## Bicyclists



## Trends

## Bicyclists in Crashes (Utah 2004-2013)

| Bicyclists |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Non-Injured |  | Injured |  | Killed |  | Total |  |
|  | \# | Rate per 10,000 Pop. | \# | Rate per 10,000 Pop. | \# | $\begin{gathered} \text { Rate per } \\ 10,000 \\ \text { Pop. } \\ \hline \end{gathered}$ | \# | $\begin{gathered} \text { Rate per } \\ 10,000 \\ \text { Pop. } \\ \hline \end{gathered}$ |
| 2004 | 49 | 0.20 | 648 | 2.67 | 6 | 0.025 | 703 | 2.89 |
| 2005 | 61 | 0.24 | 654 | 2.61 | 3 | 0.012 | 718 | 2.87 |
| 2006 | 79 | 0.31 | 592 | 2.30 | 10 | 0.039 | 681 | 2.64 |
| 2007 | 53 | 0.20 | 584 | 2.22 | 6 | 0.023 | 643 | 2.44 |
| 2008 | 90 | 0.33 | 708 | 2.63 | 4 | 0.015 | 802 | 2.98 |
| 2009 | 83 | 0.30 | 651 | 2.38 | 5 | 0.018 | 739 | 2.71 |
| 2010 | 86 | 0.31 | 680 | 2.45 | 7 | 0.025 | 773 | 2.79 |
| 2011 | 85 | 0.30 | 747 | 2.65 | 5 | 0.018 | 837 | 2.97 |
| 2012 | 63 | 0.22 | 837 | 2.93 | 3 | 0.011 | 903 | 3.16 |
| 2013 | 83 | 0.29 | 688 | 2.37 | 6 | 0.021 | 777 | 2.68 |
| Total | 732 | 0.27 | 6,789 | 2.52 | 55 | 0.020 | 7,576 | 2.81 |

## Bicyclists in Crashes (Utah 2004-2013)



- On average, 758 bicyclists are in crashes every year.
- In 2013, the total number of bicyclists in crashes decreased 14\% from 2012.
- 2012 had the highest number of bicyclists in crashes (903).


## Bicyclist Crash Rates Per <br> Population (Utah 2004-2013)



- In 2013, the total rate per population of bicyclists in crashes decreased $15 \%$ from the 2012 rate.
- 2007 had the lowest bicyclist crash rate per population (2.44).
- 2012 had the highest bicyclist crash rate per population (3.16).


## Trends

## Bicycle-Motor Vehicle Crashes (Utah 2004-2013)

## Bicycle-Motor Vehicle Crashes

| Year | Property Damage Only |  |  | Injury |  |  | Fatal |  |  | Total |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | All | Bicycle |  | All | Bicycle |  | All | Bicycle |  | All | Bicycle |  |
|  | \# | \# | \% | \# | \# | \% | \# | \# | \% | \# | \# | \% |
| 2004 | 34,222 | 45 | 0.1\% | 19,423 | 626 | 3.2\% | 260 | 6 | 2.3\% | 53,905 | 677 | 1.3\% |
| 2005 | 35,158 | 50 | 0.1\% | 19,545 | 637 | 3.3\% | 235 | 3 | 1.3\% | 54,938 | 690 | 1.3\% |
| 2006 | 37,749 | 71 | 0.2\% | 18,189 | 589 | 3.2\% | 249 | 10 | 4.0\% | 56,187 | 670 | 1.2\% |
| 2007 | 42,368 | 46 | 0.1\% | 18,619 | 579 | 3.1\% | 258 | 6 | 2.3\% | 61,245 | 631 | 1.0\% |
| 2008 | 38,997 | 83 | 0.2\% | 17,125 | 697 | 4.1\% | 245 | 4 | 1.6\% | 56,367 | 784 | 1.4\% |
| 2009 | 35,398 | 83 | 0.2\% | 15,752 | 651 | 4.1\% | 217 | 5 | 2.3\% | 51,367 | 739 | 1.4\% |
| 2010 | 34,155 | 78 | 0.2\% | 14,995 | 669 | 4.5\% | 218 | 7 | 3.2\% | 49,368 | 754 | 1.5\% |
| 2011 | 36,418 | 73 | 0.2\% | 15,645 | 735 | 4.7\% | 224 | 5 | 2.2\% | 52,287 | 813 | 1.6\% |
| 2012 | 34,635 | 59 | 0.2\% | 15,765 | 833 | 5.3\% | 200 | 3 | 1.5\% | 50,600 | 895 | 1.8\% |
| 2013 | 39,301 | 74 | 0.2\% | 16,134 | 686 | 4.3\% | 202 | 6 | 3.0\% | 55,637 | 766 | 1.4\% |
| Total | 368,401 | 662 | 0.2\% | 171,192 | 6,702 | 3.9\% | 2,308 | 55 | 2.4\% | 541,901 | 7,419 | 1.4\% |

## Percent of Crashes Involving a Bicyclist (Utah 2004-2013)



- The 10-year trend shows that bicycle-motor vehicle crashes represent $0.2 \%$ of property damage only crashes, $3.9 \%$ of injury crashes, and $2.4 \%$ of fatal crashes.
- During the last 10 years, 7,419 crashes involved a bicyclist. There are approximately 670 injury crashes and six fatal crashes involving bicyclists a year.


## Bicycle-Motor Vehicle Crash Conditions

## Bicyclists in Crashes by County (Utah 2013)

| Bicyclists |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| County | Non-Injured |  | Injured |  | Killed |  | Total |  |
|  | \# | $\begin{gathered} \text { Rate per } \\ 10,000 \\ \text { Pop. } \\ \hline \end{gathered}$ | \# | $\begin{gathered} \text { Rate per } \\ 10,000 \\ \text { Pop. } \\ \hline \end{gathered}$ | \# | $\begin{gathered} \text { Rate per } \\ 10,000 \\ \text { Pop. } \\ \hline \end{gathered}$ | \# | $\begin{array}{\|c} \hline \text { Rate per } \\ \text { 10,000 } \\ \text { Pop. } \\ \hline \end{array}$ |
| Salt Lake | 35 | 0.32 | 380 | 3.52 | 2 | 0.02 | 417 | 3.86 |
| Cache | 5 | 0.43 | 27 | 2.31 | 0 | 0.00 | 32 | 2.74 |
| Washington | 2 | 0.14 | 31 | 2.10 | 1 | 0.07 | 34 | 2.30 |
| Davis | 9 | 0.28 | 65 | 2.02 | 0 | 0.00 | 74 | 2.30 |
| Weber | 4 | 0.17 | 48 | 2.01 | 1 | 0.04 | 53 | 2.22 |
| Utah | 21 | 0.38 | 100 | 1.81 | 1 | 0.02 | 122 | 2.21 |
| Sevier | 1 | 0.48 | 3 | 1.44 | 0 | 0.00 | 4 | 1.92 |
| Iron | 1 | 0.21 | 6 | 1.28 | 0 | 0.00 | 7 | 1.50 |
| Duchesne | 0 | 0.00 | 2 | 0.98 | 1 | 0.49 | 3 | 1.48 |
| Uintah | 3 | 0.84 | 2 | 0.56 | 0 | 0.00 | 5 | 1.41 |
| Kane | 0 | 0.00 | 1 | 1.38 | 0 | 0.00 | 1 | 1.38 |
| Summit | 0 | 0.00 | 5 | 1.30 | 0 | 0.00 | 5 | 1.30 |
| Tooele | 1 | 0.16 | 6 | 0.99 | 0 | 0.00 | 7 | 1.15 |
| Wasatch | 1 | 0.38 | 2 | 0.76 | 0 | 0.00 | 3 | 1.13 |
| Grand | 0 | 0.00 | 1 | 1.07 | 0 | 0.00 | 1 | 1.07 |
| Box Elder | 0 | 0.00 | 5 | 0.98 | 0 | 0.00 | 5 | 0.98 |
| Juab | 0 | 0.00 | 1 | 0.97 | 0 | 0.00 | 1 | 0.97 |
| Carbon | 0 | 0.00 | 2 | 0.95 | 0 | 0.00 | 2 | 0.95 |
| San Juan | 0 | 0.00 | 1 | 0.67 | 0 | 0.00 | 1 | 0.67 |
| Beaver | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Daggett | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Emery | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Garfield | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| 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 |
| 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 | 83 | 0.29 | 688 | 2.37 | 6 | 0.02 | 777 | 2.68 |

- Urban areas (2.98) had a much higher total bicyclemotor vehicle crash rate per 10,000 population than rural areas (1.01).
- Salt Lake (3.86), Cache (2.74), Washington (2.30), and Davis (2.30) counties had the highest rates per population of total bicyclists in crashes per 10,000 population.
- Salt Lake County accounted for $54 \%$ of the bicyclists in crashes.
- Beaver, Daggett, Emery, Garfield, Millard, Morgan, Piute, Rich, Sanpete, and Wayne counties had no bicyclists in crashes.


## Bicyclists and Helmet Use (Utah 2013)



| Bicyclists |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Helmet Use | Non-Injured |  | Injured |  | Killed |  | Total |  |
|  | \# | \% | \# | \% | \# | \% | \# | \% |
| Helmet Worn | 10 | 12.0\% | 106 | 15.4\% | 3 | 50.0\% | 119 | 15.3\% |
| Helmet Not Worn | 24 | 28.9\% | 289 | 42.0\% | 3 | 50.0\% | 316 | 40.7\% |
| Unknown | 49 | 59.0\% | 293 | 42.6\% | 0 | 0.0\% | 342 | 44.0\% |
| Total | 83 | 100.0\% | 688 | 100.0\% | 6 | 100.0\% | 777 | 100.0\% |

- Where helmet use is known for bicyclists, $27.4 \%$ of bicyclists were wearing a helmet.


## Bicycle-Motor Vehicle Crash Conditions

Age of Bicyclists in Crashes (Utah 2013)

| Bicyclists |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Non-Injured |  | Injured |  | Killed |  | Total |  |
|  | \# | \% | \# | \% | \# | \% | \# | \% |
| 0-4 | 1 | 1.2\% | 9 | 1.3\% | 0 | 0.0\% | 10 | 1.3\% |
| 5-9 | 0 | 0.0\% | 38 | 5.5\% | 0 | 0.0\% | 38 | 4.9\% |
| 10-14 | 12 | 14.5\% | 78 | 11.3\% | 1 | 16.7\% | 91 | 11.7\% |
| 15-19 | 7 | 8.4\% | 96 | 14.0\% | 1 | 16.7\% | 104 | 13.4\% |
| 20-24 | 5 | 6.0\% | 107 | 15.6\% | 0 | 0.0\% | 112 | 14.4\% |
| 25-29 | 1 | 1.2\% | 71 | 10.3\% | 0 | 0.0\% | 72 | 9.3\% |
| 30-34 | 4 | 4.8\% | 51 | 7.4\% | 0 | 0.0\% | 55 | 7.1\% |
| 35-39 | 4 | 4.8\% | 36 | 5.2\% | 1 | 16.7\% | 41 | 5.3\% |
| 40-44 | 4 | 4.8\% | 35 | 5.1\% | 0 | 0.0\% | 39 | 5.0\% |
| 45-49 | 2 | 2.4\% | 33 | 4.8\% | 0 | 0.0\% | 35 | 4.5\% |
| 50-54 | 0 | 0.0\% | 40 | 5.8\% | 0 | 0.0\% | 40 | 5.1\% |
| 55-59 | 2 | 2.4\% | 24 | 3.5\% | 1 | 16.7\% | 27 | 3.5\% |
| 60-64 | 1 | 1.2\% | 12 | 1.7\% | 1 | 16.7\% | 14 | 1.8\% |
| 65-69 | 2 | 2.4\% | 10 | 1.5\% | 1 | 16.7\% | 13 | 1.7\% |
| 70+ | 0 | 0.0\% | 9 | 1.3\% | 0 | 0.0\% | 9 | 1.2\% |
| Unknown | 38 | 45.8\% | 39 | 5.7\% | 0 | 0.0\% | 77 | 9.9\% |
| Total | 83 | 100.0\% | 688 | 100.0\% | 6 | 100.0\% | 777 | 100.0\% |

- Nearly two-thirds (61.0\% of known) of the bicyclists in crashes were under 30 years.
- The average age of a bicyclist in a crash was 29 years.


## Driver Age (Utah 2013)

| 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 | 6 | 7.1\% | 54 | 7.5\% | 0 | 0.0\% | 60 | 7.4\% |
| 20-24 | 16 | 18.8\% | 75 | 10.4\% | 0 | 0.0\% | 91 | 11.2\% |
| 25-29 | 9 | 10.6\% | 55 | 7.6\% | 0 | 0.0\% | 64 | 7.9\% |
| 30-34 | 7 | 8.2\% | 52 | 7.2\% | 0 | 0.0\% | 59 | 7.3\% |
| 35-39 | 2 | 2.4\% | 69 | 9.6\% | 2 | 33.3\% | 73 | 9.0\% |
| 40-44 | 6 | 7.1\% | 51 | 7.1\% | 0 | 0.0\% | 57 | 7.0\% |
| 45-49 | 5 | 5.9\% | 58 | 8.1\% | 2 | 33.3\% | 65 | 8.0\% |
| 50-54 | 1 | 1.2\% | 59 | 8.2\% | 0 | 0.0\% | 60 | 7.4\% |
| 55-59 | 5 | 5.9\% | 44 | 6.1\% | 1 | 16.7\% | 50 | 6.2\% |
| 60-64 | 4 | 4.7\% | 47 | 6.5\% | 0 | 0.0\% | 51 | 6.3\% |
| 65-69 | 2 | 2.4\% | 25 | 3.5\% | 0 | 0.0\% | 27 | 3.3\% |
| 70-74 | 1 | 1.2\% | 14 | 1.9\% | 0 | 0.0\% | 15 | 1.9\% |
| 75-79 | 1 | 1.2\% | 13 | 1.8\% | 1 | 16.7\% | 15 | 1.9\% |
| 80-84 | 2 | 2.4\% | 4 | 0.6\% | 0 | 0.0\% | 6 | 0.7\% |
| 85+ | 2 | 2.4\% | 2 | 0.3\% | 0 | 0.0\% | 4 | 0.5\% |
| Unknown | 16 | 18.8\% | 97 | 13.5\% | 0 | 0.0\% | 113 | 14.0\% |
| Total | 85 | 100.0\% | 719 | 100.0\% | 6 | 100.0\% | 810 | 100.0\% |

- Nearly half ( $49.8 \%$ of known) of drivers in total bicycle-motor vehicle crashes were under age 40 years.
- The average age of a driver that hit a bicyclist was 41 years.


## Bicycle-Motor Vehicle Crash Conditions

## Gender of Bicyclists in Crashes (Utah 2013)

| Bicyclists |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gender | Non-Injured |  | Injured |  | Killed |  | Total |  |
|  | \# | \% | \# | \% | \# | \% | \# | \% |
| Male | 44 | 53.0\% | 520 | 75.6\% | 6 | 100.0\% | 570 | 73.4\% |
| Female | 4 | 4.8\% | 150 | 21.8\% | 0 | 0.0\% | 154 | 19.8\% |
| Unknown | 35 | 42.2\% | 18 | 2.6\% | 0 | 0.0\% | 53 | 6.8\% |
| Total | 83 | 100.0\% | 688 | 100.0\% | 6 | 100.0\% | 777 | 100.0\% |

- The majority of all bicyclists (78.7\% of known) in crashes were male.


## Driver Gender (Utah 2013)

- The majority of drivers in total bicycle-motor vehicle crashes (55.9\% of known) were male.

| Drivers (Bicycle-Motor Vehicle Crashes) |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gender | PDO Crashes |  | Injury Crashes |  | Fatal Crashes |  | Total |  |
|  | \# | \% | \# | \% | \# | \% | \# | \% |
| Male | 39 | 45.9\% | 357 | 49.7\% | 4 | 66.7\% | 400 | 49.4\% |
| Female | 36 | 42.4\% | 277 | 38.5\% | 2 | 33.3\% | 315 | 38.9\% |
| Unknown | 10 | 11.8\% | 85 | 11.8\% | 0 | 0.0\% | 95 | 11.7\% |
| Total | 85 | 100.0\% | 719 | 100.0\% | 6 | 100.0\% | 810 | 100.0\% |

## Bicycle-Motor Vehicle Crashes by Month (Utah 2013)

| Bicyclists |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Non-Injured |  | Injured |  | Killed |  | Total |  |
| Month | \# | Rate per Day | \# | Rate per Day | \# | Rate per Day | \# | Rate per Day |
| January | 0 | 0.0 | 11 | 0.4 | 0 | 0.00 | 11 | 0.4 |
| February | 1 | 0.0 | 14 | 0.5 | 1 | 0.04 | 16 | 0.6 |
| March | 3 | 0.1 | 32 | 1.0 | 1 | 0.03 | 36 | 1.2 |
| April | 2 | 0.1 | 54 | 1.8 | 0 | 0.00 | 56 | 1.9 |
| May | 8 | 0.3 | 92 | 3.0 | 0 | 0.00 | 100 | 3.2 |
| June | 8 | 0.3 | 98 | 3.3 | 0 | 0.00 | 106 | 3.5 |
| July | 13 | 0.4 | 97 | 3.1 | 1 | 0.03 | 111 | 3.6 |
| August | 15 | 0.5 | 106 | 3.4 | 0 | 0.00 | 121 | 3.9 |
| September | 8 | 0.3 | 77 | 2.6 | 2 | 0.07 | 87 | 2.9 |
| October | 16 | 0.5 | 56 | 1.8 | 1 | 0.03 | 73 | 2.4 |
| November | 6 | 0.2 | 37 | 1.2 | 0 | 0.00 | 43 | 1.4 |
| December | 3 | 0.1 | 14 | 0.5 | 0 | 0.00 | 17 | 0.5 |
| Total | 83 | 0.2 | 688 | 1.9 | 6 | 0.02 | 777 | 2.1 |

- August (3.9), July (3.6), and June (3.5) had the highest rates per day of total bicyclemotor vehicle crashes.


## Bicycle-Motor Vehicle Crashes by Day of Week (Utah 2013)

- The highest percentage of total bicycle-motor vehicle crashes occurred on Friday (19.4\%).

| Bicyclists |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Day of Week | Non-Injured |  | Injured |  | Killed |  | Total |  |
|  | \# | \% | \# | \% | \# | \% | \# | \% |
| Sunday | 4 | 4.8\% | 41 | 6.0\% | 1 | 16.7\% | 46 | 5.9\% |
| Monday | 15 | 18.1\% | 107 | 15.6\% | 1 | 16.7\% | 123 | 15.8\% |
| Tuesday | 17 | 20.5\% | 118 | 17.2\% | 1 | 16.7\% | 136 | 17.5\% |
| Wednesday | 14 | 16.9\% | 102 | 14.8\% | 1 | 16.7\% | 117 | 15.1\% |
| Thursday | 9 | 10.8\% | 110 | 16.0\% | 1 | 16.7\% | 120 | 15.4\% |
| Friday | 10 | 12.0\% | 140 | 20.3\% | 1 | 16.7\% | 151 | 19.4\% |
| Saturday | 14 | 16.9\% | 70 | 10.2\% | 0 | 0.0\% | 84 | 10.8\% |
| Total | 83 | 100.0\% | 688 | 100.0\% | 6 | 100.0\% | 777 | 100.0\% |

Utah Crash Summary 2013

## Bicycle-Motor Vehicle Crash Conditions

## Bicycle-Motor Vehicle Crashes by Hour (Utah 2013)

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

| Bicyclists |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hour | Non-Injured |  | Injured |  | Killed |  | Total |  |
|  | \# | \% | \# | \% | \# | \% | \# | \% |
| Midnight | 1 | 1.2\% | 6 | 0.9\% | 0 | 0.0\% | 7 | 0.9\% |
| 1 a.m. | 0 | 0.0\% | 1 | 0.1\% | 0 | 0.0\% | 1 | 0.1\% |
| 2 a.m. | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% |
| 3 a.m. | 0 | 0.0\% | 1 | 0.1\% | 0 | 0.0\% | 1 | 0.1\% |
| 4 a.m. | 1 | 1.2\% | 1 | 0.1\% | 0 | 0.0\% | 2 | 0.3\% |
| 5 a.m. | 1 | 1.2\% | 7 | 1.0\% | 0 | 0.0\% | 8 | 1.0\% |
| 6 a.m. | 0 | 0.0\% | 14 | 2.0\% | 0 | 0.0\% | 14 | 1.8\% |
| 7 a.m. | 4 | 4.8\% | 34 | 4.9\% | 3 | 50.0\% | 41 | 5.3\% |
| 8 a.m. | 1 | 1.2\% | 47 | 6.8\% | 0 | 0.0\% | 48 | 6.2\% |
| 9 a.m. | 4 | 4.8\% | 28 | 4.1\% | 0 | 0.0\% | 32 | 4.1\% |
| 10 a.m. | 1 | 1.2\% | 34 | 4.9\% | 0 | 0.0\% | 35 | 4.5\% |
| 11 a.m. | 5 | 6.0\% | 32 | 4.7\% | 0 | 0.0\% | 37 | 4.8\% |
| Noon | 6 | 7.2\% | 39 | 5.7\% | 0 | 0.0\% | 45 | 5.8\% |
| 1 p.m. | 6 | 7.2\% | 42 | 6.1\% | 1 | 16.7\% | 49 | 6.3\% |
| 2 p.m. | 6 | 7.2\% | 47 | 6.8\% | 0 | 0.0\% | 53 | 6.8\% |
| 3 p.m. | 6 | 7.2\% | 51 | 7.4\% | 0 | 0.0\% | 57 | 7.3 |
| 4 p.m. | 12 | 14.5\% | 73 | 10.6\% | 0 | 0.0\% | 85 | 10.9\% |
| 5 p.m. | 6 | 7.2\% | 67 | 9.7\% | 0 | 0.0\% | 73 | 9.4 |
| 6 p.m. | 4 | 4.8\% | 57 | 8.3\% | 0 | 0.0\% | 61 | 7.9\% |
| 7 p.m. | 8 | 9.6\% | 33 | 4.8\% | 1 | 16.7\% | 42 | 5.4\% |
| 8 p.m. | 6 | 7.2\% | 34 | 4.9\% | 1 | 16.7\% | 41 | 5.3\% |
| $9 \mathrm{p.m}$. | 3 | 3.6\% | 20 | 2.9\% | 0 | 0.0\% | 23 | 3.0\% |
| 10 p.m. | 0 | 0.0\% | 12 | 1.7\% | 0 | 0.0\% | 12 | 1.5\% |
| 11 p.m. | 2 | 2.4\% | 8 | 1.2\% | 0 | 0.0\% | 10 | 1.3\% |
| Total | 83 | 100.0\% | 688 | 100.0\% | 6 | 100.0\% | 777 | 100.0 |

## Contributing Factors of Bicyclists in Crashes (Utah 2013)

| Bicyclists |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Contributing Factors | Non-Injured |  | Injured |  | Killed |  | Total |  |
|  | \# | \% | \# | \% | \# | \% | \# | \% |
| None | 31 | 37.3\% | 252 | 36.6\% | 5 | 83.3\% | 288 | 37.1\% |
| Wrong Side of Road | 11 | 13.3\% | 72 | 10.5\% | 0 | 0.0\% | 83 | 10.7\% |
| Improper Crossing | 6 | 7.2\% | 39 | 5.7\% | 0 | 0.0\% | 45 | 5.8\% |
| Failure to Obey Traffic Signs/Signals | 1 | 1.2\% | 41 | 6.0\% | 0 | 0.0\% | 42 | 5.4\% |
| Not Visible | 6 | 7.2\% | 30 | 4.4\% | 0 | 0.0\% | 36 | 4.6\% |
| Darting | 1 | 1.2\% | 27 | 3.9\% | 1 | 16.7\% | 29 | 3.7\% |
| Failure to Yield Right of Way | 0 | 0.0\% | 29 | 4.2\% | 0 | 0.0\% | 29 | 3.7\% |
| Inattentive | 4 | 4.8\% | 23 | 3.3\% | 0 | 0.0\% | 27 | 3.5\% |
| In Roadway (standing/kneeling/lying) | 1 | 1.2\% | 8 | 1.2\% | 0 | 0.0\% | 9 | 1.2\% |
| Other | 0 | 0.0\% | 17 | 2.5\% | 0 | 0.0\% | 17 | 2.2\% |
| Unknown | 22 | 26.5\% | 150 | 21.8\% | 0 | 0.0\% | 172 | 22.1\% |
| Total | 83 | 100.0\% | 688 | 100.0\% | 6 | 100.0\% | 777 | 100.0\% |

- Wrong side of road, improper crossing, and failure to obey traffic signs/signals were the leading contributing factors for bicyclists in total crashes.
- No bicyclist contributing factors were listed for 47.6\% (of known) of the total bicyclists in crashes.
- Other contributing factors to consider are driver factors, roadway factors (such as high speeds, inadequate onroad bicycle facilities), and vehicle factors (such as vehicle design, vehicle size).


## Bicycle-Motor Vehicle Crash Conditions

Bicyclist Location in Bicycle-Motor Vehicle Crashes (Utah 2013)

| Bicyclists |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bicyclist Location | Non-Injured |  | Injured |  | Killed |  | Total |  |
|  | \# | \% | \# | \% | \# | \% | \# | \% |
| Marked Crosswalk | 19 | 22.9\% | 142 | 20.6\% | 1 | 16.7\% | 162 | 20.8\% |
| In Roadway (not at intersection) | 10 | 12.0\% | 118 | 17.2\% | 2 | 33.3\% | 130 | 16.7\% |
| Shoulder | 17 | 20.5\% | 92 | 13.4\% | 1 | 16.7\% | 110 | 14.2\% |
| Sidewalk | 14 | 16.9\% | 87 | 12.6\% | 0 | 0.0\% | 101 | 13.0\% |
| Unmarked Crosswalk | 2 | 2.4\% | 47 | 6.8\% | 2 | 33.3\% | 51 | 6.6\% |
| Bike Path/Lane | 2 | 2.4\% | 32 | 4.7\% | 0 | 0.0\% | 34 | 4.4\% |
| Outside Right of Way | 1 | 1.2\% | 5 | 0.7\% | 0 | 0.0\% | 6 | 0.8\% |
| Shared Use Path/Trail | 0 | 0.0\% | 6 | 0.9\% | 0 | 0.0\% | 6 | 0.8\% |
| Other | 2 | 2.4\% | 13 | 1.9\% | 0 | 0.0\% | 15 | 1.9\% |
| Unknown | 16 | 19.3\% | 146 | 21.2\% | 0 | 0.0\% | 162 | 20.8\% |
| Total | 83 | 100.0\% | 688 | 100.0\% | 6 | 100.0\% | 777 | 100.0\% |

- For total crashes, the largest percentages of bicyclist location prior to the crash were marked crosswalk (26.3\% of known), in roadway, (21.1\% of known), and shoulder (17.9\% of known).
- Bicycles are considered vehicles and have a legal right to the road.


## Motor Vehicle Maneuver Prior to Crash (Utah 2013)

- For total bicycle-motor vehicle crashes, the leading motor vehicle maneuvers prior to the crash were turning right (35.5\%), straight ahead (29.3\%), and turning left (13.8\%).

Motor Vehicles (Bicycle-Motor Vehicle Crashes)

| Vehicle Maneuver | PDO Crashes |  | Injury Crashes |  | Fatal Crashes |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \# | \% | \# | \% | \# | \% | \# | \% |
| Turning Right | 32 | 37.6\% | 258 | 35.5\% | 0 | 0.0\% | 290 | 35.5\% |
| Straight Ahead | 22 | 25.9\% | 214 | 29.4\% | 4 | 66.7\% | 240 | 29.3\% |
| Turning Left | 9 | 10.6\% | 102 | 14.0\% | 2 | 33.3\% | 113 | 13.8\% |
| Entering/Leaving Traffic Lane | 1 | 1.2\% | 17 | 2.3\% | 0 | 0.0\% | 18 | 2.2\% |
| Stopped/Slowing in Traffic Lane | 0 | 0.0\% | 17 | 2.3\% | 0 | 0.0\% | 17 | 2.1\% |
| Parked/Parking | 1 | 1.2\% | 13 | 1.8\% | 0 | 0.0\% | 14 | 1.7\% |
| Backing | 3 | 3.5\% | 8 | 1.1\% | 0 | 0.0\% | 11 | 1.3\% |
| Making U-turn | 1 | 1.2\% | 6 | 0.8\% | 0 | 0.0\% | 7 | 0.9\% |
| Overtaking/Passing | 0 | 0.0\% | 5 | 0.7\% | 0 | 0.0\% | 5 | 0.6\% |
| Changing Lanes | 0 | 0.0\% | 2 | 0.3\% | 0 | 0.0\% | 2 | 0.2\% |
| Other | 0 | 0.0\% | 6 | 0.8\% | 0 | 0.0\% | 6 | 0.7\% |
| Unknown | 16 | 18.8\% | 79 | 10.9\% | 0 | 0.0\% | 95 | 11.6\% |
| Total | 85 | 100.0\% | 727 | 100.0\% | 6 | 100.0\% | 818 | 100.0\% |

## Travel Speed of Motor Vehicles in Bicycle Crashes (Utah 2013)

| Motor Vehicles (Bicycle-Motor Vehicle Crash) |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Travel Speed | PDO Crashes |  | Injury Crashes |  | Fatal Crashes |  | Total |  |
|  | \# | \% | \# | \% | \# | \% | \# | \% |
| Parked | 1 | 1.2\% | 13 | 1.8\% | 0 | 0.0\% | 14 | 1.7\% |
| Stopped | 2 | 2.4\% | 19 | 2.6\% | 0 | 0.0\% | 21 | 2.6\% |
| 1-9 MPH | 33 | 38.8\% | 206 | 28.3\% | 0 | 0.0\% | 239 | 29.2\% |
| 10-19 MPH | 9 | 10.6\% | 104 | 14.3\% | 2 | 33.3\% | 115 | 14.1\% |
| 20-29 MPH | 2 | 2.4\% | 42 | 5.8\% | 0 | 0.0\% | 44 | 5.4\% |
| 30-39 MPH | 3 | 3.5\% | 27 | 3.7\% | 1 | 16.7\% | 31 | 3.8\% |
| 40-49 MPH | 2 | 2.4\% | 13 | 1.8\% | 1 | 16.7\% | 16 | 2.0\% |
| $50+\mathrm{MPH}$ | 1 | 1.2\% | 4 | 0.6\% | 2 | 33.3\% | 7 | 0.9\% |
| Unknown | 32 | 37.6\% | 299 | 41.1\% | 0 | 0.0\% | 331 | 40.5\% |
| Total | 85 | 100.0\% | 727 | 100.0\% | 6 | 100.0\% | 818 | 100.0\% |

- Nearly three-fourths (72.7\% 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 2013)

| Motor Vehicles (Bicycle-Motor Vehicle Crashes) |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Speed Limit | PDO Crashes |  | Injury Crashes |  | Fatal Crashes |  | Total |  |
|  | \# | \% | \# | \% | \# | \% | \# | \% |
| 5-15 MPH | 2 | 2.4\% | 13 | 1.8\% | 0 | 0.0\% | 15 | 1.8\% |
| 20-25 MPH | 11 | 12.9\% | 168 | 23.1\% | 1 | 16.7\% | 180 | 22.0\% |
| 30-35 MPH | 24 | 28.2\% | 167 | 23.0\% | 1 | 16.7\% | 192 | 23.5\% |
| 40-45 MPH | 15 | 17.6\% | 98 | 13.5\% | 1 | 16.7\% | 114 | 13.9\% |
| 50-55 MPH | 2 | 2.4 | 10 | 1.4 | 1 | 16. | 13 | 1.6\% |
| 60+ MPH | 1 | 1.2\% | 4 | 0.6\% | 2 | 33.3\% | 7 | 0.9\% |
| Unknown | 30 | 35.3\% | 267 | 36.7\% | 0 | 0.0\% | 297 | 36.3\% |
| Total | 85 | 100.0\% | 727 | 100.0\% | 6 | 100.0\% | 818 | 100.0\% |

- Nearly all (93.3\% of known) of bicycle-motor vehicle crashes occurred where the speed limit was 20-45 MPH.


## Contributing Factors in Bicycle Crashes (Utah 2013)

- Failed to yield right of way (42.8\%), hit and run (7.3\%), and driver distraction (5.2\%) were the leading contributing factors in total bicyclemotor vehicle crashes.

| Drivers/Motor Vehicles (Bicycle-Motor Vehicle Crashes) |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Contributing Factors | PDO Crashes |  | Injury Crashes |  | Fatal Crashes |  | Total |  |
|  | \# | \% | \# | \% | \# | \% | \# | \% |
| Failed to Yield Right of Way | 32 | 45.1\% | 266 | 43.3\% | 1 | 7.1\% | 299 | 42.8\% |
| Other Improper Driving | 8 | 11.3\% | 55 | 9.0\% | 0 | 0.0\% | 63 | 9.0\% |
| Hit and Run | 7 | 9.9\% | 44 | 7.2\% | 0 | 0.0\% | 51 | 7.3\% |
| Driver Distraction | 1 | 1.4\% | 32 | 5.2\% | 3 | 21.4\% | 36 | 5.2\% |
| Improper Turn | 3 | 4.2\% | 28 | 4.6\% | 0 | 0.0\% | 31 | 4.4\% |
| Vision Obscured by Glare | 3 | 4.2\% | 24 | 3.9\% | 1 | 7.1\% | 28 | 4.0\% |
| Disregard Traffic Signa//Sign | 0 | 0.0\% | 24 | 3.9\% | 2 | 14.3\% | 26 | 3.7\% |
| Vision Obscured by Other | 3 | 4.2\% | 18 | 2.9\% | 0 | 0.0\% | 21 | 3.0\% |
| Vision Obscured by Building, Sign | 2 | 2.8\% | 16 | 2.6\% | 0 | 0.0\% | 18 | 2.6\% |
| Vision Obscured by Vegetation | 1 | 1.4\% | 14 | 2.3\% | 0 | 0.0\% | 15 | 2.1\% |
| Failed to Keep in Proper Lane | 0 | 0.0\% | 14 | 2.3\% | 0 | 0.0\% | 14 | 2.0\% |
| Vision Obscured by Moving Vehicle | 1 | 1.4\% | 10 | 1.6\% | 0 | 0.0\% | 11 | 1.6\% |
| Vision Obscured by Weather | 2 | 2.8\% | 9 | 1.5\% | 0 | 0.0\% | 11 | 1.6\% |
| Improper Parking/Stopping | 0 | 0.0\% | 9 | 1.5\% | 0 | 0.0\% | 9 | 1.3\% |
| Speed Too Fast | 1 | 1.4\% | 8 | 1.3\% | 0 | 0.0\% | 9 | 1.3\% |
| Vehicle Defective Condition | 0 | 0.0\% | 8 | 1.3\% | 0 | 0.0\% | 8 | 1.1\% |
| Improper Backing | 2 | 2.8\% | 4 | 0.7\% | 0 | 0.0\% | 6 | 0.9\% |
| Driver Illness/Medical | 0 | 0.0\% | 3 | 0.5\% | 1 | 7.1\% | 4 | 0.6\% |
| Followed Too Closely | 1 | 1.4\% | 2 | 0.3\% | 1 | 7.1\% | 4 | 0.6\% |
| Ran Off Road | 1 | 1.4\% | 2 | 0.3\% | 1 | 7.1\% | 4 | 0.6\% |
| Vision Obscured by Parked Vehicle | 0 | 0.0\% | 4 | 0.7\% | 0 | 0.0\% | 4 | 0.6\% |
| Wrong Side/Wrong Way | 0 | 0.0\% | 3 | 0.5\% | 1 | 7.1\% | 4 | 0.6\% |
| Driving Under the Influence | 1 | 1.4\% | 2 | 0.3\% | 0 | 0.0\% | 3 | 0.4\% |
| Improper Lane Change | 0 | 0.0\% | 3 | 0.5\% | 0 | 0.0\% | 3 | 0.4\% |
| Improper Passing | 0 | 0.0\% | 3 | 0.5\% | 0 | 0.0\% | 3 | 0.4\% |
| Reckless/Aggressive Driving | 0 | 0.0\% | 2 | 0.3\% | 1 | 7.1\% | 3 | 0.4\% |
| Windshield/Window Obscured | 0 | 0.0\% | 2 | 0.3\% | 1 | 7.1\% | 3 | 0.4\% |
| Driver Asleep/Fatigue | 0 | 0.0\% | 1 | 0.2\% | 1 | 7.1\% | 2 | 0.3\% |
| Driver Emotional Prior to Crash | 0 | 0.0\% | 2 | 0.3\% | 0 | 0.0\% | 2 | 0.3\% |
| Other Driver Condition | 1 | 1.4\% | 1 | 0.2\% | 0 | 0.0\% | 2 | 0.3\% |
| Swerved or Evasive Action | 1 | 1.4\% | 1 | 0.2\% | 0 | 0.0\% | 2 | 0.3\% |
| Total | 71 | 100.0\% | 614 | 100.0\% | 14 | 100.0\% | 699 | 100.0\% |

