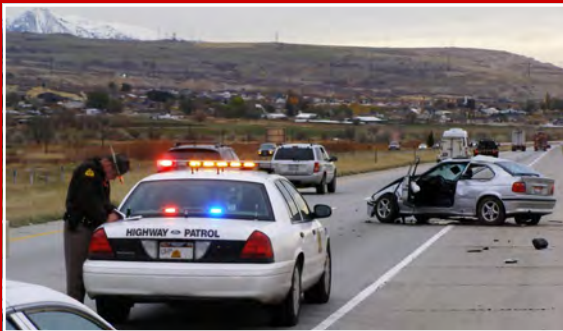


Utah Crash Summary



State of Utah

Department of Public Safety

Utah Crash Summary 2009



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Introduction

Purpose: The annual Utah Crash Summary, as required 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 deaths, injuries, and crashes. This report is designed to heighten awareness about traffic safety and allows interested individuals to identify areas where safety programs may be focused in an effort to reduce traffic-related injuries and deaths.

Crash Data: 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 information is collected on fatal crashes and compiled into the Fatality Analysis Reporting System (FARS). FARS is a national data system containing data on all fatal traffic crashes in the U.S. FARS was used for the reporting of 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.

Suggested Citation: Utah Department of Public Safety, Highway Safety Office. *Utah Crash Summary 2009*. Salt Lake City, UT: Utah Department of Public Safety, 2011.

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 2009 as 1970 there would have been 1,194 additional deaths in 2009. 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 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 2009, there were 51,367 reported traffic crashes on public roadways in Utah. These crashes involved 127,047 people, with 22,847 injured and 244 people killed. Traffic deaths were the lowest total in Utah since 1974.

Utah made progress in the following areas in 2009 when compared to 2008:

- Traffic deaths decreased from 276 in 2008 to 244 in 2009;
- The Utah death rate per vehicle miles traveled is still below the overall U.S. rate;
- Traffic crashes decreased from 56,367 in 2008 to 51,367 in 2009;
- The crash rate per miles traveled decreased 10% from 2008;
- The number of motorcyclists in crashes decreased 22%;
- The number of crashes involving an alcohol-impaired driver decreased 13%;
- The number of crashes involving a teenage driver decreased 12%;
- The number of pedestrians in crashes decreased 9%;
- The number of bicyclists in crashes decreased 8%;
- The number of crashes involving a distracted driver decreased 6%.

As improvements are made and progress continues, traffic safety needs to remain a top priority. Some areas of concern in Utah during 2009:

- Speed was a factor in 49% of fatal crashes;
- The number of people who died in a teenage driver crash increased 38%;
- The number of unrestrained occupant deaths increased 17%;
- The number of fatal crashes in rural areas increased 9%.

The *Utah Crash Summary 2009* 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 a goal of zero fatalities because the loss of just one life is too many. This is a goal we can all live with.

2009 Utah Crash Synopsis

All Crashes

Category	#	% of Total*
Total Crashes	51,367	100%
Urban	38,556	75%
Property Damage Only	35,398	69%
Injury	15,752	31%
Rural	12,811	25%
Inclement Weather	12,124	24%
Speed	11,092	22%
Teenage Driver	11,034	21%
Followed Too Closely	10,822	21%
Failed to Yield	8,869	17%
Senior (Age 65+) Driver	5,420	11%
Distracted Driving	4,526	9%
Large Truck	3,292	6%
Animal-Related	2,812	5%
Disregard Traffic Signal/Sign	2,404	5%
Alcohol-Impaired Driver	2,019	4%
Motorcycle	1,126	2%
Drowsy Driving	1,081	2%
Bicycle-Motor Vehicle	739	1%
Pedestrian-Motor Vehicle	651	1%
Fatal	217	<1%
Total Persons in Crashes	127,047	100%
Drivers	89,672	71%
Followed Too Closely Crash	34,022	27%
Teenage Driver Crash	31,528	25%
Inclement Weather Crash	27,624	22%
Failed to Yield Crash	25,737	20%
Speed Crash	25,220	20%
Injured Persons	22,847	18%
Senior (Age 65+) Driver Crash	14,789	12%
Children (Ages 0-14 Years)	13,237	10%
Distracted Driving Crash	12,407	10%
Large Truck Crash	7,888	6%
Disregard Traffic Signal/Sign Crash	7,147	6%
Animal-Related Crash	4,218	3%
Alcohol-Impaired Driver Crash	4,099	3%
Unrestrained Occupants	3,884	3%
Drowsy Driving Crash	1,949	2%
Motorcyclists	1,242	1%
Bicyclists	739	1%
Pedestrians	698	1%
Deaths	244	<1%

Fatal Crashes

Category	#	% of Total*
Fatal Crashes	217	100%
Rural	128	59%
Speed	106	49%
Urban	89	41%
Teenage Driver	39	18%
Inclement Weather	35	16%
Senior (Age 65+) Driver	33	15%
Motorcycle	30	14%
Failed to Yield	29	13%
Alcohol-Impaired Driver	28	13%
Large Truck	25	12%
Distracted Driving	21	10%
Pedestrian-Motor Vehicle	20	9%
Drowsy Driving	19	9%
Red Light/Stop Sign Running	18	8%
Followed Too Closely	12	6%
Bicycle-Motor Vehicle	5	2%
Animal-Related	4	2%
Deaths	244	100%
Drivers	148	61%
Speed Crash	123	50%
Unrestrained Occupants	91	37%
Teenage Driver Crash	47	19%
Inclement Weather Crash	39	16%
Senior (Age 65+) Driver Crash	37	15%
Failed to Yield Crash	34	14%
Alcohol-Impaired Driver Crash	31	13%
Motorcyclists	30	12%
Red Light/Stop Sign Running Crash	26	11%
Large Truck Crash	25	10%
Drowsy Driving Crash	23	9%
Distracted Driving Crash	21	9%
Pedestrians	20	8%
Children (Ages 0-14 Years)	19	8%
Followed Too Closely Crash	12	5%
Bicyclists	5	2%
Animal-Related Crash	5	2%

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

2009 Utah Crash Facts

- In an average day in Utah, there were 141 motor vehicle crashes involving 348 people with 63 people injured and 1 person killed.
- First motor vehicle crash occurred January 1, 2009 at 12:20 a.m. and the last crash occurred December 31, 2009 at 11:19 p.m.
- First fatal motor vehicle crash occurred January 3, 2009 at 2:22 p.m. and the last fatal crash occurred December 30, 2009 at 12:30 p.m.
- Tuesday, December 22, 2009 had the most crashes with 554 crashes and Sunday, March 8, 2009 had the fewest crashes with 50.
- 109 lives were estimated to be saved at current seat belt use rates. (National Highway Traffic Safety Administration)
- 53 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 23 minutes.
- A speed-related crash occurred every 47 minutes.
- A teenage-driver crash occurred every 47 minutes.
- A driver age 65 years or older was in a crash every 96 minutes.
- A distracted driver crash occurred every 116 minutes.
- A semi/large truck was in a crash every 2 hours.
- An animal-motor vehicle crash occurred every 3 hours.
- An alcohol-impaired driver crash occurred every 4 hours.
- A motorcyclist was in a crash every 7 hours.
- A bicyclist was hit by a motor vehicle every 11 hours.
- A pedestrian was hit by a motor vehicle every 12 hours.
- A person died in a crash every 35 hours.
- The youngest person in a motor vehicle crash was less than one week-old and the oldest person was 100 years-old.
- The youngest person killed in a motor vehicle crash was four months-old and the oldest person killed was 90 years-old.
- The estimated statewide economic loss due to motor vehicle crashes in Utah was \$1.64 billion. (National Highway Traffic Safety Administration)
- Hospital and emergency department charges for the treatment of Utah residents in motor vehicle crashes were \$117 million. (Utah Department of Health)
- 5.0% of licensed drivers were in a crash.
- 4.5% of Utah residents were in a crash.
- 4.4% 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 206,000 miles driven in Utah.



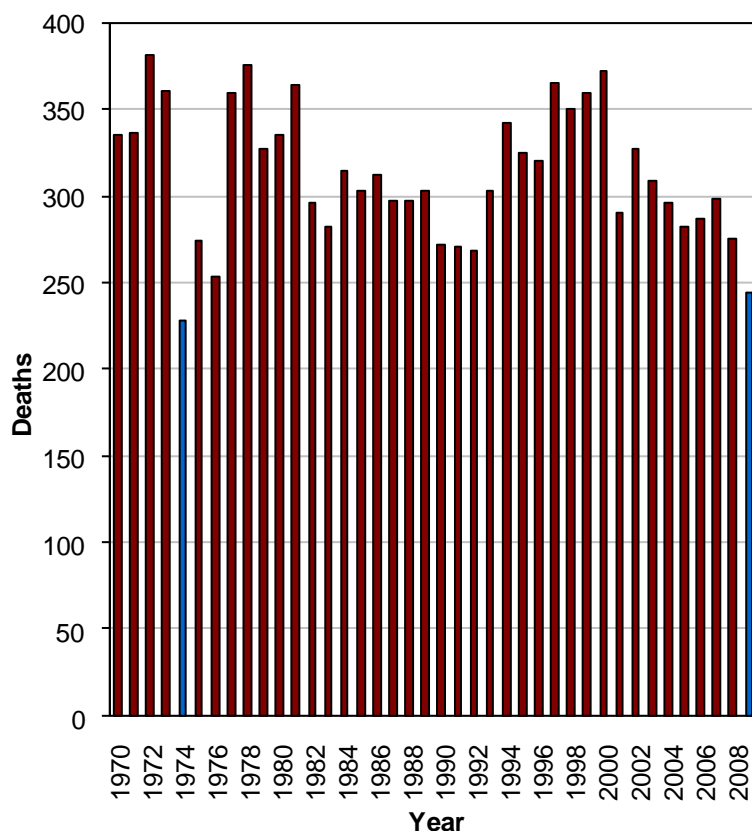
Did you know in 2009:

- 51,367 motor vehicle crashes occurred in Utah which resulted in 22,847 injured persons and 244 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 23 minutes, and a person died in a crash every 35 hours.

Overview

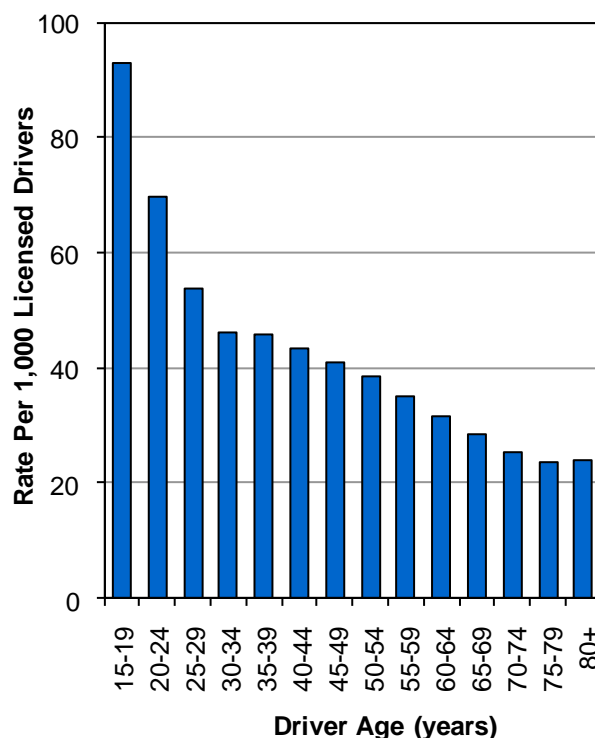


Deaths by Year (Utah 1970-2009)



- 2009 had the lowest deaths in Utah since 1974.

Crash Rates per Licensed Drivers by Age (Utah 2009)



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

Crash Summary (Utah 2009)

Leading Crash Types

1. Inclement Weather Crashes (24%)
2. Speed Crashes (22%)
3. Teen Driver Crashes (21%)
4. Senior Driver (Age 65+) Crashes (11%)
5. Distracted Driver Crashes (9%)

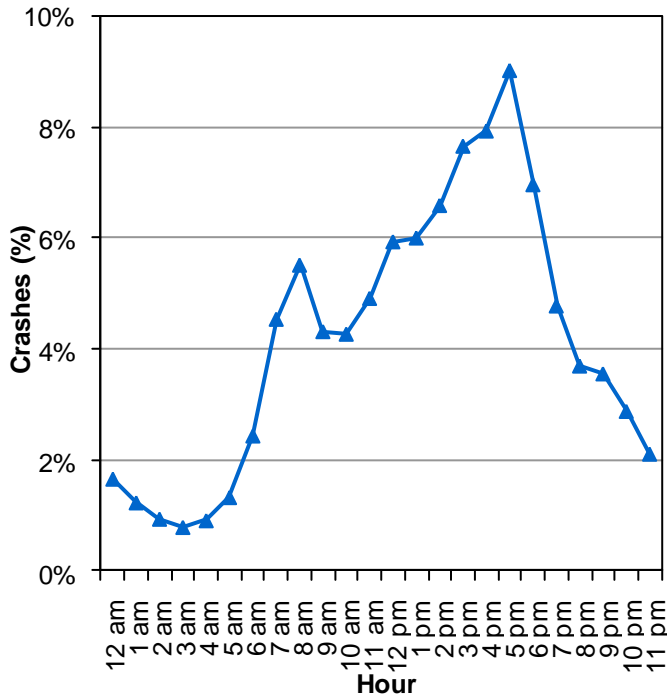
Leading Causes of Death

1. Speed (50%)
2. Unrestrained Occupants (37%)
3. Drunk Driving (13%)
4. Red Light/Stop Sign Running (11%)
5. Drowsy Driving (9%)

Overview



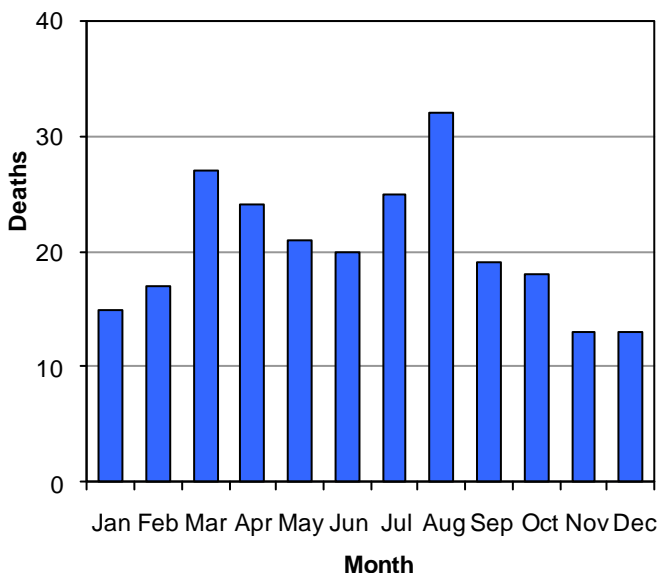
Motor Vehicle Crashes by Hour (Utah 2009)



- Crashes were highest between 3:00 p.m. and 6:59 p.m.

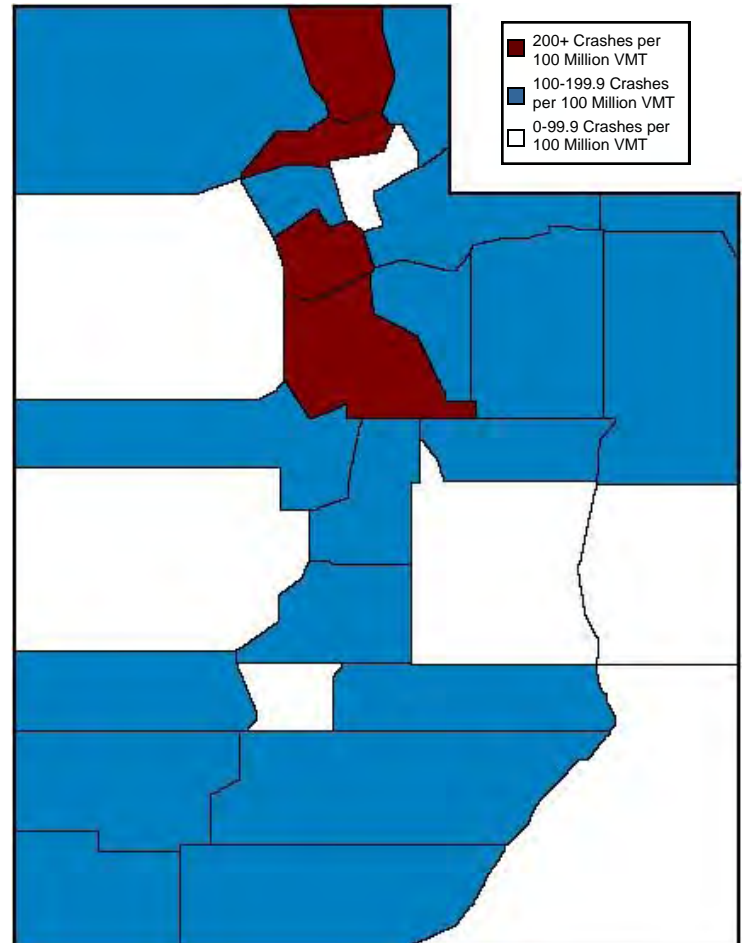
Vehicle rollovers were the most deadly event, being 10 times more likely to result in a death than other crashes.

Deaths by Month (Utah 2009)



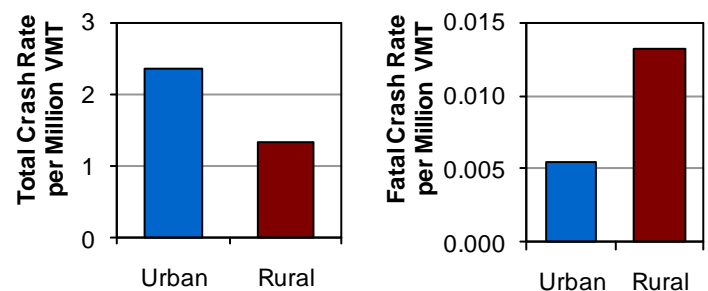
- August and March had the most deaths.

County Crash Rates by Miles Traveled (Utah 2009)



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

Urban/Rural Location (Utah 2009)



- 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 4.4 times more likely to be fatal than urban crashes.

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

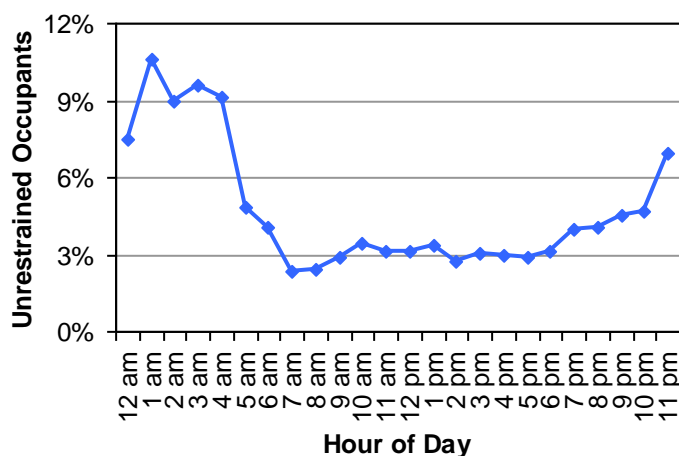
Occupant Protection



Did you know in 2009:

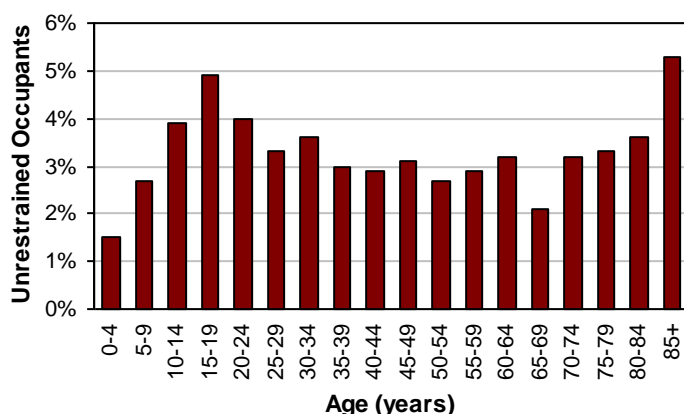
- Unrestrained crash occupants were 32 times more likely to die in a crash than restrained occupants.
- An estimated 109 lives were saved because of restraint use. (National Highway Traffic Safety Administration)
- While overall traffic deaths decreased the number of unrestrained occupant deaths increased 17%.

Unrestrained Crash Occupants by Hour (Utah 2009)



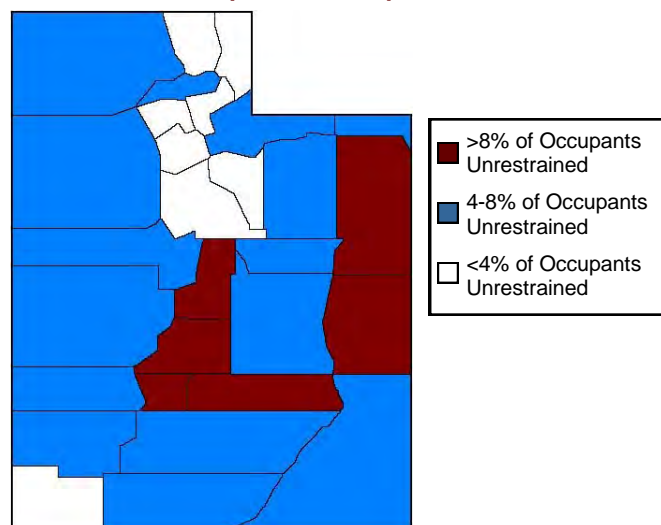
- 11:00 p.m. to 4:59 a.m. had the highest percentage of unrestrained crash occupants.

Unrestrained Crash Occupants by Age (Utah 2009)



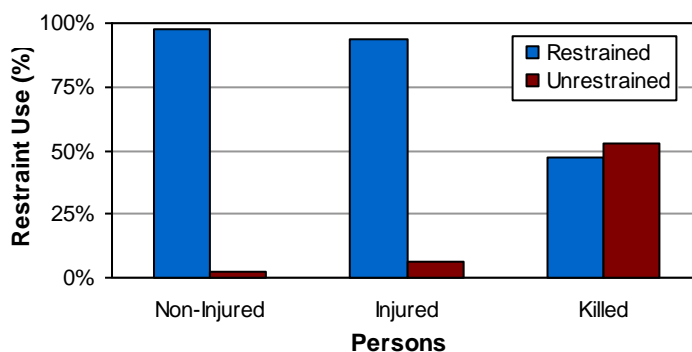
- The highest percentage of unrestrained crash occupants were 85+ and 10-24 years.

Unrestrained Crash Occupants by County (Utah 2009)



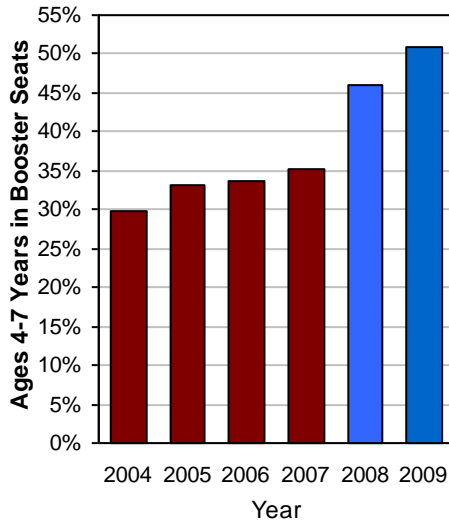
- Occupants in rural crashes were 1.7 times more likely to be unrestrained than urban occupants.

Restraint Use by Injury Severity (Utah 2009)



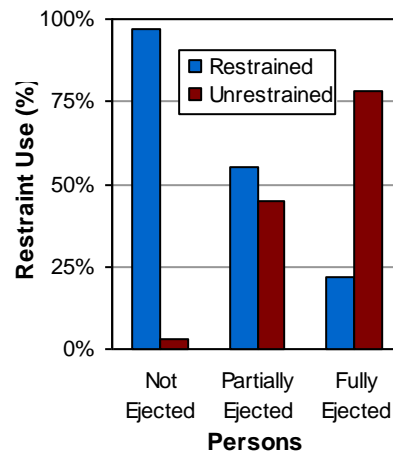
- Over 96% of persons who survived a crash were restrained compared to less than half (47%) of the persons killed.

Effectiveness of Booster Seat Law (Utah 2004-2009)



- 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 2009, booster seat use among ages 4-7 years in crashes increased to 51%.
- Booster seat use increased 45% since passage of the law.

Ejection and Restraint Use (Utah 2009)



- 78% of crash occupants fully ejected from a motor vehicle were unrestrained.
- Unrestrained occupants were 70 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.

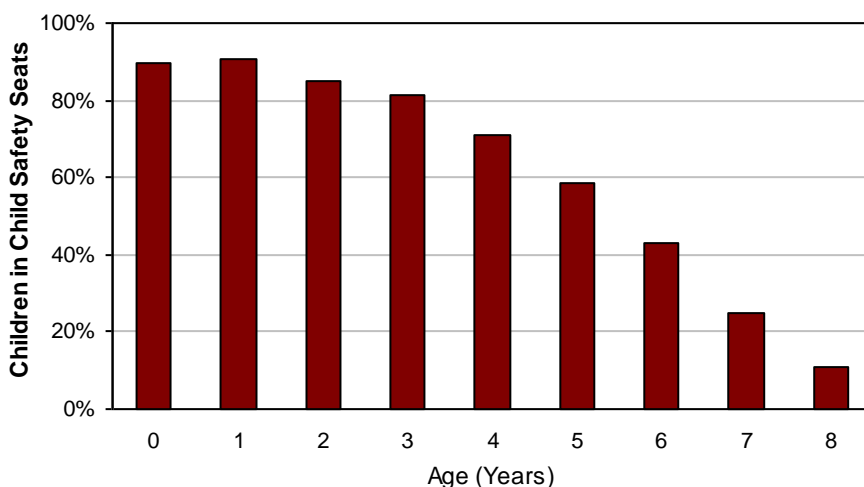
Safety Restraint Laws:

- 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 2009)



- The older the child the less likely they were using a child safety seat.
- While 90% of children 0-1 years in a crash were in a child safety seat, only 71% of 4-year-olds, 43% of 6-year-olds, and 11% 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.

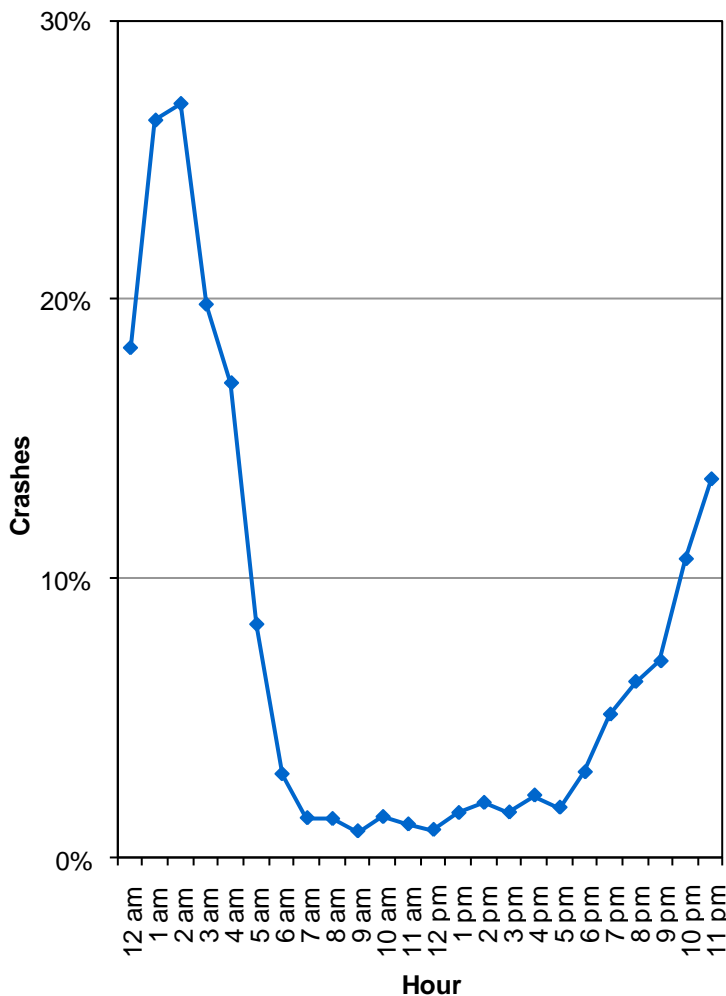
Did you know in 2009:

- 2,019 alcohol-impaired driver crashes occurred in Utah which resulted in 1,288 injured persons and 31 deaths.
- Alcohol-impaired driver crashes were 3.7 times more likely to be fatal than other crashes.
- The number of alcohol-impaired driver fatal crashes decreased 13% in 2009 from 2008.

Alcohol-Impaired Drivers

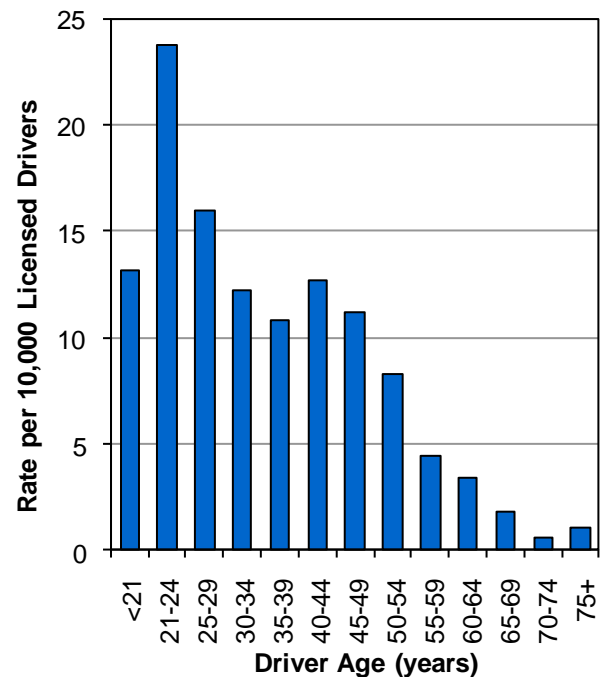


Percent of Total Crashes with an Alcohol-Impaired Driver by Hour (Utah 2009)



- While 4% of total crashes involved an alcohol-impaired driver, nearly one-fourth (22%) of crashes occurring during the hours of 12:00 a.m.-4:59 a.m. involved an alcohol-impaired driver.

Rate of Alcohol-Impaired Drivers in Crashes per Licensed Driver (Utah 2009)



- Drivers aged 21 to 24 years had the highest rates of alcohol-impaired crashes.
- Of the impaired drivers, 222 (11%) were under the age of 21 years.



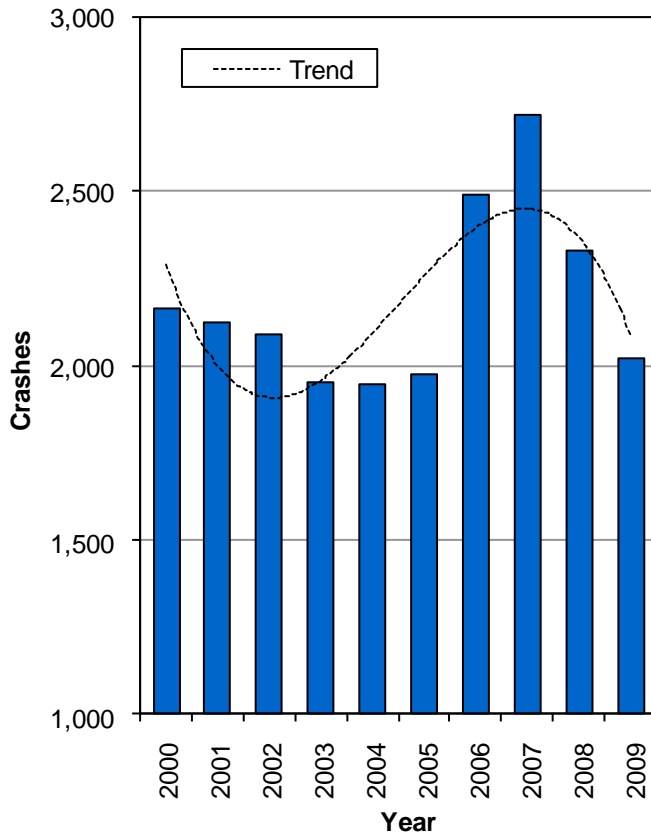
Previous DUI (Utah 2009)

- 14% of the alcohol-impaired drivers in fatal crashes were previously convicted of driving under the influence in the past three years.

Alcohol-Impaired Drivers

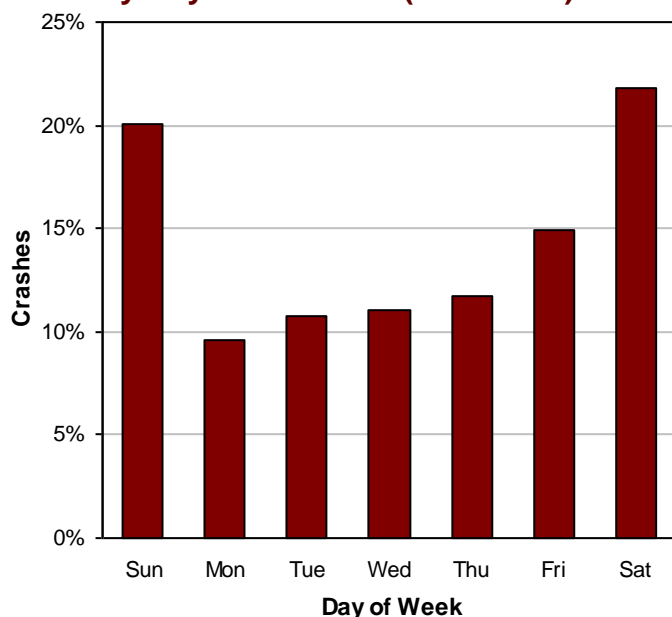


Alcohol-Impaired Driver Crashes (Utah 2000-2009)



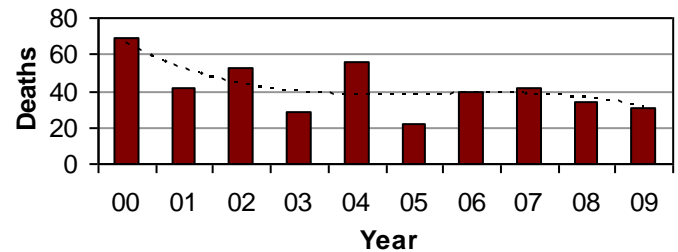
- The number of alcohol-impaired driver crashes has shown a decreasing trend over the last two years.

Alcohol-Impaired Driver Crashes by Day of the Week (Utah 2009)



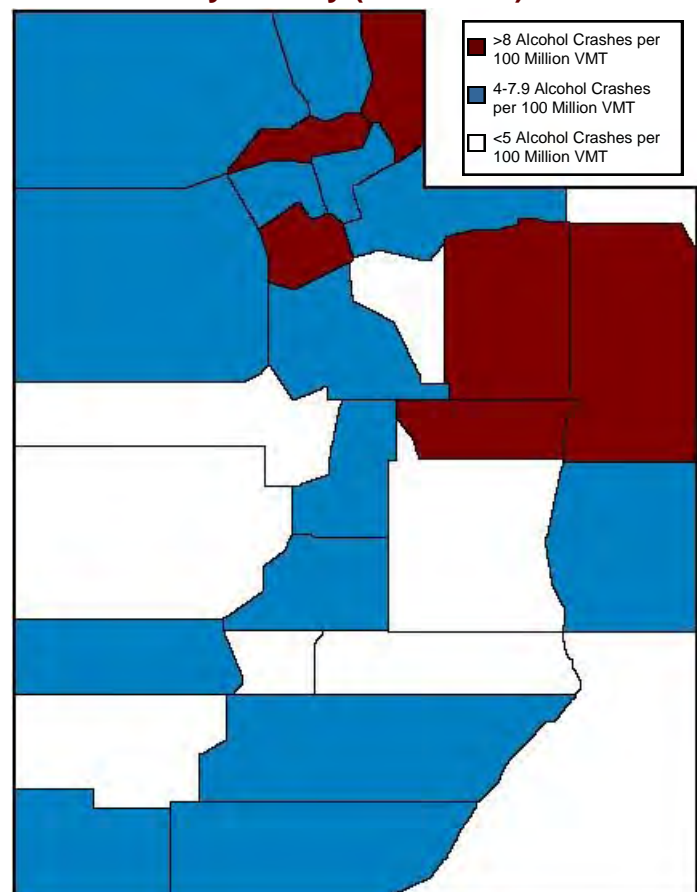
- The highest percentage of alcohol-impaired driver crashes occurred on weekends (42%).

Deaths from Alcohol-Impaired Drivers (Utah 2000-2009)



- 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 2009)



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

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

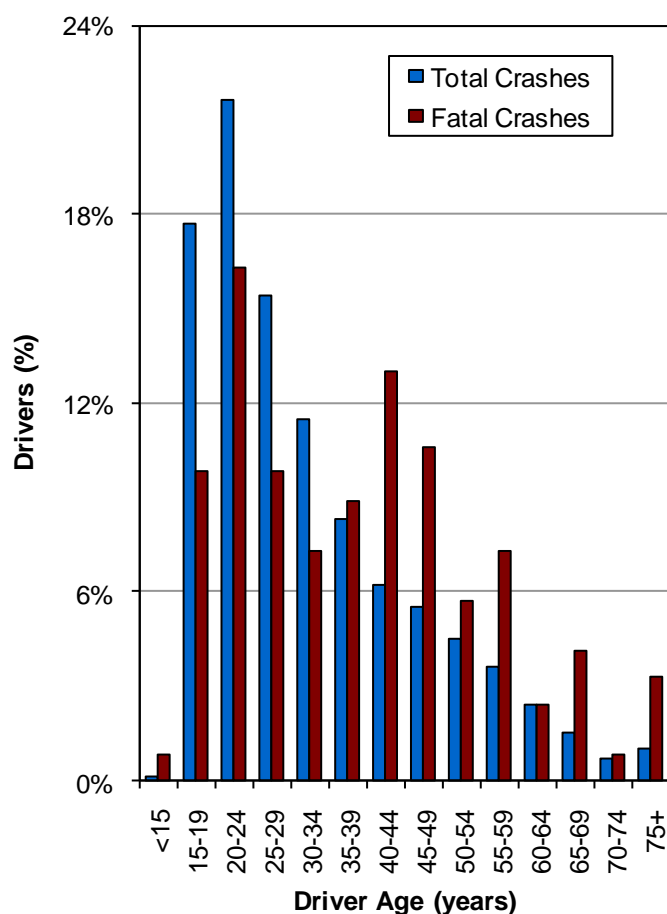
Speed



Did you know in 2009:

- 11,092 speed-related crashes occurred in Utah which resulted in 5,129 injured persons and 125 deaths.
- Speed was a factor in 49% of fatal crashes in 2009.
- Speed-related crashes were 2.8 times more likely to be fatal than other motor vehicle crashes.

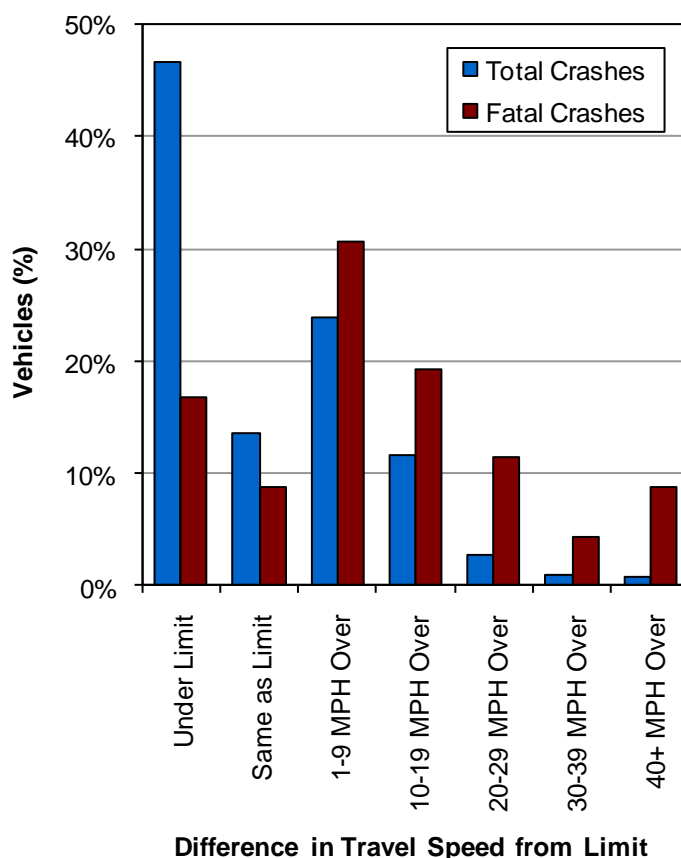
Age of Drivers in Speed-Related Crashes (Utah 2009)



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

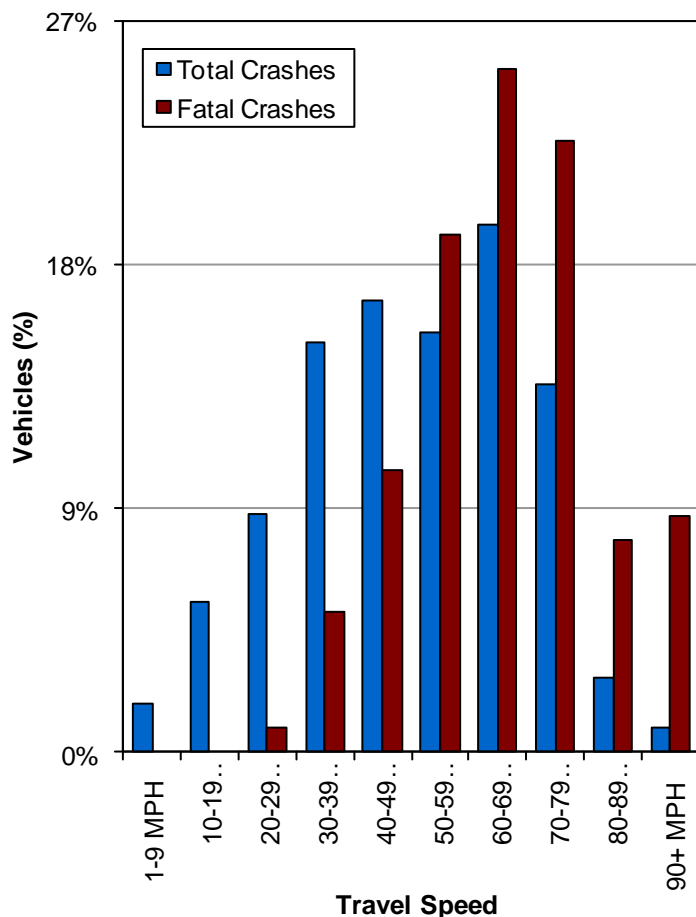


Speed-Related Crashes by Difference in Travel Speed From Speed Limit (Utah 2009)



- 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 2009)

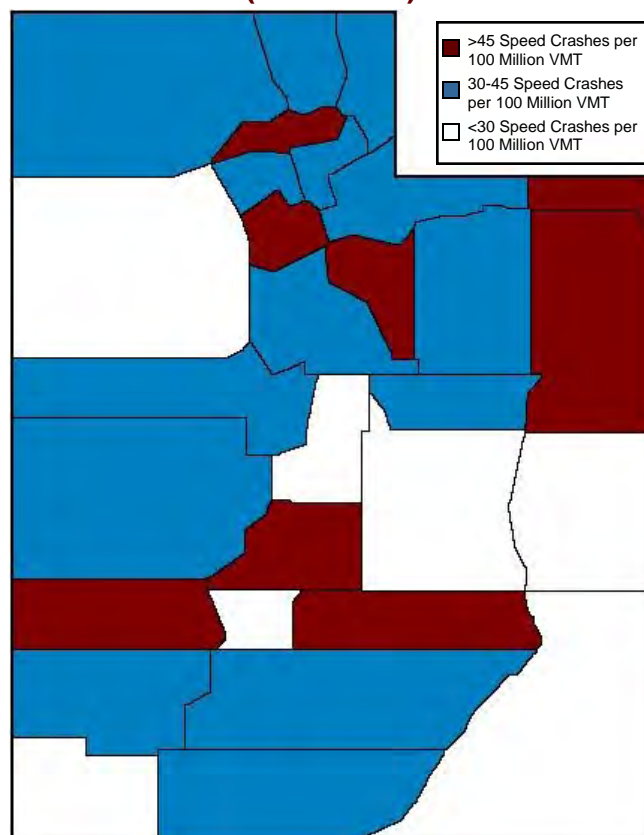


- Speed-related vehicles in fatal crashes were more likely to be traveling at higher speeds.
- The higher the speed the greater the amount of energy that must be absorbed in a crash, hence there is more chance of serious injury or death.

Speed



Speed-Related Crash Rates by County (Utah 2009)



- Wasatch, Beaver, Salt Lake, and Wayne 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.



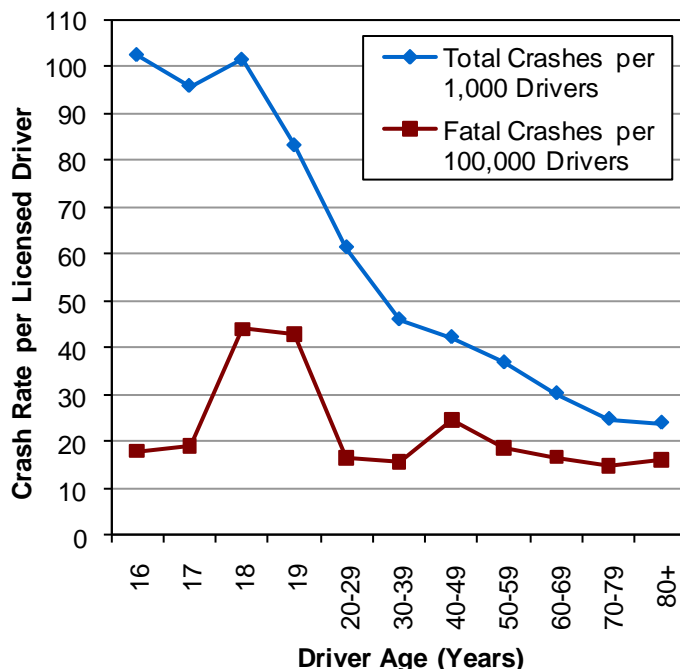
Did you know in 2009:

- Teenage drivers represented 7% of the licensed drivers in Utah, yet they were in nearly one-fourth (22%) of all motor vehicle crashes.
- Teenage drivers were in 11,034 motor vehicle crashes which resulted in 5,480 injured persons and 47 deaths.
- Teenage drivers were 2.2 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)

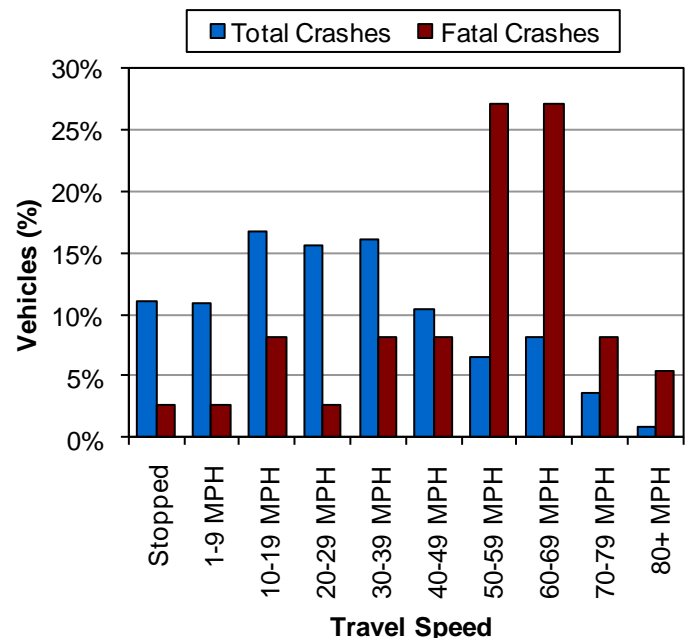


Crash Rates per Licensed Driver by Age (Utah 2009)



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

Teenage Driver Crashes by Travel Speed (Utah 2009)



- Crashes involving teenage driver vehicles traveling 50 MPH or higher were 8.9 times more likely to be fatal.

Leading Contributing Factors of Teenage Driver Crashes (Utah 2009)

All Teenage Driver Crashes

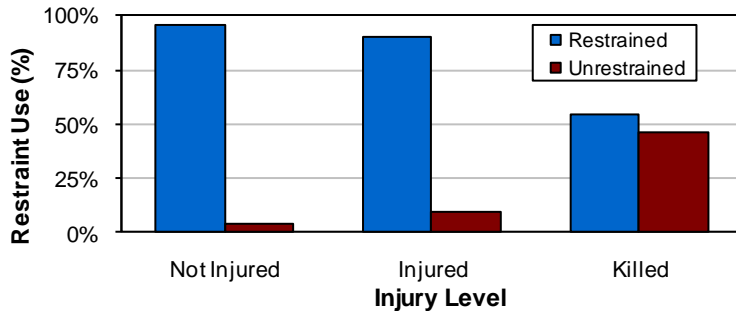
1. Followed Too Closely (19%)
2. Failed to Yield Right of Way (17%)
3. Speed Too Fast (14%)
4. Driver Distraction (10%)
5. Failed to Keep in Proper Lane (8%)

Fatal Teenage Driver Crashes

1. Failed to Keep in Proper Lane (36%)
2. Ran Off Road (31%)
3. Speed Too Fast (26%)
4. Failed to Yield Right of Way (15%)
4. Overcorrected (15%)

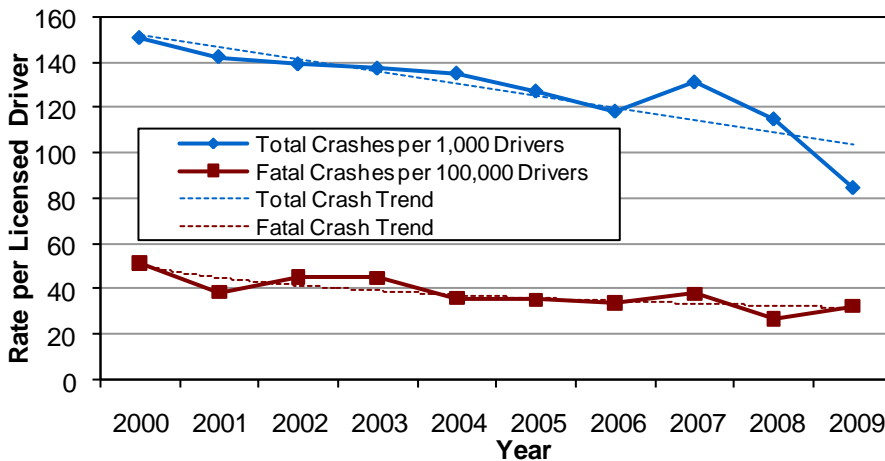


Restraint Use of Teen Drivers and Their Passengers (Utah 2009)



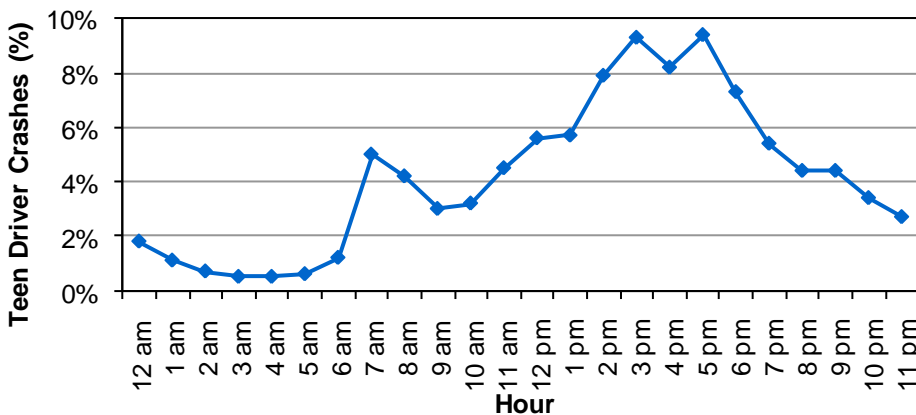
- 46% of teen drivers and their passengers killed in crashes were unrestrained.
- Unrestrained teen drivers and their passengers were 17 times more likely than restrained occupants to be killed in a crash.

Teenage Driver Crash Trend (Utah 2000-2009)



- The teenage driver crash rate per licensed driver decreased 44% from 2000 to 2008.

Teenage Driver Crashes by Hour (Utah 2009)



- 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.

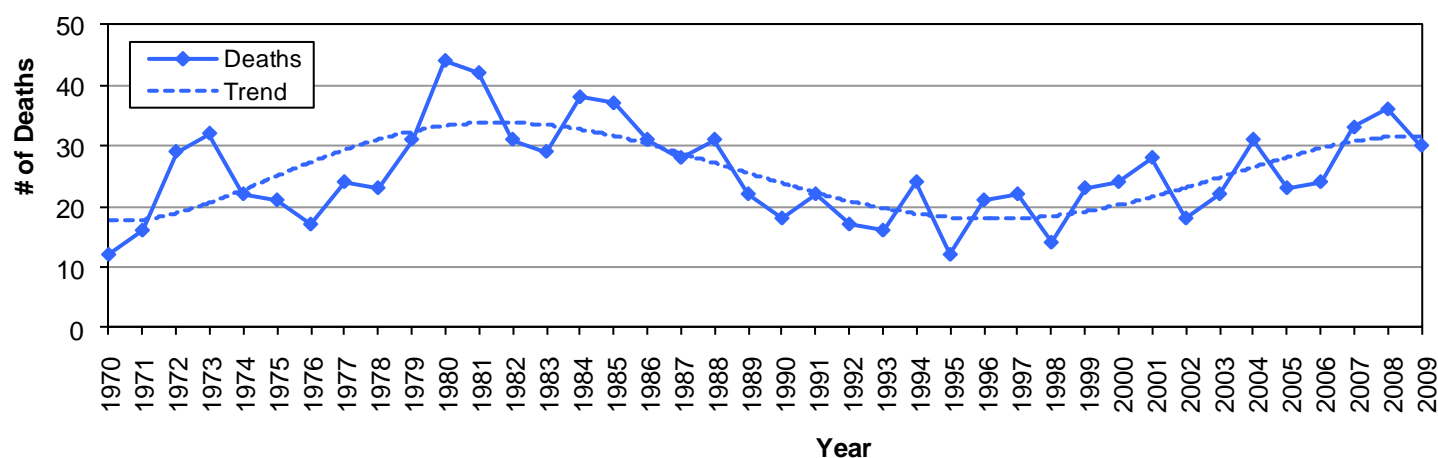
Did you know in 2009:

- There were 1,126 motorcycle crashes in Utah, resulting in 980 injured motorcyclists and 30 motorcyclist deaths.
- Motorcyclists accounted for 1% of persons in crashes and 12% of deaths.
- Compared to 2008, there was a 22% decrease in the number of motorcyclists in crashes.
- Motorcycle crashes were 7 times more likely to result in a death than other crashes.

Motorcycles

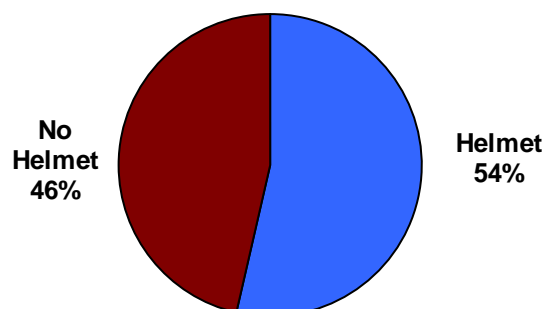


Motorcyclist Deaths (Utah 1970-2009)



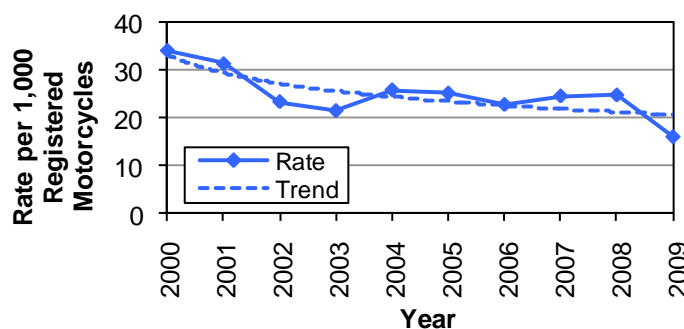
- Motorcyclist deaths are on the rise after seeing declining motorcyclist deaths in the 1990s.
- The 36 motorcyclist deaths in 2008 were the highest total since 1985.

Helmet Use of Motorcyclists in Crashes (Utah 2009)



- Only 54% of motorcyclists wore a helmet.
- Utah law requires anyone under the age of 18 years riding a motorcycle to wear a helmet.

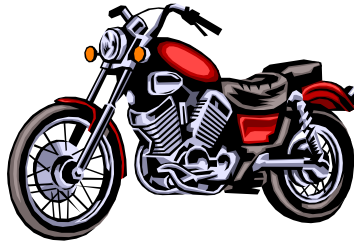
Motorcyclist Crash Rates per Registered Motorcycles (Utah 2000-2009)



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

Leading Motorcyclist Contributing Factors in Crashes (Utah 2009)

1. Speed Too Fast (13%)
2. Failed to Keep in Proper Lane (12%)
3. Followed Too Closely (11%)
4. Swerved or Evasive Action (7%)
5. Ran Off Road (6%)



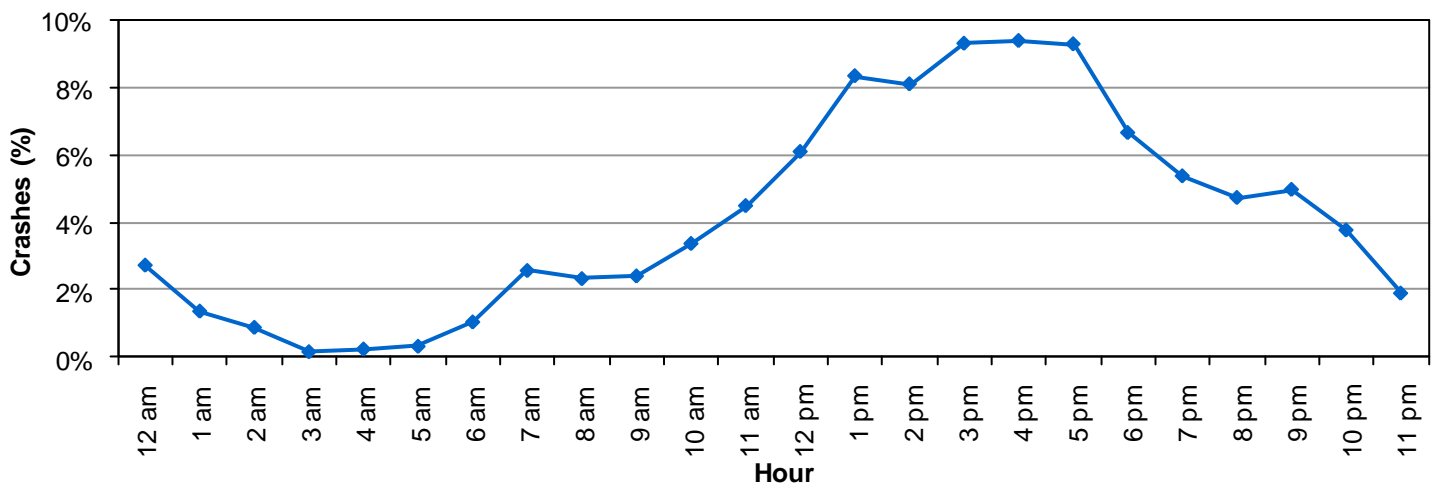
Motorcycles



Left Turns

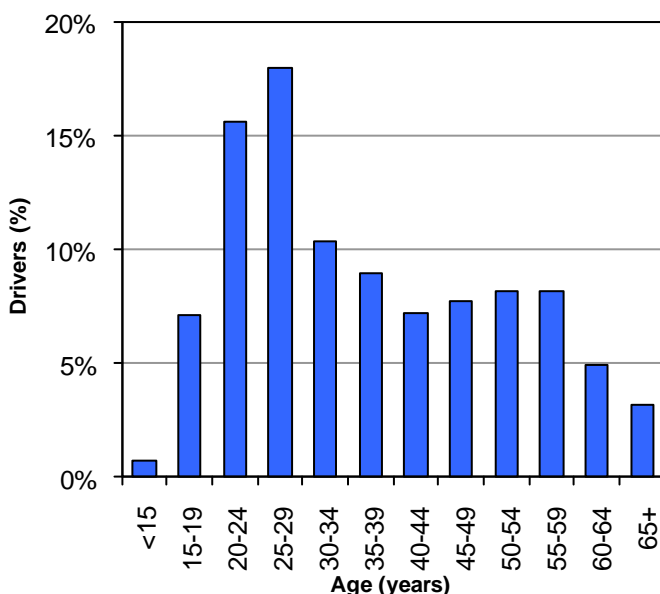
One-fourth of drivers who hit motorcycles were turning left. Drivers need to watch for motorcycles before turning.

Motorcyclists In Crashes by Hour of Day (Utah 2009)



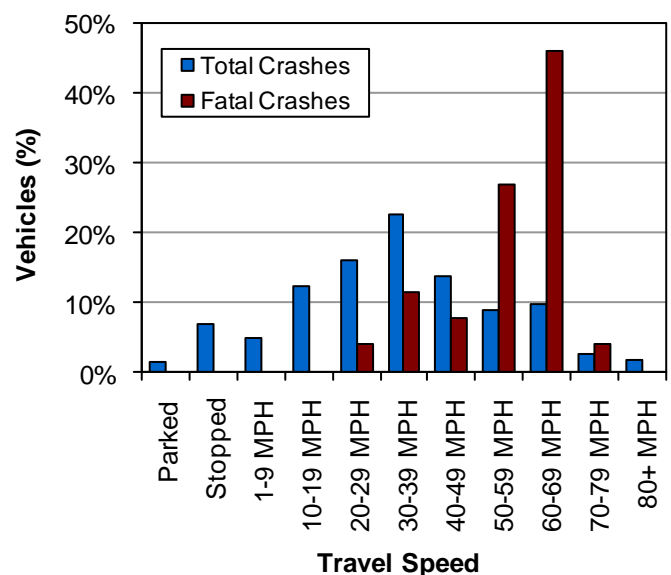
- Nearly two-thirds (63%) of motorcycle crashes occurred between 12:00 p.m. and 7:59 p.m.

Age of Motorcycle Drivers in All Crashes (Utah 2009)



- Over one-half (52%) of motorcycle drivers in crashes were under the age of 35 years.

Travel Speed of Motorcycles in Crashes (Utah 2009)



- Most (77%) of the motorcycles in fatal crashes were traveling 50 MPH or higher.

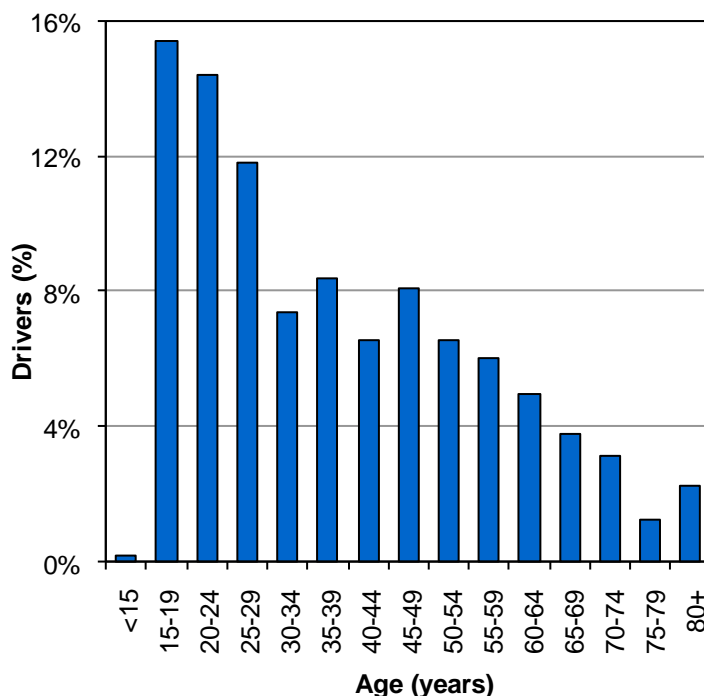
Did you know in 2009:

- 698 pedestrians were struck by motor vehicles; 613 were injured and 20 were killed.
- Pedestrians accounted for 1% of persons in crashes and 8% of deaths.
- Pedestrian crashes were 8 times more likely to result in a death than other crashes.

Pedestrians

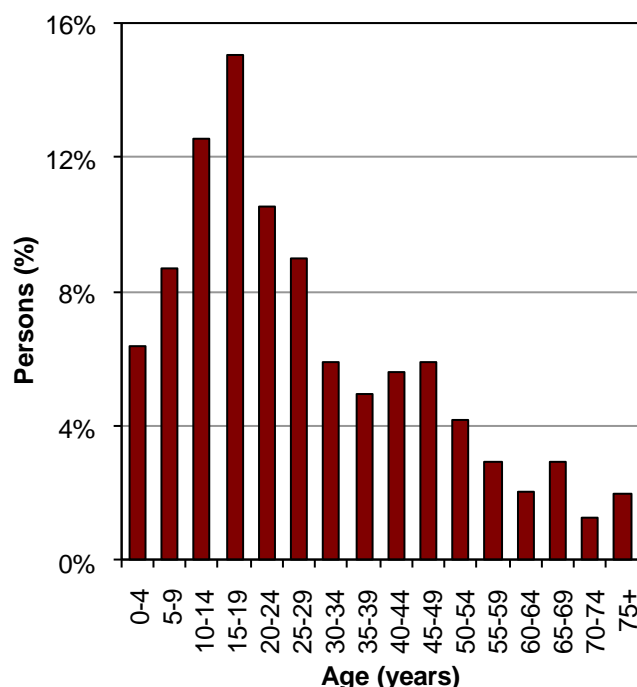


Age of Drivers in Pedestrian-Motor Vehicle Crashes (Utah 2009)



- Nearly half (42%) of drivers in pedestrian-motor vehicle crashes were under 30 years.

Age of Pedestrians in Pedestrian-Motor Vehicle Crashes (Utah 2009)



- Over half (53%) of the pedestrians in crashes were under 25 years of age.

Leading Contributing Factors of Drivers in Pedestrian Crashes (Utah 2009)

1. Failed to Yield Right of Way (32%)
2. Hit and Run (10%)
3. Driver Distraction (7%)
4. Vision Obscured by Weather (5%)
5. Speed Too Fast (4%)



Leading Contributing Factors of Pedestrians in Crashes (Utah 2009)

1. Improper Crossing (19%)
 2. Inattentive (7%)
 3. Darting (7%)
- 47% of pedestrians had no contributing factor in the crash.

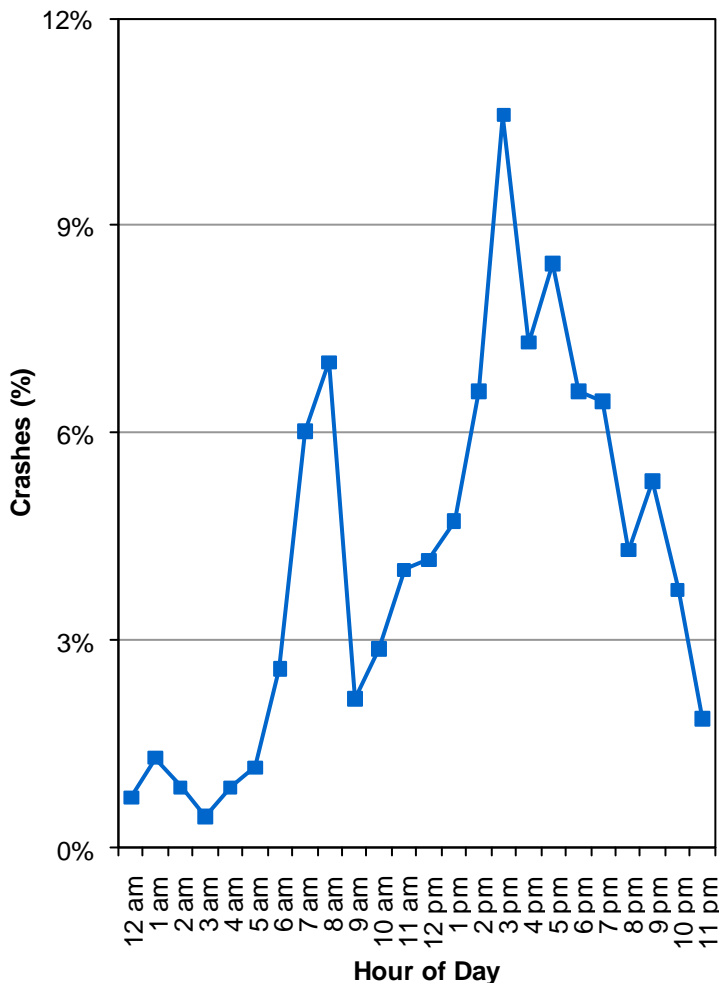


Pedestrians



Nearly one-third (32%) of drivers who hit pedestrians were turning. Drivers need to watch for pedestrians before turning.

Pedestrian-Motor Vehicle Crashes by Hour (Utah 2009)

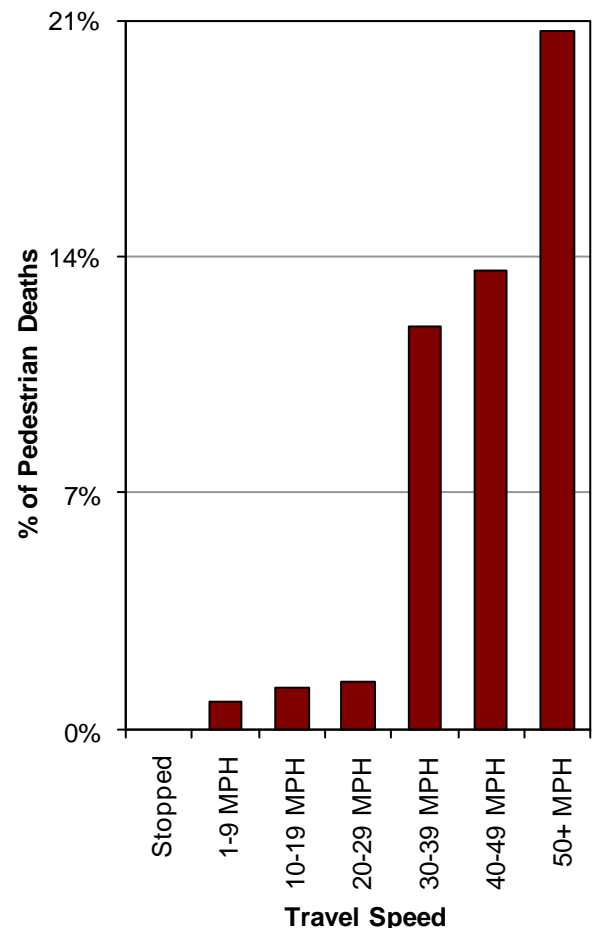


- Pedestrian-motor vehicle crashes occurred most often between 3:00 p.m.-5:59 p.m.

Location of Pedestrians in Crashes (Utah 2009)

1. Marked Crosswalk (39%)
2. In Roadway Not at Intersection/Crosswalk (29%)
3. Shoulder (10%)
4. Unmarked Crosswalk (8%)
5. Sidewalk (5%)

Percent of Pedestrian Deaths by Vehicle Travel Speed (Utah 2009)



- 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 10 times more likely to die.

Motor Vehicle Action Prior to Crash (Utah 2009)

1. Straight Ahead (53%)
2. Turning Right (19%)
3. Turning Left (13%)
4. Parked/Parking (5%)
5. Backing (4%)



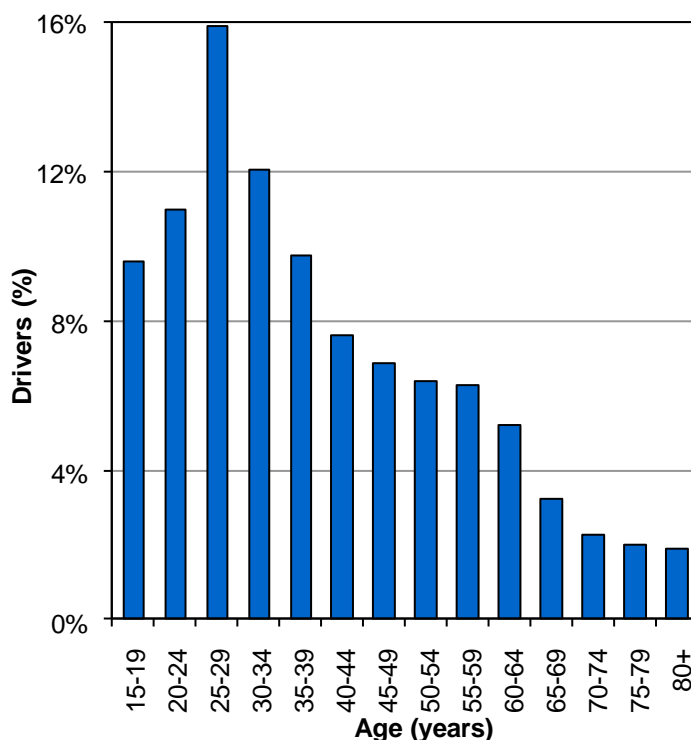
Did you know in 2009:

- 739 bicyclists were hit by motor vehicles; 651 were injured and 5 were killed.
- Utah's bicyclist crash rate per population decreased 9% from 2008.

Bicyclists

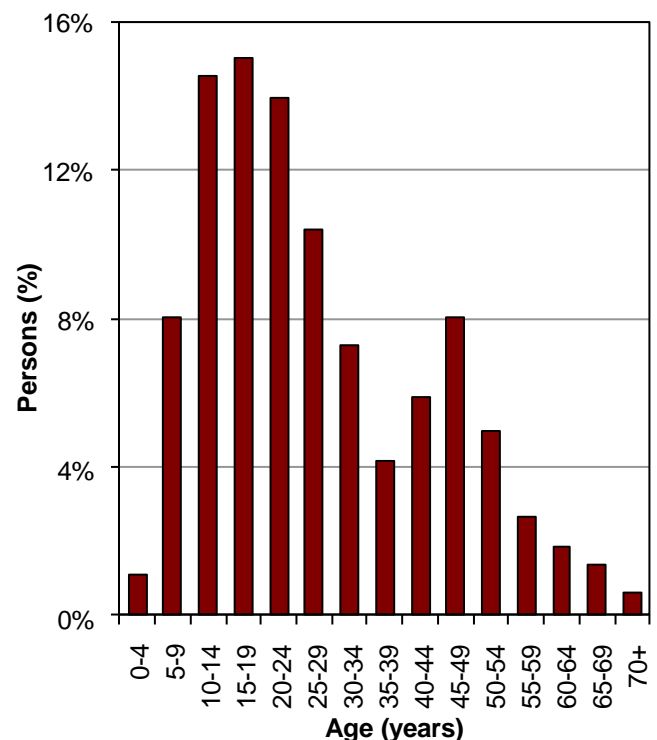


Age of Drivers in Bicycle-Motor Vehicle Crashes (Utah 2009)



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

Age of Bicyclists in Bicycle-Motor Vehicle Crashes (Utah 2009)



- Over half (53%) of the bicyclists in crashes were under 25 years of age.

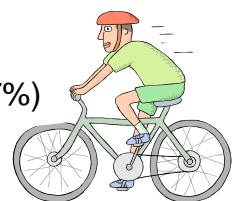
Leading Contributing Factors of Drivers in Bicyclist Crashes (Utah 2009)

1. Fail to Yield Right of Way (39%)
2. Hit and Run (7%)
3. Driver Distraction (5%)
4. Improper Turn (4%)
5. Disregard Traffic Signal/Sign (3%)



Leading Contributing Factors of Bicyclists in Crashes (Utah 2009)

1. Wrong Side of Road (13%)
 2. Improper Crossing (8%)
 3. Fail to Yield Right of Way (7%)
- 47% of bicyclists had no contributing factor in the crash.

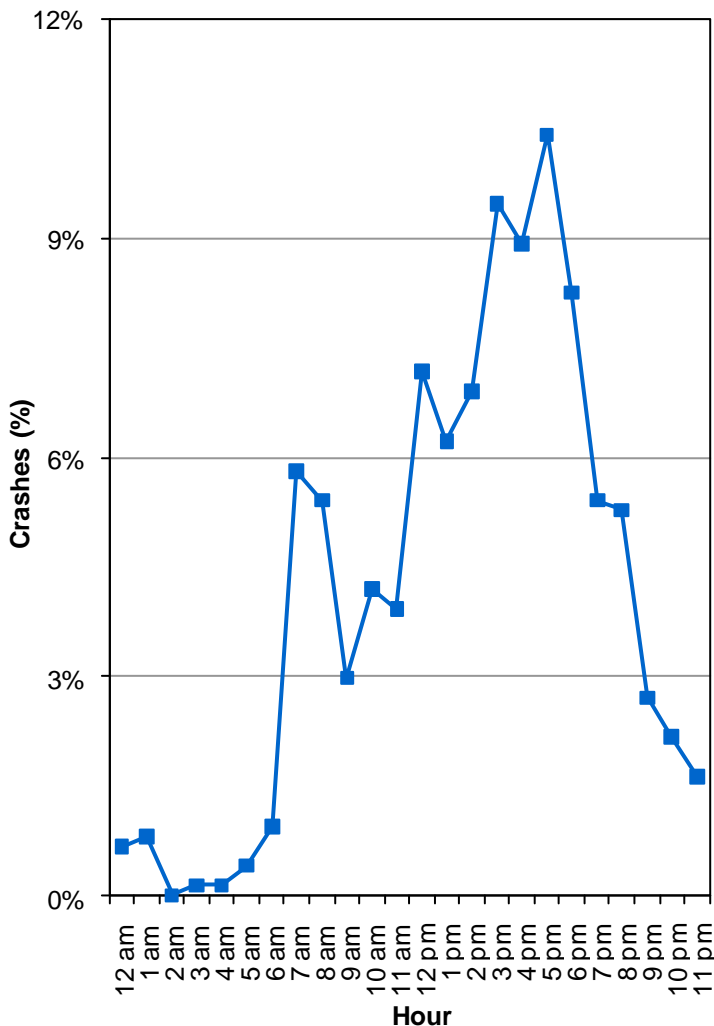


Bicyclists



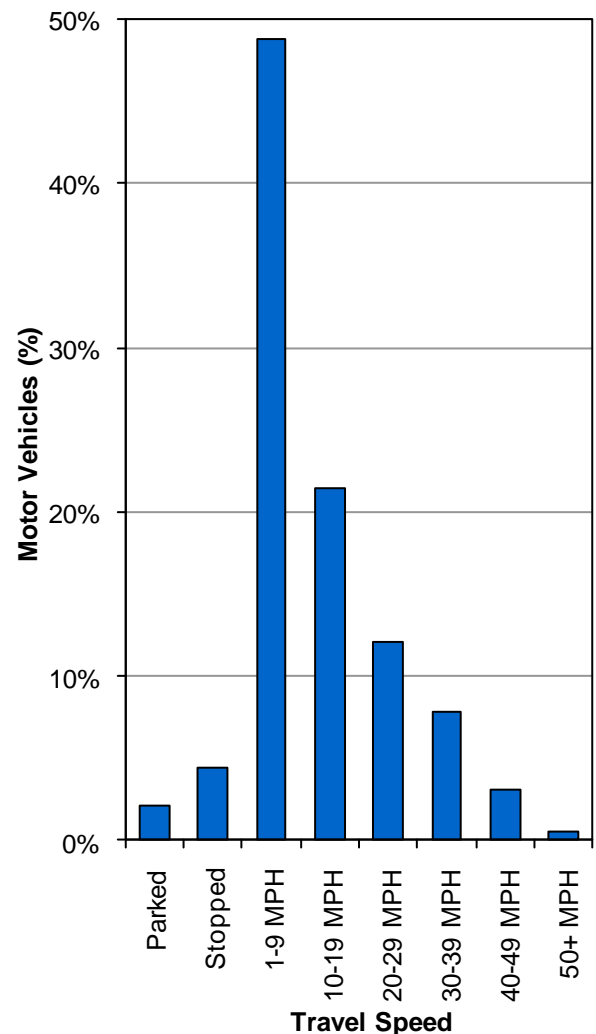
Over one-half (55%) of motor vehicles that hit bicyclists were turning. Drivers need to watch for bicycles before turning.

Bicycle-Motor Vehicle Crashes by Hour (Utah 2009)



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

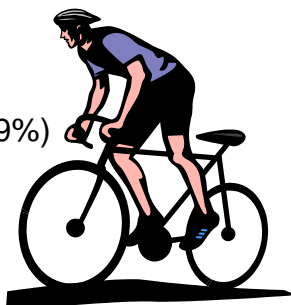
Bicycle-Motor Vehicle Crashes by Motor Vehicle Travel Speed (Utah 2009)



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

Location of Bicyclists in Crashes (Utah 2009)

1. Marked Crosswalk (30%)
2. In Roadway (Not at Intersection) (19%)
3. Shoulder (18%)
4. Sidewalk (13%)
5. Unmarked Crosswalk (10%)



Motor Vehicle Action Prior to Crash (Utah 2009)

1. Turning Right (37%)
2. Straight Ahead (36%)
3. Turning Left (17%)
4. Stopped/Slowing (3%)
5. Entering/Leaving Traffic (2%)

Overview

Section 1: Overview

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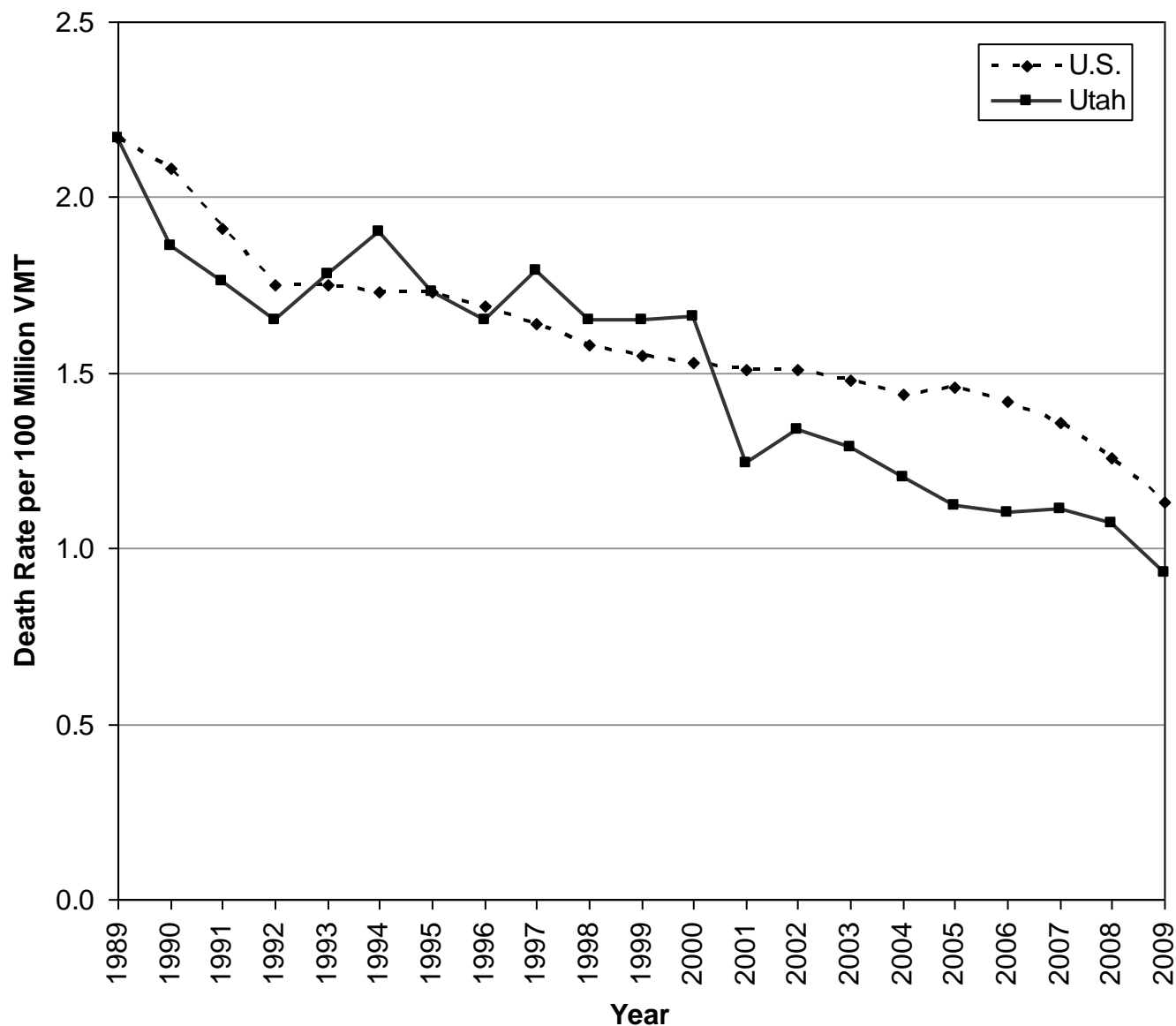
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9

Trends

Utah vs. U.S. Death Rate per 100 Million Vehicle Miles Traveled, 1989-2009

Death Rate per Miles Traveled																					
	Year																				
	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
U.S.	2.17	2.08	1.91	1.75	1.75	1.73	1.73	1.69	1.64	1.58	1.55	1.53	1.51	1.51	1.48	1.44	1.46	1.42	1.36	1.26	1.13
Utah	2.17	1.86	1.76	1.65	1.78	1.90	1.73	1.65	1.79	1.65	1.65	1.66	1.24	1.34	1.29	1.20	1.12	1.10	1.11	1.07	0.93



U.S. SOURCE: National Highway Traffic Safety Administration

- In 2009, the Utah death rate per 100 million vehicle miles traveled was 0.93 which was lower than the U.S. rate of 1.13.
- 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

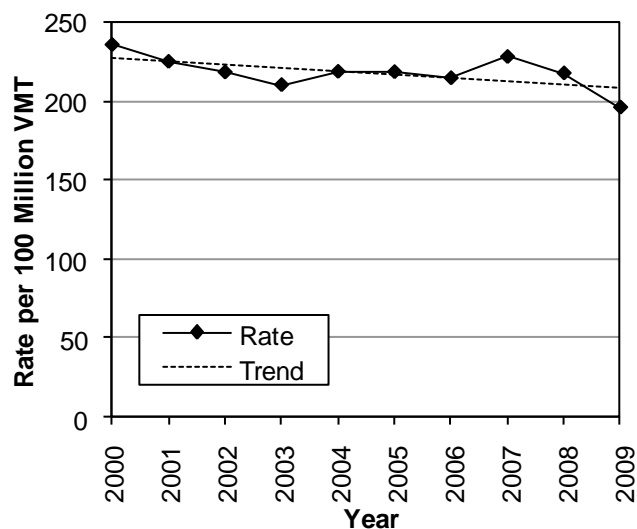
Crashes (Utah 2000-2009)

Year	Crashes							
	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
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
Total	355,583	142.7	185,461	74.4	2,576	1.03	543,620	218.2

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

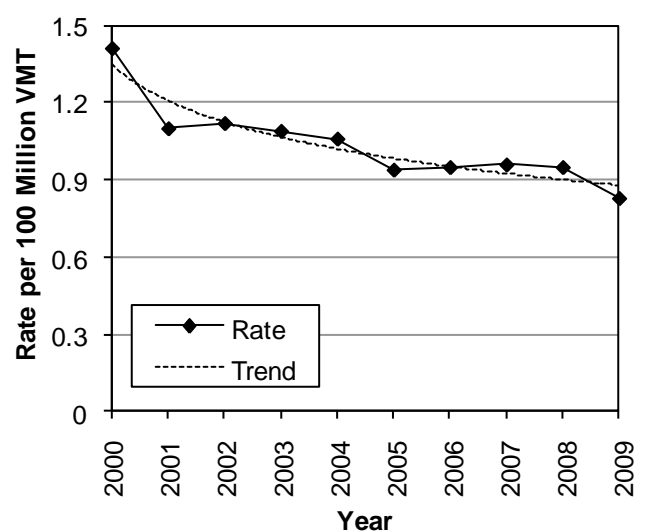
- During the last 10 years, 543,620 motor vehicle crashes occurred in Utah. On average, there are 54,400 crashes a year of which 18,500 involve injuries and 258 involve deaths.
- In 2009, total crashes decreased 8.9% from 2008.
- The 2009 total crash rate per 100 million VMT in Utah was 195.9, a 10.1% decrease from 2008.

Crash Rates Per 100 Million Vehicle Miles Traveled (Utah 2000-2009)



- The 2009 total crash rate was the lowest on record (see Appendix for records back to 1947).
- There was a 17.0% decrease in the total crash rate from 2000-2009.

Fatal Crash Rates Per 100 Million Vehicle Miles Traveled (Utah 2000-2009)



- There has been a decreasing trend in fatal crash rates over the last 10 years.
- There was a 41% decrease in the fatal crash rate from 2000-2009.

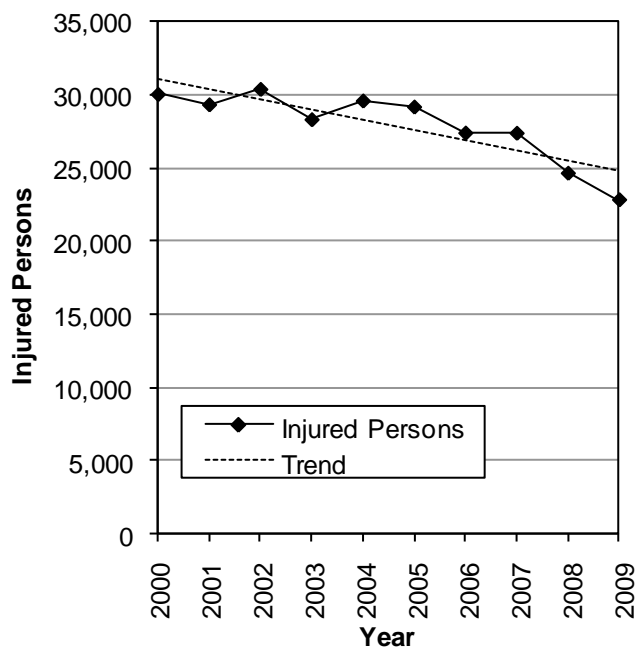
Trends

Persons Involved (Utah 2000-2009)

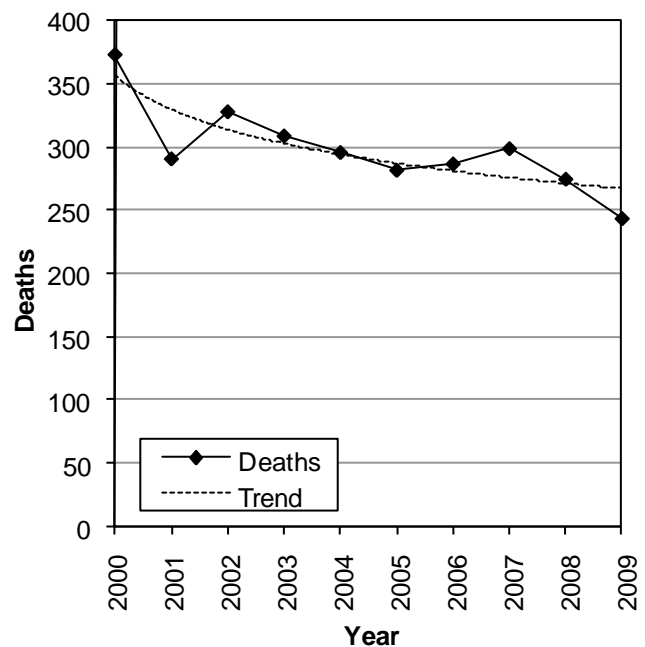
Persons								
Year	Non-Injured		Injured		Killed		Total	
	#	Rate per 100 Million VMT	#	Rate per 100 Million VMT	#	Rate per 100 Million VMT	#	Rate per 100 Million VMT
2000	110,318	489.9	30,086	133.6	373	1.66	140,777	625.2
2001	108,427	463.4	29,375	125.5	291	1.24	138,093	590.2
2002	109,878	449.6	30,433	124.5	328	1.34	140,639	575.5
2003	104,660	436.8	28,352	118.3	309	1.29	133,321	556.4
2004	111,225	451.4	29,638	120.3	296	1.20	141,159	572.8
2005	115,546	459.8	29,221	116.3	282	1.12	145,049	577.2
2006	116,187	444.0	27,433	104.8	287	1.10	143,907	550.0
2007	127,330	474.7	27,420	102.2	299	1.11	155,049	578.0
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
Total	1,121,271	450.0	279,478	112.2	2,985	1.20	1,403,734	563.3

- During the last 10 years, over 1.4 million people have been in a crash. Approximately 28,000 people are injured and 300 people are killed in motor vehicle crashes a year.
- Utah experienced a 11.6% decrease in the number of crash deaths in 2009 from 2008.
- The injury rate per miles traveled decreased for the fifth year in a row.
- 11,646 less people were in a crash in Utah in 2009; an 8.2% decrease from 2008.

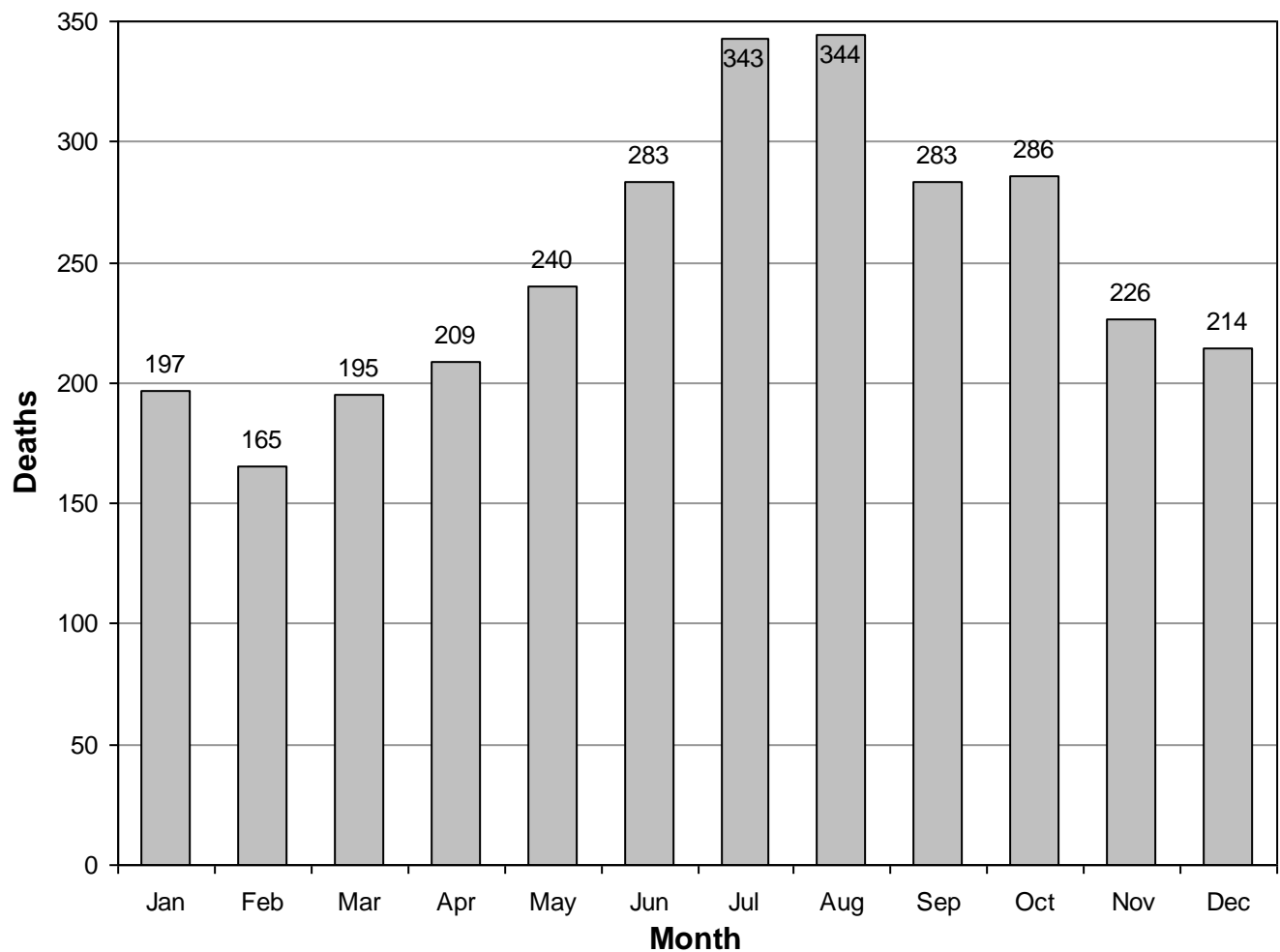
Injured Persons by Year (Utah 2000-2009)



Deaths by Year (Utah 2000-2009)



- There was a 24.1% decrease in the number of people injured over the last 10 years.
- Deaths decreased in 2009 to the lowest total in Utah since 1974.

Deaths by Month (Utah 2000-2009)

Deaths													
Year	Month												Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
2000	30	23	21	27	29	38	50	36	30	33	23	33	373
2001	22	19	12	14	30	24	40	33	21	29	27	20	291
2002	22	17	18	20	28	19	44	36	36	38	27	23	328
2003	22	15	16	22	20	39	38	39	31	25	17	25	309
2004	9	15	28	20	25	31	28	40	31	26	25	18	296
2005	16	22	14	18	18	25	25	37	31	30	25	21	282
2006	22	15	23	17	14	26	29	33	31	33	23	21	287
2007	16	13	24	35	24	31	35	26	30	26	21	18	299
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
Total	197	165	195	209	240	283	343	344	283	286	226	214	2,985

- Over one-half (51.6%) of deaths occurred June-October.
- In the last 10 years, August (344) and July (343) had the highest total number of motor vehicle crash deaths while February (165) had the fewest.
- In 2009, August (32) had the highest number of deaths while November and December (13) had the fewest.

Trends

Holiday Death Rate Per Day (Utah 2000-2009)



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
2000	2	0.7	3	1.0	3	0.8	2	0.7	5	1.3	3	0.8	2	0.7	2	0.4	5	1.3	27	0.8
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
Total	19	0.5	23	0.8	42	1.1	47	1.3	49	1.3	40	1.0	32	0.9	46	0.9	32	0.9	330	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 (1.3) 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 2009, the Easter Holiday had the highest death rate per day (1.3) while the Thanksgiving Holiday and Christmas Holiday had the lowest rates (0.0).
- The 2009 holiday death rate per day was 0.4 which was lower than the rate per day for all 2009 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 2009)

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	15,832	185.9	6,757	79.3	41	0.5	22,630	265.7
Weber	2,789	171.9	1,272	78.4	21	1.3	4,082	251.6
Cache	1,333	154.8	547	63.5	10	1.2	1,890	219.5
Utah	4,931	135.0	2,610	71.5	17	0.5	7,558	207.0
Uintah	509	143.2	167	47.0	5	1.4	681	191.6
Wayne	44	107.3	30	73.1	3	7.3	77	187.7
Wasatch	414	135.8	106	34.8	4	1.3	524	171.9
Rich	57	117.5	24	49.5	2	4.1	83	171.0
Carbon	371	124.4	131	43.9	3	1.0	505	169.4
Sevier	399	117.0	145	42.5	4	1.2	548	160.6
Davis	2,814	104.1	1,462	54.1	10	0.4	4,286	158.6
Kane	163	114.2	49	34.3	4	2.8	216	151.3
Duchesne	269	117.5	69	30.1	5	2.2	343	149.8
Summit	796	112.0	226	31.8	9	1.3	1,031	145.0
Washington	1,120	82.2	742	54.4	9	0.7	1,871	137.3
Beaver	225	90.7	80	32.2	4	1.6	309	124.5
Box Elder	771	84.0	337	36.7	9	1.0	1,117	121.7
Garfield	97	82.0	43	36.4	3	2.5	143	120.9
Iron	569	81.0	251	35.7	9	1.3	829	118.1
Daggett	28	90.7	8	25.9	0	0.0	36	116.6
Sanpete	177	81.3	64	29.4	3	1.4	244	112.1
Juab	294	76.4	93	24.2	6	1.6	393	102.2
Piute	22	72.2	8	26.3	0	0.0	30	98.4
Morgan	91	67.8	36	26.8	2	1.5	129	96.2
Tooele	542	65.2	246	29.6	8	1.0	796	95.8
San Juan	197	68.3	58	20.1	7	2.4	262	90.9
Millard	264	58.0	84	18.4	5	1.1	353	77.5
Emery	162	49.6	48	14.7	6	1.8	216	66.2
Grand	118	34.6	59	17.3	8	2.3	185	54.2
Statewide	35,398	135.0	15,752	60.1	217	0.8	51,367	195.9

- Salt Lake (265.7), Weber (251.6), and Cache (219.5) counties had the highest total crash rates per miles traveled.
- Grand (54.2), Emery (66.2), and Millard (77.5) counties had the lowest total crash rates per miles traveled.
- Wayne (7.3), Rich (4.1), and Kane (2.8) counties had the highest fatal crash rates per miles traveled.

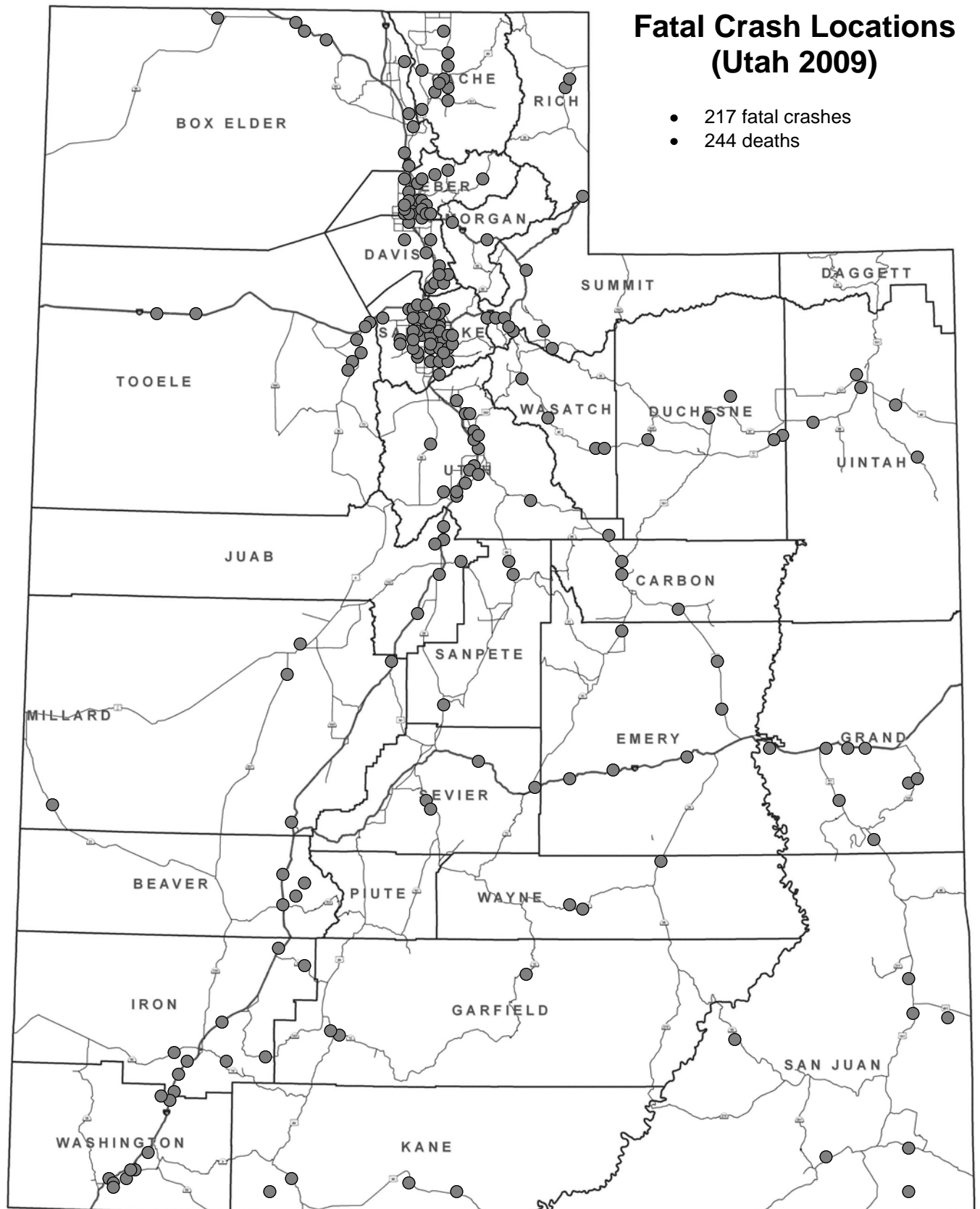
Counties

Persons in Crashes by County (Utah 2009)

County	Persons											
	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	46,927	550.9	450.3	9,395	110.3	90.2	46	0.5	0.4	56,368	661.7	540.9
Weber	8,491	523.4	373.6	1,852	114.2	81.5	23	1.4	1.0	10,366	639.0	456.1
Cache	4,284	497.5	374.9	801	93.0	70.1	10	1.2	0.9	5,095	591.7	445.9
Utah	15,605	427.3	293.6	3,935	107.7	74.0	21	0.6	0.4	19,561	535.6	368.1
Davis	9,738	360.4	316.5	2,187	80.9	71.1	10	0.4	0.3	11,935	441.7	387.9
Uintah	1,078	303.2	344.5	277	77.9	88.5	6	1.7	1.9	1,361	382.8	434.9
Washington	3,899	286.1	268.0	1,055	77.4	72.5	10	0.7	0.7	4,964	364.3	341.2
Wasatch	936	307.1	399.5	153	50.2	65.3	4	1.3	1.7	1,093	358.6	466.5
Carbon	860	288.5	435.0	173	58.0	87.5	3	1.0	1.5	1,036	347.5	524.1
Sevier	876	256.8	421.7	229	67.1	110.2	5	1.5	2.4	1,110	325.4	534.3
Wayne	85	207.2	315.8	44	107.3	163.4	3	7.3	11.1	132	321.8	490.3
Rich	122	251.4	523.8	29	59.8	124.5	2	4.1	8.6	153	315.3	656.9
Summit	1,840	258.9	454.9	297	41.8	73.4	10	1.4	2.5	2,147	302.0	530.8
Kane	346	242.4	513.4	79	55.4	117.2	4	2.8	5.9	429	300.6	636.5
Beaver	594	239.4	903.3	134	54.0	203.8	6	2.4	9.1	734	295.8	1,116.2
Iron	1,522	216.7	325.0	410	58.4	87.6	12	1.7	2.6	1,944	276.8	415.2
Duchesne	512	223.7	294.8	109	47.6	62.8	6	2.6	3.5	627	273.9	361.0
Box Elder	1,879	204.8	380.2	515	56.1	104.2	9	1.0	1.8	2,403	261.9	486.2
Tooele	1,432	172.3	242.2	390	46.9	66.0	11	1.3	1.9	1,833	220.5	310.1
Sanpete	377	173.2	136.4	94	43.2	34.0	4	1.8	1.4	475	218.2	171.8
Daggett	55	178.1	556.7	9	29.2	91.1	0	0.0	0.0	64	207.3	647.8
Juab	608	158.1	596.6	153	39.8	150.1	8	2.1	7.9	769	199.9	754.6
Garfield	172	145.4	334.0	59	49.9	114.6	3	2.5	5.8	234	197.9	454.5
Millard	651	143.0	475.1	143	31.4	104.4	5	1.1	3.6	799	175.5	583.1
Morgan	159	118.5	159.8	49	36.5	49.3	2	1.5	2.0	210	156.5	211.1
San Juan	311	107.9	198.8	91	31.6	58.2	7	2.4	4.5	409	141.9	261.5
Piute	30	98.4	202.8	13	42.7	87.9	0	0.0	0.0	43	141.1	290.7
Emery	300	91.9	276.5	71	21.7	65.4	6	1.8	5.5	377	115.5	347.5
Grand	267	78.3	281.3	101	29.6	106.4	8	2.3	8.4	376	110.2	396.1
Statewide	103,956	396.5	371.3	22,847	87.1	81.6	244	0.9	0.9	127,047	484.6	453.7

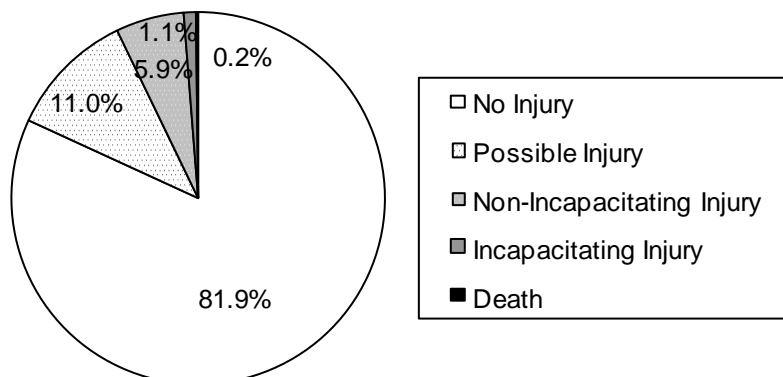
- Two different rates are given in the above table. One rate is based on vehicle miles traveled in the county and the other based on the county population.
- Rate per 100 million vehicle miles traveled:
 - Salt Lake (661.7), Weber (639.0), and Cache (591.7) counties had the highest rates of total persons in crashes per 100 million vehicle miles traveled.
 - Wayne (7.3), Rich (4.1), and Kane (2.8) counties had the highest rates of persons killed per 100 million vehicle miles traveled.
- Rate per 10,000 population:
 - Beaver (1,116.2), Juab (754.6), and Rich (656.9) counties had the highest rates of total persons in crashes per 10,000 population.
 - Wayne (11.1), Beaver (9.1), and Rich (8.6) counties had the highest rates of persons killed per 10,000 population.

Counties



Persons Involved

Injury Severity (Utah 2009)



- Although many people were injured and killed in motor vehicle crashes, the majority (81.9%) 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 2009)

Persons								
Person Placement	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Driver	74,507	71.7%	15,017	65.7%	148	60.7%	89,672	70.6%
Passenger	29,301	28.2%	6,566	28.7%	71	29.1%	35,938	28.3%
Bicyclist	83	0.1%	651	2.8%	5	2.0%	739	0.6%
Pedestrian	65	0.1%	613	2.7%	20	8.2%	698	0.5%
Total	103,956	100.0%	22,847	100.0%	244	100.0%	127,047	100.0%

- Pedestrians in a crash had the greatest risk of being killed. In fact, pedestrian crashes were 6.4 times more likely to be fatal than other crashes.

Gender of Persons in Crashes (Utah 2009)

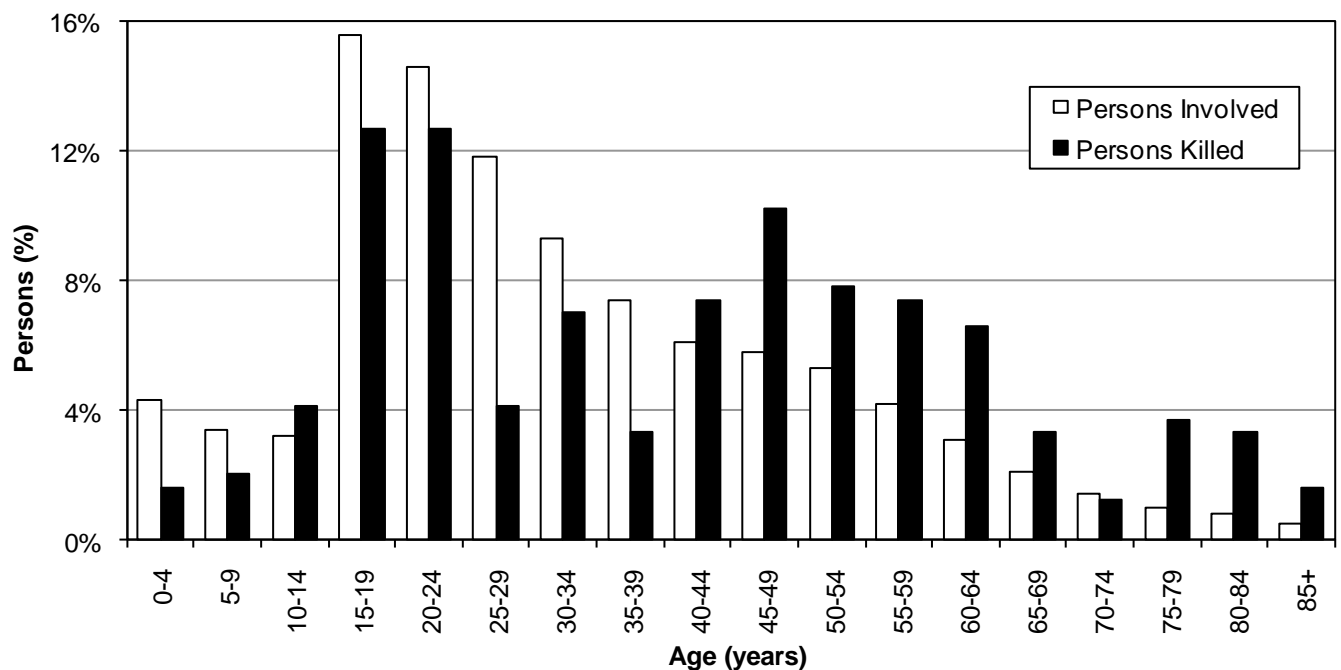
Persons								
Gender	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Male	57,196	55.0%	10,656	46.6%	167	68.4%	68,019	53.5%
Female	44,009	42.3%	12,029	52.7%	77	31.6%	56,115	44.2%
Unknown	2,751	2.6%	162	0.7%	0	0.0%	2,913	2.3%
Total	103,956	100.0%	22,847	100.0%	244	100.0%	127,047	100.0%

- Males comprised over half (53.5%) of all persons in crashes and over two-thirds (68.4%) of deaths, while females sustained more injuries (52.7%) than males.
- Males were 1.8 times more likely to die than females in a crash.

Persons Involved

Age of Persons in Crashes (Utah 2009)

Age	Persons							
	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
0-4	4,706	4.5%	537	2.4%	4	1.6%	5,247	4.1%
5-9	3,449	3.3%	702	3.1%	5	2.0%	4,156	3.3%
10-14	2,983	2.9%	841	3.7%	10	4.1%	3,834	3.0%
15-19	15,643	15.0%	3,280	14.4%	31	12.7%	18,954	14.9%
20-24	14,536	14.0%	3,221	14.1%	31	12.7%	17,788	14.0%
25-29	11,555	11.1%	2,730	11.9%	10	4.1%	14,295	11.3%
30-34	9,172	8.8%	2,066	9.0%	17	7.0%	11,255	8.9%
35-39	7,409	7.1%	1,625	7.1%	8	3.3%	9,042	7.1%
40-44	5,893	5.7%	1,436	6.3%	18	7.4%	7,347	5.8%
45-49	5,680	5.5%	1,384	6.1%	25	10.2%	7,089	5.6%
50-54	5,168	5.0%	1,257	5.5%	19	7.8%	6,444	5.1%
55-59	4,124	4.0%	989	4.3%	18	7.4%	5,131	4.0%
60-64	2,971	2.9%	730	3.2%	16	6.6%	3,717	2.9%
65-69	2,074	2.0%	506	2.2%	8	3.3%	2,588	2.0%
70-74	1,398	1.3%	341	1.5%	3	1.2%	1,742	1.4%
75-79	985	0.9%	264	1.2%	9	3.7%	1,258	1.0%
80-84	723	0.7%	204	0.9%	8	3.3%	935	0.7%
85+	470	0.5%	141	0.6%	4	1.6%	615	0.5%
Unknown	5,017	4.8%	593	2.6%	0	0.0%	5,610	4.4%
Total	103,956	100.0%	22,847	100.0%	244	100.0%	127,047	100.0%



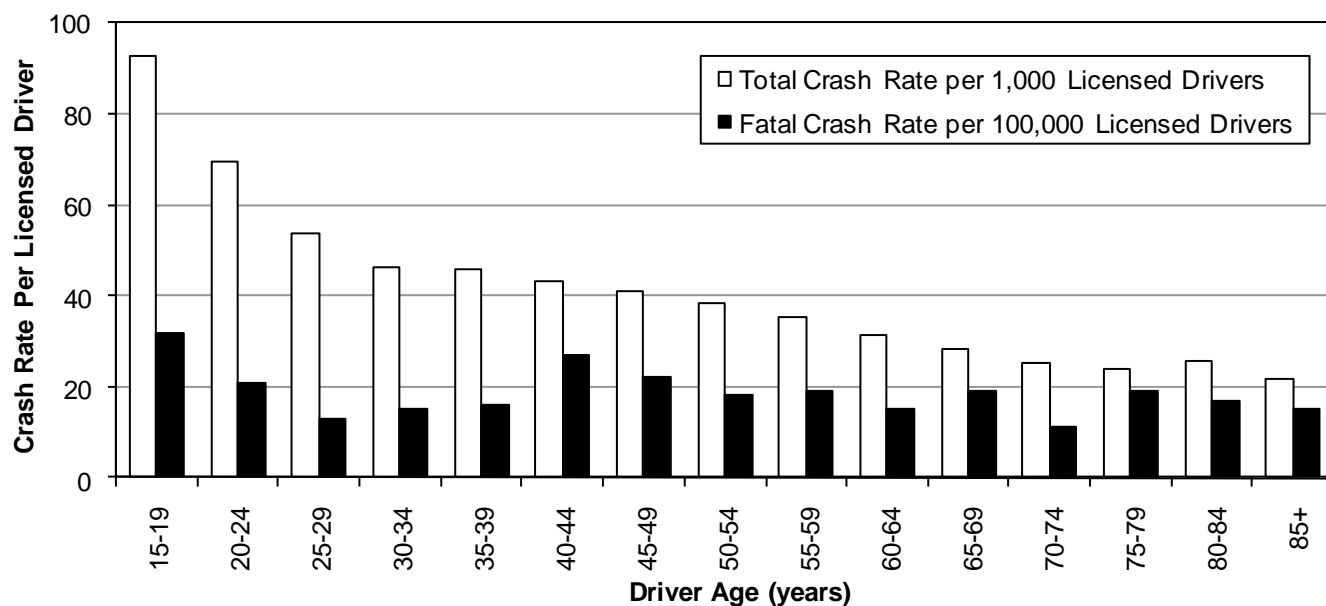
- The largest proportion of persons in crashes were aged 15-29 years (40.2%).
- The largest proportion of persons killed were aged 15-24 years (25.4%).
- The average age of a person in a crash was 32 years. The average age of a person killed was 40 years.
- While persons aged 65 years and older represented a small proportion of the persons in crashes (5.6%), they were 2.4 times more likely than all other age groups to die.

Drivers

Driver Age (Utah 2009)

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	28	0.0%	n/a	46	0.2%	n/a	1	0.3%	n/a	75	0.1%	n/a
15-19	8,238	13.6%	63.2	3,821	13.3%	29.3	42	12.2%	0.32	12,101	13.5%	92.8
20-24	9,534	15.8%	47.7	4,345	15.1%	21.7	41	11.9%	0.21	13,920	15.5%	69.7
25-29	7,886	13.0%	35.8	3,948	13.7%	17.9	28	8.1%	0.13	11,862	13.2%	53.9
30-34	6,465	10.7%	31.3	3,060	10.6%	14.8	31	9.0%	0.15	9,556	10.7%	46.2
35-39	5,266	8.7%	30.9	2,519	8.7%	14.8	28	8.1%	0.16	7,813	8.7%	45.9
40-44	4,147	6.9%	28.6	2,101	7.3%	14.5	39	11.3%	0.27	6,287	7.0%	43.4
45-49	3,999	6.6%	27.1	2,019	7.0%	13.7	33	9.6%	0.22	6,051	6.7%	41.0
50-54	3,705	6.1%	25.8	1,773	6.2%	12.3	26	7.5%	0.18	5,504	6.1%	38.3
55-59	2,919	4.8%	23.4	1,446	5.0%	11.6	24	7.0%	0.19	4,389	4.9%	35.1
60-64	2,073	3.4%	20.8	1,057	3.7%	10.6	15	4.3%	0.15	3,145	3.5%	31.5
65-69	1,388	2.3%	18.8	704	2.4%	9.5	14	4.1%	0.19	2,106	2.3%	28.5
70-74	916	1.5%	17.0	444	1.5%	8.3	6	1.7%	0.11	1,366	1.5%	25.4
75-79	619	1.0%	15.1	346	1.2%	8.4	8	2.3%	0.19	973	1.1%	23.7
80-84	474	0.8%	16.5	256	0.9%	8.9	5	1.4%	0.17	735	0.8%	25.5
85+	284	0.5%	13.8	159	0.6%	7.7	3	0.9%	0.15	446	0.5%	21.7
Unknown	2,578	4.3%	n/a	756	2.6%	n/a	1	0.3%	n/a	3,335	3.7%	n/a
Total	60,519	100.0%	33.5	28,800	100.0%	15.9	345	100.0%	0.19	89,664	100.0%	49.6

Crash Rate of Licensed Drivers by Age (Utah 2009)



- Drivers aged 15-19 years had the highest rates per licensed driver of total crashes, fatal crashes, injury crashes, and property damage only crashes.
- Drivers aged 85+ years had the lowest rate per licensed driver of total crashes (21.7).
- Drivers aged 70-74 years had the lowest rate per licensed driver of fatal crashes (0.11).
- The average age of a driver was 36 years. The average age of a driver in a fatal crash was 40 years.

Drivers

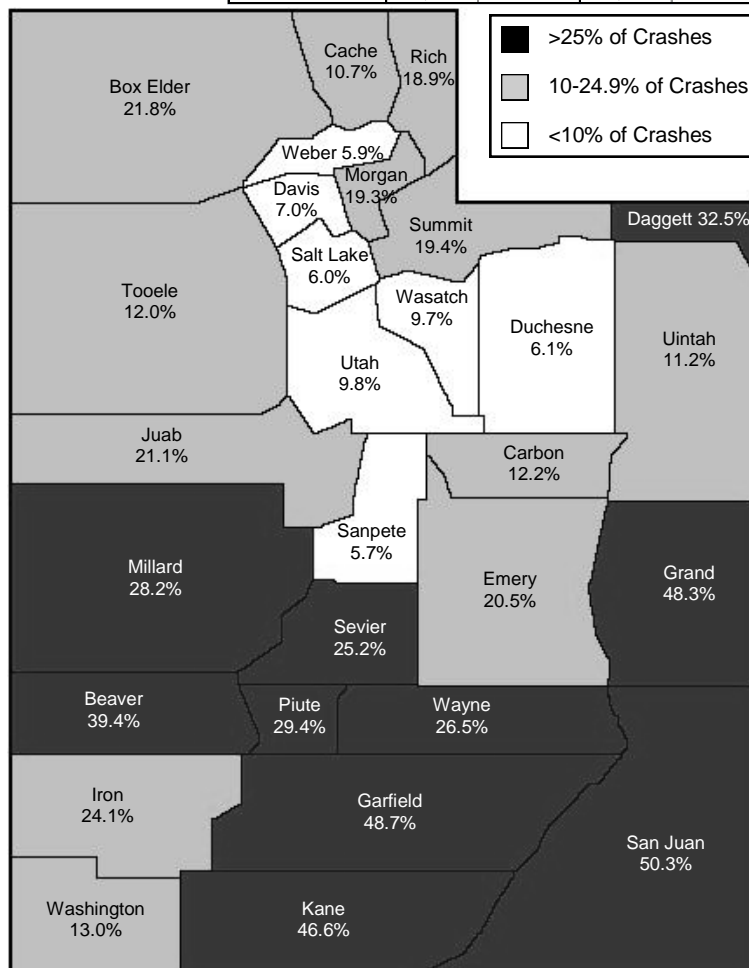
Driver Gender (Utah 2009)

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	34,629	57.2%	37.8	15,677	54.4%	17.1	249	72.2%	0.27	50,555	56.4%	55.1
Female	23,830	39.4%	26.8	12,631	43.9%	14.2	95	27.5%	0.11	36,556	40.8%	41.1
Unknown	2,060	3.4%	n/a	492	1.7%	n/a	1	0.3%	n/a	2,553	2.8%	n/a
Total	60,519	100.0%	33.5	28,800	100.0%	15.9	345	100.0%	0.19	89,664	100.0%	49.6

- Males represented 56.4% of all drivers in a crash and 72.2% 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 1.9 times more likely to be in a fatal crash than female drivers.

Out-of-State Drivers (Utah 2009)

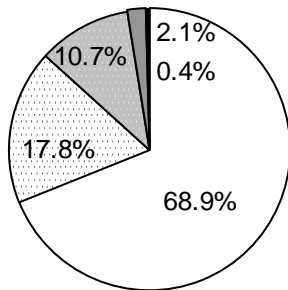
Drivers								
License State	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Utah	54,203	89.6%	26,041	90.4%	260	75.4%	80,504	89.8%
Out-Of-State	5,493	9.1%	2,496	8.7%	84	24.3%	8,073	9.0%
Unknown	823	1.4%	263	0.9%	1	0.3%	1,087	1.2%
Total	60,519	100.0%	28,800	100.0%	345	100.0%	89,664	100.0%



- Although out-of-state licensed drivers represented 9.0% of all drivers in crashes, they represented 24.3% of drivers in fatal crashes.
- There were several counties that had a disproportionate amount of out-of-state drivers in crashes. Most notably in San Juan (50.3%), Garfield (48.7%), Grand (48.3%), and Kane (46.6%) where half of the drivers in crashes were out-of-state drivers. These drivers may place an extra burden on the residents and medical services in these counties.

Crash Conditions

Crash Severity (Utah 2009)



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

- For crashes that occurred in Utah during 2009, 68.9% resulted in property damage only, 30.6% resulted in some level of injury, and 0.4% involved a death.

Month (Utah 2009)

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	3,683	118.8	1,243	40.1	13	0.42	4,939	159.3
February	28	2,851	101.8	1,109	39.6	16	0.57	3,976	142.0
March	31	2,904	93.7	1,247	40.2	23	0.74	4,174	134.6
April	30	2,563	85.4	1,264	42.1	21	0.70	3,848	128.3
May	31	2,583	83.3	1,368	44.1	20	0.65	3,971	128.1
June	30	2,508	83.6	1,316	43.9	20	0.67	3,844	128.1
July	31	2,634	85.0	1,365	44.0	16	0.52	4,015	129.5
August	31	2,595	83.7	1,355	43.7	29	0.94	3,979	128.4
September	30	2,677	89.2	1,423	47.4	17	0.57	4,117	137.2
October	31	2,799	90.3	1,239	40.0	18	0.58	4,056	130.8
November	30	2,874	95.8	1,258	41.9	12	0.40	4,144	138.1
December	31	4,727	152.5	1,565	50.5	12	0.39	6,304	203.4
Total	365	35,398	97.0	15,752	43.2	217	0.59	51,367	140.7

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

Day of Week (Utah 2009)

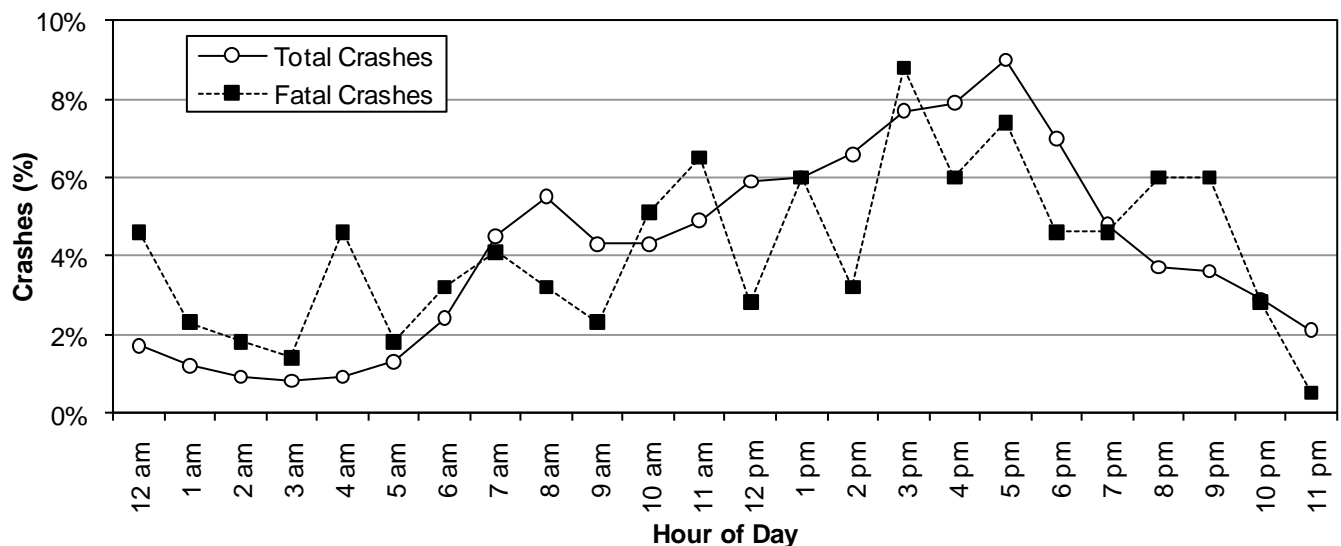
Crashes								
Day of Week	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Sunday	2,946	8.3%	1,346	8.5%	31	14.3%	4,323	8.4%
Monday	5,565	15.7%	2,335	14.8%	29	13.4%	7,929	15.4%
Tuesday	5,999	16.9%	2,551	16.2%	36	16.6%	8,586	16.7%
Wednesday	5,391	15.2%	2,400	15.2%	36	16.6%	7,827	15.2%
Thursday	5,126	14.5%	2,364	15.0%	25	11.5%	7,515	14.6%
Friday	5,502	15.5%	2,498	15.9%	30	13.8%	8,030	15.6%
Saturday	4,869	13.8%	2,258	14.3%	30	13.8%	7,157	13.9%
Total	35,398	100.0%	15,752	100.0%	217	100.0%	51,367	100.0%

- The highest percentage of total crashes occurred on Tuesday (16.7%).
- The highest percentage of fatal crashes occurred on Tuesday (16.6%) and Wednesday (16.6%).
- Crashes on the weekend were 1.4 times more likely to be fatal than weekday crashes.

Crash Conditions

Hour (Utah 2009)

Hour	Crashes							
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Midnight	612	1.7%	233	1.5%	10	4.6%	855	1.7%
1 a.m.	431	1.2%	200	1.3%	5	2.3%	636	1.2%
2 a.m.	331	0.9%	150	1.0%	4	1.8%	485	0.9%
3 a.m.	274	0.8%	132	0.8%	3	1.4%	409	0.8%
4 a.m.	327	0.9%	134	0.9%	10	4.6%	471	0.9%
5 a.m.	495	1.4%	186	1.2%	4	1.8%	685	1.3%
6 a.m.	937	2.6%	310	2.0%	7	3.2%	1,254	2.4%
7 a.m.	1,724	4.9%	599	3.8%	9	4.1%	2,332	4.5%
8 a.m.	2,039	5.8%	786	5.0%	7	3.2%	2,832	5.5%
9 a.m.	1,581	4.5%	632	4.0%	5	2.3%	2,218	4.3%
10 a.m.	1,547	4.4%	636	4.0%	11	5.1%	2,194	4.3%
11 a.m.	1,747	4.9%	763	4.8%	14	6.5%	2,524	4.9%
Noon	2,108	6.0%	934	5.9%	6	2.8%	3,048	5.9%
1 p.m.	2,065	5.8%	1,005	6.4%	13	6.0%	3,083	6.0%
2 p.m.	2,223	6.3%	1,153	7.3%	7	3.2%	3,383	6.6%
3 p.m.	2,588	7.3%	1,324	8.4%	19	8.8%	3,931	7.7%
4 p.m.	2,724	7.7%	1,334	8.5%	13	6.0%	4,071	7.9%
5 p.m.	3,145	8.9%	1,469	9.3%	16	7.4%	4,630	9.0%
6 p.m.	2,427	6.9%	1,138	7.2%	10	4.6%	3,575	7.0%
7 p.m.	1,678	4.7%	767	4.9%	10	4.6%	2,455	4.8%
8 p.m.	1,322	3.7%	565	3.6%	13	6.0%	1,900	3.7%
9 p.m.	1,278	3.6%	537	3.4%	13	6.0%	1,828	3.6%
10 p.m.	1,017	2.9%	458	2.9%	6	2.8%	1,481	2.9%
11 p.m.	778	2.2%	307	1.9%	1	0.5%	1,086	2.1%
Unknown	0	0.0%	0	0.0%	1	0.5%	1	0.0%
Total	35,398	100.0%	15,752	100.0%	217	100.0%	51,367	100.0%



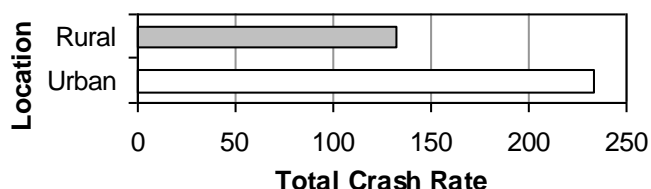
- Total crashes were more likely to occur between 3:00 p.m. and 6:59 p.m., with a peak at 5:00 p.m.
- Fatal crashes were highest during the hours of 3:00 p.m.-5:59 p.m.

Crash Conditions

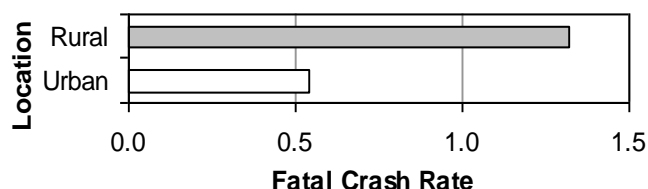
Urban/Rural Location (Utah 2009)

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	26,366	159.8	12,101	73.4	89	0.54	38,556	233.7
Rural	9,032	92.9	3,651	37.6	128	1.32	12,811	131.8
Total	35,398	135.0	15,752	60.1	217	0.83	51,367	195.9

Total Crash Rates (Utah 2008)



Fatal Crash Rates (Utah 2008)



- While urban areas had a higher rate of total crashes per vehicle mile traveled, rural areas had a higher rate of fatal crashes per vehicle mile traveled.
- Crashes occurring in rural areas were 4.4 times more likely to result in a death than crashes in urban areas.

Road Surface Condition (Utah 2009)

Crashes								
Road Surface Condition	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Dry	25,693	72.6%	12,437	79.0%	181	83.4%	38,311	74.6%
Snow/Slush	3,879	11.0%	975	6.2%	11	5.1%	4,865	9.5%
Wet	3,225	9.1%	1,435	9.1%	16	7.4%	4,676	9.1%
Ice	1,804	5.1%	568	3.6%	8	3.7%	2,380	4.6%
Other	231	0.7%	192	1.2%	0	0.0%	423	0.8%
Unknown	566	1.6%	145	0.9%	1	0.5%	712	1.4%
Total	35,398	100.0%	15,752	100.0%	217	100.0%	51,367	100.0%

- Most (74.6%) crashes occurred when roads were dry.
- Crashes on dry roads were 1.7 times more likely to be fatal compared to all other road surface conditions.

Light Condition (Utah 2009)

Crashes								
Light Condition	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Daylight	23,963	67.7%	11,230	71.3%	127	58.5%	35,320	68.8%
Dark	9,443	26.7%	3,735	23.7%	76	35.0%	13,254	25.8%
Dawn/Dusk	1,970	5.6%	785	5.0%	13	6.0%	2,768	5.4%
Unknown	22	0.1%	2	0.0%	1	0.5%	25	0.0%
Total	35,398	100.0%	15,752	100.0%	217	100.0%	51,367	100.0%

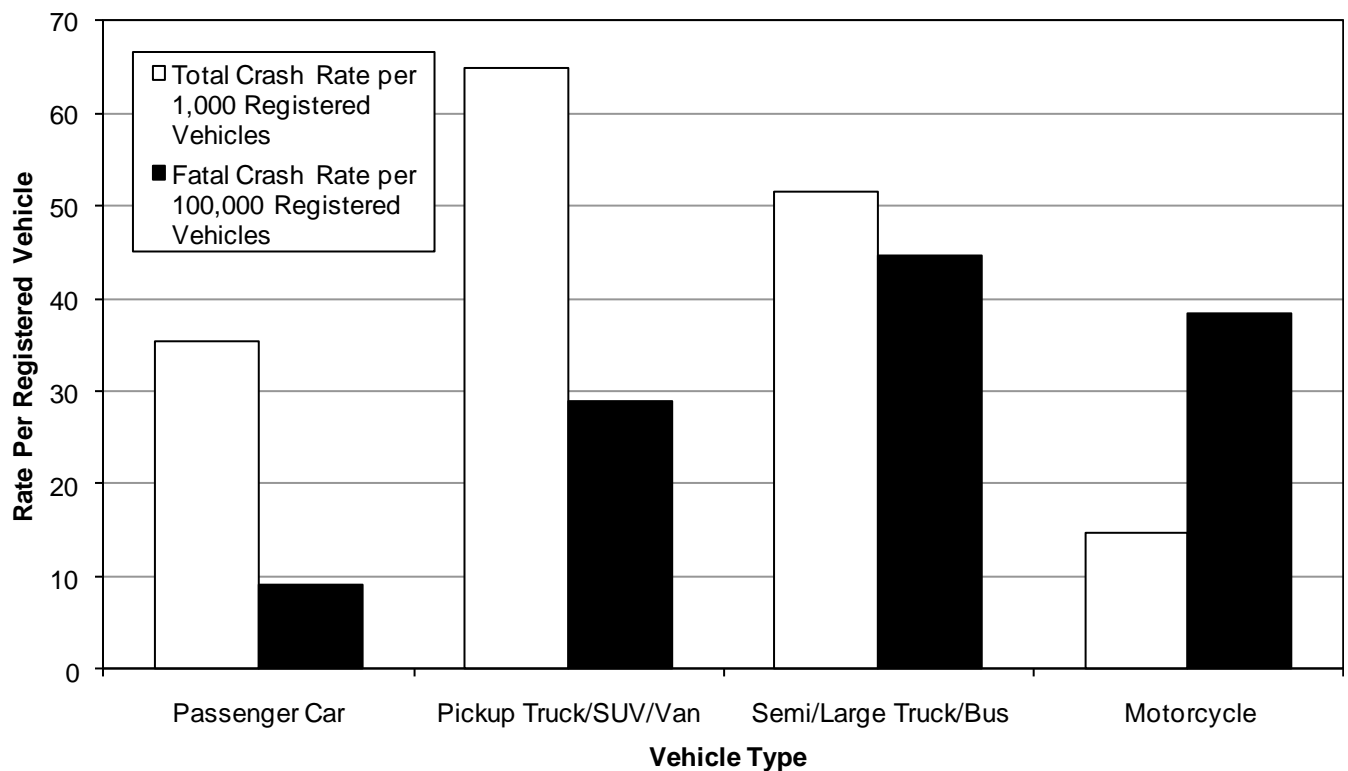
- The majority (68.8%) of crashes occurred during daylight.
- Over one-third (35.0%) of fatal crashes occurred during dark conditions.

Crash Conditions

Vehicle Type (Utah 2009)

Vehicle Type	Vehicles							
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Passenger Car	32,196	51.0%	15,419	52.6%	121	34.0%	47,736	51.4%
SUV	12,114	19.2%	5,751	19.6%	75	21.1%	17,940	19.3%
Pickup Truck	11,266	17.9%	4,408	15.0%	72	20.2%	15,746	17.0%
Van	3,491	5.5%	1,721	5.9%	26	7.3%	5,238	5.6%
Semi/Large Truck	2,403	3.8%	667	2.3%	28	7.9%	3,098	3.3%
Motorcycle	189	0.3%	931	3.2%	30	8.4%	1,150	1.2%
Bus	278	0.4%	81	0.3%	2	0.6%	361	0.4%
Other	206	0.3%	199	0.7%	1	0.3%	406	0.4%
Unknown	966	1.5%	161	0.5%	1	0.3%	1,128	1.2%
Total	63,109	100.0%	29,338	100.0%	356	100.0%	92,803	100.0%

Crash Rates by Vehicle Type (Utah 2009)



- 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 64.5% of registered vehicles in Utah, pickup truck/SUV/van 28.6%, motorcycle 3.7%, and semi/large truck/bus 3.2%.
- For total crashes, passenger car (51.4%) and SUV (19.3%) 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 (34.0%) and SUV (21.1%) were the leading vehicle types.
- Semi/large truck/bus and motorcycle had the highest fatal crash rates per registered vehicle.
- While motorcycles represented 3.7% of vehicles in total crashes, they represented 8.4% of vehicles in fatal crashes. Crashes involving a motorcycle were 7.5 times more likely to be fatal than crashes of other vehicles.

Crash Conditions

Vehicle Maneuver Prior to Crash (Utah 2009)

Vehicle Maneuver	Vehicles							
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Straight Ahead	35,325	56.0%	16,823	57.3%	279	78.4%	52,427	56.5%
Stopped in Traffic Lane	6,590	10.4%	4,092	13.9%	20	5.6%	10,702	11.5%
Turning Left	5,381	8.5%	3,268	11.1%	24	6.7%	8,673	9.3%
Slowing in Traffic Lane	3,919	6.2%	1,850	6.3%	3	0.8%	5,772	6.2%
Turning Right	2,891	4.6%	993	3.4%	1	0.3%	3,885	4.2%
Parked	2,766	4.4%	582	2.0%	10	2.8%	3,358	3.6%
Changing Lanes	2,103	3.3%	509	1.7%	8	2.2%	2,620	2.8%
Backing	1,484	2.4%	146	0.5%	0	0.0%	1,630	1.8%
Making U-turn	596	0.9%	233	0.8%	1	0.3%	830	0.9%
Entering Traffic Lane	503	0.8%	179	0.6%	0	0.0%	682	0.7%
Overtaking/Passing	439	0.7%	145	0.5%	10	2.8%	594	0.6%
Leaving Traffic Lane	169	0.3%	83	0.3%	0	0.0%	252	0.3%
Parking Maneuvers	111	0.2%	17	0.1%	0	0.0%	128	0.1%
Other	29	0.0%	9	0.0%	0	0.0%	38	0.0%
Unknown	803	1.3%	409	1.4%	0	0.0%	1,212	1.3%
Total	63,109	100.0%	29,338	100.0%	356	100.0%	92,803	100.0%

- For total crashes, straight ahead (56.5%), stopped in traffic lane (11.5%), and turning left (9.3%) were the leading vehicle maneuvers prior to the crash.
- For fatal crashes, straight ahead (78.4%), turning left (6.7%), and stopped in traffic lane (5.6%) were the leading vehicle maneuvers prior to the crash.
- Overtaking/passing was one of the deadliest maneuvers to make as crashes were 4.6 times more likely to be fatal compared to other vehicle maneuvers.

Speed Limit (Utah 2009)

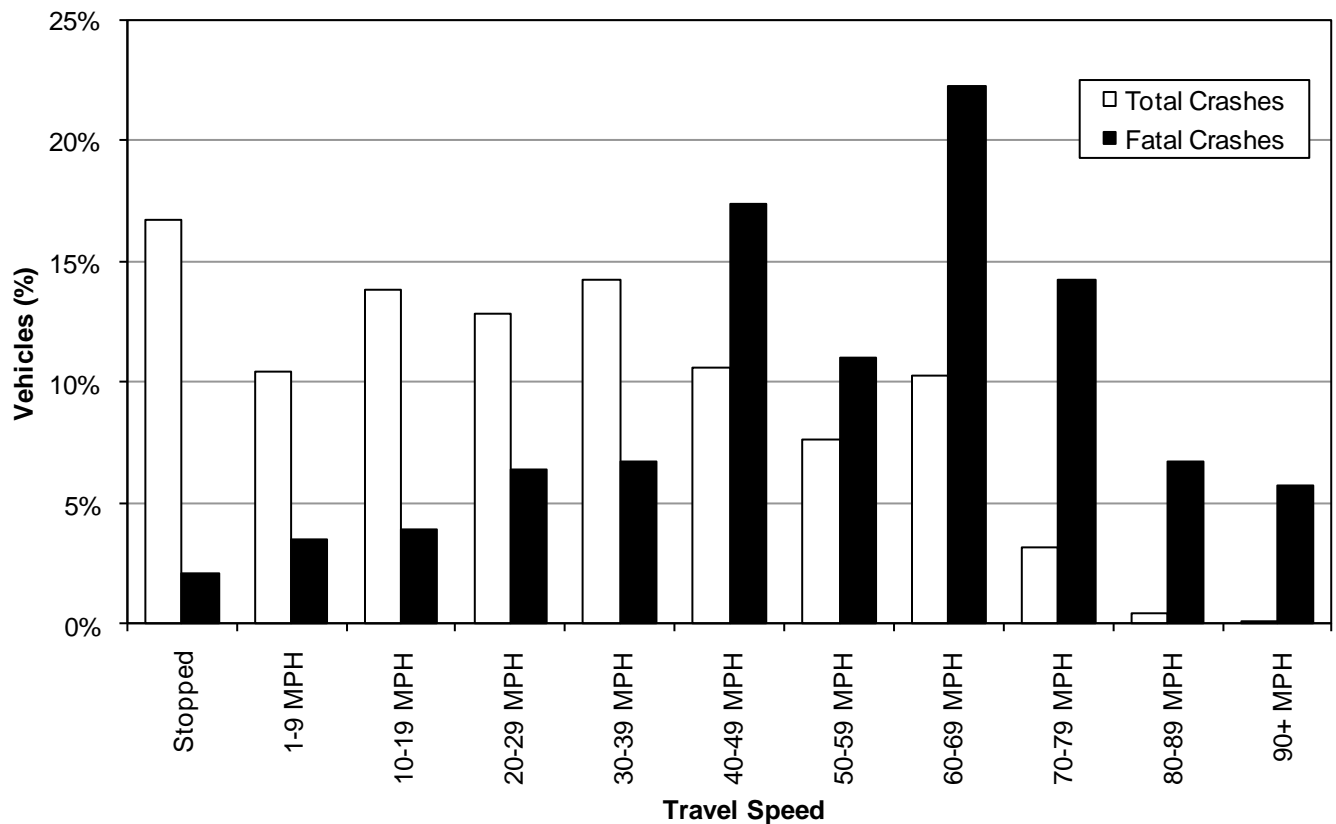
Speed Limit	Vehicles							
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
5-15 MPH	459	0.7%	152	0.5%	0	0.0%	611	0.7%
20-25 MPH	6,796	10.8%	2,702	9.2%	10	2.8%	9,508	10.2%
30-35 MPH	12,011	19.0%	6,789	23.1%	42	11.8%	18,842	20.3%
40-45 MPH	11,421	18.1%	7,144	24.4%	59	16.6%	18,624	20.1%
50-55 MPH	5,214	8.3%	2,478	8.4%	78	21.9%	7,770	8.4%
60-65 MPH	11,618	18.4%	4,008	13.7%	98	27.5%	15,724	16.9%
70+ MPH	2,164	3.4%	884	3.0%	57	16.0%	3,105	3.3%
Unknown/None	13,426	21.3%	5,181	17.7%	12	3.4%	18,619	20.1%
Total	63,109	100.0%	29,338	100.0%	356	100.0%	92,803	100.0%

- The speed limit on the roadway was 30-45 MPH for over half (50.5% of known) of the total vehicles in crashes.
- Fatal crashes were more likely to occur with higher speed limits. The speed limit was 60 MPH or higher for nearly one-half (45.1% of known) of the vehicles in fatal crashes.
- Crashes where the speed limit was 50 MPH or higher were 3.8 times more likely to be fatal.
- Studies show that a 5% increase in average speed leads to a 10% increase in injury crashes and a 20% increase in fatal crashes. A 5% decrease in speed leads to a 10% decrease in injury crashes and a 20% decrease in fatal crashes.

Crash Conditions

Travel Speed (Utah 2009)

Travel Speed	Vehicles							
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Parked	2,766	4.4%	582	2.0%	10	2.8%	3,358	3.6%
Stopped	7,164	11.4%	4,284	14.6%	20	5.6%	11,468	12.4%
1-9 MPH	4,752	7.5%	2,031	6.9%	10	2.8%	6,793	7.3%
10-19 MPH	5,895	9.3%	2,614	8.9%	15	4.2%	8,524	9.2%
20-29 MPH	5,504	8.7%	2,518	8.6%	9	2.5%	8,031	8.7%
30-39 MPH	5,713	9.1%	3,312	11.3%	26	7.3%	9,051	9.8%
40-49 MPH	4,152	6.6%	2,401	8.2%	29	8.1%	6,582	7.1%
50-59 MPH	3,883	6.2%	1,534	5.2%	59	16.6%	5,476	5.9%
60-69 MPH	5,133	8.1%	1,801	6.1%	73	20.5%	7,007	7.6%
70-79 MPH	1,568	2.5%	704	2.4%	39	11.0%	2,311	2.5%
80-89 MPH	149	0.2%	132	0.4%	10	2.8%	291	0.3%
90+ MPH	41	0.1%	42	0.1%	10	2.8%	93	0.1%
Unknown	16,389	26.0%	7,383	25.2%	46	12.9%	23,818	25.7%
Total	63,109	100.0%	29,338	100.0%	356	100.0%	92,803	100.0%



- Nearly half (47.0% 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. 61.6% (of known) of vehicles in fatal crashes were traveling 50 MPH or higher.
- Crashes involving vehicles traveling 50 MPH or higher were 5.8 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.

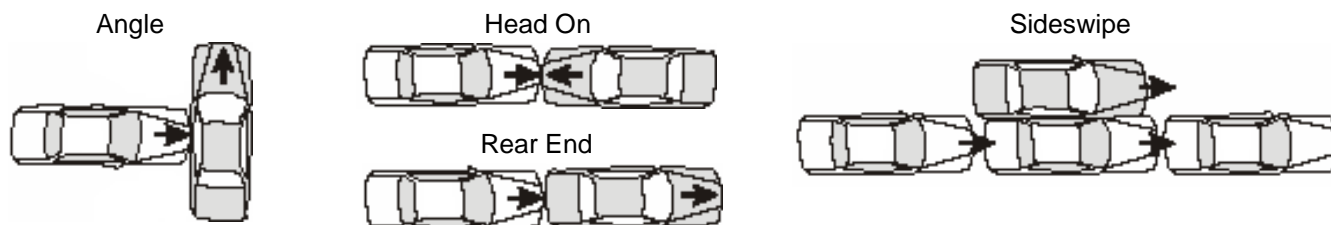
Crash Conditions

First Harmful Event (Utah 2009)

First Harmful Event	Crashes							
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Collision with Other Motor Vehicle	22,041	62.3%	9,946	63.1%	79	36.4%	32,066	62.4%
Collision with Animal	2,515	7.1%	195	1.2%	3	1.4%	2,713	5.3%
Collision with Concrete/Cable Barrier	1,782	5.0%	557	3.5%	12	5.5%	2,351	4.6%
Overturn/Rollover	657	1.9%	862	5.5%	52	24.0%	1,571	3.1%
Collision with Post, Pole, or Support	1,101	3.1%	406	2.6%	14	6.5%	1,521	3.0%
Collision with Parked Vehicle	1,016	2.9%	185	1.2%	4	1.8%	1,205	2.3%
Collision with Other Non-Fixed Object	695	2.0%	204	1.3%	1	0.5%	900	1.8%
Collision with Other Fixed Object	640	1.8%	242	1.5%	1	0.5%	883	1.7%
Collision with Fence	601	1.7%	153	1.0%	2	0.9%	756	1.5%
Collision with Bicyclist	75	0.2%	653	4.1%	5	2.3%	733	1.4%
Collision with Pedestrian	37	0.1%	550	3.5%	16	7.4%	603	1.2%
Collision with Embankment	364	1.0%	233	1.5%	7	3.2%	604	1.2%
Other Non-Collision	332	0.9%	186	1.2%	1	0.5%	519	1.0%
Collision with Tree/Shrubbery	286	0.8%	180	1.1%	0	0.0%	466	0.9%
Collision with Guardrail	332	0.9%	110	0.7%	3	1.4%	445	0.9%
Collision with Ditch	217	0.6%	135	0.9%	4	1.8%	356	0.7%
Collision with Mailbox/Fire Hydrant	226	0.6%	47	0.3%	0	0.0%	273	0.5%
Collision with Thrown or Fallen Object	206	0.6%	19	0.1%	0	0.0%	225	0.4%
Fire/Explosion	142	0.4%	5	0.0%	0	0.0%	147	0.3%
Cargo/Equipment Loss or Shift	117	0.3%	16	0.1%	0	0.0%	133	0.3%
Collision with Crash Cushion	82	0.2%	41	0.3%	0	0.0%	123	0.2%
Jackknife	98	0.3%	10	0.1%	0	0.0%	108	0.2%
Fell/Jumped from Vehicle	8	0.0%	71	0.5%	11	5.1%	90	0.2%
Collision with Bridge	28	0.1%	27	0.2%	1	0.5%	56	0.1%
Collision with Culvert	32	0.1%	17	0.1%	1	0.5%	50	0.1%
Collision with Work Zone/Equipment	38	0.1%	8	0.1%	0	0.0%	46	0.1%
Collision with Train	16	0.0%	11	0.1%	0	0.0%	27	0.1%
Immersion	5	0.0%	2	0.0%	0	0.0%	7	0.0%
Unknown	1,709	4.8%	681	4.3%	0	0.0%	2,390	4.7%
Total	35,398	100.0%	15,752	100.0%	217	100.0%	51,367	100.0%

- For all crashes, the leading first harmful event was collision with other motor vehicle (62.4%).
- For total crashes, collision with animal (5.3%) and collision with concrete/cable barrier (4.6%) were the next highest first harmful events. See page 44 for more information on collisions with animals.
- For fatal crashes, overturn/rollover (24.0%) and collision with pedestrian (7.4%) were the next highest first harmful events.
- Overturn/rollover was 9.8 times more likely to result in a death than other first harmful events.

Collision Examples



Crash Conditions

Collision Description (Utah 2009)

Crashes (Two or More Motor Vehicles)								
Collision Description	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Rear End	10,270	41.0%	4,891	44.7%	11	12.2%	15,172	42.1%
Angle	7,403	29.6%	4,248	38.9%	44	48.9%	11,695	32.4%
Sideswipe	3,701	14.8%	699	6.4%	6	6.7%	4,406	12.2%
Parked Vehicle	2,494	10.0%	462	4.2%	4	4.4%	2,960	8.2%
Head On	415	1.7%	469	4.3%	17	18.9%	901	2.5%
Backing Vehicle	246	1.0%	28	0.3%	0	0.0%	274	0.8%
Unknown/Other	492	2.0%	133	1.2%	8	8.9%	633	1.8%
Total	25,021	100.0%	10,930	100.0%	90	100.0%	36,041	100.0%

- For all crashes, the leading collision types involving two or more motor vehicles were rear end (42.1%) and angle (32.4%).
- The leading collision types in fatal crashes were angle (48.9%), head on (18.9%), and rear end (12.2%).
- Head on collisions were 9 times more likely to result in a death than other collisions involving two or more motor vehicles.

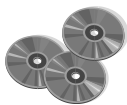
Number of Vehicles Involved (Utah 2009)

Crashes								
Vehicles Involved	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
1	10,377	29.3%	4,822	30.6%	127	58.5%	15,326	29.8%
2	22,739	64.2%	8,827	56.0%	70	32.3%	31,636	61.6%
3	1,963	5.5%	1,693	10.7%	9	4.1%	3,665	7.1%
4	258	0.7%	314	2.0%	6	2.8%	578	1.1%
5 or more	61	0.2%	96	0.6%	5	2.3%	162	0.3%
Total	35,398	100.0%	15,752	100.0%	217	100.0%	51,367	100.0%

- While the majority (70.2%) of all crashes involved two or more motor vehicles, 58.5% of fatal crashes involved only one motor vehicle.

Driver Distraction (Utah 2009)

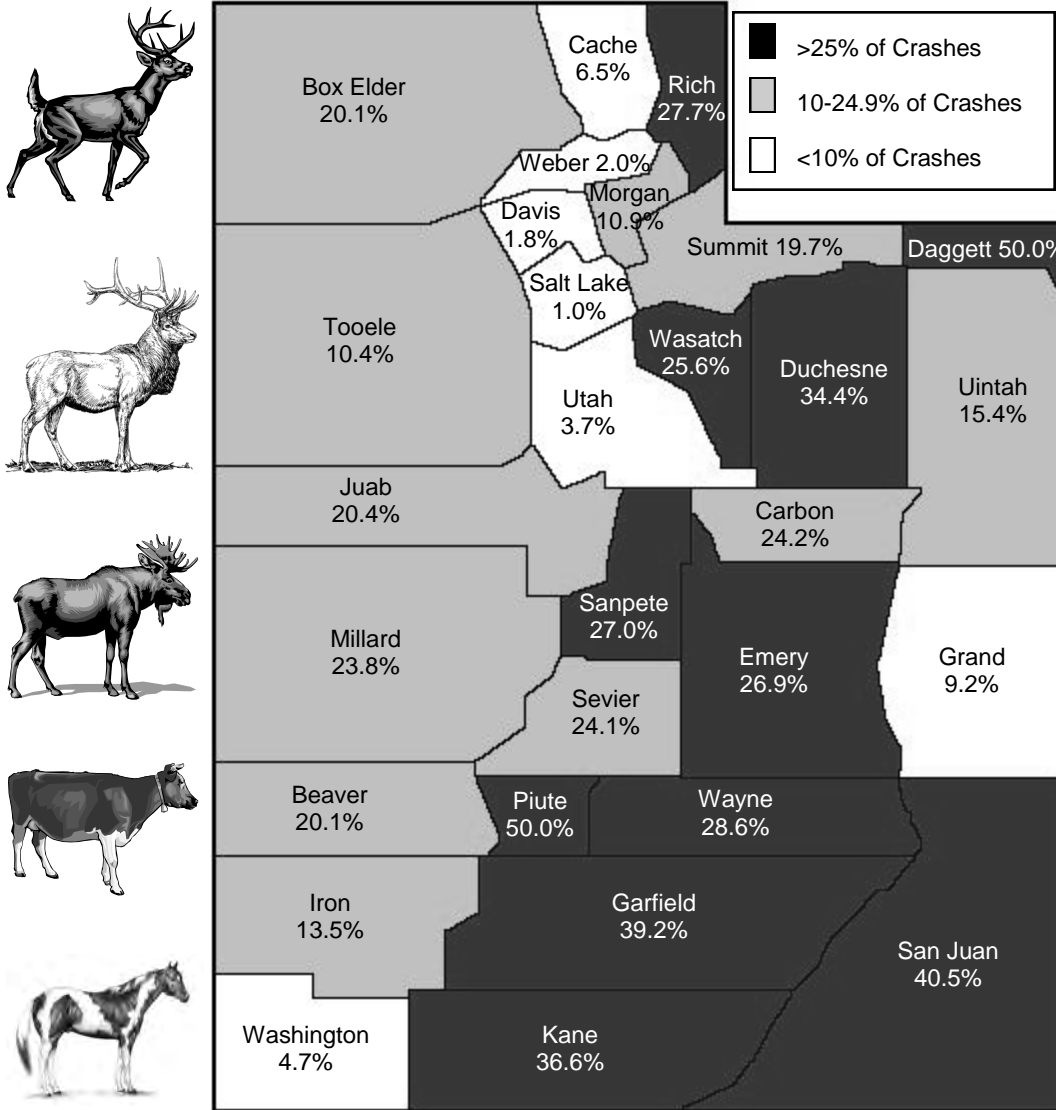
Crashes								
Driver Distraction	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
None	26,443	74.7%	10,660	67.7%	86	39.6%	37,189	72.4%
Cell Phone	487	1.4%	285	1.8%	5	2.3%	777	1.5%
Passengers	364	1.0%	241	1.5%	5	2.3%	610	1.2%
Radio/CD/DVD etc.	194	0.5%	123	0.8%	0	0.0%	317	0.6%
Other Electronic Device	79	0.2%	49	0.3%	1	0.5%	129	0.3%
Other	1,629	4.6%	1,054	6.7%	10	4.6%	2,693	5.2%
Unknown	6,202	17.5%	3,340	21.2%	110	50.7%	9,652	18.8%
Total	35,398	100.0%	15,752	100.0%	217	100.0%	51,367	100.0%



- For all crashes where driver distraction was known, 10.8% of crashes involved a distracted driver. Cell phone was the leading driver distraction (17.2% 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 2009)



- There were 2,812 collisions involving animals, 2,362 (84.0%) involved hitting a wild animal, 352 (12.5%) involved hitting a domestic animal, and 98 (3.5%) involved an unharmed animal causing evasive action.
- Daggett (50.0%), Rich (50.0%), San Juan (40.5%), and Garfield (39.2%) had the highest percent of crashes involving an animal.

Roadway Contributing Circumstances (Utah 2009)

Roadway Contributing Circumstances	Crashes							
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
None	28,979	81.9%	13,432	85.3%	159	73.3%	42,570	82.9%
Road Surface Condition (Wet/Icy/Snow/Etc.)	3,772	10.7%	1,173	7.4%	31	14.3%	4,976	9.7%
Work Zone	447	1.3%	221	1.4%	3	1.4%	671	1.3%
Debris	457	1.3%	104	0.7%	3	1.4%	564	1.1%
Animal/Non-Contact Veh/Ped/Bike Caused Evasive Action	277	0.8%	101	0.6%	10	4.6%	388	0.8%
Hole/Bump/Worn Surface/Shoulder/Traffic Control Device	169	0.5%	128	0.8%	2	0.9%	299	0.6%
Other	233	0.7%	111	0.7%	3	1.4%	347	0.7%
Unknown	1,064	3.0%	482	3.1%	6	2.8%	1,552	3.0%
Total	35,398	100.0%	15,752	100.0%	217	100.0%	51,367	100.0%

- 14.5% of crashes had a roadway contributing circumstance, where known.

Crash Conditions

Violations (Utah 2009)

Violations	Drivers							
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Following Too Close	1,795	24.6%	680	23.5%	0	0.0%	2,475	24.2%
Improper Lane Change/Travel	1,825	25.0%	617	21.4%	3	5.8%	2,445	23.9%
Speed	1,115	15.3%	399	13.8%	0	0.0%	1,514	14.8%
Improper Turn	702	9.6%	298	10.3%	2	3.8%	1,002	9.8%
Driving Under the Influence	263	3.6%	204	7.1%	7	13.5%	474	4.6%
Negligent Collision	186	2.5%	95	3.3%	0	0.0%	281	2.7%
License Violation	187	2.6%	69	2.4%	1	1.9%	257	2.5%
Equipment Violation	184	2.5%	37	1.3%	0	0.0%	221	2.2%
Insurance Violation	155	2.1%	58	2.0%	3	5.8%	216	2.1%
Improper Start or Stop	129	1.8%	51	1.8%	0	0.0%	180	1.8%
Improper Lookout	119	1.6%	41	1.4%	0	0.0%	160	1.6%
Other/Unknown Moving Violation	100	1.4%	35	1.2%	1	1.9%	136	1.3%
Hit and Run	95	1.3%	31	1.1%	3	5.8%	129	1.3%
Failure to Obey Traffic Control Device	66	0.9%	43	1.5%	1	1.9%	110	1.1%
Careless Driving	52	0.7%	41	1.4%	1	1.9%	94	0.9%
Failure to Stop at Red Light	39	0.5%	36	1.2%	2	3.8%	77	0.8%
Failure to Yield Right of Way	40	0.5%	27	0.9%	5	9.6%	72	0.7%
Improper Backing	57	0.8%	6	0.2%	0	0.0%	63	0.6%
Failure to Stop at Stop Sign	30	0.4%	22	0.8%	0	0.0%	52	0.5%
Reckless Driving	31	0.4%	16	0.6%	4	7.7%	51	0.5%
Registration Violation	36	0.5%	13	0.5%	0	0.0%	49	0.5%
Alcohol/Drug Violation, Other than DUI	24	0.3%	21	0.7%	3	5.8%	48	0.5%
Improper Passing	31	0.4%	13	0.5%	0	0.0%	44	0.4%
Wrong Side of Road/Wrong Way	18	0.2%	16	0.6%	1	1.9%	35	0.3%
Seat Belt/Child Restraint	8	0.1%	12	0.4%	0	0.0%	20	0.2%
Improper Signal	14	0.2%	3	0.1%	0	0.0%	17	0.2%
Vehicle Homicide	0	0.0%	0	0.0%	15	28.8%	15	0.1%
Other Non-Moving Violation	4	0.1%	3	0.1%	0	0.0%	7	0.1%
Texting	3	0.0%	1	0.0%	0	0.0%	4	0.0%
Total	7,308	100.0%	2,888	100.0%	52	100.0%	10,248	100.0%

- There were 10,248 citations issued at the scene of the crash. The most common violations were for following too close (24.2%), improper lane change/travel (23.9%), and speed (14.8%).
- The leading violations in fatal crashes were vehicle homicide (28.8%), driving under the influence (13.5%), and failure to yield right of way (9.6%).

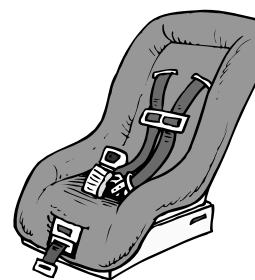
Crash Conditions

Contributing Factors (Utah 2009)

Contributing Factors	Drivers/Vehicles							
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Followed Too Closely	7,716	14.7%	3,597	13.6%	13	2.0%	11,326	14.3%
Failed to Yield Right of Way	5,495	10.5%	3,607	13.6%	29	4.4%	9,131	11.5%
Speed Too Fast	6,358	12.2%	2,599	9.8%	103	15.7%	9,060	11.4%
Failed to Keep in Proper Lane	4,582	8.8%	1,947	7.4%	131	20.0%	6,660	8.4%
Other Improper Driving	3,987	7.6%	2,077	7.9%	3	0.5%	6,067	7.6%
Driver Distraction	2,832	5.4%	1,787	6.8%	15	2.3%	4,634	5.8%
Vision Obscured by Weather Condition	3,117	6.0%	1,126	4.3%	24	3.7%	4,267	5.4%
Improper Turn	1,907	3.6%	803	3.0%	10	1.5%	2,720	3.4%
Disregard Traffic Signal/Sign	1,297	2.5%	1,171	4.4%	22	3.4%	2,490	3.1%
Ran Off Road	1,135	2.2%	869	3.3%	102	15.5%	2,106	2.7%
Driving Under the Influence	1,083	2.1%	898	3.4%	40	6.1%	2,021	2.5%
Improper Lane Change	1,570	3.0%	384	1.5%	7	1.1%	1,961	2.5%
Hit and Run	1,472	2.8%	439	1.7%	6	0.9%	1,917	2.4%
Overcorrected	1,064	2.0%	730	2.8%	31	4.7%	1,825	2.3%
Swerved or Evasive Action	1,052	2.0%	566	2.1%	26	4.0%	1,644	2.1%
Vehicle Other Defective Condition	956	1.8%	329	1.2%	4	0.6%	1,289	1.6%
Improper Backing	1,188	2.3%	95	0.4%	0	0.0%	1,283	1.6%
Asleep/Fatigue	616	1.2%	449	1.7%	19	2.9%	1,084	1.4%
Vision Obscured by Moving Vehicle	557	1.1%	341	1.3%	6	0.9%	904	1.1%
Improper Parking/Stopping	504	1.0%	223	0.8%	2	0.3%	729	0.9%
Vehicle Tires	486	0.9%	189	0.7%	8	1.2%	683	0.9%
Reckless/Aggressive Driving	374	0.7%	276	1.0%	16	2.4%	666	0.8%
Other Driver Condition	326	0.6%	281	1.1%	1	0.2%	608	0.8%
Driver Emotionally Upset	276	0.5%	274	1.0%	1	0.2%	551	0.7%
Vision Obscured by Other	329	0.6%	193	0.7%	2	0.3%	524	0.7%
Vehicle Brakes	314	0.6%	207	0.8%	1	0.2%	522	0.7%
Improper Passing	378	0.7%	99	0.4%	10	1.5%	487	0.6%
Vision Obscured by Glare	260	0.5%	180	0.7%	2	0.3%	442	0.6%
Vision Obscured by Parked Vehicle	256	0.5%	111	0.4%	0	0.0%	367	0.5%
Driver Illness/Medical	150	0.3%	178	0.7%	6	0.9%	334	0.4%
Wrong Side/Wrong Way	162	0.3%	140	0.5%	13	2.0%	315	0.4%
Vision Obscured by Physical Obstruction	123	0.2%	94	0.4%	0	0.0%	217	0.3%
Disregard Road Markings	128	0.2%	60	0.2%	1	0.2%	189	0.2%
Vision Obscured by Vegetation	83	0.2%	54	0.2%	1	0.2%	138	0.2%
Windshield or Other Window Obscured	94	0.2%	35	0.1%	0	0.0%	129	0.2%
Improper Signal	96	0.2%	20	0.1%	1	0.2%	117	0.1%
Total	52,323	100.0%	26,428	100.0%	656	100.0%	79,407	100.0%

- Some form of poor driver performance is present in the majority of crashes. The leading contributing factors for all crashes were followed too closely (14.3%), failed to yield right of way (11.5%), and speed too fast (11.4%).
- The leading contributing factors in fatal crashes were failed to keep in proper lane (19.9%), ran off road (15.8%), and speed too fast (15.7%).

Occupant Protection



Section 2: Occupant Protection

Trends

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Occupant Protection 2000-2009 48

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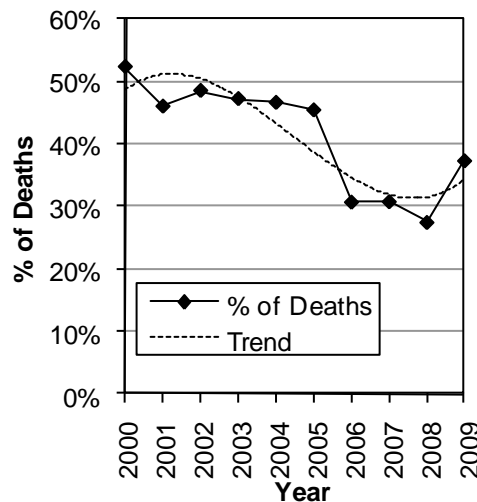
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Trends

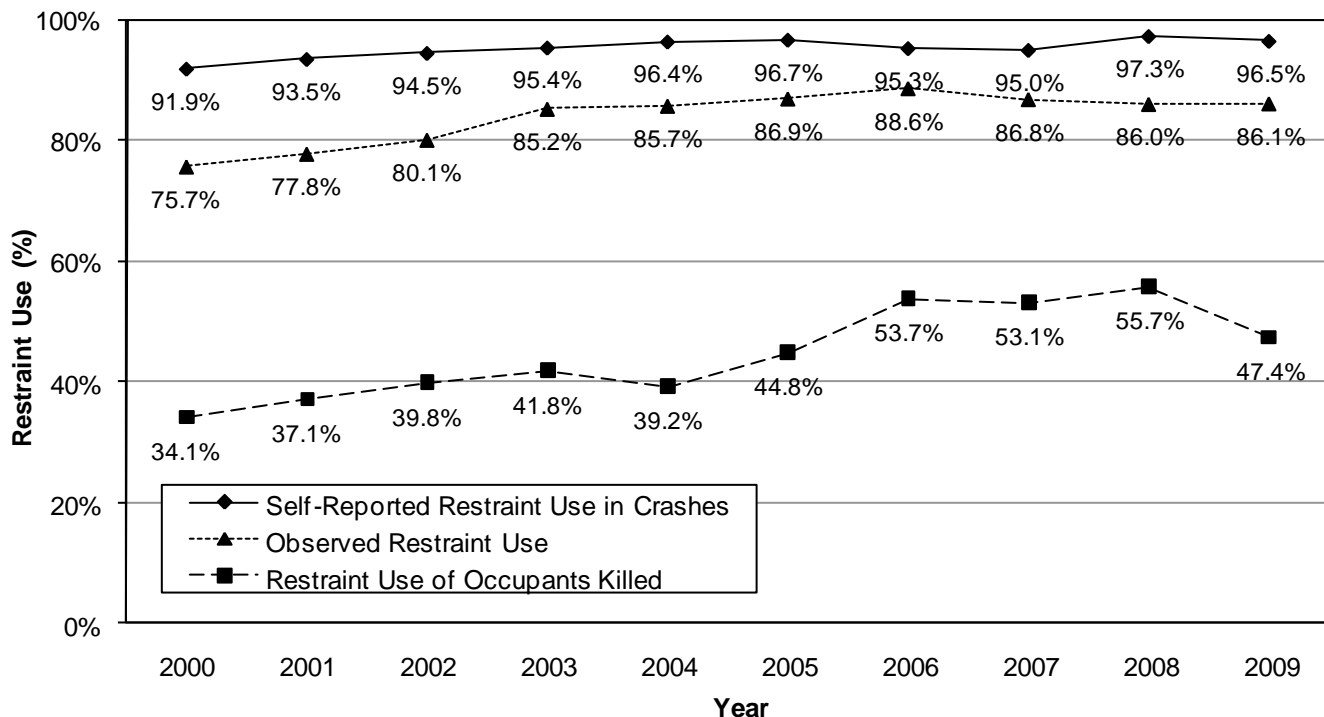
Unrestrained Occupant Deaths (Utah 2000-2009)

Unrestrained Occupant Deaths			
Year	Deaths		
	All #	Unrestrained Occupants #	%
2000	373	195	52.3%
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%
Total	2,985	1,249	41.8%



- Over the past 10 years, 41.8% of deaths have been to unrestrained occupants.
- On average, 125 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 2000-2009)



- 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 2009, the observational seat belt use increased to 86.1% from 86.0% in 2008. The year 2006 had the highest observed seat belt use ever in Utah at 88.6%.
- The 2009 self-reported restraint use of people in crashes decreased to 96.5% from 97.3% in 2008.
- Restraint use among occupants killed decreased from 55.7% in 2008 to 47.4% in 2009.

Counties

Restraint Use by County (Utah 2009)

County	Persons											
	Non-Injured			Injured			Killed			Total		
	Unres #	Restrained #	%	Unres #	Restrained #	%	Unres #	Restrained #	%	Unrestrained #	Restrained #	%
Davis	129	8,663	98.5%	78	1,800	95.8%	3	3	50.0%	210	10,466	98.0%
Rich	0	102	100.0%	2	13	86.7%	1	0	0.0%	3	115	97.5%
Cache	85	3,842	97.8%	34	604	94.7%	5	4	44.4%	124	4,450	97.3%
Utah	300	13,612	97.8%	180	3,045	94.4%	6	8	57.1%	486	16,665	97.2%
Salt Lake	1,032	41,455	97.6%	407	7,215	94.7%	17	8	32.0%	1,456	48,678	97.1%
Wasatch	16	725	97.8%	8	109	93.2%	1	0	0.0%	25	834	97.1%
Morgan	5	152	96.8%	0	38	100.0%	1	0	0.0%	6	190	96.9%
Washington	105	3,524	97.1%	68	778	92.0%	4	3	42.9%	177	4,305	96.1%
Box Elder	29	1,629	98.3%	55	381	87.4%	7	1	12.5%	91	2,011	95.7%
Summit	53	1,535	96.7%	25	218	89.7%	2	5	71.4%	80	1,758	95.6%
Millard	27	589	95.6%	5	116	95.9%	1	3	75.0%	33	708	95.5%
Weber	373	7,706	95.4%	104	1,520	93.6%	3	10	76.9%	480	9,236	95.1%
Tooele	34	1,067	96.9%	34	270	88.8%	5	5	50.0%	73	1,342	94.8%
Carbon	30	733	96.1%	18	120	87.0%	0	3	100.0%	48	856	94.7%
Garfield	7	139	95.2%	3	36	92.3%	1	0	0.0%	11	175	94.1%
Iron	65	1,259	95.1%	33	307	90.3%	3	7	70.0%	101	1,573	94.0%
Beaver	18	505	96.6%	19	90	82.6%	3	3	50.0%	40	598	93.7%
Emery	13	233	94.7%	4	47	92.2%	3	2	40.0%	20	282	93.4%
Duchesne	27	442	94.2%	8	84	91.3%	4	1	20.0%	39	527	93.1%
San Juan	12	245	95.3%	10	65	86.7%	3	1	25.0%	25	311	92.6%
Kane	13	253	95.1%	11	52	82.5%	1	3	75.0%	25	308	92.5%
Daggett	4	43	91.5%	0	5	100.0%	0	0	0.0%	4	48	92.3%
Juab	24	523	95.6%	24	118	83.1%	6	2	25.0%	54	643	92.3%
Uintah	50	854	94.5%	40	201	83.4%	4	1	20.0%	94	1,056	91.8%
Grand	13	185	93.4%	7	66	90.4%	3	3	50.0%	23	254	91.7%
Piute	0	21	100.0%	3	7	70.0%	0	0	0.0%	3	28	90.3%
Sevier	69	634	90.2%	29	150	83.8%	2	2	50.0%	100	786	88.7%
Sanpete	26	240	90.2%	12	50	80.6%	1	3	75.0%	39	293	88.3%
Wayne	10	60	85.7%	3	15	83.3%	1	1	50.0%	14	76	84.4%
Statewide	2,569	90,970	97.3%	1,224	17,520	93.5%	91	82	47.4%	3,884	108,572	96.5%

- 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 (96.5%).
- Wayne (84.4%), Sanpete (88.3%), and Sevier (88.7%) counties had the lowest percentage of occupants that were restrained.
- 47.4% of vehicle occupants killed in crashes in Utah were restrained.
- Occupants in rural crashes were 1.7 times more likely to be unrestrained than occupants in urban crashes.

Vehicle Occupants

Restraint Use by Injury Severity (Utah 2009)

Restraint Use	Persons							
	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Restrained	90,970	97.3%	17,520	93.5%	82	47.4%	108,572	96.5%
Unrestrained	2,569	2.7%	1,224	6.5%	91	52.6%	3,884	3.5%
Total	93,539	100.0%	18,744	100.0%	173	100.0%	112,456	100.0%

- Over 96% of persons who survived a crash reported being restrained.
- In contrast, less than half (47.4%) of the persons killed in a crash were restrained.
- Unrestrained crash occupants were 32 times more likely to be killed than restrained crash occupants.

Restraint Use by Gender of Crash Occupants (Utah 2009)

Persons												
Gender	Non-Injured			Injured			Killed			Total		
	Unres	Restrained		Unres	Restrained		Unres	Restrained		Unrestrained	Restrained	
	#	#	%	#	#	%	#	#	%	#	#	%
Female	1,060	40,113	97.4%	596	10,095	94.4%	29	35	54.7%	1,685	50,243	96.8%
Male	1,504	50,638	97.1%	627	7,406	92.2%	62	47	43.1%	2,193	58,091	96.4%
Unknown	5	219	97.8%	1	19	95.0%	0	0	n/a	6	238	97.5%
Total	2,569	90,970	97.3%	1,224	17,520	93.5%	91	82	47.4%	3,884	108,572	96.5%

- Overall, restraint use of female (96.8%) crash occupants was slightly higher than males (96.4%).
- For persons killed, female crash occupants had higher restraint use (54.7%) than males (43.1%).

Restraint Use by Occupant Placement (Utah 2009)

Persons												
Occupant Placement	Non-Injured			Injured			Killed			Total		
	Unres	Restrained		Unres	Restrained		Unres	Restrained		Unrestrained	Restrained	
	#	#	%	#	#	%	#	#	%	#	#	%
Driver	1,092	65,181	98.4%	638	12,127	95.0%	57	51	47.2%	1,787	77,359	97.7%
Front Seat	903	13,059	93.5%	336	3,346	90.9%	13	22	62.9%	1,252	16,427	92.9%
Back Seat	433	12,467	96.6%	202	1,986	90.8%	14	8	36.4%	649	14,461	95.7%
Other/Unknown	141	263	65.1%	48	61	56.0%	7	1	12.5%	196	325	62.4%
Total	2,569	90,970	97.3%	1,224	17,520	93.5%	91	82	47.4%	3,884	108,572	96.5%

- Among all occupants, drivers reported the highest restraint use (97.7%).

Restraint Use by Vehicle Type (Utah 2009)

Persons												
Vehicle Type	Non-Injured			Injured			Killed			Total		
	Unres	Restrained		Unres	Restrained		Unres	Restrained		Unrestrained	Restrained	
	#	#	%	#	#	%	#	#	%	#	#	%
Passenger Car	1,134	45,738	97.6%	599	10,294	94.5%	35	43	55.1%	1,768	56,075	96.9%
Van	196	7,118	97.3%	79	1,276	94.2%	5	9	64.3%	280	8,403	96.8%
SUV	498	20,117	97.6%	283	3,653	92.8%	27	17	38.6%	808	23,787	96.7%
Pickup Truck	556	15,233	96.5%	238	2,131	90.0%	18	12	40.0%	812	17,376	95.5%
Semi/Large Truck	185	2,764	93.7%	25	166	86.9%	6	1	14.3%	216	2,931	93.1%
Total	2,569	90,970	97.3%	1,224	17,520	93.5%	91	82	47.4%	3,884	108,572	96.5%

- Occupants in semi/large truck (93.1%) and pickup truck (95.5%) were the least likely to be restrained.

Vehicle Occupants

Restraint Use by Ejection (Utah 2009)

Persons												
Ejection Status	Non-Injured			Injured			Killed			Total		
	Unres	Restrained		Unres	Restrained		Unres	Restrained		Unrestrained	Restrained	
	#	#	%	#	#	%	#	#	%	#	#	%
Not Ejected	2,569	90,970	97.3%	1,073	17,439	94.2%	31	74	70.5%	3,673	108,483	96.7%
Partially Ejected	0	0	n/a	18	30	62.5%	13	8	38.1%	31	38	55.1%
Fully Ejected	0	0	n/a	133	51	27.7%	47	0	0.0%	180	51	22.1%
Total	2,569	90,970	97.3%	1,224	17,520	93.5%	91	82	47.4%	3,884	108,572	96.5%

- There is an inverse relationship between ejection from a motor vehicle and restraint use.
- The majority (96.7%) of crash occupants not ejected from a motor vehicle were restrained compared to only 22.1% of crash occupants fully ejected from a motor vehicle.
- Unrestrained occupants were 70 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 Age of Crash Occupants (Utah 2009)

Persons												
Age	Non-Injured			Injured			Killed			Total		
	Unres	Restrained		Unres	Restrained		Unres	Restrained		Unrestrained	Restrained	
	#	#	%	#	#	%	#	#	%	#	#	%
0-4	58	4,392	98.7%	12	452	97.4%	2	2	50.0%	72	4,846	98.5%
5-9	67	3,195	97.9%	33	538	94.2%	2	2	50.0%	102	3,735	97.3%
10-14	72	2,727	97.4%	57	537	90.4%	5	2	28.6%	134	3,266	96.1%
15-19	554	13,862	96.2%	267	2,481	90.3%	14	12	46.2%	835	16,355	95.1%
20-24	402	13,093	97.0%	236	2,431	91.2%	15	12	44.4%	653	15,536	96.0%
25-29	274	10,441	97.4%	145	2,087	93.5%	4	3	42.9%	423	12,531	96.7%
30-34	251	8,185	97.0%	102	1,614	94.1%	8	5	38.5%	361	9,804	96.4%
35-39	171	6,667	97.5%	73	1,285	94.6%	3	4	57.1%	247	7,956	97.0%
40-44	127	5,310	97.7%	58	1,119	95.1%	9	6	40.0%	194	6,435	97.1%
45-49	137	5,101	97.4%	53	1,091	95.4%	8	5	38.5%	198	6,197	96.9%
50-54	106	4,632	97.8%	47	1,017	95.6%	5	5	50.0%	158	5,654	97.3%
55-59	95	3,703	97.5%	35	785	95.7%	4	5	55.6%	134	4,493	97.1%
60-64	71	2,664	97.4%	34	579	94.5%	3	5	62.5%	108	3,248	96.8%
65-69	28	1,891	98.5%	19	411	95.6%	3	3	50.0%	50	2,305	97.9%
70-74	34	1,252	97.4%	16	288	94.7%	1	1	50.0%	51	1,541	96.8%
75-79	29	895	96.9%	8	236	96.7%	2	4	66.7%	39	1,135	96.7%
80-84	20	651	97.0%	9	182	95.3%	2	5	71.4%	31	838	96.4%
85+	22	414	95.0%	7	124	94.7%	1	1	50.0%	30	539	94.7%
Unknown	51	1,895	97.4%	13	263	95.3%	0	0	n/a	64	2,158	97.1%
Total	2,569	90,970	97.3%	1,224	17,520	93.5%	91	82	47.4%	3,884	108,572	96.5%

- Overall, crash occupants aged 85+ years (94.7%), 15-19 years (95.1%), 20-24 years (96.0%), and 10-14 years (96.1%) had the lowest percentages of being restrained.
- For persons killed, crash occupants aged 10-14 years (28.6%), 30-34 years (38.5%), 45-49 years (38.5%), and 40-44 years (40.0%) had the lowest percentages of being restrained.

Children and Restraint Use

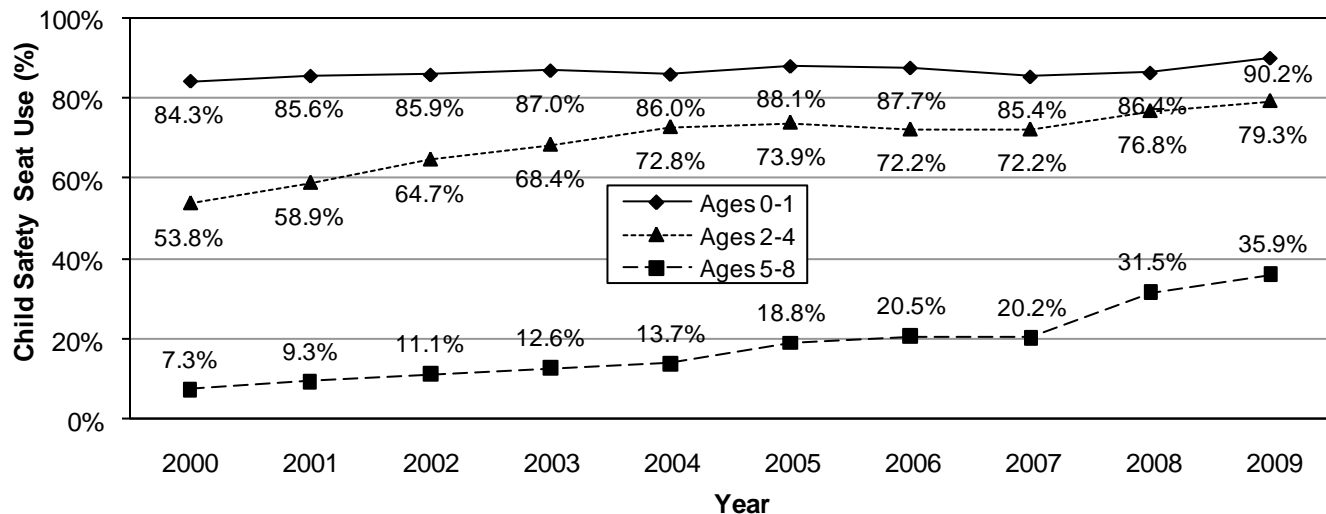
Restraint Use for Children Age 0 to 8 Years (Utah 2009)

Child Occupants								
Restraint Use	Ages 0-1		Ages 2-4		Ages 5-8		Total	
	#	%	#	%	#	%	#	%
Child Safety Seat	1,791	90.2%	2,326	79.3%	1,122	35.9%	5,239	65.1%
Seat Belt Only	170	8.6%	558	19.0%	1,929	61.7%	2,657	33.0%
Unrestrained	24	1.2%	48	1.6%	77	2.5%	149	1.9%
Total	1,985	100.0%	2,932	100.0%	3,128	100.0%	8,045	100.0%

- 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 2000-2009)

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	
	#	#	%	#	#	%	#	#	%	#	#	%
2000	317	1,703	84.3%	1,520	1,768	53.8%	3,013	237	7.3%	4,850	3,708	43.3%
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%
Total	2,742	17,759	86.6%	10,251	22,981	69.2%	28,283	6,135	17.8%	41,276	46,875	53.2%



- 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 7.3% in 2000 to 35.9% in 2009.

Alcohol-Impaired Drivers



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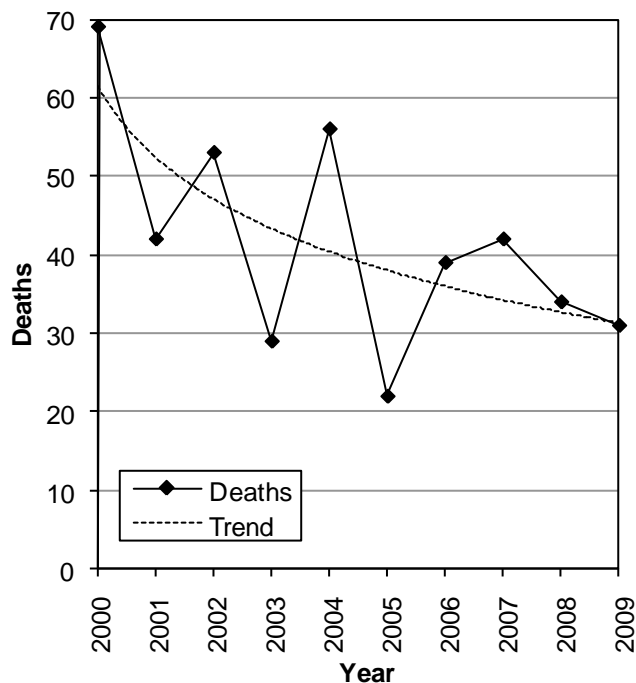
Trends

Fatal Crashes Involving Alcohol-Impaired Drivers (Utah 2000-2009)

Alcohol-Impaired Driver Crashes						
Year	Deaths			Fatal Crashes		
	All	Alcohol		All	Alcohol	
	#	#	%	#	#	%
2000	373	69	18.5%	318	59	18.6%
2001	291	42	14.4%	258	38	14.7%
2002	328	53	16.2%	274	47	17.2%
2003	309	29	9.4%	262	24	9.2%
2004	296	56	18.9%	260	50	19.2%
2005	282	22	7.8%	235	21	8.9%
2006	287	39	13.6%	249	32	12.9%
2007	299	42	14.0%	260	37	14.2%
2008	276	34	12.3%	244	32	13.1%
2009	244	31	12.7%	217	28	12.9%
Total	2,985	417	14.0%	2,577	368	14.3%

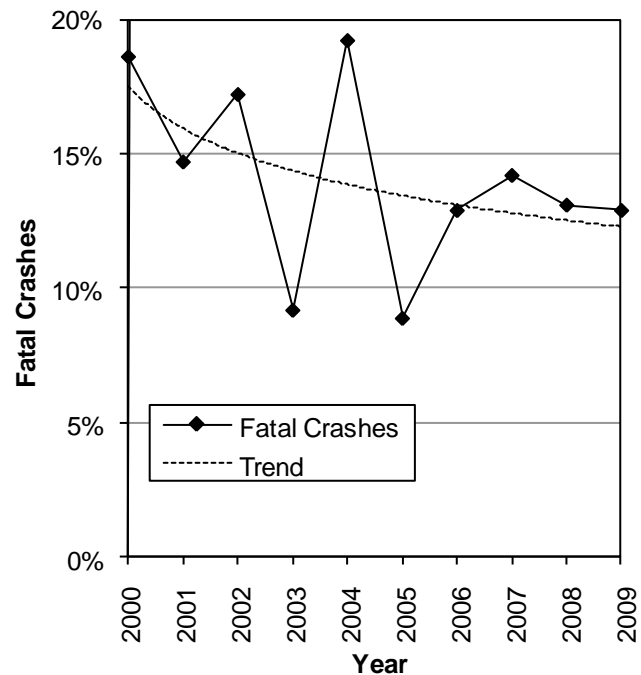
- Over the past 10 years, the percentage of deaths and fatal crashes involving alcohol-impaired drivers has fluctuated around 14% of all deaths and fatal crashes.
- On average, 42 people die a year in Utah from alcohol-impaired driver crashes.

Deaths Involving Alcohol-Impaired Drivers (Utah 2000-2009)



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

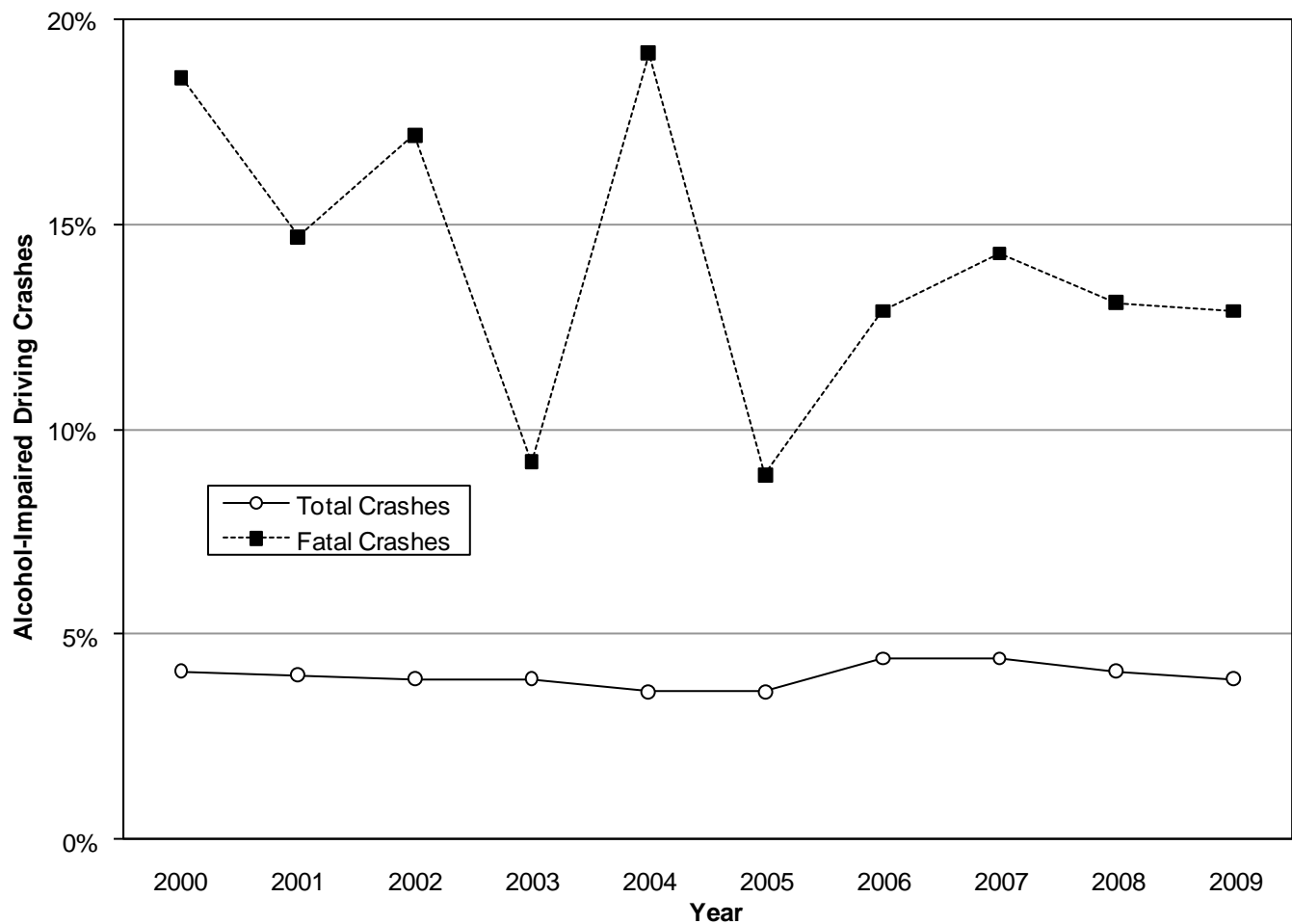
Fatal Crashes Involving Alcohol-Impaired Drivers (Utah 2000-2009)



- The percentage of fatal crashes involving alcohol-impaired drivers has fluctuated from year to year with a decreasing trend over the last ten years.

Alcohol-Impaired Driver Crashes (Utah 2000-2009)

Alcohol-Impaired Driver Crashes												
Year	Property Damage Only			Injury			Fatal			Total		
	All	Alcohol		All	Alcohol		All	Alcohol		All	Alcohol	
	#	#	%	#	#	%	#	#	%	#	#	%
2000	33,269	951	2.9%	19,564	1,152	5.9%	318	59	18.6%	53,151	2,162	4.1%
2001	33,113	932	2.8%	19,332	1,152	6.0%	258	38	14.7%	52,703	2,122	4.0%
2002	33,542	924	2.8%	19,552	1,117	5.7%	274	47	17.2%	53,368	2,088	3.9%
2003	31,842	904	2.8%	18,285	1,024	5.6%	262	24	9.2%	50,389	1,952	3.9%
2004	34,222	878	2.6%	19,423	1,020	5.3%	260	50	19.2%	53,905	1,948	3.6%
2005	35,158	898	2.6%	19,545	1,058	5.4%	235	21	8.9%	54,938	1,977	3.6%
2006	37,674	1,261	3.3%	18,264	1,195	6.5%	249	32	12.9%	56,187	2,488	4.4%
2007	42,368	1,441	3.4%	18,619	1,240	6.7%	258	37	14.3%	61,245	2,718	4.4%
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%
Total	355,583	10,514	3.0%	185,461	10,922	5.9%	2,576	368	14.3%	543,620	21,804	4.0%



- Over the past 10 years, 4.0% of total crashes involved alcohol-impaired drivers compared with 14.3% of fatal crashes.
- Over the past 10 years, alcohol-impaired driver crashes were 4 times more likely to be fatal than crashes not involving an alcohol-impaired driver.

Counties

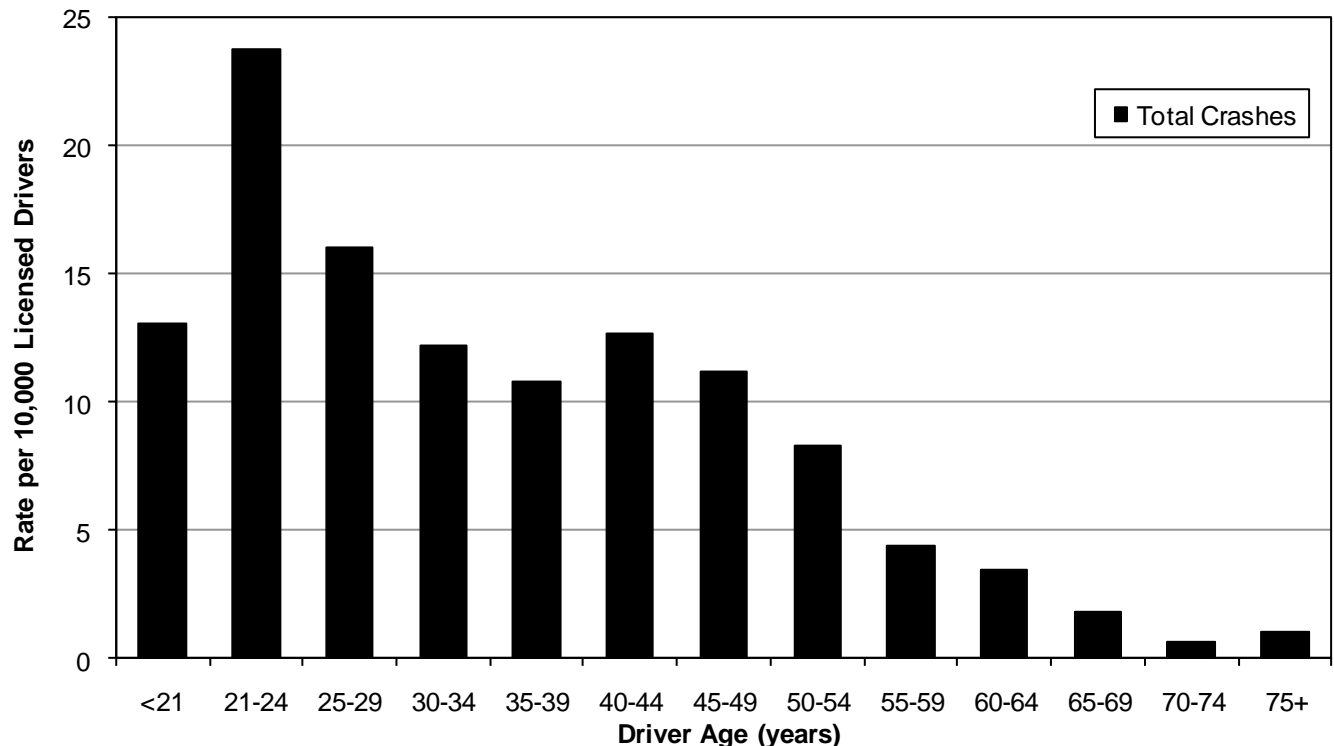
Alcohol-Impaired Driver Crashes by County (Utah 2009)

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	20	5.6	24	6.8	0	0.00	44	12.4
Rich	1	2.1	4	8.2	1	2.06	6	12.4
Salt Lake	567	6.7	384	4.5	5	0.06	956	11.2
Duchesne	12	5.2	9	3.9	2	0.87	23	10.0
Weber	90	5.5	68	4.2	3	0.18	161	9.9
Carbon	10	3.4	16	5.4	0	0.00	26	8.7
Summit	23	3.2	28	3.9	2	0.28	53	7.5
Cache	41	4.8	19	2.2	1	0.12	61	7.1
Sevier	11	3.2	13	3.8	0	0.00	24	7.0
Garfield	5	4.2	3	2.5	0	0.00	8	6.8
Washington	39	2.9	51	3.7	1	0.07	91	6.7
Kane	3	2.1	5	3.5	1	0.70	9	6.3
Sanpete	8	3.7	5	2.3	0	0.00	13	6.0
Morgan	4	3.0	4	3.0	0	0.00	8	6.0
Utah	111	3.0	92	2.5	0	0.00	203	5.6
Beaver	4	1.6	8	3.2	1	0.40	13	5.2
Davis	77	2.8	63	2.3	1	0.04	141	5.2
Tooele	18	2.2	23	2.8	1	0.12	42	5.1
Box Elder	13	1.4	27	2.9	1	0.11	41	4.5
Grand	4	1.2	7	2.1	3	0.88	14	4.1
Iron	16	2.3	11	1.6	0	0.00	27	3.8
San Juan	5	1.7	5	1.7	1	0.35	11	3.8
Millard	8	1.8	7	1.5	2	0.44	17	3.7
Piute	0	0.0	1	3.3	0	0.00	1	3.3
Wasatch	5	1.6	2	0.7	1	0.33	8	2.6
Emery	6	1.8	1	0.3	1	0.31	8	2.5
Wayne	0	0.0	1	2.4	0	0.00	1	2.4
Juab	7	1.8	2	0.5	0	0.00	9	2.3
Daggett	0	0.0	0	0.0	0	0.00	0	0.0
Statewide	1,108	4.2	883	3.4	28	0.11	2,019	7.7

- Uintah (12.4), Rich (12.4), and Salt Lake (11.2) counties had the highest rates of alcohol-impaired driver total crashes per 100 million vehicle miles traveled.
- Daggett (0.0), Juab (2.3), and Wayne (2.4) 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 2009)

Alcohol-Impaired Drivers												
Age	PDO Crashes			Injury Crashes			Fatal Crashes			Total		
	#	%	Rate per 10,000 Drivers	#	%	Rate per 10,000 Drivers	#	%	Rate per 10,000 Drivers	#	%	Rate per 10,000 Drivers
<21	135	12.1%	8.0	85	9.5%	5.0	2	7.1%	0.12	222	10.9%	13.1
21-24	216	19.3%	13.4	165	18.4%	10.2	3	10.7%	0.19	384	18.8%	23.8
25-29	180	16.1%	8.2	171	19.1%	7.8	2	7.1%	0.09	353	17.3%	16.0
30-34	144	12.9%	7.0	106	11.8%	5.1	3	10.7%	0.15	253	12.4%	12.2
35-39	103	9.2%	6.0	78	8.7%	4.6	3	10.7%	0.18	184	9.0%	10.8
40-44	91	8.1%	6.3	87	9.7%	6.0	6	21.4%	0.41	184	9.0%	12.7
45-49	83	7.4%	5.6	76	8.5%	5.1	6	21.4%	0.41	165	8.1%	11.2
50-54	68	6.1%	4.7	50	5.6%	3.5	1	3.6%	0.07	119	5.8%	8.3
55-59	29	2.6%	2.3	25	2.8%	2.0	1	3.6%	0.08	55	2.7%	4.4
60-64	18	1.6%	1.8	15	1.7%	1.5	1	3.6%	0.10	34	1.7%	3.4
65-69	8	0.7%	1.1	5	0.6%	0.7	0	0.0%	0.00	13	0.6%	1.8
70-74	0	0.0%	0.0	3	0.3%	0.6	0	0.0%	0.00	3	0.1%	0.6
75+	5	0.4%	0.6	4	0.4%	0.4	0	0.0%	0.00	9	0.4%	1.0
Unknown	39	3.5%	n/a	26	2.9%	n/a	0	0.0%	n/a	65	3.2%	n/a
Total	1,119	100.0%	6.2	896	100.0%	5.0	28	100.0%	0.15	2,043	100.0%	11.3



- Drivers aged 21-24 years had the highest rate of total alcohol-impaired driver crashes (23.8).
- Drivers aged 40-49 years had the highest rate of alcohol-impaired driver fatal crashes (0.41).
- 222 (10.9%) of the impaired drivers in total crashes were under the age of 21 years.
- Two of the 28 (7.1%) impaired drivers in fatal crashes were under the age of 21 years.
- There is a rapid decline of impaired drivers as age increases with less than 10% of impaired drivers over the age of 55 years (5.6%).

Drivers

Gender of Alcohol-Impaired Drivers in Crashes (Utah 2009)

Alcohol-Impaired Drivers								
Gender	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Male	829	74.1%	656	73.2%	22	78.6%	1,507	73.8%
Female	263	23.5%	221	24.7%	6	21.4%	490	24.0%
Unknown	27	2.4%	19	2.1%	0	0.0%	46	2.3%
Total	1,119	100.0%	896	100.0%	28	100.0%	2,043	100.0%

- Male drivers were much more likely to be an alcohol-impaired driver in a crash. Male drivers represented 73.8% of the impaired drivers in total crashes and 78.6% of impaired drivers in fatal crashes.

Drivers in Fatal Crashes by Blood Alcohol Concentration (Utah 2009)

All Drivers in Fatal Crashes		
BAC	Drivers	
	#	%
.00	100	29.0%
.01 - .07	9	2.6%
.08 - .15	9	2.6%
.16 - .23	14	4.1%
.24 - .31	5	1.4%
.32+	0	0.0%
Not Tested/Unknown	208	60.3%
Total	345	100.0%



- Of the 137 drivers in fatal crashes who were tested for alcohol, 100 (73.0%) had a blood alcohol concentration (BAC) of 0.00, 9 (6.6%) had a BAC of 0.01-0.07, and 28 (20.4%) were over the legal limit of 0.08.
- 19 out of the 28 (67.9%) 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 2009)

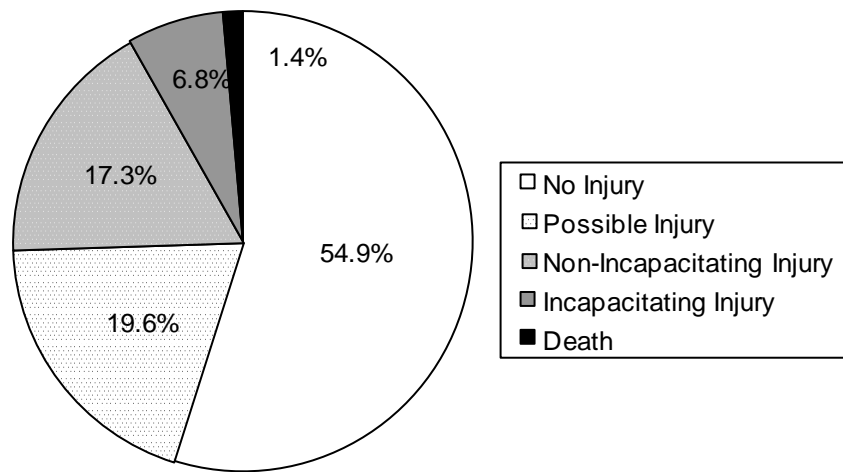
- Of the 28 alcohol-impaired drivers in fatal crashes, four drivers (14.3%) had been previously convicted of driving under the influence in the past three years.

Drug-Impaired Drivers in Crashes (Utah 2009)

- There were an additional 561 drivers impaired by drugs only, 265 (47.2%) in property damage only crashes, 273 (48.7%) in injury crashes, and 23 (4.1%) in fatal crashes.
- Depressants (diazepam, nordiazepam), narcotics (oxycodone, morphine), cannabinoids (marijuana), and stimulants (methamphetamine) were the most common drugs for drug-impaired drivers in fatal crashes.

Crash Conditions

Alcohol-Impaired Driver Crash Severity (Utah 2009)



- Alcohol-impaired driver crashes were more likely to have a death or injury than other crashes.
- A higher percentage of alcohol-impaired driver crashes (43.7%) resulted in an injury compared to all motor vehicle crashes that resulted in an injury (30.7%).
- 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 2009)

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	112	3.6	72	2.3	0	0.00	184	5.9
February	28	86	3.1	46	1.6	0	0.00	132	4.7
March	31	86	2.8	69	2.2	0	0.00	155	5.0
April	30	86	2.9	85	2.8	3	0.10	174	5.8
May	31	97	3.1	87	2.8	7	0.23	191	6.2
June	30	81	2.7	82	2.7	3	0.10	166	5.5
July	31	87	2.8	76	2.5	2	0.06	165	5.3
August	31	84	2.7	80	2.6	5	0.16	169	5.5
September	30	85	2.8	71	2.4	2	0.07	158	5.3
October	31	92	3.0	78	2.5	4	0.13	174	5.6
November	30	103	3.4	69	2.3	0	0.00	172	5.7
December	31	109	3.5	68	2.2	2	0.06	179	5.8
Total	365	1,108	3.0	883	2.4	28	0.08	2,019	5.5

- Overall, the highest rates per day of alcohol-impaired driver crashes were in May (6.2) and January (5.9) with the lowest rate per day in February (4.7).
- The highest rates per day of fatal alcohol-impaired driver crashes occurred in May and August.

Crash Conditions

Alcohol-Impaired Driver Crashes by Day of Week (Utah 2009)

Alcohol-Impaired Driver Crashes								
Day of Week	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Sunday	229	20.7%	172	19.5%	5	17.9%	406	20.1%
Monday	99	8.9%	89	10.1%	6	21.4%	194	9.6%
Tuesday	126	11.4%	92	10.4%	1	3.6%	219	10.8%
Wednesday	114	10.3%	105	11.9%	4	14.3%	223	11.0%
Thursday	138	12.5%	95	10.8%	3	10.7%	236	11.7%
Friday	159	14.4%	138	15.6%	3	10.7%	300	14.9%
Saturday	243	21.9%	192	21.7%	6	21.4%	441	21.8%
Total	1,108	100.0%	883	100.0%	28	100.0%	2,019	100.0%

- 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 2009)

Alcohol-Impaired Driver Crashes								
Hour	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Midnight	89	8.0%	61	6.9%	6	21.4%	156	7.7%
1 a.m.	93	8.4%	72	8.2%	3	10.7%	168	8.3%
2 a.m.	67	6.0%	64	7.2%	0	0.0%	131	6.5%
3 a.m.	41	3.7%	39	4.4%	1	3.6%	81	4.0%
4 a.m.	46	4.2%	33	3.7%	1	3.6%	80	4.0%
5 a.m.	28	2.5%	29	3.3%	0	0.0%	57	2.8%
6 a.m.	18	1.6%	19	2.2%	0	0.0%	37	1.8%
7 a.m.	21	1.9%	11	1.2%	0	0.0%	32	1.6%
8 a.m.	19	1.7%	17	1.9%	2	7.1%	38	1.9%
9 a.m.	9	0.8%	10	1.1%	1	3.6%	20	1.0%
10 a.m.	16	1.4%	13	1.5%	2	7.1%	31	1.5%
11 a.m.	17	1.5%	12	1.4%	0	0.0%	29	1.4%
Noon	19	1.7%	10	1.1%	0	0.0%	29	1.4%
1 p.m.	23	2.1%	23	2.6%	2	7.1%	48	2.4%
2 p.m.	41	3.7%	24	2.7%	0	0.0%	65	3.2%
3 p.m.	36	3.2%	25	2.8%	1	3.6%	62	3.1%
4 p.m.	44	4.0%	44	5.0%	1	3.6%	89	4.4%
5 p.m.	44	4.0%	36	4.1%	1	3.6%	81	4.0%
6 p.m.	54	4.9%	53	6.0%	1	3.6%	108	5.3%
7 p.m.	72	6.5%	53	6.0%	0	0.0%	125	6.2%
8 p.m.	64	5.8%	51	5.8%	4	14.3%	119	5.9%
9 p.m.	69	6.2%	58	6.6%	1	3.6%	128	6.3%
10 p.m.	94	8.5%	63	7.1%	1	3.6%	158	7.8%
11 p.m.	84	7.6%	63	7.1%	0	0.0%	147	7.3%
Total	1,108	100.0%	883	100.0%	28	100.0%	2,019	100.0%

- Alcohol-impaired driver total crashes peaked in the evening and early morning hours (6:00 p.m. to 2:59 a.m.).
- Fatal alcohol-impaired driver crashes varied by hour and peaked at midnight and 8:00 p.m.

Speed



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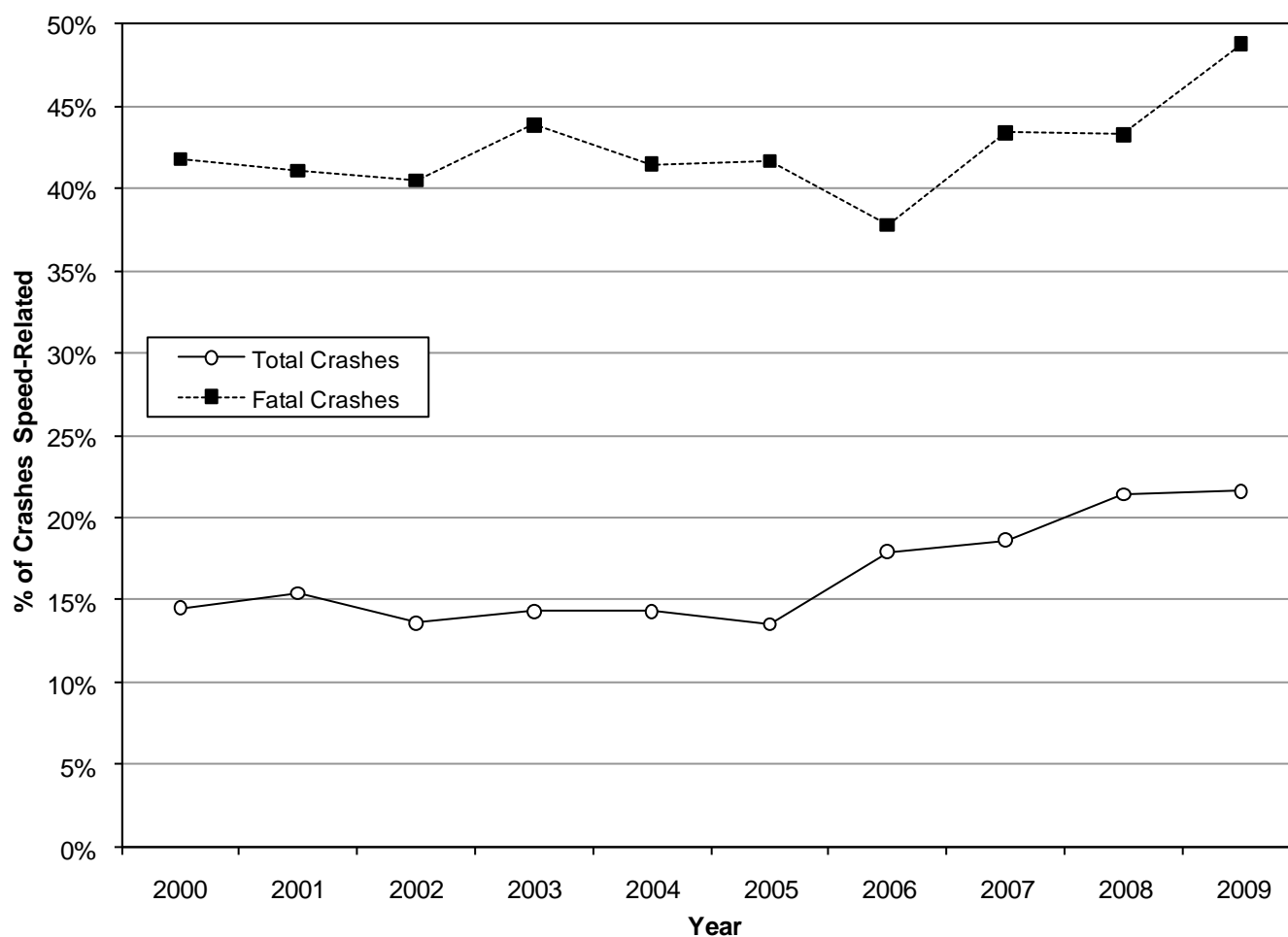
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Trends

Speed-Related Crashes (Utah 2000-2009)

Speed-Related Crashes												
Year	Property Damage Only			Injury			Fatal			Total		
	All #	Speed #	%	All #	Speed #	%	All #	Speed #	%	All #	Speed #	%
2000	33,269	4,687	14.1%	19,564	2,934	15.0%	318	133	41.8%	53,151	7,754	14.6%
2001	33,113	5,037	15.2%	19,332	3,003	15.5%	258	106	41.1%	52,703	8,146	15.5%
2002	33,542	4,379	13.1%	19,552	2,770	14.2%	274	111	40.5%	53,368	7,260	13.6%
2003	31,842	4,498	14.1%	18,285	2,604	14.2%	262	115	43.9%	50,389	7,217	14.3%
2004	34,222	4,836	14.1%	19,423	2,764	14.2%	260	108	41.5%	53,905	7,708	14.3%
2005	35,158	4,676	13.3%	19,545	2,653	13.6%	235	98	41.7%	54,938	7,427	13.5%
2006	37,674	6,450	17.1%	18,264	3,539	19.4%	249	94	37.8%	56,187	10,083	17.9%
2007	42,368	7,612	18.0%	18,619	3,687	19.8%	258	112	43.4%	61,245	11,411	18.6%
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%
Total	355,583	58,093	16.3%	185,461	30,955	16.7%	2,576	1,089	42.3%	543,620	90,137	16.6%



- Speed-related crashes are a concern because of the increased potential for severe injury and death.
- The 10-year trend shows that 16.6% of total crashes and 42.3% of fatal crashes in Utah are speed-related.
- The percent of crashes that were speed-related increased for the fourth year in a row.
- Speed was a factor in 49.8% of fatal crashes in 2009 where speed was known.

Counties

Speed-Related Crashes by County (Utah 2009)

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
Wasatch	137	44.9	42	13.8	1	0.33	180	59.1
Beaver	92	37.1	46	18.5	2	0.81	140	56.4
Salt Lake	3,208	37.7	1,215	14.3	16	0.19	4,439	52.1
Wayne	8	19.5	10	24.4	3	7.31	21	51.2
Uintah	122	34.3	54	15.2	1	0.28	177	49.8
Sevier	112	32.8	53	15.5	3	0.88	168	49.2
Daggett	12	38.9	3	9.7	0	0.00	15	48.6
Weber	531	32.7	233	14.4	10	0.62	774	47.7
Utah	1,004	27.5	550	15.1	8	0.22	1,562	42.8
Box Elder	265	28.9	115	12.5	5	0.54	385	42.0
Rich	12	24.7	7	14.4	1	2.06	20	41.2
Cache	224	26.0	120	13.9	7	0.81	351	40.8
Juab	107	27.8	46	12.0	2	0.52	155	40.3
Summit	187	26.3	88	12.4	3	0.42	278	39.1
Morgan	38	28.3	11	8.2	1	0.75	50	37.3
Iron	180	25.6	74	10.5	4	0.57	258	36.7
Millard	118	25.9	46	10.1	2	0.44	166	36.5
Garfield	20	16.9	20	16.9	2	1.69	42	35.5
Davis	645	23.9	304	11.3	4	0.15	953	35.3
Duchesne	56	24.5	20	8.7	3	1.31	79	34.5
Kane	31	21.7	15	10.5	3	2.10	49	34.3
Carbon	64	21.5	27	9.1	0	0.00	91	30.5
Tooele	136	16.4	82	9.9	6	0.72	224	26.9
Sanpete	34	15.6	18	8.3	3	1.38	55	25.3
Piute	4	13.1	3	9.8	0	0.00	7	23.0
San Juan	38	13.2	18	6.2	4	1.39	60	20.8
Washington	155	11.4	122	9.0	3	0.22	280	20.5
Emery	34	10.4	21	6.4	4	1.23	59	18.1
Grand	33	9.7	16	4.7	5	1.47	54	15.8
Statewide	7,607	29.0	3,379	12.9	106	0.40	11,092	42.3

- Wasatch (59.1), Beaver (56.4), and Salt Lake (52.1) counties had the highest rates of speed-related total crashes per 100 million vehicle miles traveled.
- Wayne (7.31), Kane (2.10), and Rich (2.06) counties had the highest rates of fatal speed-related crashes per 100 million vehicle miles traveled.
- Grand (15.8), Emery (18.1), and Washington (20.5) counties had the lowest rates of speed-related total crashes per 100 million vehicle miles traveled.

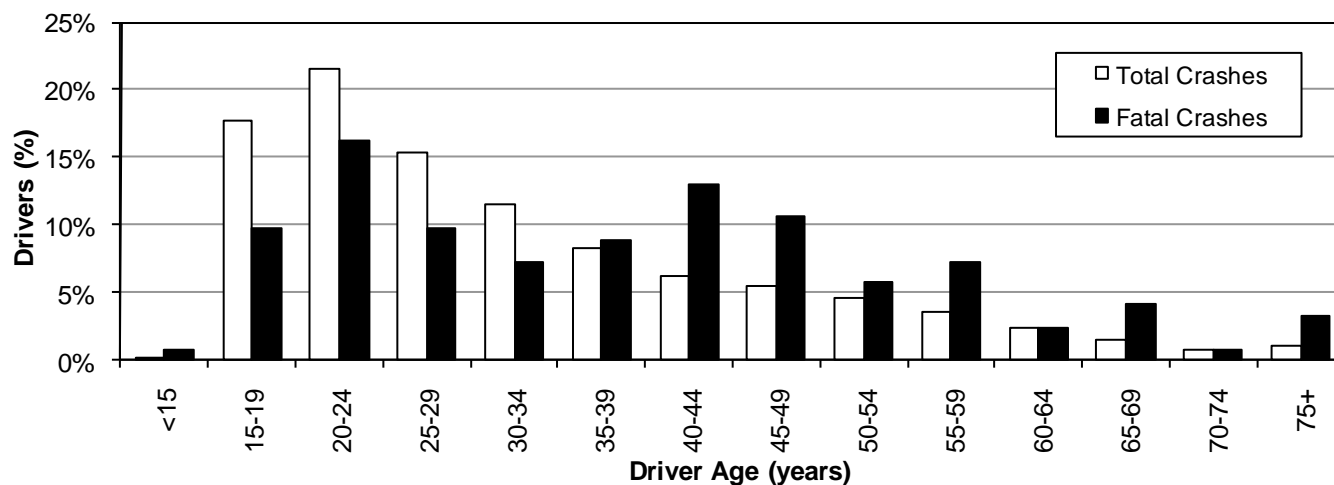


Stop speeding before it stops you

Drivers

Age of Drivers in Speed-Related Crashes (Utah 2009)

Speed-Related Drivers								
Age	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
<15	3	0.0%	11	0.3%	1	0.8%	15	0.1%
15-19	1,394	17.4%	630	17.5%	12	9.8%	2,036	17.4%
20-24	1,748	21.8%	712	19.8%	20	16.3%	2,480	21.1%
25-29	1,208	15.1%	552	15.4%	12	9.8%	1,772	15.1%
30-34	929	11.6%	384	10.7%	9	7.3%	1,322	11.3%
35-39	653	8.2%	286	8.0%	11	8.9%	950	8.1%
40-44	454	5.7%	237	6.6%	16	13.0%	707	6.0%
45-49	407	5.1%	217	6.0%	13	10.6%	637	5.4%
50-54	363	4.5%	147	4.1%	7	5.7%	517	4.4%
55-59	256	3.2%	147	4.1%	9	7.3%	412	3.5%
60-64	190	2.4%	86	2.4%	3	2.4%	279	2.4%
65-69	101	1.3%	64	1.8%	5	4.1%	170	1.4%
70-74	42	0.5%	33	0.9%	1	0.8%	76	0.6%
75+	70	0.9%	37	1.0%	4	3.3%	111	0.9%
Unknown	193	2.4%	51	1.4%	0	0.0%	244	2.1%
Total	8,011	100.0%	3,594	100.0%	123	100.0%	11,728	100.0%



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

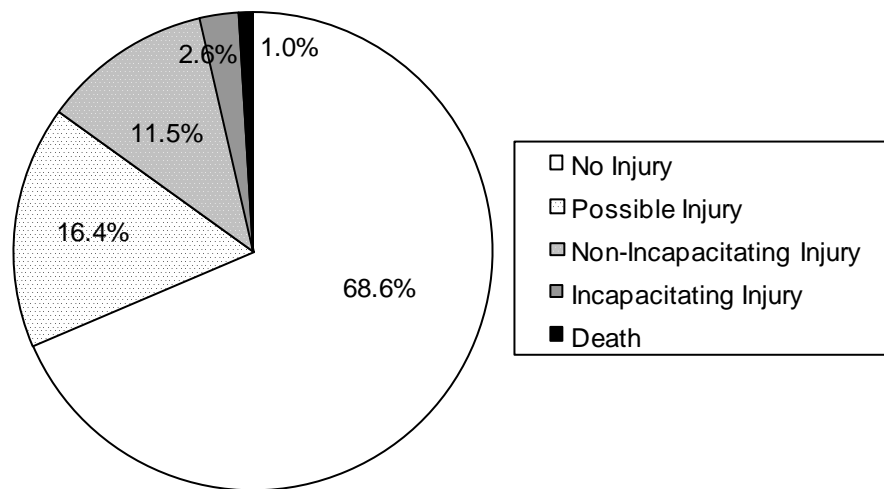
Gender of Drivers in Speed-Related Crashes (Utah 2009)

Speed-Related Drivers								
Gender	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Male	5,022	62.7%	2,180	60.7%	98	79.7%	7,300	62.2%
Female	2,833	35.4%	1,381	38.4%	25	20.3%	4,239	36.1%
Unknown	156	1.9%	33	0.9%	0	0.0%	189	1.6%
Total	8,011	100.0%	3,594	100.0%	123	100.0%	11,728	100.0%

- Male drivers represented 62.2% of the drivers in speed-related total crashes and 79.7% of the drivers in speed-related fatal crashes.

Crash Conditions

Speed-Related Crash Severity (Utah 2009)



- A higher percentage of speed-related crashes were fatal (1.0%) compared to all motor vehicle crashes (0.4%).
- Speed-related crashes were 2.8 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.

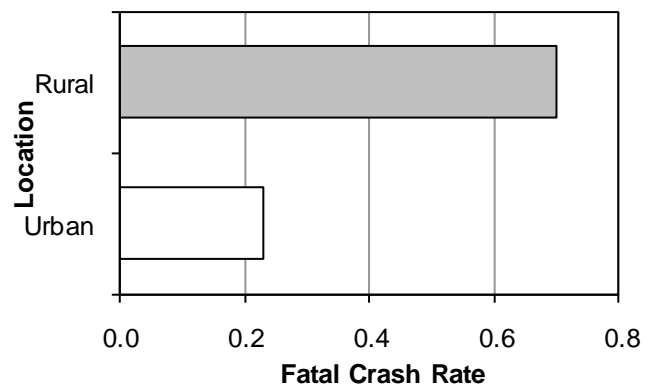
Speed-Related Crashes by Urban/Rural Location (Utah 2009)

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	5,388	32.7	2,302	14.0	38	0.23	7,728	46.9
Rural	2,219	22.8	1,077	11.1	68	0.70	3,364	34.6
Total	7,607	29.0	3,379	12.9	106	0.40	11,092	42.3

Total Crash Rates (Utah 2009)



Fatal Crash Rates (Utah 2009)



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

Crash Conditions

Speed-Related Crashes by Month (Utah 2009)

Speed-Related Crashes								
Month	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	Rate per Day	#	Rate per Day	#	Rate per Day	#	Rate per Day
January	1,191	38.4	390	12.6	4	0.13	1,585	51.1
February	797	28.5	303	10.8	6	0.21	1,106	39.5
March	736	23.7	281	9.1	11	0.35	1,028	33.2
April	468	15.6	251	8.4	9	0.30	728	24.3
May	321	10.4	207	6.7	11	0.35	539	17.4
June	318	10.6	241	8.0	9	0.30	568	18.9
July	311	10.0	217	7.0	8	0.26	536	17.3
August	309	10.0	214	6.9	14	0.45	537	17.3
September	319	10.6	237	7.9	11	0.37	567	18.9
October	403	13.0	204	6.6	9	0.29	616	19.9
November	479	16.0	260	8.7	8	0.27	747	24.9
December	1,955	63.1	574	18.5	6	0.19	2,535	81.8
Total	7,607	20.8	3,379	9.3	106	0.29	11,092	30.4

- Overall, December (81.8), January (51.1), and February (39.5) had the highest rates of speed-related crashes per day.
- August (0.45) and September (0.37) had the highest rates per day of fatal speed-related crashes.

Speed-Related Crashes by Day of Week (Utah 2009)

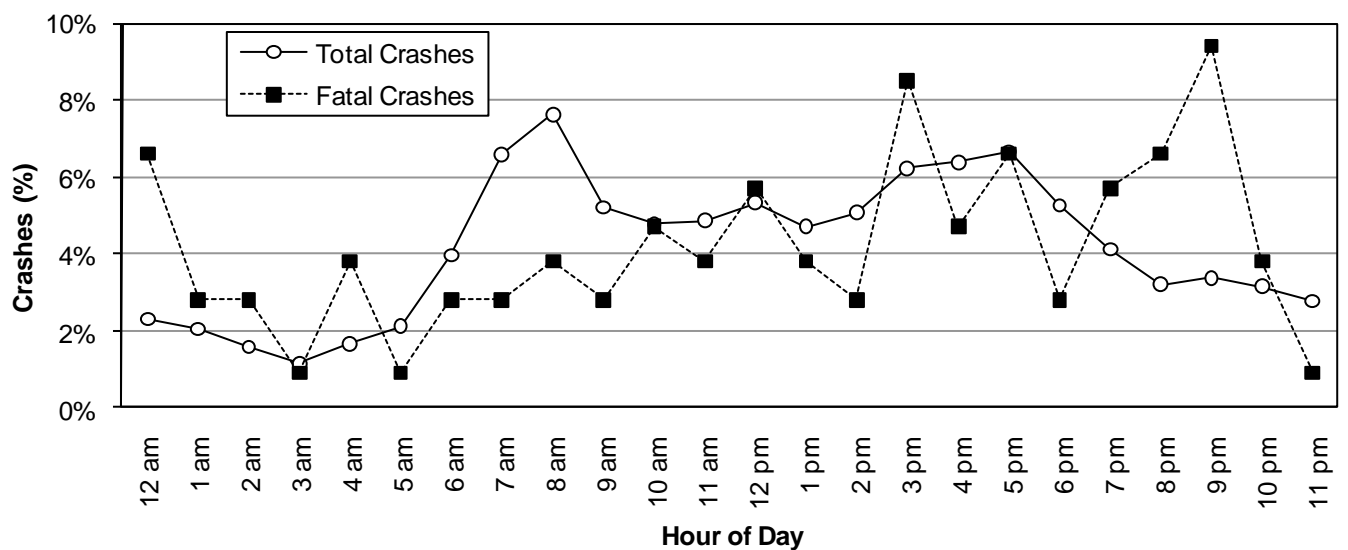
Speed-Related Crashes								
Day of Week	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Sunday	861	11.3%	407	12.0%	14	13.2%	1,282	11.6%
Monday	1,238	16.3%	511	15.1%	15	14.2%	1,764	15.9%
Tuesday	1,562	20.5%	587	17.4%	16	15.1%	2,165	19.5%
Wednesday	1,020	13.4%	442	13.1%	18	17.0%	1,480	13.3%
Thursday	841	11.1%	429	12.7%	12	11.3%	1,282	11.6%
Friday	785	10.3%	446	13.2%	13	12.3%	1,244	11.2%
Saturday	1,300	17.1%	557	16.5%	18	17.0%	1,875	16.9%
Total	7,607	100.0%	3,379	100.0%	106	100.0%	11,092	100.0%

- The highest percentage of speed-related total crashes occurred on Tuesday (19.5%) while the highest percentage of fatal crashes occurred on Saturday (17.0%) and Wednesday (17.0%).
- The lowest percentage of speed-related total crashes occurred on Friday (11.2%) while the lowest percentage of fatal crashes occurred on Thursday (11.3%).

Crash Conditions

Speed-Related Crashes by Hour (Utah 2009)

Speed-Related Crashes								
Hour	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Midnight	165	2.2%	83	2.5%	7	6.6%	255	2.3%
1 a.m.	140	1.8%	83	2.5%	3	2.8%	226	2.0%
2 a.m.	107	1.4%	64	1.9%	3	2.8%	174	1.6%
3 a.m.	85	1.1%	41	1.2%	1	0.9%	127	1.1%
4 a.m.	120	1.6%	60	1.8%	4	3.8%	184	1.7%
5 a.m.	165	2.2%	68	2.0%	1	0.9%	234	2.1%
6 a.m.	314	4.1%	122	3.6%	3	2.8%	439	4.0%
7 a.m.	553	7.3%	174	5.1%	3	2.8%	730	6.6%
8 a.m.	631	8.3%	210	6.2%	4	3.8%	845	7.6%
9 a.m.	415	5.5%	159	4.7%	3	2.8%	577	5.2%
10 a.m.	352	4.6%	172	5.1%	5	4.7%	529	4.8%
11 a.m.	386	5.1%	149	4.4%	4	3.8%	539	4.9%
Noon	408	5.4%	177	5.2%	6	5.7%	591	5.3%
1 p.m.	341	4.5%	176	5.2%	4	3.8%	521	4.7%
2 p.m.	373	4.9%	186	5.5%	3	2.8%	562	5.1%
3 p.m.	450	5.9%	231	6.8%	9	8.5%	690	6.2%
4 p.m.	477	6.3%	225	6.7%	5	4.7%	707	6.4%
5 p.m.	501	6.6%	231	6.8%	7	6.6%	739	6.7%
6 p.m.	375	4.9%	205	6.1%	3	2.8%	583	5.3%
7 p.m.	303	4.0%	148	4.4%	6	5.7%	457	4.1%
8 p.m.	239	3.1%	109	3.2%	7	6.6%	355	3.2%
9 p.m.	265	3.5%	98	2.9%	10	9.4%	373	3.4%
10 p.m.	232	3.0%	112	3.3%	4	3.8%	348	3.1%
11 p.m.	210	2.8%	96	2.8%	1	0.9%	307	2.8%
Total	7,607	100.0%	3,379	100.0%	106	100.0%	11,092	100.0%



- Total speed-related crashes peaked in the morning (7:00 a.m. to 8:59 a.m.), with another peak in the late afternoon/evening (3:00 p.m. to 5:59 p.m.).
- Fatal speed-related crashes varied by hour and were highest during the 9:00 p.m. and 3:00 p.m. hours.

Crash Conditions

Speed-Related Crashes by Vehicle Type (Utah 2009)

Speed-Related Vehicles								
Vehicle Type	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Passenger Car	4,387	54.8%	1,834	51.0%	48	39.0%	6,269	53.5%
SUV	1,510	18.8%	736	20.5%	27	22.0%	2,273	19.4%
Pickup Truck	1,468	18.3%	600	16.7%	18	14.6%	2,086	17.8%
Van	364	4.5%	155	4.3%	8	6.5%	527	4.5%
Semi/Large Truck	201	2.5%	71	2.0%	10	8.1%	282	2.4%
Motorcycle	26	0.3%	151	4.2%	11	8.9%	188	1.6%
Bus	7	0.1%	1	0.0%	0	0.0%	8	0.1%
Other	12	0.1%	38	1.1%	1	0.8%	51	0.4%
Unknown	36	0.4%	8	0.2%	0	0.0%	44	0.4%
Total	8,011	100.0%	3,594	100.0%	123	100.0%	11,728	100.0%

- 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 2009)

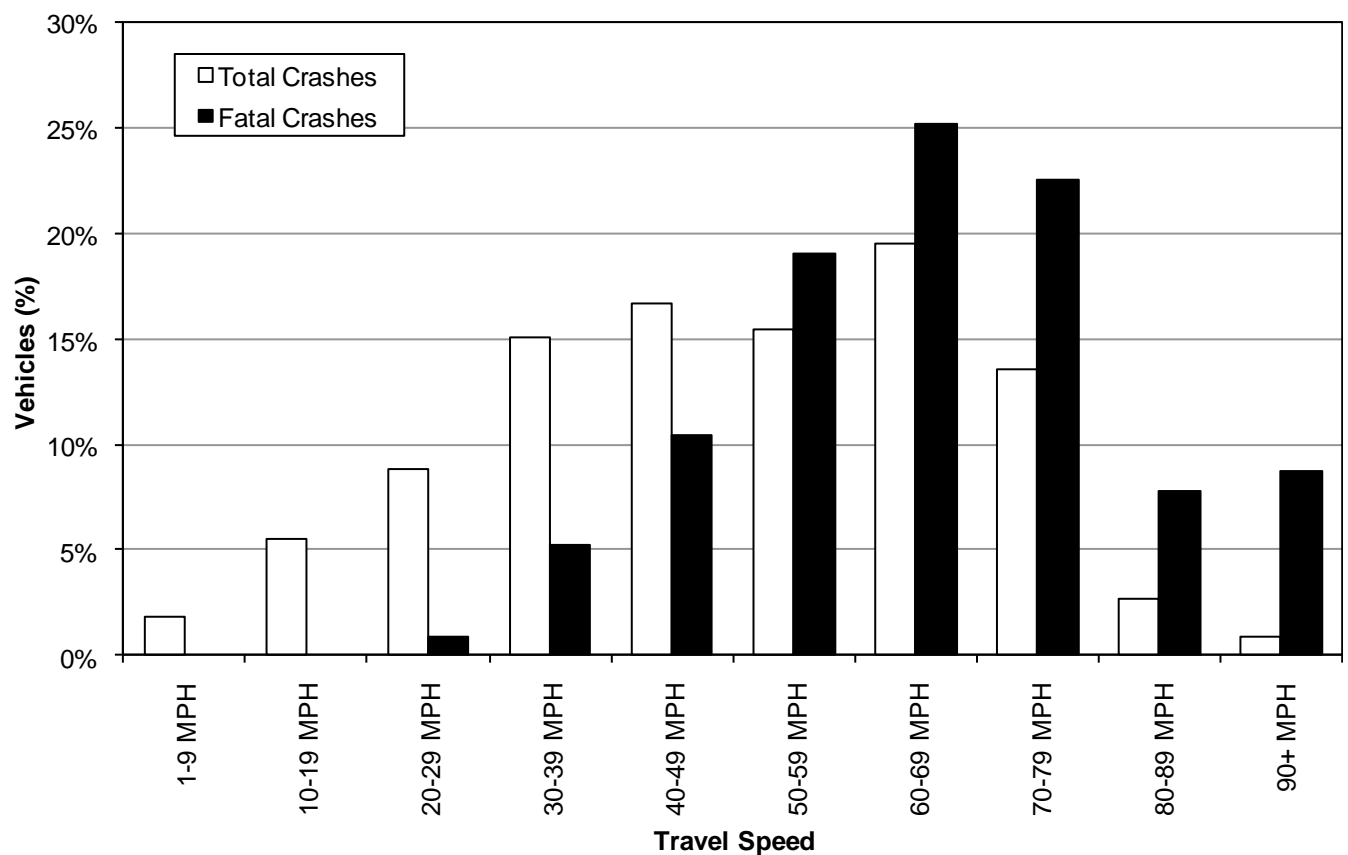
Speed-Related Vehicles								
Speed Limit	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
5-15 MPH	76	0.9%	27	0.8%	0	0.0%	103	0.9%
20-25 MPH	916	11.4%	435	12.1%	7	5.7%	1,358	11.6%
30-35 MPH	918	11.5%	487	13.6%	16	13.0%	1,421	12.1%
40-45 MPH	777	9.7%	480	13.4%	18	14.6%	1,275	10.9%
50-55 MPH	979	12.2%	461	12.8%	26	21.1%	1,466	12.5%
60-65 MPH	2,950	36.8%	1,098	30.6%	30	24.4%	4,078	34.8%
70+ MPH	815	10.2%	355	9.9%	24	19.5%	1,194	10.2%
Unknown	580	7.2%	251	7.0%	2	1.6%	833	7.1%
Total	8,011	100.0%	3,594	100.0%	123	100.0%	11,728	100.0%

- Nearly one-half (48.4% 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. Two-thirds (66.1% 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 2009)

Speed-Related Vehicles								
Travel Speed	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
1-9 MPH	143	1.8%	42	1.2%	0	0.0%	185	1.6%
10-19 MPH	456	5.7%	105	2.9%	0	0.0%	561	4.8%
20-29 MPH	695	8.7%	204	5.7%	1	0.8%	900	7.7%
30-39 MPH	1,033	12.9%	507	14.1%	6	4.9%	1,546	13.2%
40-49 MPH	1,106	13.8%	593	16.5%	12	9.8%	1,711	14.6%
50-59 MPH	1,050	13.1%	515	14.3%	22	17.9%	1,587	13.5%
60-69 MPH	1,374	17.2%	592	16.5%	29	23.6%	1,995	17.0%
70-79 MPH	911	11.4%	452	12.6%	26	21.1%	1,389	11.8%
80-89 MPH	140	1.7%	123	3.4%	9	7.3%	272	2.3%
90+ MPH	41	0.5%	42	1.2%	10	8.1%	93	0.8%
Unknown	1,062	13.3%	419	11.7%	8	6.5%	1,489	12.7%
Total	8,011	100.0%	3,594	100.0%	123	100.0%	11,728	100.0%

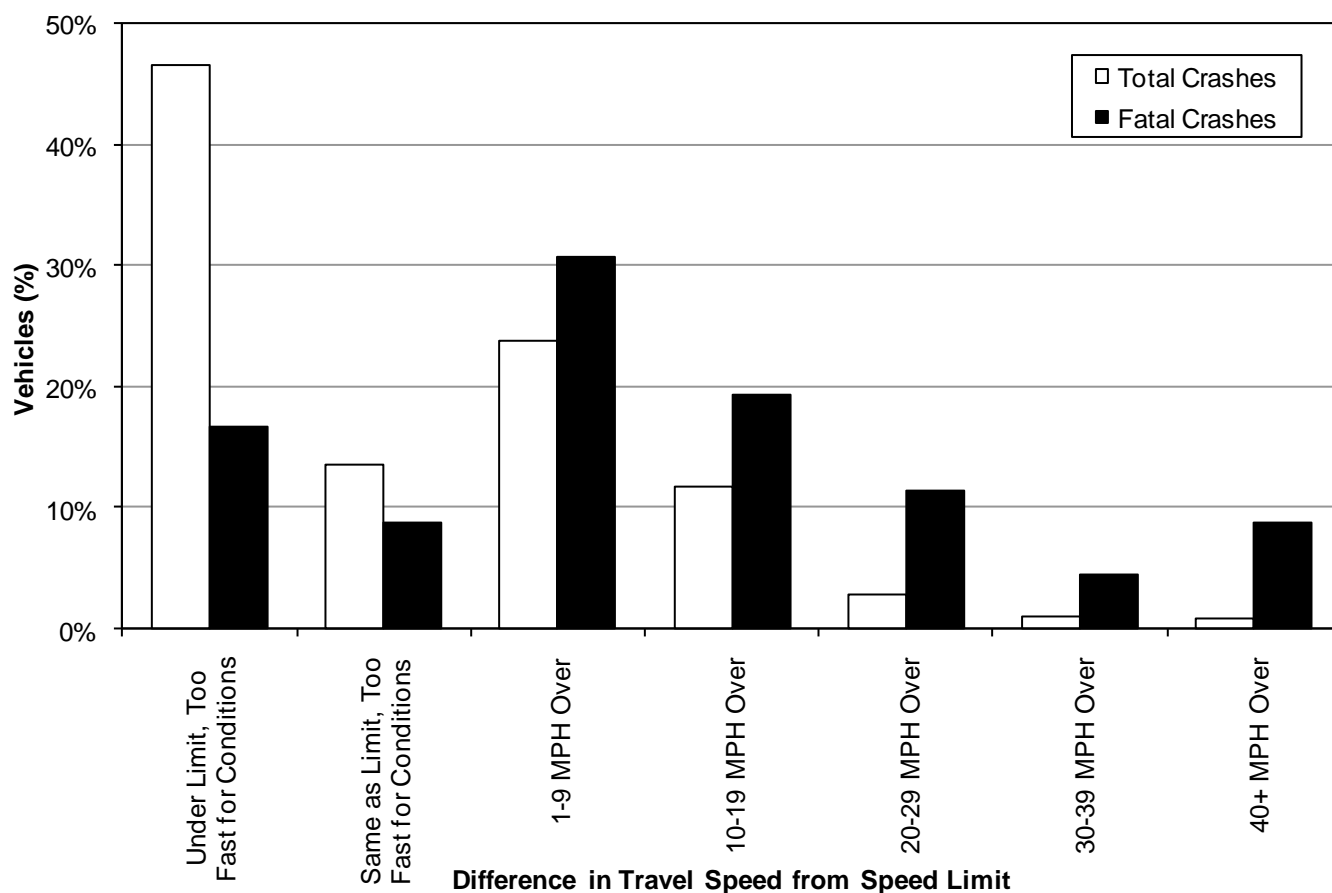


- 60-69 MPH (19.5% of known) and 40-49 MPH (16.7% of known) were the leading travel speeds of vehicles in total speed-related crashes.
- Two-thirds (64.3% of known) of vehicles in fatal speed-related crashes were traveling 60 MPH or higher.
- Speed-related vehicles in fatal crashes were more likely to 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 2009)

Speed-Related Vehicles								
Travel Speed vs. Speed Limit	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Under Limit, Too Fast for Conditions	3,527	44.0%	1,143	31.8%	19	15.4%	4,689	40.0%
Same as Limit, Too Fast for Conditions	931	11.6%	414	11.5%	10	8.1%	1,355	11.6%
1-9 MPH Over Speed Limit	1,532	19.1%	825	23.0%	35	28.5%	2,392	20.4%
10-19 MPH Over Speed Limit	649	8.1%	506	14.1%	22	17.9%	1,177	10.0%
20-29 MPH Over Speed Limit	135	1.7%	138	3.8%	13	10.6%	286	2.4%
30-39 MPH Over Speed Limit	32	0.4%	55	1.5%	5	4.1%	92	0.8%
40+ MPH Over Speed Limit	35	0.4%	29	0.8%	10	8.1%	74	0.6%
Unknown	1,170	14.6%	484	13.5%	9	7.3%	1,663	14.2%
Total	8,011	100.0%	3,594	100.0%	123	100.0%	11,728	100.0%



- It is troubling to see that 4,021 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.
- Nearly three out of every four speed-related vehicles (74.6% 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



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Section 5: Teenage Drivers

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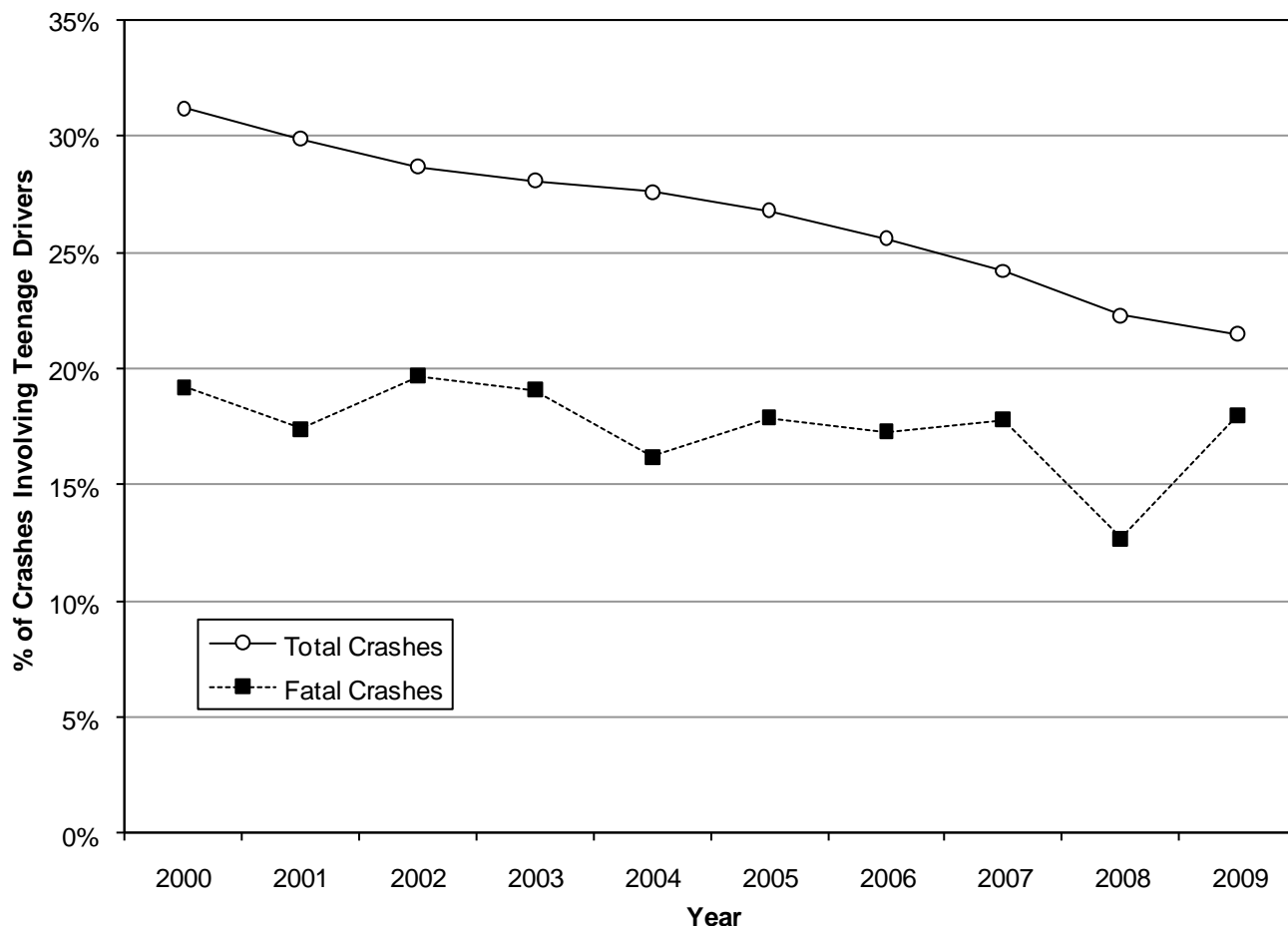
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Trends

Teenage Driver Crashes (Utah 2000-2009)

Teenage Driver Crashes												
Year	Property Damage Only			Injury			Fatal			Total		
	All #	Teen Driver #	%	All #	Teen Driver #	%	All #	Teen Driver #	%	All #	Teen Driver #	%
2000	33,269	10,252	30.8%	19,564	6,263	32.0%	318	61	19.2%	53,151	16,576	31.2%
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%
Total	355,583	92,274	26.0%	185,461	51,469	27.8%	2,576	453	17.6%	543,620	144,196	26.5%



- 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 26.5% of all crashes in Utah involved a teenage driver with a decreasing trend over the last 10 years.
- Fatal teenage driver crashes have fluctuated around the 10-year average of 17.6% of fatal crashes.

Counties

Teenage Driver Crashes by County (Utah 2009)

County	Teenage Driver Crashes											
	PDO Crashes			Injury Crashes			Fatal Crashes			Total		
	All #	Teen Driver #	%	All #	Teen Driver #	%	All #	Teen Driver #	%	All #	Teen Driver #	%
Cache	1,333	369	27.7%	547	174	31.8%	10	5	50.0%	1,890	548	29.0%
Morgan	91	27	29.7%	36	8	22.2%	2	0	0.0%	129	35	27.1%
Davis	2,814	760	27.0%	1,462	388	26.5%	10	5	50.0%	4,286	1,153	26.9%
Utah	4,931	1,268	25.7%	2,610	696	26.7%	17	4	23.5%	7,558	1,968	26.0%
Washington	1,120	269	24.0%	742	170	22.9%	9	2	22.2%	1,871	441	23.6%
Sanpete	177	39	22.0%	64	18	28.1%	3	0	0.0%	244	57	23.4%
Weber	2,789	634	22.7%	1,272	288	22.6%	21	7	33.3%	4,082	929	22.8%
Salt Lake	15,832	3,189	20.1%	6,757	1,359	20.1%	41	4	9.8%	22,630	4,552	20.1%
Tooele	542	108	19.9%	246	49	19.9%	8	1	12.5%	796	158	19.8%
Sevier	399	75	18.8%	145	32	22.1%	4	1	25.0%	548	108	19.7%
Wasatch	414	76	18.4%	106	22	20.8%	4	0	0.0%	524	98	18.7%
Iron	569	103	18.1%	251	51	20.3%	9	1	11.1%	829	155	18.7%
Uintah	509	95	18.7%	167	24	14.4%	5	0	0.0%	681	119	17.5%
Box Elder	771	109	14.1%	337	66	19.6%	9	1	11.1%	1,117	176	15.8%
Summit	796	112	14.1%	226	40	17.7%	9	2	22.2%	1,031	154	14.9%
Carbon	371	47	12.7%	131	27	20.6%	3	1	33.3%	505	75	14.9%
Daggett	28	3	10.7%	8	2	25.0%	0	0	0.0%	36	5	13.9%
Millard	264	36	13.6%	84	12	14.3%	5	0	0.0%	353	48	13.6%
Duchesne	269	37	13.8%	69	8	11.6%	5	1	20.0%	343	46	13.4%
Piute	22	2	9.1%	8	2	25.0%	0	0	0.0%	30	4	13.3%
Emery	162	22	13.6%	48	6	12.5%	6	0	0.0%	216	28	13.0%
Beaver	225	27	12.0%	80	11	13.8%	4	0	0.0%	309	38	12.3%
Garfield	97	9	9.3%	43	7	16.3%	3	0	0.0%	143	16	11.2%
Rich	57	4	7.0%	24	4	16.7%	2	1	50.0%	83	9	10.8%
Kane	163	18	11.0%	49	5	10.2%	4	0	0.0%	216	23	10.6%
Grand	118	15	12.7%	59	4	6.8%	8	0	0.0%	185	19	10.3%
Juab	294	28	9.5%	93	11	11.8%	6	1	16.7%	393	40	10.2%
San Juan	197	16	8.1%	58	7	12.1%	7	2	28.6%	262	25	9.5%
Wayne	44	3	6.8%	30	4	13.3%	3	0	0.0%	77	7	9.1%
Statewide	35,398	7,500	21.2%	15,752	3,495	22.2%	217	39	18.0%	51,367	11,034	21.5%

- Overall, Cache (29.0%), Morgan (27.1%), and Davis (26.9%) counties had the highest percentages of crashes involving a teenage driver.
- Cache (50.0%), Davis (50.0%), and Rich (50.0%) counties had the highest percentages of fatal crashes involving a teenage driver.
- Overall, Wayne (9.1%), San Juan (9.5%), and Juab (10.2%) counties had the lowest percentages of crashes involving a teenage driver.
- Statewide, teenage driver crashes represented 21.5% of all crashes and 18.0% of all fatal crashes.



Persons Involved

Restraint Use of Teen Drivers and Their Passengers (Utah 2009)

Persons (Teen Driver and Passengers)							
Restraint Use	Non-Injured		Injured		Killed		Total
	#	%	#	%	#	%	# %
Restrained	13,418	96.2%	2,394	90.6%	13	54.2%	15,825 95.3%
Unrestrained	524	3.8%	249	9.4%	11	45.8%	784 4.7%
Total	13,942	100.0%	2,643	100.0%	24	100.0%	16,609 100.0%

- Overall, most teen drivers and their passengers were restrained (95.3%).
- Only 54.2% of occupants killed in teenage driven vehicles were restrained.
- In fact, teen drivers and their passengers that were unrestrained were 17 times more likely than restrained occupants to be killed in a crash.

Number of Occupants in Teenage Driven Vehicles (Utah 2009)

Teenage Driven Vehicles							
Number of Occupants	PDO Crashes		Injury Crashes		Fatal Crashes		Total
	#	%	#	%	#	%	# %
1	5,837	70.9%	2,337	61.2%	15	35.7%	8,189 67.7%
2	1,596	19.4%	945	24.7%	11	26.2%	2,552 21.1%
3	521	6.3%	321	8.4%	5	11.9%	847 7.0%
4 or more	284	3.4%	218	5.7%	11	26.2%	513 4.2%
Total	8,238	100.0%	3,821	100.0%	42	100.0%	12,101 100.0%

- Over two-thirds of teenage driven vehicles (67.7%) in crashes contained only the teenage driver.
- In comparison, one-third (35.7%) 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 8.2 times more likely to be fatal than crashes involving teenage driven vehicles with fewer occupants.

Drivers

Gender of Teenage Drivers in Crashes (Utah 2009)

Teenage Drivers							
Gender	PDO Crashes		Injury Crashes		Fatal Crashes		Total
	#	%	#	%	#	%	# %
Male	4,278	51.9%	1,890	49.5%	28	66.7%	6,196 51.2%
Female	3,937	47.8%	1,924	50.4%	14	33.3%	5,875 48.5%
Unknown	23	0.3%	7	0.2%	0	0.0%	30 0.2%
Total	8,238	100.0%	3,821	100.0%	42	100.0%	12,101 100.0%

- The majority of teen drivers in all motor vehicle crashes (51.2%) and fatal crashes (66.7%) were male.
- Crashes involving male teen drivers were 1.9 times more likely to be fatal than female teen driver crashes.

Previous Driving Violations of Teens in Fatal Crashes (Utah 2009)

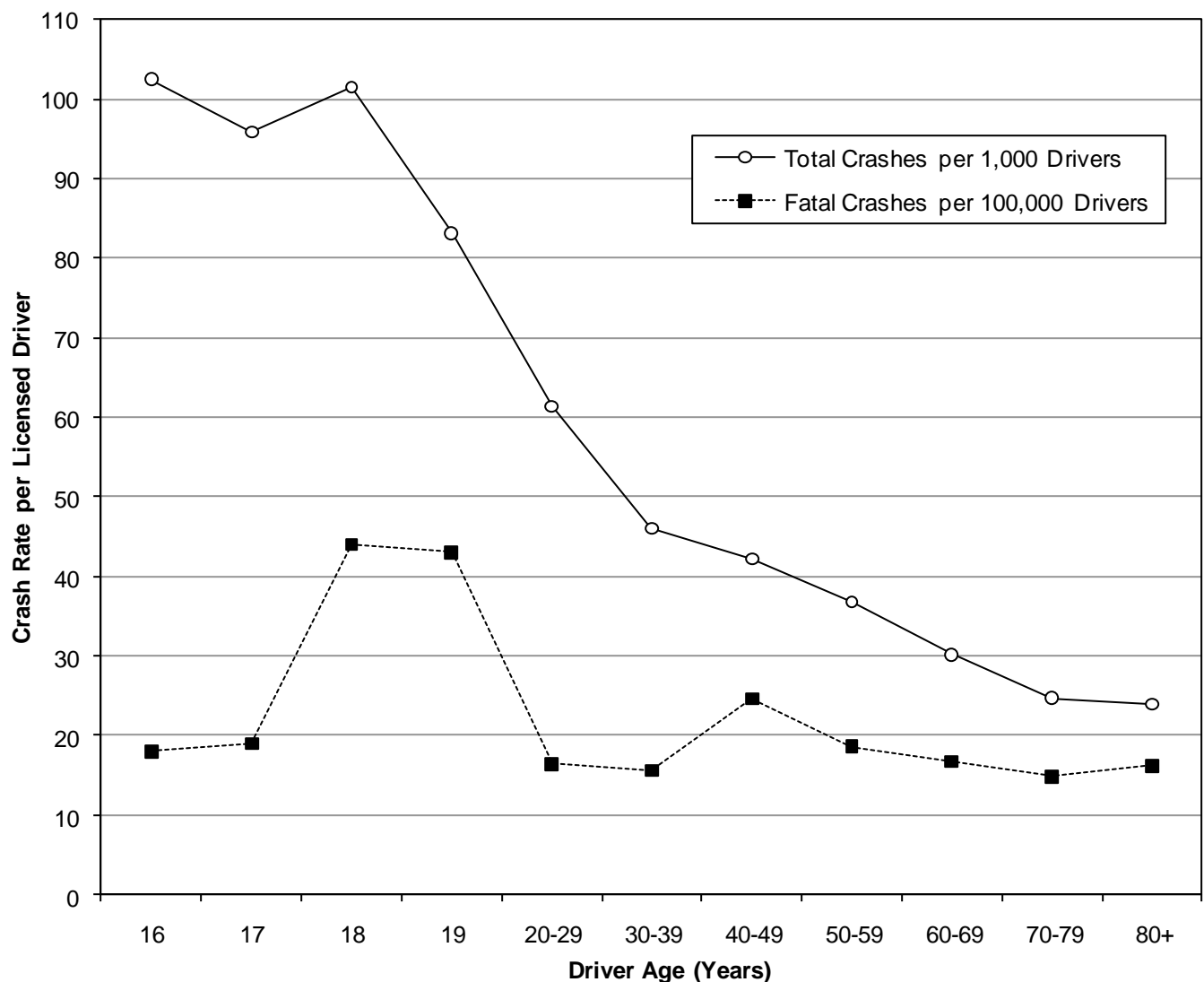
- Of the 42 teenage drivers in fatal crashes, 20 (47.6%) had been previously convicted of a moving traffic violation in the past three years.

Alcohol Involvement of Teenage Drivers (Utah 2009)

- Of the 42 teenage drivers in fatal crashes, three (7.1%) were impaired by alcohol.

Age of Teenage Drivers in Crashes (Utah 2009)

Teenage Drivers												
Age	PDO Crashes			Injury Crashes			Fatal Crashes			Total		
	#	%	Rate per 1,000 Drivers	#	%	Rate per 1,000 Drivers	#	%	Rate per 1,000 Drivers	#	%	Rate per 1,000 Drivers
15	109	1.3%	n/a	58	1.5%	n/a	1	2.4%	n/a	168	1.4%	n/a
16	1,617	19.6%	71.7	691	18.1%	30.6	4	9.5%	0.18	2,312	19.1%	102.5
17	2,050	24.9%	65.2	961	25.2%	30.6	6	14.3%	0.19	3,017	24.9%	95.9
18	2,415	29.3%	70.3	1,058	27.7%	30.8	15	35.7%	0.44	3,488	28.8%	101.5
19	2,047	24.8%	54.7	1,053	27.6%	28.1	16	38.1%	0.43	3,116	25.7%	83.2
Total	8,238	100.0%	63.2	3,821	100.0%	29.3	42	100.0%	0.32	12,101	100.0%	92.8

Crash Rate of Licensed Drivers by Age (Utah 2009)

- Drivers aged 16 years had the highest total crash rate per licensed driver (102.5).
- Drivers aged 18 and 19 years had the highest fatal crash rate per licensed driver.

Crash Conditions

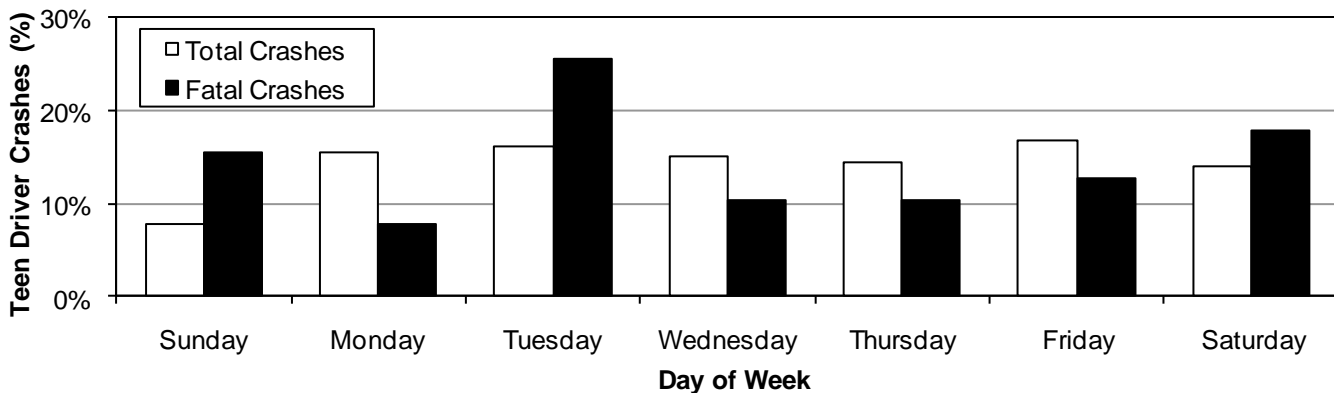
Teenage Driver Crashes by Month (Utah 2009)

Teenage 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	710	22.9	267	8.6	2	0.06	979	31.6
February	28	630	22.5	267	9.5	4	0.14	901	32.2
March	31	618	19.9	297	9.6	4	0.13	919	29.6
April	30	558	18.6	289	9.6	6	0.20	853	28.4
May	31	583	18.8	319	10.3	2	0.06	904	29.2
June	30	535	17.8	301	10.0	4	0.13	840	28.0
July	31	544	17.5	280	9.0	2	0.06	826	26.6
August	31	570	18.4	285	9.2	3	0.10	858	27.7
September	30	622	20.7	319	10.6	5	0.17	946	31.5
October	31	656	21.2	295	9.5	3	0.10	954	30.8
November	30	576	19.2	308	10.3	1	0.03	885	29.5
December	31	898	29.0	268	8.6	3	0.10	1,169	37.7
Total	365	7,500	20.5	3,495	9.6	39	0.11	11,034	30.2

- Overall, December (37.7) and February (32.2) had the highest rates per day for teenage driver crashes.
- The highest rates per day of fatal teenage driver crashes occurred in April and September.

Teenage Driver Crashes by Day of Week (Utah 2009)

Teenage Driver Crashes								
Day of Week	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Sunday	561	7.5%	286	8.2%	6	15.4%	853	7.7%
Monday	1,172	15.6%	537	15.4%	3	7.7%	1,712	15.5%
Tuesday	1,267	16.9%	516	14.8%	10	25.6%	1,793	16.2%
Wednesday	1,173	15.6%	488	14.0%	4	10.3%	1,665	15.1%
Thursday	1,050	14.0%	544	15.6%	4	10.3%	1,598	14.5%
Friday	1,243	16.6%	609	17.4%	5	12.8%	1,857	16.8%
Saturday	1,034	13.8%	515	14.7%	7	17.9%	1,556	14.1%
Total	7,500	100.0%	3,495	100.0%	39	100.0%	11,034	100.0%

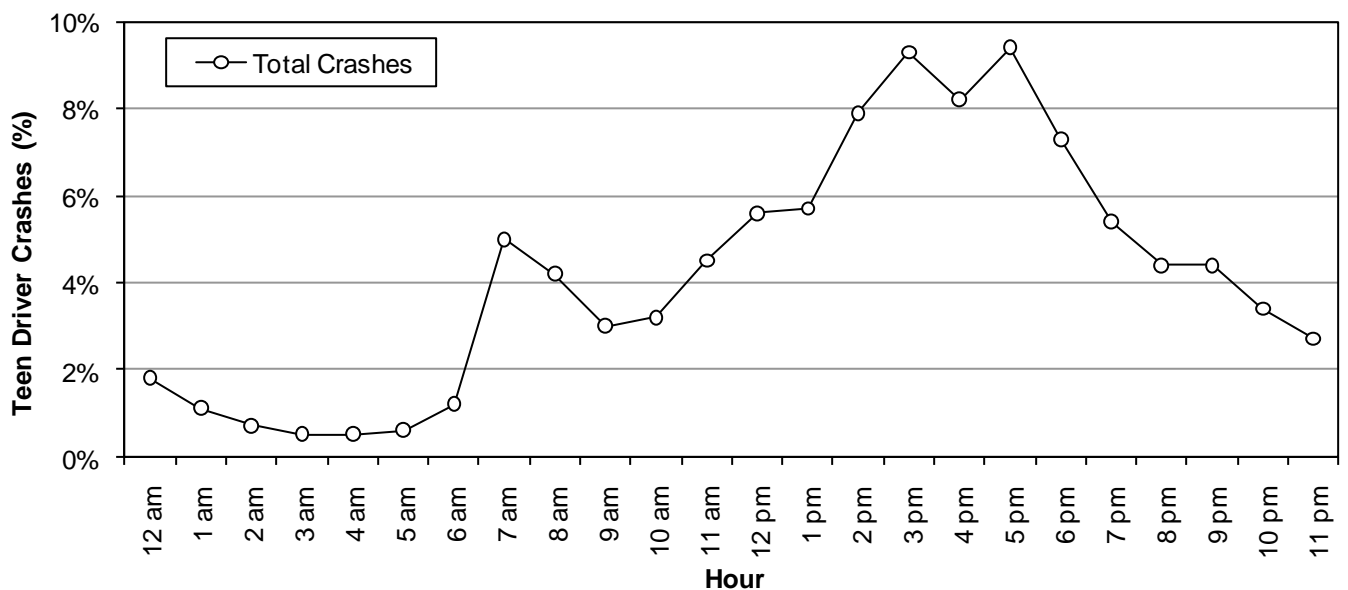


- Overall, the highest percentage of teenage driver crashes occurred on Friday (16.8%).
- The highest percentage of fatal teenage driver crashes occurred on Tuesday (25.6%).

Crash Conditions

Teenage Driver Crashes by Hour (Utah 2009)

Teenage Driver Crashes								
Hour	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Midnight	132	1.8%	70	2.0%	2	5.1%	204	1.8%
1 a.m.	87	1.2%	34	1.0%	1	2.6%	122	1.1%
2 a.m.	45	0.6%	29	0.8%	0	0.0%	74	0.7%
3 a.m.	43	0.6%	17	0.5%	0	0.0%	60	0.5%
4 a.m.	31	0.4%	20	0.6%	0	0.0%	51	0.5%
5 a.m.	41	0.5%	24	0.7%	0	0.0%	65	0.6%
6 a.m.	91	1.2%	41	1.2%	2	5.1%	134	1.2%
7 a.m.	407	5.4%	139	4.0%	4	10.3%	550	5.0%
8 a.m.	329	4.4%	129	3.7%	0	0.0%	458	4.2%
9 a.m.	254	3.4%	80	2.3%	0	0.0%	334	3.0%
10 a.m.	244	3.3%	109	3.1%	1	2.6%	354	3.2%
11 a.m.	352	4.7%	146	4.2%	1	2.6%	499	4.5%
Noon	418	5.6%	200	5.7%	0	0.0%	618	5.6%
1 p.m.	431	5.7%	202	5.8%	0	0.0%	633	5.7%
2 p.m.	583	7.8%	291	8.3%	1	2.6%	875	7.9%
3 p.m.	697	9.3%	317	9.1%	8	20.5%	1,022	9.3%
4 p.m.	619	8.3%	288	8.2%	0	0.0%	907	8.2%
5 p.m.	706	9.4%	325	9.3%	4	10.3%	1,035	9.4%
6 p.m.	523	7.0%	273	7.8%	5	12.8%	801	7.3%
7 p.m.	404	5.4%	192	5.5%	0	0.0%	596	5.4%
8 p.m.	327	4.4%	155	4.4%	3	7.7%	485	4.4%
9 p.m.	303	4.0%	174	5.0%	4	10.3%	481	4.4%
10 p.m.	225	3.0%	147	4.2%	3	7.7%	375	3.4%
11 p.m.	208	2.8%	93	2.7%	0	0.0%	301	2.7%
Total	7,500	100.0%	3,495	100.0%	39	100.0%	11,034	100.0%



- 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 2009)

Teenage Driver Vehicles								
Speed Limit	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
5-15 MPH	84	1.0%	19	0.5%	0	0.0%	103	0.9%
20-25 MPH	1,318	16.0%	498	13.0%	2	4.8%	1,818	15.0%
30-35 MPH	2,030	24.6%	941	24.6%	5	11.9%	2,976	24.6%
40-45 MPH	1,666	20.2%	996	26.1%	13	31.0%	2,675	22.1%
50-55 MPH	599	7.3%	342	9.0%	10	23.8%	951	7.9%
60-65 MPH	1,071	13.0%	403	10.5%	9	21.4%	1,483	12.3%
70+ MPH	152	1.8%	75	2.0%	3	7.1%	230	1.9%
Unknown	1,318	16.0%	547	14.3%	0	0.0%	1,865	15.4%
Total	8,238	100.0%	3,821	100.0%	42	100.0%	12,101	100.0%

- Over half (55.2% where speed limit was known) of total teenage driver crashes occurred where the speed limit was 30-45 MPH.
- Fatal teenage driver crashes were more likely to occur with higher speed limits. Over one-half (52.4%) of fatal teenage driver crashes occurred where the speed limit was 50 MPH or higher.
- Teenage driver crashes where the speed limit was 50 MPH or higher were 2.1 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.

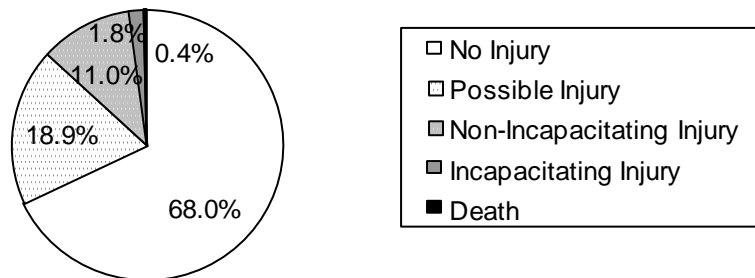
Travel Speed of Teenage Driver Vehicles in Crashes (Utah 2009)

Teenage Driver Vehicles								
Travel Speed	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Stopped	648	7.9%	341	8.9%	1	2.4%	990	8.2%
1-9 MPH	692	8.4%	289	7.6%	1	2.4%	982	8.1%
10-19 MPH	1,081	13.1%	421	11.0%	3	7.1%	1,505	12.4%
20-29 MPH	956	11.6%	441	11.5%	1	2.4%	1,398	11.6%
30-39 MPH	962	11.7%	483	12.6%	3	7.1%	1,448	12.0%
40-49 MPH	568	6.9%	366	9.6%	3	7.1%	937	7.7%
50-59 MPH	393	4.8%	191	5.0%	10	23.8%	594	4.9%
60-69 MPH	507	6.2%	209	5.5%	10	23.8%	726	6.0%
70-79 MPH	213	2.6%	111	2.9%	3	7.1%	327	2.7%
80-89 MPH	35	0.4%	26	0.7%	0	0.0%	61	0.5%
90+ MPH	10	0.1%	9	0.2%	2	4.8%	21	0.2%
Unknown	2,173	26.4%	934	24.4%	5	11.9%	3,112	25.7%
Total	8,238	100.0%	3,821	100.0%	42	100.0%	12,101	100.0%

- Nearly half (48.4% 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. Over two-thirds (67.6% of known) of teenage driver vehicles in fatal crashes were traveling 50 MPH or higher.
- Crashes involving teenage driver vehicles traveling 50 MPH or higher were 8.9 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 2009)



- Similar to all motor vehicle crashes, nearly one-third (31.7%) of teenage driver crashes resulted in some level of non-fatal injury.
- The percentage of fatal teenage driver crashes (0.4%) was similar to all fatal motor vehicle crashes (0.4%).

Teenage Driver Crash Violations (Utah 2009)

Teenage Drivers								
Violations	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Following Too Close	313	27.7%	90	20.2%	0	0.0%	403	25.4%
Improper Lane Change/Travel	270	23.9%	108	24.3%	0	0.0%	378	23.8%
Improper Turn	146	12.9%	68	15.3%	0	0.0%	214	13.5%
Speed	155	13.7%	57	12.8%	0	0.0%	212	13.4%
Negligent Collision	44	3.9%	29	6.5%	0	0.0%	73	4.6%
License Violation	26	2.3%	8	1.8%	1	11.1%	35	2.2%
Driving Under the Influence	20	1.8%	8	1.8%	1	11.1%	29	1.8%
Improper Start or Stop	17	1.5%	7	1.6%	0	0.0%	24	1.5%
Careless Driving	9	0.8%	14	3.1%	0	0.0%	23	1.5%
Failure to Obey Traffic Control Device	12	1.1%	11	2.5%	0	0.0%	23	1.5%
Insurance Violation	15	1.3%	7	1.6%	1	11.1%	23	1.5%
Improper Lookout	18	1.6%	4	0.9%	0	0.0%	22	1.4%
Hit and Run	17	1.5%	2	0.4%	0	0.0%	19	1.2%
Reckless Driving	10	0.9%	2	0.4%	1	11.1%	13	0.8%
Failure to Stop at Red Light	6	0.5%	6	1.3%	0	0.0%	12	0.8%
Failure to Stop at Stop Sign	6	0.5%	6	1.3%	0	0.0%	12	0.8%
Equipment Violation	10	0.9%	1	0.2%	0	0.0%	11	0.7%
Failure to Yield Right of Way	4	0.4%	5	1.1%	1	11.1%	10	0.6%
Improper Backing	9	0.8%	1	0.2%	0	0.0%	10	0.6%
Improper Passing	8	0.7%	2	0.4%	0	0.0%	10	0.6%
Alcohol/Drug Violation, Other than DUI	6	0.5%	2	0.4%	0	0.0%	8	0.5%
Other Moving Violation	4	0.4%	0	0.0%	1	11.1%	5	0.3%
Registration Violation	4	0.4%	0	0.0%	0	0.0%	4	0.3%
Wrong Side of Road	2	0.2%	2	0.4%	0	0.0%	4	0.3%
Improper Signal	1	0.1%	2	0.4%	0	0.0%	3	0.2%
Seat Belt/Child Restraint	0	0.0%	3	0.7%	0	0.0%	3	0.2%
Vehicle Homicide	0	0.0%	0	0.0%	3	33.3%	3	0.2%
Total	1,132	100.0%	445	100.0%	9	100.0%	1,586	100.0%

- There were 1,586 citations issued to teenage drivers at the scene of the crash. The most common violations were for following too close (25.4%), improper lane change/travel (23.8%), and improper turn (13.5%).

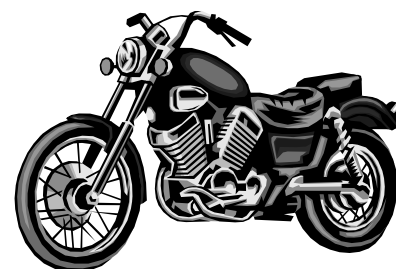
Crash Conditions

Contributing Factors of Teenage Driver Crashes (Utah 2009)

Teenage Drivers/Vehicles								
Contributing Factors	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Followed Too Closely	1,476	16.6%	650	15.2%	2	2.5%	2,128	16.1%
Failed to Yield Right of Way	1,149	12.9%	700	16.3%	6	7.6%	1,855	14.0%
Speed Too Fast	1,095	12.3%	441	10.3%	10	12.7%	1,546	11.7%
Driver Distraction	654	7.4%	391	9.1%	5	6.3%	1,050	7.9%
Other Improper Driving	646	7.3%	340	7.9%	0	0.0%	986	7.4%
Failed to Keep in Proper Lane	657	7.4%	242	5.6%	14	17.7%	913	6.9%
Improper Turn	358	4.0%	153	3.6%	0	0.0%	511	3.9%
Vision Obscured by Weather Condition	381	4.3%	126	2.9%	0	0.0%	507	3.8%
Disregard Traffic Signal/Sign	202	2.3%	185	4.3%	5	6.3%	392	3.0%
Ran Off Road	213	2.4%	146	3.4%	12	15.2%	371	2.8%
Improper Lane Change	235	2.6%	56	1.3%	1	1.3%	292	2.2%
Overcorrected	201	2.3%	68	1.6%	6	7.6%	275	2.1%
Swerved or Evasive Action	164	1.8%	92	2.1%	0	0.0%	256	1.9%
Asleep/Fatigue	119	1.3%	94	2.2%	4	5.1%	217	1.6%
Improper Backing	167	1.9%	15	0.3%	0	0.0%	182	1.4%
Vehicle Other Defective Condition	121	1.4%	50	1.2%	0	0.0%	171	1.3%
Driving Under the Influence	89	1.0%	65	1.5%	4	5.1%	158	1.2%
Reckless/Aggressive Driving	92	1.0%	51	1.2%	3	3.8%	146	1.1%
Vision Obscured by Moving Vehicle	93	1.0%	45	1.0%	2	2.5%	140	1.1%
Hit and Run	96	1.1%	32	0.7%	0	0.0%	128	1.0%
Improper Parking/Stopping	93	1.0%	33	0.8%	0	0.0%	126	1.0%
Driver Emotionally Upset	61	0.7%	53	1.2%	0	0.0%	114	0.9%
Vehicle Brakes	69	0.8%	42	1.0%	0	0.0%	111	0.8%
Other Driver Condition	66	0.7%	38	0.9%	1	1.3%	105	0.8%
Vehicle Tires	67	0.8%	25	0.6%	0	0.0%	92	0.7%
Vision Obscured by Other	52	0.6%	21	0.5%	0	0.0%	73	0.6%
Vision Obscured by Parked Vehicle	43	0.5%	27	0.6%	0	0.0%	70	0.5%
Vision Obscured by Glare	38	0.4%	23	0.5%	0	0.0%	61	0.5%
Improper Passing	50	0.6%	8	0.2%	1	1.3%	59	0.4%
Wrong Side/Wrong Way	23	0.3%	26	0.6%	3	3.8%	52	0.4%
Windshield or Other Window Obscured	39	0.4%	12	0.3%	0	0.0%	51	0.4%
Disregard Road Markings	19	0.2%	8	0.2%	0	0.0%	27	0.2%
Driver Illness/Medical	12	0.1%	14	0.3%	0	0.0%	26	0.2%
Vision Obscured by Building, Sign, etc.	15	0.2%	9	0.2%	0	0.0%	24	0.2%
Improper Signal	10	0.1%	4	0.1%	0	0.0%	14	0.1%
Vision Obscured by Vegetation	8	0.1%	5	0.1%	0	0.0%	13	0.1%
Total	8,873	100.0%	4,290	100.0%	79	100.0%	13,242	100.0%

- Some form of poor driver performance is present in the majority of crashes. The leading contributing factors for all teenage driver crashes were followed too closely (16.1%), failed to yield right of way (14.0%), and speed too fast (11.7%).
- The leading contributing factors in fatal teenage driver crashes were failed to keep in proper lane (17.7%), ran off road (15.2%), and speed too fast (12.7%).
- Compared to drivers of all ages, teenage drivers were more likely to have a contributing factor of followed too closely, failure to yield right of way, and driver distraction.

Motorcycles



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Section 6: Motorcycles

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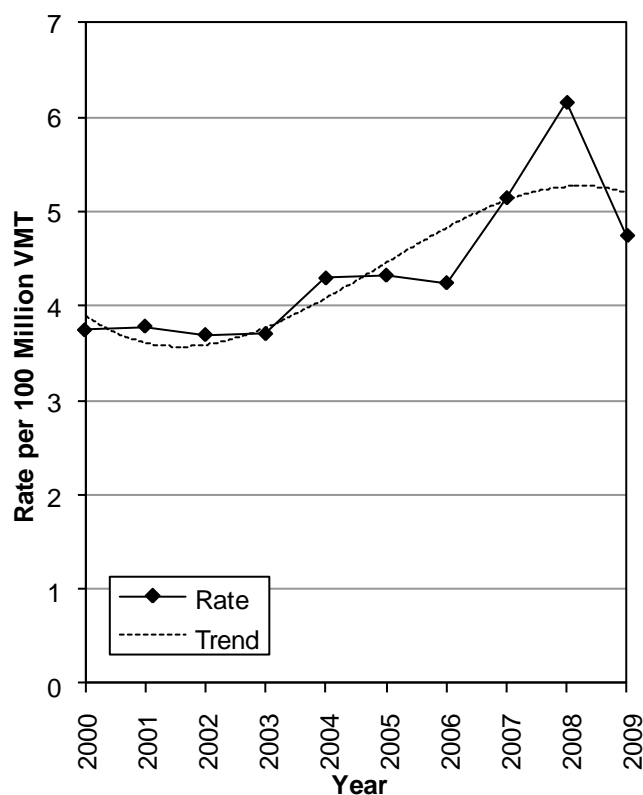
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Trends

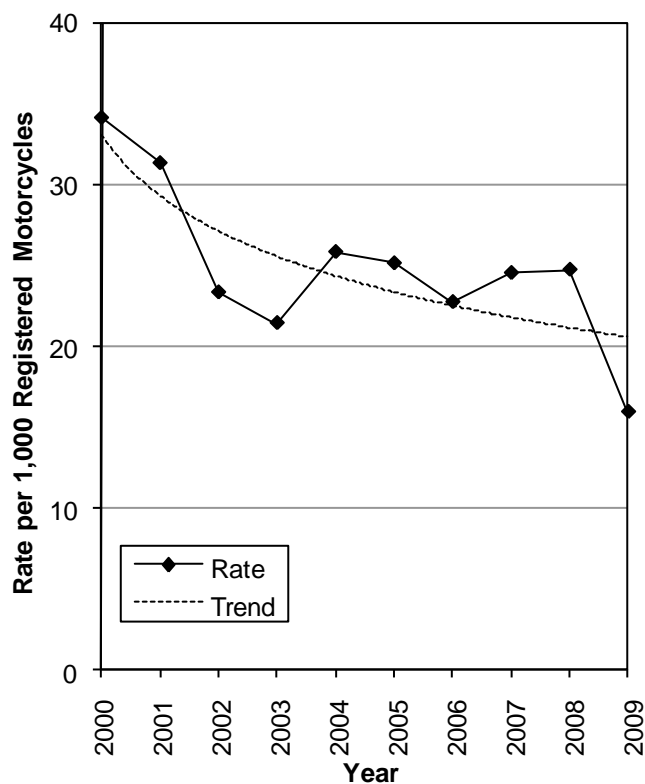
Motorcyclists in Crashes (Utah 2000-2009)

Motorcyclists (Driver and Passenger)												
Year	Non-Injured			Injured			Killed			Total		
	#	Rate per 100 Million VMT	Rate per 1,000 Rgstrd Mtrcycs	#	Rate per 100 Million VMT	Rate per 1,000 Rgstrd Mtrcycs	#	Rate per 100 Million VMT	Rate per 1,000 Rgstrd Mtrcycs	#	Rate per 100 Million VMT	Rate per 1,000 Registered Motorcycles
2000	124	0.6	5.0	694	3.1	28.1	24	0.11	0.97	842	3.74	34.1
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
Total	1,795	0.7	3.9	8,916	3.6	19.2	269	0.11	0.58	10,980	4.41	23.6

Motorcyclist Crash Rates per VMT (Utah 2000-2009)



Motorcyclist Crash Rates per Registered Motorcycles (Utah 2000-2009)



- 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.

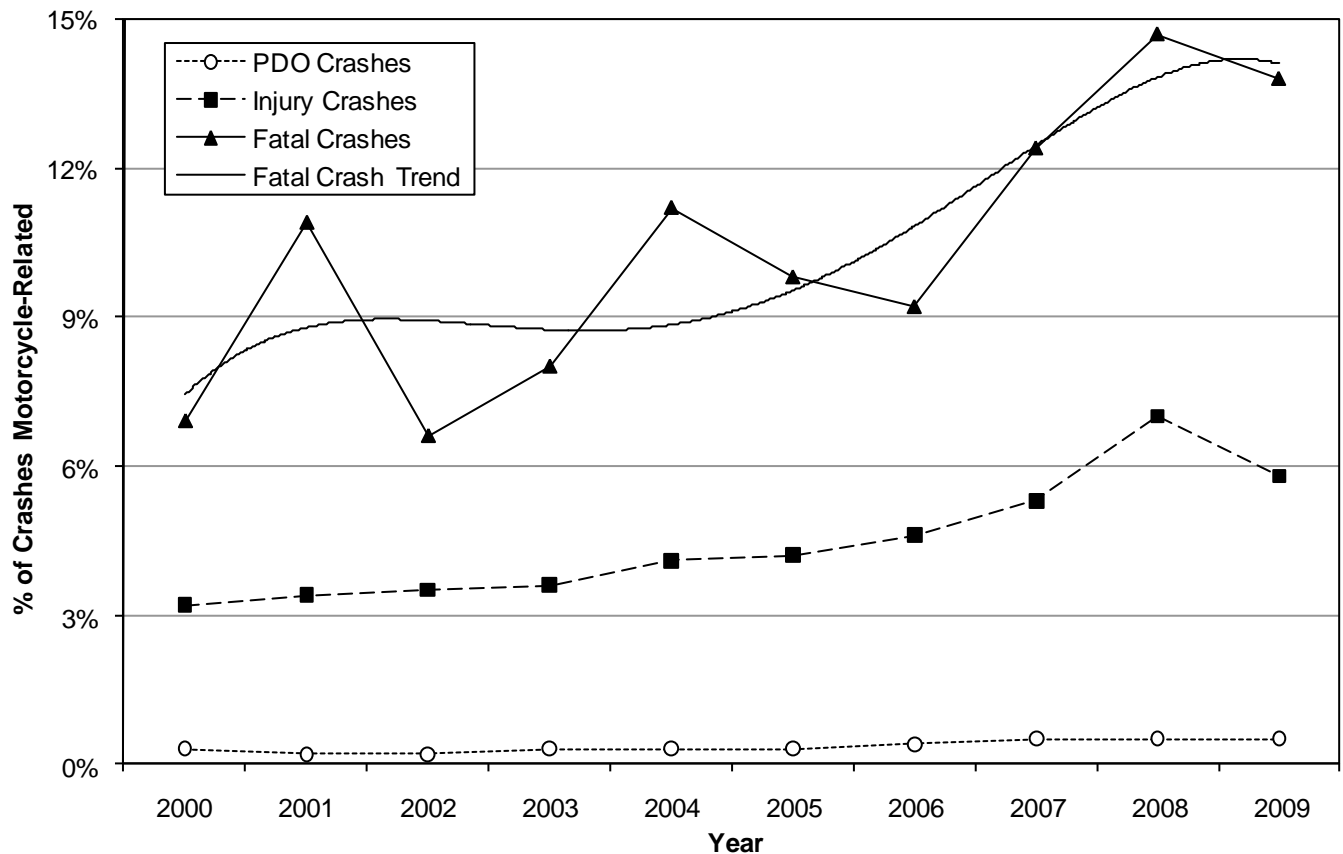
- The rate of total motorcyclists in crashes per registered motorcycles decreased 36% in 2009 compared to 2008.

Trends

Motorcycle Crashes (Utah 2000-2009)

Year	Motorcycle Crashes											
	Property Damage Only			Injury			Fatal			Total		
	All #	Motorcycle #	%	All #	Motorcycle #	%	All #	Motorcycle #	%	All #	Motorcycle #	%
2000	33,269	88	0.3%	19,564	624	3.2%	318	22	6.9%	53,151	734	1.4%
2001	33,113	82	0.2%	19,332	648	3.4%	258	28	10.9%	52,703	758	1.4%
2002	33,542	81	0.2%	19,552	689	3.5%	274	18	6.6%	53,368	788	1.5%
2003	31,842	84	0.3%	18,285	661	3.6%	262	21	8.0%	50,389	766	1.5%
2004	34,222	104	0.3%	19,423	805	4.1%	260	29	11.2%	53,905	938	1.7%
2005	35,158	117	0.3%	19,545	829	4.2%	235	23	9.8%	54,938	969	1.8%
2006	37,749	135	0.4%	18,189	835	4.6%	249	23	9.2%	56,187	993	1.8%
2007	42,368	199	0.5%	18,619	984	5.3%	258	32	12.4%	61,245	1,215	2.0%
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%
Total	355,658	1,249	0.4%	185,386	8,181	4.4%	2,576	262	10.2%	543,620	9,692	1.8%

Percent of Crashes Involving a Motorcycle (Utah 2000-2009)



- The 10-year trend shows that motorcycle crashes represent 0.4% of property damage only crashes, 4.4% of injury crashes, and 10.2% of fatal crashes.
- Motorcycles are over-represented in fatal crashes accounting for 10.2% of fatal crashes compared to 1.8% of total crashes.
- During the last 10 years, the highest percent of total crashes involving motorcycles occurred in 2008 (2.5%).

Counties

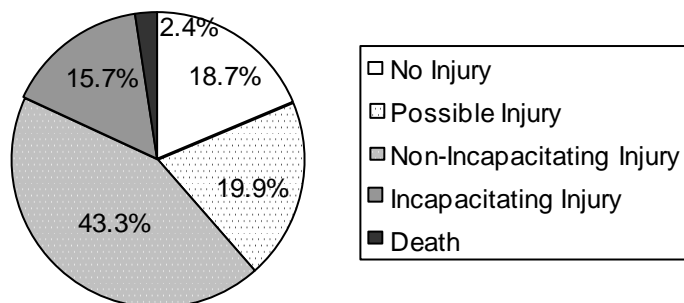
Motorcyclists in Crashes by County (Utah 2009)

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
Wayne	0	0.0	8	19.5	1	2.44	9	21.9
Rich	1	2.1	7	14.4	1	2.06	9	18.5
Garfield	5	4.2	12	10.1	2	1.69	19	16.1
Daggett	1	3.2	2	6.5	0	0.00	3	9.7
Morgan	0	0.0	10	7.5	1	0.75	11	8.2
Weber	30	1.8	74	4.6	6	0.37	110	6.8
Cache	7	0.8	50	5.8	1	0.12	58	6.7
Washington	12	0.9	72	5.3	2	0.15	86	6.3
Salt Lake	103	1.2	375	4.4	3	0.04	481	5.6
Utah	32	0.9	165	4.5	2	0.05	199	5.4
Sevier	2	0.6	15	4.4	0	0.00	17	5.0
Carbon	3	1.0	9	3.0	0	0.00	12	4.0
Wasatch	6	2.0	3	1.0	2	0.66	11	3.6
Kane	0	0.0	5	3.5	0	0.00	5	3.5
Uintah	1	0.3	10	2.8	1	0.28	12	3.4
San Juan	2	0.7	5	1.7	2	0.69	9	3.1
Davis	11	0.4	61	2.3	2	0.07	74	2.7
Iron	0	0.0	18	2.6	1	0.14	19	2.7
Summit	2	0.3	15	2.1	1	0.14	18	2.5
Tooele	5	0.6	15	1.8	1	0.12	21	2.5
Box Elder	5	0.5	17	1.9	0	0.00	22	2.4
Sanpete	0	0.0	5	2.3	0	0.00	5	2.3
Duchesne	0	0.0	5	2.2	0	0.00	5	2.2
Grand	2	0.6	5	1.5	0	0.00	7	2.1
Beaver	0	0.0	5	2.0	0	0.00	5	2.0
Emery	1	0.3	4	1.2	0	0.00	5	1.5
Juab	0	0.0	5	1.3	0	0.00	5	1.3
Millard	1	0.2	3	0.7	1	0.22	5	1.1
Piute	0	0.0	0	0.0	0	0.00	0	0.0
Statewide	232	0.9	980	3.7	30	0.11	1,242	4.7

- Wayne (21.9), Rich (18.5), and Garfield (16.1) counties had the highest rates of motorcyclists in crashes per vehicle miles traveled (VMT).
- Wayne (2.44), Rich (2.06), and Garfield (1.69) counties had the highest rates of motorcyclists killed in crashes.

Motorcyclists

Injury Severity of Motorcyclists in Crashes (Utah 2009)



- The percentage of motorcyclists sustaining a non-fatal injury (78.9%) was much higher than that of all persons in motor vehicle crashes sustaining a non-fatal injury (18.0%).
- The percentage of motorcyclists killed in crashes (2.4%) was higher than for all persons killed in motor vehicle crashes (0.2%).
- Motorcycle crashes were 7.3 times more likely to result in a death than other motor vehicle crashes.

Occupant Placement of Motorcyclists in Crashes (Utah 2009)

- Drivers accounted for the majority of motorcyclists in a crash (91.7%) and motorcyclists killed (96.7%).

Motorcyclists (Driver and Passenger)								
Occupant Placement	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Driver	212	91.4%	898	91.6%	29	96.7%	1,139	91.7%
Passenger	20	8.6%	82	8.4%	1	3.3%	103	8.3%
Total	232	100.0%	980	100.0%	30	100.0%	1,242	100.0%

Age of Motorcyclists in Crashes (Utah 2009)

Motorcyclists (Driver and Passenger)								
Age	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
0-9	1	0.4%	1	45.0%	0	0.0%	2	0.2%
10-14	2	0.9%	11	1.1%	0	0.0%	13	1.0%
15-19	15	6.5%	78	8.0%	1	3.3%	94	7.6%
20-24	26	11.2%	165	16.8%	0	0.0%	191	15.4%
25-29	43	18.5%	164	16.7%	3	10.0%	210	16.9%
30-34	21	9.1%	99	10.1%	2	6.7%	122	9.8%
35-39	23	9.9%	86	8.8%	1	3.3%	110	8.9%
40-44	15	6.5%	74	7.6%	2	6.7%	91	7.3%
45-49	20	8.6%	72	7.3%	6	20.0%	98	7.9%
50-54	21	9.1%	75	7.7%	5	16.7%	101	8.1%
55-59	21	9.1%	72	7.3%	4	13.3%	97	7.8%
60-64	8	3.4%	45	4.6%	4	13.3%	57	4.6%
65+	6	2.6%	28	2.9%	2	6.7%	36	2.9%
Unknown	10	4.3%	10	1.0%	0	0.0%	20	1.6%
Total	232	100.0%	980	144.9%	30	100.0%	1,242	100.0%

- Overall, the largest percentages of motorcyclists in crashes were aged 20-29 years (32.3%).
- The highest percentages of motorcyclist deaths were aged 45-64 years (63.3%).
- The average age of a motorcyclist in a crash was 36.7 years.

Gender of Motorcyclists in Crashes (Utah 2009)

- The majority of all motorcyclists (82.6%) and motorcyclists killed (93.3%) in crashes were male.

Motorcyclists (Driver and Passenger)								
Gender	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Male	188	81.0%	810	82.7%	28	93.3%	1026	82.6%
Female	36	15.5%	169	17.2%	2	6.7%	207	16.7%
Unknown	8	3.4%	1	0.1%	0	0.0%	9	0.7%
Total	232	100.0%	980	100.0%	30	100.0%	1,242	100.0%

Motorcyclists

Motorcycle Driver Age (Utah 2009)

Motorcycle Drivers								
Age	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
<15	0	0.0%	8	0.9%	0	0.0%	8	0.7%
15-19	13	7.2%	66	7.1%	1	3.3%	80	7.0%
20-24	24	13.3%	151	16.3%	0	0.0%	175	15.4%
25-29	34	18.8%	165	17.8%	3	10.0%	202	17.7%
30-34	21	11.6%	93	10.0%	2	6.7%	116	10.2%
35-39	16	8.8%	83	8.9%	1	3.3%	100	8.8%
40-44	10	5.5%	69	7.4%	2	6.7%	81	7.1%
45-49	11	6.1%	69	7.4%	6	20.0%	86	7.6%
50-54	16	8.8%	71	7.7%	4	13.3%	91	8.0%
55-59	14	7.7%	72	7.8%	5	16.7%	91	8.0%
60-64	7	3.9%	44	4.7%	4	13.3%	55	4.8%
65+	6	3.3%	27	2.9%	2	6.7%	35	3.1%
Unknown	9	5.0%	10	1.1%	0	0.0%	19	1.7%
Total	181	100.0%	928	100.0%	30	100.0%	1,139	100.0%

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

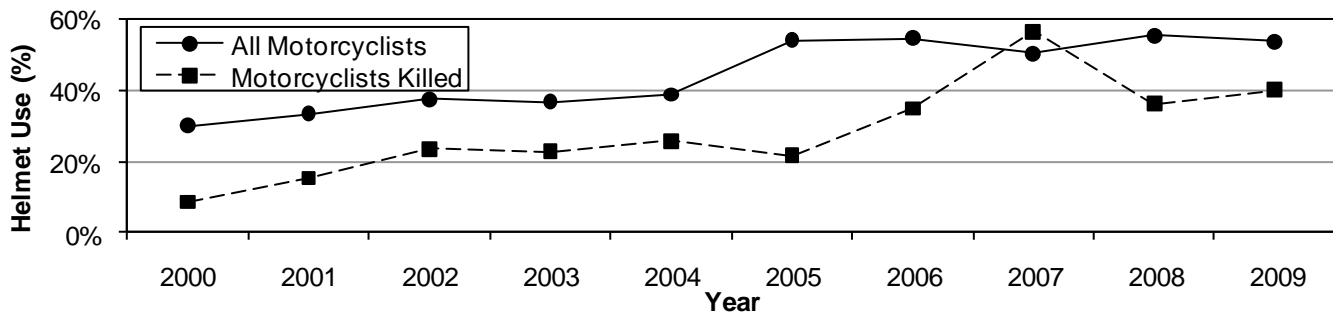
Motorcycle Driver License Status (Utah 2009)

- Of the 30 motorcycle drivers in fatal crashes, 27 (90.0%) had a motorcycle license.

Helmet Use of Motorcyclists in Crashes (Utah 2000-2009)

Motorcyclists (Driver and Passenger)												
Year	Non-Injured			Injured			Killed			Total		
	No Hlmt	Helmet		No Hlmt	Helmet		No Hlmt	Helmet		No Helmet	Helmet	
	#	#	%	#	#	%	#	#	%	#	#	%
2000	596	249	29.5%	480	218	31.2%	21	2	8.7%	1,097	469	29.9%
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%
Total	1,305	853	39.5%	4,452	3,784	45.9%	184	79	30.0%	5,941	4,716	44.3%

- Overall helmet use by motorcyclists in crashes increased from 29.9% in 2000 to 53.6% in 2009.
- Helmet use among motorcyclists killed has shown an increasing trend.



Motorcyclists

Helmet Use of Motorcyclists in Crashes (Utah 2009)

Motorcyclists (Driver and Passenger)								
Helmet Use	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Helmet Worn	95	40.9%	476	48.6%	12	40.0%	583	46.9%
Helmet Not Worn	51	22.0%	436	44.5%	18	60.0%	505	40.7%
Unknown	86	37.1%	68	6.9%	0	0.0%	154	12.4%
Total	232	100.0%	980	100.0%	30	100.0%	1,242	100.0%



- Only 53.6% (of known) of the motorcyclists in crashes wore a helmet.
- Only 12 of the 30 motorcyclists killed in crashes (40.0%) were wearing a helmet.

Motorcycle Crash Conditions

Motorcyclists in Crashes by Month (Utah 2009)

- 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 (Driver and Passenger)									
Month	# of Days	Non-Injured		Injured		Killed		Total	
		#	Rate per Day	#	Rate per Day	#	Rate per Day	#	Rate per Day
January	31	4	0.1	14	0.5	0	0.00	18	0.6
February	28	5	0.2	27	1.0	0	0.00	32	1.1
March	31	8	0.3	33	1.1	0	0.00	41	1.3
April	30	12	0.4	75	2.5	0	0.00	87	2.9
May	31	27	0.9	129	4.2	6	0.19	162	5.2
June	30	31	1.0	125	4.2	5	0.17	161	5.4
July	31	48	1.5	141	4.5	4	0.13	193	6.2
August	31	34	1.1	187	6.0	11	0.35	232	7.5
September	30	30	1.0	131	4.4	2	0.07	163	5.4
October	31	22	0.7	77	2.5	2	0.06	101	3.3
November	30	10	0.3	33	1.1	0	0.00	43	1.4
December	31	1	0.0	8	0.3	0	0.00	9	0.3
Total	365	232	0.6	980	2.7	30	0.08	1,242	3.4

Motorcyclists in Crashes by Day of Week (Utah 2009)

Motorcyclists (Driver and Passenger)								
Day of Week	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Sunday	33	14.2%	149	15.2%	3	10.0%	185	14.9%
Monday	36	15.5%	130	13.3%	1	3.3%	167	13.4%
Tuesday	30	12.9%	118	12.0%	3	10.0%	151	12.2%
Wednesday	25	10.8%	134	13.7%	7	23.3%	166	13.4%
Thursday	29	12.5%	99	10.1%	4	13.3%	132	10.6%
Friday	33	14.2%	153	15.6%	6	20.0%	192	15.5%
Saturday	46	19.8%	197	20.1%	6	20.0%	249	20.0%
Total	232	100.0%	980	100.0%	30	100.0%	1,242	100.0%

- Over one-third (35.5%) of total motorcycle crashes occurred on Friday and Saturday.
- Fatal motorcycle crashes occurred most frequently on Wednesday (23.3%).

Motorcycle Crash Conditions

Motorcyclists in Crashes by Hour (Utah 2009)

Motorcyclists (Driver and Passenger)								
Hour	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Midnight	5	2.2%	29	3.0%	0	0.0%	34	2.7%
1 a.m.	3	1.3%	14	1.4%	0	0.0%	17	1.4%
2 a.m.	0	0.0%	11	1.1%	0	0.0%	11	0.9%
3 a.m.	0	0.0%	2	0.2%	0	0.0%	2	0.2%
4 a.m.	0	0.0%	3	0.3%	0	0.0%	3	0.2%
5 a.m.	0	0.0%	4	0.4%	0	0.0%	4	0.3%
6 a.m.	1	0.4%	11	1.1%	1	3.3%	13	1.0%
7 a.m.	5	2.2%	27	2.8%	0	0.0%	32	2.6%
8 a.m.	9	3.9%	20	2.0%	0	0.0%	29	2.3%
9 a.m.	6	2.6%	23	2.3%	1	3.3%	30	2.4%
10 a.m.	9	3.9%	32	3.3%	1	3.3%	42	3.4%
11 a.m.	10	4.3%	44	4.5%	2	6.7%	56	4.5%
Noon	16	6.9%	58	5.9%	2	6.7%	76	6.1%
1 p.m.	20	8.6%	81	8.3%	3	10.0%	104	8.4%
2 p.m.	22	9.5%	77	7.9%	2	6.7%	101	8.1%
3 p.m.	19	8.2%	95	9.7%	2	6.7%	116	9.3%
4 p.m.	18	7.8%	98	10.0%	1	3.3%	117	9.4%
5 p.m.	21	9.1%	92	9.4%	2	6.7%	115	9.3%
6 p.m.	17	7.3%	63	6.4%	3	10.0%	83	6.7%
7 p.m.	11	4.7%	54	5.5%	2	6.7%	67	5.4%
8 p.m.	15	6.5%	41	4.2%	2	6.7%	58	4.7%
9 p.m.	7	3.0%	50	5.1%	5	16.7%	62	5.0%
10 p.m.	9	3.9%	37	3.8%	1	3.3%	47	3.8%
11 p.m.	9	3.9%	14	1.4%	0	0.0%	23	1.9%
Total	232	100.0%	980	100.0%	30	100.0%	1,242	100.0%

- Over one-half (51.2%) of total motorcycle crashes occurred between 1:00 p.m. and 6:59 p.m.

Travel Speed (Utah 2009)

- Nearly two-thirds (64.5% where travel speed was known) of motorcycles in total crashes were traveling 10-49 MPH.
- Most (76.9% of known) of the motorcycles in fatal crashes were traveling 50 MPH or higher.

Motorcycles								
Travel Speed	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Parked	8	4.2%	3	0.3%	0	0.0%	11	1.0%
Stopped	23	12.2%	33	3.5%	0	0.0%	56	4.9%
1-9 MPH	14	7.4%	26	2.8%	0	0.0%	40	3.5%
10-19 MPH	19	10.1%	83	8.9%	0	0.0%	102	8.9%
20-29 MPH	26	13.8%	107	11.5%	1	3.3%	134	11.7%
30-39 MPH	19	10.1%	165	17.7%	3	10.0%	187	16.3%
40-49 MPH	12	6.3%	100	10.7%	2	6.7%	114	9.9%
50-59 MPH	6	3.2%	60	6.4%	7	23.3%	73	6.3%
60-69 MPH	8	4.2%	61	6.6%	12	40.0%	81	7.0%
70-79 MPH	1	0.5%	19	2.0%	1	3.3%	21	1.8%
80+ MPH	3	1.6%	11	1.2%	0	0.0%	14	1.2%
Unknown	50	26.5%	263	28.2%	4	13.3%	317	27.6%
Total	189	100.0%	931	100.0%	30	100.0%	1,150	100.0%

Motorcycle Crash Conditions

Maneuver of Other Vehicle Prior to Motorcycle Crash (Utah 2009)

Vehicles Other than Motorcycles (Motorcycle Crash)								
Vehicle Maneuver	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Straight Ahead	64	45.1%	160	30.7%	5	33.3%	229	33.8%
Turning Left	17	12.0%	146	28.0%	8	53.3%	171	25.2%
Stopped in Traffic Lane	16	11.3%	57	10.9%	0	0.0%	73	10.8%
Slowing in Traffic Lane	7	4.9%	31	6.0%	0	0.0%	38	5.6%
Turning Right	7	4.9%	31	6.0%	0	0.0%	38	5.6%
Changing Lanes	8	5.6%	28	5.4%	1	6.7%	37	5.5%
Making U-turn	2	1.4%	32	6.1%	0	0.0%	34	5.0%
Parked/Parking	10	7.0%	15	2.9%	0	0.0%	25	3.7%
Entering/Leaving Traffic Lane	3	2.1%	9	1.7%	0	0.0%	12	1.8%
Backing	6	4.2%	3	0.6%	0	0.0%	9	1.3%
Overtaking/Passing	0	0.0%	1	0.2%	1	6.7%	2	0.3%
Unknown	2	1.4%	8	1.5%	0	0.0%	10	1.5%
Total	142	100.0%	521	100.0%	15	100.0%	678	100.0%

- For all motorcycle crashes, the leading maneuvers of vehicles other than motorcycles prior to the crash were straight ahead (33.8%) and turning left (25.2%).

Contributing Factors of Drivers Other than Motorcyclists in Motorcycle Crashes (Utah 2009)

Drivers/Vehicles Other than Motorcycles (Motorcycle Crash)								
Contributing Factors	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Failed to Yield Right of Way	18	14.3%	152	34.4%	4	21.1%	174	29.6%
Improper Turn	8	6.3%	54	12.2%	4	21.1%	66	11.2%
Followed Too Closely	22	17.5%	36	8.1%	2	10.5%	60	10.2%
Other Improper Driving	15	11.9%	29	6.6%	0	0.0%	44	7.5%
Improper Lane Change	9	7.1%	24	5.4%	1	5.3%	34	5.8%
Driver Distraction	7	5.6%	18	4.1%	1	5.3%	26	4.4%
Failed to Keep in Proper Lane	7	5.6%	14	3.2%	0	0.0%	21	3.6%
Disregard Traffic Signal/Sign	2	1.6%	16	3.6%	0	0.0%	18	3.1%
Vision Obscured by Moving Vehicle	1	0.8%	16	3.6%	1	5.3%	18	3.1%
Hit and Run	7	5.6%	9	2.0%	0	0.0%	16	2.7%
Vision Obscured by Other	1	0.8%	12	2.7%	1	5.3%	14	2.4%
Swerved or Evasive Action	1	0.8%	11	2.5%	1	5.3%	13	2.2%
Driving Under the Influence	3	2.4%	8	1.8%	1	5.3%	12	2.0%
Vehicle Defective Condition	4	3.2%	7	1.6%	0	0.0%	11	1.9%
Speed Too Fast	1	0.8%	6	1.4%	2	10.5%	9	1.5%
Vision Obscured by Glare	3	2.4%	5	1.1%	0	0.0%	8	1.4%
Improper Backing	5	4.0%	1	0.2%	0	0.0%	6	1.0%
Improper Parking/Stopping	3	2.4%	3	0.7%	0	0.0%	6	1.0%
Reckless/Aggressive Driving	2	1.6%	4	0.9%	0	0.0%	6	1.0%
Driver Emotionally Upset	2	1.6%	3	0.7%	0	0.0%	5	0.9%
Other Driver Condition	1	0.8%	4	0.9%	0	0.0%	5	0.9%
Improper Passing	1	0.8%	2	0.5%	1	5.3%	4	0.7%
Wrong Side/Wrong Way	1	0.8%	3	0.7%	0	0.0%	4	0.7%
Vision Obscured by Parked Vehicle	1	0.8%	3	0.7%	0	0.0%	4	0.7%
Disregard Road Markings	1	0.8%	2	0.5%	0	0.0%	3	0.5%
Total	126	100.0%	442	100.0%	19	100.0%	587	100.0%

- Failed to yield right of way (29.6%), improper turn (11.2%), and followed too closely (10.2%) 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 2009)

Motorcycle Drivers/Vehicles								
Contributing Factors	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Speed Too Fast	20	14.8%	114	12.8%	9	20.0%	143	13.4%
Failed to Keep in Proper Lane	13	9.6%	109	12.3%	13	28.9%	135	12.6%
Followed Too Closely	17	12.6%	101	11.4%	2	4.4%	120	11.2%
Other Improper Driving	13	9.6%	86	9.7%	0	0.0%	99	9.3%
Swerved or Evasive Action	7	5.2%	65	7.3%	2	4.4%	74	6.9%
Ran Off Road	5	3.7%	57	6.4%	9	20.0%	71	6.6%
Driving Under the Influence	2	1.5%	45	5.1%	2	4.4%	49	4.6%
Overcorrected	7	5.2%	40	4.5%	0	0.0%	47	4.4%
Failed to Yield Right of Way	8	5.9%	34	3.8%	1	2.2%	43	4.0%
Reckless/Aggressive Driving	3	2.2%	33	3.7%	1	2.2%	37	3.5%
Driver Distraction	3	2.2%	28	3.1%	1	2.2%	32	3.0%
Vehicle Other Defective Condition	4	3.0%	24	2.7%	0	0.0%	28	2.6%
Improper Turn	3	2.2%	22	2.5%	1	2.2%	26	2.4%
Vehicle Tires	5	3.7%	12	1.3%	1	2.2%	18	1.7%
Disregard Traffic Signal/Sign	1	0.7%	12	1.3%	1	2.2%	14	1.3%
Improper Passing	4	3.0%	10	1.1%	0	0.0%	14	1.3%
Other Driver Condition	3	2.2%	11	1.2%	0	0.0%	14	1.3%
Vision Obscured by Moving Vehicle	4	3.0%	10	1.1%	0	0.0%	14	1.3%
Vision Obscured by Weather Condition	6	4.4%	7	0.8%	0	0.0%	13	1.2%
Improper Parking/Stopping	0	0.0%	11	1.2%	0	0.0%	11	1.0%
Vision Obscured by Other	0	0.0%	11	1.2%	0	0.0%	11	1.0%
Improper Lane Change	2	1.5%	6	0.7%	1	2.2%	9	0.8%
Hit and Run	3	2.2%	5	0.6%	0	0.0%	8	0.7%
Vehicle Brakes	0	0.0%	8	0.9%	0	0.0%	8	0.7%
Vision Obscured by Vegetation	0	0.0%	6	0.7%	1	2.2%	7	0.7%
Vision Obscured by Physical Obstruction	0	0.0%	6	0.7%	0	0.0%	6	0.6%
Asleep/Fatigue	0	0.0%	5	0.6%	0	0.0%	5	0.5%
Driver Emotionally Upset	0	0.0%	3	0.3%	0	0.0%	3	0.3%
Vision Obscured by Glare	1	0.7%	2	0.2%	0	0.0%	3	0.3%
Driver Illness/Medical	0	0.0%	2	0.2%	0	0.0%	2	0.2%
Vision Obscured by Parked Vehicle	1	0.7%	1	0.1%	0	0.0%	2	0.2%
Wrong Side/Wrong Way	0	0.0%	2	0.2%	0	0.0%	2	0.2%
Improper Backing	0	0.0%	1	0.1%	0	0.0%	1	0.1%
Total	135	100.0%	889	100.0%	45	100.0%	1,069	100.0%

- Speed too fast (13.4%), failed to keep in proper lane (12.6%), and followed too closely (11.2%) were the leading contributing factors for all motorcycle crashes.
- The leading contributing factors for fatal crashes were failed to keep in proper lane (28.9%), speed too fast (20.0%), and ran off road (20.0%).

Pedestrians



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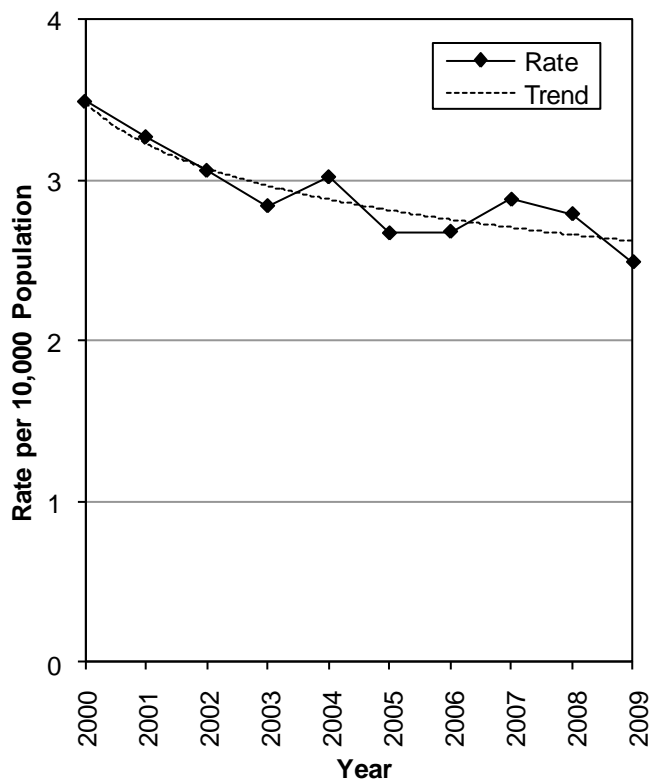
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Trends

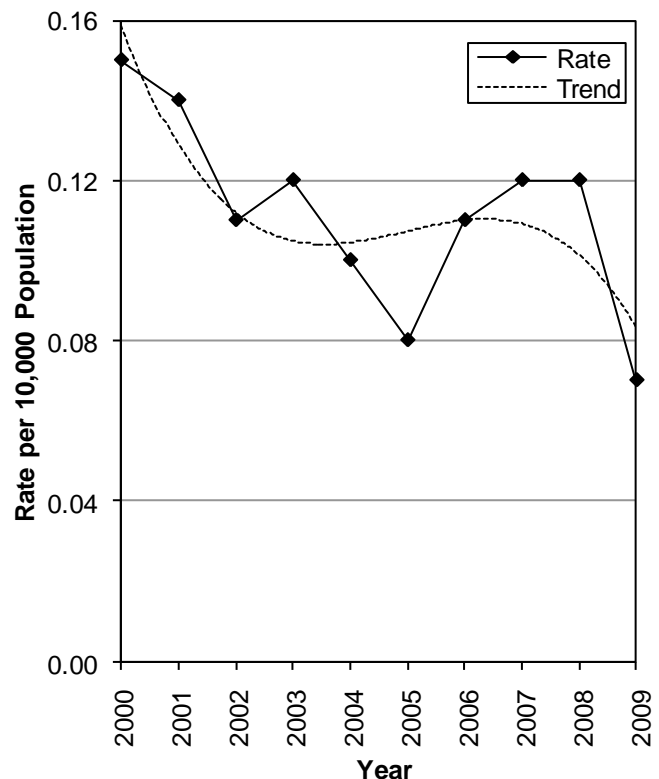
Pedestrians in Crashes (Utah 2000-2009)

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.
2000	44	0.20	708	3.15	33	0.15	785	3.49
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
Total	519	0.21	6,520	2.59	279	0.11	7,318	2.90

Pedestrian Crash Rates Per Population (Utah 2000-2009)



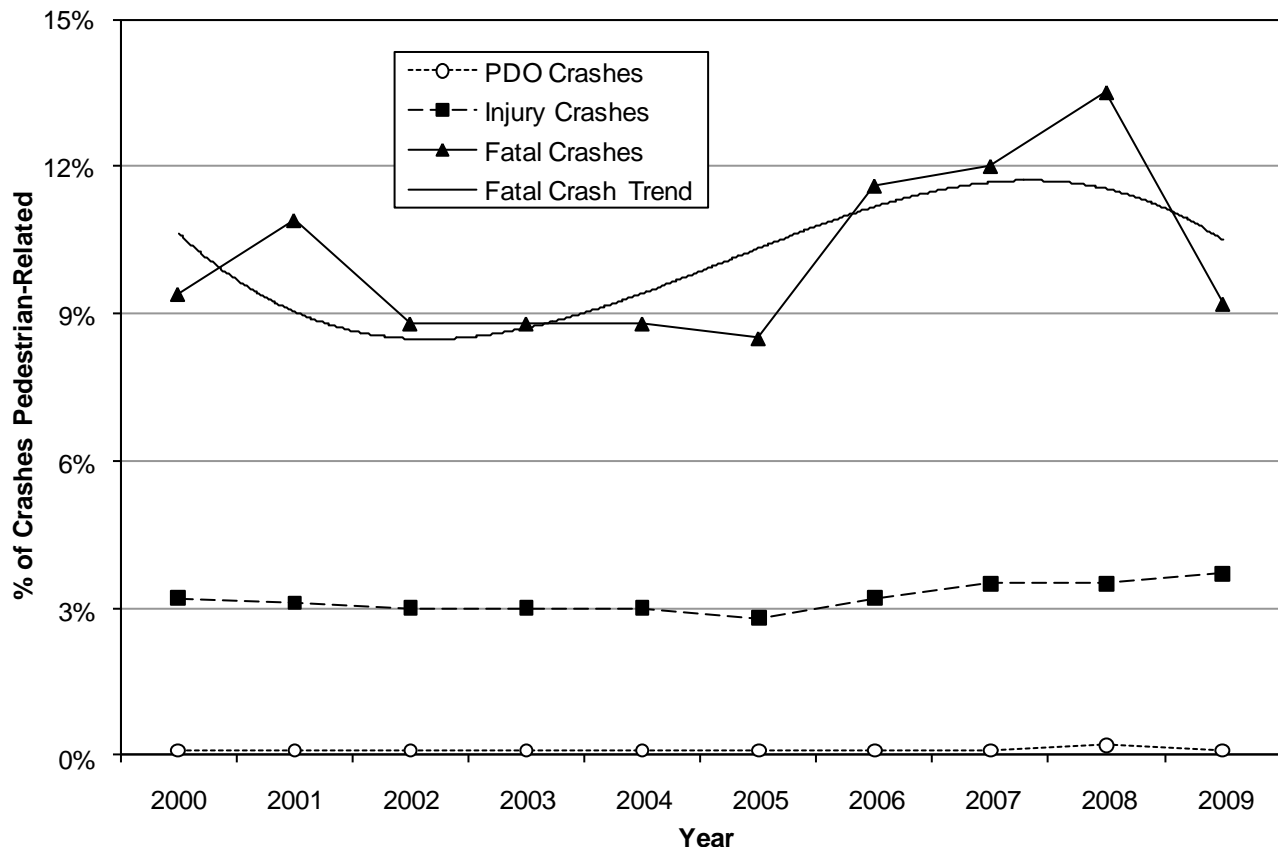
Pedestrian Death Rates Per Population (Utah 2000-2009)



- Over the last 10 years, total pedestrian crash rates per population have followed a decreasing trend.
- In 2009, the total rate per population of pedestrians in crashes decreased 11% from 2008.
- 2009 had the lowest rate per population of total pedestrians in crashes.
- The pedestrian death rates per population decreased in 2009 after an increasing trend over the previous three years.
- 2000 had the highest rate per population of pedestrians killed in crashes (0.15), while 2009 had the lowest rate (0.07).

Pedestrian-Motor Vehicle Crashes (Utah 2000-2009)

Pedestrian-Motor Vehicle Crashes												
Year	Property Damage Only			Injury			Fatal			Total		
	All	Pedestrian		All	Pedestrian		All	Pedestrian		All	Pedestrian	
	#	#	%	#	#	%	#	#	%	#	#	%
2000	33,269	31	0.1%	19,564	626	3.2%	318	30	9.4%	53,151	687	1.3%
2001	33,113	30	0.1%	19,332	597	3.1%	258	28	10.9%	52,703	655	1.2%
2002	33,542	28	0.1%	19,552	584	3.0%	274	24	8.8%	53,368	636	1.2%
2003	31,842	36	0.1%	18,285	540	3.0%	262	23	8.8%	50,389	599	1.2%
2004	34,222	37	0.1%	19,423	583	3.0%	260	23	8.8%	53,905	643	1.2%
2005	35,158	28	0.1%	19,545	552	2.8%	235	20	8.5%	54,938	600	1.1%
2006	37,749	33	0.1%	18,189	580	3.2%	249	29	11.6%	56,187	642	1.1%
2007	42,368	40	0.1%	18,619	653	3.5%	258	31	12.0%	61,245	724	1.2%
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%
Total	355,658	369	0.1%	185,386	5,908	3.2%	2,576	261	10.1%	543,620	6,538	1.2%

Percent of Crashes Pedestrian-Related (Utah 2000-2009)

- The 10-year trend shows that pedestrian-motor vehicle crashes represent 0.1% of property damage only crashes, 3.2% of injury crashes, and 10.1% of fatal crashes.
- Pedestrians are over-represented in fatal crashes accounting for 10.1% of fatal crashes compared to 1.2% of total crashes.
- From 2008 to 2009, the percent of fatal crashes that involved a pedestrian decreased 32%.
- During the last 10 years, the highest percent of fatal crashes involving pedestrians occurred in 2008 (13.5%).

Counties

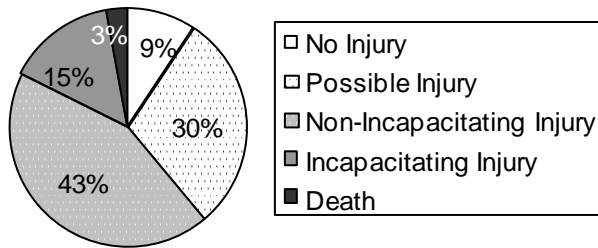
Pedestrians in Crashes by County (Utah 2009)

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.
Grand	0	0.00	4	4.21	0	0.00	4	4.21
Garfield	0	0.00	2	3.88	0	0.00	2	3.88
Salt Lake	37	0.36	323	3.10	11	0.11	371	3.56
Carbon	1	0.51	6	3.04	0	0.00	7	3.54
Beaver	1	1.52	1	1.52	0	0.00	2	3.04
Weber	7	0.31	51	2.24	3	0.13	61	2.68
Box Elder	2	0.40	10	2.02	1	0.20	13	2.63
Sevier	0	0.00	5	2.41	0	0.00	5	2.41
Iron	1	0.21	10	2.14	0	0.00	11	2.35
Davis	5	0.16	54	1.76	1	0.03	60	1.95
Cache	1	0.09	21	1.84	0	0.00	22	1.93
Utah	6	0.11	87	1.64	2	0.04	95	1.79
Summit	1	0.25	6	1.48	0	0.00	7	1.73
Washington	2	0.14	23	1.58	0	0.00	25	1.72
Tooele	0	0.00	8	1.35	0	0.00	8	1.35
Duchesne	0	0.00	1	0.58	1	0.58	2	1.15
Emery	1	0.92	0	0.00	0	0.00	1	0.92
Wasatch	0	0.00	0	0.00	1	0.43	1	0.43
Uintah	0	0.00	1	0.32	0	0.00	1	0.32
Daggett	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
Sanpete	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
Statewide	65	0.23	613	2.19	20	0.07	698	2.49

- Grand (4.21), Garfield (3.88), and Salt Lake (3.56) counties had the highest rates of pedestrians in crashes per 10,000 population.
- Daggett, Juab, Kane, Millard, Morgan, Piute, Rich, San Juan, Sanpete, and Wayne counties had no pedestrians in crashes.

Pedestrians

Injury Severity of Pedestrians in Crashes (Utah 2009)



- 87.8% of pedestrians in crashes sustained an injury compared to 18.0% of all persons in crashes.
- The percentage of pedestrians killed in crashes (2.9%) was much higher than the percentage for all persons killed in motor vehicle crashes (0.2%).
- Pedestrian crashes were 8.1 times more likely to result in a death than other motor vehicle crashes.

Age of Pedestrians in Crashes (Utah 2009)

Pedestrians								
Age	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
0-4	8	12.3%	33	5.4%	0	0.0%	41	5.9%
5-9	7	10.8%	49	8.0%	0	0.0%	56	8.0%
10-14	5	7.7%	76	12.4%	0	0.0%	81	11.6%
15-19	8	12.3%	89	14.5%	0	0.0%	97	13.9%
20-24	5	7.7%	60	9.8%	3	15.0%	68	9.7%
25-29	5	7.7%	53	8.6%	0	0.0%	58	8.3%
30-34	4	6.2%	33	5.4%	1	5.0%	38	5.4%
35-39	1	1.5%	31	5.1%	0	0.0%	32	4.6%
40-44	3	4.6%	32	5.2%	1	5.0%	36	5.2%
45-49	3	4.6%	33	5.4%	2	10.0%	38	5.4%
50-54	1	1.5%	23	3.8%	3	15.0%	27	3.9%
55-59	2	3.1%	14	2.3%	3	15.0%	19	2.7%
60-64	0	0.0%	11	1.8%	2	10.0%	13	1.9%
65-69	1	1.5%	17	2.8%	1	5.0%	19	2.7%
70-74	0	0.0%	8	1.3%	0	0.0%	8	1.1%
75-79	0	0.0%	2	0.3%	2	10.0%	4	0.6%
80-84	0	0.0%	3	0.5%	1	5.0%	4	0.6%
85+	0	0.0%	4	0.7%	1	5.0%	5	0.7%
Unknown	12	18.5%	42	6.9%	0	0.0%	54	7.7%
Total	65	100.0%	613	100.0%	20	100.0%	698	100.0%

- Overall, the largest percentages of pedestrians in crashes were aged 10-24 years (38.2% of known).
- The highest percentage of pedestrian deaths occurred in the 45-64 year age group (50.0%).
- The average age of a pedestrian in a crash was 28 years. The average age of a pedestrian killed was 54 years.

Gender of Pedestrians in Crashes (Utah 2009)

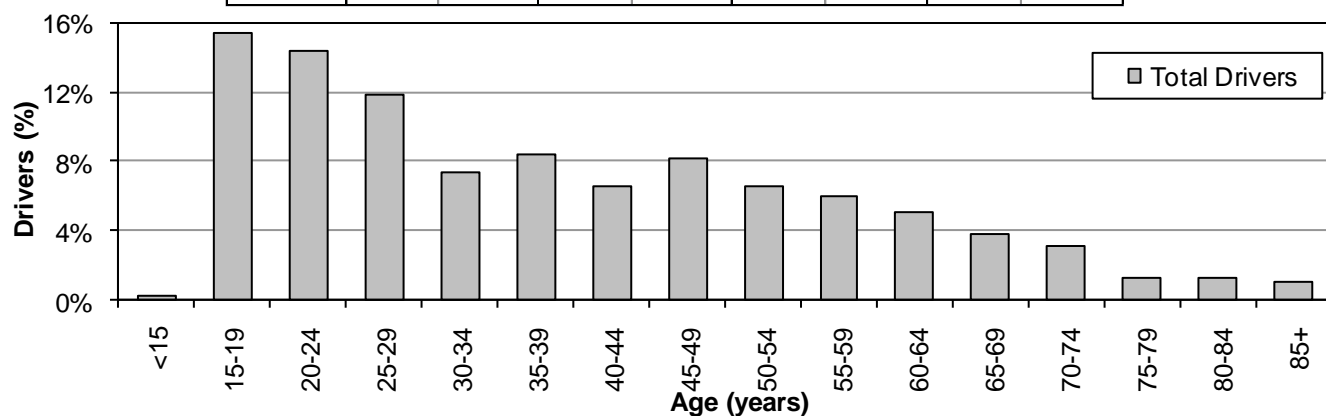
Pedestrians								
Gender	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Male	37	56.9%	339	55.3%	14	70.0%	390	55.9%
Female	18	27.7%	261	42.6%	6	30.0%	285	40.8%
Unknown	10	15.4%	13	2.1%	0	0.0%	23	3.3%
Total	65	100.0%	613	100.0%	20	100.0%	698	100.0%

- The majority of all pedestrians hit (55.9%) and pedestrians killed (70.0%) in crashes were male.

Drivers

Driver Age (Utah 2009)

Drivers (Pedestrian-Motor Vehicle Crashes)								
Age	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
<15	0	0.0%	1	0.2%	0	0.0%	1	0.1%
15-19	5	10.6%	82	13.6%	3	12.0%	90	13.3%
20-24	4	8.5%	77	12.7%	3	12.0%	84	12.4%
25-29	10	21.3%	58	9.6%	1	4.0%	69	10.2%
30-34	2	4.3%	40	6.6%	1	4.0%	43	6.4%
35-39	2	4.3%	44	7.3%	3	12.0%	49	7.2%
40-44	4	8.5%	31	5.1%	3	12.0%	38	5.6%
45-49	5	10.6%	38	6.3%	4	16.0%	47	7.0%
50-54	3	6.4%	35	5.8%	0	0.0%	38	5.6%
55-59	4	8.5%	28	4.6%	3	12.0%	35	5.2%
60-64	3	6.4%	25	4.1%	1	4.0%	29	4.3%
65-69	0	0.0%	22	3.6%	0	0.0%	22	3.3%
70-74	1	2.1%	16	2.6%	1	4.0%	18	2.7%
75-79	0	0.0%	7	1.2%	0	0.0%	7	1.0%
80-84	0	0.0%	7	1.2%	0	0.0%	7	1.0%
85+	0	0.0%	5	0.8%	1	4.0%	6	0.9%
Unknown	4	8.5%	88	14.6%	1	4.0%	93	13.8%
Total	47	100.0%	604	100.0%	25	100.0%	676	100.0%



- Nearly half (41.9% of known) of drivers in total pedestrian-motor vehicle crashes were under 30 years.
- The percentage of drivers in fatal pedestrian-motor vehicle crashes was highest for those aged 45-49 years.
- The average age of a driver was 39 years. The average age of a driver in a fatal crash was 41 years.

Driver Gender (Utah 2009)

Drivers (Pedestrian-Motor Vehicle Crashes)								
Gender	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Male	19	40.4%	341	56.5%	18	72.0%	378	55.9%
Female	25	53.2%	200	33.1%	6	24.0%	231	34.2%
Unknown	3	6.4%	63	10.4%	1	4.0%	67	9.9%
Total	47	100.0%	604	100.0%	25	100.0%	676	100.0%

- Most drivers in total pedestrian crashes (62.1% of known) and fatal crashes (75.0% of known) were male.

Pedestrian-Motor Vehicle Crash Conditions

Contributing Factors of Pedestrians in Crashes (Utah 2009)

Contributing Factors	Pedestrians							
	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
None	20	30.8%	202	33.0%	11	55.0%	233	33.4%
Improper Crossing	7	10.8%	85	13.9%	1	5.0%	93	13.3%
Inattentive	2	3.1%	34	5.5%	0	0.0%	36	5.2%
Darting	2	3.1%	31	5.1%	1	5.0%	34	4.9%
In Roadway (standing, kneeling, lying)	5	7.7%	23	3.8%	4	20.0%	32	4.6%
Failure to Obey Traffic Signs/Signals	0	0.0%	15	2.4%	0	0.0%	15	2.1%
Not Visible	0	0.0%	10	1.6%	3	15.0%	13	1.9%
Failure to Yield Right of Way	1	1.5%	6	1.0%	0	0.0%	7	1.0%
Other	0	0.0%	32	5.2%	0	0.0%	32	4.6%
Unknown	28	43.1%	175	28.5%	0	0.0%	203	29.1%
Total	65	100.0%	613	100.0%	20	100.0%	698	100.0%

- Improper crossing (18.8% of known), inattentive (7.3% of known), and darting (6.9% of known) were the leading contributing factors for pedestrians in total crashes.
- In roadway (20.0%) and not visible (15.0%) were the leading contributing factors for pedestrians killed.
- No contributing factors were listed for 55.0% of the pedestrians killed and 47.1% (of known) of total pedestrians.
- Other contributing factors to consider are drivers (see page 100), 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 2009)

Month	# of Days	Pedestrians							
		Non-Injured		Injured		Killed		Total	
		#	Rate per Day	#	Rate per Day	#	Rate per Day	#	Rate per Day
January	31	2	0.06	55	1.77	1	0.03	58	1.87
February	28	10	0.36	57	2.04	2	0.07	69	2.46
March	31	6	0.19	51	1.65	2	0.06	59	1.90
April	30	1	0.03	51	1.70	2	0.07	54	1.80
May	31	3	0.10	46	1.48	4	0.13	53	1.71
June	30	8	0.27	42	1.40	0	0.00	50	1.67
July	31	10	0.32	47	1.52	0	0.00	57	1.84
August	31	7	0.23	46	1.48	1	0.03	54	1.74
September	30	4	0.13	66	2.20	1	0.03	71	2.37
October	31	6	0.19	48	1.55	3	0.10	57	1.84
November	30	4	0.13	59	1.97	2	0.07	65	2.17
December	31	4	0.13	45	1.45	2	0.06	51	1.65
Total	365	65	0.18	613	1.68	20	0.05	698	1.91

- February, September, and November had the highest rates per day of total pedestrian-motor vehicle crashes.
- May (0.13) and October (0.10) had the highest rates per day of pedestrian deaths.

Pedestrian-Motor Vehicle Crash Conditions

Pedestrian-Motor Vehicle Crashes by Hour (Utah 2009)

Hour	Pedestrians							
	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Midnight	1	1.5%	4	0.7%	0	0.0%	5	0.7%
1 a.m.	0	0.0%	9	1.5%	0	0.0%	9	1.3%
2 a.m.	0	0.0%	6	1.0%	0	0.0%	6	0.9%
3 a.m.	0	0.0%	3	0.5%	0	0.0%	3	0.4%
4 a.m.	0	0.0%	5	0.8%	1	5.0%	6	0.9%
5 a.m.	0	0.0%	7	1.1%	1	5.0%	8	1.1%
6 a.m.	1	1.5%	16	2.6%	1	5.0%	18	2.6%
7 a.m.	3	4.6%	38	6.2%	1	5.0%	42	6.0%
8 a.m.	1	1.5%	47	7.7%	1	5.0%	49	7.0%
9 a.m.	1	1.5%	13	2.1%	1	5.0%	15	2.1%
10 a.m.	3	4.6%	17	2.8%	0	0.0%	20	2.9%
11 a.m.	1	1.5%	24	3.9%	3	15.0%	28	4.0%
Noon	5	7.7%	23	3.8%	1	5.0%	29	4.2%
1 p.m.	2	3.1%	31	5.1%	0	0.0%	33	4.7%
2 p.m.	4	6.2%	41	6.7%	1	5.0%	46	6.6%
3 p.m.	7	10.8%	65	10.6%	2	10.0%	74	10.6%
4 p.m.	6	9.2%	43	7.0%	2	10.0%	51	7.3%
5 p.m.	8	12.3%	51	8.3%	0	0.0%	59	8.5%
6 p.m.	4	6.2%	41	6.7%	1	5.0%	46	6.6%
7 p.m.	4	6.2%	39	6.4%	2	10.0%	45	6.4%
8 p.m.	4	6.2%	25	4.1%	1	5.0%	30	4.3%
9 p.m.	2	3.1%	35	5.7%	0	0.0%	37	5.3%
10 p.m.	6	9.2%	19	3.1%	1	5.0%	26	3.7%
11 p.m.	2	3.1%	11	1.8%	0	0.0%	13	1.9%
Total	65	100.0%	613	100.0%	20	100.0%	698	100.0%

- Total pedestrian-motor vehicle crashes were more likely to occur between 3:00 p.m. and 5:59 p.m.
- Fatal pedestrian-motor vehicle crashes were highest during the 11:00 a.m. hour.

Pedestrian-Motor Vehicle Crashes by Day of Week (Utah 2009)

Day of Week	Pedestrians							
	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Sunday	6	9.2%	38	6.2%	4	20.0%	48	6.9%
Monday	7	10.8%	99	16.2%	3	15.0%	109	15.6%
Tuesday	13	20.0%	115	18.8%	4	20.0%	132	18.9%
Wednesday	7	10.8%	92	15.0%	5	25.0%	104	14.9%
Thursday	11	16.9%	112	18.3%	2	10.0%	125	17.9%
Friday	7	10.8%	87	14.2%	1	5.0%	95	13.6%
Saturday	14	21.5%	70	11.4%	1	5.0%	85	12.2%
Total	65	100.0%	613	100.0%	20	100.0%	698	100.0%

- The highest percentage of total pedestrian-motor vehicle crashes (18.9%) occurred on Tuesday.

Pedestrian-Motor Vehicle Crash Conditions

Vehicle Maneuver Prior to Crash (Utah 2009)

Vehicles (Pedestrian-Motor Vehicle Crashes)								
Vehicle Maneuver	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Straight Ahead	27	55.1%	330	52.4%	18	66.7%	375	53.1%
Turning Right	10	20.4%	125	19.8%	0	0.0%	135	19.1%
Turning Left	5	10.2%	82	13.0%	3	11.1%	90	12.7%
Parked/Parking	2	4.1%	30	4.8%	2	7.4%	34	4.8%
Backing	2	4.1%	27	4.3%	0	0.0%	29	4.1%
Stopped/Slowing in Traffic Lane	1	2.0%	18	2.9%	2	7.4%	21	3.0%
Entering Traffic Lane	0	0.0%	8	1.3%	0	0.0%	8	1.1%
Overtaking/Passing	1	2.0%	2	0.3%	1	3.7%	4	0.6%
Changing Lanes	0	0.0%	2	0.3%	1	3.7%	3	0.4%
Other	0	0.0%	2	0.3%	0	0.0%	2	0.3%
Unknown	1	2.0%	4	0.6%	0	0.0%	5	0.7%
Total	49	100.0%	630	100.0%	27	100.0%	706	100.0%

- The leading vehicle maneuvers prior to the crash were straight ahead (53.1%), turning right (19.1%), and turning left (12.7%).

Pedestrian-Motor Vehicle Crashes by Speed Limit (Utah 2009)

Vehicles (Pedestrian-Motor Vehicle Crashes)								
Speed Limit	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
5-15 MPH	1	2.1%	20	3.3%	0	0.0%	21	3.1%
20-25 MPH	8	17.0%	141	23.3%	1	4.0%	150	22.2%
30-35 MPH	11	23.4%	154	25.5%	7	28.0%	172	25.4%
40-45 MPH	6	12.8%	90	14.9%	4	16.0%	100	14.8%
50-55 MPH	3	6.4%	12	2.0%	2	8.0%	17	2.5%
60-65 MPH	4	8.5%	7	1.2%	10	40.0%	21	3.1%
70+ MPH	0	0.0%	7	1.2%	1	4.0%	8	1.2%
Unknown	14	29.8%	173	28.6%	0	0.0%	187	27.7%
Total	47	100.0%	604	100.0%	25	100.0%	676	100.0%

- The majority (86.3% of known) of total pedestrian crashes occurred where the speed limit was 20-45 MPH.

Travel Speed of Vehicles in Pedestrian Crashes (Utah 2009)

Vehicles (Pedestrian-Motor Vehicle Crashes)								
Travel Speed	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Parked	2	4.1%	26	4.1%	2	7.4%	30	4.2%
Stopped	0	0.0%	9	1.4%	2	7.4%	11	1.6%
1-9 MPH	7	14.3%	119	18.9%	1	3.7%	127	18.0%
10-19 MPH	4	8.2%	77	12.2%	1	3.7%	82	11.6%
20-29 MPH	0	0.0%	69	11.0%	1	3.7%	70	9.9%
30-39 MPH	3	6.1%	49	7.8%	7	25.9%	59	8.4%
40-49 MPH	2	4.1%	17	2.7%	3	11.1%	22	3.1%
50-59 MPH	1	2.0%	14	2.2%	4	14.8%	19	2.7%
60-69 MPH	2	4.1%	4	0.6%	2	7.4%	8	1.1%
70+ MPH	0	0.0%	2	0.3%	0	0.0%	2	0.3%
Unknown	28	57.1%	244	38.7%	4	14.8%	276	39.1%
Total	49	100.0%	630	100.0%	27	100.0%	706	100.0%

- 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 9.7 times more likely to die.

Pedestrian-Motor Vehicle Crash Conditions

Contributing Factors in Pedestrian Crashes (Utah 2009)

Drivers/Vehicles (Pedestrian-Motor Vehicle Crashes)								
Contributing Factors	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Failed to Yield Right of Way	10	22.7%	195	30.8%	5	10.2%	210	28.9%
Other Improper Driving	7	15.9%	61	9.6%	0	0.0%	68	9.4%
Hit and Run	3	6.8%	61	9.6%	3	6.1%	67	9.2%
Driver Distraction	2	4.5%	43	6.8%	3	6.1%	48	6.6%
Vision Obscured by Weather Condition	3	6.8%	25	3.9%	4	8.2%	32	4.4%
Speed Too Fast	2	4.5%	21	3.3%	6	12.2%	29	4.0%
Vision Obscured by Moving Vehicle	1	2.3%	23	3.6%	1	2.0%	25	3.4%
Failed to Keep in Proper Lane	2	4.5%	13	2.1%	7	14.3%	22	3.0%
Vision Obscured by Glare	1	2.3%	18	2.8%	1	2.0%	20	2.8%
Vision Obscured by Other	3	6.8%	15	2.4%	0	0.0%	18	2.5%
Improper Turn	2	4.5%	15	2.4%	0	0.0%	17	2.3%
Vision Obscured by Parked Vehicle	0	0.0%	17	2.7%	0	0.0%	17	2.3%
Reckless/Aggressive Driving	0	0.0%	11	1.7%	3	6.1%	14	1.9%
Driving Under the Influence	1	2.3%	9	1.4%	3	6.1%	13	1.8%
Improper Backing	1	2.3%	12	1.9%	0	0.0%	13	1.8%
Vehicle Other Defective Condition	0	0.0%	12	1.9%	1	2.0%	13	1.8%
Driver Emotionally Upset	0	0.0%	12	1.9%	0	0.0%	12	1.7%
Swerved or Evasive Action	1	2.3%	10	1.6%	0	0.0%	11	1.5%
Disregard Traffic Signal/Sign	0	0.0%	8	1.3%	1	2.0%	9	1.2%
Improper Parking/Stopping	0	0.0%	7	1.1%	1	2.0%	8	1.1%
Other Driver Condition	0	0.0%	8	1.3%	0	0.0%	8	1.1%
Ran Off Road	0	0.0%	3	0.5%	5	10.2%	8	1.1%
Overcorrected	1	2.3%	6	0.9%	0	0.0%	7	1.0%
Vehicle Brakes	0	0.0%	7	1.1%	0	0.0%	7	1.0%
Followed Too Closely	1	2.3%	4	0.6%	1	2.0%	6	0.8%
Disregard Road Markings	0	0.0%	4	0.6%	0	0.0%	4	0.6%
Vision Obscured by Building, Sign	0	0.0%	4	0.6%	0	0.0%	4	0.6%
Vision Obscured by Vegetation	2	4.5%	2	0.3%	0	0.0%	4	0.6%
Driver Illness/Medical	0	0.0%	2	0.3%	1	2.0%	3	0.4%
Vehicle Tires	0	0.0%	2	0.3%	1	2.0%	3	0.4%
Windshield or Other Window Obscured	0	0.0%	3	0.5%	0	0.0%	3	0.4%
Improper Lane Change	0	0.0%	1	0.2%	1	2.0%	2	0.3%
Improper Passing	0	0.0%	0	0.0%	1	2.0%	1	0.1%
Wrong Side/Wrong Way	1	2.3%	0	0.0%	0	0.0%	1	0.1%
Total	44	100.0%	634	100.0%	49	100.0%	727	100.0%

- Failed to yield right of way (28.9%), hit and run (9.2%), and driver distraction (6.6%) were the leading contributing factors in total pedestrian-motor vehicle crashes.
- Failed to keep in proper lane (14.3%) and speed too fast (12.2%) were the leading contributing factors in fatal pedestrian-motor vehicle crashes.

Bicyclists



Section 8: Bicyclists

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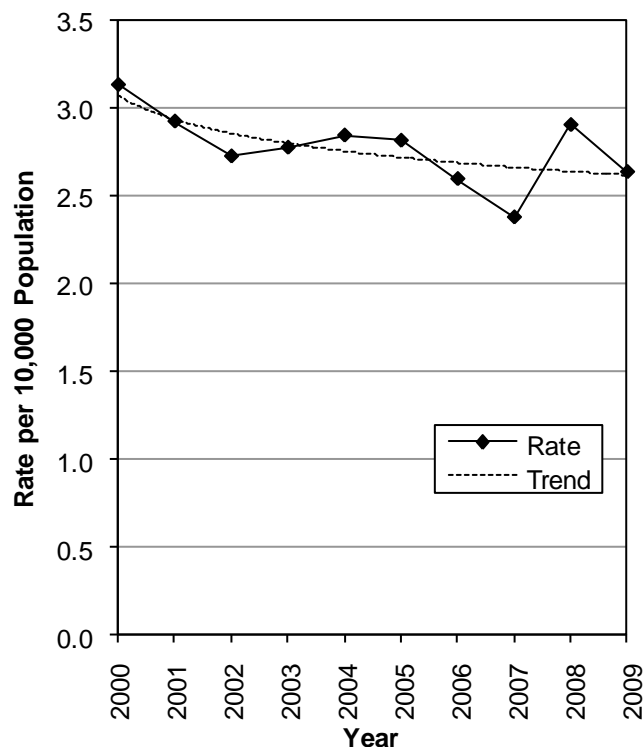
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Trends

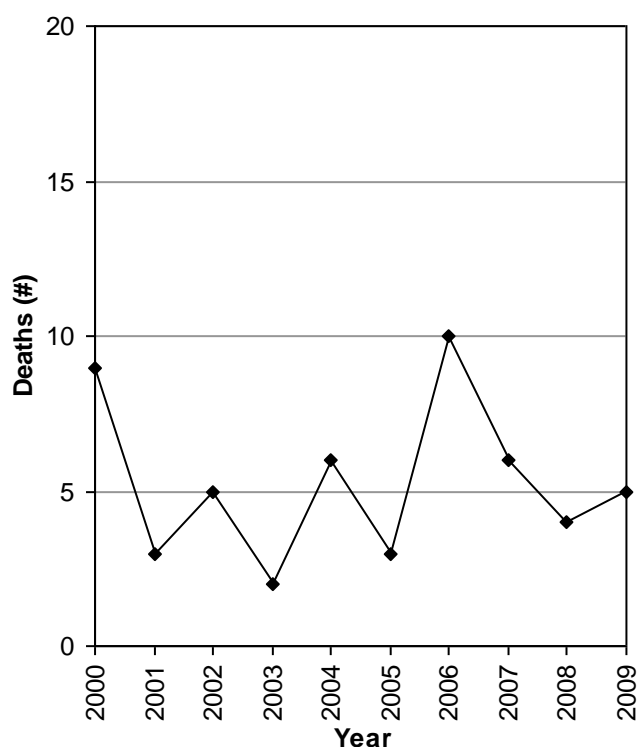
Bicyclists in Crashes (Utah 2000-2009)

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.
2000	62	0.28	635	2.83	9	0.040	706	3.14
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
Total	623	0.25	6,308	2.50	53	0.021	6,984	2.77

Bicyclist Crash Rates Per Population (Utah 2000-2009)



Bicyclist Deaths (Utah 2000-2009)



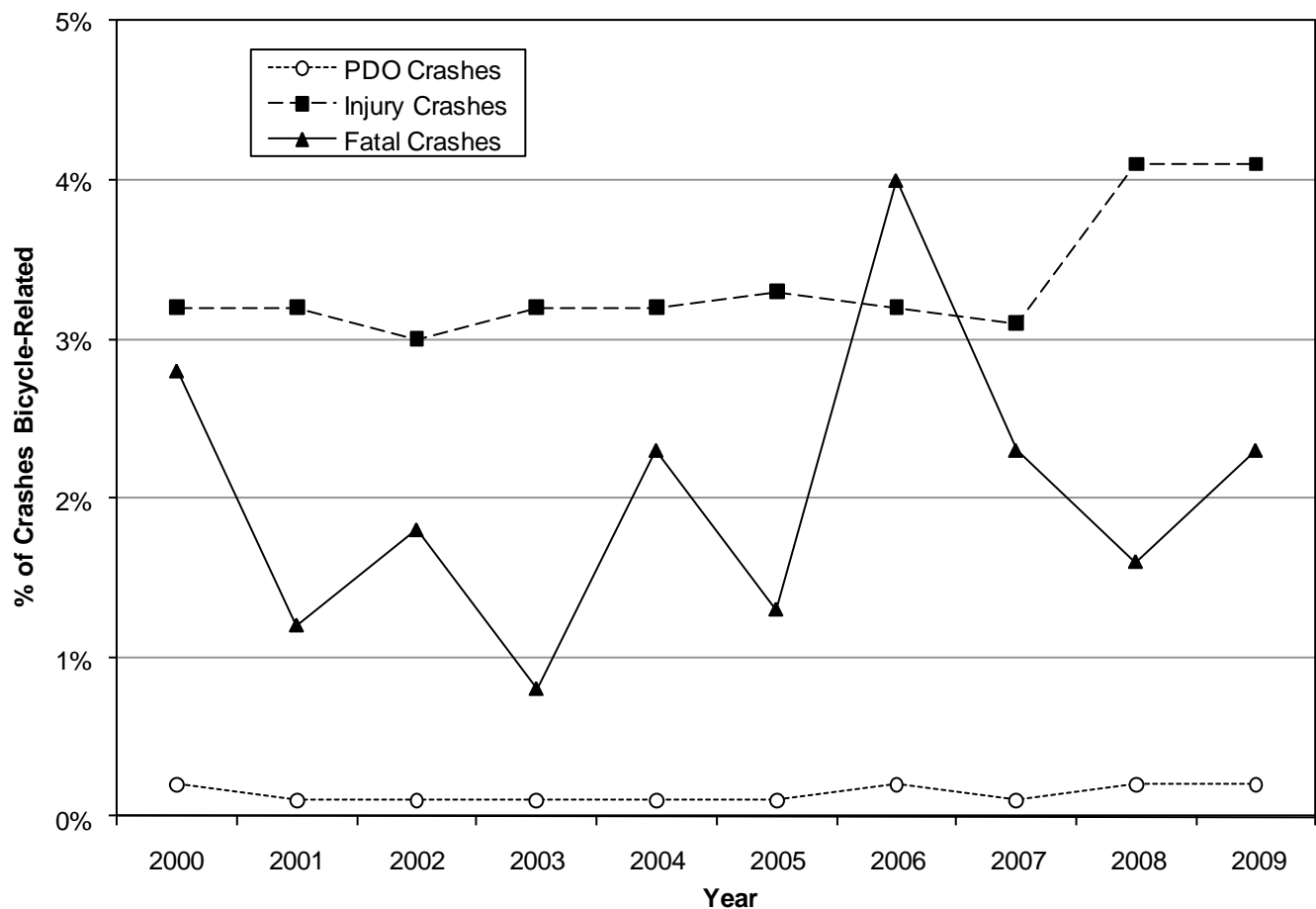
- Over the last 10 years, the rates of total bicyclists in crashes has followed a decreasing trend.
- In 2009, the total rate per population of bicyclists in crashes decreased 9% from the 2008 rate.
- 2007 had the lowest bicyclist crash rate per population (2.38).
- On average, five bicyclists are killed in crashes every year.
- In 2009, there were five 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 2000-2009)

Bicycle-Motor Vehicle Crashes												
Year	Property Damage Only			Injury			Fatal			Total		
	All	Bicycle		All	Bicycle		All	Bicycle		All	Bicycle	
	#	#	%	#	#	%	#	#	%	#	#	%
2000	33,269	58	0.2%	19,564	625	3.2%	318	9	2.8%	53,151	692	1.3%
2001	33,113	42	0.1%	19,332	609	3.2%	258	3	1.2%	52,703	654	1.2%
2002	33,542	44	0.1%	19,552	585	3.0%	274	5	1.8%	53,368	634	1.2%
2003	31,842	39	0.1%	18,285	589	3.2%	262	2	0.8%	50,389	630	1.3%
2004	34,222	45	0.1%	19,423	626	3.2%	260	6	2.3%	53,905	677	1.3%
2005	35,158	50	0.1%	19,545	637	3.3%	235	3	1.3%	54,938	690	1.3%
2006	37,749	71	0.2%	18,189	589	3.2%	249	10	4.0%	56,187	670	1.2%
2007	42,368	46	0.1%	18,619	579	3.1%	258	6	2.3%	61,245	631	1.0%
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%
Total	355,658	561	0.2%	185,386	6,187	3.3%	2,576	53	2.1%	543,620	6,801	1.3%

Percent of Crashes Involving a Bicyclist (Utah 2000-2009)



- The 10-year trend shows that bicycle-motor vehicle crashes represent 0.2% of property damage only crashes, 3.3% of injury crashes, and 2.1% of fatal crashes.
- During the last 10 years, 6,801 crashes involved a bicyclist. There are approximately 620 injury crashes and five fatal crashes involving bicyclists a year.

Counties

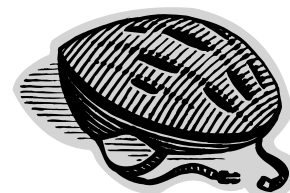
Bicyclists in Crashes by County (Utah 2009)

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.
Rich	0	0.00	1	4.29	0	0.00	1	4.29
Salt Lake	48	0.46	341	3.27	3	0.03	392	3.76
Wayne	0	0.00	1	3.71	0	0.00	1	3.71
Washington	5	0.34	38	2.61	0	0.00	43	2.96
Utah	11	0.21	127	2.39	0	0.00	138	2.60
Cache	2	0.18	26	2.28	0	0.00	28	2.45
Iron	1	0.21	9	1.92	0	0.00	10	2.14
Garfield	0	0.00	1	1.94	0	0.00	1	1.94
Davis	6	0.20	52	1.69	1	0.03	59	1.92
Weber	7	0.31	31	1.36	0	0.00	38	1.67
Carbon	0	0.00	3	1.52	0	0.00	3	1.52
Box Elder	0	0.00	7	1.42	0	0.00	7	1.42
Summit	0	0.00	4	0.99	1	0.25	5	1.24
Tooele	1	0.17	5	0.85	0	0.00	6	1.01
Uintah	1	0.32	2	0.64	0	0.00	3	0.96
Wasatch	1	0.43	1	0.43	0	0.00	2	0.85
Millard	0	0.00	1	0.73	0	0.00	1	0.73
Sevier	0	0.00	1	0.48	0	0.00	1	0.48
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
Emery	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
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
San Juan	0	0.00	0	0.00	0	0.00	0	0.00
Sanpete	0	0.00	0	0.00	0	0.00	0	0.00
Statewide	83	0.30	651	2.32	5	0.02	739	2.64

- Urban areas (2.97) had a much higher total bicycle-motor vehicle crash rate per 10,000 population than rural areas (1.62).
- Rich (4.29, small numbers), Salt Lake (3.76), Wayne (3.71 small numbers), Washington (2.96), and Utah (2.60) counties had the highest rates per population of total bicyclists in crashes per 10,000 population.
- Beaver, Daggett, Duchesne, Emery, Grand, Juab, Kane, Morgan, Piute, San Juan, and Sanpete counties had no bicyclists in crashes.

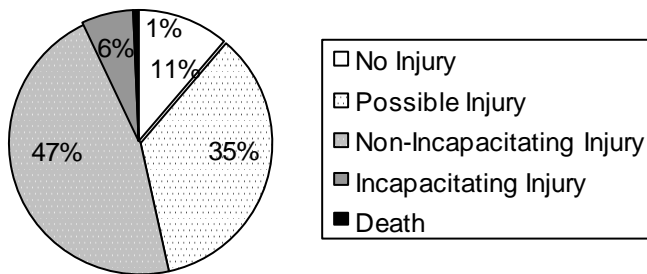
Bicyclists and Helmet Use

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



Bicyclists

Injury Severity of Bicyclists in Crashes (Utah 2009)



- 88.1% of bicyclists in crashes sustained an injury compared to 18.0% of all persons in motor vehicle crashes.

Age of Bicyclists in Crashes (Utah 2009)

Bicyclists								
Age	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
0-4	0	0.0%	7	1.1%	0	0.0%	7	0.9%
5-9	1	1.2%	51	7.8%	0	0.0%	52	7.0%
10-14	7	8.4%	85	13.1%	2	40.0%	94	12.7%
15-19	8	9.6%	89	13.7%	0	0.0%	97	13.1%
20-24	7	8.4%	83	12.7%	0	0.0%	90	12.2%
25-29	7	8.4%	60	9.2%	0	0.0%	67	9.1%
30-34	4	4.8%	43	6.6%	0	0.0%	47	6.4%
35-39	0	0.0%	27	4.1%	0	0.0%	27	3.7%
40-44	2	2.4%	36	5.5%	0	0.0%	38	5.1%
45-49	4	4.8%	47	7.2%	1	20.0%	52	7.0%
50-54	2	2.4%	30	4.6%	0	0.0%	32	4.3%
55-59	1	1.2%	15	2.3%	1	20.0%	17	2.3%
60-64	1	1.2%	10	1.5%	1	20.0%	12	1.6%
65-69	0	0.0%	9	1.4%	0	0.0%	9	1.2%
70+	2	2.4%	2	0.3%	0	0.0%	4	0.5%
Unknown	37	44.6%	57	8.8%	0	0.0%	94	12.7%
Total	83	100.0%	651	100.0%	5	100.0%	739	100.0%

- Where age was known, over half (52.7%) of the bicyclists in crashes were under 25 years.
- The average age of a bicyclist in a crash was 28 years.

Gender of Bicyclists in Crashes (Utah 2009)

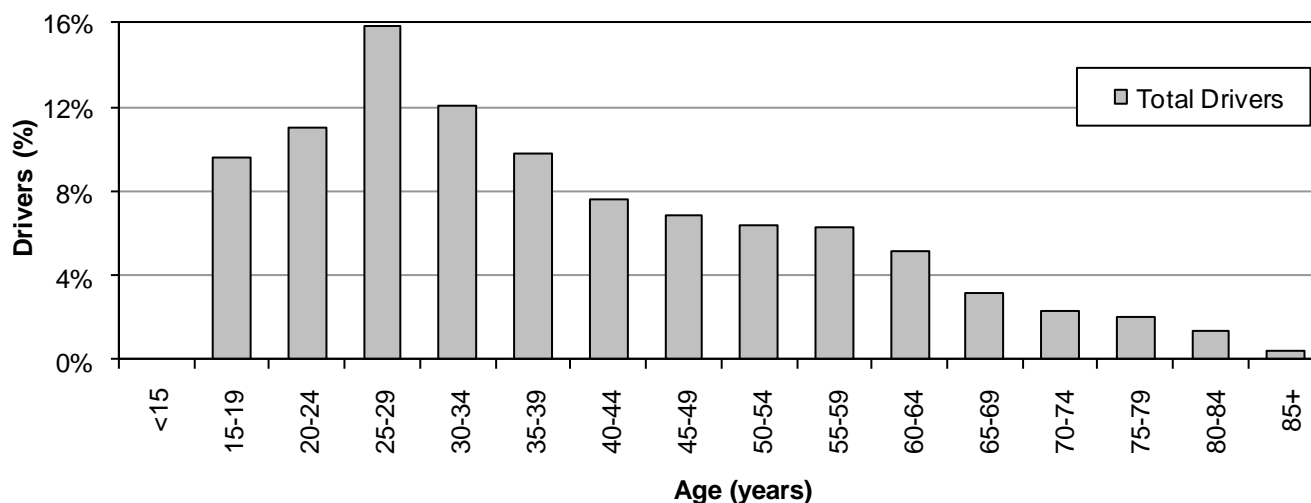
Bicyclists								
Gender	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Male	47	56.6%	499	76.7%	5	100.0%	551	74.6%
Female	9	10.8%	149	22.9%	0	0.0%	158	21.4%
Unknown	27	32.5%	3	0.5%	0	0.0%	30	4.1%
Total	83	100.0%	651	100.0%	5	100.0%	739	100.0%

- The majority of all bicyclists (74.6%) in crashes were male.

Motor Vehicle Drivers

Driver Age (Utah 2009)

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	8	10.1%	54	8.3%	1	14.3%	63	8.6%
20-24	6	7.6%	64	9.9%	2	28.6%	72	9.8%
25-29	10	12.7%	94	14.5%	0	0.0%	104	14.1%
30-34	11	13.9%	68	10.5%	0	0.0%	79	10.7%
35-39	7	8.9%	56	8.6%	1	14.3%	64	8.7%
40-44	6	7.6%	44	6.8%	0	0.0%	50	6.8%
45-49	5	6.3%	39	6.0%	1	14.3%	45	6.1%
50-54	6	7.6%	34	5.2%	2	28.6%	42	5.7%
55-59	3	3.8%	38	5.9%	0	0.0%	41	5.6%
60-64	2	2.5%	32	4.9%	0	0.0%	34	4.6%
65-69	1	1.3%	20	3.1%	0	0.0%	21	2.9%
70-74	1	1.3%	14	2.2%	0	0.0%	15	2.0%
75-79	2	2.5%	11	1.7%	0	0.0%	13	1.8%
80-84	1	1.3%	8	1.2%	0	0.0%	9	1.2%
85+	0	0.0%	3	0.5%	0	0.0%	3	0.4%
Unknown	10	12.7%	70	10.8%	0	0.0%	80	10.9%
Total	79	100.0%	649	100.0%	7	100.0%	735	100.0%



- Over half (58.3% of known) of drivers in total bicycle-motor vehicle crashes were under age 40 years.

Driver Gender (Utah 2009)

Drivers (Bicycle-Motor Vehicle Crashes)								
Gender	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Male	47	59.5%	320	49.3%	5	71.4%	372	50.6%
Female	27	34.2%	288	44.4%	2	28.6%	317	43.1%
Unknown	5	6.3%	41	6.3%	0	0.0%	46	6.3%
Total	79	100.0%	649	100.0%	7	100.0%	735	100.0%

- The majority of drivers in total bicycle-motor vehicle crashes (54.0% of known) were male.

Bicycle-Motor Vehicle Crash Conditions

Bicycle-Motor Vehicle Crashes by Month (Utah 2009)

Bicyclists									
Month	# of Days	Non-Injured		Injured		Killed		Total	
		#	Rate per Day	#	Rate per Day	#	Rate per Day	#	Rate per Day
January	31	1	0.0	12	0.4	0	0.00	13	0.4
February	28	3	0.1	25	0.9	1	0.04	29	1.0
March	31	2	0.1	32	1.0	1	0.03	35	1.1
April	30	11	0.4	45	1.5	1	0.03	57	1.9
May	31	16	0.5	85	2.7	0	0.00	101	3.3
June	30	9	0.3	78	2.6	1	0.03	88	2.9
July	31	6	0.2	80	2.6	0	0.00	86	2.8
August	31	11	0.4	103	3.3	0	0.00	114	3.7
September	30	11	0.4	103	3.4	1	0.03	115	3.8
October	31	4	0.1	42	1.4	0	0.00	46	1.5
November	30	4	0.1	32	1.1	0	0.00	36	1.2
December	31	5	0.2	14	0.5	0	0.00	19	0.6
Total	365	83	0.2	651	1.8	5	0.01	739	2.0

- September (3.8) and August (3.7) had the highest rates per day of total bicycle-motor vehicle crashes.

Bicycle-Motor Vehicle Crashes by Day of Week (Utah 2009)

Bicyclists								
Day of Week	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Sunday	5	6.0%	33	5.1%	0	0.0%	38	5.1%
Monday	9	10.8%	90	13.8%	3	60.0%	102	13.8%
Tuesday	19	22.9%	130	20.0%	2	40.0%	151	20.4%
Wednesday	12	14.5%	121	18.6%	0	0.0%	133	18.0%
Thursday	11	13.3%	94	14.4%	0	0.0%	105	14.2%
Friday	15	18.1%	105	16.1%	0	0.0%	120	16.2%
Saturday	12	14.5%	78	12.0%	0	0.0%	90	12.2%
Total	83	100.0%	651	100.0%	5	100.0%	739	100.0%

- The highest percentage of total bicycle-motor vehicle crashes (20.4%) occurred on Tuesday.

Bicyclist Location in Bicycle-Motor Vehicle Crashes (Utah 2009)

Bicyclists								
Bicyclist Location	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Marked Crosswalk	12	14.5%	127	19.5%	4	80.0%	143	19.4%
In Roadway (not at intersection)	7	8.4%	85	13.1%	0	0.0%	92	12.4%
Shoulder	6	7.2%	80	12.3%	1	20.0%	87	11.8%
Sidewalk	3	3.6%	58	8.9%	0	0.0%	61	8.3%
Unmarked Crosswalk	3	3.6%	42	6.5%	0	0.0%	45	6.1%
Bike Path	0	0.0%	14	2.2%	0	0.0%	14	1.9%
Shared Use Path/Trail	1	1.2%	7	1.1%	0	0.0%	8	1.1%
Outside Right of Way	0	0.0%	5	0.8%	0	0.0%	5	0.7%
Other	0	0.0%	21	3.2%	0	0.0%	21	2.8%
Unknown	51	61.4%	212	32.6%	0	0.0%	263	35.6%
Total	83	100.0%	651	100.0%	5	100.0%	739	100.0%

- For total crashes, the largest percentages of bicyclist location prior to the crash were marked crosswalk (30.0% of known), in roadway, (19.3% of known), and shoulder (18.3% 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 2009)

Bicyclists								
Hour	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Midnight	1	1.2%	4	0.6%	0	0.0%	5	0.7%
1 a.m.	1	1.2%	5	0.8%	0	0.0%	6	0.8%
2 a.m.	0	0.0%	0	0.0%	0	0.0%	0	0.0%
3 a.m.	0	0.0%	1	0.2%	0	0.0%	1	0.1%
4 a.m.	0	0.0%	1	0.2%	0	0.0%	1	0.1%
5 a.m.	1	1.2%	2	0.3%	0	0.0%	3	0.4%
6 a.m.	0	0.0%	6	0.9%	1	20.0%	7	0.9%
7 a.m.	4	4.8%	39	6.0%	0	0.0%	43	5.8%
8 a.m.	7	8.4%	33	5.1%	0	0.0%	40	5.4%
9 a.m.	4	4.8%	18	2.8%	0	0.0%	22	3.0%
10 a.m.	4	4.8%	27	4.1%	0	0.0%	31	4.2%
11 a.m.	4	4.8%	25	3.8%	0	0.0%	29	3.9%
Noon	5	6.0%	48	7.4%	0	0.0%	53	7.2%
1 p.m.	12	14.5%	33	5.1%	1	20.0%	46	6.2%
2 p.m.	8	9.6%	43	6.6%	0	0.0%	51	6.9%
3 p.m.	3	3.6%	66	10.1%	1	20.0%	70	9.5%
4 p.m.	8	9.6%	57	8.8%	1	20.0%	66	8.9%
5 p.m.	6	7.2%	71	10.9%	0	0.0%	77	10.4%
6 p.m.	8	9.6%	53	8.1%	0	0.0%	61	8.3%
7 p.m.	2	2.4%	38	5.8%	0	0.0%	40	5.4%
8 p.m.	1	1.2%	37	5.7%	1	20.0%	39	5.3%
9 p.m.	2	2.4%	18	2.8%	0	0.0%	20	2.7%
10 p.m.	0	0.0%	16	2.5%	0	0.0%	16	2.2%
11 p.m.	2	2.4%	10	1.5%	0	0.0%	12	1.6%
Total	83	100.0%	651	100.0%	5	100.0%	739	100.0%

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

Motor Vehicle Maneuver Prior to Crash (Utah 2009)

Motor Vehicles (Bicycle-Motor Vehicle Crashes)								
Vehicle Maneuver	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Turning Right	27	33.8%	251	38.2%	0	0.0%	278	37.4%
Straight Ahead	30	37.5%	231	35.2%	6	85.7%	267	35.9%
Turning Left	12	15.0%	114	17.4%	0	0.0%	126	16.9%
Stopped/Slowing in Traffic Lane	6	7.5%	18	2.7%	1	14.3%	25	3.4%
Entering/Leaving Traffic Lane	1	1.3%	14	2.1%	0	0.0%	15	2.0%
Parked/Parking	1	1.3%	13	2.0%	0	0.0%	14	1.9%
Backing	0	0.0%	10	1.5%	0	0.0%	10	1.3%
Making U-turn	2	2.5%	4	0.6%	0	0.0%	6	0.8%
Overtaking/Passing	1	1.3%	1	0.2%	0	0.0%	2	0.3%
Unknown	0	0.0%	1	0.2%	0	0.0%	1	0.1%
Total	80	100.0%	657	100.0%	7	100.0%	744	100.0%

- For total bicycle-motor vehicle crashes, the leading motor vehicle maneuvers prior to the crash were turning right (37.4%), straight ahead (35.9%), and turning left (16.9%).

Bicycle-Motor Vehicle Crash Conditions

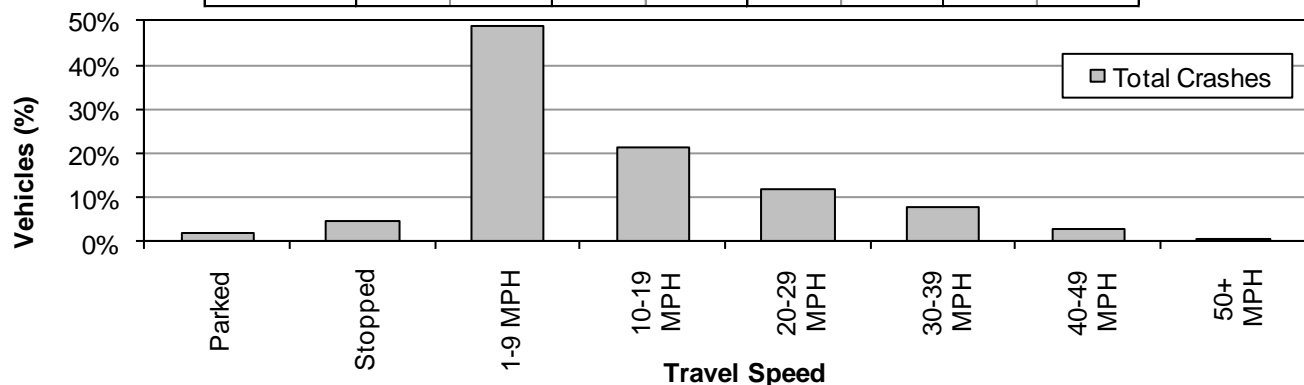
Contributing Factors of Bicyclists in Crashes (Utah 2009)

Bicyclists								
Contributing Factors	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
None	20	24.1%	208	32.0%	4	80.0%	232	31.4%
Wrong Side of Road	4	4.8%	60	9.2%	0	0.0%	64	8.7%
Improper Crossing	5	6.0%	33	5.1%	0	0.0%	38	5.1%
Failure to Yield Right of Way	1	1.2%	34	5.2%	0	0.0%	35	4.7%
Failure to Obey Traffic Signs/Signals	0	0.0%	27	4.1%	1	20.0%	28	3.8%
Not Visible	1	1.2%	25	3.8%	0	0.0%	26	3.5%
Darting	3	3.6%	21	3.2%	0	0.0%	24	3.2%
Inattentive	0	0.0%	15	2.3%	0	0.0%	15	2.0%
In Roadway (standing/kneeling/lying)	1	1.2%	5	0.8%	0	0.0%	6	0.8%
Other	0	0.0%	25	3.8%	0	0.0%	25	3.4%
Unknown	48	57.8%	198	30.4%	0	0.0%	246	33.3%
Total	83	100.0%	651	100.0%	5	100.0%	739	100.0%

- Wrong side of road (13.0% of known), improper crossing (7.7% of known), and failure to yield right of way (7.1% of known) were the leading contributing factors for bicyclists in total crashes.
- No bicyclist contributing factors were listed for 47.1% (of known) of the total bicyclists in crashes.
- Other contributing factors to consider are driver factors (see page 110), 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 2009)

Motor Vehicles (Bicycle-Motor Vehicle Crash)								
Travel Speed	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Parked	1	1.3%	8	1.2%	0	0.0%	9	1.2%
Stopped	2	2.5%	16	2.4%	1	14.3%	19	2.6%
1-9 MPH	17	21.3%	195	29.7%	0	0.0%	212	28.5%
10-19 MPH	6	7.5%	86	13.1%	1	14.3%	93	12.5%
20-29 MPH	4	5.0%	48	7.3%	0	0.0%	52	7.0%
30-39 MPH	3	3.8%	29	4.4%	2	28.6%	34	4.6%
40-49 MPH	2	2.5%	11	1.7%	0	0.0%	13	1.7%
50+ MPH	0	0.0%	2	0.3%	0	0.0%	2	0.3%
Unknown	45	56.3%	262	39.9%	3	42.9%	310	41.7%
Total	80	100.0%	657	100.0%	7	100.0%	744	100.0%



- Over two-thirds (70.3% 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 2009)

- Almost all (92.8% 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	0	0.0%	16	2.5%	0	0.0%	16	2.2%
20-25 MPH	15	19.0%	169	26.0%	1	14.3%	185	25.2%
30-35 MPH	14	17.7%	145	22.3%	3	42.9%	162	22.0%
40-45 MPH	10	12.7%	92	14.2%	3	42.9%	105	14.3%
50-55 MPH	3	3.8%	12	1.8%	0	0.0%	15	2.0%
60+ MPH	2	2.5%	2	0.3%	0	0.0%	4	0.5%
Unknown	35	44.3%	213	32.8%	0	0.0%	248	33.7%
Total	79	100.0%	649	100.0%	7	100.0%	735	100.0%

Contributing Factors in Bicycle Crashes (Utah 2009)

- Failed to yield right of way (40.8%) 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	34	42.5%	251	40.7%	2	25.0%	287	40.8%
Other Improper Driving	6	7.5%	68	11.0%	0	0.0%	74	10.5%
Hit and Run	9	11.3%	40	6.5%	1	12.5%	50	7.1%
Driver Distraction	4	5.0%	30	4.9%	0	0.0%	34	4.8%
Improper Turn	4	5.0%	25	4.1%	0	0.0%	29	4.1%
Disregard Traffic Signal/Sign	1	1.3%	20	3.2%	1	12.5%	22	3.1%
Vision Obscured by Glare	1	1.3%	21	3.4%	0	0.0%	22	3.1%
Vision Obscured by Vegetation	2	2.5%	19	3.1%	0	0.0%	21	3.0%
Vision Obscured by Other	2	2.5%	15	2.4%	0	0.0%	17	2.4%
Failed to Keep in Proper Lane	3	3.8%	12	1.9%	1	12.5%	16	2.3%
Vision Obscured by Moving Vehicle	0	0.0%	16	2.6%	0	0.0%	16	2.3%
Vision Obscured by Building, Sign	1	1.3%	12	1.9%	0	0.0%	13	1.8%
Vehicle Defective Condition	1	1.3%	11	1.8%	0	0.0%	12	1.7%
Vision Obscured by Weather	2	2.5%	9	1.5%	0	0.0%	11	1.6%
Driver Emotionally Upset	2	2.5%	8	1.3%	0	0.0%	10	1.4%
Wrong Side/Wrong Way	0	0.0%	10	1.6%	0	0.0%	10	1.4%
Driving Under the Influence	1	1.3%	5	0.8%	1	12.5%	7	1.0%
Improper Parking/Stopping	0	0.0%	7	1.1%	0	0.0%	7	1.0%
Speed Too Fast	1	1.3%	6	1.0%	0	0.0%	7	1.0%
Vision Obscured by Parked Vehicle	1	1.3%	6	1.0%	0	0.0%	7	1.0%
Improper Backing	0	0.0%	6	1.0%	0	0.0%	6	0.9%
Followed Too Closely	3	3.8%	2	0.3%	0	0.0%	5	0.7%
Improper Signal	1	1.3%	3	0.5%	0	0.0%	4	0.6%
Overcorrected	0	0.0%	4	0.6%	0	0.0%	4	0.6%
Reckless/Aggressive Driving	0	0.0%	3	0.5%	0	0.0%	3	0.4%
Asleep/Fatigue	0	0.0%	1	0.2%	1	12.5%	2	0.3%
Disregard Road Markings	0	0.0%	2	0.3%	0	0.0%	2	0.3%
Improper Passing	0	0.0%	2	0.3%	0	0.0%	2	0.3%
Other Driver Condition	0	0.0%	1	0.2%	1	12.5%	2	0.3%
Swerved or Evasive Action	1	1.3%	1	0.2%	0	0.0%	2	0.3%
Total	80	100.0%	616	100.0%	8	100.0%	704	100.0%

Appendix

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Appendix

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Population, Vehicle Miles Traveled, Injuries, and Deaths (Utah 1947-2009)

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

VEHICLE MILES

TRAVELED SOURCE:
Utah Department of
Transportation, Utah
Highway Performance
Monitoring System,
www.udot.utah.gov

Population, Vehicle Miles Traveled, Injuries, and Deaths (Utah 1947-2009)

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
Total	92,833,009	718,703,335,720	1,121,089	156.0	17,949	2.50

Crashes (Utah 1947-2009)

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 1947-2009)

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
Total	1,655,914	230.4	737,984	102.7	15,360	2.14	2,409,258	335.2

County Population and Vehicle Miles Traveled (Utah 2009)

County		
County	Vehicle Miles Traveled	Population
Beaver	248,115,514	6,576
Box Elder	917,671,498	49,421
Cache	861,094,707	114,276
Carbon	298,141,117	19,768
Daggett	30,873,135	988
Davis	2,702,081,954	307,656
Duchesne	228,926,743	17,368
Emery	326,440,398	10,848
Garfield	118,254,762	5,149
Grand	341,154,838	9,493
Iron	702,216,514	46,825
Juab	384,655,938	10,191
Kane	142,718,355	6,740
Millard	455,391,362	13,702
Morgan	134,143,043	9,947
Piute	30,475,040	1,479
Rich	48,524,322	2,329
Salt Lake	8,518,653,933	1,042,125
San Juan	288,251,457	15,643
Sanpete	217,721,175	27,646
Sevier	341,143,192	20,773
Summit	710,815,253	40,451
Tooele	831,306,456	59,117
Uintah	355,502,991	31,291
Utah	3,652,018,328	531,442
Wasatch	304,798,580	23,428
Washington	1,362,778,935	145,466
Wayne	41,024,805	2,692
Weber	1,622,214,496	227,259
Statewide	26,217,108,843	2,800,089

VEHICLE MILES TRAVELED SOURCE:
Utah Department of Transportation, Utah
Highway Performance Monitoring System,
www.udot.utah.gov

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

Number of Licensed Drivers by Age (Utah 2009)

Licensed Drivers		
Age	#	%
15-19	130,394	7.2%
20-24	199,848	11.1%
25-29	220,246	12.2%
30-34	206,880	11.5%
35-39	170,303	9.4%
40-44	144,860	8.0%
45-49	147,736	8.2%
50-54	143,732	8.0%
55-59	124,887	6.9%
60-64	99,755	5.5%
65-69	73,896	4.1%
70-74	53,778	3.0%
75-79	41,061	2.3%
80-84	28,809	1.6%
85+	20,523	1.1%
Total	1,806,708	100.0%

Number of Licensed Drivers by Gender (Utah 2009)

Licensed Drivers		
Gender	#	%
Male	916,886	50.7%
Female	889,822	49.3%
Total	1,806,708	100.0%

SOURCE: Utah Department of Public Safety, Driver License Division

Number of Registered Vehicles by Vehicle Type (Utah 2005-2009)

Vehicles					
Year	Heavy Truck	Light Truck	Motorcycle	Passenger Car	Total
2005	58,645	552,931	43,271	1,205,430	1,860,277
2006	60,765	564,280	48,949	1,243,041	1,917,035
2007	62,860	585,413	56,146	1,297,242	2,001,661
2008	66,578	601,655	64,376	1,334,906	2,067,515
2009	67,124	598,513	78,302	1,349,596	2,093,535
Total	315,972	2,902,792	291,044	6,430,215	9,940,023

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** Private property crashes excluded. Private property 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 reported alcohol use.

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

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

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

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

Fatal Crash: A 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

UTAH HIGHWAY SAFETY

www.highwaysafety.utah.gov

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

www.nhtsa.dot.gov