

# Bicyclists



## Section 10: Bicyclists

2

<u>Trends</u>	
Bicyclists in Crashes 2002-2011.....	126
Bicycle-Motor Vehicle Crashes 2002-2011.....	127
<u>Counties</u>	
Bicyclists in Crashes by County.....	128
<u>Bicyclists</u>	
Helmet Use.....	128
Injury Severity.....	129
Age.....	129
Gender.....	129
<u>Motor Vehicle Drivers</u>	
Driver Age.....	130
Driver Gender.....	130
<u>Crash Conditions</u>	
Month.....	131
Day of Week.....	131
Bicyclist Location.....	131
Hour.....	132
Motor Vehicle Maneuver Prior to Crash.....	132
Bicyclist Contributing Factors.....	133
Travel Speed of Motor Vehicles.....	133
Speed Limit.....	134
Motor Vehicle Driver Contributing Factors.....	134

0

1

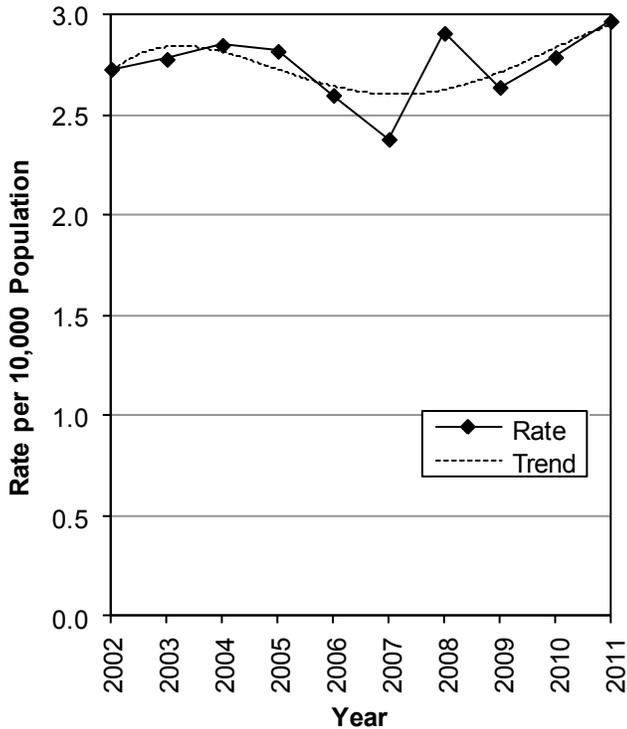
1

# Trends

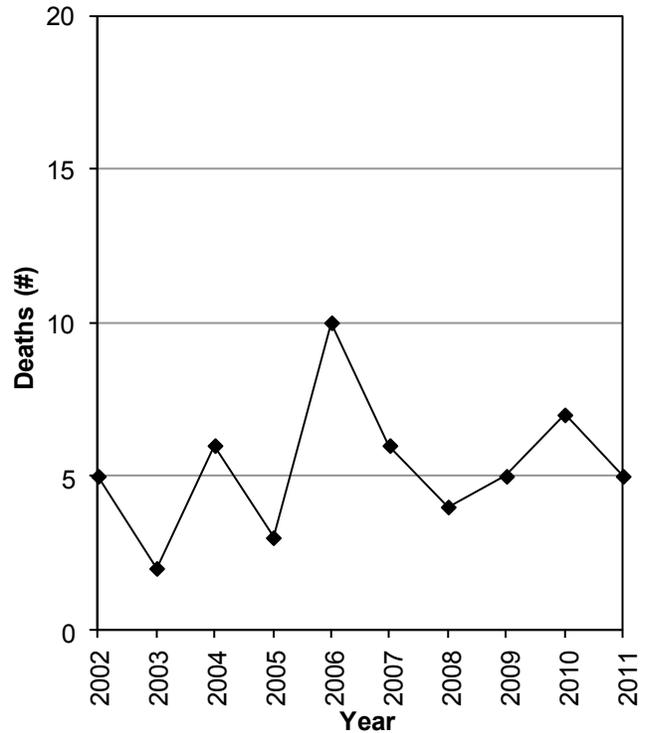
## Bicyclists in Crashes (Utah 2002-2011)

Bicyclists								
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.
2002	50	0.21	590	2.53	5	0.021	645	2.77
2003	48	0.20	621	2.62	2	0.008	671	2.83
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
<b>Total</b>	<b>684</b>	<b>0.26</b>	<b>6,475</b>	<b>2.50</b>	<b>53</b>	<b>0.020</b>	<b>7,212</b>	<b>2.79</b>

### Bicyclist Crash Rates Per Population (Utah 2002-2011)



### Bicyclist Deaths (Utah 2002-2011)



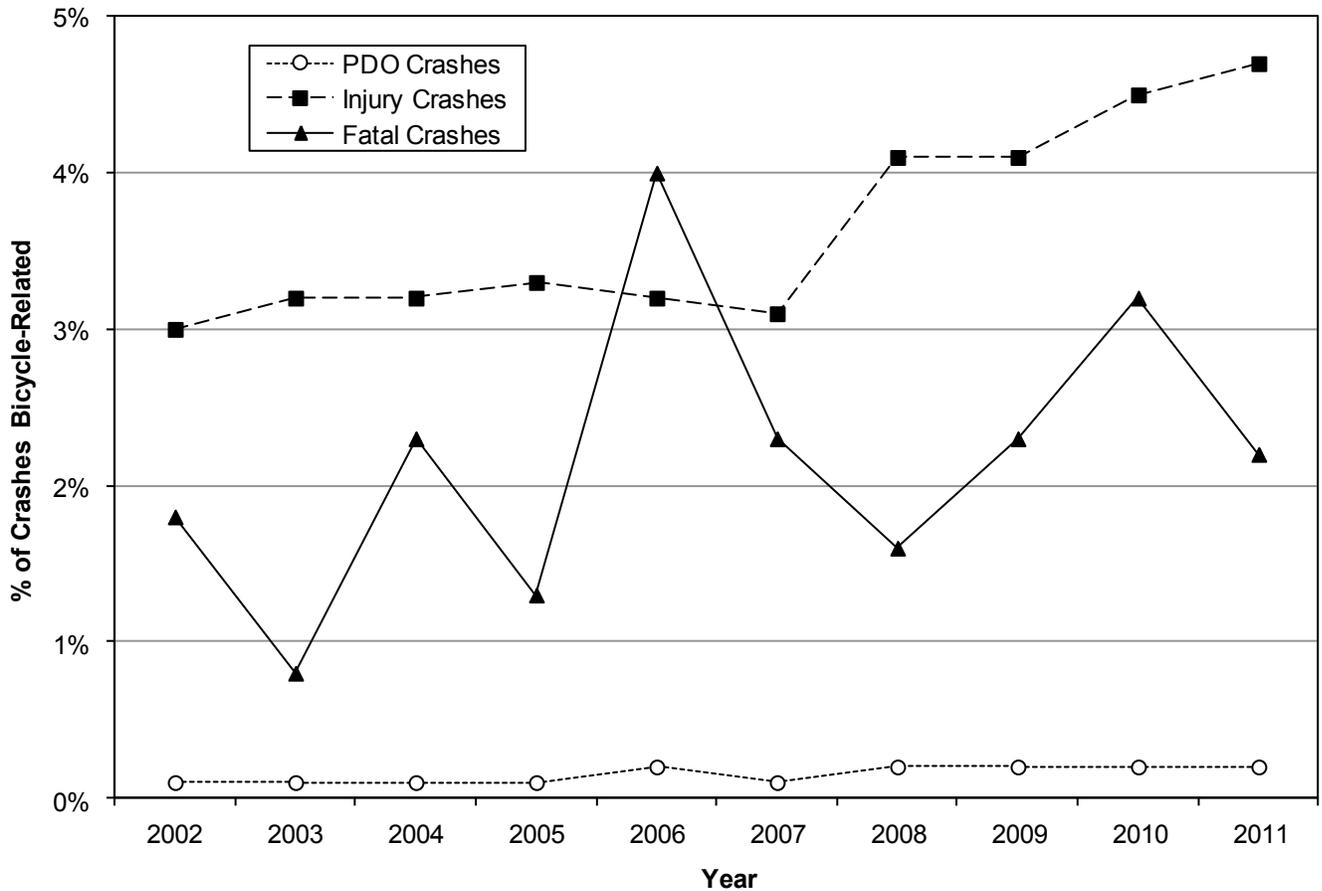
- In 2011, the total rate per population of bicyclists in crashes increased 6% from the 2010 rate.
- 2007 had the lowest bicyclist crash rate per population (2.44).
- 2008 had the highest bicyclist crash rate per population (2.98).

- On average, five bicyclists are killed in crashes every year.
- In 2011, there were 5 bicyclists killed in crashes.
- Because of the small number of bicyclist deaths, use caution when comparing years due to small number instability.

### Bicycle-Motor Vehicle Crashes (Utah 2002-2011)

Bicycle-Motor Vehicle Crashes												
Year	Property Damage Only			Injury			Fatal			Total		
	All	Bicycle		All	Bicycle		All	Bicycle		All	Bicycle	
	#	#	%	#	#	%	#	#	%	#	#	%
2002	33,542	44	0.1%	19,552	585	3.0%	274	5	1.8%	53,368	634	1.2%
2003	31,842	39	0.1%	18,285	589	3.2%	262	2	0.8%	50,389	630	1.3%
2004	34,222	45	0.1%	19,423	626	3.2%	260	6	2.3%	53,905	677	1.3%
2005	35,158	50	0.1%	19,545	637	3.3%	235	3	1.3%	54,938	690	1.3%
2006	37,749	71	0.2%	18,189	589	3.2%	249	10	4.0%	56,187	670	1.2%
2007	42,368	46	0.1%	18,619	579	3.1%	258	6	2.3%	61,245	631	1.0%
2008	38,997	83	0.2%	17,125	697	4.1%	245	4	1.6%	56,367	784	1.4%
2009	35,398	83	0.2%	15,752	651	4.1%	217	5	2.3%	51,367	739	1.4%
2010	34,155	78	0.2%	14,995	669	4.5%	218	7	3.2%	49,368	754	1.5%
2011	36,418	73	0.2%	15,645	735	4.7%	224	5	2.2%	52,287	813	1.6%
<b>Total</b>	<b>359,849</b>	<b>612</b>	<b>0.2%</b>	<b>177,130</b>	<b>6,357</b>	<b>3.6%</b>	<b>2,442</b>	<b>53</b>	<b>2.2%</b>	<b>539,421</b>	<b>7,022</b>	<b>1.3%</b>

### Percent of Crashes Involving a Bicyclist (Utah 2002-2011)



- The 10-year trend shows that bicycle-motor vehicle crashes represent 0.2% of property damage only crashes, 3.6% of injury crashes, and 2.2% of fatal crashes.
- During the last 10 years, 7,022 crashes involved a bicyclist. There are approximately 635 injury crashes and five fatal crashes involving bicyclists a year.

## Counties

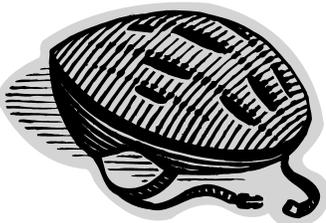
### Bicyclists in Crashes by County (Utah 2011)

County	Bicyclists							
	Non-Injured		Injured		Killed		Total	
	#	Rate per 10,000 Pop.	#	Rate per 10,000 Pop.	#	Rate per 10,000 Pop.	#	Rate per 10,000 Pop.
Salt Lake	43	0.41	391	3.74	1	0.01	435	4.16
Cache	11	0.96	28	2.44	0	0.00	39	3.40
Grand	1	1.07	2	2.15	0	0.00	3	3.22
Utah	11	0.21	157	2.96	0	0.00	168	3.17
Carbon	1	0.47	5	2.33	0	0.00	6	2.79
Wasatch	1	0.41	5	2.04	0	0.00	6	2.45
Davis	7	0.22	61	1.95	1	0.03	69	2.21
Weber	6	0.26	44	1.89	0	0.00	50	2.14
Washington	0	0.00	25	1.77	1	0.07	26	1.84
Tooele	2	0.34	7	1.18	0	0.00	9	1.52
Beaver	0	0.00	1	1.51	0	0.00	1	1.51
Kane	0	0.00	1	1.39	0	0.00	1	1.39
Uintah	0	0.00	4	1.20	0	0.00	4	1.20
Summit	0	0.00	4	1.08	0	0.00	4	1.08
Iron	0	0.00	5	1.07	0	0.00	5	1.07
Emery	0	0.00	0	0.00	1	0.91	1	0.91
Millard	0	0.00	1	0.79	0	0.00	1	0.79
Box Elder	2	0.40	2	0.40	0	0.00	4	0.79
Sanpete	0	0.00	2	0.71	0	0.00	2	0.71
San Juan	0	0.00	1	0.67	0	0.00	1	0.67
Duchesne	0	0.00	0	0.00	1	0.52	1	0.52
Sevier	0	0.00	1	0.48	0	0.00	1	0.48
Daggett	0	0.00	0	0.00	0	0.00	0	0.00
Garfield	0	0.00	0	0.00	0	0.00	0	0.00
Juab	0	0.00	0	0.00	0	0.00	0	0.00
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
Wayne	0	0.00	0	0.00	0	0.00	0	0.00
<b>Statewide</b>	<b>85</b>	<b>0.30</b>	<b>747</b>	<b>2.65</b>	<b>5</b>	<b>0.02</b>	<b>837</b>	<b>2.97</b>

- Urban areas (3.40) had a much higher total bicycle-motor vehicle crash rate per 10,000 population than rural areas (1.66).
- Salt Lake (4.16), Cache (3.40), and Grand (3.22) counties had the highest rates per population of total bicyclists in crashes per 10,000 population.
- Daggett, Garfield, Juab, Morgan, Piute, Rich, and Wayne counties had no bicyclists in crashes.

## Bicyclists

### Bicyclists and Helmet Use

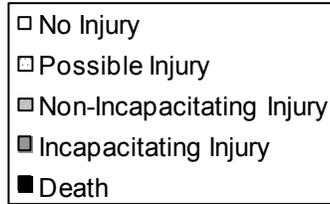
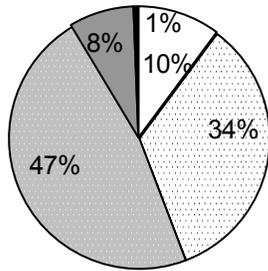


Helmet Use	Bicyclists							
	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Helmet Worn	5	5.9%	78	10.4%	2	40.0%	85	10.2%
Helmet Not Worn	34	40.0%	180	24.1%	3	60.0%	217	25.9%
Unknown	46	54.1%	489	65.5%	0	0.0%	535	63.9%
<b>Total</b>	<b>85</b>	<b>100.0%</b>	<b>747</b>	<b>100.0%</b>	<b>5</b>	<b>100.0%</b>	<b>837</b>	<b>100.0%</b>

- Where helmet use is known for bicyclists, 28.1% of bicyclists were wearing a helmet.

# Bicyclists

## Injury Severity of Bicyclists in Crashes (Utah 2011)



- 89.2% of bicyclists in crashes sustained an injury compared to 17.3% of all persons in motor vehicle crashes.

## Age of Bicyclists in Crashes (Utah 2011)

Age	Bicyclists							
	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
0-4	0	0.0%	6	0.8%	1	20.0%	7	0.8%
5-9	8	9.4%	54	7.2%	1	20.0%	63	7.5%
10-14	16	18.8%	98	13.1%	1	20.0%	115	13.7%
15-19	9	10.6%	117	15.7%	0	0.0%	126	15.1%
20-24	8	9.4%	116	15.5%	1	20.0%	125	14.9%
25-29	4	4.7%	61	8.2%	0	0.0%	65	7.8%
30-34	3	3.5%	59	7.9%	0	0.0%	62	7.4%
35-39	6	7.1%	31	4.1%	0	0.0%	37	4.4%
40-44	2	2.4%	40	5.4%	0	0.0%	42	5.0%
45-49	3	3.5%	42	5.6%	0	0.0%	45	5.4%
50-54	5	5.9%	35	4.7%	0	0.0%	40	4.8%
55-59	3	3.5%	25	3.3%	0	0.0%	28	3.3%
60-64	1	1.2%	17	2.3%	0	0.0%	18	2.2%
65-69	1	1.2%	8	1.1%	0	0.0%	9	1.1%
70+	3	3.5%	4	0.5%	1	20.0%	8	1.0%
Unknown	13	15.3%	34	4.6%	0	0.0%	47	5.6%
<b>Total</b>	<b>85</b>	<b>100.0%</b>	<b>747</b>	<b>100.0%</b>	<b>5</b>	<b>100.0%</b>	<b>837</b>	<b>100.0%</b>

- Over half (52.1%) 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 2011)

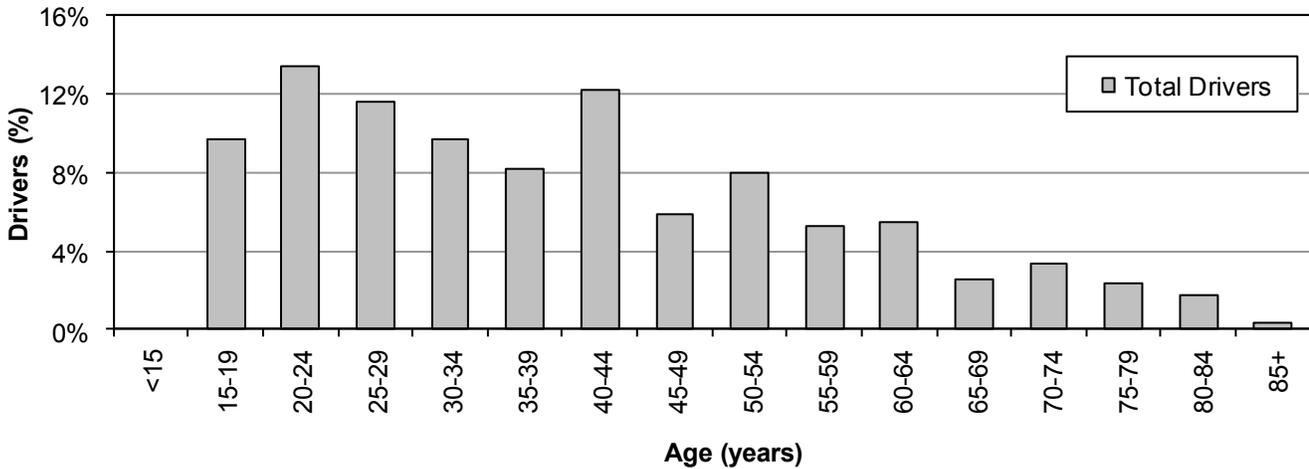
Gender	Bicyclists							
	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Male	62	72.9%	547	73.2%	3	60.0%	612	73.1%
Female	12	14.1%	186	24.9%	2	40.0%	200	23.9%
Unknown	11	12.9%	14	1.9%	0	0.0%	25	3.0%
<b>Total</b>	<b>85</b>	<b>100.0%</b>	<b>747</b>	<b>100.0%</b>	<b>5</b>	<b>100.0%</b>	<b>837</b>	<b>100.0%</b>

- The majority of all bicyclists (73.1%) in crashes were male.

# Motor Vehicle Drivers

## Driver Age (Utah 2011)

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	11	13.9%	61	8.1%	0	0.0%	72	8.6%
20-24	10	12.7%	89	11.9%	0	0.0%	99	11.9%
25-29	6	7.6%	79	10.5%	1	20.0%	86	10.3%
30-34	7	8.9%	65	8.7%	0	0.0%	72	8.6%
35-39	7	8.9%	53	7.1%	1	20.0%	61	7.3%
40-44	2	2.5%	88	11.7%	0	0.0%	90	10.8%
45-49	9	11.4%	35	4.7%	0	0.0%	44	5.3%
50-54	2	2.5%	57	7.6%	0	0.0%	59	7.1%
55-59	6	7.6%	33	4.4%	0	0.0%	39	4.7%
60-64	7	8.9%	34	4.5%	0	0.0%	41	4.9%
65-69	1	1.3%	17	2.3%	1	20.0%	19	2.3%
70-74	1	1.3%	23	3.1%	1	20.0%	25	3.0%
75-79	2	2.5%	16	2.1%	0	0.0%	18	2.2%
80-84	0	0.0%	13	1.7%	0	0.0%	13	1.6%
85+	2	2.5%	0	0.0%	0	0.0%	2	0.2%
Unknown	6	7.6%	88	11.7%	1	20.0%	95	11.4%
<b>Total</b>	<b>79</b>	<b>100.0%</b>	<b>751</b>	<b>100.0%</b>	<b>5</b>	<b>100.0%</b>	<b>835</b>	<b>100.0%</b>



- Over half (52.7% of known) of drivers in total bicycle-motor vehicle crashes were under age 40 years.

## Driver Gender (Utah 2011)

Drivers (Bicycle-Motor Vehicle Crashes)								
Gender	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Male	35	44.3%	358	47.7%	2	40.0%	395	47.3%
Female	38	48.1%	328	43.7%	2	40.0%	368	44.1%
Unknown	6	7.6%	65	8.7%	1	20.0%	72	8.6%
<b>Total</b>	<b>79</b>	<b>100.0%</b>	<b>751</b>	<b>100.0%</b>	<b>5</b>	<b>100.0%</b>	<b>835</b>	<b>100.0%</b>

- The majority of drivers in total bicycle-motor vehicle crashes (51.8% of known) were male.

## Bicycle-Motor Vehicle Crash Conditions

### Bicycle-Motor Vehicle Crashes by Month (Utah 2011)

Bicyclists								
Month	Non-Injured		Injured		Killed		Total	
	#	Rate per Day	#	Rate per Day	#	Rate per Day	#	Rate per Day
January	3	0.1	15	0.5	0	0.00	18	0.6
February	1	0.0	14	0.5	0	0.00	15	0.5
March	4	0.1	49	1.6	0	0.00	53	1.7
April	6	0.2	32	1.1	0	0.00	38	1.3
May	8	0.3	66	2.1	0	0.00	74	2.4
June	11	0.4	110	3.7	3	0.10	124	4.1
July	13	0.4	104	3.4	0	0.00	117	3.8
August	12	0.4	111	3.6	1	0.03	124	4.0
September	9	0.3	109	3.6	1	0.03	119	4.0
October	8	0.3	82	2.6	0	0.00	90	2.9
November	3	0.1	30	1.0	0	0.00	33	1.1
December	7	0.2	25	0.8	0	0.00	32	1.0
<b>Total</b>	<b>85</b>	<b>0.2</b>	<b>747</b>	<b>2.0</b>	<b>5</b>	<b>0.01</b>	<b>837</b>	<b>2.3</b>

- June (4.1), August (4.0), and September (4.0) had the highest rates per day of total bicycle-motor vehicle crashes.

### Bicycle-Motor Vehicle Crashes by Day of Week (Utah 2011)

Bicyclists								
Day of Week	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Sunday	8	9.4%	43	5.8%	1	20.0%	52	6.2%
Monday	12	14.1%	128	17.1%	0	0.0%	140	16.7%
Tuesday	16	18.8%	143	19.1%	1	20.0%	160	19.1%
Wednesday	12	14.1%	116	15.5%	1	20.0%	129	15.4%
Thursday	16	18.8%	126	16.9%	0	0.0%	142	17.0%
Friday	11	12.9%	116	15.5%	0	0.0%	127	15.2%
Saturday	10	11.8%	75	10.0%	2	40.0%	87	10.4%
<b>Total</b>	<b>85</b>	<b>100.0%</b>	<b>747</b>	<b>100.0%</b>	<b>5</b>	<b>100.0%</b>	<b>837</b>	<b>100.0%</b>

- The highest percentage of total bicycle-motor vehicle crashes occurred on Tuesday (19.1%).

### Bicyclist Location in Bicycle-Motor Vehicle Crashes (Utah 2011)

Bicyclists								
Bicyclist Location	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Marked Crosswalk	28	32.9%	195	26.1%	0	0.0%	223	26.6%
In Roadway (not at intersection)	11	12.9%	135	18.1%	4	80.0%	150	17.9%
Shoulder	8	9.4%	88	11.8%	0	0.0%	96	11.5%
Sidewalk	11	12.9%	80	10.7%	0	0.0%	91	10.9%
Unmarked Crosswalk	8	9.4%	65	8.7%	0	0.0%	73	8.7%
Bike Path/Lane	3	3.5%	27	3.6%	0	0.0%	30	3.6%
Outside Right of Way	0	0.0%	5	0.7%	0	0.0%	5	0.6%
Shared Use Path/Trail	0	0.0%	4	0.5%	0	0.0%	4	0.5%
Other	3	3.5%	24	3.2%	0	0.0%	27	3.2%
Unknown	13	15.3%	124	16.6%	1	20.0%	138	16.5%
<b>Total</b>	<b>85</b>	<b>100.0%</b>	<b>747</b>	<b>100.0%</b>	<b>5</b>	<b>100.0%</b>	<b>837</b>	<b>100.0%</b>

- For total crashes, the largest percentages of bicyclist location prior to the crash were marked crosswalk (31.9% of known), in roadway, (21.5% of known), and shoulder (13.7% 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 2011)

Bicyclists								
Hour	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Midnight	3	3.5%	10	1.3%	0	0.0%	13	1.6%
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.	0	0.0%	0	0.0%	0	0.0%	0	0.0%
5 a.m.	0	0.0%	3	0.4%	0	0.0%	3	0.4%
6 a.m.	0	0.0%	14	1.9%	0	0.0%	14	1.7%
7 a.m.	1	1.2%	38	5.1%	0	0.0%	39	4.7%
8 a.m.	5	5.9%	39	5.2%	0	0.0%	44	5.3%
9 a.m.	2	2.4%	31	4.1%	1	20.0%	34	4.1%
10 a.m.	5	5.9%	34	4.6%	0	0.0%	39	4.7%
11 a.m.	3	3.5%	33	4.4%	0	0.0%	36	4.3%
Noon	7	8.2%	53	7.1%	0	0.0%	60	7.2%
1 p.m.	7	8.2%	48	6.4%	1	20.0%	56	6.7%
2 p.m.	9	10.6%	45	6.0%	0	0.0%	54	6.5%
3 p.m.	9	10.6%	56	7.5%	1	20.0%	66	7.9%
4 p.m.	6	7.1%	55	7.4%	0	0.0%	61	7.3%
5 p.m.	7	8.2%	87	11.6%	0	0.0%	94	11.2%
6 p.m.	7	8.2%	73	9.8%	1	20.0%	81	9.7%
7 p.m.	6	7.1%	53	7.1%	0	0.0%	59	7.0%
8 p.m.	2	2.4%	30	4.0%	0	0.0%	32	3.8%
9 p.m.	3	3.5%	21	2.8%	0	0.0%	24	2.9%
10 p.m.	2	2.4%	15	2.0%	1	20.0%	18	2.2%
11 p.m.	1	1.2%	7	0.9%	0	0.0%	8	1.0%
<b>Total</b>	<b>85</b>	<b>100.0%</b>	<b>747</b>	<b>100.0%</b>	<b>5</b>	<b>100.0%</b>	<b>837</b>	<b>100.0%</b>

- Total bicycle-motor vehicle crashes were highest between 12:00 p.m. and 7:59 p.m.

### Motor Vehicle Maneuver Prior to Crash (Utah 2011)

Motor Vehicles (Bicycle-Motor Vehicle Crashes)								
Vehicle Maneuver	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Turning Right	34	43.0%	282	37.5%	0	0.0%	316	37.8%
Straight Ahead	26	32.9%	216	28.7%	4	80.0%	246	29.4%
Turning Left	8	10.1%	140	18.6%	0	0.0%	148	17.7%
Stopped/Slowing in Traffic Lane	4	5.1%	24	3.2%	0	0.0%	28	3.3%
Entering/Leaving Traffic Lane	0	0.0%	16	2.1%	0	0.0%	16	1.9%
Backing	1	1.3%	9	1.2%	0	0.0%	10	1.2%
Making U-turn	0	0.0%	8	1.1%	0	0.0%	8	1.0%
Parked/Parking	0	0.0%	8	1.1%	0	0.0%	8	1.0%
Overtaking/Passing	0	0.0%	5	0.7%	1	20.0%	6	0.7%
Other	0	0.0%	10	1.3%	0	0.0%	10	1.2%
Unknown	6	7.6%	34	4.5%	0	0.0%	40	4.8%
<b>Total</b>	<b>79</b>	<b>100.0%</b>	<b>752</b>	<b>100.0%</b>	<b>5</b>	<b>100.0%</b>	<b>836</b>	<b>100.0%</b>

- For total bicycle-motor vehicle crashes, the leading motor vehicle maneuvers prior to the crash were turning right (37.8%), straight ahead (29.4%), and turning left (17.7%).

## Bicycle-Motor Vehicle Crash Conditions

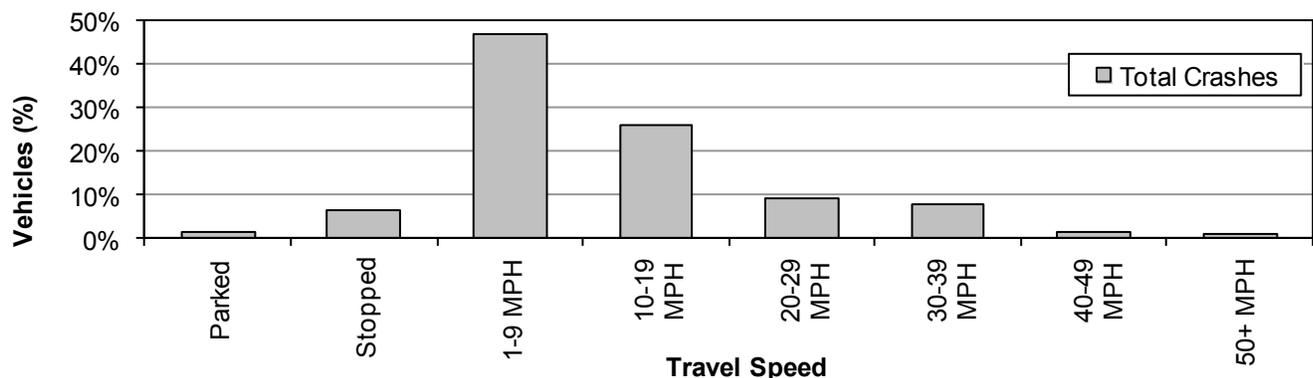
### Contributing Factors of Bicyclists in Crashes (Utah 2011)

Bicyclists								
Contributing Factors	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
None	36	42.4%	321	43.0%	1	20.0%	<b>358</b>	<b>42.8%</b>
Improper Crossing	7	8.2%	63	8.4%	0	0.0%	<b>70</b>	<b>8.4%</b>
Wrong Side of Road	11	12.9%	52	7.0%	1	20.0%	<b>64</b>	<b>7.6%</b>
Failure to Obey Traffic Signs/Signals	6	7.1%	29	3.9%	0	0.0%	<b>35</b>	<b>4.2%</b>
Not Visible	2	2.4%	32	4.3%	1	20.0%	<b>35</b>	<b>4.2%</b>
Failure to Yield Right of Way	3	3.5%	24	3.2%	1	20.0%	<b>28</b>	<b>3.3%</b>
Darting	2	2.4%	21	2.8%	0	0.0%	<b>23</b>	<b>2.7%</b>
Inattentive	1	1.2%	22	2.9%	0	0.0%	<b>23</b>	<b>2.7%</b>
In Roadway (standing/kneeling/lying)	0	0.0%	10	1.3%	0	0.0%	<b>10</b>	<b>1.2%</b>
Other	6	7.1%	29	3.9%	0	0.0%	<b>35</b>	<b>4.2%</b>
Unknown	11	12.9%	144	19.3%	1	20.0%	<b>156</b>	<b>18.6%</b>
<b>Total</b>	<b>85</b>	<b>100.0%</b>	<b>747</b>	<b>100.0%</b>	<b>5</b>	<b>100.0%</b>	<b>837</b>	<b>100.0%</b>

- Improper crossing (10.3% of known), wrong side of road (9.4% of known), and failure to obey traffic signs/signals (5.1% of known) were the leading contributing factors for bicyclists in total crashes.
- No bicyclist contributing factors were listed for 52.6% (of known) of the total bicyclists in crashes.
- Other contributing factors to consider are driver factors (see page 134), 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 2011)

Motor Vehicles (Bicycle-Motor Vehicle Crash)								
Travel Speed	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Parked	0	0.0%	7	0.9%	0	0.0%	<b>7</b>	<b>0.8%</b>
Stopped	6	7.6%	26	3.5%	0	0.0%	<b>32</b>	<b>3.8%</b>
1-9 MPH	25	31.6%	218	29.0%	1	20.0%	<b>244</b>	<b>29.2%</b>
10-19 MPH	6	7.6%	128	17.0%	0	0.0%	<b>134</b>	<b>16.0%</b>
20-29 MPH	2	2.5%	46	6.1%	0	0.0%	<b>48</b>	<b>5.7%</b>
30-39 MPH	1	1.3%	38	5.1%	1	20.0%	<b>40</b>	<b>4.8%</b>
40-49 MPH	0	0.0%	7	0.9%	0	0.0%	<b>7</b>	<b>0.8%</b>
50+ MPH	0	0.0%	3	0.4%	2	40.0%	<b>5</b>	<b>0.6%</b>
Unknown	39	49.4%	279	37.1%	1	20.0%	<b>319</b>	<b>38.2%</b>
<b>Total</b>	<b>79</b>	<b>100.0%</b>	<b>752</b>	<b>100.0%</b>	<b>5</b>	<b>100.0%</b>	<b>836</b>	<b>100.0%</b>



- Over two-thirds (73.1% 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 2011)

Motor Vehicles (Bicycle-Motor Vehicle Crashes)								
Speed Limit	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
5-15 MPH	1	1.3%	20	2.7%	0	0.0%	21	2.5%
20-25 MPH	13	16.5%	196	26.1%	1	20.0%	210	25.1%
30-35 MPH	22	27.8%	202	26.9%	1	20.0%	225	26.9%
40-45 MPH	11	13.9%	98	13.0%	1	20.0%	110	13.2%
50-55 MPH	0	0.0%	6	0.8%	2	40.0%	8	1.0%
60+ MPH	1	1.3%	4	0.5%	0	0.0%	5	0.6%
Unknown	31	39.2%	226	30.1%	0	0.0%	257	30.7%
<b>Total</b>	<b>79</b>	<b>100.0%</b>	<b>752</b>	<b>100.0%</b>	<b>5</b>	<b>100.0%</b>	<b>836</b>	<b>100.0%</b>

- Almost all (94.1% of known) of bicycle-motor vehicle crashes occurred where the speed limit was 20-45 MPH.

## Contributing Factors in Bicycle Crashes (Utah 2011)

Drivers/Motor Vehicles (Bicycle-Motor Vehicle Crashes)								
Contributing Factors	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Failed to Yield Right of Way	23	40.4%	301	42.6%	0	0.0%	324	42.1%
Other Improper Driving	6	10.5%	70	9.9%	0	0.0%	76	9.9%
Hit and Run	6	10.5%	63	8.9%	1	16.7%	70	9.1%
Improper Turn	3	5.3%	43	6.1%	0	0.0%	46	6.0%
Driver Distraction	0	0.0%	32	4.5%	0	0.0%	32	4.2%
Vision Obscured by Glare	2	3.5%	24	3.4%	0	0.0%	26	3.4%
Disregard Traffic Signal/Sign	2	3.5%	17	2.4%	0	0.0%	19	2.5%
Failed to Keep in Proper Lane	0	0.0%	19	2.7%	0	0.0%	19	2.5%
Vision Obscured by Vegetation	4	7.0%	14	2.0%	0	0.0%	18	2.3%
Vision Obscured by Moving Vehicle	0	0.0%	14	2.0%	0	0.0%	14	1.8%
Vision Obscured by Other	1	1.8%	13	1.8%	0	0.0%	14	1.8%
Vision Obscured by Building, Sign	0	0.0%	13	1.8%	0	0.0%	13	1.7%
Driving Under the Influence	1	1.8%	10	1.4%	1	16.7%	12	1.6%
Vehicle Defective Condition	1	1.8%	10	1.4%	0	0.0%	11	1.4%
Vision Obscured by Parked Vehicle	2	3.5%	9	1.3%	0	0.0%	11	1.4%
Driver Emotional Prior to Crash	0	0.0%	9	1.3%	0	0.0%	9	1.2%
Improper Backing	1	1.8%	6	0.8%	0	0.0%	7	0.9%
Followed Too Closely	2	3.5%	4	0.6%	0	0.0%	6	0.8%
Improper Parking/Stopping	1	1.8%	4	0.6%	1	16.7%	6	0.8%
Other Driver Condition	0	0.0%	5	0.7%	1	16.7%	6	0.8%
Vision Obscured by Weather	1	1.8%	5	0.7%	0	0.0%	6	0.8%
Improper Lane Change	0	0.0%	4	0.6%	0	0.0%	4	0.5%
Improper Passing	0	0.0%	3	0.4%	1	16.7%	4	0.5%
Disregard Road Markings	0	0.0%	3	0.4%	0	0.0%	3	0.4%
Ran Off Road	0	0.0%	3	0.4%	0	0.0%	3	0.4%
Reckless/Aggressive Driving	0	0.0%	2	0.3%	1	16.7%	3	0.4%
Speed Too Fast	0	0.0%	3	0.4%	0	0.0%	3	0.4%
Swerved or Evasive Action	0	0.0%	2	0.3%	0	0.0%	2	0.3%
Improper Signal	0	0.0%	1	0.1%	0	0.0%	1	0.1%
Wrong Side/Wrong Way	1	1.8%	0	0.0%	0	0.0%	1	0.1%
<b>Total</b>	<b>57</b>	<b>100.0%</b>	<b>706</b>	<b>100.0%</b>	<b>6</b>	<b>100.0%</b>	<b>769</b>	<b>100.0%</b>

- Failed to yield right of way (42.1%) was the leading contributing factor in total bicycle-motor vehicle crashes.

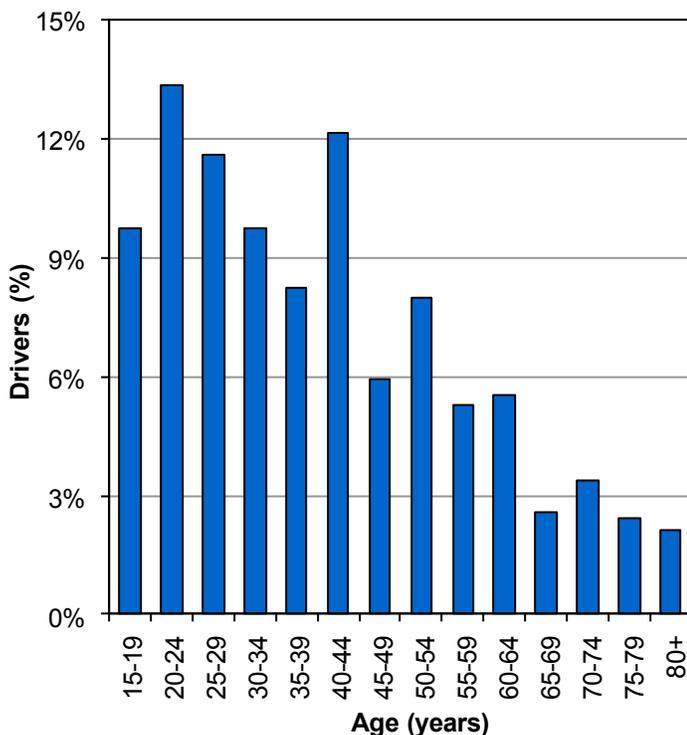
## Did you know in 2011:

- 837 bicyclists were hit by motor vehicles; 747 were injured and 5 were killed.
- Utah's bicyclist crash rate per population increased 6% from 2010.

# Bicyclists



### Age of Drivers in Bicycle-Motor Vehicle Crashes (Utah 2011)



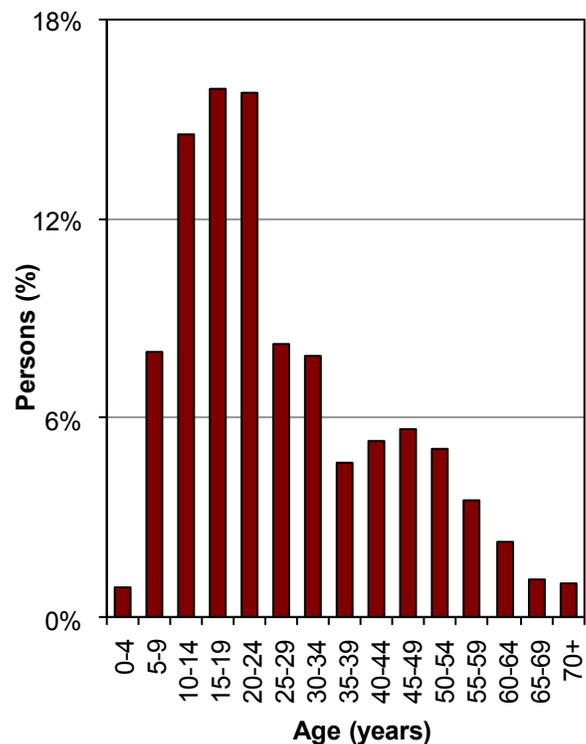
- Over half (53%) of drivers in bicycle-motor vehicle crashes were under 40 years.

### Leading Contributing Factors of Drivers in Bicyclist Crashes (Utah 2011)

1. Fail to Yield Right of Way (40%)
2. Hit and Run (9%)
3. Improper Turn (6%)
4. Driver Distraction (4%)
5. Vision Obscured by Glare (3%)



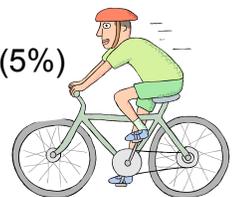
### Age of Bicyclists in Bicycle-Motor Vehicle Crashes (Utah 2011)



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

### Leading Contributing Factors of Bicyclists in Crashes (Utah 2011)

1. Improper Crossing (10%)
  2. Wrong Side of Road (9%)
  3. Disregard Traffic Sign/Signal (5%)
- 53% of bicyclists had no contributing factor in the crash.

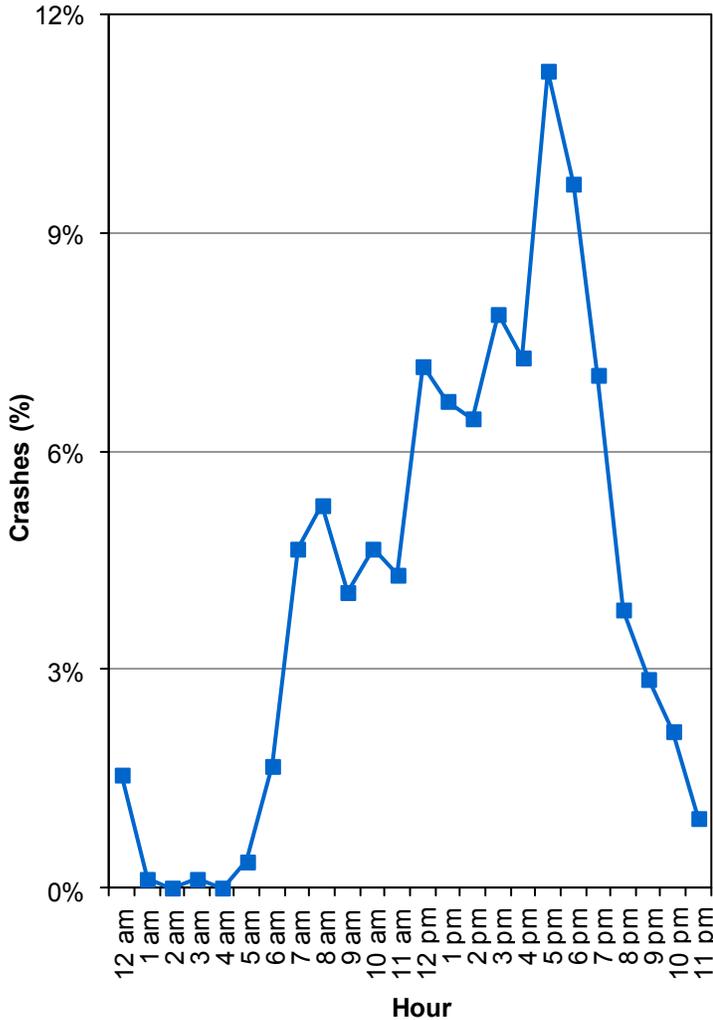


# Bicyclists

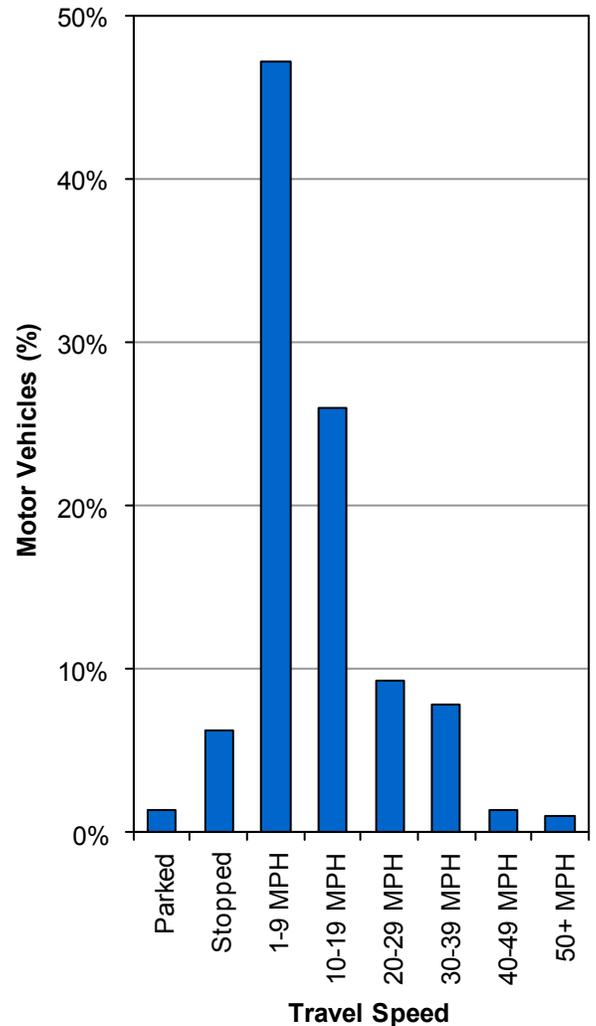


Over one-half (59%) of motor vehicles that hit bicyclists were turning. Drivers need to watch for bicycles before turning.

**Bicycle-Motor Vehicle Crashes by Hour (Utah 2011)**



**Bicycle-Motor Vehicle Crashes by Motor Vehicle Travel Speed (Utah 2011)**

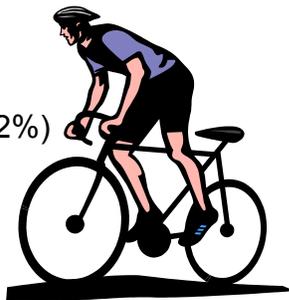


- Bicycle-motor vehicle crashes occurred most often between 3:00 p.m.-6:59 p.m.

- Nearly three-fourths (73%) of crashes with bicyclists occurred when the motor vehicle was traveling 1-19 MPH.

**Location of Bicyclists in Crashes (Utah 2011)**

1. Marked Crosswalk (32%)
2. In Roadway (Not at Intersection) (22%)
3. Shoulder (14%)
4. Sidewalk (13%)
5. Unmarked Crosswalk (10%)



**Motor Vehicle Action Prior to Crash (Utah 2011)**

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