.4	7	1.5	0	0.00	9	1.9
Emery	1	0.3	3	0.9	1	0.31	5	1.5
Beaver	0	0.0	2	0.8	0	0.00	2	0.8
<b>Statewide</b>	<b>190</b>	<b>0.7</b>	<b>979</b>	<b>3.7</b>	<b>21</b>	<b>0.08</b>	<b>1,190</b>	<b>4.5</b>

- Rich (18.9), Wayne (16.6), and Morgan (15.7) counties had the highest rates of motorcyclists in crashes per vehicle miles traveled (VMT).
- Duchesne (0.86) and Juab (0.51) counties had the highest rates of motorcyclists killed in crashes.

## Motorcyclists

### Injury Severity of Motorcyclists in Crashes (Utah 2010)



- The percentage of motorcyclists sustaining a non-fatal injury (82.3%) was much higher than that of all persons in motor vehicle crashes sustaining a non-fatal injury (17.5%).
- The percentage of motorcyclists killed in crashes (1.8%) was higher than for all persons killed in motor vehicle crashes (0.2%).
- Motorcycle crashes were 4.7 times more likely to result in a death than other motor vehicle crashes.

### Occupant Placement of Motorcyclists in Crashes (Utah 2010)

Motorcyclists (Driver and Passenger)								
Occupant Placement	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Driver	172	90.5%	876	89.5%	20	95.2%	1,068	89.7%
Passenger	18	9.5%	103	10.5%	1	4.8%	122	10.3%
<b>Total</b>	<b>190</b>	<b>100.0%</b>	<b>979</b>	<b>100.0%</b>	<b>21</b>	<b>100.0%</b>	<b>1,190</b>	<b>100.0%</b>

- Drivers accounted for the majority of motorcyclists in a crash (89.7%) and motorcyclists killed (95.2%).

### Gender of Motorcyclists in Crashes (Utah 2010)

Motorcyclists (Driver and Passenger)								
Gender	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Male	158	83.2%	806	82.3%	20	95.2%	984	82.7%
Female	27	14.2%	170	17.4%	1	4.8%	198	16.6%
Unknown	5	2.6%	3	0.3%	0	0.0%	8	0.7%
<b>Total</b>	<b>190</b>	<b>100.0%</b>	<b>979</b>	<b>100.0%</b>	<b>21</b>	<b>100.0%</b>	<b>1,190</b>	<b>100.0%</b>

- The majority of all motorcyclists (82.7%) and motorcyclists killed (95.2%) in crashes were male.

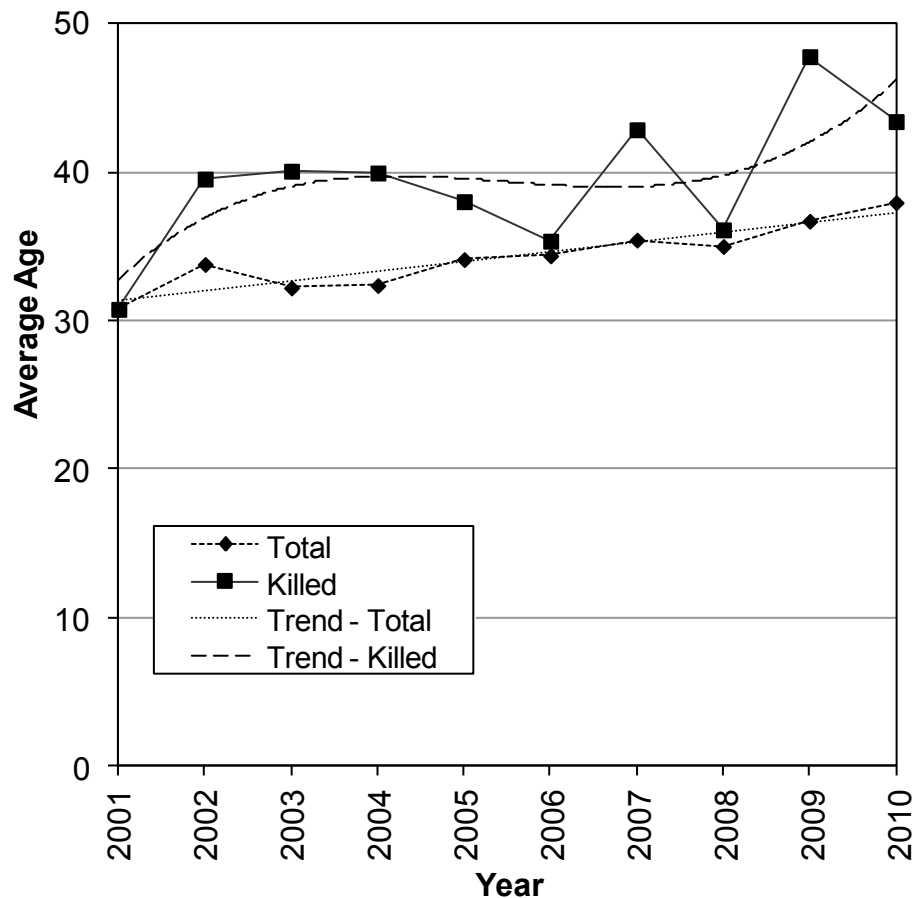
## Motorcyclists

### Age of Motorcyclists in Crashes (Utah 2010)

Motorcyclists (Driver and Passenger)								
Age	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
0-9	1	0.5%	6	45.0%	0	0.0%	7	0.6%
10-14	0	0.0%	18	1.8%	0	0.0%	18	1.5%
15-19	10	5.3%	90	9.2%	0	0.0%	100	8.4%
20-24	25	13.2%	156	15.9%	2	9.5%	183	15.4%
25-29	27	14.2%	113	11.5%	3	14.3%	143	12.0%
30-34	18	9.5%	86	8.8%	4	19.0%	108	9.1%
35-39	15	7.9%	81	8.3%	1	4.8%	97	8.2%
40-44	15	7.9%	71	7.3%	1	4.8%	87	7.3%
45-49	13	6.8%	84	8.6%	1	4.8%	98	8.2%
50-54	24	12.6%	89	9.1%	1	4.8%	114	9.6%
55-59	19	10.0%	80	8.2%	5	23.8%	104	8.7%
60-64	10	5.3%	50	5.1%	0	0.0%	60	5.0%
65+	7	3.7%	43	4.4%	3	14.3%	53	4.5%
Unknown	6	3.2%	12	1.2%	0	0.0%	18	1.5%
<b>Total</b>	<b>190</b>	<b>100.0%</b>	<b>979</b>	<b>144.4%</b>	<b>21</b>	<b>100.0%</b>	<b>1,190</b>	<b>100.0%</b>

- Overall, the largest percentages of motorcyclists in crashes were aged 20-29 years (27.4%).
- The highest percentages of motorcyclist deaths were aged 55-59 years (23.8%) and 30-34 years (19.0%).

### Average Age of Motorcyclists in Crashes (Utah 2001-2010)



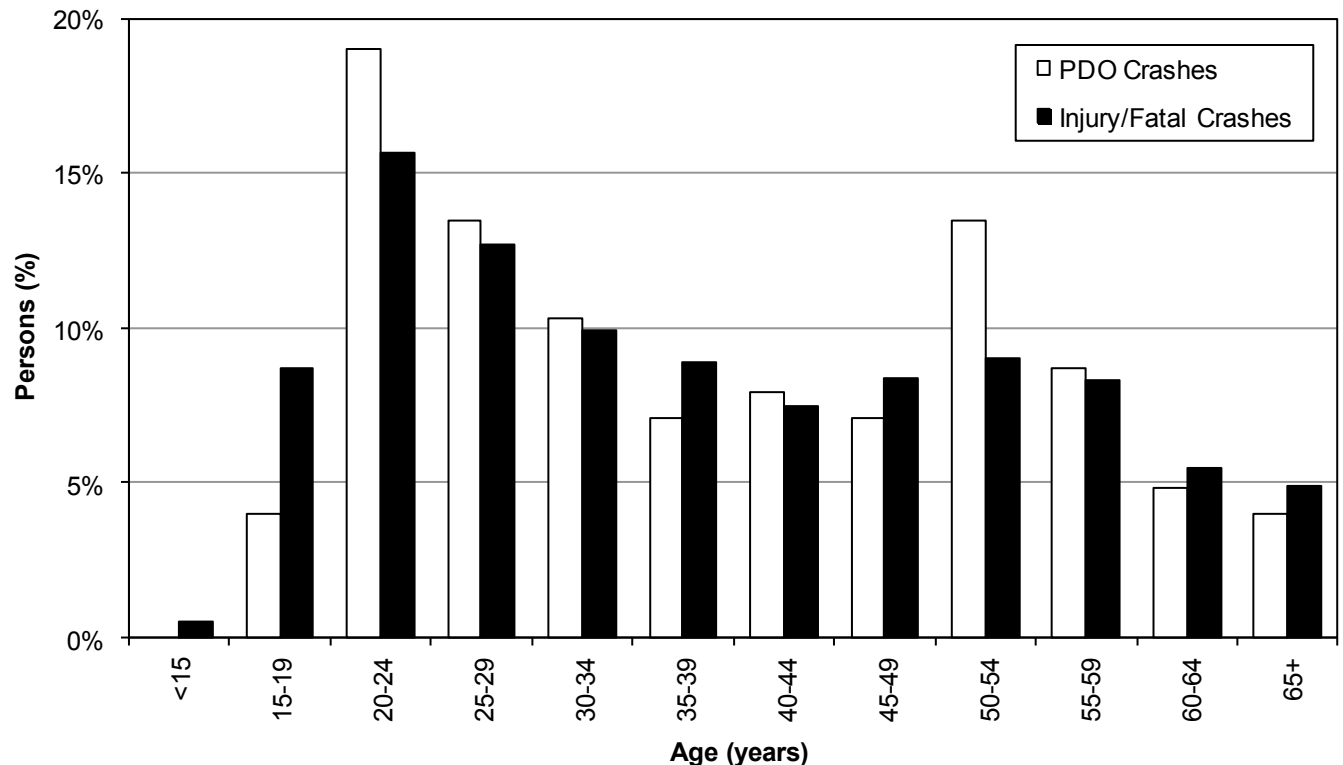
Motorcyclists (Driver and Passenger)		
Year	Total	Killed
	Mean Age	Mean Age
2001	30.80	30.79
2002	33.81	39.56
2003	32.23	40.09
2004	32.39	39.97
2005	34.14	38.04
2006	34.39	35.38
2007	35.45	42.88
2008	35.02	36.14
2009	36.72	47.80
2010	37.97	43.43
<b>Average</b>	<b>34.29</b>	<b>39.41</b>

- The average age for both motorcyclists in crashes and motorcyclists killed has shown an increasing trend over the past 10 years.
- The average age of motorcyclists who die is higher than total motorcyclists in crashes.
- The average age of a motorcyclist in a crash in 2010 was 38 years.

# Motorcyclists

## Motorcycle Driver Age (Utah 2010)

Motorcycle Drivers								
Age	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
<15	0	0.0%	5	0.5%	0	0.0%	5	0.5%
15-19	5	3.8%	81	8.9%	0	0.0%	86	8.1%
20-24	24	18.5%	143	15.6%	2	8.7%	169	15.8%
25-29	17	13.1%	114	12.5%	4	17.4%	135	12.6%
30-34	13	10.0%	88	9.6%	4	17.4%	105	9.8%
35-39	9	6.9%	81	8.9%	1	4.3%	91	8.5%
40-44	10	7.7%	68	7.4%	1	4.3%	79	7.4%
45-49	9	6.9%	77	8.4%	1	4.3%	87	8.1%
50-54	17	13.1%	81	8.9%	2	8.7%	100	9.4%
55-59	11	8.5%	73	8.0%	4	17.4%	88	8.2%
60-64	6	4.6%	51	5.6%	0	0.0%	57	5.3%
65+	5	3.8%	41	4.5%	4	17.4%	50	4.7%
Unknown	4	3.1%	12	1.3%	0	0.0%	16	1.5%
<b>Total</b>	<b>130</b>	<b>100.0%</b>	<b>915</b>	<b>100.0%</b>	<b>23</b>	<b>100.0%</b>	<b>1,068</b>	<b>100.0%</b>



- Over one-half (51.0%) of the motorcycle drivers in crashes were under the age of 35 years.

## Motorcycle Driver License Status (Utah 2010)

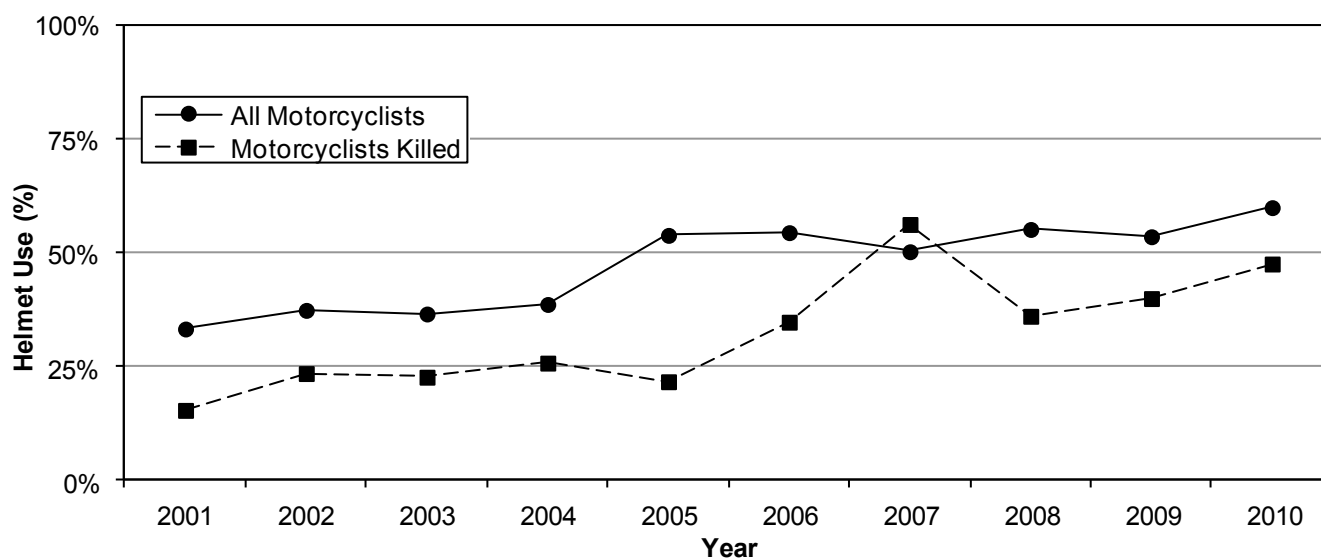
- Of the 23 motorcycle drivers in fatal crashes, 17 (73.9%) had a motorcycle license.



## Motorcyclists

### Helmet Use of Motorcyclists in Crashes (Utah 2001-2010)

Motorcyclists (Driver and Passenger)												
Year	Non-Injured			Injured			Killed			Total		
	No Hlmt	Helmet		No Hlmt	Helmet		No Hlmt	Helmet		No Helmet	Helmet	
	#	#	%	#	#	%	#	#	%	#	#	%
2001	91	36	28.3%	479	255	34.7%	22	4	15.4%	592	295	33.3%
2002	90	40	30.8%	462	293	38.8%	13	4	23.5%	565	337	37.4%
2003	91	35	27.8%	428	270	38.7%	17	5	22.7%	536	310	36.6%
2004	99	40	28.8%	492	339	40.8%	23	8	25.8%	614	387	38.7%
2005	107	53	33.1%	234	361	60.7%	18	5	21.7%	359	419	53.9%
2006	54	59	52.2%	359	446	55.4%	15	8	34.8%	428	513	54.5%
2007	70	90	56.3%	513	497	49.2%	14	18	56.3%	597	605	50.3%
2008	56	156	73.6%	569	629	52.5%	23	13	36.1%	648	798	55.2%
2009	51	95	65.1%	436	476	52.2%	18	12	40.0%	505	583	53.6%
2010	48	84	63.6%	359	534	59.8%	11	10	47.6%	418	628	60.0%
Total	757	688	47.6%	4,331	4,100	48.6%	174	87	33.3%	5,262	4,875	48.1%



- Overall helmet use by motorcyclists in crashes increased from 33.3% in 2001 to 60.0% in 2010.
- Helmet use among motorcyclists killed has shown an increasing trend.

### Helmet Use of Motorcyclists in Crashes (Utah 2010)

Motorcyclists (Driver and Passenger)							
Helmet Use	Non-Injured		Injured		Killed		Total
	#	%	#	%	#	%	# %
Helmet Worn	84	44.2%	534	54.5%	10	47.6%	628 52.8%
Helmet Not Worn	48	25.3%	359	36.7%	11	52.4%	418 35.1%
Unknown	58	30.5%	86	8.8%	0	0.0%	144 12.1%
<b>Total</b>	<b>190</b>	<b>100.0%</b>	<b>979</b>	<b>100.0%</b>	<b>21</b>	<b>100.0%</b>	<b>1,190 100.0%</b>



- Only 60.0% (of known) of the motorcyclists in crashes wore a helmet.
- Only 10 of the 21 motorcyclists killed in crashes (47.6%) were wearing a helmet.

## Motorcycle Crash Conditions

### Motorcyclists in Crashes by Month (Utah 2010)

Motorcyclists (Driver and Passenger)								
Month	Non-Injured		Injured		Killed		Total	
	#	Rate per Day	#	Rate per Day	#	Rate per Day	#	Rate per Day
January	0	0.0	8	0.3	1	0.03	9	0.3
February	3	0.1	14	0.5	0	0.00	17	0.6
March	16	0.5	37	1.2	1	0.03	54	1.7
April	13	0.4	70	2.3	2	0.07	85	2.8
May	9	0.3	108	3.5	3	0.10	120	3.9
June	28	0.9	169	5.6	1	0.03	198	6.6
July	39	1.3	147	4.7	3	0.10	189	6.1
August	33	1.1	155	5.0	6	0.19	194	6.3
September	25	0.8	158	5.3	3	0.10	186	6.2
October	15	0.5	75	2.4	1	0.03	91	2.9
November	8	0.3	25	0.8	0	0.00	33	1.1
December	1	0.0	13	0.4	0	0.00	14	0.5
<b>Total</b>	<b>190</b>	<b>0.5</b>	<b>979</b>	<b>2.7</b>	<b>21</b>	<b>0.06</b>	<b>1,190</b>	<b>3.3</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 Hour (Utah 2010)

Motorcyclists (Driver and Passenger)								
Hour	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Midnight	1	0.5%	17	1.7%	0	0.0%	18	1.5%
1 a.m.	0	0.0%	8	0.8%	0	0.0%	8	0.7%
2 a.m.	2	1.1%	5	0.5%	1	4.8%	8	0.7%
3 a.m.	1	0.5%	1	0.1%	0	0.0%	2	0.2%
4 a.m.	0	0.0%	3	0.3%	0	0.0%	3	0.3%
5 a.m.	0	0.0%	1	0.1%	0	0.0%	1	0.1%
6 a.m.	3	1.6%	15	1.5%	0	0.0%	18	1.5%
7 a.m.	2	1.1%	23	2.3%	1	4.8%	26	2.2%
8 a.m.	3	1.6%	27	2.8%	0	0.0%	30	2.5%
9 a.m.	8	4.2%	30	3.1%	0	0.0%	38	3.2%
10 a.m.	2	1.1%	39	4.0%	3	14.3%	44	3.7%
11 a.m.	17	8.9%	52	5.3%	2	9.5%	71	6.0%
Noon	7	3.7%	60	6.1%	1	4.8%	68	5.7%
1 p.m.	15	7.9%	73	7.5%	0	0.0%	88	7.4%
2 p.m.	17	8.9%	83	8.5%	4	19.0%	104	8.7%
3 p.m.	20	10.5%	89	9.1%	1	4.8%	110	9.2%
4 p.m.	17	8.9%	94	9.6%	0	0.0%	111	9.3%
5 p.m.	23	12.1%	101	10.3%	0	0.0%	124	10.4%
6 p.m.	18	9.5%	64	6.5%	1	4.8%	83	7.0%
7 p.m.	12	6.3%	53	5.4%	2	9.5%	67	5.6%
8 p.m.	7	3.7%	48	4.9%	0	0.0%	55	4.6%
9 p.m.	7	3.7%	43	4.4%	1	4.8%	51	4.3%
10 p.m.	5	2.6%	22	2.2%	0	0.0%	27	2.3%
11 p.m.	3	1.6%	28	2.9%	4	19.0%	35	2.9%
<b>Total</b>	<b>190</b>	<b>100.0%</b>	<b>979</b>	<b>100.0%</b>	<b>21</b>	<b>100.0%</b>	<b>1,190</b>	<b>100.0%</b>

- Over one-half (52.1%) of total motorcycle crashes occurred between 1:00 p.m. and 6:59 p.m.

## Motorcycle Crash Conditions

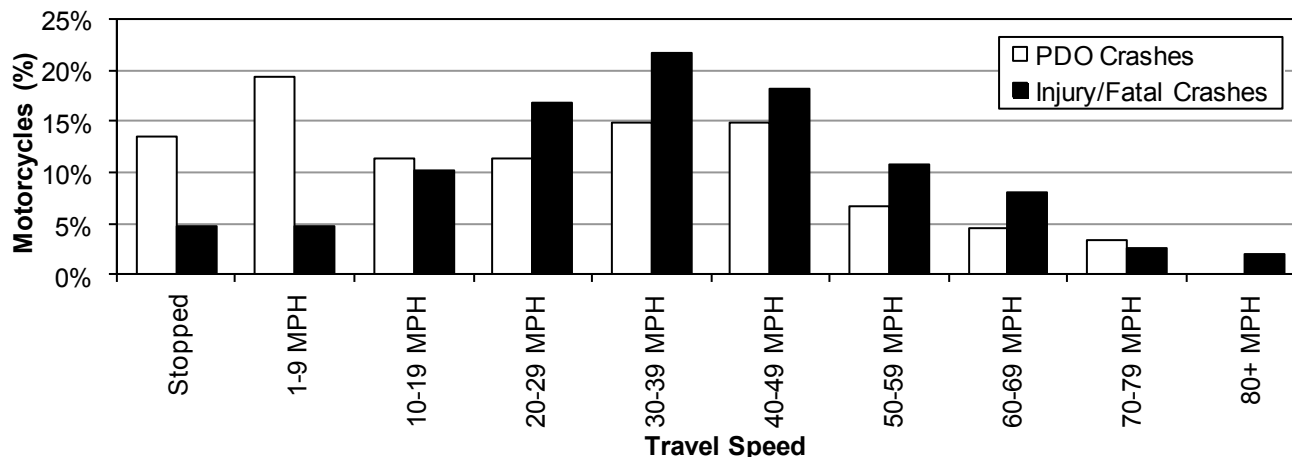
### Motorcyclists in Crashes by Day of Week (Utah 2010)

Motorcyclists (Driver and Passenger)								
Day of Week	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Sunday	24	12.6%	130	13.3%	4	19.0%	158	13.3%
Monday	29	15.3%	132	13.5%	2	9.5%	163	13.7%
Tuesday	25	13.2%	137	14.0%	4	19.0%	166	13.9%
Wednesday	24	12.6%	110	11.2%	1	4.8%	135	11.3%
Thursday	26	13.7%	141	14.4%	5	23.8%	172	14.5%
Friday	21	11.1%	156	15.9%	1	4.8%	178	15.0%
Saturday	41	21.6%	173	17.7%	4	19.0%	218	18.3%
<b>Total</b>	<b>190</b>	<b>100.0%</b>	<b>979</b>	<b>100.0%</b>	<b>21</b>	<b>100.0%</b>	<b>1,190</b>	<b>100.0%</b>

- One-third (33.3%) of total motorcycle crashes occurred on Friday and Saturday.
- Fatal motorcycle crashes occurred most frequently on Thursday (23.8%).

### Travel Speed (Utah 2010)

Motorcycles								
Travel Speed	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Parked	13	9.2%	3	0.3%	0	0.0%	16	1.5%
Stopped	12	8.5%	34	3.7%	0	0.0%	46	4.2%
1-9 MPH	17	12.0%	33	3.6%	0	0.0%	50	4.6%
10-19 MPH	10	7.0%	72	7.8%	1	4.3%	83	7.7%
20-29 MPH	10	7.0%	119	13.0%	0	0.0%	129	11.9%
30-39 MPH	13	9.2%	153	16.7%	1	4.3%	167	15.4%
40-49 MPH	13	9.2%	129	14.1%	3	13.0%	145	13.4%
50-59 MPH	6	4.2%	76	8.3%	4	17.4%	86	7.9%
60-69 MPH	4	2.8%	57	6.2%	3	13.0%	64	5.9%
70-79 MPH	3	2.1%	19	2.1%	1	4.3%	23	2.1%
80+ MPH	0	0.0%	14	1.5%	4	17.4%	18	1.7%
Unknown	41	28.9%	209	22.8%	6	26.1%	256	23.6%
<b>Total</b>	<b>142</b>	<b>100.0%</b>	<b>918</b>	<b>100.0%</b>	<b>23</b>	<b>100.0%</b>	<b>1,083</b>	<b>100.0%</b>



- Over one-half (54.4% of known) of motorcycles in total crashes were traveling 20-49 MPH.
- Most (70.6% of known) of the motorcycles in fatal crashes were traveling 50 MPH or higher.

## Motorcycle Crash Conditions

### Maneuver of Other Vehicle Prior to Motorcycle Crash (Utah 2010)

Vehicles Other than Motorcycles (Motorcycle Crash)								
Vehicle Maneuver	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Straight Ahead	34	35.1%	147	31.7%	5	35.7%	186	32.3%
Turning Left	20	20.6%	137	29.5%	7	50.0%	164	28.5%
Stopped in Traffic Lane	9	9.3%	45	9.7%	2	14.3%	56	9.7%
Slowing in Traffic Lane	3	3.1%	35	7.5%	0	0.0%	38	6.6%
Parked/Parking	8	8.2%	17	3.7%	0	0.0%	25	4.3%
Turning Right	4	4.1%	17	3.7%	0	0.0%	21	3.7%
Changing Lanes	8	8.2%	10	2.2%	0	0.0%	18	3.1%
Making U-turn	3	3.1%	15	3.2%	0	0.0%	18	3.1%
Entering/Leaving Traffic Lane	1	1.0%	12	2.6%	0	0.0%	13	2.3%
Backing	4	4.1%	2	0.4%	0	0.0%	6	1.0%
Overtaking/Passing	0	0.0%	5	1.1%	0	0.0%	5	0.9%
Unknown/Other	3	3.1%	22	4.7%	0	0.0%	25	4.3%
<b>Total</b>	<b>97</b>	<b>100.0%</b>	<b>464</b>	<b>100.0%</b>	<b>14</b>	<b>100.0%</b>	<b>575</b>	<b>100.0%</b>

- For all motorcycle crashes, the leading maneuvers of vehicles other than motorcycles prior to the crash were straight ahead (32.3%) and turning left (28.5%).

### Contributing Factors of Drivers Other than Motorcyclists in Motorcycle Crashes (Utah 2010)

Drivers/Vehicles Other than Motorcycles (Motorcycle Crash)								
Contributing Factors	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Failed to Yield Right of Way	22	24.2%	150	35.3%	7	38.9%	179	33.5%
Followed Too Closely	12	13.2%	39	9.2%	1	5.6%	52	9.7%
Improper Turn	10	11.0%	41	9.6%	0	0.0%	51	9.6%
Other Improper Driving	14	15.4%	28	6.6%	0	0.0%	42	7.9%
Driver Distraction	4	4.4%	29	6.8%	2	11.1%	35	6.6%
Failed to Keep in Proper Lane	4	4.4%	14	3.3%	1	5.6%	19	3.6%
Vision Obscured by Moving Vehicle	2	2.2%	15	3.5%	0	0.0%	17	3.2%
Vision Obscured by Other	2	2.2%	15	3.5%	0	0.0%	17	3.2%
Improper Lane Change	5	5.5%	11	2.6%	0	0.0%	16	3.0%
Speed Too Fast	5	5.5%	8	1.9%	1	5.6%	14	2.6%
Hit and Run	1	1.1%	11	2.6%	0	0.0%	12	2.2%
Vehicle Defective Condition	3	3.3%	9	2.1%	0	0.0%	12	2.2%
Other Driver Condition	0	0.0%	11	2.6%	0	0.0%	11	2.1%
Disregard Traffic Signal/Sign	1	1.1%	8	1.9%	0	0.0%	9	1.7%
Vision Obscured by Parked Vehicle	0	0.0%	7	1.6%	0	0.0%	7	1.3%
Improper Parking/Stopping	1	1.1%	5	1.2%	0	0.0%	6	1.1%
Improper Backing	3	3.3%	2	0.5%	0	0.0%	5	0.9%
Improper Signal	0	0.0%	5	1.2%	0	0.0%	5	0.9%
Wrong Side/Wrong Way	0	0.0%	4	0.9%	1	5.6%	5	0.9%
Driving Under the Influence	1	1.1%	1	0.2%	2	11.1%	4	0.7%
Improper Passing	0	0.0%	4	0.9%	0	0.0%	4	0.7%
Overcorrected/Oversteering	0	0.0%	4	0.9%	0	0.0%	4	0.7%
Swerved or Evasive Action	1	1.1%	3	0.7%	0	0.0%	4	0.7%
Reckless/Aggressive Driving	0	0.0%	1	0.2%	2	11.1%	3	0.6%
Ran Off Road	0	0.0%	0	0.0%	1	5.6%	1	0.2%
<b>Total</b>	<b>91</b>	<b>100.0%</b>	<b>425</b>	<b>100.0%</b>	<b>18</b>	<b>100.0%</b>	<b>534</b>	<b>100.0%</b>

- Failed to yield right of way (33.5%), followed too closely (9.7%), and improper turn (9.6%) were the leading contributing factors for drivers other than motorcyclists in all motorcycle crashes.

## Motorcycle Crash Conditions

### Contributing Factors of Motorcycle Drivers in Crashes (Utah 2010)

Motorcycle Drivers/Vehicles								
Contributing Factors	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Speed Too Fast	9	9.0%	125	14.1%	10	26.3%	144	14.0%
Failed to Keep in Proper Lane	10	10.0%	106	12.0%	5	13.2%	121	11.8%
Followed Too Closely	15	15.0%	91	10.3%	0	0.0%	106	10.3%
Other Improper Driving	17	17.0%	82	9.2%	0	0.0%	99	9.7%
Swerved or Evasive Action	6	6.0%	80	9.0%	0	0.0%	86	8.4%
Ran Off Road	7	7.0%	63	7.1%	7	18.4%	77	7.5%
Driving Under the Influence	2	2.0%	36	4.1%	5	13.2%	43	4.2%
Driver Distraction	5	5.0%	35	3.9%	1	2.6%	41	4.0%
Failed to Yield Right of Way	6	6.0%	31	3.5%	0	0.0%	37	3.6%
Overcorrected	2	2.0%	32	3.6%	0	0.0%	34	3.3%
Reckless/Aggressive Driving	1	1.0%	21	2.4%	5	13.2%	27	2.6%
Improper Passing	2	2.0%	17	1.9%	3	7.9%	22	2.1%
Improper Turn	5	5.0%	17	1.9%	0	0.0%	22	2.1%
Vehicle Other Defective Condition	1	1.0%	20	2.3%	0	0.0%	21	2.0%
Vision Obscured by Moving Vehicle	0	0.0%	16	1.8%	0	0.0%	16	1.6%
Improper Lane Change	2	2.0%	13	1.5%	0	0.0%	15	1.5%
Improper Parking/Stopping	2	2.0%	13	1.5%	0	0.0%	15	1.5%
Vehicle Tires	1	1.0%	13	1.5%	0	0.0%	14	1.4%
Other Driver Condition	1	1.0%	12	1.4%	0	0.0%	13	1.3%
Vehicle Brakes	0	0.0%	12	1.4%	0	0.0%	12	1.2%
Disregard Traffic Signal/Sign	0	0.0%	9	1.0%	1	2.6%	10	1.0%
Vision Obscured by Glare	0	0.0%	9	1.0%	0	0.0%	9	0.9%
Hit and Run	1	1.0%	6	0.7%	0	0.0%	7	0.7%
Vision Obscured by Other	1	1.0%	6	0.7%	0	0.0%	7	0.7%
Vision Obscured by Weather Condition	0	0.0%	5	0.6%	0	0.0%	5	0.5%
Driver Emotional Prior to Crash	0	0.0%	3	0.3%	1	2.6%	4	0.4%
Vision Obscured by Parked Vehicle	1	1.0%	3	0.3%	0	0.0%	4	0.4%
Disregard Road Markings	0	0.0%	3	0.3%	0	0.0%	3	0.3%
Driver Illness/Medical	0	0.0%	3	0.3%	0	0.0%	3	0.3%
Vision Obscured by Vegetation	0	0.0%	3	0.3%	0	0.0%	3	0.3%
Asleep/Fatigue	0	0.0%	2	0.2%	0	0.0%	2	0.2%
Improper Backing	2	2.0%	0	0.0%	0	0.0%	2	0.2%
Wrong Side/Wrong Way	1	1.0%	0	0.0%	0	0.0%	1	0.1%
<b>Total</b>	<b>100</b>	<b>100.0%</b>	<b>887</b>	<b>100.0%</b>	<b>38</b>	<b>100.0%</b>	<b>1,025</b>	<b>100.0%</b>

- Speed too fast (14.0%), failed to keep in proper lane (11.8%), and followed too closely (10.3%) were the leading contributing factors for all motorcycle crashes.
- The leading contributing factors for fatal crashes were speed too fast (26.3%) and ran off road (18.4%).

# Pedestrians



2

## Section 7: Pedestrians

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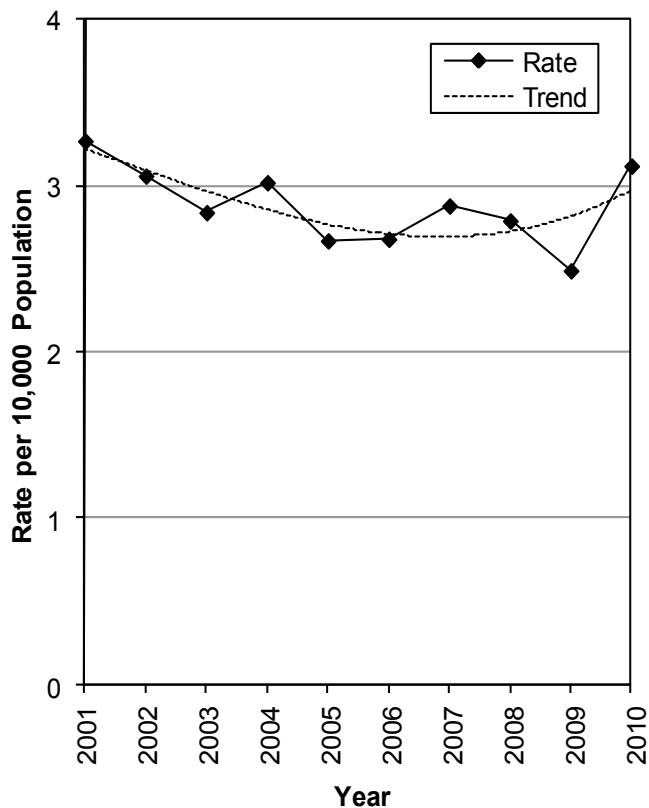
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## Trends

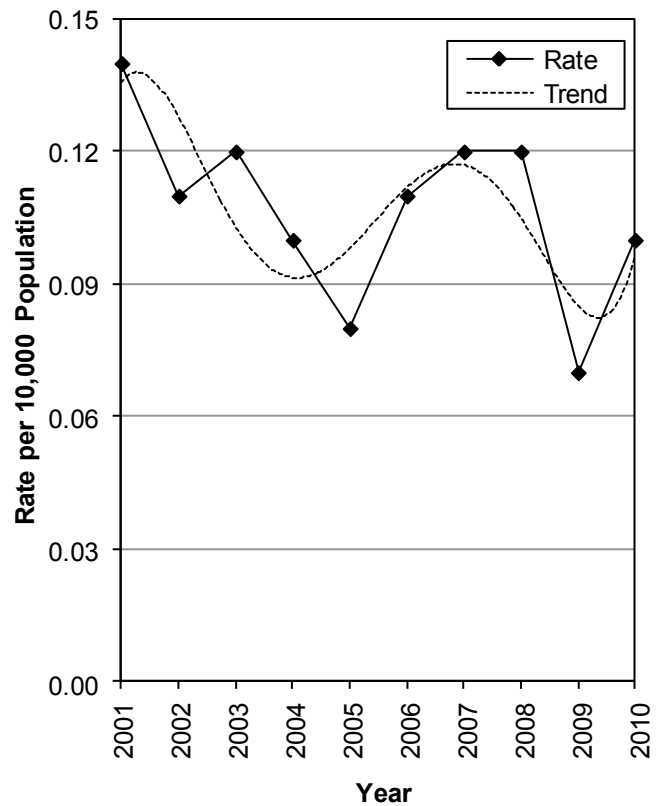
### Pedestrians in Crashes (Utah 2001-2010)

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.
2001	39	0.17	682	2.96	33	0.14	754	3.27
2002	32	0.14	664	2.82	25	0.11	721	3.06
2003	42	0.17	616	2.55	28	0.12	686	2.84
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
2008	97	0.35	638	2.31	34	0.12	769	2.79
2009	65	0.23	613	2.19	20	0.07	698	2.49
2010	76	0.27	759	2.75	28	0.10	863	3.12
<b>Total</b>	<b>551</b>	<b>0.21</b>	<b>6,571</b>	<b>2.55</b>	<b>274</b>	<b>0.11</b>	<b>7,396</b>	<b>2.87</b>

#### Pedestrian Crash Rates Per Population (Utah 2001-2010)



#### Pedestrian Death Rates Per Population (Utah 2001-2010)



- In 2010, the total rate per population of pedestrians in crashes increased 25% from 2009. This was the highest rate since 2001.
- 2009 had the lowest rate per population of total pedestrians in crashes.
- The pedestrian death rates per population increased in 2010 after a decrease in 2009.
- 2001 had the highest rate per population of pedestrians killed in crashes (0.14), while 2009 had the lowest rate (0.07).

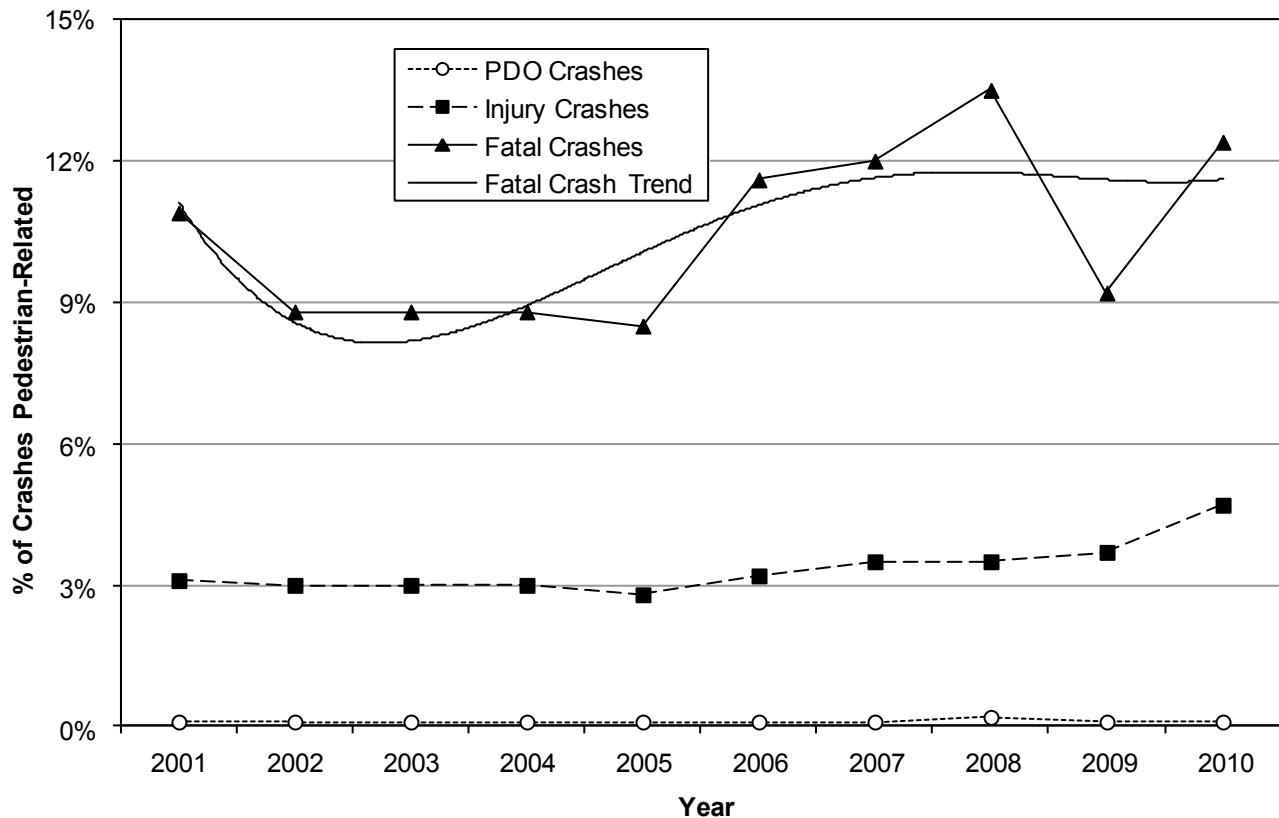


## Trends

## Pedestrian-Motor Vehicle Crashes (Utah 2001-2010)

Pedestrian-Motor Vehicle Crashes												
Year	Property Damage Only			Injury			Fatal			Total		
	All	Pedestrian		All	Pedestrian		All	Pedestrian		All	Pedestrian	
	#	#	%	#	#	%	#	#	%	#	#	%
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%
2008	38,997	63	0.2%	17,125	605	3.5%	245	33	13.5%	56,367	701	1.2%
2009	35,398	43	0.1%	15,752	588	3.7%	217	20	9.2%	51,367	651	1.3%
2010	34,155	47	0.1%	14,995	707	4.7%	218	27	12.4%	49,368	781	1.6%
<b>Total</b>	<b>356,544</b>	<b>385</b>	<b>0.1%</b>	<b>180,817</b>	<b>5,989</b>	<b>3.3%</b>	<b>2,476</b>	<b>258</b>	<b>10.4%</b>	<b>539,837</b>	<b>6,632</b>	<b>1.2%</b>

## Percent of Crashes Pedestrian-Related (Utah 2001-2010)



- The 10-year trend shows that pedestrian-motor vehicle crashes represent 0.1% of property damage only crashes, 3.3% 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 2009 to 2010, the percent of fatal crashes that involved a pedestrian increased 35%.
- During the last 10 years, the highest percent of fatal crashes involving pedestrians occurred in 2008 (13.5%).

## Counties

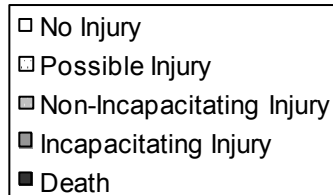
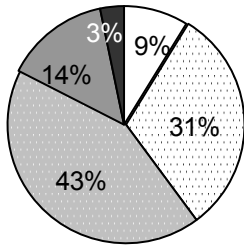
### Pedestrians in Crashes by County (Utah 2010)

County	Pedestrians							
	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.
Juab	2	1.95	5	4.88	0	0.00	7	6.83
Wasatch	1	0.42	11	4.67	0	0.00	12	5.10
Salt Lake	46	0.45	382	3.71	10	0.10	438	4.25
Weber	9	0.39	72	3.11	3	0.13	84	3.63
Summit	0	0.00	12	3.30	0	0.00	12	3.30
Beaver	0	0.00	2	3.02	0	0.00	2	3.02
Cache	3	0.27	29	2.57	1	0.09	33	2.93
Utah	6	0.12	113	2.19	5	0.10	124	2.40
Davis	7	0.23	62	2.02	1	0.03	70	2.28
Washington	1	0.07	28	2.03	2	0.14	31	2.24
Tooele	0	0.00	12	2.06	1	0.17	13	2.23
Grand	0	0.00	1	1.08	1	1.08	2	2.17
Garfield	0	0.00	1	1.93	0	0.00	1	1.93
Uintah	0	0.00	5	1.53	1	0.31	6	1.84
Iron	0	0.00	8	1.73	0	0.00	8	1.73
Millard	0	0.00	2	1.60	0	0.00	2	1.60
Sevier	0	0.00	2	0.96	1	0.48	3	1.44
Box Elder	1	0.20	5	1.00	1	0.20	7	1.40
Duchesne	0	0.00	1	0.54	1	0.54	2	1.07
Morgan	0	0.00	1	1.06	0	0.00	1	1.06
Carbon	0	0.00	2	0.93	0	0.00	2	0.93
Emery	0	0.00	1	0.91	0	0.00	1	0.91
Sanpete	0	0.00	2	0.72	0	0.00	2	0.72
Daggett	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
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>76</b>	<b>0.27</b>	<b>759</b>	<b>2.75</b>	<b>28</b>	<b>0.10</b>	<b>863</b>	<b>3.12</b>

- Juab (6.83), Wasatch (5.10), and Salt Lake (4.25) counties had the highest rates of pedestrians in crashes per 10,000 population.
- Daggett, Kane, Piute, Rich, San Juan, and Wayne counties had no pedestrians in crashes.

## Pedestrians

### Injury Severity of Pedestrians in Crashes (Utah 2010)



- 87.9% of pedestrians in crashes sustained an injury compared to 17.5% of all persons in crashes.
- The percentage of pedestrians killed in crashes (3.2%) was much higher than the percentage for all persons killed in motor vehicle crashes (0.2%).
- Pedestrian crashes were 9.1 times more likely to result in a death than other motor vehicle crashes.

### Age of Pedestrians in Crashes (Utah 2010)

Pedestrians								
Age	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
0-4	7	11.3%	38	5.4%	2	7.1%	47	5.9%
5-9	2	3.2%	39	5.5%	1	3.6%	42	5.3%
10-14	7	11.3%	98	13.9%	3	10.7%	108	13.6%
15-19	14	22.6%	122	17.3%	0	0.0%	136	17.1%
20-24	9	14.5%	89	12.6%	2	7.1%	100	12.6%
25-29	5	8.1%	46	6.5%	2	7.1%	53	6.7%
30-34	7	11.3%	37	5.3%	1	3.6%	45	5.7%
35-39	0	0.0%	37	5.3%	2	7.1%	39	4.9%
40-44	1	1.6%	42	6.0%	2	7.1%	45	5.7%
45-49	4	6.5%	37	5.3%	2	7.1%	43	5.4%
50-54	1	1.6%	34	4.8%	1	3.6%	36	4.5%
55-59	2	3.2%	27	3.8%	0	0.0%	29	3.7%
60-64	1	1.6%	25	3.6%	4	14.3%	30	3.8%
65-69	0	0.0%	17	2.4%	3	10.7%	20	2.5%
70-74	1	1.6%	9	1.3%	1	3.6%	11	1.4%
75-79	1	1.6%	3	0.4%	1	3.6%	5	0.6%
80-84	0	0.0%	1	0.1%	1	3.6%	2	0.3%
85+	0	0.0%	3	0.4%	0	0.0%	3	0.4%
Unknown		0.0%		0.0%	0	0.0%	0	0.0%
<b>Total</b>	<b>62</b>	<b>100.0%</b>	<b>704</b>	<b>100.0%</b>	<b>28</b>	<b>100.0%</b>	<b>794</b>	<b>100.0%</b>

- Overall, the largest percentages of pedestrians in crashes were aged 10-24 years (43.3% of known).
- The highest percentage of pedestrian deaths occurred in the 60-69 year age group (25.0%).
- The average age of a pedestrian in a crash was 29 years. The average age of a pedestrian killed was 41 years.

### Gender of Pedestrians in Crashes (Utah 2010)

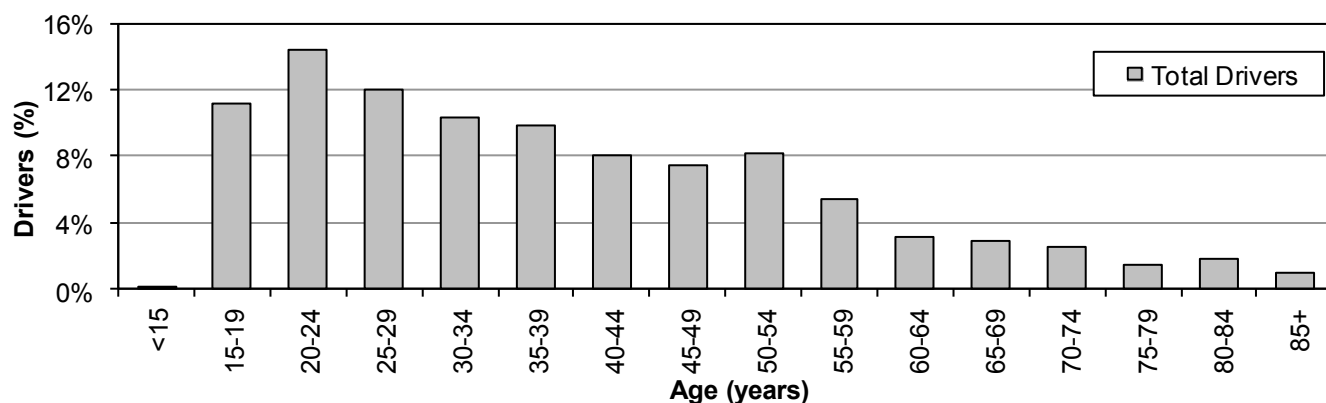
Pedestrians								
Gender	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Male	44	57.9%	396	52.2%	15	53.6%	455	52.7%
Female	23	30.3%	328	43.2%	13	46.4%	364	42.2%
Unknown	9	11.8%	35	4.6%	0	0.0%	44	5.1%
<b>Total</b>	<b>76</b>	<b>100.0%</b>	<b>759</b>	<b>100.0%</b>	<b>28</b>	<b>100.0%</b>	<b>863</b>	<b>100.0%</b>

- The majority of all pedestrians hit (52.7%) and pedestrians killed (53.6%) in crashes were male.

## Drivers

### Driver Age (Utah 2010)

Drivers (Pedestrian-Motor Vehicle Crashes)								
Age	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
<15	0	0.0%	0	0.0%	1	3.6%	1	0.1%
15-19	3	5.7%	72	9.6%	5	17.9%	80	9.6%
20-24	8	15.1%	89	11.9%	6	21.4%	103	12.4%
25-29	4	7.5%	78	10.4%	4	14.3%	86	10.3%
30-34	6	11.3%	65	8.7%	3	10.7%	74	8.9%
35-39	3	5.7%	66	8.8%	2	7.1%	71	8.5%
40-44	4	7.5%	54	7.2%	0	0.0%	58	7.0%
45-49	3	5.7%	48	6.4%	3	10.7%	54	6.5%
50-54	4	7.5%	55	7.3%	0	0.0%	59	7.1%
55-59	1	1.9%	35	4.7%	3	10.7%	39	4.7%
60-64	0	0.0%	21	2.8%	1	3.6%	22	2.6%
65-69	2	3.8%	19	2.5%	0	0.0%	21	2.5%
70-74	1	1.9%	17	2.3%	0	0.0%	18	2.2%
75-79	1	1.9%	10	1.3%	0	0.0%	11	1.3%
80-84	0	0.0%	13	1.7%	0	0.0%	13	1.6%
85+	1	1.9%	6	0.8%	0	0.0%	7	0.8%
Unknown	12	22.6%	103	13.7%	0	0.0%	115	13.8%
<b>Total</b>	<b>53</b>	<b>100.0%</b>	<b>751</b>	<b>100.0%</b>	<b>28</b>	<b>100.0%</b>	<b>832</b>	<b>100.0%</b>



- Nearly half (48.0% of known) of drivers in total pedestrian-motor vehicle crashes were under 35 years.
- The percentage of drivers in fatal pedestrian-motor vehicle crashes was highest for those aged 15-29 years.
- The average age of a driver was 39 years. The average age of a driver in a fatal crash was 32 years.

### Driver Gender (Utah 2010)

Drivers (Pedestrian-Motor Vehicle Crashes)								
Gender	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Male	23	43.4%	373	49.7%	18	64.3%	414	49.8%
Female	21	39.6%	307	40.9%	10	35.7%	338	40.6%
Unknown	9	17.0%	71	9.5%	0	0.0%	80	9.6%
<b>Total</b>	<b>53</b>	<b>100.0%</b>	<b>751</b>	<b>100.0%</b>	<b>28</b>	<b>100.0%</b>	<b>832</b>	<b>100.0%</b>

- The majority of drivers in total pedestrian crashes (55.1% of known) and fatal crashes (64.3%) were male.

## Pedestrian-Motor Vehicle Crash Conditions

### Contributing Factors of Pedestrians in Crashes (Utah 2010)

Contributing Factors	Pedestrians							
	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
None	41	53.9%	322	42.4%	11	39.3%	374	43.3%
Improper Crossing	3	3.9%	110	14.5%	4	14.3%	117	13.6%
Darting	8	10.5%	56	7.4%	4	14.3%	68	7.9%
In Roadway (standing, kneeling, lying)	2	2.6%	44	5.8%	4	14.3%	50	5.8%
Not Visible	0	0.0%	38	5.0%	0	0.0%	38	4.4%
Failure to Obey Traffic Signs/Signals	4	5.3%	18	2.4%	3	10.7%	25	2.9%
Inattentive	2	2.6%	10	1.3%	1	3.6%	13	1.5%
Failure to Yield Right of Way	0	0.0%	7	0.9%	0	0.0%	7	0.8%
Other	8	10.5%	49	6.5%	1	3.6%	58	6.7%
Unknown	8	10.5%	105	13.8%	0	0.0%	113	13.1%
<b>Total</b>	<b>76</b>	<b>100.0%</b>	<b>759</b>	<b>100.0%</b>	<b>28</b>	<b>100.0%</b>	<b>863</b>	<b>100.0%</b>

- Improper crossing (15.6% of known), darting (9.1% of known), and in roadway (6.7% of known) were the leading contributing factors for pedestrians in total crashes.
- Improper crossing (14.3%), darting (14.3%), and in roadway (14.3%) were the leading contributing factors for pedestrians killed.
- No contributing factors were listed for 39.3% of the pedestrians killed and 49.9% (of known) of total pedestrians.
- Other contributing factors to consider are drivers (see page 106), roadways (such as high speeds, traffic volumes, number of lanes to cross, inadequate pedestrian crossings), and vehicles (such as vehicle size).

### Pedestrian-Motor Vehicle Crashes by Month (Utah 2010)

Month	Pedestrians							
	Non-Injured		Injured		Killed		Total	
	#	Rate per Day	#	Rate per Day	#	Rate per Day	#	Rate per Day
January	6	0.19	63	2.03	2	0.06	71	2.29
February	8	0.29	62	2.21	1	0.04	71	2.54
March	6	0.19	51	1.65	1	0.03	58	1.87
April	6	0.20	59	1.97	3	0.10	68	2.27
May	6	0.19	42	1.35	4	0.13	52	1.68
June	10	0.33	43	1.43	1	0.03	54	1.80
July	4	0.13	58	1.87	2	0.06	64	2.06
August	11	0.35	65	2.10	0	0.00	76	2.45
September	5	0.17	79	2.63	3	0.10	87	2.90
October	4	0.13	83	2.68	3	0.10	90	2.90
November	8	0.27	75	2.50	3	0.10	86	2.87
December	2	0.06	79	2.55	5	0.16	86	2.77
<b>Total</b>	<b>76</b>	<b>0.21</b>	<b>759</b>	<b>2.08</b>	<b>28</b>	<b>0.08</b>	<b>863</b>	<b>2.36</b>

- October, September, and November had the highest rates per day of total pedestrian-motor vehicle crashes.
- December (0.16) and May (0.13) had the highest rates per day of pedestrian deaths.

## Pedestrian-Motor Vehicle Crash Conditions

### Pedestrian-Motor Vehicle Crashes by Hour (Utah 2010)

Hour	Pedestrians							
	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Midnight	2	2.6%	10	1.3%	1	3.6%	13	1.5%
1 a.m.	1	1.3%	7	0.9%	1	3.6%	9	1.0%
2 a.m.	0	0.0%	4	0.5%	0	0.0%	4	0.5%
3 a.m.	0	0.0%	0	0.0%	1	3.6%	1	0.1%
4 a.m.	0	0.0%	2	0.3%	0	0.0%	2	0.2%
5 a.m.	0	0.0%	7	0.9%	2	7.1%	9	1.0%
6 a.m.	1	1.3%	22	2.9%	1	3.6%	24	2.8%
7 a.m.	2	2.6%	46	6.1%	4	14.3%	52	6.0%
8 a.m.	7	9.2%	27	3.6%	0	0.0%	34	3.9%
9 a.m.	3	3.9%	15	2.0%	0	0.0%	18	2.1%
10 a.m.	5	6.6%	21	2.8%	0	0.0%	26	3.0%
11 a.m.	1	1.3%	33	4.3%	0	0.0%	34	3.9%
Noon	6	7.9%	32	4.2%	2	7.1%	40	4.6%
1 p.m.	2	2.6%	32	4.2%	0	0.0%	34	3.9%
2 p.m.	4	5.3%	55	7.2%	3	10.7%	62	7.2%
3 p.m.	6	7.9%	70	9.2%	0	0.0%	76	8.8%
4 p.m.	7	9.2%	53	7.0%	0	0.0%	60	7.0%
5 p.m.	8	10.5%	62	8.2%	1	3.6%	71	8.2%
6 p.m.	6	7.9%	59	7.8%	3	10.7%	68	7.9%
7 p.m.	2	2.6%	59	7.8%	3	10.7%	64	7.4%
8 p.m.	3	3.9%	52	6.9%	3	10.7%	58	6.7%
9 p.m.	6	7.9%	42	5.5%	2	7.1%	50	5.8%
10 p.m.	3	3.9%	31	4.1%	1	3.6%	35	4.1%
11 p.m.	1	1.3%	18	2.4%	0	0.0%	19	2.2%
<b>Total</b>	<b>76</b>	<b>100.0%</b>	<b>759</b>	<b>100.0%</b>	<b>28</b>	<b>100.0%</b>	<b>863</b>	<b>100.0%</b>

- Total pedestrian-motor vehicle crashes were more likely to occur between 2:00 p.m. and 7:59 p.m.
- Fatal pedestrian-motor vehicle crashes were highest during the 7:00 a.m. hour.

### Pedestrian-Motor Vehicle Crashes by Day of Week (Utah 2010)

Day of Week	Pedestrians							
	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Sunday	1	1.3%	60	7.9%	7	25.0%	68	7.9%
Monday	14	18.4%	108	14.2%	0	0.0%	122	14.1%
Tuesday	12	15.8%	126	16.6%	4	14.3%	142	16.5%
Wednesday	9	11.8%	118	15.5%	2	7.1%	129	14.9%
Thursday	14	18.4%	132	17.4%	8	28.6%	154	17.8%
Friday	7	9.2%	114	15.0%	3	10.7%	124	14.4%
Saturday	19	25.0%	101	13.3%	4	14.3%	124	14.4%
<b>Total</b>	<b>76</b>	<b>100.0%</b>	<b>759</b>	<b>100.0%</b>	<b>28</b>	<b>100.0%</b>	<b>863</b>	<b>100.0%</b>

- The highest percentage of total pedestrian-motor vehicle crashes (17.8%) occurred on Thursday.

## Pedestrian-Motor Vehicle Crash Conditions

### Vehicle Maneuver Prior to Crash (Utah 2010)

Vehicles (Pedestrian-Motor Vehicle Crashes)								
Vehicle Maneuver	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Straight Ahead	21	35.6%	367	47.2%	20	69.0%	408	47.2%
Turning Right	17	28.8%	132	17.0%	2	6.9%	151	17.5%
Turning Left	3	5.1%	111	14.3%	3	10.3%	117	13.5%
Stopped/Slowing in Traffic Lane	5	8.5%	40	5.1%	3	10.3%	48	5.5%
Backing	3	5.1%	38	4.9%	0	0.0%	41	4.7%
Parked/Parking	4	6.8%	27	3.5%	0	0.0%	31	3.6%
Entering Traffic Lane	1	1.7%	3	0.4%	1	3.4%	5	0.6%
Changing Lanes	0	0.0%	5	0.6%	0	0.0%	5	0.6%
Overtaking/Passing	0	0.0%	3	0.4%	0	0.0%	3	0.3%
Other	3	5.1%	24	3.1%	0	0.0%	27	3.1%
Unknown	2	3.4%	27	3.5%	0	0.0%	29	3.4%
<b>Total</b>	<b>59</b>	<b>100.0%</b>	<b>777</b>	<b>100.0%</b>	<b>29</b>	<b>100.0%</b>	<b>865</b>	<b>100.0%</b>

- The leading vehicle maneuvers prior to the crash were straight ahead (47.2%), turning right (17.5%), and turning left (13.5%).

### Pedestrian-Motor Vehicle Crashes by Speed Limit (Utah 2010)

Vehicles (Pedestrian-Motor Vehicle Crashes)								
Speed Limit	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
5-15 MPH	2	3.4%	20	2.6%	0	0.0%	22	2.5%
20-25 MPH	8	13.6%	163	21.0%	4	13.8%	175	20.2%
30-35 MPH	8	13.6%	184	23.7%	6	20.7%	198	22.9%
40-45 MPH	9	15.3%	130	16.7%	7	24.1%	146	16.9%
50-55 MPH	2	3.4%	10	1.3%	4	13.8%	16	1.8%
60-65 MPH	0	0.0%	15	1.9%	3	10.3%	18	2.1%
70+ MPH	1	1.7%	3	0.4%	4	13.8%	8	0.9%
Unknown	29	49.2%	252	32.4%	1	3.4%	282	32.6%
<b>Total</b>	<b>59</b>	<b>100.0%</b>	<b>777</b>	<b>100.0%</b>	<b>29</b>	<b>100.0%</b>	<b>865</b>	<b>100.0%</b>

- The majority (89.0% of known) of total pedestrian crashes occurred where the speed limit was 20-45 MPH.

### Travel Speed of Vehicles in Pedestrian Crashes (Utah 2010)

Vehicles (Pedestrian-Motor Vehicle Crashes)								
Travel Speed	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Parked	4	6.8%	20	2.6%	0	0.0%	24	2.8%
Stopped	4	6.8%	39	5.0%	2	6.9%	45	5.2%
1-9 MPH	14	23.7%	150	19.3%	2	6.9%	166	19.2%
10-19 MPH	3	5.1%	111	14.3%	1	3.4%	115	13.3%
20-29 MPH	4	6.8%	74	9.5%	3	10.3%	81	9.4%
30-39 MPH	1	1.7%	59	7.6%	3	10.3%	63	7.3%
40-49 MPH	2	3.4%	33	4.2%	5	17.2%	40	4.6%
50-59 MPH	0	0.0%	9	1.2%	2	6.9%	11	1.3%
60-69 MPH	1	1.7%	4	0.5%	2	6.9%	7	0.8%
70+ MPH	0	0.0%	2	0.3%	3	10.3%	5	0.6%
Unknown	26	44.1%	276	35.5%	6	20.7%	308	35.6%
<b>Total</b>	<b>59</b>	<b>100.0%</b>	<b>777</b>	<b>100.0%</b>	<b>29</b>	<b>100.0%</b>	<b>865</b>	<b>100.0%</b>

- 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 6.7 times more likely to die.



## Pedestrian-Motor Vehicle Crash Conditions

### Contributing Factors in Pedestrian Crashes (Utah 2010)

Drivers/Vehicles (Pedestrian-Motor Vehicle Crashes)								
Contributing Factors	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Failed to Yield Right of Way	13	23.2%	238	29.7%	9	23.7%	260	29.0%
Other Improper Driving	9	16.1%	97	12.1%	0	0.0%	106	11.8%
Hit and Run	7	12.5%	79	9.9%	3	7.9%	89	9.9%
Driver Distraction	4	7.1%	60	7.5%	4	10.5%	68	7.6%
Vision Obscured by Weather Condition	2	3.6%	29	3.6%	2	5.3%	33	3.7%
Improper Backing	2	3.6%	25	3.1%	0	0.0%	27	3.0%
Followed Too Closely	2	3.6%	21	2.6%	0	0.0%	23	2.6%
Failed to Keep in Proper Lane	3	5.4%	17	2.1%	2	5.3%	22	2.5%
Vision Obscured by Moving Vehicle	1	1.8%	19	2.4%	2	5.3%	22	2.5%
Driver Emotional Prior to Crash	0	0.0%	20	2.5%	1	2.6%	21	2.3%
Speed Too Fast	0	0.0%	18	2.2%	3	7.9%	21	2.3%
Ran Off Road	2	3.6%	15	1.9%	3	7.9%	20	2.2%
Vision Obscured by Glare	0	0.0%	19	2.4%	0	0.0%	19	2.1%
Vision Obscured by Parked Vehicle	1	1.8%	14	1.7%	3	7.9%	18	2.0%
Driving Under the Influence	0	0.0%	15	1.9%	1	2.6%	16	1.8%
Reckless/Aggressive Driving	1	1.8%	15	1.9%	0	0.0%	16	1.8%
Vehicle Other Defective Condition	3	5.4%	13	1.6%	0	0.0%	16	1.8%
Improper Turn	1	1.8%	13	1.6%	1	2.6%	15	1.7%
Swerved or Evasive Action	1	1.8%	10	1.2%	2	5.3%	13	1.5%
Other Driver Condition	0	0.0%	11	1.4%	0	0.0%	11	1.2%
Vision Obscured by Other	2	3.6%	8	1.0%	1	2.6%	11	1.2%
Windshield or Other Window Obscured	1	1.8%	8	1.0%	1	2.6%	10	1.1%
Disregard Traffic Signal/Sign	0	0.0%	9	1.1%	0	0.0%	9	1.0%
Disregard Road Markings	0	0.0%	6	0.7%	0	0.0%	6	0.7%
Improper Parking/Stopping	0	0.0%	5	0.6%	0	0.0%	5	0.6%
Improper Lane Change	0	0.0%	4	0.5%	0	0.0%	4	0.4%
Overcorrected	0	0.0%	3	0.4%	0	0.0%	3	0.3%
Vehicle Brakes	0	0.0%	3	0.4%	0	0.0%	3	0.3%
Wrong Side/Wrong Way	0	0.0%	3	0.4%	0	0.0%	3	0.3%
Asleep/Fatigue	1	1.8%	1	0.1%	0	0.0%	2	0.2%
Driver Illness/Medical	0	0.0%	1	0.1%	0	0.0%	1	0.1%
Vehicle Tires	0	0.0%	1	0.1%	0	0.0%	1	0.1%
Vision Obscured by Building, Sign	0	0.0%	1	0.1%	0	0.0%	1	0.1%
Vision Obscured by Vegetation	0	0.0%	1	0.1%	0	0.0%	1	0.1%
<b>Total</b>	<b>56</b>	<b>100.0%</b>	<b>802</b>	<b>100.0%</b>	<b>38</b>	<b>100.0%</b>	<b>896</b>	<b>100.0%</b>

- Failed to yield right of way (29.0%), hit and run (9.9%), and driver distraction (7.6%) were the leading contributing factors in total pedestrian-motor vehicle crashes.
- Failed to yield right of way (23.7%) and driver distraction (10.5%) were the leading contributing factors in fatal pedestrian-motor vehicle crashes.

# Bicyclists



## Section 8: Bicyclists

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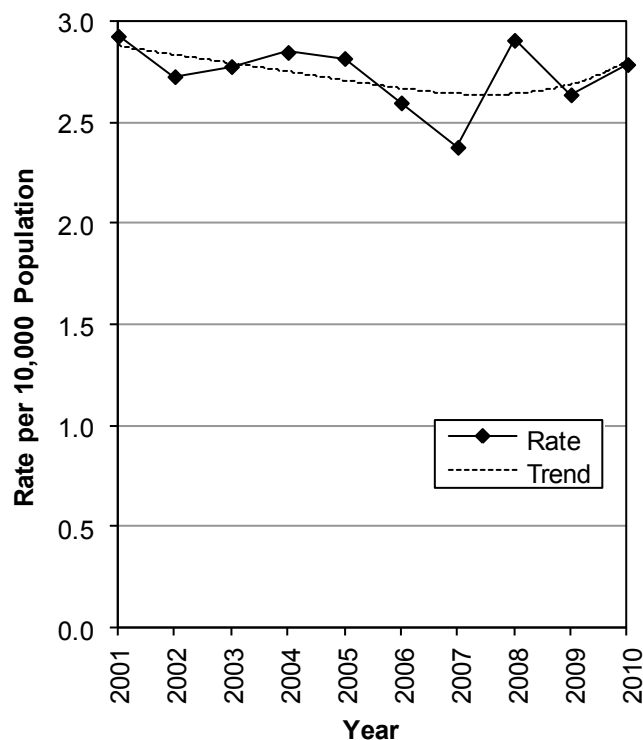
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## Trends

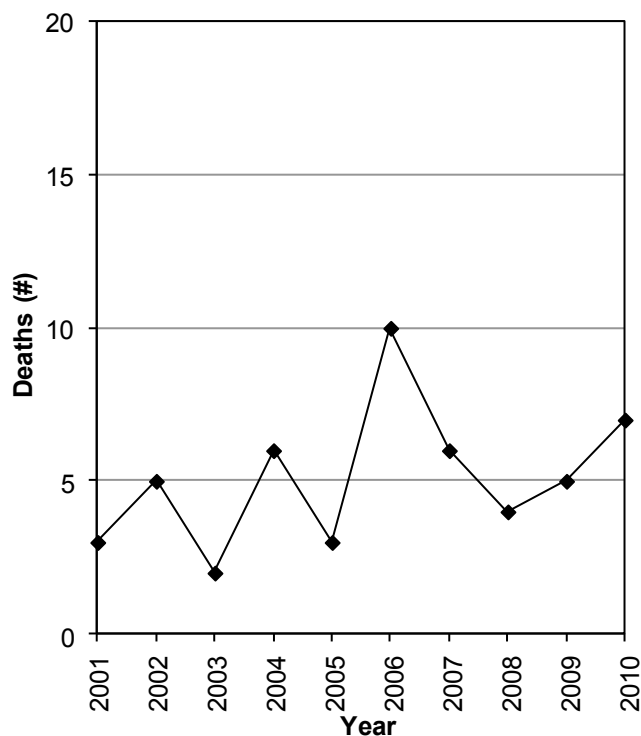
### Bicyclists in Crashes (Utah 2001-2010)

Year	Bicyclists							
	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.
2001	48	0.21	625	2.71	3	0.013	676	2.93
2002	50	0.21	590	2.50	5	0.021	645	2.73
2003	48	0.20	621	2.57	2	0.008	671	2.78
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
2008	90	0.33	708	2.57	4	0.015	802	2.91
2009	83	0.30	651	2.32	5	0.018	739	2.64
2010	86	0.31	680	2.46	7	0.025	773	2.80
<b>Total</b>	<b>647</b>	<b>0.25</b>	<b>6,353</b>	<b>2.47</b>	<b>51</b>	<b>0.020</b>	<b>7,051</b>	<b>2.74</b>

### Bicyclist Crash Rates Per Population (Utah 2001-2010)



### Bicyclist Deaths (Utah 2001-2010)



- In 2010, the total rate per population of bicyclists in crashes increased 6% from the 2009 rate.
- 2007 had the lowest bicyclist crash rate per population (2.38).
- 2001 had the highest bicyclist crash rate per population (2.93).

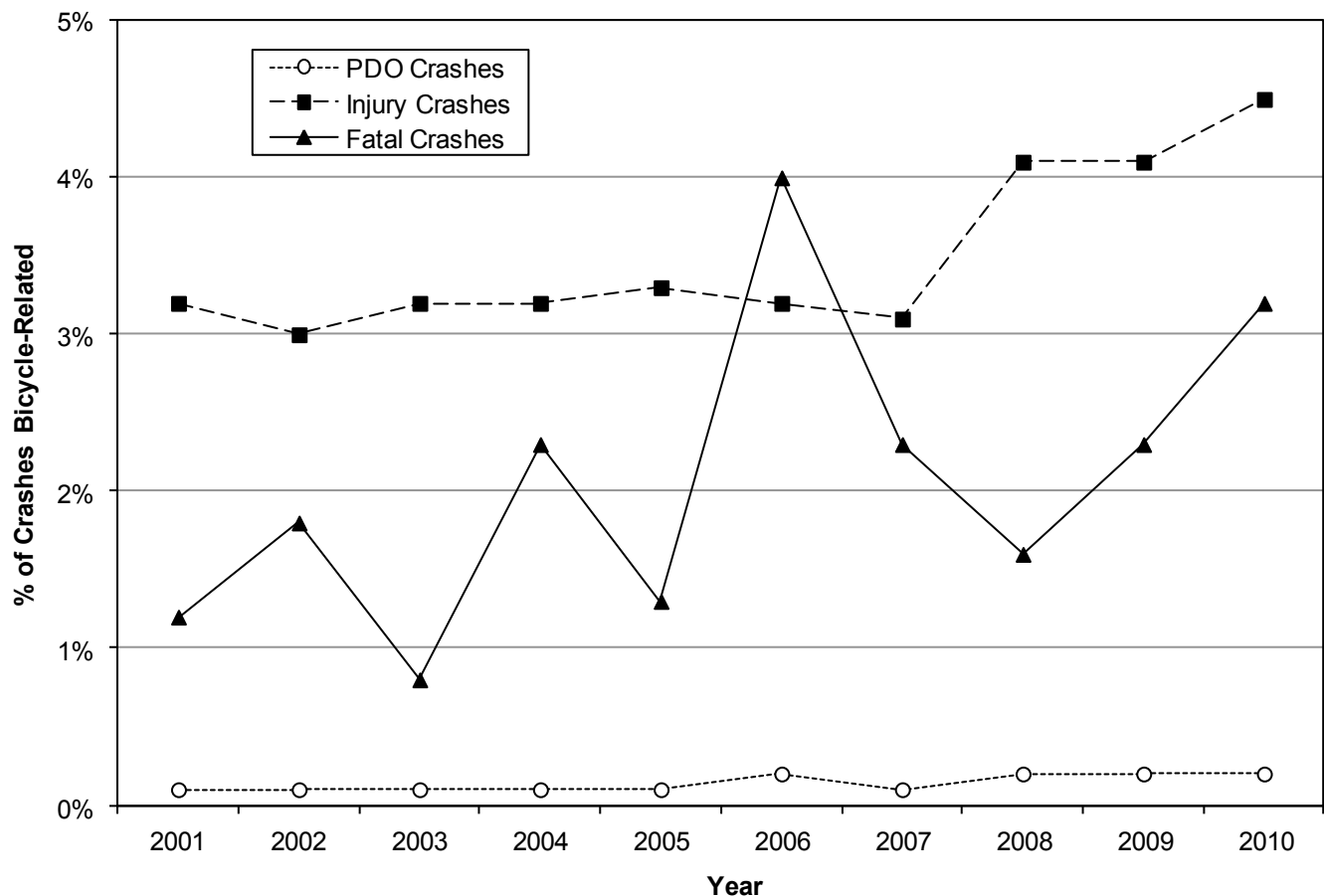
- On average, five bicyclists are killed in crashes every year.
- In 2010, there were 7 bicyclists killed in crashes.
- Because of the small number of bicyclist deaths, use caution when comparing years due to small number instability.

## Trends

## Bicycle-Motor Vehicle Crashes (Utah 2001-2010)

Bicycle-Motor Vehicle Crashes												
Year	Property Damage Only			Injury			Fatal			Total		
	All	Bicycle		All	Bicycle		All	Bicycle		All	Bicycle	
	#	#	%	#	#	%	#	#	%	#	#	%
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%
2008	38,997	83	0.2%	17,125	697	4.1%	245	4	1.6%	56,367	784	1.4%
2009	35,398	83	0.2%	15,752	651	4.1%	217	5	2.3%	51,367	739	1.4%
2010	34,155	78	0.2%	14,995	669	4.5%	218	7	3.2%	49,368	754	1.5%
<b>Total</b>	<b>356,544</b>	<b>581</b>	<b>0.2%</b>	<b>180,817</b>	<b>6,231</b>	<b>3.4%</b>	<b>2,476</b>	<b>51</b>	<b>2.1%</b>	<b>539,837</b>	<b>6,863</b>	<b>1.3%</b>

## Percent of Crashes Involving a Bicyclist (Utah 2001-2010)



- The 10-year trend shows that bicycle-motor vehicle crashes represent 0.2% of property damage only crashes, 3.4% of injury crashes, and 2.1% of fatal crashes.
- During the last 10 years, 6,861 crashes involved a bicyclist. There are approximately 620 injury crashes and five fatal crashes involving bicyclists a year.

## Counties

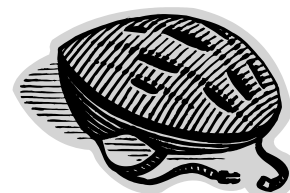
### Bicyclists in Crashes by County (Utah 2010)

County	Bicyclists							
	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.
Salt Lake	54	0.52	340	3.30	5	0.05	399	3.88
Cache	5	0.44	33	2.93	1	0.09	39	3.46
Utah	12	0.23	142	2.75	0	0.00	154	2.98
Wasatch	1	0.42	5	2.12	0	0.00	6	2.55
Weber	5	0.22	47	2.03	0	0.00	52	2.25
Summit	1	0.28	7	1.93	0	0.00	8	2.20
Davis	5	0.16	62	2.02	0	0.00	67	2.19
Garfield	0	0.00	1	1.93	0	0.00	1	1.93
Sevier	0	0.00	4	1.92	0	0.00	4	1.92
Iron	3	0.65	5	1.08	0	0.00	8	1.73
Washington	0	0.00	20	1.45	0	0.00	20	1.45
Carbon	0	0.00	3	1.40	0	0.00	3	1.40
Uintah	0	0.00	3	0.92	0	0.00	3	0.92
Emery	0	0.00	1	0.91	0	0.00	1	0.91
Tooele	0	0.00	4	0.69	0	0.00	4	0.69
Box Elder	0	0.00	3	0.60	0	0.00	3	0.60
Sanpete	0	0.00	0	0.00	1	0.36	1	0.36
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
Duchesne	0	0.00	0	0.00	0	0.00	0	0.00
Grand	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>86</b>	<b>0.31</b>	<b>680</b>	<b>2.46</b>	<b>7</b>	<b>0.03</b>	<b>773</b>	<b>2.80</b>

- Urban areas (3.22) had a much higher total bicycle-motor vehicle crash rate per 10,000 population than rural areas (1.49).
- Salt Lake (3.87), Cache (3.46), and Utah (2.98) counties had the highest rates per population of total bicyclists in crashes per 10,000 population.
- Beaver, Daggett, Duchesne, Grand, Juab, Kane, Millard, Morgan, Piute, Rich, San Juan, and Wayne counties had no bicyclists in crashes.

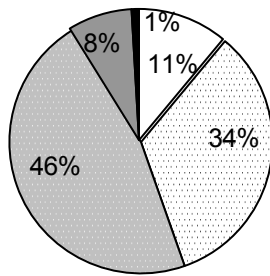
### Bicyclists and Helmet Use

- Helmet use for bicyclists in crashes was not reported consistently. As a result, it is not in this summary.



## Bicyclists

### Injury Severity of Bicyclists in Crashes (Utah 2010)



<input type="checkbox"/>	No Injury
<input type="checkbox"/>	Possible Injury
<input type="checkbox"/>	Non-Incapacitating Injury
<input type="checkbox"/>	Incapacitating Injury
<input type="checkbox"/>	Death

- 88.1% of bicyclists in crashes sustained an injury compared to 17.5% of all persons in motor vehicle crashes.

### Age of Bicyclists in Crashes (Utah 2010)

Age	Bicyclists							
	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
0-4	2	2.3%	6	0.9%	0	0.0%	8	1.0%
5-9	6	7.0%	37	5.4%	1	14.3%	44	5.7%
10-14	10	11.6%	103	15.1%	1	14.3%	114	14.7%
15-19	14	16.3%	110	16.2%	0	0.0%	124	16.0%
20-24	9	10.5%	94	13.8%	0	0.0%	103	13.3%
25-29	6	7.0%	54	7.9%	2	28.6%	62	8.0%
30-34	3	3.5%	56	8.2%	0	0.0%	59	7.6%
35-39	3	3.5%	34	5.0%	0	0.0%	37	4.8%
40-44	4	4.7%	39	5.7%	0	0.0%	43	5.6%
45-49	7	8.1%	33	4.9%	2	28.6%	42	5.4%
50-54	0	0.0%	33	4.9%	0	0.0%	33	4.3%
55-59	1	1.2%	20	2.9%	0	0.0%	21	2.7%
60-64	0	0.0%	8	1.2%	1	14.3%	9	1.2%
65-69	1	1.2%	6	0.9%	0	0.0%	7	0.9%
70+	1	1.2%	3	0.4%	0	0.0%	4	0.5%
Unknown	19	22.1%	44	6.5%	0	0.0%	63	8.2%
<b>Total</b>	<b>86</b>	<b>100.0%</b>	<b>680</b>	<b>100.0%</b>	<b>7</b>	<b>100.0%</b>	<b>773</b>	<b>100.0%</b>

- Where age was known, over half (55.3%) of the bicyclists in crashes were under 25 years.
- The average age of a bicyclist in a crash was 27 years.

### Gender of Bicyclists in Crashes (Utah 2010)

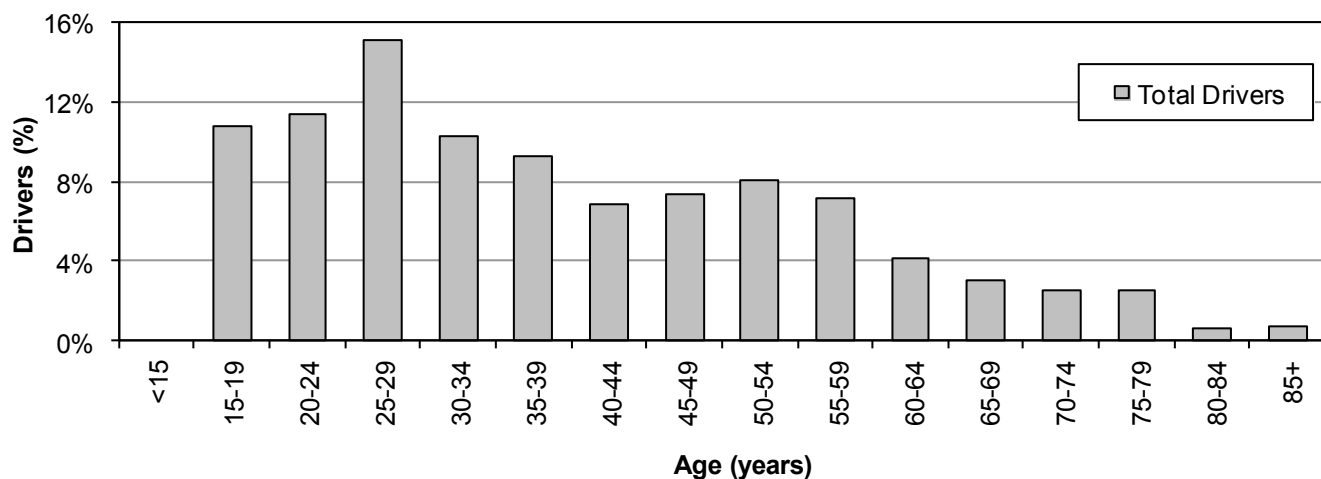
Gender	Bicyclists							
	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Male	59	68.6%	515	75.7%	4	57.1%	578	74.8%
Female	15	17.4%	146	21.5%	3	42.9%	164	21.2%
Unknown	12	14.0%	19	2.8%	0	0.0%	31	4.0%
<b>Total</b>	<b>86</b>	<b>100.0%</b>	<b>680</b>	<b>100.0%</b>	<b>7</b>	<b>100.0%</b>	<b>773</b>	<b>100.0%</b>

- The majority of all bicyclists (74.7%) in crashes were male.

## Motor Vehicle Drivers

### Driver Age (Utah 2010)

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	9	11.3%	63	9.2%	2	25.0%	74	9.5%
20-24	7	8.8%	69	10.0%	1	12.5%	77	9.9%
25-29	10	12.5%	92	13.4%	0	0.0%	102	13.1%
30-34	6	7.5%	64	9.3%	0	0.0%	70	9.0%
35-39	8	10.0%	52	7.6%	3	37.5%	63	8.1%
40-44	10	12.5%	38	5.5%	0	0.0%	48	6.2%
45-49	5	6.3%	45	6.5%	0	0.0%	50	6.4%
50-54	4	5.0%	50	7.3%	1	12.5%	55	7.1%
55-59	2	2.5%	46	6.7%	1	12.5%	49	6.3%
60-64	6	7.5%	22	3.2%	0	0.0%	28	3.6%
65-69	4	5.0%	16	2.3%	0	0.0%	20	2.6%
70-74	1	1.3%	16	2.3%	0	0.0%	17	2.2%
75-79	3	3.8%	14	2.0%	0	0.0%	17	2.2%
80-84	0	0.0%	4	0.6%	0	0.0%	4	0.5%
85+	0	0.0%	5	0.7%	0	0.0%	5	0.6%
Unknown	5	6.3%	92	13.4%	0	0.0%	97	12.5%
<b>Total</b>	<b>80</b>	<b>100.0%</b>	<b>688</b>	<b>100.0%</b>	<b>8</b>	<b>100.0%</b>	<b>776</b>	<b>100.0%</b>



- Over half (56.9% of known) of drivers in total bicycle-motor vehicle crashes were under age 40 years.

### Driver Gender (Utah 2010)

Drivers (Bicycle-Motor Vehicle Crashes)								
Gender	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Male	44	55.0%	334	48.5%	3	37.5%	381	49.1%
Female	33	41.3%	286	41.6%	5	62.5%	324	41.8%
Unknown	3	3.8%	68	9.9%	0	0.0%	71	9.1%
<b>Total</b>	<b>80</b>	<b>100.0%</b>	<b>688</b>	<b>100.0%</b>	<b>8</b>	<b>100.0%</b>	<b>776</b>	<b>100.0%</b>

- The majority of drivers in total bicycle-motor vehicle crashes (53.9% of known) were male.



## Bicycle-Motor Vehicle Crash Conditions

### Bicycle-Motor Vehicle Crashes by Month (Utah 2010)

Bicyclists								
Month	Non-Injured		Injured		Killed		Total	
	#	Rate per Day	#	Rate per Day	#	Rate per Day	#	Rate per Day
January	1	0.0	24	0.8	0	0.00	25	0.8
February	1	0.0	22	0.8	0	0.00	23	0.8
March	5	0.2	33	1.1	0	0.00	38	1.2
April	7	0.2	40	1.3	0	0.00	47	1.6
May	5	0.2	71	2.3	0	0.00	76	2.5
June	12	0.4	92	3.1	0	0.00	104	3.5
July	12	0.4	98	3.2	3	0.10	113	3.6
August	12	0.4	86	2.8	1	0.03	99	3.2
September	11	0.4	103	3.4	0	0.00	114	3.8
October	11	0.4	59	1.9	1	0.03	71	2.3
November	6	0.2	35	1.2	2	0.07	43	1.4
December	3	0.1	17	0.5	0	0.00	20	0.6
<b>Total</b>	<b>86</b>	<b>0.2</b>	<b>680</b>	<b>1.9</b>	<b>7</b>	<b>0.02</b>	<b>773</b>	<b>2.1</b>

- September (3.8) and July (3.6) had the highest rates per day of total bicycle-motor vehicle crashes.

### Bicycle-Motor Vehicle Crashes by Day of Week (Utah 2010)

Bicyclists								
Day of Week	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Sunday	6	7.0%	44	6.5%	1	14.3%	51	6.6%
Monday	15	17.4%	128	18.8%	0	0.0%	143	18.5%
Tuesday	16	18.6%	115	16.9%	2	28.6%	133	17.2%
Wednesday	18	20.9%	103	15.1%	1	14.3%	122	15.8%
Thursday	16	18.6%	121	17.8%	2	28.6%	139	18.0%
Friday	11	12.8%	90	13.2%	1	14.3%	102	13.2%
Saturday	4	4.7%	79	11.6%	0	0.0%	83	10.7%
<b>Total</b>	<b>86</b>	<b>100.0%</b>	<b>680</b>	<b>100.0%</b>	<b>7</b>	<b>100.0%</b>	<b>773</b>	<b>100.0%</b>

- The highest percentage of total bicycle-motor vehicle crashes (18.5%) occurred on Monday.

### Bicyclist Location in Bicycle-Motor Vehicle Crashes (Utah 2010)

Bicyclists								
Bicyclist Location	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Marked Crosswalk	33	38.4%	151	22.2%	0	0.0%	184	23.8%
In Roadway (not at intersection)	6	7.0%	135	19.9%	2	28.6%	143	18.5%
Shoulder	11	12.8%	98	14.4%	2	28.6%	111	14.4%
Sidewalk	11	12.8%	87	12.8%	0	0.0%	98	12.7%
Unmarked Crosswalk	4	4.7%	51	7.5%	3	42.9%	58	7.5%
Bike Path	3	3.5%	23	3.4%	0	0.0%	26	3.4%
Outside Right of Way	0	0.0%	4	0.6%	0	0.0%	4	0.5%
Shared Use Path/Trail	0	0.0%	3	0.4%	0	0.0%	3	0.4%
Other	1	1.2%	21	3.1%	0	0.0%	22	2.8%
Unknown	17	19.8%	107	15.7%	0	0.0%	124	16.0%
<b>Total</b>	<b>86</b>	<b>100.0%</b>	<b>680</b>	<b>100.0%</b>	<b>7</b>	<b>100.0%</b>	<b>773</b>	<b>100.0%</b>

- For total crashes, the largest percentages of bicyclist location prior to the crash were marked crosswalk (28.1% of known), in roadway, (22.1% of known), and shoulder (17.2% of known).
- Bicycles are considered vehicles and have a legal right to the road.

## Bicycle-Motor Vehicle Crash Conditions

### Bicycle-Motor Vehicle Crashes by Hour (Utah 2010)

Bicyclists								
Hour	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Midnight	0	0.0%	4	0.6%	0	0.0%	4	0.5%
1 a.m.	0	0.0%	2	0.3%	0	0.0%	2	0.3%
2 a.m.	0	0.0%	5	0.7%	0	0.0%	5	0.6%
3 a.m.	0	0.0%	0	0.0%	0	0.0%	0	0.0%
4 a.m.	1	1.2%	2	0.3%	0	0.0%	3	0.4%
5 a.m.	0	0.0%	6	0.9%	1	14.3%	7	0.9%
6 a.m.	1	1.2%	7	1.0%	1	14.3%	9	1.2%
7 a.m.	6	7.0%	38	5.6%	0	0.0%	44	5.7%
8 a.m.	0	0.0%	28	4.1%	1	14.3%	29	3.8%
9 a.m.	2	2.3%	29	4.3%	0	0.0%	31	4.0%
10 a.m.	4	4.7%	31	4.6%	0	0.0%	35	4.5%
11 a.m.	6	7.0%	20	2.9%	1	14.3%	27	3.5%
Noon	13	15.1%	47	6.9%	0	0.0%	60	7.8%
1 p.m.	5	5.8%	37	5.4%	0	0.0%	42	5.4%
2 p.m.	11	12.8%	43	6.3%	0	0.0%	54	7.0%
3 p.m.	6	7.0%	48	7.1%	0	0.0%	54	7.0%
4 p.m.	7	8.1%	65	9.6%	1	14.3%	73	9.4%
5 p.m.	10	11.6%	85	12.5%	1	14.3%	96	12.4%
6 p.m.	7	8.1%	62	9.1%	0	0.0%	69	8.9%
7 p.m.	0	0.0%	50	7.4%	0	0.0%	50	6.5%
8 p.m.	5	5.8%	28	4.1%	0	0.0%	33	4.3%
9 p.m.	0	0.0%	27	4.0%	1	14.3%	28	3.6%
10 p.m.	2	2.3%	11	1.6%	0	0.0%	13	1.7%
11 p.m.	0	0.0%	5	0.7%	0	0.0%	5	0.6%
<b>Total</b>	<b>86</b>	<b>100.0%</b>	<b>680</b>	<b>100.0%</b>	<b>7</b>	<b>100.0%</b>	<b>773</b>	<b>100.0%</b>

- Total bicycle-motor vehicle crashes were highest between 2:00 p.m. and 7:59 p.m.

### Motor Vehicle Maneuver Prior to Crash (Utah 2010)

Motor Vehicles (Bicycle-Motor Vehicle Crashes)								
Vehicle Maneuver	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Straight Ahead	26	31.7%	235	34.0%	7	87.5%	268	34.3%
Turning Right	39	47.6%	227	32.8%	1	12.5%	267	34.1%
Turning Left	6	7.3%	121	17.5%	0	0.0%	127	16.2%
Entering/Leaving Traffic Lane	2	2.4%	23	3.3%	0	0.0%	25	3.2%
Stopped/Slowing in Traffic Lane	2	2.4%	17	2.5%	0	0.0%	19	2.4%
Backing	1	1.2%	14	2.0%	0	0.0%	15	1.9%
Parked/Parking	2	2.4%	9	1.3%	0	0.0%	11	1.4%
Making U-turn	0	0.0%	5	0.7%	0	0.0%	5	0.6%
Other	1	1.2%	11	1.6%	0	0.0%	12	1.5%
Unknown	3	3.7%	30	4.3%	0	0.0%	33	4.2%
<b>Total</b>	<b>82</b>	<b>100.0%</b>	<b>692</b>	<b>100.0%</b>	<b>8</b>	<b>100.0%</b>	<b>782</b>	<b>100.0%</b>

- For total bicycle-motor vehicle crashes, the leading motor vehicle maneuvers prior to the crash were straight ahead (34.4%), turning right (34.0%), and turning left (16.3%).

## Bicycle-Motor Vehicle Crash Conditions

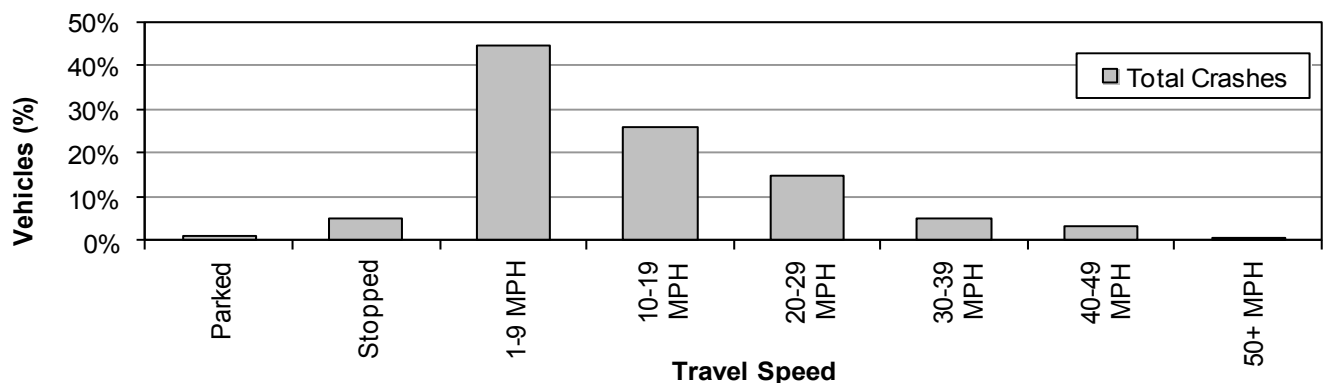
### Contributing Factors of Bicyclists in Crashes (Utah 2010)

Bicyclists								
Contributing Factors	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
None	33	38.4%	246	36.2%	4	57.1%	283	36.6%
Wrong Side of Road	6	7.0%	61	9.0%	1	14.3%	68	8.8%
Improper Crossing	7	8.1%	55	8.1%	0	0.0%	62	8.0%
Failure to Obey Traffic Signs/Signals	4	4.7%	30	4.4%	0	0.0%	34	4.4%
Not Visible	2	2.3%	31	4.6%	0	0.0%	33	4.3%
Failure to Yield Right of Way	5	5.8%	26	3.8%	1	14.3%	32	4.1%
Darting	2	2.3%	28	4.1%	0	0.0%	30	3.9%
Inattentive	2	2.3%	27	4.0%	0	0.0%	29	3.8%
In Roadway (standing/kneeling/lying)	3	3.5%	8	1.2%	0	0.0%	11	1.4%
Other	6	7.0%	36	5.3%	0	0.0%	42	5.4%
Unknown	16	18.6%	132	19.4%	1	14.3%	149	19.3%
<b>Total</b>	<b>86</b>	<b>100.0%</b>	<b>680</b>	<b>100.0%</b>	<b>7</b>	<b>100.0%</b>	<b>773</b>	<b>100.0%</b>

- Wrong side of road (10.9% of known), improper crossing (9.8% of known), and failure to obey traffic signs/signals (5.5% of known) were the leading contributing factors for bicyclists in total crashes.
- No bicyclist contributing factors were listed for 45.3% (of known) of the total bicyclists in crashes.
- Other contributing factors to consider are driver factors (see page 116), roadway factors (such as high speeds, inadequate on-road bicycle facilities), and vehicle factors (such as vehicle design, vehicle size).

### Travel Speed of Motor Vehicles in Bicycle Crashes (Utah 2010)

Motor Vehicles (Bicycle-Motor Vehicle Crash)								
Travel Speed	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Parked	2	2.4%	4	0.6%	0	0.0%	6	0.8%
Stopped	4	4.9%	19	2.7%	0	0.0%	23	2.9%
1-9 MPH	23	28.0%	182	26.3%	0	0.0%	205	26.2%
10-19 MPH	8	9.8%	109	15.8%	1	12.5%	118	15.1%
20-29 MPH	2	2.4%	64	9.2%	1	12.5%	67	8.6%
30-39 MPH	1	1.2%	21	3.0%	1	12.5%	23	2.9%
40-49 MPH	0	0.0%	13	1.9%	1	12.5%	14	1.8%
50+ MPH	1	1.2%	2	0.3%	0	0.0%	3	0.4%
Unknown	41	50.0%	278	40.2%	4	50.0%	323	41.3%
<b>Total</b>	<b>82</b>	<b>100.0%</b>	<b>692</b>	<b>100.0%</b>	<b>8</b>	<b>100.0%</b>	<b>782</b>	<b>100.0%</b>



- Over two-thirds (70.2% of known) of motor vehicles were travelling 1-19 MPH in crashes with bicycles.

## Bicycle-Motor Vehicle Crash Conditions

### Bicycle-Motor Vehicle Crashes by Speed Limit (Utah 2010)

- Almost all (93.8% of known) of bicycle-motor vehicle crashes occurred where the speed limit was 20-45 MPH.

Motor Vehicles (Bicycle-Motor Vehicle Crashes)								
Speed Limit	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
5-15 MPH	3	3.7%	18	2.6%	0	0.0%	21	2.7%
20-25 MPH	20	24.4%	169	24.4%	3	37.5%	192	24.6%
30-35 MPH	19	23.2%	180	26.0%	1	12.5%	200	25.6%
40-45 MPH	7	8.5%	94	13.6%	4	50.0%	105	13.4%
50-55 MPH	1	1.2%	10	1.4%	0	0.0%	11	1.4%
60+ MPH	0	0.0%	1	0.1%	0	0.0%	1	0.1%
Unknown	32	39.0%	220	31.8%	0	0.0%	252	32.2%
<b>Total</b>	<b>82</b>	<b>100.0%</b>	<b>692</b>	<b>100.0%</b>	<b>8</b>	<b>100.0%</b>	<b>782</b>	<b>100.0%</b>

### Contributing Factors in Bicycle Crashes (Utah 2010)

- Failed to yield right of way (46.4%) was the leading contributing factor in total bicycle-motor vehicle crashes.

Drivers/Motor Vehicles (Bicycle-Motor Vehicle Crashes)								
Contributing Factors	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Failed to Yield Right of Way	37	62.7%	284	45.7%	1	9.1%	322	46.5%
Other Improper Driving	9	15.3%	66	10.6%	0	0.0%	75	10.8%
Hit and Run	1	1.7%	47	7.6%	1	9.1%	49	7.1%
Vision Obscured by Glare	2	3.4%	34	5.5%	0	0.0%	36	5.2%
Improper Turn	1	1.7%	31	5.0%	0	0.0%	32	4.6%
Driver Distraction	1	1.7%	19	3.1%	1	9.1%	21	3.0%
Vision Obscured by Vegetation	1	1.7%	20	3.2%	0	0.0%	21	3.0%
Disregard Traffic Signal/Sign	1	1.7%	15	2.4%	1	9.1%	17	2.5%
Vision Obscured by Moving Vehicle	1	1.7%	14	2.3%	0	0.0%	15	2.2%
Vision Obscured by Building, Sign	1	1.7%	12	1.9%	0	0.0%	13	1.9%
Vision Obscured by Other	1	1.7%	9	1.4%	1	9.1%	11	1.6%
Vision Obscured by Parked Vehicle	0	0.0%	9	1.4%	0	0.0%	9	1.3%
Improper Backing	0	0.0%	8	1.3%	0	0.0%	8	1.2%
Vision Obscured by Weather	0	0.0%	6	1.0%	1	9.1%	7	1.0%
Driver Emotional Prior to Crash	0	0.0%	6	1.0%	0	0.0%	6	0.9%
Failed to Keep in Proper Lane	0	0.0%	4	0.6%	2	18.2%	6	0.9%
Driving Under the Influence	0	0.0%	4	0.6%	1	9.1%	5	0.7%
Followed Too Closely	1	1.7%	4	0.6%	0	0.0%	5	0.7%
Improper Passing	0	0.0%	4	0.6%	1	9.1%	5	0.7%
Disregard Road Markings	0	0.0%	4	0.6%	0	0.0%	4	0.6%
Improper Parking/Stopping	0	0.0%	4	0.6%	0	0.0%	4	0.6%
Speed Too Fast	0	0.0%	4	0.6%	0	0.0%	4	0.6%
Vehicle Defective Condition	0	0.0%	4	0.6%	0	0.0%	4	0.6%
Improper Signal	1	1.7%	2	0.3%	0	0.0%	3	0.4%
Other Driver Condition	0	0.0%	3	0.5%	0	0.0%	3	0.4%
Swerved or Evasive Action	1	1.7%	2	0.3%	0	0.0%	3	0.4%
Wrong Side/Wrong Way	0	0.0%	2	0.3%	0	0.0%	2	0.3%
Improper Lane Change	0	0.0%	1	0.2%	0	0.0%	1	0.1%
Reckless/Aggressive Driving	0	0.0%	0	0.0%	1	9.1%	1	0.1%
<b>Total</b>	<b>59</b>	<b>100.0%</b>	<b>622</b>	<b>100.0%</b>	<b>11</b>	<b>100.0%</b>	<b>692</b>	<b>100.0%</b>

# Appendix

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## Appendix

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## Population, Vehicle Miles Traveled, Injuries, and Deaths (Utah 1947-2010)

Persons						
Year	Population	Vehicle Miles Traveled (VMT)	Injuries		Deaths	
			#	Rate Per 100 Million VMT	#	Rate Per 100 Million VMT
1947	636,000	2,132,000,000	3,747	175.8	186	8.72
1948	653,000	2,351,000,000	3,982	169.4	220	9.36
1949	670,800	2,475,000,000	3,808	153.9	174	7.03
1950	695,900	2,839,000,000	4,459	157.1	188	6.62
1951	706,100	3,015,000,000	5,132	170.2	207	6.87
1952	724,000	3,050,000,000	5,140	168.5	246	8.07
1953	739,100	3,232,000,000	4,945	153.0	209	6.47
1954	750,500	3,336,000,000	4,495	134.7	209	6.26
1955	782,800	3,075,000,000	5,036	163.8	203	6.60
1956	808,800	3,310,000,000	4,812	145.4	215	6.50
1957	826,300	3,366,000,000	5,022	149.2	222	6.60
1958	845,200	3,531,000,000	5,658	160.2	193	5.47
1959	869,900	3,784,000,000	5,992	158.4	205	5.42
1960	900,000	3,852,000,000	9,128	237.0	256	6.65
1961	936,000	3,997,000,000	10,412	260.5	236	5.90
1962	958,000	4,240,000,000	11,133	262.6	233	5.50
1963	974,000	4,549,000,000	12,603	277.0	263	5.78
1964	978,000	4,790,000,000	14,096	294.3	295	6.16
1965	991,000	4,997,000,000	14,361	287.4	281	5.62
1966	1,009,000	5,079,000,000	14,994	295.2	331	6.52
1967	1,019,000	5,257,000,000	14,401	273.9	275	5.23
1968	1,029,000	5,539,000,000	15,539	280.5	289	5.22
1969	1,047,000	5,802,000,000	15,977	275.4	308	5.31
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

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 Department of  
Transportation, Utah  
Highway Performance  
Monitoring System,  
[www.udot.utah.gov](http://www.udot.utah.gov)

## Population, Vehicle Miles Traveled, Injuries, and Deaths (Utah 1947-2010)

Persons (continued)						
Year	Population	Vehicle Miles Traveled (VMT)	Injuries		Deaths	
			#	Rate Per 100 Million VMT	#	Rate Per 100 Million VMT
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	2,305,652	23,398,734,621	29,375	125.5	291	1.24
2002	2,358,330	24,438,992,554	30,433	124.5	328	1.34
2003	2,413,618	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
2008	2,757,779	25,883,467,343	24,672	95.3	276	1.07
2009	2,800,089	26,217,108,843	22,847	87.1	244	0.93
2010	2,763,885	26,617,169,711	21,675	81.4	253	0.95
<b>Total</b>	<b>95,596,894</b>	<b>745,320,505,431</b>	<b>1,142,764</b>	<b>153.3</b>	<b>18,202</b>	<b>2.44</b>

## Crashes (Utah 1947-2010)

Crashes								
Year	Property Damage Only		Injury		Fatal		Total	
	#	Rate Per 100 Million VMT	#	Rate Per 100 Million VMT	#	Rate Per 100 Million VMT	#	Rate Per 100 Million VMT
1947	6,123	287.2	2,603	122.1	159	7.46	8,885	416.7
1948	7,117	302.7	2,675	113.8	169	7.19	9,961	423.7
1949	8,327	336.4	2,614	105.6	151	6.10	11,092	448.2
1950	9,532	335.8	3,004	105.8	169	5.95	12,705	447.5
1951	12,806	424.7	3,495	115.9	174	5.77	16,475	546.4
1952	14,052	460.7	3,474	113.9	184	6.03	17,710	580.7
1953	12,883	398.6	3,305	102.3	185	5.72	16,373	506.6
1954	11,911	357.0	3,016	90.4	176	5.28	15,103	452.7
1955	14,504	471.7	3,390	110.2	166	5.40	18,060	587.3
1956	14,045	424.3	3,310	100.0	176	5.32	17,531	529.6
1957	15,476	459.8	3,397	100.9	181	5.38	19,054	566.1
1958	18,287	517.9	3,762	106.5	171	4.84	22,220	629.3
1959	19,389	512.4	3,946	104.3	171	4.52	23,506	621.2
1960	20,702	537.4	5,576	144.8	200	5.19	26,478	687.4
1961	19,278	482.3	6,257	156.5	197	4.93	25,732	643.8
1962	19,459	458.9	6,968	164.3	186	4.39	26,613	627.7
1963	19,344	425.2	7,798	171.4	198	4.35	27,340	601.0
1964	20,570	429.4	8,636	180.3	246	5.14	29,452	614.9
1965	20,427	408.8	8,856	177.2	242	4.84	29,525	590.9



## Crashes (Utah 1947-2010)

Crashes (continued)								
Year	Property Damage Only		Injury		Fatal		Total	
	#	Rate Per 100 Million VMT	#	Rate Per 100 Million VMT	#	Rate Per 100 Million VMT	#	Rate Per 100 Million VMT
1966	20,616	405.9	9,076	178.7	265	5.22	29,957	589.8
1967	21,873	416.1	8,888	169.1	231	4.39	30,992	589.5
1968	24,724	446.4	9,550	172.4	258	4.66	34,532	623.4
1969	24,665	425.1	9,850	169.8	251	4.33	34,766	599.2
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
2008	38,997	150.7	17,125	66.2	245	0.95	56,367	217.8
2009	35,398	135.0	15,752	60.1	217	0.83	51,367	195.9
2010	34,155	128.3	14,995	56.3	218	0.82	49,368	185.5
<b>Total</b>	<b>1,690,069</b>	<b>226.8</b>	<b>752,979</b>	<b>101.0</b>	<b>15,578</b>	<b>2.09</b>	<b>2,458,626</b>	<b>329.9</b>

## County Population and Vehicle Miles Traveled (Utah 2010)

County		
County	Vehicle Miles Traveled	Population
Beaver	253,940,901	6,629
Box Elder	923,263,939	49,975
Cache	865,905,682	112,656
Carbon	300,889,642	21,403
Daggett	31,456,196	1,059
Davis	2,688,514,623	306,479
Duchesne	232,377,158	18,607
Emery	323,007,637	10,976
Garfield	113,360,324	5,172
Grand	315,282,229	9,225
Iron	716,873,399	46,163
Juab	390,348,951	10,246
Kane	144,600,580	7,125
Millard	469,010,846	12,503
Morgan	133,795,040	9,469
Piute	29,907,114	1,556
Rich	47,672,968	2,264
Salt Lake	8,649,123,758	1,029,655
San Juan	326,338,599	14,746
Sanpete	218,355,221	27,822
Sevier	329,028,823	20,802
Summit	719,531,820	36,324
Tooele	841,233,868	58,218
Uintah	374,321,667	32,588
Utah	3,790,832,805	516,564
Wasatch	323,793,896	23,530
Washington	1,374,118,511	138,115
Wayne	42,091,207	2,778
Weber	1,648,192,305	231,236
<b>Statewide</b>	<b>26,617,169,711</b>	<b>2,763,885</b>

VEHICLE MILES TRAVELED SOURCE:  
Utah Department of Transportation, 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 Licensed Drivers by Age (Utah 2010)

Licensed Drivers		
Age	#	%
15-19	151,877	8.2%
20-24	199,131	10.8%
25-29	215,641	11.6%
30-34	211,685	11.4%
35-39	172,556	9.3%
40-44	149,958	8.1%
45-49	144,354	7.8%
50-54	144,894	7.8%
55-59	129,436	7.0%
60-64	105,705	5.7%
65-69	76,323	4.1%
70-74	55,776	3.0%
75-79	42,093	2.3%
80-84	29,836	1.6%
85+	21,789	1.2%
<b>Total</b>	<b>1,851,054</b>	<b>100.0%</b>

## Number of Licensed Drivers by Gender (Utah 2010)

Licensed Drivers		
Gender	#	%
Male	936,832	50.6%
Female	914,222	49.4%
<b>Total</b>	<b>1,851,054</b>	<b>100.0%</b>

SOURCE: Utah Department of Public Safety, Driver License Division

## Number of Registered Vehicles by Vehicle Type (Utah 2005-2010)

Vehicles					
Year	Heavy Truck	Light Truck	Motorcycle	Passenger Car	Total
2005	58,645	552,931	43,271	1,205,430	<b>1,860,277</b>
2006	60,765	564,280	48,949	1,243,041	<b>1,917,035</b>
2007	62,860	585,413	56,146	1,297,242	<b>2,001,661</b>
2008	66,578	601,655	64,376	1,334,906	<b>2,067,515</b>
2009	67,124	598,513	78,302	1,349,596	<b>2,093,535</b>
2010	63,927	588,733	71,957	1,340,300	<b>2,064,917</b>
<b>Total</b>	<b>379,899</b>	<b>3,491,525</b>	<b>363,001</b>	<b>7,770,515</b>	<b>12,004,940</b>

SOURCE: Utah State Tax Commission, Economic and Statistical Unit

## **Notable Changes in Utah Motor Vehicle Laws**

- 1915** Driving age established at 16 years and older.
- 1926** Stop sign law implemented.
- 1935** Alcohol drinking age set at 21 years and older.
- 1967** Illegal to operate a motor vehicle at or above .08 BAC.
- 1969** Motorcycle helmet required for all ages on roads with speed limits 35 mph or higher.
- 1973** Maximum speed limit lowered to 55 mph.
- 1977** Motorcycle helmet law changed, helmets required only for riders under 18 years on all roads.
- 1985** First child restraint law.
- 1986** First seat belt law.
- 1987** Maximum speed limit raised to 65 mph.
- 1992** Illegal for drivers under age 21 years to drive with any detectable amount of alcohol.
- 1996** Maximum speed limit raised to 75 mph.
- 1997** Increased age that children need to be restrained from up to eight years to up to ten years.
- 1999** First Graduated Driver License law implemented.
- 2000** Secondary seat belt law for drivers and all passengers of motor vehicles.
- 2000** Increased age for use of child restraints up to age five years.
- 2007** Hand-held telephone use prohibited, enforced if a moving traffic violation is committed.
- 2008** Increased age for use of child restraints up to age eight years.
- 2008** Maximum speed limit raised to 80 mph on selected parts of rural I-15.
- 2009** All drivers convicted of DUI required to use ignition interlock system.
- 2009** Text messaging prohibited while operating a moving motor vehicle.

## **Changes in Crash Reporting**

- 1991** Amount of property damage required for reportable crashes increased from \$400 to \$750.
- 1996** Amount of property damage required for reportable crashes increased to \$1,000.
- 1997** Non-traffic crashes excluded. Non-traffic crashes accounted for approximately 10% of crashes in previous years.
- 2006** State of Utah Investigating Officer's Report of Traffic Crash DI-9 Form updated.
- 2009** Amount of property damage required for reportable crashes increased to \$1,500.

## 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 suspected 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 crash involving a motor vehicle traveling on a trafficway resulting in the death of at least one person 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.

**Restraint Use:** Restraint use is reported for occupants in a passenger car, light truck, van, SUV, or large truck. Occupants are coded as restrained 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 unrestrained. In the majority of cases, restraint use is self-reported by the crash occupant. In the case of fatal or severe injury crashes, the officer determines restraint use.

**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.

**Speed Crash:** A crash where a driver exceeded posted speed limits or was driving too fast for conditions.

**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.

**UTAH DEPARTMENT OF PUBLIC SAFETY**

[www.publicsafety.utah.gov](http://www.publicsafety.utah.gov)

**UTAH HIGHWAY SAFETY**

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**NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION**

[www.nhtsa.dot.gov](http://www.nhtsa.dot.gov)