Bicyclists

Section 12: Bicyclists

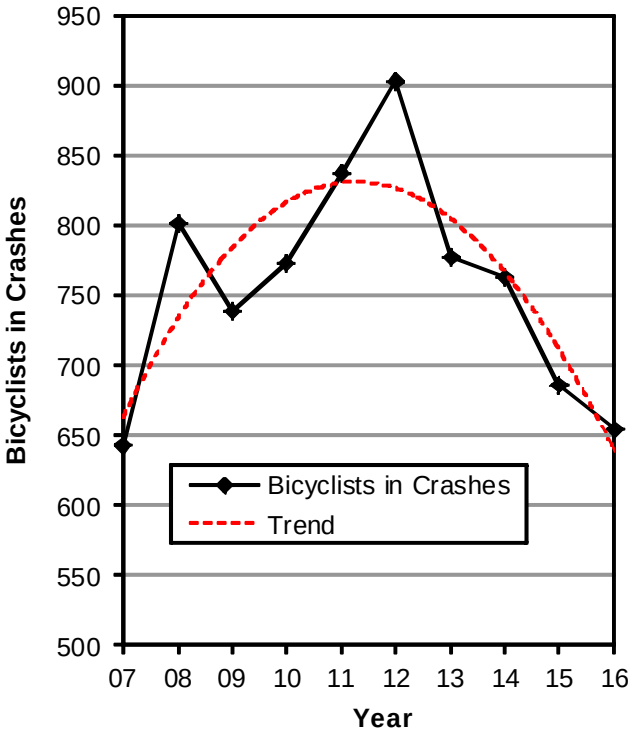
2016

Trends

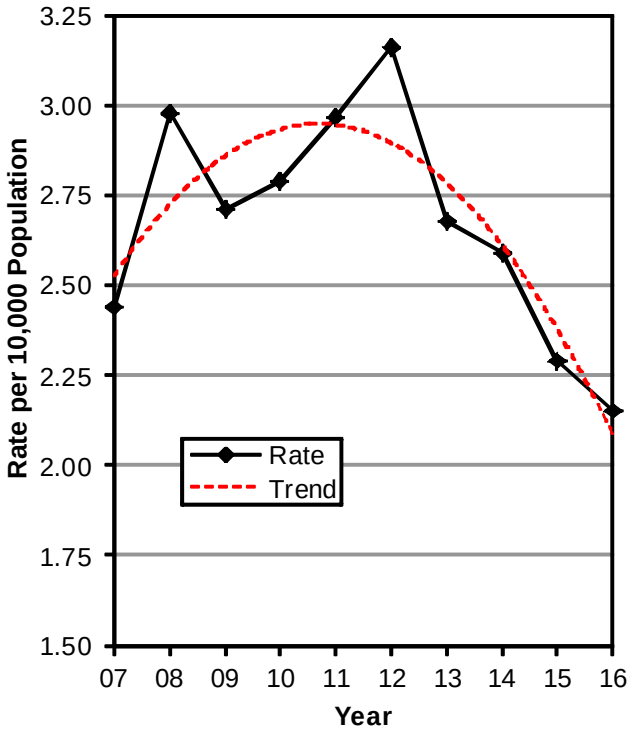
Bicyclists in Crashes (Utah 2007-2016)

Bicyclists								
	Non-Injured		Injured		Killed		Total	
Year	#	Rate per 10,000 Pop.	#	Rate per 10,000 Pop.	#	Rate per 10,000 Pop.	#	Rate per 10,000 Pop.
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**
2014	69	0.23	685	2.33	9	0.031	**763**	**2.59**
2015	46	0.15	635	2.12	5	0.017	**686**	**2.29**
2016	37	0.12	613	2.01	5	0.016	**655**	**2.15**
Total	**695**	**0.24**	**6,828**	**2.40**	**55**	**0.019**	**7,578**	**2.67**

Bicyclists in Crashes (Utah 2007-2016)



Bicyclist Crash Rates Per Population (Utah 2007-2016)



- On average, 760 bicyclists are in crashes every year.
- The total number of bicyclists in crashes has steadily decreased the last four years.
- 2012 had the highest number of bicyclists in crashes (903).

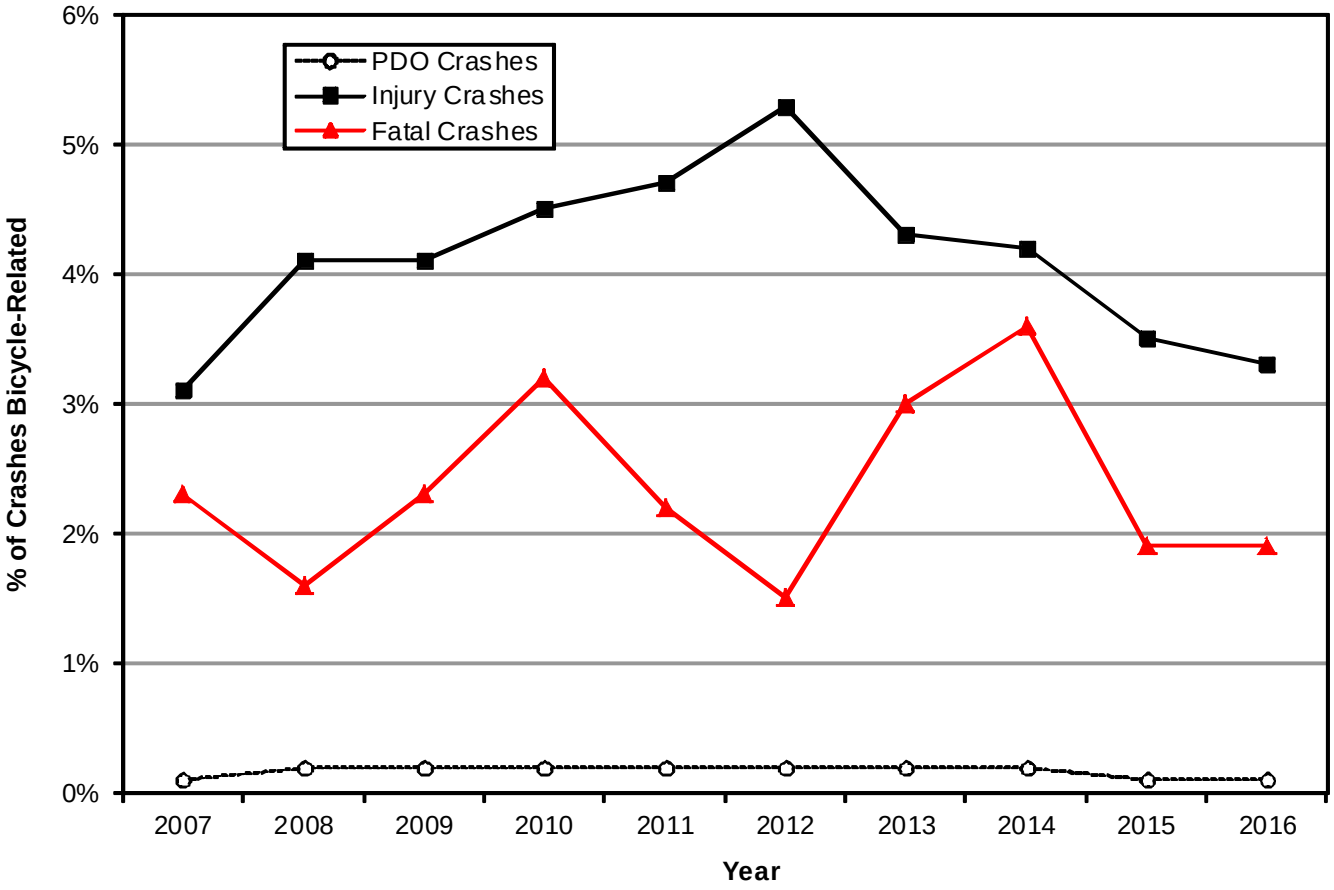
- The total rate per population of bicyclists in crashes decreased 11% over the last 10 years.
- 2016 had the lowest bicyclist crash rate per population (2.15).
- 2012 had the highest bicyclist crash rate per population (3.16).

Trends

Bicycle-Motor Vehicle Crashes (Utah 2007-2016)

Bicycle-Motor Vehicle Crashes												
	Property Damage Only			Injury			Fatal			Total		
	All	Bicycle		All	Bicycle		All	Bicycle		All	Bicycle	
Year	#	#	%	#	#	%	#	#	%	#	#	%
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%**
2014	37,388	60	0.2%	16,426	684	4.2%	222	8	3.6%	**54,036**	**752**	**1.4%**
2015	42,089	38	0.1%	17,665	627	3.5%	258	5	1.9%	**60,012**	**670**	**1.1%**
2016	43,465	31	0.1%	18,747	613	3.3%	259	5	1.9%	**62,471**	**649**	**1.0%**
Total	**384,214**	**625**	**0.2%**	**166,873**	**6,774**	**4.1%**	**2,303**	**54**	**2.3%**	**553,390**	**7,453**	**1.3%**

Percent of Crashes Involving a Bicyclist (Utah 2007-2016)

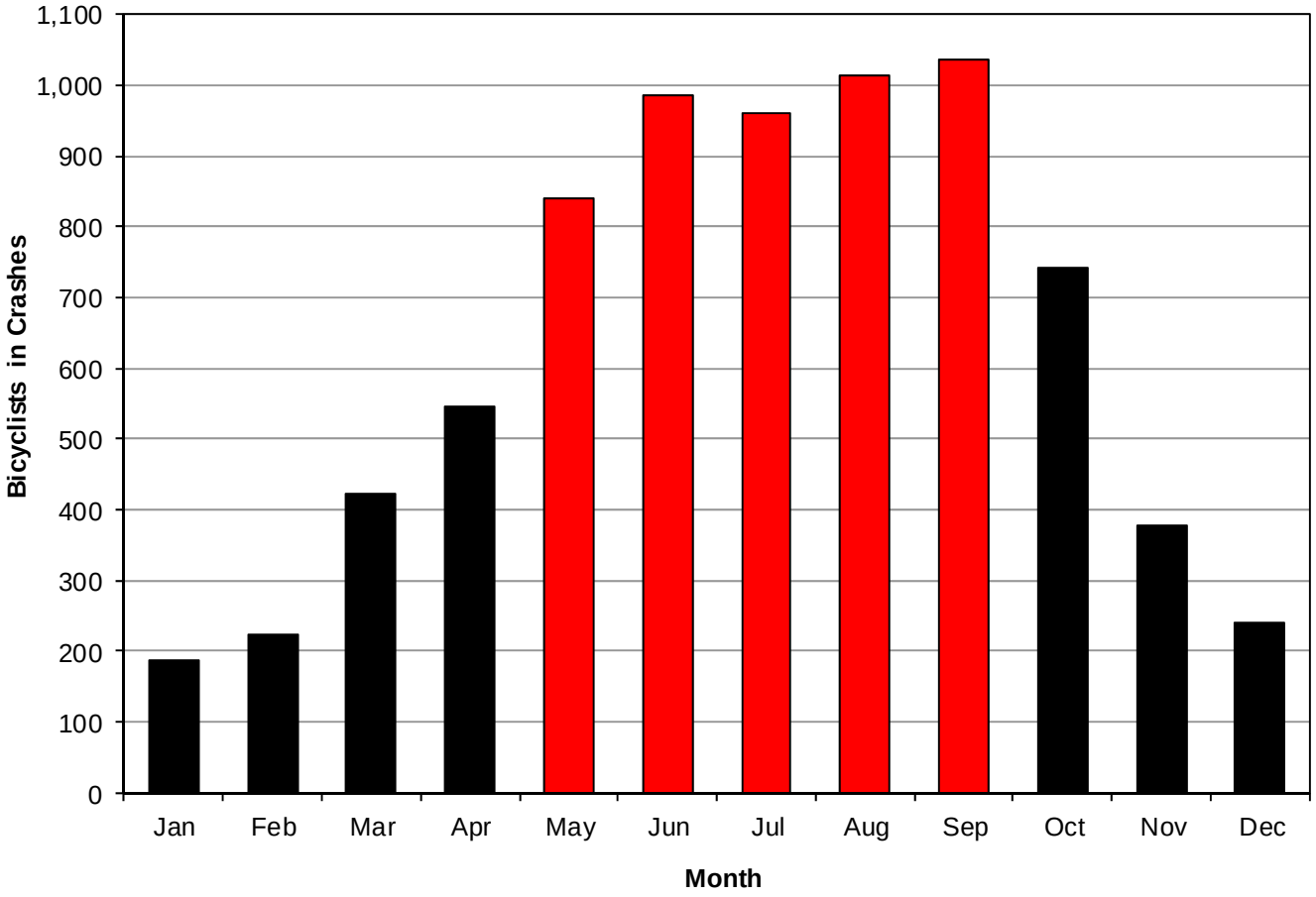


- The 10-year trend shows that bicycle-motor vehicle crashes represent 0.2% of property damage only crashes, 4.1% of injury crashes, and 2.3% of fatal crashes.
- During the last 10 years, 7,453 crashes involved a bicyclist. There are approximately 680 injury crashes and five fatal crashes involving bicyclists a year.

Trends

Bicyclists in Crashes by Month (Utah 2007-2016)

Bicyclists												
	Year										Total	
Month	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	#	%
January	14	14	13	25	18	30	11	27	23	12	**187**	**2.5%**
February	13	11	29	23	15	33	16	23	36	25	**224**	**3.0%**
March	43	30	35	38	53	54	36	51	45	38	**423**	**5.6%**
April	59	49	57	47	38	73	56	57	56	53	**545**	**7.2%**
May	73	90	101	76	74	112	100	75	68	72	**841**	**11.1%**
June	86	103	88	104	124	108	106	102	81	85	**987**	**13.0%**
July	75	106	86	113	117	86	111	101	85	80	**960**	**12.7%**
August	86	123	114	99	124	112	121	76	70	89	**1,014**	**13.4%**
September	78	137	115	114	119	110	87	100	97	80	**1,037**	**13.7%**
October	70	75	46	71	90	100	73	90	73	54	**742**	**9.8%**
November	32	37	36	43	33	51	43	33	28	42	**378**	**5.0%**
December	14	27	19	20	32	34	17	28	24	25	**240**	**3.2%**
Total	**643**	**802**	**739**	**773**	**837**	**903**	**777**	**763**	**686**	**655**	**7,578**	**100.0%**

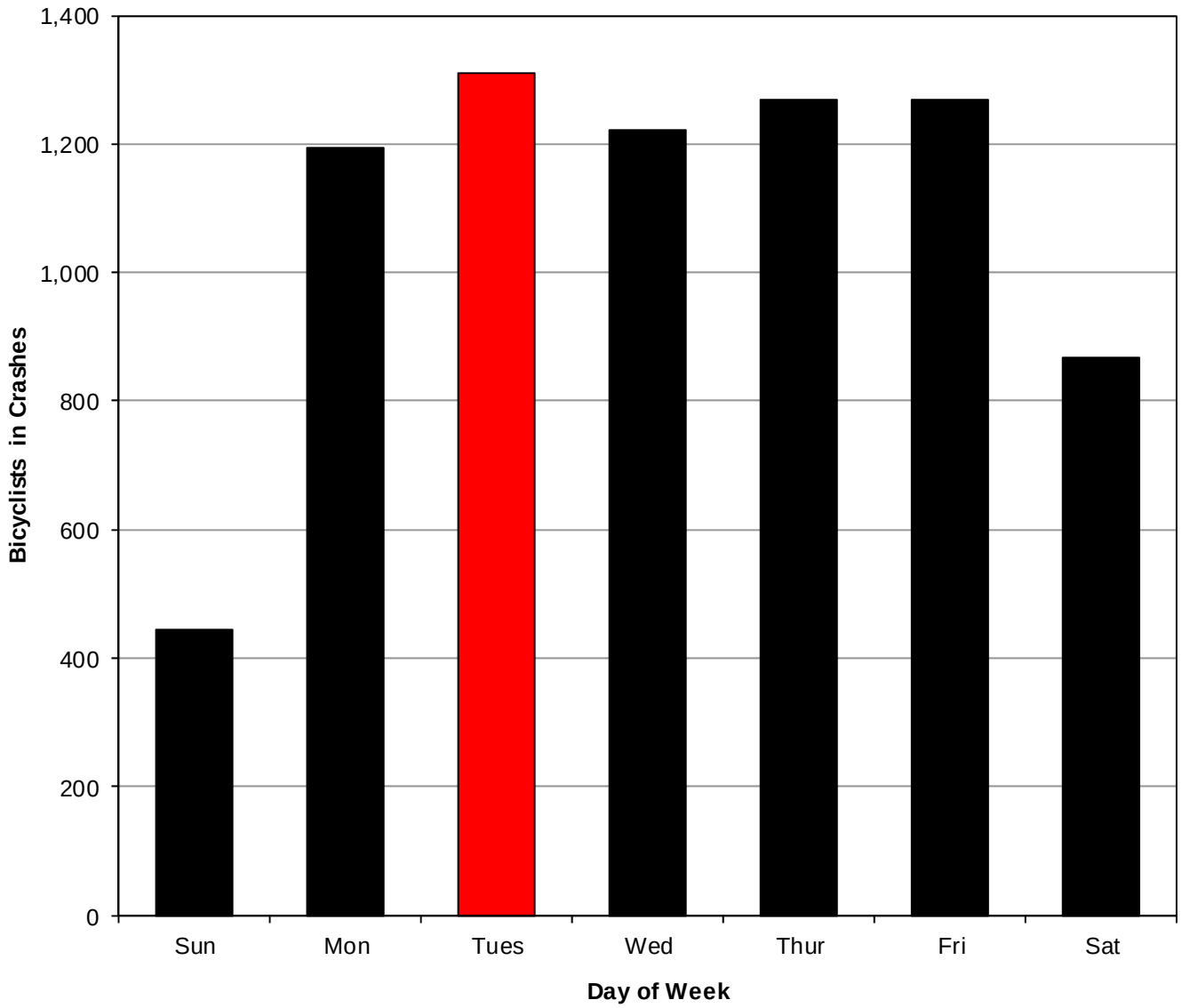


- Bicycle-motor vehicle crashes were highest during the months of May through September over the past 10 years.
- Bicycle-motor vehicle crashes were lowest during the months of December through February over the past 10 years.

Trends

Bicyclists in Crashes by Day of Week (Utah 2007-2016)

Bicyclists												
Day of Week	Year										Total	
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	#	%
Sunday	35	41	38	51	52	60	46	34	54	34	**445**	**5.9%**
Monday	114	124	102	143	140	108	123	126	115	100	**1,195**	**15.8%**
Tuesday	106	139	151	133	160	163	136	130	101	90	**1,309**	**17.3%**
Wednesday	95	136	133	122	129	151	117	116	109	115	**1,223**	**16.1%**
Thursday	105	129	105	139	142	169	120	128	107	125	**1,269**	**16.7%**
Friday	116	132	120	102	127	158	151	146	111	105	**1,268**	**16.7%**
Saturday	72	101	90	83	87	94	84	83	89	86	**869**	**11.5%**
Total	**643**	**802**	**739**	**773**	**837**	**903**	**777**	**763**	**686**	**655**	**7,578**	**100.0%**

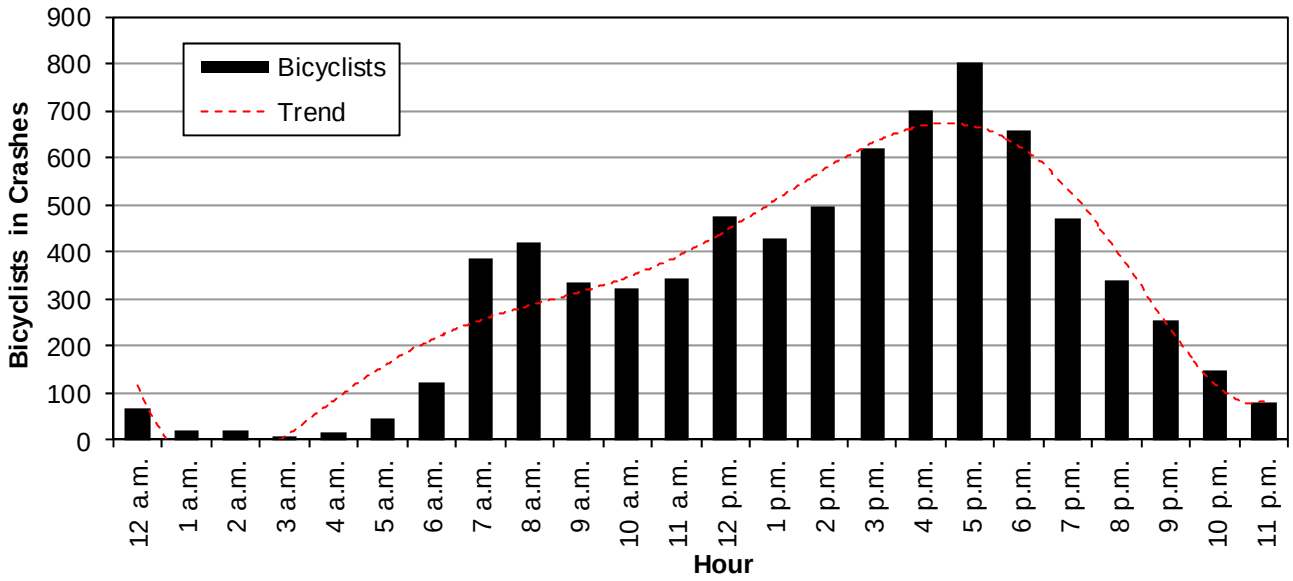


- Bicycle-motor vehicle crashes were highest Monday through Friday over the past 10 years.
- Bicycle-motor vehicle crashes were lowest on Sunday over the past 10 years.

Trends

Bicyclists in Crashes by Hour (Utah 2007-2016)

Bicyclists												
	Year										Total	
Hour	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	#	%
Midnight	5	7	5	4	13	8	7	6	7	4	**66**	**0.9%**
1 a.m.	1	0	6	2	1	4	1	4	2	0	**21**	**0.3%**
2 a.m.	0	5	0	5	0	4	0	3	2	2	**21**	**0.3%**
3 a.m.	0	3	1	0	1	1	1	1	0	0	**8**	**0.1%**
4 a.m.	1	3	1	3	0	3	2	3	1	0	**17**	**0.2%**
5 a.m.	4	8	3	7	3	3	8	4	4	2	**46**	**0.6%**
6 a.m.	11	8	7	9	14	17	14	14	15	14	**123**	**1.6%**
7 a.m.	41	39	43	44	39	45	41	34	32	26	**384**	**5.1%**
8 a.m.	40	42	40	29	44	57	48	32	44	43	**419**	**5.5%**
9 a.m.	22	38	22	31	34	40	32	42	39	33	**333**	**4.4%**
10 a.m.	26	29	31	35	39	43	35	34	29	22	**323**	**4.3%**
11 a.m.	31	47	29	27	36	39	37	32	36	29	**343**	**4.5%**
Noon	39	40	53	60	60	54	45	47	35	43	**476**	**6.3%**
1 p.m.	37	37	46	42	56	52	49	49	31	31	**430**	**5.7%**
2 p.m.	31	52	51	54	54	55	53	48	56	42	**496**	**6.5%**
3 p.m.	49	79	70	54	66	77	57	57	52	57	**618**	**8.2%**
4 p.m.	62	66	66	73	61	84	85	87	47	71	**702**	**9.3%**
5 p.m.	73	86	77	96	94	99	73	80	66	60	**804**	**10.6%**
6 p.m.	60	64	61	69	81	77	61	58	67	58	**656**	**8.7%**
7 p.m.	44	57	40	50	59	49	42	53	52	26	**472**	**6.2%**
8 p.m.	34	32	39	33	32	42	41	24	32	31	**340**	**4.5%**
9 p.m.	17	35	20	28	24	24	23	30	21	30	**252**	**3.3%**
10 p.m.	11	12	16	13	18	19	12	14	11	23	**149**	**2.0%**
11 p.m.	4	13	12	5	8	7	10	7	5	8	**79**	**1.0%**
Total	**643**	**802**	**739**	**773**	**837**	**903**	**777**	**763**	**686**	**655**	**7,578**	**100.0%**



- Bicycle-motor vehicle crashes were highest during the hours of 3:00-6:59 p.m.
- Bicycle-motor vehicle crashes were lowest during the hours of 1:00-4:59 a.m.

Trends

Bicyclists in Crashes by County (Utah 2007-2016)

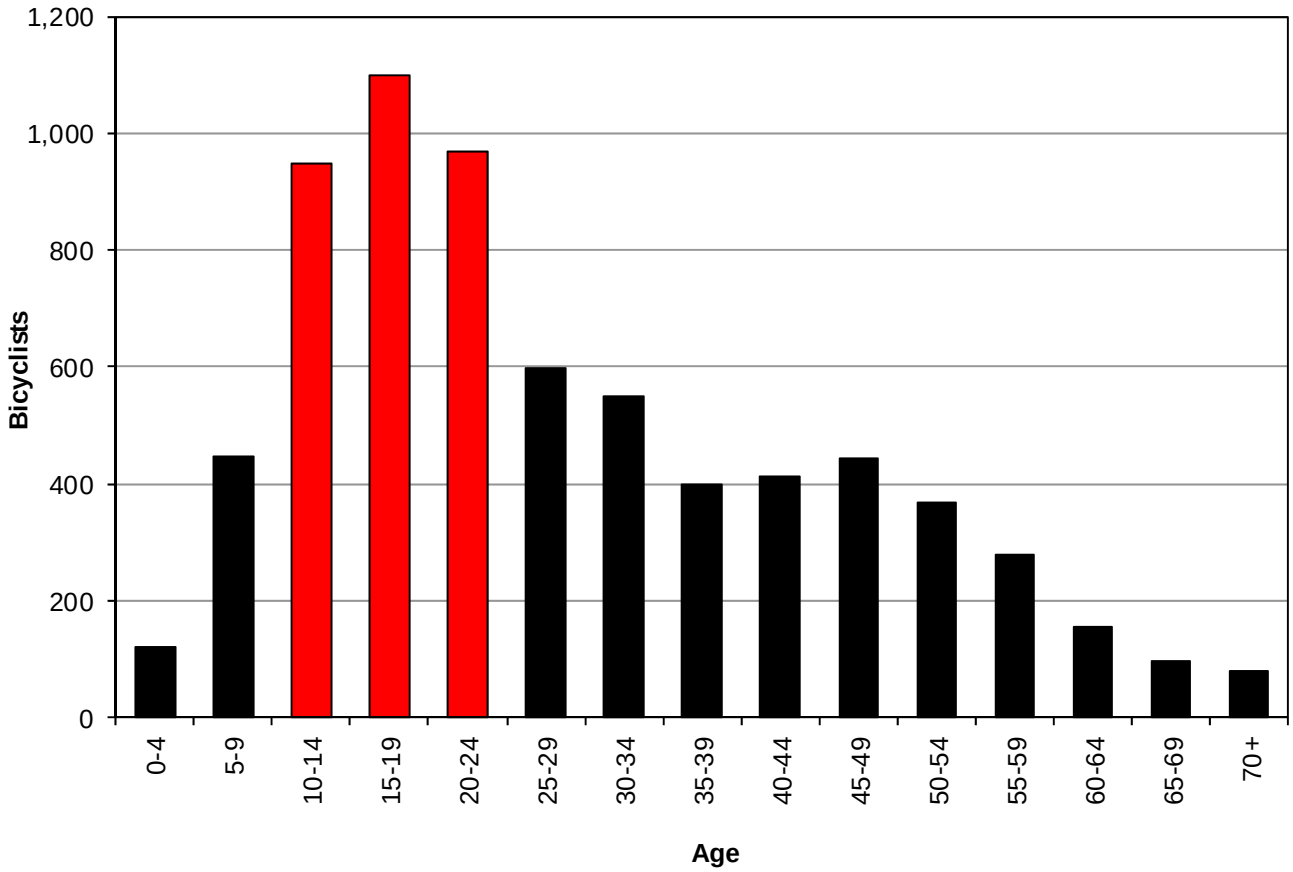
Bicyclists													
	Year										Total		Rate per Year per
County	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	#	%	10,000 Population
Salt Lake	341	416	392	399	435	484	417	392	356	348	**3,980**	**52.5%**	**3.55**
Cache	28	40	28	39	39	30	32	33	27	17	**313**	**4.1%**	**2.55**
Grand	2	3	0	0	3	4	1	3	6	2	**24**	**0.3%**	**2.51**
Utah	113	159	138	154	168	164	122	103	116	109	**1,346**	**17.8%**	**2.27**
Weber	40	42	38	52	50	83	53	71	43	55	**527**	**7.0%**	**2.13**
Davis	60	58	59	67	69	64	74	69	52	68	**640**	**8.4%**	**1.87**
Washington	23	28	43	20	26	26	34	38	43	18	**299**	**3.9%**	**1.87**
Iron	8	12	10	8	5	9	7	12	9	4	**84**	**1.1%**	**1.68**
Carbon	3	3	3	3	6	1	2	4	7	2	**34**	**0.4%**	**1.67**
Summit	3	7	5	8	4	7	5	9	2	4	**54**	**0.7%**	**1.34**
Tooele	5	12	6	4	9	5	7	13	7	8	**76**	**1.0%**	**1.17**
Sevier	1	3	1	4	1	1	4	3	3	2	**23**	**0.3%**	**1.08**
Wasatch	3	2	2	6	6	2	3	1	3	4	**32**	**0.4%**	**1.05**
Uintah	5	2	3	3	4	7	5	2	5	2	**38**	**0.5%**	**1.04**
Box Elder	5	5	7	3	4	6	5	5	2	4	**46**	**0.6%**	**0.87**
Garfield	0	1	1	1	0	0	0	0	0	1	**4**	**0.1%**	**0.80**
Duchesne	1	3	0	0	1	4	3	0	0	2	**14**	**0.2%**	**0.69**
Kane	0	1	0	0	1	1	1	1	0	0	**5**	**0.1%**	**0.68**
Emery	0	1	0	1	1	0	0	1	1	1	**6**	**0.1%**	**0.59**
Sanpete	2	2	0	1	2	4	0	2	1	1	**15**	**0.2%**	**0.51**
Rich	0	0	1	0	0	0	0	0	0	0	**1**	**0.0%**	**0.43**
Millard	0	0	1	0	1	0	0	0	1	2	**5**	**0.1%**	**0.39**
Wayne	0	0	1	0	0	0	0	0	0	0	**1**	**0.0%**	**0.37**
Beaver	0	0	0	0	1	1	0	0	0	0	**2**	**0.0%**	**0.31**
San Juan	0	1	0	0	1	0	1	0	2	0	**5**	**0.1%**	**0.30**
Juab	0	0	0	0	0	0	1	0	0	1	**2**	**0.0%**	**0.18**
Morgan	0	1	0	0	0	0	0	1	0	0	**2**	**0.0%**	**0.17**
Daggett	0	0	0	0	0	0	0	0	0	0	**0**	**0.0%**	**0.00**
Piute	0	0	0	0	0	0	0	0	0	0	**0**	**0.0%**	**0.00**
Total	**643**	**802**	**739**	**773**	**837**	**903**	**777**	**763**	**686**	**655**	**7,578**	**100.0%**	**2.48**

- Salt Lake (3.55), Cache (2.55), Grand (2.51), and Utah (2.27) counties had the highest rates per population of total bicyclists in crashes per 10,000 population per year over the last 10 years.
- Salt Lake County accounted for 53% of the bicyclists in crashes. Utah County accounted for 18% of the bicyclists and Davis County accounted for 8% of the bicyclists. These three counties accounted for over three-fourths (79%) of the bicyclists in crashes over the last 10 years.
- Daggett and Piute counties had no bicyclists in crashes.

Trends

Bicyclists in Crashes by Age (Utah 2007-2016)

Bicyclists												
	Year										Total	
Age	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	#	%
0-4	38	24	7	8	7	8	10	9	2	6	**119**	**1.7%**
5-9	49	50	52	44	63	48	38	40	24	38	**446**	**6.4%**
10-14	99	122	94	114	115	99	91	71	77	68	**950**	**13.6%**
15-19	85	116	97	124	126	134	104	128	95	89	**1,098**	**15.8%**
20-24	70	95	90	103	125	114	112	88	94	79	**970**	**13.9%**
25-29	41	67	67	62	65	73	72	54	50	48	**599**	**8.6%**
30-34	40	40	47	59	62	75	55	59	58	54	**549**	**7.9%**
35-39	36	29	27	37	37	53	41	53	38	48	**399**	**5.7%**
40-44	32	42	38	43	42	53	39	36	51	38	**414**	**5.9%**
45-49	36	44	52	42	45	52	35	50	47	40	**443**	**6.4%**
50-54	29	21	32	33	40	58	40	42	35	39	**369**	**5.3%**
55-59	24	23	17	21	28	38	27	32	29	39	**278**	**4.0%**
60-64	9	8	12	9	18	25	14	23	18	18	**154**	**2.2%**
65-69	6	8	9	7	9	9	13	8	12	15	**96**	**1.4%**
70+	7	6	4	4	8	13	9	8	9	12	**80**	**1.1%**
Total	**601**	**695**	**645**	**710**	**790**	**852**	**700**	**701**	**639**	**631**	**6,964**	**100.0%**

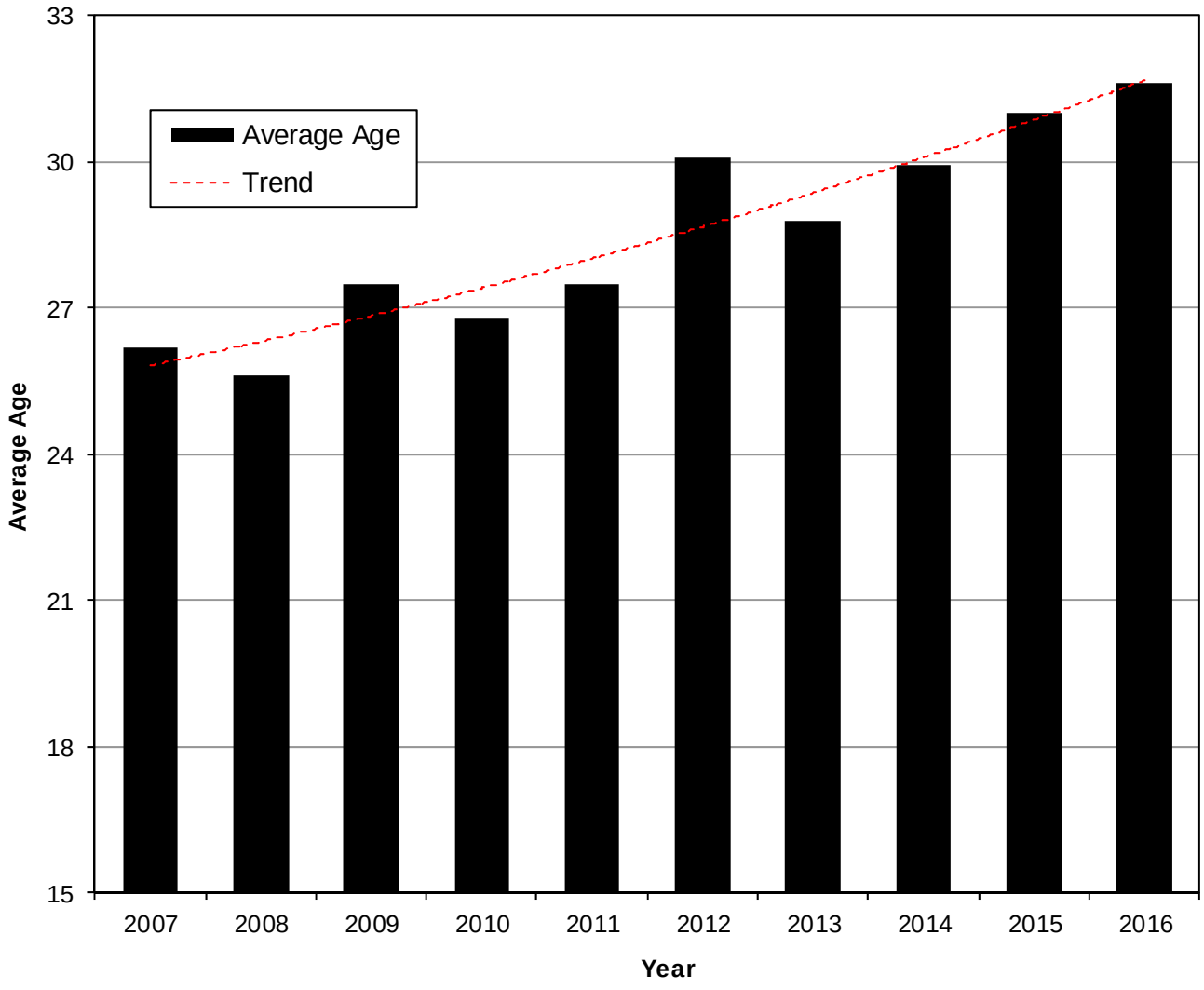


- Bicycle-motor vehicle crashes were highest among ages 10-24 years.
- Bicycle-motor vehicle crashes were lowest among ages 60+ years.

Trends

Bicyclists in Crashes by Average Age (Utah 2007-2016)

Bicyclists	
Year	Total Mean Age
2007	26.20
2008	25.60
2009	27.50
2010	26.80
2011	27.50
2012	30.10
2013	28.80
2014	29.95
2015	31.01
2016	31.60
Average	**28.51**

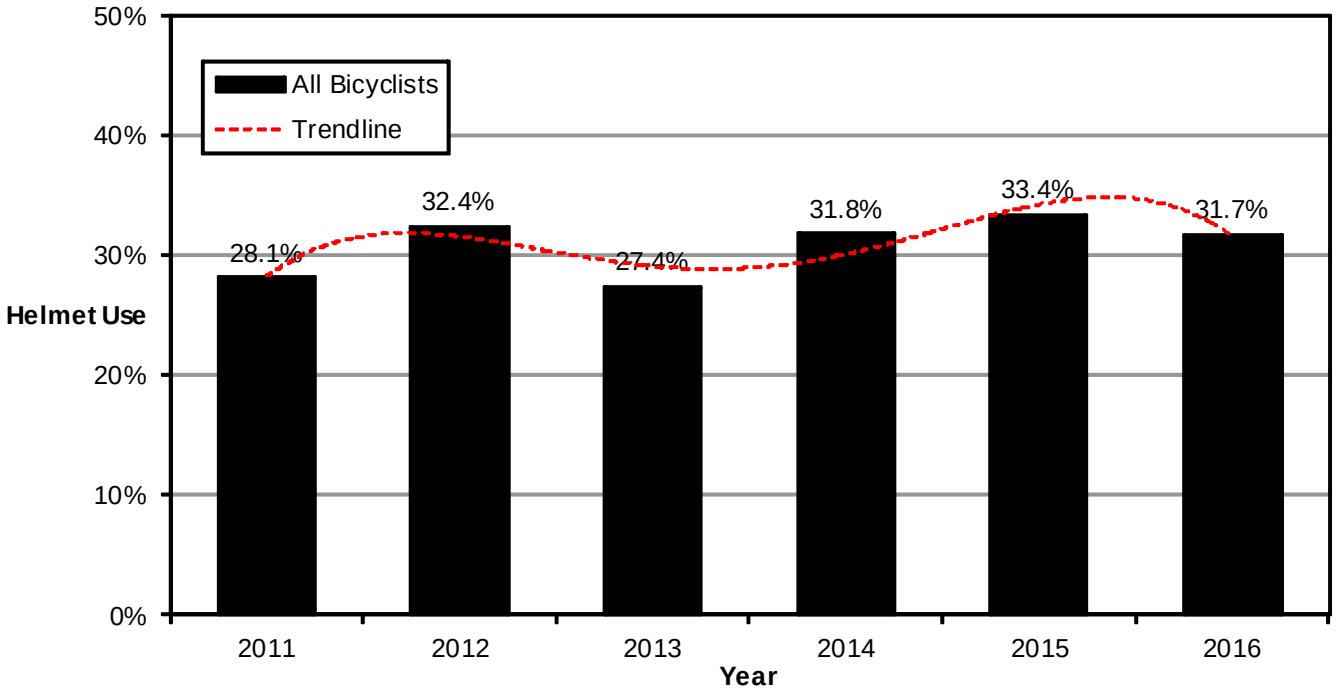


- The average age of bicyclists in crashes has shown an increasing trend over the last 10 years.

Helmets

Helmet Use of Bicyclists in Crashes (Utah 2011-2016)

Bicyclists												
	Non-Injured			Injured			Killed			Total		
	No Hlmt	Helmet		No Hlmt	Helmet		No Hlmt	Helmet		No Helmet	Helmet	
Year	#	#	%	#	#	%	#	#	%	#	#	%
2011	34	5	12.8%	180	78	30.2%	3	2	40.0%	**217**	**85**	**28.1%**
2012	18	5	21.7%	190	96	33.6%	3	0	0.0%	**211**	**101**	**32.4%**
2013	24	10	29.4%	289	106	26.8%	3	3	50.0%	**316**	**119**	**27.4%**
2014	36	9	20.0%	402	193	32.4%	4	4	50.0%	**442**	**206**	**31.8%**
2015	18	12	40.0%	384	188	32.9%	2	3	60.0%	**404**	**203**	**33.4%**
2016	25	6	19.4%	383	184	32.5%	4	1	20.0%	**412**	**191**	**31.7%**
Total	**155**	**47**	**23.3%**	**1,828**	**845**	**31.6%**	**19**	**13**	**40.6%**	**2,002**	**905**	**31.1%**



- Overall helmet use by bicyclists in crashes has fluctuated around the six year average of 31.1%.
- 2015 had the highest percent of helmet use by bicyclists in crashes while 2013 had the lowest percent.

Helmet Use of Bicyclists in Crashes (Utah 2016)

Bicyclists								
	Non-Injured		Injured		Killed		Total	
Helmet Use	#	%	#	%	#	%	#	%
Helmet Not Worn	25	67.6%	383	62.5%	4	80.0%	**412**	**62.9%**
Helmet Worn	6	16.2%	184	30.0%	1	20.0%	**191**	**29.2%**
Unknown	6	16.2%	46	7.5%	0	0.0%	**52**	**7.9%**
Total	**37**	**100.0%**	**613**	**100.0%**	**5**	**100.0%**	**655**	**100.0%**

- Where helmet use is known for bicyclists, 31.7% of bicyclists were wearing a helmet.

Bicycle-Motor Vehicle Crash Conditions

Bicyclists in Crashes by County (Utah 2016)

Bicyclists								
	Non-Injured		Injured		Killed		Total	
County	#	Rate per 10,000 Pop.	#	Rate per 10,000 Pop.	#	Rate per 10,000 Pop.	#	Rate per 10,000 Pop.
Salt Lake	21	0.19	325	2.90	2	0.02	**348**	**3.10**
Weber	4	0.16	51	2.06	0	0.00	**55**	**2.22**
Grand	0	0.00	2	2.09	0	0.00	**2**	**2.09**
Garfield	0	0.00	1	2.01	0	0.00	**1**	**2.01**
Davis	5	0.15	63	1.84	0	0.00	**68**	**1.99**
Utah	5	0.08	101	1.71	3	0.05	**109**	**1.84**
Millard	0	0.00	2	1.58	0	0.00	**2**	**1.58**
Cache	0	0.00	17	1.38	0	0.00	**17**	**1.38**
Wasatch	0	0.00	4	1.31	0	0.00	**4**	**1.31**
Tooele	0	0.00	8	1.23	0	0.00	**8**	**1.23**
Washington	0	0.00	18	1.12	0	0.00	**18**	**1.12**
Summit	1	0.25	3	0.74	0	0.00	**4**	**0.99**
Duchesne	0	0.00	2	0.98	0	0.00	**2**	**0.98**
Carbon	0	0.00	2	0.98	0	0.00	**2**	**0.98**
Emery	0	0.00	1	0.98	0	0.00	**1**	**0.98**
Sevier	0	0.00	2	0.94	0	0.00	**2**	**0.94**
Juab	0	0.00	1	0.91	0	0.00	**1**	**0.91**
Iron	0	0.00	4	0.80	0	0.00	**4**	**0.80**
Box Elder	1	0.19	3	0.56	0	0.00	**4**	**0.75**
Uintah	0	0.00	2	0.55	0	0.00	**2**	**0.55**
Sanpete	0	0.00	1	0.34	0	0.00	**1**	**0.34**
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**
Kane	0	0.00	0	0.00	0	0.00	**0**	**0.00**
Morgan	0	0.00	0	0.00	0	0.00	**0**	**0.00**
Piute	0	0.00	0	0.00	0	0.00	**0**	**0.00**
Rich	0	0.00	0	0.00	0	0.00	**0**	**0.00**
San Juan	0	0.00	0	0.00	0	0.00	**0**	**0.00**
Wayne	0	0.00	0	0.00	0	0.00	**0**	**0.00**
Statewide	**37**	**0.12**	**613**	**2.01**	**5**	**0.02**	**655**	**2.15**

Bicyclists								
	Non-Injured		Injured		Killed		Total	
Location	#	Rate per 10,000 Pop.	#	Rate per 10,000 Pop.	#	Rate per 10,000 Pop.	#	Rate per 10,000 Pop.
Urban	35	0.14	575	2.22	5	0.02	**615**	**2.38**
Rural	2	0.04	38	0.82	0	0.00	**40**	**0.86**
Total	**37**	**0.12**	**613**	**2.01**	**5**	**0.02**	**655**	**2.15**

- Urban areas (2.38) had a much higher total bicycle-motor vehicle crash rate per 10,000 population than rural areas (0.86).
- Salt Lake (3.10), Weber (2.22), Grand (2.09), and Garfield (2.01) counties had the highest rates per population of total bicyclists in crashes per 10,000 population.
- Salt Lake County accounted for 53% of the bicyclists in crashes.
- Beaver, Daggett, Kane, Morgan, Piute, Rich, San Juan, and Wayne counties had no bicyclists in crashes.

Bicycle-Motor Vehicle Crash Conditions

Age of Bicyclists in Crashes (Utah 2016)

Bicyclists								
	Non-Injured		Injured		Killed		Total	
Age	#	%	#	%	#	%	#	%
0-4	1	2.7%	5	0.8%	0	0.0%	**6**	**0.9%**
5-9	4	10.8%	33	5.4%	1	20.0%	**38**	**5.8%**
10-14	3	8.1%	65	10.6%	0	0.0%	**68**	**10.4%**
15-19	4	10.8%	84	13.7%	1	20.0%	**89**	**13.6%**
20-24	3	8.1%	76	12.4%	0	0.0%	**79**	**12.1%**
25-29	1	2.7%	47	7.7%	0	0.0%	**48**	**7.3%**
30-34	4	10.8%	50	8.2%	0	0.0%	**54**	**8.2%**
35-39	2	5.4%	46	7.5%	0	0.0%	**48**	**7.3%**
40-44	2	5.4%	36	5.9%	0	0.0%	**38**	**5.8%**
45-49	2	5.4%	38	6.2%	0	0.0%	**40**	**6.1%**
50-54	1	2.7%	38	6.2%	0	0.0%	**39**	**6.0%**
55-59	0	0.0%	37	6.0%	2	40.0%	**39**	**6.0%**
60-64	1	2.7%	16	2.6%	1	20.0%	**18**	**2.7%**
65-69	1	2.7%	14	2.3%	0	0.0%	**15**	**2.3%**
70+	0	0.0%	12	2.0%	0	0.0%	**12**	**1.8%**
Unknown	8	21.6%	16	2.6%	0	0.0%	**24**	**3.7%**
Total	**37**	**100.0%**	**613**	**100.0%**	**5**	**100.0%**	**655**	**100.0%**

- Over one-third (36%) of the bicyclists in crashes were 10-24 years.

Driver Age (Utah 2016)

Drivers (Bicycle-Motor Vehicle Crashes)								
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
Age	#	%	#	%	#	%	#	%
<15	0	0.0%	0	0.0%	0	0.0%	**0**	**0.0%**
15-19	1	3.2%	50	8.2%	0	0.0%	**51**	**7.9%**
20-24	3	9.7%	81	13.3%	0	0.0%	**84**	**13.0%**
25-29	4	12.9%	56	9.2%	0	0.0%	**60**	**9.3%**
30-34	2	6.5%	59	9.7%	1	20.0%	**62**	**9.6%**
35-39	4	12.9%	58	9.5%	0	0.0%	**62**	**9.6%**
40-44	2	6.5%	41	6.7%	1	20.0%	**44**	**6.8%**
45-49	3	9.7%	43	7.1%	0	0.0%	**46**	**7.1%**
50-54	0	0.0%	35	5.8%	1	20.0%	**36**	**5.6%**
55-59	0	0.0%	36	5.9%	1	20.0%	**37**	**5.7%**
60-64	2	6.5%	27	4.4%	1	20.0%	**30**	**4.7%**
65-69	2	6.5%	24	3.9%	0	0.0%	**26**	**4.0%**
70-74	0	0.0%	14	2.3%	0	0.0%	**14**	**2.2%**
75-79	1	3.2%	20	3.3%	0	0.0%	**21**	**3.3%**
80-84	0	0.0%	8	1.3%	0	0.0%	**8**	**1.2%**
85+	0	0.0%	8	1.3%	0	0.0%	**8**	**1.2%**
Unknown	7	22.6%	48	7.9%	0	0.0%	**55**	**8.5%**
Total	**31**	**100.0%**	**608**	**100.0%**	**5**	**100.0%**	**644**	**100.0%**

- Over half (54% 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 37 years.

Bicycle-Motor Vehicle Crash Conditions

Gender of Bicyclists in Crashes (Utah 2016)

Bicyclists								
	Non-Injured		Injured		Killed		Total	
Gender	#	%	#	%	#	%	#	%
Male	27	73.0%	475	77.5%	3	60.0%	**505**	**77.1%**
Female	6	16.2%	134	21.9%	2	40.0%	**142**	**21.7%**
Unknown	4	10.8%	4	0.7%	0	0.0%	**8**	**1.2%**
Total	**37**	**100.0%**	**613**	**100.0%**	**5**	**100.0%**	**655**	**100.0%**

- Most bicyclists (77%) in crashes were male.

Driver Gender (Utah 2016)

Drivers (Bicycle-Motor Vehicle Crashes)								
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
Gender	#	%	#	%	#	%	#	%
Male	18	58.1%	306	50.3%	3	60.0%	**327**	**50.8%**
Female	10	32.3%	267	43.9%	2	40.0%	**279**	**43.3%**
Unknown	3	9.7%	35	5.8%	0	0.0%	**38**	**5.9%**
Total	**31**	**100.0%**	**608**	**100.0%**	**5**	**100.0%**	**644**	**100.0%**

- A slight majority of drivers in total bicycle-motor vehicle crashes (54% of known) were male.

Bicycle-Motor Vehicle Crashes by Month (Utah 2016)

Bicyclists								
	Non-Injured		Injured		Killed		Total	
Month	#	Rate per Day	#	Rate per Day	#	Rate per Day	#	Rate per Day
January	0	0.0	12	0.4	0	0.000	**12**	**0.4**
February	1	0.0	24	0.8	0	0.000	**25**	**0.9**
March	3	0.1	35	1.1	0	0.000	**38**	**1.2**
April	3	0.1	48	1.6	2	0.067	**53**	**1.8**
May	4	0.1	68	2.2	0	0.000	**72**	**2.3**
June	4	0.1	80	2.7	1	0.033	**85**	**2.8**
July	8	0.3	71	2.3	1	0.032	**80**	**2.6**
August	3	0.1	86	2.8	0	0.000	**89**	**2.9**
September	3	0.1	77	2.6	0	0.000	**80**	**2.7**
October	3	0.1	51	1.6	0	0.000	**54**	**1.7**
November	2	0.1	40	1.3	0	0.000	**42**	**1.4**
December	3	0.1	21	0.7	1	0.032	**25**	**0.8**
Total	**37**	**0.1**	**613**	**1.7**	**5**	**0.014**	**655**	**1.8**

- August (2.9), June (2.8), and September (2.7) had the highest rates per day of total bicycle-motor vehicle crashes.

Bicycle-Motor Vehicle Crash Conditions

Bicycle-Motor Vehicle Crashes by Day of Week (Utah 2016)

Bicyclists								
Day of Week	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Sunday	1	2.7%	31	5.1%	2	40.0%	**34**	**5.2%**
Monday	5	13.5%	95	15.5%	0	0.0%	**100**	**15.3%**
Tuesday	6	16.2%	84	13.7%	0	0.0%	**90**	**13.7%**
Wednesday	9	24.3%	104	17.0%	2	40.0%	**115**	**17.6%**
Thursday	6	16.2%	119	19.4%	0	0.0%	**125**	**19.1%**
Friday	5	13.5%	99	16.2%	1	20.0%	**105**	**16.0%**
Saturday	5	13.5%	81	13.2%	0	0.0%	**86**	**13.1%**
Total	**37**	**100.0%**	**613**	**100.0%**	**5**	**100.0%**	**655**	**100.0%**

- The highest percentage of total bicycle-motor vehicle crashes occurred on Thursday (19%).

Bicycle-Motor Vehicle Crashes by Hour (Utah 2016)

Bicyclists								
Hour	Non-Injured		Injured		Killed		Total	
	#	%	#	%	#	%	#	%
Midnight	1	2.7%	3	0.5%	0	0.0%	**4**	**0.6%**
1 a.m.	0	0.0%	0	0.0%	0	0.0%	**0**	**0.0%**
2 a.m.	0	0.0%	2	0.3%	0	0.0%	**2**	**0.3%**
3 a.m.	0	0.0%	0	0.0%	0	0.0%	**0**	**0.0%**
4 a.m.	0	0.0%	0	0.0%	0	0.0%	**0**	**0.0%**
5 a.m.	0	0.0%	2	0.3%	0	0.0%	**2**	**0.3%**
6 a.m.	1	2.7%	13	2.1%	0	0.0%	**14**	**2.1%**
7 a.m.	0	0.0%	26	4.2%	0	0.0%	**26**	**4.0%**
8 a.m.	3	8.1%	40	6.5%	0	0.0%	**43**	**6.6%**
9 a.m.	1	2.7%	32	5.2%	0	0.0%	**33**	**5.0%**
10 a.m.	0	0.0%	22	3.6%	0	0.0%	**22**	**3.4%**
11 a.m.	2	5.4%	27	4.4%	0	0.0%	**29**	**4.4%**
Noon	4	10.8%	39	6.4%	0	0.0%	**43**	**6.6%**
1 p.m.	0	0.0%	31	5.1%	0	0.0%	**31**	**4.7%**
2 p.m.	3	8.1%	39	6.4%	0	0.0%	**42**	**6.4%**
3 p.m.	4	10.8%	53	8.6%	0	0.0%	**57**	**8.7%**
4 p.m.	3	8.1%	67	10.9%	1	20.0%	**71**	**10.8%**
5 p.m.	4	10.8%	55	9.0%	1	20.0%	**60**	**9.2%**
6 p.m.	3	8.1%	54	8.8%	1	20.0%	**58**	**8.9%**
7 p.m.	3	8.1%	23	3.8%	0	0.0%	**26**	**4.0%**
8 p.m.	2	5.4%	29	4.7%	0	0.0%	**31**	**4.7%**
9 p.m.	2	5.4%	28	4.6%	0	0.0%	**30**	**4.6%**
10 p.m.	1	2.7%	21	3.4%	1	20.0%	**23**	**3.5%**
11 p.m.	0	0.0%	7	1.1%	1	20.0%	**8**	**1.2%**
Total	**37**	**100.0%**	**613**	**100.0%**	**5**	**100.0%**	**655**	**100.0%**

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

Bicycle-Motor Vehicle Crash Conditions

Contributing Factors of Bicyclists in Crashes (Utah 2016)

Bicyclists								
	Non-Injured		Injured		Killed		Total	
Contributing Factors	#	%	#	%	#	%	#	%
None	14	37.8%	275	44.9%	2	40.0%	**291**	**44.4%**
Wrong Side of Road	2	5.4%	66	10.8%	0	0.0%	**68**	**10.4%**
Improper Crossing	4	10.8%	50	8.2%	1	20.0%	**55**	**8.4%**
Failure to Obey Traffic Signs/Signals	3	8.1%	33	5.4%	0	0.0%	**36**	**5.5%**
Failure to Yield Right of Way	1	2.7%	31	5.1%	1	20.0%	**33**	**5.0%**
Not Visible	2	5.4%	29	4.7%	0	0.0%	**31**	**4.7%**
Darting	2	5.4%	27	4.4%	0	0.0%	**29**	**4.4%**
Inattentive	2	5.4%	16	2.6%	0	0.0%	**18**	**2.7%**
Improper Turn/Merge	0	0.0%	7	1.1%	0	0.0%	**7**	**1.1%**
Improper Passing	0	0.0%	5	0.8%	0	0.0%	**5**	**0.8%**
In Roadway Improperly	0	0.0%	5	0.8%	0	0.0%	**5**	**0.8%**
Other	2	5.4%	25	4.1%	1	20.0%	**28**	**4.3%**
Unknown	5	13.5%	44	7.2%	0	0.0%	**49**	**7.5%**
Total	**37**	**100.0%**	**613**	**100.0%**	**5**	**100.0%**	**655**	**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 48% (of known) of the total bicyclists in crashes.
- Other contributing factors to consider are driver factors, roadway factors (such as high speeds, inadequate on-road bicycle facilities), and vehicle factors (such as vehicle design, vehicle size).

Bicyclist Location in Bicycle-Motor Vehicle Crashes (Utah 2016)

Bicyclists								
	Non-Injured		Injured		Killed		Total	
Bicyclist Location	#	%	#	%	#	%	#	%
Marked Crosswalk at Intersection	12	32.4%	184	30.0%	2	40.0%	**198**	**30.2%**
In Roadway (not at intersection)	9	24.3%	115	18.8%	1	20.0%	**125**	**19.1%**
Shoulder	4	10.8%	87	14.2%	0	0.0%	**91**	**13.9%**
Sidewalk	2	5.4%	65	10.6%	0	0.0%	**67**	**10.2%**
Unmarked Crosswalk	3	8.1%	51	8.3%	1	20.0%	**55**	**8.4%**
Bike Path/Lane	0	0.0%	39	6.4%	0	0.0%	**39**	**6.0%**
Mid-Block Crosswalk	0	0.0%	12	2.0%	0	0.0%	**12**	**1.8%**
Outside Right of Way	0	0.0%	7	1.1%	0	0.0%	**7**	**1.1%**
Median	0	0.0%	2	0.3%	0	0.0%	**2**	**0.3%**
Shared Use Path/Trail	0	0.0%	2	0.3%	0	0.0%	**2**	**0.3%**
Other	2	5.4%	25	4.1%	0	0.0%	**27**	**4.1%**
Unknown	5	13.5%	24	3.9%	1	20.0%	**30**	**4.6%**
Total	**37**	**100.0%**	**613**	**100.0%**	**5**	**100.0%**	**655**	**100.0%**

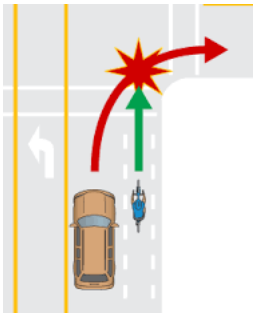
- For total crashes, the largest percentages of bicyclist location prior to the crash were marked crosswalk (32% of known), in roadway (20% of known), shoulder (15% of known), and sidewalk (11% of known).
- Bicycles are considered vehicles and have a legal right to the road.

Bicycle-Motor Vehicle Crash Conditions

Bicyclist Action in Bicycle-Motor Vehicle Crashes (Utah 2016)

Bicyclists								
	Non-Injured		Injured		Killed		Total	
Bicyclist Action	#	%	#	%	#	%	#	%
Cycling Along Roadway with Traffic	6	16.2%	176	28.7%	1	20.0%	**183**	**27.9%**
Entering or Crossing Road	12	32.4%	161	26.3%	3	60.0%	**176**	**26.9%**
Cycling on Sidewalk	6	16.2%	161	26.3%	0	0.0%	**167**	**25.5%**
Cycling Along Roadway Against Traffic	7	18.9%	74	12.1%	0	0.0%	**81**	**12.4%**
In Roadway Other	0	0.0%	10	1.6%	0	0.0%	**10**	**1.5%**
Waiting to Cross Roadway	1	2.7%	3	0.5%	0	0.0%	**4**	**0.6%**
Adjacent to Roadway	0	0.0%	2	0.3%	0	0.0%	**2**	**0.3%**
Going to/from School	0	0.0%	1	0.2%	0	0.0%	**1**	**0.2%**
Other	1	2.7%	12	2.0%	0	0.0%	**13**	**2.0%**
Unknown	4	10.8%	13	2.1%	1	20.0%	**18**	**2.7%**
Total	**37**	**100.0%**	**613**	**100.0%**	**5**	**100.0%**	**655**	**100.0%**

- For total crashes, the largest percentages of bicyclist action prior to the crash were cycling along roadway with traffic (29% of known), entering or crossing road (28% of known), cycling on sidewalk (26% of known), and cycling along roadway against traffic (13%).



Motor Vehicle Maneuver Prior to Crash (Utah 2016)

Motor Vehicles (Bicycle-Motor Vehicle Crashes)								
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
Vehicle Maneuver	#	%	#	%	#	%	#	%
Turning Right	9	29.0%	222	35.9%	1	20.0%	**232**	**35.4%**
Straight Ahead	11	35.5%	216	34.9%	3	60.0%	**230**	**35.1%**
Turning Left	5	16.1%	98	15.8%	1	20.0%	**104**	**15.9%**
Stopped/Slowing in Traffic Lane	1	3.2%	20	3.2%	0	0.0%	**21**	**3.2%**
Entering/Leaving Traffic Lane	1	3.2%	19	3.1%	0	0.0%	**20**	**3.1%**
Parked/Parking	0	0.0%	10	1.6%	0	0.0%	**10**	**1.5%**
Backing	1	3.2%	9	1.5%	0	0.0%	**10**	**1.5%**
Making U-turn	0	0.0%	3	0.5%	0	0.0%	**3**	**0.5%**
Changing Lanes	0	0.0%	2	0.3%	0	0.0%	**2**	**0.3%**
Overtaking/Passing	0	0.0%	2	0.3%	0	0.0%	**2**	**0.3%**
Other	1	3.2%	6	1.0%	0	0.0%	**7**	**1.1%**
Unknown	2	6.5%	12	1.9%	0	0.0%	**14**	**2.1%**
Total	**31**	**100.0%**	**619**	**100.0%**	**5**	**100.0%**	**655**	**100.0%**

- For total bicycle-motor vehicle crashes, the leading motor vehicle maneuvers prior to the crash were turning right (35%), straight ahead (35%), and turning left (16%).

Bicycle-Motor Vehicle Crash Conditions

Bicycle-Motor Vehicle Crashes by Speed Limit (Utah 2016)

Motor Vehicles (Bicycle-Motor Vehicle Crashes)								
Speed Limit	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
5-15 MPH	1	3.2%	19	3.1%	0	0.0%	**20**	**3.1%**
20-25 MPH	4	12.9%	138	22.3%	1	20.0%	**143**	**21.8%**
30-35 MPH	8	25.8%	160	25.8%	2	40.0%	**170**	**26.0%**
40-45 MPH	7	22.6%	97	15.7%	1	20.0%	**105**	**16.0%**
50-55 MPH	0	0.0%	11	1.8%	0	0.0%	**11**	**1.7%**
60+ MPH	0	0.0%	5	0.8%	0	0.0%	**5**	**0.8%**
Unknown	11	35.5%	189	30.5%	1	20.0%	**201**	**30.7%**
Total	**31**	**100.0%**	**619**	**100.0%**	**5**	**100.0%**	**655**	**100.0%**

- Nearly all (92% of known) of bicycle-motor vehicle crashes occurred where the speed limit was 20-45 MPH.
- The highest number of bicycle crashes occurred on roads with speed limits of 25 MPH, 35 MPH, and 40 MPH.

Travel Speed of Motor Vehicles in Bicycle Crashes (Utah 2016)

Motor Vehicles (Bicycle-Motor Vehicle Crash)								
Travel Speed	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Parked	0	0.0%	7	1.1%	0	0.0%	**7**	**1.1%**
Stopped	0	0.0%	15	2.4%	0	0.0%	**15**	**2.3%**
1-9 MPH	7	22.6%	176	28.4%	1	20.0%	**184**	**28.1%**
10-19 MPH	5	16.1%	93	15.0%	0	0.0%	**98**	**15.0%**
20-29 MPH	1	3.2%	60	9.7%	1	20.0%	**62**	**9.5%**
30-39 MPH	4	12.9%	32	5.2%	2	40.0%	**38**	**5.8%**
40-49 MPH	0	0.0%	11	1.8%	0	0.0%	**11**	**1.7%**
50+ MPH	0	0.0%	6	1.0%	0	0.0%	**6**	**0.9%**
Unknown	14	45.2%	219	35.4%	1	20.0%	**234**	**35.7%**
Total	**31**	**100.0%**	**619**	**100.0%**	**5**	**100.0%**	**655**	**100.0%**

- Over two-thirds (67% of known) of motor vehicles were travelling 1-19 MPH in crashes with bicycles.

Drivers in Bicycle Crashes with Contributing Factors (Utah 2016)

Drivers/Motor Vehicles (Bicycle-Motor Vehicle Crashes)								
Driver/Vehicle with a Contributing Factor(s)	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
	#	%	#	%	#	%	#	%
Yes	17	54.8%	369	59.6%	2	40.0%	**388**	**59.2%**
No	12	38.7%	218	35.2%	2	40.0%	**232**	**35.4%**
Unknown	2	6.5%	32	5.2%	1	20.0%	**35**	**5.3%**
Total	**31**	**100.0%**	**619**	**100.0%**	**5**	**100.0%**	**655**	**100.0%**

- 59% of drivers in total bicycle crashes had a contributing factor.

Bicycle-Motor Vehicle Crash Conditions

Contributing Factors in Bicycle Crashes (Utah 2016)

Drivers/Motor Vehicles (Bicycle-Motor Vehicle Crashes)								
	PDO Crashes		Injury Crashes		Fatal Crashes		Total	
Contributing Factors	#	%	#	%	#	%	#	%
Failed to Yield Right of Way	9	33.3%	263	49.0%	1	14.3%	**273**	**47.8%**
Other Improper Driving	0	0.0%	52	9.7%	0	0.0%	**52**	**9.1%**
Hit and Run	3	11.1%	38	7.1%	1	14.3%	**42**	**7.4%**
Improper Turn	4	14.8%	22	4.1%	1	14.3%	**27**	**4.7%**
Vision Obscured by Glare	1	3.7%	19	3.5%	0	0.0%	**20**	**3.5%**
Driver Distraction	0	0.0%	17	3.2%	1	14.3%	**18**	**3.2%**
Vision Obscured by Building, Sign	1	3.7%	17	3.2%	0	0.0%	**18**	**3.2%**
Vision Obscured by Moving Vehicle	0	0.0%	17	3.2%	0	0.0%	**17**	**3.0%**
Disregard Traffic Signal/Sign	0	0.0%	12	2.2%	0	0.0%	**12**	**2.1%**
Vision Obscured by Other	2	7.4%	8	1.5%	0	0.0%	**10**	**1.8%**
Vision Obscured by Weather	2	7.4%	7	1.3%	0	0.0%	**9**	**1.6%**
Vision Obscured by Parked Vehicle	1	3.7%	7	1.3%	0	0.0%	**8**	**1.4%**
Failed to Keep in Proper Lane	1	3.7%	6	1.1%	0	0.0%	**7**	**1.2%**
Improper Backing	1	3.7%	6	1.1%	0	0.0%	**7**	**1.2%**
Vehicle Defective Condition	0	0.0%	6	1.1%	0	0.0%	**6**	**1.1%**
Vision Obscured by Vegetation	0	0.0%	6	1.1%	0	0.0%	**6**	**1.1%**
Driver Condition Other	0	0.0%	5	0.9%	0	0.0%	**5**	**0.9%**
Driving Under the Influence	0	0.0%	3	0.6%	1	14.3%	**4**	**0.7%**
Followed Too Closely	0	0.0%	4	0.7%	0	0.0%	**4**	**0.7%**
Driver Emotional Prior to Crash	0	0.0%	3	0.6%	0	0.0%	**3**	**0.5%**
Improper Parking/Stopping	0	0.0%	3	0.6%	0	0.0%	**3**	**0.5%**
Improper Passing	0	0.0%	3	0.6%	0	0.0%	**3**	**0.5%**
Swerved or Evasive Action	0	0.0%	2	0.4%	1	14.3%	**3**	**0.5%**
Windshield/Window Obscured	1	3.7%	1	0.2%	1	14.3%	**3**	**0.5%**
Disregard Road Markings	0	0.0%	2	0.4%	0	0.0%	**2**	**0.4%**
Driver Asleep/Fatigue	0	0.0%	2	0.4%	0	0.0%	**2**	**0.4%**
Driver Illness/Medical	0	0.0%	1	0.2%	0	0.0%	**1**	**0.2%**
Improper Lane Change	0	0.0%	1	0.2%	0	0.0%	**1**	**0.2%**
Improper Signal	0	0.0%	1	0.2%	0	0.0%	**1**	**0.2%**
Ran Off Road	0	0.0%	1	0.2%	0	0.0%	**1**	**0.2%**
Reckless/Aggressive Driving	0	0.0%	1	0.2%	0	0.0%	**1**	**0.2%**
Speed Too Fast	0	0.0%	1	0.2%	0	0.0%	**1**	**0.2%**
Wrong Side/Wrong Way	1	3.7%	0	0.0%	0	0.0%	**1**	**0.2%**
Total	**27**	**100.0%**	**537**	**100.0%**	**7**	**100.0%**	**571**	**100.0%**

- Failed to yield right of way (48%), hit and run (7%), and improper turn (5%) were the leading contributing factors in total bicycle-motor vehicle crashes.