

## Fatal and Serious Injury Motor Vehicle Crashes:

# Bicyclist Crashes

On Minnesota roadways, there were 348 crashes involving a bicyclist resulting in fatality or serious injury between 2016 and 2020. This is an average of 70 crashes per year and accounted for 3.9% of all the fatal and serious injury crashes in this period.

Bicyclists are a Connected Focus Area. Most crashes in connected focus areas are correlated with core and strategic focus areas.

Focus Area definitions are published in the SHSP Technical Report. ([www.mndot.gov/trafficeng/safety/shsp/technical-report.pdf](http://www.mndot.gov/trafficeng/safety/shsp/technical-report.pdf))

### Distribution of Bicyclist Crashes by Roadway Jurisdiction

	Rural		Urban		Total	
Trunk Highway	15	4%	23	7%	38	11%
County	33	10%	80	23%	113	33%
City	7	2%	183	53%	190	55%
Township	2	1%	0	0%	2	1%
Other	0	0%	4	1%	4	1%
<b>Total</b>	<b>57</b>	<b>16%</b>	<b>290</b>	<b>84%</b>	<b>347</b>	<b>100%</b>

Crashes involving a bicyclist occur predominantly on the municipal system.

Rural is defined as a population less than 5,000, per Crash Facts.

### Distribution of Bicyclist Crashes by TZD Region

	Rural		Urban		Total	
Northeast	4	31%	9	69%	13	100%
Northwest	5	56%	4	44%	9	100%
East Central	13	39%	20	61%	33	100%
West Central	5	56%	4	44%	9	100%
Southeast	7	32%	15	68%	22	100%
South Central	8	44%	10	56%	18	100%
Southwest	2	40%	3	60%	5	100%
Metro	13	5%	226	95%	239	100%
<b>Total</b>	<b>57</b>	<b>16%</b>	<b>291</b>	<b>84%</b>	<b>348</b>	<b>100%</b>

Crashes involving a bicyclist occur primarily in urban areas.

31% of these crashes occurred in Greater Minnesota.

Rural is defined as a population less than 5,000, per Crash Facts.

### Light Conditions

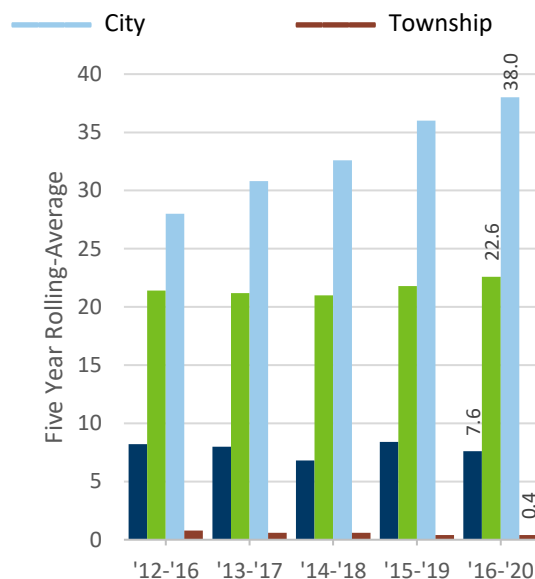
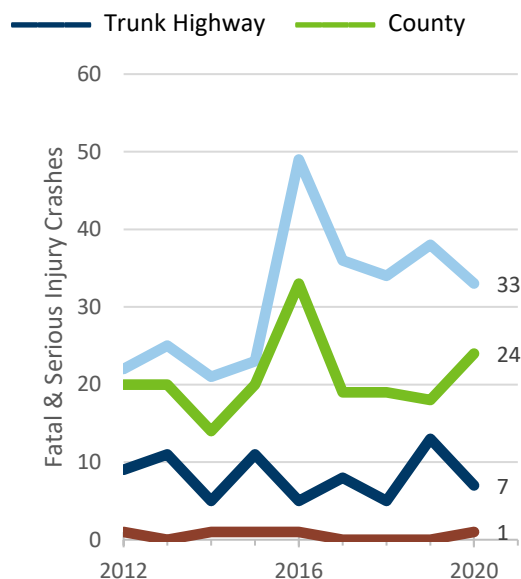
	Focus Area	All KA
Daylight	73.9%	59.3%
Sunrise/Sunset	8.0%	6.1%
Night/Dark	17.8%	34.2%
Street Lights On	13.8%	18.1%
Street Lights Off	0.3%	0.9%
Unknown/No Lighting	3.7%	15.2%
Other/Unknown	0.3%	0.4%

### Roadway Conditions

	Focus Area	All KA
Dry	87.1%	77.2%
Wet	10.3%	10.0%
Snow/Slush/Ice	1.1%	9.1%
Other	1.4%	3.7%

## Trends in Bicyclist Crashes

Statewide, across all jurisdictions the percent of fatal and serious injury crashes involving a bicyclist is decreasing.



NOTE: In 2016, Minnesota modified the injury severity definitions to align with Federal Standards. This change resulted in an 80% increase in reported serious injury crashes.

## Interaction with other Strategic Highway Safety Plan focus areas

Focus Area	Bicyclist Crashes		All K+A Crash Types		Difference	Rank*
Intersection	259	74.4%	4,363	48.7%	+ 25.7%	↑ #1
Work Zone	7	2.0%	202	2.3%	- 0.2%	—
Train	0	0.0%	25	0.3%	- 0.3%	—
Older Driver	58	16.7%	1,609	18.0%	- 1.3%	—
Commercial Vehicle	17	4.9%	776	8.7%	- 3.8%	↓
Inattentive Driver	20	5.7%	919	10.3%	- 4.5%	↓
Younger Driver	27	7.8%	1,423	15.9%	- 8.1%	↓
Head-on	0	0.0%	1,004	11.2%	- 11.2%	↓
Pedestrian	2	0.6%	1,105	12.3%	- 11.8%	↓
Unlicensed Driver	17	4.9%	1,564	17.5%	- 12.6%	↓
Unbelted Occupant	0	0.0%	1,346	15.0%	- 15.0%	↓
Motorcycle	6	1.7%	1,501	16.8%	- 15.0%	↓
Impaired User	41	11.8%	2,441	27.2%	- 15.5%	↓
Speed	11	3.2%	2,018	22.5%	- 19.4%	↓
Single Veh. Run-off-road	0	0.0%	2,859	31.9%	- 31.9%	↓
Bicyclist	348	100.0%	348	3.9%	N/A	N/A

\* Rankings shows areas with greatest overrepresentation compared to all fatal and serious injury crashes.

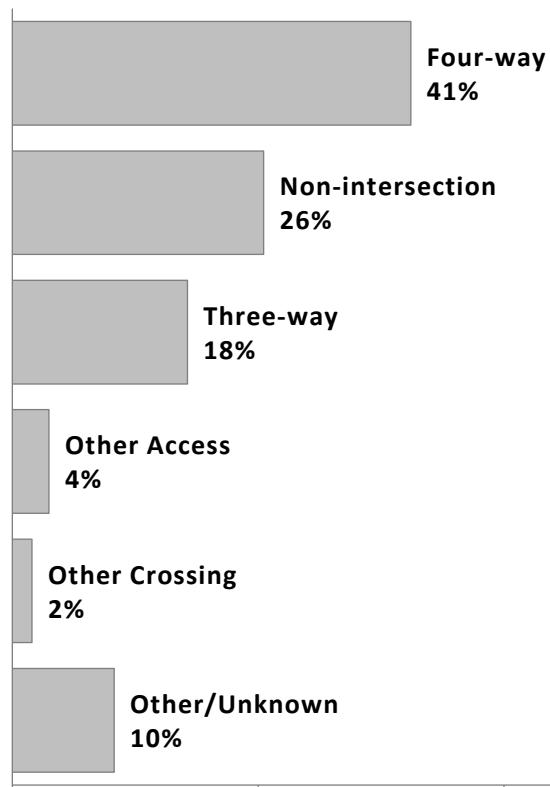
Compared to all fatal and serious injury crashes, the Intersection focus area is over-represented in crashes involving a bicyclist. This focus area may present a unique challenge and opportunity for reducing Bicyclist Crashes in Minnesota.

### Seasonality of Bicyclist Crashes

	12 AM to 3 AM	3 AM to 6 AM	6 AM to 9 AM	9 AM to 12 PM	12 PM to 3 PM	3 PM to 6 PM	6 PM to 9 PM	9 PM to 12 AM	Σ
January	0.3%	0.0%	0.0%	0.3%	0.6%	1.1%	0.0%	0.0%	2%
February	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.3%	0.0%	1%
March	0.0%	0.3%	0.3%	0.0%	1.4%	0.6%	1.1%	0.6%	4%
April	0.0%	0.0%	0.3%	0.3%	0.9%	2.6%	1.1%	0.0%	5%
May	0.0%	0.3%	1.4%	0.9%	2.3%	2.6%	3.4%	0.6%	12%
June	0.3%	0.0%	2.6%	2.9%	4.0%	3.4%	3.2%	0.6%	17%
July	0.3%	0.6%	1.4%	1.4%	2.6%	5.2%	3.4%	2.0%	17%
August	1.1%	0.3%	2.3%	1.7%	2.6%	4.6%	3.7%	2.0%	18%
September	0.6%	0.3%	0.6%	0.9%	1.7%	3.7%	2.6%	0.6%	11%
October	0.0%	0.0%	0.3%	1.1%	0.0%	2.6%	2.6%	0.6%	7%
November	0.3%	0.0%	1.1%	0.3%	0.6%	1.4%	0.6%	0.0%	4%
December	0.0%	0.0%	0.0%	0.0%	0.3%	0.6%	0.0%	0.0%	1%
Σ	3%	2%	10%	10%	17%	29%	22%	7%	100%

A fatal or serious injury crash involving a bicyclist occurred approximately every 5 days. These crashes are more prevalent in the summer & during the afternoon and evening hours; this analysis does not control for existing traffic patterns.

### Top Five Intersection Types



About 3 in 4 fatal and serious injury crashes involving a bicyclist (74%) were intersection or interchange related.