

## Fatal and Serious Injury Motor Vehicle Crashes:

# Train Crashes

On Minnesota roadways, there were 18 crashes involving a train resulting in fatality or serious injury between 2019 and 2023. This is an average of 4 crashes per year and accounted for 0.2% of all the fatal and serious injury crashes in this period.

Trains 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 Train Crashes by Roadway Jurisdiction

	Rural		Urban		Total	
Trunk Highway	1	9%	0	0%	1	9%
County	2	18%	1	9%	3	27%
City	2	18%	1	9%	3	27%
Township	3	27%	0	0%	3	27%
Other	1	9%	0	0%	1	9%
<b>Total</b>	<b>9</b>	<b>82%</b>	<b>2</b>	<b>18%</b>	<b>11</b>	<b>100%</b>

Crashes involving a train occur most frequently on the county system.

Rural is defined as a population less than 5,000, per Crash Facts; crashes that are not geolocated are included in total but not rural/urban columns.

### Distribution of Train Crashes by TZD Region

	Rural		Urban		Total	
Northeast	2	100%	0	0%	2	100%
Northwest	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!
East Central	1	100%	0	0%	1	100%
West Central	4	100%	0	0%	4	100%
Southeast	1	100%	0	0%	1	100%
South Central	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!
Southwest	1	100%	0	0%	1	100%
Metro	0	0%	2	100%	2	100%
<b>Total</b>	<b>9</b>	<b>82%</b>	<b>2</b>	<b>18%</b>	<b>11</b>	<b>100%</b>

Crashes involving a train occur most frequently in rural areas.

82% of these crashes occurred in Greater Minnesota.

Rural is defined as a population less than 5,000, per Crash Facts; crashes that are not geolocated are included in total but not rural/urban columns.

### Light Conditions

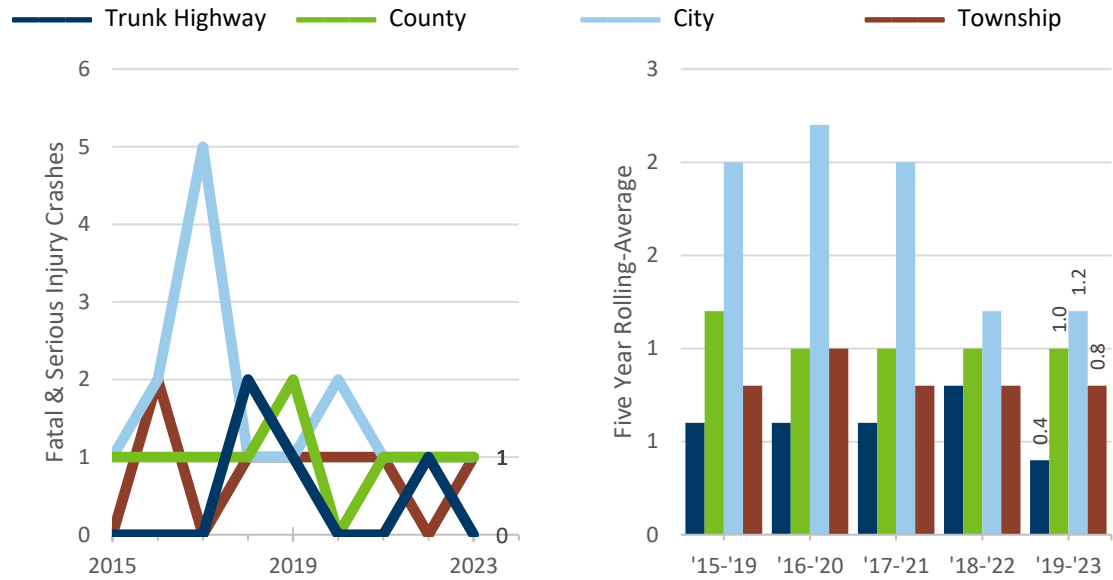
	Focus Area	All KA
Daylight	77.8%	59.7%
Sunrise/Sunset	0.0%	6.2%
Night/Dark	22.2%	33.6%
Street Lights On	16.7%	18.7%
Street Lights Off	0.0%	0.9%
Unknown/No Lighting	5.6%	14.0%
Other/Unknown	0.0%	0.5%

### Roadway Conditions

	Focus Area	All KA
Dry	55.6%	78.3%
Wet	11.1%	8.8%
Snow/Slush/Ice	27.8%	8.8%
Other	5.6%	4.1%

## Trends in Train Crashes

Statewide, the percent of all fatal and serious injury crashes involving a train 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	Train Crashes		All K+A Crash Types		Difference	Rank*
Intersection	17	94.4%	4,575	48.8%	+ 45.6%	↑ #1
Unbelted Occupant	4	22.2%	1,346	14.4%	+ 7.9%	↑ #2
Impaired User	6	33.3%	2,616	27.9%	+ 5.4%	↑ #3
Older Driver	4	22.2%	1,771	18.9%	+ 3.3%	↑ #4
Work Zone	0	0.0%	197	2.1%	- 2.1%	— —
Inattentive Driver	1	5.6%	735	7.8%	- 2.3%	— —
Commercial Vehicle	1	5.6%	824	8.8%	- 3.2%	↓ —
Unlicensed Driver	3	16.7%	1,918	20.5%	- 3.8%	↓ —
Bicyclist	0	0.0%	364	3.9%	- 3.9%	↓ —
Pedestrian	1	5.6%	1,037	11.1%	- 5.5%	↓ —
Head-on	0	0.0%	1,057	11.3%	- 11.3%	↓ —
Younger Driver	0	0.0%	1,495	16.0%	- 16.0%	↓ —
Motorcycle	0	0.0%	1,572	16.8%	- 16.8%	↓ —
Speed	1	5.6%	2,154	23.0%	- 17.4%	↓ —
Single Veh. Run-off-road	0	0.0%	2,980	31.8%	- 31.8%	↓ —
Train	18	100.0%	18	0.2%	N/A	N/A

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

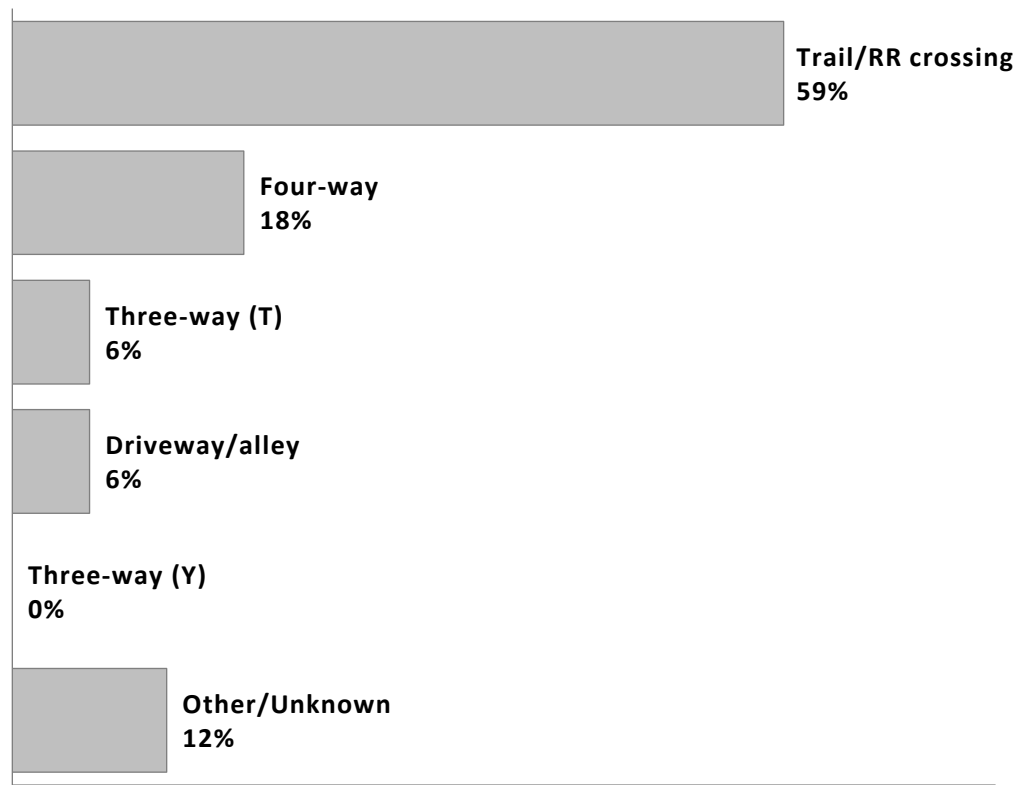
Compared to all fatal and serious injury crashes, the Intersection, Unbelted Occupant, Impaired User and Older Driver focus areas are over-represented in crashes involving a train. These focus areas may present unique challenges and opportunities for reducing Train Crashes in Minnesota.

### Seasonality of Train Crashes

	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	12 AM to 3 AM	Σ
January	0.0%	0.0%	5.6%	0.0%	5.6%	0.0%	0.0%	0.0%	11%
February	0.0%	5.6%	5.6%	5.6%	0.0%	0.0%	0.0%	0.0%	17%
March	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	11.1%	0.0%	11%
April	0.0%	0.0%	0.0%	0.0%	5.6%	0.0%	0.0%	5.6%	11%
May	0.0%	0.0%	5.6%	0.0%	0.0%	0.0%	0.0%	0.0%	6%
June	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0%
July	0.0%	0.0%	0.0%	0.0%	5.6%	0.0%	0.0%	0.0%	6%
August	0.0%	0.0%	0.0%	0.0%	0.0%	5.6%	0.0%	0.0%	6%
September	5.6%	0.0%	0.0%	0.0%	5.6%	0.0%	0.0%	0.0%	11%
October	0.0%	0.0%	0.0%	5.6%	5.6%	0.0%	0.0%	0.0%	11%
November	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0%
December	0.0%	0.0%	0.0%	5.6%	5.6%	0.0%	0.0%	0.0%	11%
Σ	6%	6%	17%	17%	34%	6%	11%	6%	100%

A fatal or serious injury crash involving a train occurred approximately every 101.5 days. These crashes are more prevalent in the winter and spring & during the afternoon and evening hours; this analysis does not control for existing traffic patterns.

### Top Five Intersection Types (where intersection/interchange related)



About 9 in 10 fatal and serious injury crashes involving a train (94%) were intersection or interchange related.