Technical Memorandum

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Date:	7/24/2026
Subject:	MIC Area Safety Action Plan Phase 2 – 2020-2024 Crash Data Update

1. Introduction

The Duluth–Superior Metropolitan Interstate Council (MIC) is preparing a Comprehensive Safety Action Plan (SAP) to advance a Safe System approach and support state and federal roadway safety goals across the Duluth–Superior metropolitan planning area. Phase 1 of the SAP established the plan's technical foundation by applying a data-driven, systemic analysis to all arterial and collector roadways within the MIC jurisdiction, identifying Safety Emphasis Areas (SEAs), developing risk factors and tiering, and assembling an initial set of prioritized safety strategies and candidate projects.

This Phase 2 Crash Data Update refreshes the crash dataset used in Phase 1 so that the analysis reflects the most recent complete five-year period now available—calendar years 2020–2024. Updating to a recent baseline ensures that safety patterns, crash rates, and risk assessments reflect recent operating conditions and reporting trends on both the Minnesota and Wisconsin sides of the MIC planning area.

The following updates to the MIC Area Safety Action Plan are included in this memorandum:

- Replaces the 2017–2021 crash dataset used in Phase 1 with a reconciled, 2020–2024 five-year dataset drawn from the appropriate Minnesota and Wisconsin crash systems and filtered to the SAP study network.
- Recomputes crash rates, updates the SEA-specific risk factor assessments, and re-tiers roadway elements to reflect the new data.
- Reassesses the safety improvement projects for each high-priority location within each SEA category.

Following the Phase 2 Safety Action Plan engagement activities, the following additional updates will be made:

- Flag locations that were identified as high priorities through the stakeholder engagement activities.
- Add project implementation timelines to each recommended project in accordance with SS4A requirements.
- Incorporate stakeholder engagement priority locations into the project implementation timelines to assign greater urgency to high-priority locations.

Phase 2 is intentionally incremental: it retains the Phase 1 framework—SEAs, risk-factor logic, systemic screening approach, and project-prioritization structure—and updates only what the new 2020–2024 crash data requires. Where the refreshed dataset resulted in different risk scores and changes in which locations are included in the high-priority tier, the project assignment for the new priority locations was assessed and refined. Conversely, where the priority locations from the Phase 1 analysis remained unchanged, the Phase 1 recommendations were generally also left unchanged after a review.

The remainder of the memorandum is structured as follows:

- Summarizes data sources and processing, including Minnesota/Wisconsin data reconciliation.
- Presents updated crash statistics and SEA risk-factor results.
- Compares Phase 1 vs. Phase 2 tiering and explains notable shifts.
- Identifies recommended projects for each Tier 1 and Tier 2 location in the updated analysis.

2. Crash Data

Crash data from 2020-2024 was collected for both the Minnesota and Wisconsin portions of the MIC planning area. Only fatal (K), suspected serious injury (A), and minor injury (B) crashes occurring along functionally classified, non-interstate roadways were analyzed—consistent with the Phase 1 analysis approach. In total, 830 KAB crashes from 2020-2024 were included in the analysis, with 587 of them on Minnesota roadways and the remaining 243 on Wisconsin roadways. Consistent with the original methodology, this crash dataset encompasses all KAB crashes in the MIC planning area—not just those that occurred along analysis segments, curves, and intersections. This comprehensive areawide crash dataset allows crash rate analysis for the full MIC planning area, including the crash rate breakdowns by roadway classification provided in Section 3.

Minnesota crash data was gathered from the MnDOT Minnesota Crash Mapping Analysis Tool, version 2 (MnCMAT2). Wisconsin crash data was collected using the WisTransPortal Crash Data Retrieval Facility. As with the Phase 1 SAP analysis, the crash data required initial review and processing to reconcile differences between the Minnesota and Wisconsin crash data formats so they could be used together. The key fields reviewed included the following:

- Location
- Year
- Severity
- Crash Type
  - Angle crashes
  - Lane-departure crashes
- Pedestrian/Bicycle Related
- Intersection Related

The most intensive review required was the crash type field. The crash type classifications differ slightly between the Minnesota and Wisconsin data. Wisconsin defines crash data by collision type and driver action, and as a result, the data does not differentiate between “left-turn” and “angle” crashes in the same way that the Minnesota crash data does. Because of this, all left-turn crashes are categorized as “angle” or “other” types of collisions in the Wisconsin dataset. Given that one of the checks for the SEA risk factor assessment requires the number of “angle” crashes specifically, the Wisconsin data was reviewed to determine where crashes listed as “angle” should be reclassified as “left-turn” to align with the Minnesota data. These crashes were reclassified, and the two datasets were then combined into one cohesive Minnesota and Wisconsin dataset.

Consistent with the Phase 1 analysis methodology, a quality check of the 2020-2024 crash data was conducted by reviewing crash narratives and crash attributes for 10% of all vehicle crashes to validate data accuracy. This review and validation process was also completed for all crashes involving a pedestrian or bicycle.

2.1 CRASH DATA ASSIGNMENT TO THE STUDY NETWORK

To analyze where crashes occur within the MIC network, the 2020–2024 crash data was linked to the appropriate Safety Emphasis Area (SEA) roadway feature—segments/curves (SEA 1) or intersections (SEAs 2–4)—using a standard buffer-and-spatial-join workflow in ArcGIS Pro. Buffer distances were tailored to each SEA to capture crashes coded to the immediate roadway/approach while minimizing overlap. Where segment and intersection buffers met, crashes were assigned to the intersection to avoid double counting.

The crash relation methodology was implemented as follows: SEA-specific buffers were constructed; crashes were filtered to the types relevant to each SEA; spatial joins were performed to count crashes within buffers; and precedence rules were applied to resolve overlaps.

2.1.1 SEA 1: Rural Two-Lane Undivided Roads

SEGMENTS

Segment centerlines were buffered by 50 feet. Where segment buffers intersected buffers for SEA 2, SEA 3, or SEA 4 intersections, the overlapping portions of the segment buffers were erased so that crashes occurring at or near intersections would be attributed to the applicable intersection SEA. Only lane departure crashes were considered for SEA 1 segments. Approximately 46 crashes were attributed to SEA 1 segments.

CURVES

The SEA 1 curve dataset was provided as point features located at the point of intersection (PI) of tangents. To determine the length of the curve, the tangent length was calculated via the radius of the curve and the degree of curvature. A buffer of each SEA 1 curve point was created using this calculated tangent value as the buffer radius. The intersection of the SEA 1 segments buffers and these point buffers were then used to extrapolate the curve buffers to the roadways and, finally, to spatially join the number of crashes along them. Approximately 14 crashes were attributed to SEA 1 curves.

2.1.2 SEA 2: Urban Two-Way Stop Controlled (TWSC) Intersections

A 200-foot buffer was applied to each of the SEA 2 TWSC intersections. Intersection-related angle crashes were spatially joined to the buffered features, and non-intersection crashes were excluded. Approximately 24 crashes were attributed to SEA 2 intersections.

2.1.3 SEA 3: Signalized Intersections along Multilane Arterials

A 200-foot buffer was applied to the SEA 3 signalized intersections on multilane arterials. Intersection-related crashes were spatially joined to the buffered features, and non-intersection crashes were excluded. Approximately 119 crashes were attributed to SEA 3 intersections.

2.1.4 SEA 4: Urban Intersections (Pedestrian and Bicycle Crashes)

A 200-foot buffer was applied to each SEA 4 urban intersection. Intersection-related pedestrian and bicycle crashes were spatially joined to the buffered features, and non-intersection crashes were excluded. Approximately 52 crashes were attributed to SEA 4 intersections.

Intersection attribution was given precedence over segment attribution wherever buffers overlapped, thereby preventing double counting. The counts reported above are approximate and reflect the filtered crash subsets relevant to each SEA for 2020–2024.

3. Crash Rate Analysis

Using the updated 2020-2024 crash data, crash rates were calculated for corridors within the MIC planning area. The crash rate was calculated as the total fatal, serious injury, and minor injury (KAB) crashes per hundred million vehicle-miles traveled (HMVMT). Following the Phase 1 SAP methodology, the resulting crash rates were categorized as low, moderate, or high based on the thresholds shown in **Table 1**.

Table 1. KAB Crash Rate Categories

Category	KAB Crashes per HMVMT
Low	<15
Moderate	15 to 50
High	>50

The analysis network was divided into categories of functional class, area type, roadway type, and AADT. The crash rates for the classification groups within these categories are shown in **Table 2**. The crash rates are highlighted according to the low, moderate, and high categories indicated in **Table 1**.

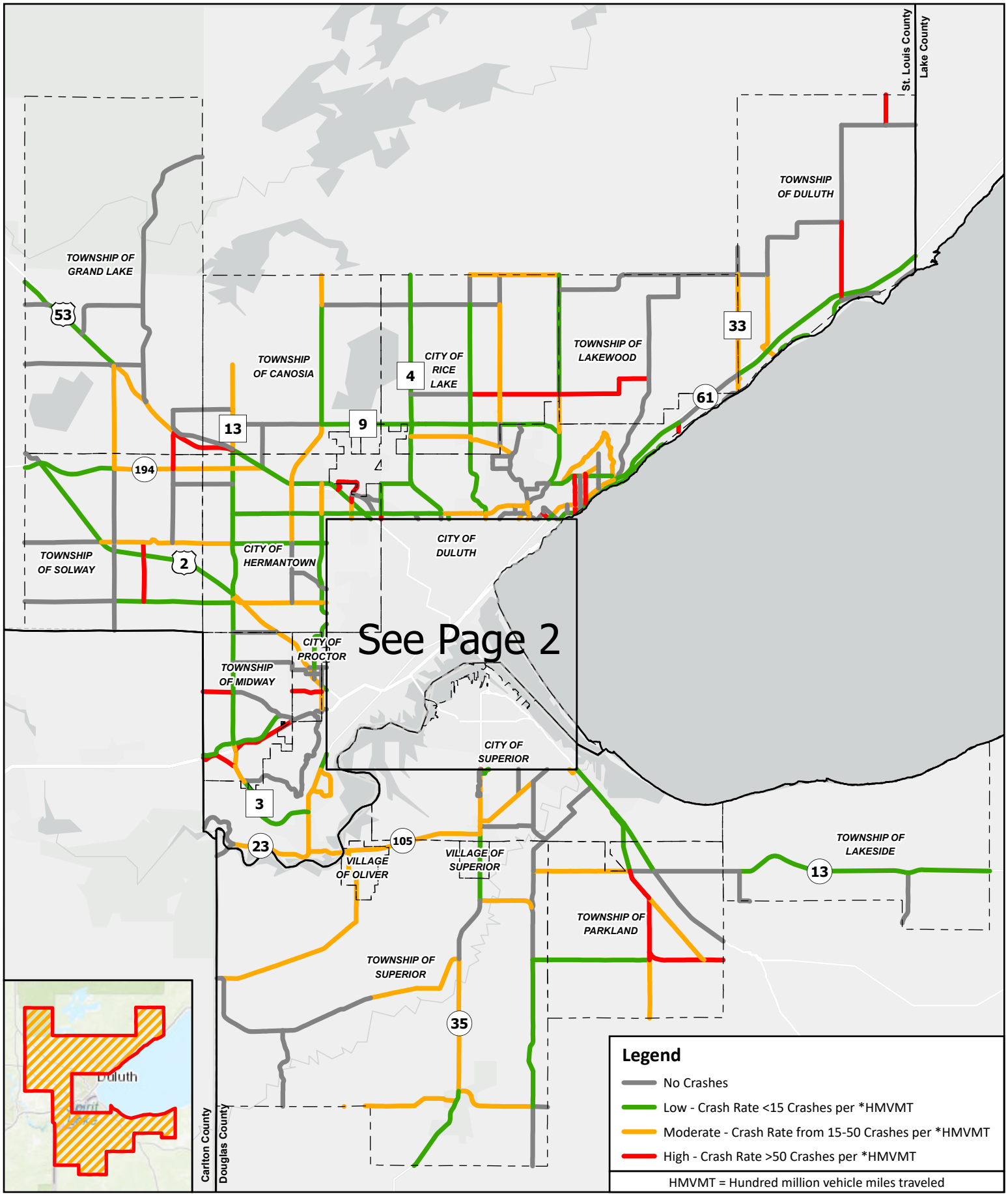
Changes in crash rate category between the Phase 2 and Phase 1 SAP crash rate analyses are noted below:

- Major collector and minor collector roads increased from low → moderate
- Two-lane divided roads decreased from high → moderate
- Two-lane undivided roads decreased from moderate → low
- Roads with an AADT of 5,000-15,000 decreased from moderate → low

Table 2. KAB Crash Rate by Roadway Classifications

Category	Classification	Miles	KAB Crashes	KAB Crash Rate per HMVMT
Functional Class	Principal Arterial	78.7	155	9.4
	Minor Arterial	147.0	246	14.5
	Major Collector	267.7	200	18.3
	Minor Collector	147.7	81	18.3
Area Type	Rural	431.6	226	9.7
	Urban	209.5	456	17.9
Roadway Type	Five-Lane Undivided	9.2	44	17.5
	Four-Lane Divided	50.6	76	6.8
	Four-Lane Undivided	21.5	76	17.4
	Three-Lane Undivided	21.1	72	22.8
	Two-Lane Divided	1.9	7	49.2
	Two-Lane Undivided	536.0	406	14.8
	Single Lane	0.8	1	20.9
AADT	<5,000	468.3	296	18.9
	5,000 to 10,000	98.5	169	13.7
	10,000 to 15,000	35.8	101	13.0
	>15,000	38.5	116	8.9

Figure 1 and **Figure 2** display the 2020-2024 crash rate category for all roadway segments within the MIC planning area.



MIC Safety Action Plan

Figure 1

Crash Rate Categorization Map

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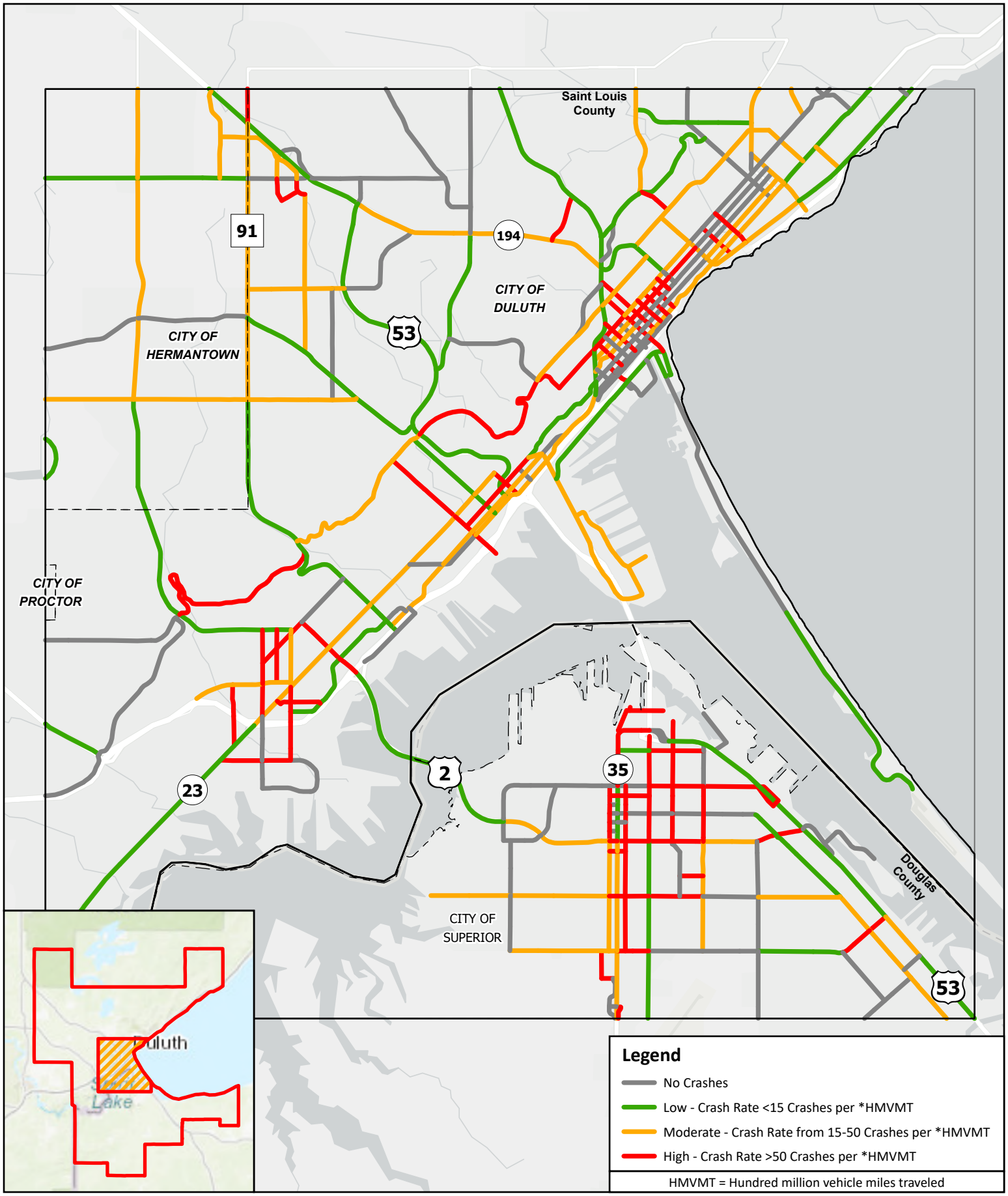

MIC Safety Action Plan

Figure 2

Crash Rate Categorization Map - Downtown Duluth & Superior

ALLIANT

4. Risk Factor Analysis

The Phase 2 update to the Safety Action Plan only influences the crash history data. As a result, any changes to the risk factor assessment for a given location are limited to the crash-related risk factor for each SEA. Each SEA includes only one crash-related risk factor, resulting in a maximum change from the SAP Phase 1 risk assessment of one star for any analysis location. The crash-related risk factors and their scoring criteria are outlined for each SEA in **Table 3**.

Table 3. SEA Crash-Related Risk Factors

Safety Emphasis Area	Risk Factor
SEA 1: Rural Two-Lane Undivided Roads	*Segments – Lane departure KAB crashes* ☆ > 0.10 crashes per mile per 5-year period ★ ≥ 0.50 crashes per mile per 5-year period *Curves – KAB crashes* ☆ ≥ 1 crash per 5-year period ★ ≥ 2 crashes per 5-year period
SEA 2: Urban TWSC Intersections	*KAB Angle crashes* ★ ≥ 1 crash per 5-year period
SEA 3: Signalized Intersections on Multilane Arterials	*KAB Crashes* ☆ ≥ 1 crash per 5-year period ★ ≥ 2 crashes per 5-year period
SEA 4: Urban Intersections	*KAB Pedestrian-Bike Crashes* ☆ ≥ 1 crash per 5-year period ★ ≥ 2 crashes per 5-year period

The updated risk assessment results using 2020-2024 crash data produced different groupings of locations with the same number of risk factors met. Tiers are assigned to include the locations with the greatest number of risk factors met, and each tier only includes full groups of locations at a particular total start level (e.g., SEA Tier 2 includes all locations with three total stars). Because the risk scoring changed with the Phase 2 update as a result of the crash data update, the number of locations in each tier was updated for each SEA. The tier size criteria were kept consistent with the SAP Phase 1 methodology. Tier 1 includes approximately the top 5% or top 20 locations, and Tier 2 includes approximately the next 5% or next 20 locations. The resulting number of locations in each tier for each SEA are listed in **Table 4**, and the full risk factor assessment tables for each SEA are provided in **Attachment 1**.

Table 4. Number of Locations per Risk Assessment Tier in Phase 2 Analysis

	SEA 1 (Segments)	SEA 1 (Curves)	SEA 2 (Intersections-TWSC)	SEA 3 (Intersections-Signal)	SEA 4 (Intersections-Ped/Bike)
Tier 1 Locations	18 (23 miles)	15	32	22	61
Tier 2 Locations	13 (23 miles)	24	18	23	28
Total	**31 (46 miles)**	**39**	**50**	**45**	**89**

The risk factor assessment update resulted in several locations in each SEA changed tiers between the Phase 1 and Phase 2 analyses. Overall, there was a slight decrease in the total number of priority locations (Tier 1 or Tier 2) for each SEA from Phase 1 to Phase 2.

Table 5 shows the number of priority locations resulting from the Phase 1 analysis along with the number of those locations that remained a priority location in the Phase 2 update. Very few of the Tier 1 or Tier 2 locations in the Phase 2 SAP tables were newly added in this phase; most of them carried over from Phase 1.

Table 5. Locations in Tier 1 & 2 in Phase 1 & 2 Analysis

	SEA 1 (Segments)	SEA 1 (Curves)	SEA 2 (Intersections-TWSC)	SEA 3 (Intersections-Signal)	SEA 4 (Intersections-Ped/Bike)
Phase 1 Tier 1/2 locations retained as Tier 1/2 in Phase 2	30	39	45	45	85
Total number of Tier 1/2 Locations in Phase 2	31	39	50	45	89
% Phase 2 Tier 1/2 Locations retained from Phases 1	**97%**	**100%**	**90%**	**100%**	**96%**

5. Safety Countermeasure Assignment

Safety countermeasures are assigned for each Tier 1 and Tier 2 location. Countermeasures were selected using the decision trees defined in Appendix K of the Phase 1 Safety Action Plan. No changes were made to the list of potential countermeasures in the Phase 2 update. As show in **Table 5**, 90-100% of the Tier 1 and Tier 2 locations resulting from the Phase 2 analysis were also in Tier 1 or Tier 2 in the Phase 1 analysis, and thus, have already been assigned safety countermeasures. The countermeasures recommended at locations that were previously in Tier 1 or Tier 2 in the Phase 1 SAP were left unchanged in most cases; however, the "conduct a traffic study" strategy was reassessed for all locations because it is contingent on crash history at the location. This updated assessment resulted in changes to the recommendation for a traffic study in some locations based on changes in crash history from the 2017-2021 Phase 1 analysis period to the 2020-2024 Phase 2 analysis period.

For locations that were not in Tier 1 or Tier 2 in the Phase 1 analysis and were elevated into Tier 1 or Tier 2 in Phase 2 with the updated crash data, the countermeasure decision trees were used to assess the appropriate countermeasures. The recommendations and cost estimate followed the guidance outlined in the safety action plan and were checked for each location to verify feasibility and necessity. The unit prices used in developing the cost estimates in the Phase 1 analysis were held constant for this Phase 2 analysis. The tables of recommended countermeasures for each location in the SEAs are attached in **Attachment 2.**

Following the Phase 1 methodology, a weighted cost per risk factor was determined for each location to further aid in prioritizing locations. This was based on the total cost associated with the recommended projects and the number of risk factors met at the location. This weighing helps to prioritize projects based on their cost effectiveness. The lower the cost per weighted risk factor, the more economically advantageous it is to implement an improvement strategy. These tables, sorted by cost per weighted risk factor, are attached in **Attachment 3**.

List of Attachments:

1. Risk Factor Assessment
2. Recommended Safety Projects Prioritized by Risk
3. Recommended Safety Projects Prioritized by Cost per Weighted Risk

Attachment 1: Risk Factor Assessment

Safety Emphasis Area 1 (Segments)

Rural Two-Lane Undivided Roads

With AADT Less Than 5,000

(Roads on the Functional Classification System)

Road Name	State	County	Municipality	Speed Limit (mph)	Number of KAB Crashes	Length (miles)	AADT	Density of Lane Departure Crashes	Curve Density	Access Density	Edge Risk	Speed Limit	Roadway Width	Total Stars
S Chicago Ave	Wisconsin	Douglas	Village of Oliver	45	3	1.3	2300	★	½	★	★	★	★	★★★★★½
Ryan Rd	Minnesota	Saint Louis	Duluth Township	50	0	0.3	364		★	★	★	★	★	★★★★★
CTH A	Wisconsin	Douglas	Superior Township	40	0	1.3	730		½	★	★	★	★	★★★★½
CTH K	Wisconsin	Douglas	Parkland Township	55	1	1.8	1200	★		★	½	★	★	★★★★½
Becks Rd	Minnesota	Saint Louis	Midway Township	55	1	1.1	670	★	½	½	★	½	★	★★★★½
Lester River Rd	Minnesota	Saint Louis	Lakewood Township	45	0	3.6	2000		★	★	★	½	★	★★★★½
CTH 8	Minnesota	Saint Louis	Grand Lake Township	30	0	0.8	120		½	★	½	★	★	★★★★
Swan Lake Rd	Minnesota	Saint Louis	City of Duluth	30	0	1.2	3000		★	★	★		★	★★★★
Occidental Blvd	Minnesota	Saint Louis	City of Duluth	30	0	0.4	348		★	★	★		★	★★★★
CTH A	Wisconsin	Douglas	Superior Township	55	0	0.7	970		½	½	★	★	★	★★★★
Saginaw Rd	Minnesota	Saint Louis	Solway Township	55	0	0.4	225		★	★	½	½	★	★★★★
CTH U	Wisconsin	Douglas	Lakeside Township	30	0	0.9	90		★		★	★	★	★★★★
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	40	0	0.7	1450		★	★	★		★	★★★★
Ryan Rd	Minnesota	Saint Louis	Duluth Township	55	0	0.2	364		★	½	½	★	★	★★★★
Hermantown Rd	Minnesota	Saint Louis	City of Hermantown	55	0	1.0	2800		½	★	★	½	★	★★★★
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	45	1	1.4	348	★	★		★		★	★★★★
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	30	3	1.7	1580	★	★	½	½		★	★★★★
CTH C	Wisconsin	Douglas	Parkland Township	30	1	4.0	1000	½		★	½	★	★	★★★★
W Skyline	Minnesota	Saint Louis	Midway Township	30	0	0.5	680		½	★	★		★	★★★½
Lavaque Rd	Minnesota	Saint Louis	City of Hermantown	45	2	0.7	3500	★		★		½	★	★★★½
Schultz Rd	Minnesota	Saint Louis	City of Rice Lake	55	0	1.0	115			★	½	★	★	★★★½
Morris Thomas Rd	Minnesota	Saint Louis	City of Hermantown	55	1	1.7	2200	★		★	½	★		★★★½
Schultz Rd	Minnesota	Saint Louis	City of Rice Lake	55	0	2.0	170			★	½	★	★	★★★½
Swan Lake Rd	Minnesota	Saint Louis	City of Hermantown	55	0	0.7	1400		½	★	★	★		★★★½
CTH E	Wisconsin	Douglas	Parkland Township	55	0	1.0	2000			★	★	½	★	★★★½
CTH K	Wisconsin	Douglas	Parkland Township	55	1	2.5	850	½		½	½	★	★	★★★½
W Skyline Pkwy	Minnesota	Saint Louis	City of Proctor	30	0	1.8	680		★	½	★		★	★★★½
CTH D	Wisconsin	Douglas	Lakeside Township	55	0	2.5	1400			½	★	★	★	★★★½
W Calvary Rd	Minnesota	Saint Louis	City of Rice Lake	55	1	2.0	1650	½		★	★		★	★★★½
CTH C	Wisconsin	Douglas	Parkland Township	55	0	2.7	750			★	½	★	★	★★★½
CTH W	Wisconsin	Douglas	Superior Township	30	0	3.7	270		½		★	★	★	★★★½
Observation Rd	Minnesota	Saint Louis	City of Duluth	40	0	1.1	1100		★	½	★	½		★★★
CTH E	Wisconsin	Douglas	Parkland Township	55	0	1.1	1200			★	½	½	★	★★★
CTH E	Wisconsin	Douglas	Parkland Township	45	0	2.8	670			★	½	½	★	★★★
CTH C	Wisconsin	Douglas	Superior Township	30	1	3.7	430	½			½	★	★	★★★
Saginaw Rd	Minnesota	Saint Louis	Solway Township	55	0	0.2	2500			½	½	★	★	★★★
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	30	0	0.2	1580		★		★		★	★★★
Swan Lake Rd	Minnesota	Saint Louis	City of Duluth	30	0	0.3	3000		★	½	½		★	★★★

Safety Emphasis Area 1 (Segments)

Rural Two-Lane Undivided Roads

With AADT Less Than 5,000

(Roads on the Functional Classification System)

Road Name	State	County	Municipality	Speed Limit (mph)	Number of KAB Crashes	Length (miles)	AADT	Density of Lane Departure Crashes	Curve Density	Access Density	Edge Risk	Speed Limit	Roadway Width	Total Stars
OLD HWY 2	Minnesota	Saint Louis	City of Hermantown	55	0	0.3	760				★	★		★★★
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	30	0	0.4	348		★		★		★	★★★
TH 39/E McCuen St	Minnesota	Saint Louis	City of Duluth	35	1	0.6	2300	★	★					★★★
CTH B	Wisconsin	Douglas	Superior Township	55	0	1.0	1300					★	★	★★★
W Tischer Rd	Minnesota	Saint Louis	City of Rice Lake	40	1	1.0	600	★		★				★★★
CTH U	Wisconsin	Douglas	Lakeside Township	55	0	1.0	90					★	★	★★★
Lavaque Rd	Minnesota	Saint Louis	City of Hermantown	40	0	1.0	3500			★			★	★★★
Arnold Rd	Minnesota	Saint Louis	City of Rice Lake	55	0	1.0	270			★	★	★		★★★
Canosia Rd	Minnesota	Saint Louis	Solway Township	55	0	1.0	1550			★	★	★		★★★
Strand Rd	Minnesota	Saint Louis	Lakewood Township	40	0	1.0	870			★			★	★★★
Maple Grove Rd	Minnesota	Saint Louis	Solway Township	50	0	1.1	1466		★		★			★★★
E Union St	Wisconsin	Douglas	Village of Oliver	55	1	1.1	3300	★				★		★★★
WIS 105	Wisconsin	Douglas	Village of Oliver	55	2	1.1	3300	★				★		★★★
Caribou Lake Rd	Minnesota	Saint Louis	Solway Township	55	0	1.2	265			★	★	★		★★★
St. Louis River Rd	Minnesota	Saint Louis	City of Hermantown	45	0	1.5	531			★			★	★★★
Howard Gnesen Rd	Minnesota	Saint Louis	City of Rice Lake	30	1	2.4	4250			★	★			★★★
Maple Grove Rd	Minnesota	Saint Louis	Solway Township	55	0	2.6	390					★	★	★★★
Schultz Rd	Minnesota	Saint Louis	City of Rice Lake	55	0	3.0	170					★	★	★★★
Howard Gnesen Rd	Minnesota	Saint Louis	City of Rice Lake	55	1	3.0	1850			★		★		★★★
CTH C	Wisconsin	Douglas	Superior Township	55	0	3.2	430					★	★	★★★
CTH A	Wisconsin	Douglas	Superior Township	55	0	3.3	930					★	★	★★★
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	30	0	3.5	680		★		★		★	★★★
Jean Duluth Rd	Minnesota	Saint Louis	City of Rice Lake	55	1	4.0	3750			★		★		★★★
CTH B	Wisconsin	Douglas	Superior Township	45	1	5.8	530						★	★★★
Morris Thomas Rd E	Minnesota	Saint Louis	City of Hermantown	55	1	4.0	1100			★		★		★★★
WIS 35	Wisconsin	Douglas	Superior Township	55	5	4.5	4400	★		★		★		★★★
CTH W	Wisconsin	Douglas	Superior Township	55	2	5.1	2300					★	★	★★★
MN 194	Minnesota	Saint Louis	Solway Township	60	2	2.0	4800	★		★		★		★★★
McQuade Rd	Minnesota	Saint Louis	Lakewood Township	40	0	0.4	345		★	★				★★
Caribou Lake Rd	Minnesota	Saint Louis	Grand Lake Township	40	0	0.6	499			★	★			★★
Culbertson Rd	Minnesota	Saint Louis	Duluth Township	55	0	1.0	380				★	★		★★
TH 210/ Oldenberg Pkwy	Minnesota	Saint Louis	City of Duluth	55	0	2.0	2000		★		★			★★
Rose Rd	Minnesota	Saint Louis	City of Hermantown	45	0	2.0	374			★	★			★★
Morris Thomas Rd E	Minnesota	Saint Louis	Solway Township	55	0	3.0	750			★		★		★★
WIS 35	Wisconsin	Douglas	Superior Township	55	2	4.3	4400					★		★★
Munger Shaw Rd	Minnesota	Saint Louis	Grand Lake Township	55	0	4.7	680					★		★★
Industrial Rd	Minnesota	Saint Louis	Grand Lake Township	50	0	0.1	1000		★					★★

Safety Emphasis Area 1 (Segments)

Rural Two-Lane Undivided Roads

With AADT Less Than 5,000

(Roads on the Functional Classification System)

Road Name	State	County	Municipality	Speed Limit (mph)	Number of KAB Crashes	Length (miles)	AADT		Density of Lane Departure Crashes	Curve Density	Access Density	Edge Risk	Speed Limit	Roadway Width	Total Stars
Ugstad Rd	Minnesota	Saint Louis	Midway Township	55	0	0.1	680					½	★	★	★★½
McQuade Rd	Minnesota	Saint Louis	Lakewood Township	30	0	0.2	345			★	½	★			★★½
CTH C	Minnesota	Douglas	Superior Township	55	0	0.2	230					½	★	★	★★½
Truck Rte St	Wisconsin	Douglas	City of Superior	25	0	0.2	350			★		½		★	★★½
E 3rd St	Wisconsin	Douglas	City of Superior	35	0	0.3	2000			★	½	★			★★½
E 3rd St	Wisconsin	Douglas	City of Superior	35	0	0.4	2000			★	★	½			★★½
Lakewood Rd	Minnesota	Saint Louis	City of Duluth	30	0	0.4	740				★	½		★	★★½
Munger Shaw Rd	Minnesota	Saint Louis	Solway Township	55	0	0.4	305				★	½	★		★★½
Garfield Ave	Wisconsin	Douglas	City of Superior	25	0	0.5	2100			★	★	½			★★½
Caribou Lake Rd	Minnesota	Saint Louis	Solway Township	55	0	0.5	195				½	★	★		★★½
Woodland Ave	Minnesota	Saint Louis	City of Duluth	30	0	0.5	1724			★	★	½			★★½
42nd Ave	Wisconsin	Douglas	City of Superior	55	0	0.5	970			½			★	★	★★½
Stebner Rd	Minnesota	Saint Louis	City of Hermantown	55	0	0.5	2350			★	½		★		★★½
Port Terminal Dr	Minnesota	Saint Louis	City of Duluth	30	0	0.6	1900			★	★	½			★★½
Marina Dr	Wisconsin	Douglas	City of Superior	25	0	0.6	510			★	½	★			★★½
Becks Rd	Minnesota	Saint Louis	Midway Township	55	0	0.6	3600			½	★		★		★★½
Helberg Dr	Minnesota	Saint Louis	City of Duluth	30	0	0.7	830			★	★	½			★★½
Lakewood Rd	Minnesota	Saint Louis	Lakewood Township	55	0	0.7	450				★	½	★		★★½
McQuade Rd	Minnesota	Saint Louis	Duluth Township	55	0	0.9	760				★	½	★		★★½
E Shilhon Rd	Minnesota	Saint Louis	Duluth Township	55	0	1.0	380			½	½	½	★		★★½
Industrial Rd	Minnesota	Saint Louis	Grand Lake Township	50	0	1.0	480				★	★	½		★★½
Howard Gnesen Rd	Minnesota	Saint Louis	City of Rice Lake	40	0	1.0	1800				★	★	½		★★½
USH 2	Minnesota	Saint Louis	Solway Township	60	1	1.0	3250		★		½		★		★★½
Hermantown Rd	Minnesota	Saint Louis	City of Hermantown	40	0	1.2	750			½	★	½	½		★★½
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	30	1	1.2	1975		★	★		½			★★½
Lindahl Rd	Minnesota	Saint Louis	City of Hermantown	55	0	1.5	580				★	½	★		★★½
Canosia Rd	Minnesota	Saint Louis	Solway Township	55	0	1.7	1650				½	★	★		★★½
Lavaque Bypass Rd	Minnesota	Saint Louis	City of Hermantown	55	0	1.8	3300			½	★		★		★★½
N Cloquet Rd	Minnesota	Saint Louis	Midway Township	35	0	1.9	680			½	★	★			★★½
Stark Rd	Minnesota	Saint Louis	Midway Township	45	0	1.9	590				★	★	½		★★½
Caribou Lake Rd	Minnesota	Saint Louis	Solway Township	55	0	2.0	195				½	★	★		★★½
W Tischer Rd	Minnesota	Saint Louis	City of Rice Lake	45	0	2.0	600				★	★	½		★★½
W SKyline Pkwy	Minnesota	Saint Louis	City of Duluth	30	5	2.1	620		★	★		½			★★½
Thompson Hill Rd	Minnesota	Saint Louis	Midway Township	55	2	2.2	425		★	½			★		★★½
Lester River Rd	Minnesota	Saint Louis	Lakewood Township	45	0	2.7	450				★	★	½		★★½
Arnold Rd	Minnesota	Saint Louis	City of Rice Lake	40	0	3.0	820				★	★	½		★★½
CTH Z	Wisconsin	Douglas	Parkland Township	55	1	3.3	730		½		½	½	★		★★½

Safety Emphasis Area 1 (Segments)

Rural Two-Lane Undivided Roads

With AADT Less Than 5,000

(Roads on the Functional Classification System)

Road Name	State	County	Municipality	Speed Limit (mph)	Number of KAB Crashes	Length (miles)	AADT	Density of Lane Departure Crashes	Curve Density	Access Density	Edge Risk	Speed Limit	Roadway Width	Total Stars
CTH C/W	Wisconsin	Douglas	Superior Township	55	0	3.4	230				½	★	★	★★½
CTH A	Wisconsin	Douglas	Superior Township	55	1	5.0	1500	½		½	½	★		★★½
WIS 13	Wisconsin	Douglas	Lakeside Township	55	2	6.0	1600	½		½	½	★		★★½
Canosia Rd	Minnesota	Saint Louis	Solway Township	55	1	3.4	1000	½		★		★		★★½
N Cloquet Rd	Minnesota	Saint Louis	Midway Township	50	1	1.0	1950	★		½	½	½		★★½
MN 194	Minnesota	Saint Louis	City of Hermantown	55	2	1.0	4850	★		½		★		★★½
CTH W	Wisconsin	Douglas	Village of Oliver	55	2	1.2	2300	★			½	★		★★½
Stinson Ave	Wisconsin	Douglas	City of Superior	35	0	2.0	2800			★	★			★★
W Tischer Rd	Minnesota	Saint Louis	Lakewood Township	40	0	2.0	870			★	½	½		★★
Becks Rd	Minnesota	Saint Louis	City of Duluth	55	0	3.2	3600		½	½		★		★★
Homestead Rd	Minnesota	Saint Louis	Duluth Township	55	0	3.3	380			½	½	★		★★
W Tischer Rd	Minnesota	Saint Louis	City of Rice Lake	45	0	2.0	560			★	½	½		★★
MN 194	Minnesota	Saint Louis	City of Hermantown	55	0	2.0	4850			★		★		★★
WIS 35	Wisconsin	Douglas	Superior Township	55	0	2.2	4400		½	½		★		★★
Homestead Rd	Minnesota	Saint Louis	Duluth Township	55	0	2.4	380			½	½	★		★★
CTH 61	Minnesota	Saint Louis	Duluth Township	50	0	2.8	1350		½	★		½		★★
Industrial Rd	Minnesota	Saint Louis	Grand Lake Township	50	0	3.0	1100			★	½	½		★★
N 12th St	Wisconsin	Douglas	City of Superior	25	0	0.1	1100		★	½	½			★★
MN 23	Minnesota	Saint Louis	City of Duluth	30	1	0.1	2000	★	★					★★
Marina Dr	Wisconsin	Douglas	City of Superior	25	0	0.1	510		★		★			★★
Catlin Ave	Wisconsin	Douglas	City of Superior	25	0	0.2	2000			★	★			★★
E 1st St	Wisconsin	Douglas	City of Superior	25	0	0.2	710				★		★	★★
Chambersburg Ave	Minnesota	Saint Louis	City of Duluth	30	0	0.2	2217			★	★			★★
24th Ave E	Wisconsin	Douglas	City of Superior	35	0	0.2	2400			★	★			★★
Oakes Ave	Wisconsin	Douglas	City of Superior	25	0	0.2	1800			★	★			★★
Old North Shore Rd	Minnesota	Saint Louis	Duluth Township	35	0	0.3	364		★	½	½			★★
CTH K	Wisconsin	Douglas	Parkland Township	45	0	0.3	1200				½	½	★	★★
Marina Dr	Wisconsin	Douglas	City of Superior	25	0	0.3	560		★		★			★★
Hill Ave	Wisconsin	Douglas	City of Superior	25	0	0.4	4200			★	★			★★
Howard Gnesen Rd	Minnesota	Saint Louis	City of Rice Lake	30	0	0.4	2450			★	★			★★
Maple Grove Rd	Minnesota	Saint Louis	Solway Township	55	0	0.4	1466			½	½	★		★★
N Tischer Rd	Minnesota	Saint Louis	Lakewood Township	40	0	0.5	870			★	½	½		★★
N 58th St E	Wisconsin	Douglas	City of Superior	30	0	0.5	2000			★	★			★★
USH 2	Minnesota	Saint Louis	Solway Township	60	0	0.5	3250		½	½		★		★★
Midway Rd	Minnesota	Saint Louis	Midway Township	45	0	0.6	3600		½	★		½		★★
E 3rd St	Wisconsin	Douglas	City of Superior	35	0	0.6	2000			★	★			★★
Ugstad Rd	Minnesota	Saint Louis	City of Hermantown	45	0	0.6	2400			★	½	½		★★

Safety Emphasis Area 1 (Segments)

Rural Two-Lane Undivided Roads

With AADT Less Than 5,000

(Roads on the Functional Classification System)

Road Name	State	County	Municipality	Speed Limit (mph)	Number of KAB Crashes	Length (miles)	AADT	Density of Lane Departure Crashes	Curve Density	Access Density	Edge Risk	Speed Limit	Roadway Width	Total Stars
Chambersburg Ave	Minnesota	Saint Louis	City of Duluth	30	0	0.6	2217			★	★			★★
Mountain Dr	Minnesota	Saint Louis	City of Proctor	40	0	0.8	680		★	★	★	★		★★
CTH Z	Wisconsin	Douglas	Parkland Township	55	0	0.8	1000			★	★	★		★★
W Knife River Rd	Minnesota	Saint Louis	Duluth Township	55	0	1.0	275			★	★	★		★★
Ugstad Rd	Minnesota	Saint Louis	City of Hermantown	40	0	1.0	750				★	★	★	★★
Lismore Rd	Minnesota	Saint Louis	City of Rice Lake	55	0	1.0	540			★	★	★		★★
Lavaque Rd	Minnesota	Saint Louis	Canosia Township	55	0	1.0	3300			★		★		★★
Howard Gnesen Rd	Minnesota	Saint Louis	City of Rice Lake	55	0	1.0	1850			★	★	★		★★
Martin Rd	Minnesota	Saint Louis	Canosia Township	45	0	1.0	2585			★	★	★		★★
Morris Thomas Rd	Minnesota	Saint Louis	City of Hermantown	55	0	1.0	3300			★		★		★★
Morris Thomas Rd	Minnesota	Saint Louis	City of Hermantown	40	0	1.0	3800			★	★	★		★★
Hermantown Rd	Minnesota	Saint Louis	City of Hermantown	40	0	1.1	1300		★	★		★		★★
Ryan Rd	Minnesota	Saint Louis	Duluth Township	55	0	1.3	380			★	★	★		★★
Taft Rd	Minnesota	Saint Louis	Grand Lake Township	40	0	1.4	680			★	★	★		★★
W Knife River Rd	Minnesota	Saint Louis	Duluth Township	55	0	1.5	275			★	★	★		★★
Midway Rd	Minnesota	Saint Louis	Canosia Township	50	0	1.5	1400			★	★	★		★★
Munger Shaw Rd	Minnesota	Saint Louis	Solway Township	55	0	1.6	305			★	★	★		★★
CTH C	Wisconsin	Douglas	Superior Township	55	0	1.9	2800			★	★	★		★★
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	30	0	1.9	348		★		★			★★
Korkki Rd	Minnesota	Saint Louis	Duluth Township	55	0	2.0	380			★	★	★		★★
Central Ave	Wisconsin	Douglas	City of Superior	55	2	2.0	3300	★				★		★★
Lismore Rd	Minnesota	Saint Louis	Lakewood Township	55	0	2.0	1250			★		★		★★
Martin Rd	Minnesota	Saint Louis	Canosia Township	55	0	2.0	2585			★		★		★★
Lismore Rd	Minnesota	Saint Louis	City of Rice Lake	55	0	2.0	540			★	★	★		★★
Lismore Rd	Minnesota	Saint Louis	Lakewood Township	55	0	2.0	1250			★		★		★★
Maple Grove Rd	Minnesota	Saint Louis	City of Hermantown	50	0	2.0	1466			★	★	★		★★
CTH 982	Minnesota	Saint Louis	Grand Lake Township	50	0	2.2	816		★	★		★		★★
Ryan Rd	Minnesota	Saint Louis	Duluth Township	55	0	2.3	364			★	★	★		★★
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	30	0	2.4	1240		★	★	★			★★
CTH 61	Minnesota	Saint Louis	Lakewood Township	50	0	2.5	2900		★	★		★		★★
Bergstrom Rd	Minnesota	Saint Louis	Grand Lake Township	55	0	2.9	215			★		★		★★
McQuade Rd	Minnesota	Saint Louis	Lakewood Township	55	0	3.4	760			★		★		★★
Munger Shaw Rd	Minnesota	Saint Louis	Grand Lake Township	45	0	3.4	1050		★	★		★		★★
WIS 13	Wisconsin	Douglas	Lakeside Township	55	1	3.7	1400	★			★	★		★★
CTH 61	Minnesota	Saint Louis	Duluth Township	50	1	4.8	1350	★		★		★		★★
MN 23	Minnesota	Saint Louis	City of Duluth	50	1	2.2	2000	★	★	★		★		★★
Caribou Lake Rd	Minnesota	Saint Louis	Grand Lake Township	55	1	0.1	265	★				★		★★

Safety Emphasis Area 1 (Segments)

Rural Two-Lane Undivided Roads

With AADT Less Than 5,000

(Roads on the Functional Classification System)

Road Name	State	County	Municipality	Speed Limit (mph)	Number of KAB Crashes	Length (miles)	AADT	Density of Lane Departure Crashes	Curve Density	Access Density	Edge Risk	Speed Limit	Roadway Width	Total Stars
N 56th St	Wisconsin	Douglas	City of Superior	25	2	0.2	2800	★						★★
E 5th St	Wisconsin	Douglas	City of Superior	30	0	0.4	1900			★				★
Winter St	Wisconsin	Douglas	City of Superior	25	0	0.2	2000			★				★
E 10th St	Wisconsin	Douglas	City of Superior	25	0	0.6	990			★				★
Arnold Rd	Minnesota	Saint Louis	City of Rice Lake	30	0	1.0	1450			★				★
N 58th St	Wisconsin	Douglas	City of Superior	30	0	1.0	2000							★
Minnesota Ave	Minnesota	Saint Louis	City of Duluth	30	0	1.0	1850		★					★
USH 2	Minnesota	Saint Louis	City of Hermantown	60	0	3.4	3250					★		★
Caribou Lake Rd	Minnesota	Saint Louis	Solway Township	55	0	2.5	1400					★		★
WIS 13	Wisconsin	Douglas	Lakeside Township	55	0	2.9	2000					★		★
MN 23	Minnesota	Saint Louis	City of Duluth	30	0	0.1	1650		★					★
Hill Ave	Wisconsin	Douglas	City of Superior	25	0	0.1	4200				★			★
E 5th St	Wisconsin	Douglas	City of Superior	30	0	0.1	750				★			★
Stebner Rd	Minnesota	Saint Louis	City of Hermantown	55	0	0.1	2650					★		★
W Mulberry St	Minnesota	Saint Louis	City of Duluth	30	0	0.2	3000			★				★
W SKyline Pkwy	Minnesota	Saint Louis	City of Proctor	30	0	0.2	4150		★					★
Susquehanna Ave	Wisconsin	Douglas	City of Superior	25	0	0.2	3000				★			★
39th Ave E	Wisconsin	Douglas	City of Superior	25	0	0.2	930			★				★
39th Ave E	Wisconsin	Douglas	City of Superior	25	0	0.2	930			★				★
N 58th St	Wisconsin	Douglas	City of Superior	25	0	0.3	2000			★				★
Canosia Rd	Minnesota	Saint Louis	Solway Township	55	0	0.3	1650					★		★
TH 39/E McCuen St	Minnesota	Saint Louis	City of Duluth	30	0	0.3	2300			★				★
Lavaque Rd	Minnesota	Saint Louis	Canosia Township	55	0	0.3	3300					★		★
CTH 45	Minnesota	Saint Louis	Midway Township	35	0	0.4	680				★			★
USH 2	Minnesota	Saint Louis	City of Hermantown	60	0	0.4	760					★		★
CTH 61	Minnesota	Saint Louis	City of Duluth	50	0	0.4	2900		★					★
USH 2	Minnesota	Saint Louis	Solway Township	60	0	0.5	4800					★		★
39th Ave E	Wisconsin	Douglas	City of Superior	25	0	0.6	930			★				★
Woodlawn Rd	Wisconsin	Douglas	City of Superior	30	0	0.6	1400		★					★
Ugstad Rd	Minnesota	Saint Louis	City of Hermantown	35	0	0.9	750			★				★
Morris Thomas Rd	Minnesota	Saint Louis	City of Hermantown	45	0	1.0	3300			★				★
Maple Grove Rd	Minnesota	Saint Louis	Solway Township	50	0	1.0	1466							★
W Arrowhead Rd	Minnesota	Saint Louis	City of Hermantown	45	0	1.0	2760			★				★
Lismore Rd	Minnesota	Saint Louis	Duluth Township	55	0	1.0	1250					★		★
Roberg Rd	Minnesota	Saint Louis	Lakewood Township	40	0	1.0	450							★
Airbase Rd	Minnesota	Saint Louis	City of Hermantown	40	0	1.0	2100			★				★
CTH 73	Minnesota	Saint Louis	Midway Township	30	0	1.2	510		★					★

Safety Emphasis Area 1 (Segments)

Rural Two-Lane Undivided Roads

With AADT Less Than 5,000

(Roads on the Functional Classification System)

Road Name	State	County	Municipality	Speed Limit (mph)	Number of KAB Crashes	Length (miles)	AADT	Density of Lane Departure Crashes	Curve Density	Access Density	Edge Risk	Speed Limit	Roadway Width	Total Stars
CTH A	Wisconsin	Douglas	Superior Township	55	0	1.8	2900			½		★		★½
Helm Rd	Minnesota	Saint Louis	Grand Lake Township	50	0	2.0	720			★		½		★½
MN 194	Minnesota	Saint Louis	Solway Township	60	0	2.6	4800		½			★		★½
Martin Rd	Minnesota	Saint Louis	City of Rice Lake	55	0	3.0	4950			½		★		★½
USH 2	Minnesota	Saint Louis	Solway Township	60	1	3.4	2500	½				★		★½
Lavaque Rd	Minnesota	Saint Louis	Canosia Township	55	0	4.0	3300			½		★		★½
Catlin Ave	Wisconsin	Douglas	City of Superior	25	0	0.1	2000			½	½			★
Catlin Ave	Wisconsin	Douglas	City of Superior	25	0	0.2	1900			½	½			★
Winter St	Wisconsin	Douglas	City of Superior	25	0	0.3	1400			★				★
Winter St	Wisconsin	Douglas	City of Superior	25	0	0.5	1000			★				★
CTH 61	Minnesota	Saint Louis	City of Duluth	50	0	1.7	2900		½			½		★
Chambersburg Ave	Minnesota	Saint Louis	City of Duluth	30	0	0.0	2217				★			★
S 59th Ave W	Minnesota	Saint Louis	City of Duluth	30	0	0.1	943				★			★
Howard Gnesen Rd	Minnesota	Saint Louis	City of Rice Lake	30	0	0.1	4250				★			★
N 12th St	Wisconsin	Douglas	City of Superior	25	0	0.1	1100			½	½			★
N 5th St	Wisconsin	Douglas	City of Superior	25	0	0.1	1000				★			★
W Skyline Pkwy	Minnesota	Saint Louis	City of Proctor	30	0	0.2	4150		★					★
N 12th St	Wisconsin	Douglas	City of Superior	25	0	0.2	1100			½	½			★
Homestead Rd	Minnesota	Saint Louis	Duluth Township	30	0	0.2	380			½	½			★
Catlin Ave	Wisconsin	Douglas	City of Superior	25	0	0.2	2100			★				★
Stinson Ave	Wisconsin	Douglas	City of Superior	35	0	0.2	2400			½	½			★
Midway Rd	Minnesota	Saint Louis	Midway Township	45	0	0.2	3600			½		½		★
E 18th St	Wisconsin	Douglas	City of Superior	30	0	0.3	800			½	½			★
Main St	Wisconsin	Douglas	City of Superior	25	0	0.3	1000				★			★
N Tischer Rd	Minnesota	Saint Louis	Lakewood Township	40	0	0.4	1250		½			½		★
MN 23	Wisconsin	Douglas	Superior Township	30	0	0.4	2000		½	½				★
Martin Rd	Minnesota	Saint Louis	City of Rice Lake	50	0	0.5	3600			½		½		★
Stinson Ave	Wisconsin	Douglas	City of Superior	35	0	0.5	2500			½	½			★
Winter St	Wisconsin	Douglas	City of Superior	25	0	0.6	1800			½	½			★
42nd Ave	Wisconsin	Douglas	City of Superior	35	0	1.3	800		½		½			★
Bardon Ave	Wisconsin	Douglas	City of Superior	35	0	1.5	1400				★			★
Maple Grove Rd	Minnesota	Saint Louis	City of Hermantown	50	0	1.6	4450			½		½		★
CTH B	Wisconsin	Douglas	Superior Township	45	0	2.8	2500			½		½		★
Old N Shore Rd	Minnesota	Saint Louis	Lakewood Township	30	1	0.1	345	★						★
Hill Ave	Wisconsin	Douglas	City of Superior	35	0	0.1	3300				½			½
Susquehanna Ave	Wisconsin	Douglas	City of Superior	25	0	0.0	3000				½			½
E Union St	Wisconsin	Douglas	Village of Oliver	25	0	0.0	2300				½			½

Safety Emphasis Area 1 (Segments)

Rural Two-Lane Undivided Roads

With AADT Less Than 5,000

(Roads on the Functional Classification System)

Road Name	State	County	Municipality	Speed Limit (mph)	Number of KAB Crashes	Length (miles)	AADT		Density of Lane Departure Crashes	Curve Density	Access Density	Edge Risk	Speed Limit	Roadway Width	Total Stars
Winter St	Wisconsin	Douglas	City of Superior	25	0	0.1	710					★			★
Catlin Ave	Wisconsin	Douglas	City of Superior	25	0	0.1	1100					★			★
N 12th St	Wisconsin	Douglas	City of Superior	25	0	0.1	1100					★			★
E St	Wisconsin	Douglas	City of Superior	25	0	0.1	350				★				★
N 56th St	Wisconsin	Douglas	City of Superior	25	0	0.1	2800					★			★
Midway Rd	Minnesota	Saint Louis	Canosia Township	40	0	0.1	4200						★		★
Port Terminal Dr	Minnesota	Saint Louis	City of Duluth	30	0	0.2	830					★			★
Hill Ave	Wisconsin	Douglas	City of Superior	35	0	1.0	3300					★			★
Lismore Rd	Minnesota	Saint Louis	Lakewood Township	50	0	2.0	1600						★		★
Catlin Ave	Wisconsin	Douglas	City of Superior	25	0	0.0	2100								
Grand Ave	Wisconsin	Douglas	City of Superior	10	0	0.1	1000								
Catlin Ave	Wisconsin	Douglas	City of Superior	25	0	0.2	1100								
WIS 35	Wisconsin	Douglas	Superior Township	35	0	0.7	4400								

Safety Emphasis Area 1 (Curves)

Rural Two-Lane Undivided Roads

With AADT Less Than 5,000

(Roads on the Functional Classification System)

Road Name	State	County	Municipality	Lat/Long	Speed Limit (mph)	Curve Advisory Speed (mph)	Length (miles)	AADT	Occurance of KAB Crashes on Curve	Intersection Or Visual Trap	Curve Radii	Horizontal Curve Speed Differential	Shoulder/Surface Type	Total Stars
CTH C	Wisconsin	Douglas	Superior Township	46°35'25.04"N, 92° 7'58.90"W	55	15	3.7	430	½	★	★	★	½	★★★★
TH 39/E McCuen St	Minnesota	Saint Louis	City of Duluth	46°39'22.28"N, 92°12'30.51"W	35	25	0.6	2300	½	½	★	★	½	★★★½
CTH 8	Minnesota	Saint Louis	Grand Lake Township	46°55'24.22"N, 92°24'46.07"W	55	No Posting	0.8	120		½	★	★	★	★★★½
Ryan Rd	Minnesota	Saint Louis	Duluth Township	46°57'22.91"N, 91°53'59.42"W	55	30	1.3	380		★	★	★	½	★★★½
W Tischer Rd	Minnesota	Saint Louis	Lakewood Township	46°52'49.13"N, 92° 0'19.37"W	40	20	2.0	870		★	★	★	½	★★★½
Ryan Rd	Minnesota	Saint Louis	Duluth Township	46°54'11.29"N, 91°54'12.54"W	55	15	0.3	364		★	★	★	½	★★★½
Occidental Blvd	Minnesota	Saint Louis	City of Duluth	46°50'38.96"N, 92° 0'37.28"W	30	20	0.4	348			★	★	★	★★★
CTH W	Wisconsin	Douglas	Superior Township	46°33'7.90"N, 92°14'49.97"W	55	No Posting	3.7	270			★	★	★	★★★
Maple Grove Rd	Minnesota	Saint Louis	Solway Township	46°48'27.56"N, 92°20'0.41"W	50	25	1.1	1466		½	★	★	½	★★★
E Shilhon Rd	Minnesota	Saint Louis	Duluth Township	46°57'22.89"N, 91°52'43.28"W	55	25	1.0	380		½	★	★	½	★★★
Ryan Rd	Minnesota	Saint Louis	Duluth Township	46°54'3.49"N, 91°54'2.98"W	55	No Posting	0.2	364		½	★	★	½	★★★
Becks Rd	Minnesota	Saint Louis	Midway Township	46°42'15.72"N, 92°17'31.69"W	50	40	1.1	670	½		★	★	½	★★★
Industrial Rd	Minnesota	Saint Louis	Grand Lake Township	46°53'37.03"N, 92°21'56.59"W	50	No Posting	0.1	1000		½	★	★	½	★★★
Munger Shaw Rd	Minnesota	Saint Louis	Grand Lake Township	46°54'46.80"N, 92°20'38.89"W	45	No Posting	3.4	1050		★	½	★	½	★★★
CTH C	Wisconsin	Douglas	Superior Township	46°34'48.28"N, 92°12'6.64"W	55	20	3.2	430		★	½	★	½	★★★
CTH W	Wisconsin	Douglas	Superior Township	46°33'14.72"N, 92°14'41.78"W	55	No Posting	3.7	270			½	★	★	★★½
N 58th St	Wisconsin	Douglas	City of Superior	46°40'11.71"N, 92° 4'37.88"W	30	15	1.0	2000			★	★	½	★★½
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°43'30.81"N, 92°13'1.44"W	30	15	0.2	4150		½	★	★		★★½
Occidental Blvd	Minnesota	Saint Louis	City of Duluth	46°50'29.15"N, 92° 0'36.58"W	30	20	0.4	348			½	★	★	★★½
CTH W	Wisconsin	Douglas	Superior Township	46°32'43.85"N, 92°14'38.17"W	55	25	3.7	270			½	★	★	★★½
N 58th St	Wisconsin	Douglas	City of Superior	46°40'9.80"N, 92° 4'40.55"W	30	15	1.0	2000			★	★	½	★★½
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°48'43.37"N, 92° 5'26.53"W	30	15	0.7	1450			★	★	½	★★½
S Chicago Ave	Wisconsin	Douglas	Village of Oliver	46°38'42.53"N, 92°11'32.99"W	55	25	1.3	2300			★	★	½	★★½
Becks Rd	Minnesota	Saint Louis	Midway Township	46°41'56.24"N, 92°16'47.16"W	50	No Posting	1.1	670			★	★	½	★★½
Maple Grove Rd	Minnesota	Saint Louis	Solway Township	46°48'28.32"N, 92°20'19.68"W	50	25	1.1	1466			★	★	½	★★½
42nd Ave	Wisconsin	Douglas	Superior Township	46°39'29.00"N, 92° 3'59.28"W	55	35	0.5	970		½	½	★	½	★★½
Maple Grove Rd	Minnesota	Saint Louis	Solway Township	46°48'34.09"N, 92°20'15.47"W	50	25	1.1	1466			★	★	½	★★½
TH 210/Oldenberg Pkw	Minnesota	Saint Louis	City of Duluth	46°40'21.35"N, 92°17'27.23"W	40	25	2.0	2000			★	★	½	★★½
CTH A	Wisconsin	Douglas	Douglas Township	46°29'38.66"N, 92° 4'20.00"W	55	35	3.3	930		½	½	★	½	★★½
CTH U	Wisconsin	Douglas	Douglas Township	46°37'56.39"N, 91°54'41.08"W	55	No Posting	0.9	90			★	★	½	★★½
St. Louis River Rd	Minnesota	Saint Louis	Midway Township	46°45'50.88"N, 92°14'59.42"W	45	No Posting	1.5	531		½	★	★		★★½
CTH U	Wisconsin	Douglas	Douglas Township	46°37'40.46"N, 91°54'21.35"W	55	No Posting	0.9	90			★	★	½	★★½
Korkki Rd	Minnesota	Saint Louis	Duluth Township	46°57'48.95"N, 91°52'43.39"W	55	25	2.0	380			★	★	½	★★½
Swan Lake Rd	Minnesota	Saint Louis	City of Hermantown	46°49'49.50"N, 92°11'2.04"W	55	30	0.7	1400		½	½	★	½	★★½
CTH A	Wisconsin	Douglas	Superior Township	46°37'49.02"N, 92° 3'58.80"W	55	20	1.3	730			★	★	½	★★½
CTH W	Wisconsin	Douglas	Superior Township	46°33'17.08"N, 92°14'27.44"W	55	No Posting	3.7	270			½	★	★	★★½
CTH U	Wisconsin	Douglas	Douglas Township	46°37'55.53"N, 91°54'34.61"W	55	No Posting	0.9	90			★	★	½	★★½
Caribou Lake Rd	Minnesota	Saint Louis	Grand Lake Township	46°51'38.82"N, 92°19'21.75"W	55	No Posting	1.2	265		½	½	★	½	★★½
S Chicago Ave	Wisconsin	Douglas	Village of Oliver	46°38'53.05"N, 92°11'52.46"W	55	25	1.3	2300		½	½	★	½	★★½
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°42'53.93"N, 92°13'10.82"W	30	No Posting	1.8	680		½	★		½	★★
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'34.37"N, 92°11'26.72"W	30	No Posting	2.1	620	★		★			★★

Safety Emphasis Area 1 (Curves)

Rural Two-Lane Undivided Roads

With AADT Less Than 5,000

(Roads on the Functional Classification System)

Road Name	State	County	Municipality	Lat/Long	Speed Limit (mph)	Curve Advisory Speed (mph)	Length (miles)	AADT	Occurance of KAB Crashes on Curve	Intersection Or Visual Trap	Curve Radii	Horizontal Curve Speed Differential	Shoulder/Surface Type	Total Stars
N Tischer Rd	Minnesota	Saint Louis	Lakewood Township	46°56'17.27"N, 92° 0'20.56"W	40	No Posting	0.4	1250	★	½	½			★★
Hermantown Rd	Minnesota	Saint Louis	City of Hermantown	46°47'22.30"N, 92°10'31.24"W	40	No Posting	1.0	2800		½	★		½	★★
Minnesota Ave	Minnesota	Saint Louis	City of Duluth	46°43'50.54"N, 92° 3'19.92"W	30	No Posting	1.0	1850		½	★		½	★★
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°46'43.40"N, 92° 7'15.66"W	30	No Posting	1.7	1580		★	★			★★
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°46'41.36"N, 92° 7'16.51"W	30	No Posting	1.7	1580	★		★			★★
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	46°51'14.71"N, 92° 0'38.94"W	30	No Posting	1.4	348	½		★		½	★★
Lester River Rd	Minnesota	Saint Louis	Lakewood Township	46°52'39.58"N, 91°59'15.54"W	45	No Posting	3.6	2000			½	★	½	★★
Minnesota Ave	Minnesota	Saint Louis	City of Duluth	46°43'41.96"N, 92° 3'8.90"W	30	No Posting	1.0	1850		½	★		½	★★
Lester River Rd	Minnesota	Saint Louis	Lakewood Township	46°52'20.41"N, 91°59'19.06"W	45	No Posting	3.6	2000			½	★	½	★★
CTH A	Wisconsin	Douglas	Superior Township	46°38'3.17"N, 92° 4'3.44"W	55	20	1.3	730			½	★	½	★★
Lester River Rd	Minnesota	Saint Louis	City of Duluth	46°50'29.00"N, 92° 0'20.38"W	45	No Posting	3.6	2000			½	★	½	★★
Observation Rd	Minnesota	Saint Louis	City of Duluth	46°47'12.19"N, 92° 7'19.38"W	40	35	1.1	1100			★	½	½	★★
CTH U	Wisconsin	Douglas	Lakeside Township	46°37'59.53"N, 91°54'46.40"W	55	20	0.9	90			½	★	½	★★
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°43'52.49"N, 92°12'11.39"W	30	No Posting	2.4	1240		½	★		½	★★
CTH B	Wisconsin	Douglas	Superior Township	46°31'58.46"N, 92° 9'3.79"W	45	35	5.8	530		½	½	½	½	★★
Port Terminal Dr	Minnesota	Saint Louis	City of Duluth	46°45'10.57"N, 92° 5'56.58"W	30	25	0.6	1900		½	★	½		★★
Maple Grove Rd	Minnesota	Saint Louis	Solway Township	46°48'32.48"N, 92°20'8.32"W	50	25	1.1	1466			½	★	½	★★
CTH B	Wisconsin	Douglas	Superior Township	46°32'11.47"N, 92° 8'39.41"W	45	30	5.8	530			½	★	½	★★
CTH A	Wisconsin	Douglas	Superior Township	46°30'12.34"N, 92° 4'1.10"W	55	35	3.3	930			½	★	½	★★
CTH C	Wisconsin	Douglas	Superior Township	46°36'17.12"N, 92° 7'27.52"W	55	35	3.7	430			½	★	½	★★
CTH C	Wisconsin	Douglas	Superior Township	46°34'48.80"N, 92°12'12.50"W	55	20	3.2	430			½	★	½	★★
OLD HWY 2	Minnesota	Saint Louis	City of Hermantown	46°46'42.97"N, 92°16'30.08"W	55	No Posting	0.3	760			½	★	½	★★
CTH C/W	Wisconsin	Douglas	Superior Township	46°35'40.31"N, 92°17'12.23"W	55	No Posting	3.4	230			½	★	½	★★
CTH 61	Minnesota	Saint Louis	City of Duluth	46°50'31.61"N, 91°59'46.82"W	50	No Posting	0.4	2900			★	★		★★
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°43'57.20"N, 92°12'7.26"W	30	No Posting	2.4	1240		½	★		½	★★
Skyline Pkwy	Minnesota	Saint Louis	Midway Township	46°41'30.48"N, 92°15'40.08"W	30	No Posting	3.5	680			★		★	★★
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°41'27.34"N, 92°14'30.52"W	30	No Posting	3.5	680			★		★	★★
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°41'15.10"N, 92°14'19.14"W	30	No Posting	3.5	680			★		★	★★
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°41'16.48"N, 92°14'12.40"W	30	No Posting	3.5	680			★		★	★★
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°41'12.42"N, 92°14'7.36"W	30	No Posting	3.5	680			★		★	★★
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°41'2.00"N, 92°14'6.74"W	30	No Posting	3.5	680			★		★	★★
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°41'5.31"N, 92°13'56.91"W	30	No Posting	3.5	680			★		★	★★
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°41'4.98"N, 92°13'54.56"W	30	No Posting	3.5	680			★		★	★★
Skyline Pkwy	Wisconsin	Douglas	City of Duluth	46°41'7.81"N, 92°13'53.75"W	30	No Posting	3.5	680			★		★	★★
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°41'6.80"N, 92°14'1.09"W	30	No Posting	3.5	680			★		★	★★
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°41'9.88"N, 92°13'54.45"W	30	No Posting	3.5	680			★		★	★★
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°41'13.85"N, 92°13'52.33"W	30	No Posting	3.5	680			★		★	★★
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°41'23.86"N, 92°13'51.53"W	30	No Posting	3.5	680			★		★	★★
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°41'52.23"N, 92°13'49.58"W	30	No Posting	3.5	680			★		★	★★
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°42'7.28"N, 92°13'43.49"W	30	No Posting	3.5	680			★		★	★★

Safety Emphasis Area 1 (Curves)

Rural Two-Lane Undivided Roads

With AADT Less Than 5,000

(Roads on the Functional Classification System)

Road Name	State	County	Municipality	Lat/Long	Speed Limit (mph)	Curve Advisory Speed (mph)	Length (miles)	AADT	Occurance of KAB Crashes on Curve	Intersection Or Visual Trap	Curve Radii	Horizontal Curve Speed Differential	Shoulder/Surface Type	Total Stars
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°42'10.83"N, 92°13'22.03"W	30	No Posting	3.5	680			★		★	★★
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°42'13.59"N, 92°14'0.06"W	30	No Posting	3.5	680			★		★	★★
Minnesota Ave	Minnesota	Saint Louis	City of Duluth	46°43'46.35"N, 92° 3'0.70"W	30	No Posting	1.0	1850		½	★		½	★★
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'8.36"N, 92°10'28.15"W	30	No Posting	2.1	620	★		½			★ ½
Howard Gnesen Rd	Minnesota	Saint Louis	City of Duluth	46°49'41.87"N, 92° 6'22.84"W	30	No Posting	2.4	4250	½		½		½	★ ½
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'9.47"N, 92°11'12.63"W	30	No Posting	2.1	620	½		★			★ ½
McQuade Rd	Minnesota	Saint Louis	Lakewood Township	46°53'10.57"N, 91°55'14.48"W	30	No Posting	0.4	345			★		½	★ ½
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°41'36.74"N, 92°15'14.06"W	30	No Posting	3.5	680			½		★	★ ½
CTH W	Wisconsin	Douglas	Superior Township	46°33'35.00"N, 92°14'30.95"W	55	No Posting	3.7	270			½		★	★ ½
CTH W	Wisconsin	Douglas	Superior Township	46°32'50.16"N, 92°14'45.21"W	55	No Posting	3.7	270			½		★	★ ½
TH 210/Oldenberg Pkw	Minnesota	Saint Louis	City of Duluth	46°40'17.34"N, 92°16'59.43"W	40	No Posting	2.0	2000			★		½	★ ½
W Skyline	Minnesota	Saint Louis	Midway Township	46°41'30.87"N, 92°16'17.07"W	30	No Posting	0.5	680			★		½	★ ½
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	46°51'31.91"N, 92° 0'49.93"W	30	No Posting	1.4	348			★		½	★ ½
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	46°50'54.58"N, 92° 0'37.47"W	30	No Posting	1.4	348			★		½	★ ½
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	46°51'37.43"N, 92° 0'50.40"W	30	No Posting	1.4	348			★		½	★ ½
W Skyline Pkwy	Minnesota	Saint Louis	City of Proctor	46°43'23.51"N, 92°13'11.14"W	30	No Posting	1.8	680			★		½	★ ½
W Skyline Pkwy	Minnesota	Saint Louis	City of Proctor	46°43'22.99"N, 92°13'17.74"W	30	No Posting	1.8	680			★		½	★ ½
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	46°50'48.29"N, 92° 0'31.15"W	30	No Posting	1.4	348			★		½	★ ½
Swan Lake Rd	Minnesota	Saint Louis	City of Duluth	46°49'14.32"N, 92° 8'59.53"W	30	No Posting	1.2	3000		½	½		½	★ ½
W Skyline Pkwy	Minnesota	Saint Louis	City of Proctor	46°43'17.59"N, 92°13'10.82"W	30	No Posting	1.8	680			★		½	★ ½
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	46°51'37.71"N, 92° 0'53.23"W	30	No Posting	1.4	348			★		½	★ ½
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	46°51'38.94"N, 92° 0'53.12"W	30	No Posting	1.4	348			★		½	★ ½
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	46°50'39.74"N, 92° 0'36.34"W	30	No Posting	1.4	348			★		½	★ ½
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°42'57.02"N, 92°13'20.75"W	30	No Posting	1.8	680		½	½		½	★ ½
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	46°51'33.51"N, 92° 0'49.84"W	30	No Posting	1.4	348			★		½	★ ½
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	46°51'34.99"N, 92° 0'51.90"W	30	No Posting	1.4	348			★		½	★ ½
Ryan Rd	Minnesota	Saint Louis	Duluth Township	46°54'1.71"N, 91°53'51.94"W	30	No Posting	0.3	364			★		½	★ ½
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	46°51'2.51"N, 92° 0'43.88"W	30	No Posting	1.4	348			★		½	★ ½
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	46°51'28.76"N, 92° 0'46.21"W	30	No Posting	1.4	348			★		½	★ ½
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°48'30.26"N, 92° 5'37.26"W	30	No Posting	0.7	1450		½	½		½	★ ½
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	46°51'16.37"N, 92° 0'45.02"W	30	No Posting	1.4	348			★		½	★ ½
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	46°51'22.24"N, 92° 0'48.34"W	30	No Posting	1.4	348			★		½	★ ½
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°46'43.44"N, 92° 7'23.31"W	30	No Posting	1.7	1580		½	★			★ ½
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	46°50'55.05"N, 92° 0'41.71"W	30	No Posting	1.4	348			★		½	★ ½
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°48'20.68"N, 92° 5'50.85"W	30	No Posting	0.7	1450			★		½	★ ½
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°43'10.53"N, 92°13'11.58"W	30	No Posting	1.8	680			★		½	★ ½
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	46°50'44.50"N, 92° 0'37.97"W	30	No Posting	1.4	348			★		½	★ ½
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°42'21.20"N, 92°13'21.94"W	30	No Posting	1.8	680			★		½	★ ½
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°43'13.88"N, 92°13'6.31"W	30	No Posting	1.8	680			★		½	★ ½
Observation Rd	Minnesota	Saint Louis	City of Duluth	46°46'58.99"N, 92° 7'21.01"W	40	No Posting	1.1	1100			★		½	★ ½
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°42'1.05"N, 92°13'38.55"W	30	No Posting	3.5	680			½		★	★ ½

Safety Emphasis Area 1 (Curves)

Rural Two-Lane Undivided Roads

With AADT Less Than 5,000

(Roads on the Functional Classification System)

Road Name	State	County	Municipality	Lat/Long	Speed Limit (mph)	Curve Advisory Speed (mph)	Length (miles)	AADT	Occurance of KAB Crashes on Curve	Intersection Or Visual Trap	Curve Radii	Horizontal Curve Speed Differential	Shoulder/Surface Type	Total Stars
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°46'24.45"N, 92° 7'38.55"W	30	No Posting	1.7	1580		★	★			★ ★
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°42'12.21"N, 92°13'17.02"W	30	No Posting	1.8	680			★		★	★ ★
CTH E	Wisconsin	Douglas	Parkland Township	46°38'38.57"N, 91°59'46.42"W	45	40	1.1	1200		★		★	★	★ ★
Swan Lake Rd	Minnesota	Saint Louis	City of Duluth	46°48'14.84"N, 92° 8'11.60"W	30	No Posting	0.3	3000		★	★		★	★ ★
TH 39/E McCuen St	Minnesota	Saint Louis	City of Duluth	46°39'26.35"N, 92°13'0.23"W	35	30	0.6	2300			★	★	★	★ ★
CTH B	Wisconsin	Douglas	Superior Township	46°31'57.26"N, 92°12'11.99"W	45	35	5.8	530			★	★	★	★ ★
CTH B	Wisconsin	Douglas	Superior Township	46°32'11.19"N, 92° 7'49.45"W	45	35	5.8	530			★	★	★	★ ★
CTH B	Wisconsin	Douglas	Superior Township	46°32'8.73"N, 92° 7'44.30"W	45	35	5.8	530			★	★	★	★ ★
Helberg Dr	Minnesota	Saint Louis	City of Duluth	46°45'50.07"N, 92° 6'37.48"W	30	20	0.7	830			★	★		★ ★
WIS 35	Wisconsin	Douglas	Superior Township	46°31'57.27"N, 92° 7'21.87"W	55	35	4.3	4400			★	★		★ ★
TH 210/Oldenberg Pkw	Minnesota	Saint Louis	City of Duluth	46°40'18.63"N, 92°17'11.96"W	40	30	2.0	2000				★	★	★ ★
Lismore Rd	Minnesota	Saint Louis	Lakewood Township	46°55'51.74"N, 92° 0'20.61"W	50	40	2.0	1600		★		★		★ ★
CTH 61	Minnesota	Saint Louis	City of Duluth	46°50'35.13"N, 91°59'44.54"W	50	No Posting	0.4	2900			★	★		★ ★
Stebner Rd	Minnesota	Saint Louis	City of Duluth	46°49'57.31"N, 92°11'40.95"W	55	No Posting	0.5	2350			★	★		★ ★
CTH 61	Minnesota	Saint Louis	Lakewood Township	46°52'50.20"N, 91°55'20.60"W	50	No Posting	2.5	2900			★	★		★ ★
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°44'45.00"N, 92°11'27.45"W	30	No Posting	2.4	1240		★	★		★	★ ★
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°41'42.89"N, 92°15'26.11"W	30	No Posting	3.5	680			★		★	★ ★
Industrial Rd	Minnesota	Saint Louis	Grand Lake Township	46°53'40.33"N, 92°22'4.15"W	50	No Posting	3.0	1100		★	★		★	★ ★
Munger Shaw Rd	Minnesota	Saint Louis	Grand Lake Township	46°59'15.88"N, 92°19'46.91"W	55	No Posting	4.7	680		★	★		★	★ ★
Howard Gnesen Rd	Minnesota	Saint Louis	City of Duluth	46°50'26.50"N, 92° 6'23.05"W	30	No Posting	2.4	4250		★	★		★	★ ★
Howard Gnesen Rd	Minnesota	Saint Louis	City of Duluth	46°49'46.66"N, 92° 6'40.46"W	30	No Posting	2.4	4250		★	★		★	★ ★
Saginaw Rd	Minnesota	Saint Louis	Solway Township	46°51'4.46"N, 92°25'35.71"W	40	No Posting	0.4	225		★	★		★	★ ★
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°44'56.20"N, 92°11'9.49"W	30	No Posting	2.4	1240			★		★	★ ★
S Chicago Ave	Wisconsin	Douglas	Village of Oliver	46°38'45.85"N, 92°11'45.41"W	55	25	1.3	2300				★	★	★ ★
TH 210/Oldenberg Pkw	Minnesota	Saint Louis	City of Duluth	46°40'18.23"N, 92°17'25.92"W	40	No Posting	2.0	2000			★		★	★ ★
TH 210/Oldenberg Pkw	Minnesota	Saint Louis	City of Duluth	46°40'8.05"N, 92°16'59.29"W	40	No Posting	2.0	2000			★		★	★ ★
TH 210/Oldenberg Pkw	Minnesota	Saint Louis	City of Duluth	46°40'5.56"N, 92°16'55.72"W	40	No Posting	2.0	2000			★		★	★ ★
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°50'48.33"N, 92° 1'55.93"W	30	No Posting	1.9	348			★		★	★ ★
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°50'49.35"N, 92° 1'52.94"W	30	No Posting	1.9	348			★		★	★ ★
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°50'53.13"N, 92° 1'52.14"W	30	No Posting	1.9	348			★		★	★ ★
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°50'54.64"N, 92° 1'49.80"W	30	No Posting	1.9	348			★		★	★ ★
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°50'58.50"N, 92° 1'47.31"W	30	No Posting	1.9	348			★		★	★ ★
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°50'58.61"N, 92° 1'40.72"W	30	No Posting	1.9	348			★		★	★ ★
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°51'5.88"N, 92° 1'32.16"W	30	No Posting	1.9	348			★		★	★ ★
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°51'8.77"N, 92° 1'29.98"W	30	No Posting	1.9	348			★		★	★ ★
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°51'29.03"N, 92° 1'2.71"W	30	No Posting	1.9	348			★		★	★ ★
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°51'32.29"N, 92° 1'3.17"W	30	No Posting	1.9	348			★		★	★ ★
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°51'36.42"N, 92° 0'58.02"W	30	No Posting	1.9	348			★		★	★ ★
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°51'40.21"N, 92° 0'59.25"W	30	No Posting	1.9	348			★		★	★ ★
McQuade Rd	Minnesota	Saint Louis	Lakewood Township	46°53'18.54"N, 91°55'14.80"W	30	No Posting	0.2	345			★		★	★ ★

Safety Emphasis Area 1 (Curves)

Rural Two-Lane Undivided Roads

With AADT Less Than 5,000

(Roads on the Functional Classification System)

Road Name	State	County	Municipality	Lat/Long	Speed Limit (mph)	Curve Advisory Speed (mph)	Length (miles)	AADT	Occurance of KAB Crashes on Curve	Intersection Or Visual Trap	Curve Radii	Horizontal Curve Speed Differential	Shoulder/Surface Type	Total Stars
McQuade Rd	Minnesota	Saint Louis	Lakewood Township	46°52'55.59"N, 91°55'14.39"W	30	No Posting	0.4	345			★		⚑	★ ⚑
Helberg Dr	Minnesota	Saint Louis	City of Duluth	92° 6'33.22"W, 92° 6'26.05"W	30	No Posting	0.7	830		⚑	★			★ ⚑
E 3rd St	Wisconsin	Douglas	City of Superior	46°40'39.14"N, 92° 0'38.61"W	35	No Posting	0.4	2000			★		⚑	★ ⚑
E 3rd St	Wisconsin	Douglas	City of Superior	46°40'12.54"N, 92° 0'10.67"W	35	No Posting	0.3	2000			★		⚑	★ ⚑
Marina Dr	Wisconsin	Douglas	City of Superior	46°43'8.86"N, 92° 3'45.92"W	25	No Posting	0.1	510			★		⚑	★ ⚑
N 12th St	Wisconsin	Douglas	City of Superior	46°43'27.00"N, 92° 4'38.78"W	25	No Posting	0.1	1100			★		⚑	★ ⚑
Marina Dr	Wisconsin	Douglas	City of Superior	46°43'22.20"N, 92° 4'2.82"W	25	No Posting	0.3	560			★		⚑	★ ⚑
Garfield Ave	Wisconsin	Douglas	City of Superior	46°43'20.90"N, 92° 7'2.07"W	25	No Posting	0.5	2100		⚑	★			★ ⚑
Marina Dr	Wisconsin	Douglas	City of Superior	46°43'19.33"N, 92° 3'41.90"W	25	No Posting	0.6	510			★		⚑	★ ⚑
Marina Dr	Wisconsin	Douglas	City of Superior	46°43'10.93"N, 92° 3'31.32"W	25	No Posting	0.6	510			★		⚑	★ ⚑
Marina Dr	Wisconsin	Douglas	City of Superior	46°43'10.32"N, 92° 3'23.85"W	25	No Posting	0.6	510			★		⚑	★ ⚑
WIS 35	Wisconsin	Douglas	Superior Township	46°32'5.89"N, 92° 7'19.04"W	55	No Posting	4.3	4400	⚑	⚑				★
MN 23	Minnesota	Saint Louis	City of Duluth	46°39'35.30"N, 92°16'13.98"W	30	No Posting	0.1	2000	⚑		⚑			★
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'38.65"N, 92° 9'46.48"W	30	No Posting	1.2	1975			★			★
Swan Lake Rd	Minnesota	Saint Louis	City of Duluth	46°48'49.96"N, 92° 8'39.11"W	30	No Posting	1.2	3000			⚑		⚑	★
MN 23	Minnesota	Saint Louis	City of Duluth	46°39'39.24"N, 92°16'50.42"W	30	No Posting	0.1	1650		⚑	⚑			★
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'47.15"N, 92° 9'36.87"W	30	No Posting	1.2	1975			★			★
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'46.07"N, 92° 9'20.48"W	30	No Posting	1.2	1975			★			★
CTH 73	Minnesota	Saint Louis	Midway Township	46°42'17.77"N, 92°17'31.48"W	30	No Posting	1.2	510			★			★
Hermantown Rd	Minnesota	Saint Louis	City of Hermantown	46°47'22.55"N, 92°10'44.21"W	40	No Posting	1.0	2800			⚑		⚑	★
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°46'27.20"N, 92° 7'25.88"W	30	No Posting	1.7	1580			★			★
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°43'5.93"N, 92°13'12.19"W	30	No Posting	1.8	680			⚑		⚑	★
Lester River Rd	Minnesota	Saint Louis	Lakewood Township	46°52'26.14"N, 91°59'19.72"W	45	No Posting	3.6	2000			⚑		⚑	★
CTH U	Wisconsin	Douglas	Lakeside Township	46°37'41.57"N, 91°54'24.91"W	55	No Posting	0.9	90			⚑		⚑	★
Observation Rd	Minnesota	Saint Louis	City of Duluth	46°47'9.32"N, 92° 8'2.30"W	40	No Posting	1.1	1100			⚑		⚑	★
Saginaw Rd	Minnesota	Saint Louis	Solway Township	46°50'55.58"N, 92°25'26.71"W	40	No Posting	0.4	225			⚑		⚑	★
Lester River Rd	Minnesota	Saint Louis	City of Duluth	46°50'48.98"N, 92° 0'9.51"W	45	No Posting	3.6	2000			⚑		⚑	★
Lester River Rd	Minnesota	Saint Louis	City of Duluth	46°51'23.60"N, 91°59'57.11"W	45	No Posting	3.6	2000			⚑		⚑	★
Swan Lake Rd	Minnesota	Saint Louis	City of Duluth	46°48'24.11"N, 92° 8'10.86"W	30	No Posting	0.3	3000			⚑		⚑	★
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°44'27.71"N, 92°11'41.00"W	30	No Posting	2.4	1240			⚑		⚑	★
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°44'30.28"N, 92°11'34.91"W	30	No Posting	2.4	1240			⚑		⚑	★
TH 39/E McCuen St	Minnesota	Saint Louis	City of Duluth	46°39'28.35"N, 92°12'51.73"W	35	No Posting	0.6	2300			⚑		⚑	★
MN 23	Minnesota	Saint Louis	City of Duluth	46°39'10.70"N, 92°13'35.26"W	50	No Posting	2.2	2000		⚑	⚑			★
H 210/Oldenberg Pkw	Minnesota	Saint Louis	City of Duluth	46°40'21.86"N, 92°17'53.56"W	40	No Posting	2.0	2000			⚑		⚑	★
H 210/Oldenberg Pkw	Minnesota	Saint Louis	City of Duluth	46°40'27.79"N, 92°17'39.10"W	40	No Posting	2.0	2000			⚑		⚑	★
N Cloquet Rd	Minnesota	Saint Louis	Midway Township	46°43'32.24"N, 92°14'58.75"W	35	No Posting	1.9	680			⚑		⚑	★
Bergstrom Rd	Minnesota	Saint Louis	Grand Lake Township	46°55'23.69"N, 92°23'10.28"W	55	No Posting	2.9	215		⚑	⚑			★
Hermantown Rd	Minnesota	Saint Louis	City of Hermantown	46°47'19.17"N, 92°13'11.89"W	40	No Posting	1.2	750			⚑		⚑	★
Hermantown Rd	Minnesota	Saint Louis	City of Hermantown	46°47'6.54"N, 92°12'47.89"W	40	No Posting	1.1	1300			⚑		⚑	★
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°50'13.98"N, 92° 2'43.46"W	30	No Posting	0.4	348			⚑		⚑	★

Safety Emphasis Area 1 (Curves)

Rural Two-Lane Undivided Roads

With AADT Less Than 5,000

(Roads on the Functional Classification System)

Road Name	State	County	Municipality	Lat/Long	Speed Limit (mph)	Curve Advisory Speed (mph)	Length (miles)	AADT	Occurance of KAB Crashes on Curve	Intersection Or Visual Trap	Curve Radii	Horizontal Curve Speed Differential	Shoulder/Surface Type	Total Stars
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°50'19.23"N, 92° 2'39.88"W	30	No Posting	0.4	348			★		★	★
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°50'38.92"N, 92° 2'20.46"W	30	No Posting	1.9	348			★		★	★
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°51'4.14"N, 92° 1'35.43"W	30	No Posting	1.9	348			★		★	★
Old North Shore Rd	Minnesota	Saint Louis	Duluth Township	46°54'15.67"N, 91°53'59.03"W	35	35	0.3	364			★		★	★
Howard Gnesen Rd	Minnesota	Saint Louis	City of Duluth	46°50'30.43"N, 92° 6'39.99"W	30	No Posting	2.4	4250			★		★	★
Lester River Rd	Minnesota	Saint Louis	Lakewood Township	46°52'50.82"N, 91°59'3.15"W	45	No Posting	3.6	2000			★		★	★
Port Terminal Dr	Minnesota	Saint Louis	City of Duluth	46°45'8.15"N, 92° 6'10.74"W	30	No Posting	0.6	1900		★	★			★
Minnesota Ave	Minnesota	Saint Louis	City of Duluth	46°43'57.04"N, 92° 3'11.79"W	30	No Posting	1.0	1850			★		★	★
Minnesota Ave	Minnesota	Saint Louis	City of Duluth	46°43'41.76"N, 92° 2'52.54"W	30	No Posting	1.0	1850			★		★	★
42nd Ave	Wisconsin	Douglas	City of Superior	46°40'14.75"N, 92° 2'46.64"W	35	No Posting	1.3	800			★		★	★
E 3rd St	Wisconsin	Douglas	City of Superior	46°40'33.47"N, 92° 0'36.35"W	35	No Posting	0.4	2000			★		★	★
Munger Shaw Rd	Minnesota	Saint Louis	Grand Lake Township	46°52'40.76"N, 92°20'36.96"W	45	No Posting	3.4	1050			★		★	★
Munger Shaw Rd	Minnesota	Saint Louis	Grand Lake Township	46°54'40.85"N, 92°20'18.83"W	45	No Posting	3.4	1050			★		★	★
CTH 61	Minnesota	Saint Louis	City of Duluth	46°52'50.16"N, 91°55'29.81"W	50	No Posting	2.5	2900		★	★			★
Lismore Rd	Minnesota	Saint Louis	Lakewood Township	46°56'17.25"N, 92° 0'20.12"W	55	No Posting	2.0	1250		★	★			★
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'2.16"N, 92°11'5.74"W	30	No Posting	2.1	620			★			★
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'9.64"N, 92°11'16.63"W	30	No Posting	2.1	620			★			★
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'12.57"N, 92°11'15.58"W	30	No Posting	2.1	620			★			★
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'8.34"N, 92°11'9.07"W	30	No Posting	2.1	620			★			★
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'6.42"N, 92°11'7.01"W	30	No Posting	2.1	620			★			★
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'35.05"N, 92° 9'48.23"W	30	No Posting	1.2	1975			★			★
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'37.37"N, 92° 9'40.14"W	30	No Posting	1.2	1975			★			★
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'41.12"N, 92° 9'33.96"W	30	No Posting	1.2	1975			★			★
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'44.59"N, 92° 9'27.63"W	30	No Posting	1.2	1975			★			★
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'44.49"N, 92° 9'23.06"W	30	No Posting	1.2	1975			★			★
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'56.52"N, 92° 9'2.67"W	30	No Posting	1.2	1975			★			★
W Skyline Pkwy	Minnesota	Saint Louis	City of Proctor	46°43'33.38"N, 92°13'16.73"W	30	No Posting	0.2	4150			★			★
Woodland Ave	Minnesota	Saint Louis	City of Duluth	46°51'44.29"N, 92° 4'26.58"W	30	No Posting	0.5	1724			★			★
Helberg Dr	Minnesota	Saint Louis	City of Duluth	46°45'25.17"N, 92° 6'10.34"W	30	No Posting	0.7	830			★			★
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°47'18.34"N, 92° 6'36.95"W	30	No Posting	0.2	1580		★			★	★
Woodland Ave	Minnesota	Saint Louis	City of Duluth	46°51'41.05"N, 92° 4'34.83"W	30	No Posting	0.5	1724			★			★
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°46'27.18"N, 92° 7'29.74"W	30	No Posting	1.7	1580			★			★
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'13.59"N, 92°10'21.96"W	30	No Posting	2.1	620			★			★
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'15.77"N, 92°10'16.33"W	30	No Posting	2.1	620			★			★
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'23.44"N, 92° 9'52.73"W	30	No Posting	2.1	620			★			★
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°46'7.78"N, 92° 8'57.49"W	30	No Posting	1.2	1975			★			★
CTH 73	Minnesota	Saint Louis	Midway Township	46°42'26.55"N, 92°17'29.94"W	30	No Posting	1.2	510			★			★
Bergstrom Rd	Minnesota	Saint Louis	Grand Lake Township	46°54'38.83"N, 92°23'10.86"W	55	No Posting	2.9	215			★			★
CTH 61	Minnesota	Saint Louis	Lakewood Township	46°52'25.97"N, 91°56'9.29"W	50	No Posting	2.5	2900			★			★
WIS 35	Wisconsin	Douglas	Superior Township	46°32'10.77"N, 92° 7'12.85"W	55	No Posting	4.3	4400			★			★

Safety Emphasis Area 1 (Curves)

Rural Two-Lane Undivided Roads

With AADT Less Than 5,000

(Roads on the Functional Classification System)

Road Name	State	County	Municipality	Lat/Long	Speed Limit (mph)	Curve Advisory Speed (mph)	Length (miles)	AADT		Occurance of KAB Crashes on Curve	Intersection Or Visual Trap	Curve Radii	Horizontal Curve Speed Differential	Shoulder/Surface Type	Total Stars
MN 23	Minnesota	Saint Louis	City of Duluth	46°39'39.23"N, 92°15'59.22"W	50	No Posting	2.2	2000			★				★
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°50'45.49"N, 92° 1'59.97"W	30	No Posting	1.9	348						★	★
Helberg Dr	Minnesota	Saint Louis	City of Duluth	46°45'44.67"N, 92° 6'33.22"W	30	No Posting	0.7	830			★				★
42nd Ave	Wisconsin	Douglas	City of Superior	46°40'9.89"N, 92° 2'51.26"W	35	No Posting	1.3	800						★	★
Woodlawn Rd	Wisconsin	Douglas	City of Superior	46°40'3.31"N, 92° 3'59.08"W	30	No Posting	0.6	1400						★	★
CTH C/W	Wisconsin	Douglas	Superior Township	46°34'35.39"N, 92°17'12.63"W	55	No Posting	3.4	230						★	★
Mountain Dr	Minnesota	Saint Louis	City of Proctor	46°43'29.71"N, 92°13'30.16"W	40	No Posting	0.8	680							
CTH 73	Minnesota	Saint Louis	Midway Township	46°42'14.75"N, 92°17'55.17"W	30	No Posting	1.2	510							
CTH 73	Minnesota	Saint Louis	Midway Township	46°42'33.75"N, 92°17'14.53"W	30	No Posting	1.2	510							
CTH 61	Minnesota	Saint Louis	Duluth Township	46°54'38.35"N, 91°51'42.52"W	50	No Posting	4.8	1350							

Safety Emphasis Area 2

Urban Intersections - Side Road Stop Control
Angle Crashes

Road Name	Lat/Long	Municipality	Traffic Control	Number of Angle Crashes	Posted Speed Limit of Major Roadway	Mainline Cross Section	Intersection Skew (degrees)	Number of Entering Legs to Intersection	Pedestrian Generator within 200' of the intersection	Mainline AADT	Total Stars
E 2nd St - Hwy 53/2, E 2nd St - Hwy 53/2, E 3rd St	46.67769,-92.01047	City of Superior	2-Way Stop	★	½	★		★	★	★	★★★★★½
Midway Rd, Old Miller Trunk Hwy	46.853476,-92.280423	Canosia Township	2-Way Stop	★	★		★	★	★		★★★★★
E 2nd St - Hwy 53/2, 31st Ave E, E 2nd St - Hwy 53/2	46.697325,-92.035494	City of Superior	2-Way Stop	★	½	½		★	★	★	★★★★★
Railroad St, Railroad St, Harbor Dr	46.783758,-92.098405	City of Duluth	2-Way Stop		½	½	★	★	★	½	★★★★½
Rice Lake Rd, Rice Lake Rd, E Skyline Pkwy	46.796809,-92.107038	City of Duluth	1-Way Stop		★	½	★		★	★	★★★★½
TH23/Grand Ave, S 63rd Ave W	46.733143,-92.177404	City of Duluth	2-Way Stop		½	★	★	★		★	★★★★½
Highway 53, E St	46.725675,-92.073523	City of Superior	2-Way Stop		★	½		★	★	★	★★★★½
E 2nd St - Hwy 53/2, E 2nd St - Hwy 53/2, 23rd Ave E	46.705584,-92.046012	City of Superior	2-Way Stop		½	½		★	★	★	★★★★
Hammond Ave, Broadway St, Hammond Ave	46.726591,-92.097838	City of Superior	2-Way Stop	★	½			★	★	½	★★★★
Tower Ave, Tower Ave, N 34th St, N 34th St	46.698911,-92.104079	City of Superior	2-Way Stop		½	½		★	★	★	★★★★
E 2nd St - Hwy 53/2, Marina Dr, E 2nd St - Hwy 53/2	46.718679,-92.063054	City of Superior	2-Way Stop		½	½		★	★	★	★★★★
Tower Ave, Tower Ave, N 16th St	46.719309,-92.103964	City of Superior	2-Way Stop		½	½		★	★	★	★★★★
Belknap St, E 5th St, E 5th St, Belknap St	46.72148,-92.073535	City of Superior	2-Way Stop		½	½	½	★	★	½	★★★★
Tower Ave, N 40th St	46.6917,-92.104146	City of Superior	2-Way Stop		½	½		★	★	★	★★★★
Skyline Pkwy, TH 194/Mesaba Ave, E 9th St, Mesaba Ave	46.793681,-92.10707	City of Duluth	2-Way Stop		½	½	★	★		★	★★★★
4th St, TH 194/Mesaba Ave	46.785267,-92.10836	City of Duluth	2-Way Stop		½	½	★	★		★	★★★★
E Superior St, N 14th Ave E, S 14th Ave E, E Superior St	46.800315,-92.08077	City of Duluth	2-Way Stop	★	½			★	★	½	★★★★
E Superior St, 47th Ave E, 47th Ave E	46.82925,-92.029228	City of Duluth	2-Way Stop		½		★	★	★	½	★★★★
W Michigan St, W Superior St, W Michigan St	46.773974,-92.113991	City of Duluth	1-Way Stop		½	★	½		★	½	★★★½
Woodland Ave, W Redwing St	46.850022,-92.081848	City of Duluth	2-Way Stop		½		½	★	★	½	★★★½
Highway 53, Catlin Ave	46.733377,-92.087412	City of Superior	1-Way Stop		★	½	★			★	★★★½
Tower Ave, N 58th St, Tower Ave	46.669482,-92.104311	City of Superior	2-Way Stop		½			★	★	★	★★★½
Woodland Ave, Woodland Ave	46.810829,-92.078289	City of Duluth	2-Way Stop		½		★	★		★	★★★½
Highway 53, Grand Ave, Grand Ave	46.733759,-92.093319	City of Superior	2-Way Stop		★	½		★		★	★★★½
N 6th Ave E, E 7th St	46.797353,-92.098371	City of Duluth	2-Way Stop		½	★		★		★	★★★½
Tower Ave, N 56th St, Tower Ave	46.672224,-92.104293	City of Superior	2-Way Stop		½			★	★	★	★★★½
N 12th St, N 12th St, Tower Ave, Tower Ave	46.724274,-92.103911	City of Superior	2-Way Stop	★				★	★	½	★★★½
N 21st Ave E, E 1st St	46.807646,-92.073203	City of Duluth	2-Way Stop	★	½			★		★	★★★½
Highland Ave, Vinland St, W SKyline Pkwy, Getchell Rd	46.750383,-92.187843	City of Duluth	2-Way Stop	★	★			★		½	★★★½
Crosley Ave, 47th Ave E	46.841267,-92.029455	City of Duluth	2-Way Stop	★	½		★	★			★★★½
Tower Ave, Henry Cohen Dr	46.684543,-92.104201	City of Superior	2-Way Stop		½	½	½	★		★	★★★½
N 59th Ave W, N 59th Ave W, Cody St, Cody St	46.741309,-92.171944	City of Duluth	2-Way Stop	★	½	½	½	★			★★★½
TH 23/Commonwealth Ave, TH 39/E McCuen St.	46.657238,-92.226382	City of Duluth	2-Way Stop		½			★	★	½	★★★
Haines Rd, W SKyline Pkwy, Haines Rd	46.758685,-92.163991	City of Duluth	1-Way Stop		½	★	★			½	★★★
London Rd, S 14th Ave E, London Rd	46.799193,-92.079391	City of Duluth	2-Way Stop		½			★	★	½	★★★
E Skyline Pkwy, E Skyline Pkwy, E 13th St	46.801564,-92.104711	City of Duluth	1-Way Stop		½		★	★		½	★★★
E 4th St, N 12th Ave E	46.801087,-92.087656	City of Duluth	2-Way Stop		½			★	★	½	★★★
Highway 2, Highway 2, N 2nd Ave	46.741341,-92.222349	City of Proctor	2-Way Stop		½		★	★		½	★★★
W 4th St, N 3rd Ave W	46.786766,-92.10627	City of Duluth	2-Way Stop		½			★	★	½	★★★
Hammond Ave, N 5th St, Hammond Ave, N 5th St	46.732539,-92.097857	City of Superior	1-Way Stop		½	½			★	★	★★★
E 4th St, N 4th Ave E	46.793465,-92.097548	City of Duluth	2-Way Stop		½			★	★	½	★★★
Highway 53, N 5th St	46.73254,-92.085315	City of Superior	1-Way Stop		★	½	½			★	★★★
Glenwood St, Glenwood St, N 43rd Ave E	46.840383,-92.037093	City of Duluth	2-Way Stop		½			★	★	½	★★★
N 24th Ave W, S 24th Ave W, W Superior St, W Superior St	46.764095,-92.128014	City of Duluth	2-Way Stop		½			★	★	½	★★★
E 9th St, 11th Ave E	46.803465,-92.094328	City of Duluth	2-Way Stop	★	½			★		½	★★★
Rice Lake Rd, Rice Lake Rd, E 13th St	46.799962,-92.107071	City of Duluth	1-Way Stop	★	★					★	★★★

Safety Emphasis Area 2

Urban Intersections - Side Road Stop Control
Angle Crashes

Road Name	Lat/Long	Municipality	Traffic Control	Number of Angle Crashes	Posted Speed Limit of Major Roadway	Mainline Cross Section	Intersection Skew (degrees)	Number of Entering Legs to Intersection	Pedestrian Generator within 200' of the intersection	Mainline AADT	Total Stars
N 3rd St, N 3rd St	46.735177,-92.099363	City of Superior	2-Way Stop		½	½		★	★		★★★
E 2nd St, N 14th Ave E	46.801641,-92.08296	City of Duluth	2-Way Stop	★	½				★	½	★★★
N 1st St E, E 4th St, N 1st Ave E	46.790576,-92.10133	City of Duluth	2-Way Stop	★	½			★		½	★★★
Broadway St, Broadway St, Ogden Ave, Ogden Ave	46.726606,-92.102351	City of Superior	2-Way Stop	★				★	★		★★★
Broadway St, Broadway St, Tower Ave, Tower Ave	46.726615,-92.103889	City of Superior	2-Way Stop					★	★	½	★★½
Banks Ave, N 28th St, N 28th St	46.706216,-92.105571	City of Superior	2-Way Stop					★	★	½	★★½
E 1st St, N 19th Ave E	46.805754,-92.075682	City of Duluth	2-Way Stop		½			★	★		★★½
N 1st Ave E, E 1st St, E 1st St	46.788585,-92.098036	City of Duluth	2-Way Stop		½			★	★		★★½
N 59th Ave W, N 59th Ave W, W Eighth St	46.744014,-92.171927	City of Duluth	2-Way Stop		½		★	★			★★½
London Rd, 45th Ave E	46.82422,-92.032798	City of Duluth	1-Way Stop		½		★			★	★★½
N 13th St, N 13th St, Tower Ave, Tower Ave	46.723112,-92.103924	City of Superior	2-Way Stop					★	★	½	★★½
Woodland Ave, Woodland Ave, Anoka St	46.84388,-92.083375	City of Duluth	2-Way Stop		½		½	★		½	★★½
N 19st Ave W, W 1st St	46.76956,-92.122861	City of Duluth	2-Way Stop		½			★	★		★★½
E Superior St, N 19th Ave E	46.805058,-92.07458	City of Duluth	2-Way Stop		½			★	★		★★½
E 1st St, N 4th Ave E	46.791476,-92.094326	City of Duluth	2-Way Stop		½			★	★		★★½
24th Ave E, E 5th St, E 5th St	46.702711,-92.047734	City of Superior	2-Way Stop		½			★	★		★★½
23rd Ave E, E 5th St	46.703738,-92.049035	City of Superior	2-Way Stop		½			★	★		★★½
Martin Rd, Woodland Ave	46.865482,-92.077029	City of Duluth	2-Way Stop		★		½	★			★★½
W SKyline Pkwy, N 24th Ave W	46.773455,-92.142903	City of Duluth	2-Way Stop		½		★	★			★★½
E Calvary Rd, Arnold Rd, Calvary Rd	46.854539,-92.090157	City of Duluth	2-Way Stop		½		★	★			★★½
N Hawthorne Rd, Vermillion Rd	46.819914,-92.068833	City of Duluth	2-Way Stop		½		★	★			★★½
N 24th Ave W, N 24th Ave W, W 1st St, W 1st St	46.764774,-92.129108	City of Duluth	2-Way Stop	★	½			★			★★½
Belknap St, Wyoming Ave	46.720719,-92.12442	City of Superior	1-Way Stop			★			★	½	★★½
60th Ave E, London Rd	46.836542,-92.008037	City of Duluth	1-Way Stop		½		★			★	★★½
Arrowhead Rd, Arrowhead Rd, Swan Lake Rd	46.822025,-92.149924	City of Duluth	1-Way Stop		★	½				★	★★½
London Rd, N 43rd Ave E	46.822379,-92.03671	City of Duluth	1-Way Stop	★	½					★	★★½
Mountain Shadow Dr, Mall Dr	46.805877,-92.165195	City of Duluth	1-Way Stop		½	★			★		★★½
S 5th Ave W, S 5th Ave W, Harbor Dr	46.780278,-92.100843	City of Duluth	1-Way Stop		½	★			★		★★½
Martin Rd, Jean Duluth Rd, Jean Duluth Rd	46.861737,-92.047945	City of Duluth	1-Way Stop	★	★					½	★★½
E 4th St, N 3rd Ave E, E 4th St	46.792491,-92.098828	City of Duluth	2-Way Stop		½			★		½	★★
E Superior St, N 43rd Ave E, N 43rd Ave E	46.82629,-92.036653	City of Duluth	2-Way Stop		½			★		½	★★
Anderson Rd, Anderson Rd, Chambersburg Ave	46.793171,-92.158623	City of Duluth	2-Way Stop		½			★		½	★★
Winter St, Winter St, Ogden Ave	46.727896,-92.102343	City of Superior	2-Way Stop					★	★		★★
Highland Ave, Highland Ave, N 59th Ave W	46.748367,-92.171957	City of Duluth	2-Way Stop		½			★		½	★★
Piedmont Ave, Morris Thomas Rd	46.778747,-92.153965	City of Duluth	2-Way Stop		½			★		½	★★
Glenwood St, 47th Ave E, 47th Ave E	46.840387,-92.029286	City of Duluth	2-Way Stop		½			★		½	★★
W Redwing St, MaXwell Ave	46.849954,-92.095393	City of Duluth	2-Way Stop		½			★		½	★★
E Superior St, E Superior St, S 26th Ave E	46.811732,-92.065909	City of Duluth	2-Way Stop		½			★		½	★★
E Superior St, S 36th Ave E, N 36th Ave E, E Superior St	46.821286,-92.052868	City of Duluth	2-Way Stop		½			★		½	★★
E 7th St, N Lake Ave, E 7th St	46.79164,-92.105799	City of Duluth	2-Way Stop		½			★		½	★★
Banks Ave, N 14th St, Banks Ave	46.721954,-92.105461	City of Superior	2-Way Stop					★	★		★★
N 12th St, N 12th St, Ogden Ave, Ogden Ave	46.724269,-92.102369	City of Superior	2-Way Stop					★	★		★★
N 13th St, Banks Ave, Banks Ave	46.723113,-92.105454	City of Superior	2-Way Stop					★	★		★★
N 13th St, Ogden Ave, Ogden Ave	46.723106,-92.102378	City of Superior	2-Way Stop					★	★		★★
Broadway St, Banks Ave	46.726615,-92.105425	City of Superior	2-Way Stop					★	★		★★
N 16th St, Ogden Ave, Ogden Ave	46.71931,-92.102397	City of Superior	2-Way Stop					★	★		★★

Safety Emphasis Area 2

Urban Intersections - Side Road Stop Control
Angle Crashes

Road Name	Lat/Long	Municipality	Traffic Control	Number of Angle Crashes	Posted Speed Limit of Major Roadway	Mainline Cross Section	Intersection Skew (degrees)	Number of Entering Legs to Intersection	Pedestrian Generator within 200' of the intersection	Mainline AADT	Total Stars
N 16th St, Banks Ave	46.719298,-92.105459	City of Superior	2-Way Stop					★	★		★★
60th Ave E, Glenwood St	46.840383,-92.010504	City of Duluth	2-Way Stop		↳		↳	★			★★
Midway Rd, Helm Rd, Midway Rd	46.872755,-92.280443	Canosia Township	2-Way Stop		★			★			★★
E 3rd St, N 14th Ave E	46.802304,-92.084029	City of Duluth	2-Way Stop		↳				★	↳	★★
E 2nd St, N 4th Ave E, E 2nd St	46.792123,-92.095348	City of Duluth	2-Way Stop		↳				★	↳	★★
E Superior St, N 4th Ave E	46.790771,-92.093213	City of Duluth	1-Way Stop		↳				★	↳	★★
N 21st St, E 5th St, E 5th St	46.713365,-92.061309	City of Superior	1-Way Stop		↳				★	↳	★★
Ogden Ave, Ogden Ave, N 21st St	46.713407,-92.102445	City of Superior	1-Way Stop		↳				★	↳	★★
Rice Lake Rd, Pecan Ave	46.805201,-92.112551	City of Duluth	1-Way Stop		★		↳			↳	★★
E 3rd St, N 2nd Ave E	46.790871,-92.098933	City of Duluth	2-Way Stop	★	↳					↳	★★
Woodland Ave, W College St	46.814879,-92.07827	City of Duluth	1-Way Stop		↳	↳				★	★★
Tower Ave, N 45th St	46.685588,-92.104197	City of Superior	1-Way Stop		↳	↳				★	★★
London Rd, S 36th Ave E, London Rd	46.818586,-92.048526	City of Duluth	1-Way Stop		★					★	★★
W 3rd St, N 2nd Ave W, W 3rd St	46.787078,-92.103882	City of Duluth	2-Way Stop	★	↳					↳	★★
Maple Grove Rd, Joshua Ave, Maple Grove Rd	46.807606,-92.15321	City of Duluth	2-Way Stop		↳			★			★↳
W Kent Rd, N 19th Ave E, N 19th Ave E	46.812863,-92.087213	City of Duluth	2-Way Stop		↳			★			★↳
N 4th Ave W, W 4th St, N 4th Ave W	46.78581,-92.10751	City of Duluth	2-Way Stop		↳			★			★↳
N 21st St, N 21st St, Wyoming Ave, Wyoming Ave	46.7135,-92.12445	City of Superior	2-Way Stop					★		↳	★↳
N 5th St, Tower Ave	46.732549,-92.103835	City of Superior	2-Way Stop					★		↳	★↳
W Eighth St, W Eighth St, N 46th Ave W	46.749381,-92.164445	City of Duluth	2-Way Stop		↳			★			★↳
W Skyline Pkwy, N 27th Ave W	46.770619,-92.147025	City of Duluth	2-Way Stop		↳			★			★↳
Boundary Ave, Boundary Ave, 2nd St	46.743942,-92.217122	City of Duluth	2-Way Stop		↳			★			★↳
2nd St, 5th St	46.743892,-92.228173	City of Proctor	2-Way Stop		↳			★			★↳
N 10th Ave W, 4th St	46.780113,-92.115073	City of Duluth	2-Way Stop		↳			★			★↳
E 4th St, 34th Ave E	46.822017,-92.059719	City of Duluth	2-Way Stop		↳			★			★↳
Tower Ave, N 14th St, Tower Ave	46.721963,-92.103936	City of Superior	1-Way Stop						★	↳	★↳
N 3rd St, N 3rd St, Tower Ave	46.735002,-92.103369	City of Superior	1-Way Stop						★	↳	★↳
N 11th St, Tower Ave, Tower Ave	46.725427,-92.103906	City of Superior	1-Way Stop						★	↳	★↳
Highway 2, 5th St	46.746895,-92.225959	City of Proctor	1-Way Stop		↳		↳			↳	★↳
London Rd, S 12th Ave E, London Rd	46.797725,-92.082174	City of Duluth	1-Way Stop		↳		↳			↳	★↳
Grand Ave, Grand Ave, Becks Rd	46.676557,-92.226504	City of Duluth	1-Way Stop		★					↳	★↳
London Rd, 47th Ave E	46.826823,-92.029168	City of Duluth	1-Way Stop		↳					★	★↳
N 21st Ave E, E 3rd St	46.80895,-92.075328	City of Duluth	1-Way Stop		↳					★	★↳
N 3rd St, Tower Ave	46.735183,-92.103796	City of Superior	1-Way Stop				↳		★		★↳
W 3rd St, N 1st Ave W	46.788012,-92.102688	City of Duluth	2-Way Stop		↳				★		★↳
S 4th Ave W, W Michigan St	46.782743,-92.102601	City of Duluth	2-Way Stop		↳				★		★↳
S 21st Ave W, W Michigan St, Lower Michigan St	46.766155,-92.12337	City of Duluth	1-Way Stop		↳				★		★↳
E 3rd St, N 19th Ave E, E 3rd St	46.807056,-92.077812	City of Duluth	2-Way Stop		↳				★		★↳
E 3rd St, N 4th Ave E	46.792813,-92.096418	City of Duluth	2-Way Stop		↳				★		★↳
E Superior St, N 52nd Ave E	46.834349,-92.019842	City of Duluth	1-Way Stop		↳		★				★↳
E Michigan St, S 2nd Ave E, E Michigan St	46.788566,-92.095023	City of Duluth	1-Way Stop		↳				★		★↳
E Michigan St, S 1st Ave E, E Michigan St	46.787572,-92.096417	City of Duluth	1-Way Stop		↳				★		★↳
S 3rd Ave E, E Michigan St	46.789507,-92.093859	City of Duluth	1-Way Stop		↳				★		★↳
Belknap St, Susquehanna Ave	46.72072,-92.125787	City of Superior	2-Way Stop					★			★
N 21st St, Weeks Ave, N 21st St	46.713378,-92.091999	City of Superior	2-Way Stop					★			★
N 12th St, Banks Ave, Banks Ave	46.724275,-92.105443	City of Superior	2-Way Stop					★			★

Safety Emphasis Area 2

Urban Intersections - Side Road Stop Control
Angle Crashes

Road Name	Lat/Long	Municipality	Traffic Control	Number of Angle Crashes	Posted Speed Limit of Major Roadway	Mainline Cross Section	Intersection Skew (degrees)	Number of Entering Legs to Intersection	Pedestrian Generator within 200' of the intersection	Mainline AADT	Total Stars
N 11th St, Banks Ave, Banks Ave	46.725426,-92.105435	City of Superior	2-Way Stop					★			★
N 5th St, Catlin Ave, Catlin Ave	46.7325,-92.087422	City of Superior	2-Way Stop					★			★
S 37 1/2 Ave W, W Michigan St, W Michigan St	46.751256,-92.143861	City of Duluth	1-Way Stop		★					★	★
W Michigan St, W Michigan St, W Superior St	46.75082,-92.144494	City of Duluth	1-Way Stop		★					★	★
Mike Colalillo Dr, Ramsey St	46.738724,-92.160878	City of Duluth	1-Way Stop		★					★	★
Decker Rd, Piedmont Ave, Piedmont Ave	46.784905,-92.163959	City of Duluth	1-Way Stop		★					★	★
34th Ave E, E Superior St	46.819385,-92.0554	City of Duluth	1-Way Stop		★					★	★
E Superior St, N 24th Ave E	46.809858,-92.068378	City of Duluth	1-Way Stop		★					★	★
W 3rd St, N 3rd Ave W	46.786104,-92.105142	City of Duluth	2-Way Stop		★					★	★
Catlin Ave, N 19th St	46.71606,-92.087533	City of Superior	1-Way Stop						★		★
Cody St, Cody St, S 63rd Ave W	46.741188,-92.177673	City of Duluth	1-Way Stop		★	★					★
N 21st St, Banks Ave, Banks Ave, N 21st St	46.713417,-92.105519	City of Superior	1-Way Stop							★	★
S 24th Ave W, W Michigan St, W Michigan St	46.763685,-92.127383	City of Duluth	1-Way Stop		★						★
E 2nd St, N 19th Ave E, E 2nd St	46.806405,-92.076744	City of Duluth	2-Way Stop		★						★
S 37 1/2 Ave W, Oneota St	46.750561,-92.142716	City of Duluth	1-Way Stop		★						★
N Central Ave, Highland Ave	46.748381,-92.166496	City of Duluth	1-Way Stop		★						★
Vinland St, W Skyline Pkwy, Vinland St	46.749946,-92.188685	City of Duluth	1-Way Stop		★						★
MN-23, Oldenberg Pkwy	46.660836,-92.279964	City of Duluth	1-Way Stop		★						★
N Ugstad Rd, Stark Rd	46.748929,-92.237999	City of Proctor	1-Way Stop		★						★
Cirrus Dr, Airport Rd	46.837487,-92.205139	City of Duluth	1-Way Stop		★						★
MaXwell Ave, Anoka St	46.843897,-92.095288	City of Duluth	2-Way Stop		★						★
Old Howard Mill Rd, N 36th Ave E	46.824795,-92.059324	City of Duluth	1-Way Stop		★						★
Vermillion Rd, E St Marie St	46.821982,-92.068843	City of Duluth	1-Way Stop		★						★
N 1st St E, E 9th St	46.793911,-92.106758	City of Duluth	1-Way Stop		★						★
W Michigan St, S 1st Ave W, S 1st Ave W, W Michigan St	46.78568,-92.098897	City of Duluth	2-Way Stop		★						★
Winter St, Banks Ave	46.727905,-92.105413	City of Superior	1-Way Stop								
N 37th St, Frontage Rd	46.695393,-92.103126	City of Superior	1-Way Stop								
N 34th St, Frontage Rd	46.698847,-92.10331	City of Superior	1-Way Stop								
Grand Ave, Lamborn Ave	46.720238,-92.093426	City of Superior	1-Way Stop								

Safety Emphasis Area 3

Signalized Intersections Along Multi-Lane Arterials

Signalized Intersection Name	Municipality	Intersection Location (Lat/Long)	Number of KAB Crashes	Speed Limit on Major Road	Speed Limit on Minor Road	Mainline AADT	Skew of Intersection	Presence of Median	Presence of Mainline Left Turn Lanes	Left Turn Signal Phasing N/E	Left Turn Signal Phasing S/W	Signal Heads per Number of Thru Lanes	Access Within Influence Area	Left Turn Lane Alignment	Isolated vs. Coordinated	Total Stars
MNTH 23 (Grand Ave) & MSAS 108, MUN 153 (Raleigh St)	City of Duluth	46.731269,-92.180057	★	½	½	★	★	★	★	★	★		★		★	★★★★★★★★★½
Arrowhead Road and Arlington Ave	City of Duluth	46.8222412,-92.1323428	★	½	★	★		★		½	½		★	½	★	★★★★★★★½
First Street and 46th Ave W	City of Duluth	46.744615,-92.1568984	★		½			★	★	★	★	★	½		★	★★★★★★★½
18th Ave E & E 5th St	City of Superior	46.708897,-92.055627	★					★	★	★	★	★	★		★	★★★★★★★½
MNTH 23 (Grand Ave) & River West Dr/Warkwick St	City of Duluth	46.714344,-92.203656	½	★	½	½		★	★	★	★		½		★	★★★★★★★½
USTH 53 (Miller Trunk Hwy) & CSAH 91 (Haines Rd)	City of Hermantown	46.814785,-92.174789	★	★	★	★	★			½	½		★	★		★★★★★★★½
USTH 53 (Miller Trunk Hwy) & MSAS 104, CSAH 32 (W Arrowhead Rd)	City of Hermantown	46.822112,-92.18676	★	★	★	★	★					★	★	★		★★★★★★★½
USTH 53 (Miller Trunk Hwy) & CSAH 13 (Midway Rd)	Canosia Township	46.852995,-92.280403	½	★	★	★	★						★	★	★	★★★★★★★½½
USH 2/USH 53 (E 2nd) & 22nd Ave E	City of Superior	46.706586,-92.047341	½	½		★		★		★	★		★	½	★	★★★★★★★½½
CSAH 9 (4th St) at 6th Ave E	City of Duluth	46.795357,-92.09511	½		½	★		★		½	★	★	★	★		★★★★★★★½½
Superior Street and 27th Ave W	City of Duluth	46.7613776,-92.1317979	★		½	½		★	★	½	★	★	★			★★★★★★★½½
USTH 53 (Trinity Rd) & CSAH 90 (Arlington Ave)	City of Duluth	46.78255,-92.138753	½	★	★	★		★		½	½		½	½	★	★★★★★★★½½
USTH 53 (Trinity Rd) & MSAS 198 (Anderson Rd)	City of Duluth	46.793185,-92.156289		★	½	★	½	★		½	½		★	½	★	★★★★★★★½½
MNTH 23 (Grand Ave) & MUN 172 (72nd Ave W)	City of Duluth	46.725327,-92.188433		½	½	★		★	★	★	★		½		★	★★★★★★★½½
USH 53 (2nd St) & USH 2 (Belknap St)	City of Superior	46.722281,-92.068439	★	½	½	★	★			½	½		½	★	★	★★★★★★★½½
STH 35 (Tower Ave) & N 28th St	City of Superior	46.706188,-92.104047	★	½		★				½	½	★	★	★	★	★★★★★★★½½
STH 35 (Tower Ave) & N 21st St	City of Superior	46.713416,-92.103969	★	½		★				½	½	★	★	★	★	★★★★★★★½½
USTH 53 (Miller Trunk Hwy) & CSAH 48 (Lavaque Bypass Rd), MSAS 101 (Ugstad Rd	City of Hermantown	46.83658,-92.238403	★	★	★	★				½	½		★	★		★★★★★★★
MNTH 23 (Grand Ave) & MSAS 101 (88th Ave W)	City of Duluth	46.697136,-92.218051		★	½	½	½	★	★		★		½		★	★★★★★★★½
USTH 53 (Miller Trunk Hwy) & CSAH 17, MSAS 103 (Stebner Rd)	City of Hermantown	46.827651,-92.195789	★	★	★	★	★						★	★		★★★★★★★
College Street and Kenwood Ave	City of Duluth	46.8167053,-92.1003188	½		½	½		★	★	★	½	½	½		★	★★★★★★★
TH 194 (Central Ent) & MSAS 198, M 535 (Anderson Rd)	City of Duluth	46.800664,-92.143421	½		½	★	½	★		½	½	★	★	½		★★★★★★★
USTH 53 & CSAH 54 (Piedmont Ave)	City of Duluth	46.775111,-92.143167	★	★	½	★	½			½		★			★	★★★★★★½
TH 194 (Central Ent) & MSAS 182 (Pecan Ave)	City of Duluth	46.799477,-92.116405	★		½	★	½			½	½	★	½	★		★★★★★★½
Summit Street and Woodland Ave	City of Duluth	46.817781,-92.077889	½		½	★		★	★		★		½		★	★★★★★★★½
TH 194 (Mesaba Ave) & MSAS 127 (W 7th St)	City of Duluth	46.790914,-92.106795	½		½	★	★			½	½	★	½	★		★★★★★★½
TH 194 & CSAH 4 (Rice Lake Rd) & MSAS 192 (Central Ent)	City of Duluth	46.795888,-92.107092	½		★	★	★			½	½	½	½	★		★★★★★★½
Arrowhead Road and Rice Lake Road (CSAH 4)	City of Duluth	46.822098,-92.12661	★		★	★		★		½	½			½	★	★★★★★★½
TH 194 (Central Ent) & MSAS 205, M 494 (Basswood Ave)	City of Duluth	46.80047,-92.135306	½		½	★		★		½	½	★	★	½		★★★★★★½
Michigan Street and 27th Ave W	City of Duluth	46.760847,-92.131133	★		½	½		★	½	½	★	½	★			★★★★★★½
US 2 at CSAH 14 (Boundary Ave)	City of Duluth	46.738127,-92.217107	★		½	½	★						★	★	★	★★★★★★
Grand Ave and 46th Ave W	City of Duluth	46.7460826,-92.1592956	½		½	★		★	½	½	½		½		★	★★★★★★★
STH 35 (Tower Ave) & N 31st St	City of Superior	46.70253,-92.104136				★				½	½	★	★	★	★	★★★★★★
STH 35 (Tower Ave) & N 37th St	City of Superior	46.695397,-92.104127		½		★				½	½	★	½	★	★	★★★★★★
Clover Street and Woodland Ave	City of Duluth	46.8157372,-92.0780403			½	★		★	★	★	★		½			★★★★★★
TH 194 (Mesaba Ave) & MSAS 126 (W 3rd St)	City of Duluth	46.783745,-92.108303			½	★	★		★	★	★		½			★★★★★★
USTH 53 (Miller Trunk Hwy) & MSAS 107 (Loberg Ave)	City of Hermantown	46.81906,-92.181777	★	★	½	★					★		½	★		★★★★★★
TH 194 (Central Ent) & CSAH 90 (Arlington Ave)	City of Duluth	46.800452,-92.13214			½	★		★		½	½	★	★	½		★★★★★★
Railroad Street and Canal Park Dr	City of Duluth	46.7850637,-92.0950474	½		½	★				½	★		★	★		★★★★★½
CSAH 9 (Woodland Ave) at W Arrowhead Rd	City of Duluth	46.825768,-92.071347			½	★	★	½		½	½		★	½		★★★★★½
USH 2/USH 53 (E 2nd) & 18th Ave E	City of Superior	46.71075,-92.052616	★	½		★			½	★			½		★	★★★★★½
TH 53 & MSAS 108 (Cirrus Dr), M166 (Sugar Maple Dr)	City of Hermantown	46.833594,-92.205486	★	★	½	★							★	★		★★★★★½
USH 2/USH 53 (E 2nd) & 39th Ave E	City of Superior	46.689033,-92.025013		½		★		★		½	½		½	½	★	★★★★★½
USTH 53 (Trinity Rd) & MSAS 209, MUN 1414 (Mall Drive)	City of Duluth	46.801655,-92.154729	½	★	½	★				½	½		½	★		★★★★★½
USTH 53 (Trinity Rd) & USTH 194 (Central Ent)	City of Duluth	46.804291,-92.153721	★	★	★	★							½	★		★★★★★½
TH 53 and Lavaque	City of Hermantown	46.836657,-92.217085		★	★	★							★	★		★★★★★
Arrowhead Road and Menard Drive	City of Hermantown	46.8222438,-92.1843165		½	½	★				½	½		½	½	★	★★★★★
St. Marie Street and Woodland Ave	City of Duluth	46.8222306,-92.0741843			½	★		★		½	½		★	½		★★★★★
Ninth Street and 6th Ave E	City of Duluth	46.7987104,-92.1003168			½	★		★	★		½	½	½			★★★★★
Eighth Street and Woodland Ave	City of Duluth	46.8140462,-92.0780908			½	★		★		½	½		★	½		★★★★★
Second Street and Lake Ave	City of Duluth	46.7882795,-92.1005779	½		½	½		★	★		★		½			★★★★★
Kenwood Ave and Cleveland Street	City of Duluth	46.8212826,-92.1002414	½		½	½		★		½	½		★	½		★★★★★
Superior Street and Lake Avenue	City of Duluth	46.7871064,-92.0981324	★		½	★		★		½	½			½		★★★★★
USH 2 (Belknap St) & Ogden Ave	City of Superior	46.720658,-92.102405	★			★		★		½	½		½	½		★★★★★
USH 2 (Belknap St) & Catlin Ave	City of Superior	46.72058,-92.087497	★			½		★		½	½		★	½		★★★★★

Safety Emphasis Area 3

Signalized Intersections Along Multi-Lane Arterials

Signalized Intersection Name	Municipality	Intersection Location (Lat/Long)	Number of KAB Crashes	Speed Limit on Major Road	Speed Limit on Minor Road	Mainline AADT	Skew of Intersection	Presence of Median	Presence of Mainline Left Turn Lanes	Left Turn Signal Phasing N/E	Left Turn Signal Phasing S/W	Signal Heads per Number of Thru Lanes	Access Within Influence Area	Left Turn Lane Alignment	Isolated vs. Coordinated	Total Stars
USH 2 (Belknap St) & Hammond Ave	City of Superior	46.720625,-92.09788	★		½	★		★		½	½			½		★★★★★
USH 2 (Belknap St) & STH 35 (Tower Ave)	City of Superior	46.720669,-92.103916	★		½	★		★		½	½			½		★★★★★
Michigan Street and 5th Ave W	City of Duluth	46.7817011,-92.1038757			½			½	★		★	★	½			★★★★½
TH 194 (Mesaba Ave) & MSAS 129, 173 (W 1st St)	City of Duluth	46.780905,-92.108101			½	★	★		½	★	½					★★★★½
Third Street and 10th Ave E	City of Duluth	46.7984737,-92.0888588			½			★	★	★			★			★★★★½
First Street and Lake Ave	City of Duluth	46.7876425,-92.099137	½		½	½		★	★	★						★★★★½
USH 2 (Belknap St) & Grand Ave	City of Superior	46.720619,-92.093397	½			½		★		½	½		★	½		★★★★½
USTH 53 (Miller Trunk Hwy) & MUN 524 (Cottonwood Ave)	City of Duluth	46.805551,-92.156918	★	½	½	★							½	★		★★★★½
TH 194 (Central Ent) & MSAS 209 (Mall Drive)	City of Duluth	46.802236,-92.148654	★	½	½	★							½	★		★★★★½
USH 2 (Belknap St) & Banks Ave	City of Superior	46.720652,-92.105508	★			★		½		½	½		½	½		★★★★½
Third Street and 6th Ave E	City of Duluth	46.7946977,-92.0938074			½	½		★	★	★			½			★★★★½
CSAH 9 (Woodland Ave) at CSAH 37 (Snively Rd)	City of Duluth	46.827429,-92.070623			½	★		★	½		½		½			★★★★
USH 53 NB & USH 53 SB	City of Superior	46.733879,-92.095592		½	½		★		½				½		★	★★★★
Third Street and Lake Ave	City of Duluth	46.7882795,-92.1005779			½			★	★	★			½			★★★★
Second Street and 10th Ave E	City of Duluth	46.797932,-92.0879733			½			★	★		★		½			★★★★
USH 2 (Belknap St) & Hill Ave	City of Superior	46.720627,-92.077188				½	½	★		½	½		½	½		★★★★
USTH 53 (Miller Trunk Hwy) & CSAH 6 (Maple Grove Rd)	City of Duluth	46.807826,-92.163466	½	½	½	★	★						½			★★★★
Second Street and 1st Ave E	City of Duluth	46.7893696,-92.0991934	½		½	½		★				★	½			★★★★
5th Ave W and I-35 (Northbound)	City of Duluth	46.7810142,-92.102392	½		½			★	★		½	½				★★★★
USTH 53 (Miller Trunk Hwy) & MSAS 196 (Burning Tree Rd)	City of Duluth	46.810907,-92.168449	½	½	½	★							½	★		★★★★
I-35 & MSAS 140 (Lake Ave)	City of Duluth	46.786296,-92.097057	★		★	★								★		★★★★
Second Street and 2nd Ave E	City of Duluth	46.7892288,-92.0993403			½	½		★				★	½			★★★½
Second Street and 3rd Ave E	City of Duluth	46.791135,-92.0968369			½	½		★				★	½			★★★½
Second Street and 1st Ave W	City of Duluth	46.7873687,-92.1014395			½			★				★	★			★★★½
Second Street and 4th Avenue W	City of Duluth	46.7844686,-92.1055561			½			★				★	★			★★★½
5th Ave W and I-35 (Southbound)	City of Duluth	46.7812281,-92.1029379			½			★	★	½		½				★★★½
Technology Drive and Rice Lake Road (CSAH 4)	City of Duluth	46.8254181,-92.1342029		★	½	½					½				★	★★★½
Second Street and 2nd Ave W	City of Duluth	46.7864064,-92.1027035	½		½			★				★	½			★★★½
TH 194 (Mesaba Ave) & MSAS 130 (2nd St) (Fire Dept Signal)	City of Duluth	46.782306,-92.108051	½		½	★	★						½			★★★½
Lake Ave and Railroad Street	City of Duluth	46.7846926,-92.0965137	½		½	½			½	½	★					★★★½
Second Street and 3rd Ave W	City of Duluth	46.7853117,-92.1040793			½			★				★	½			★★★
Third Street and 4th Ave W	City of Duluth	46.7851305,-92.1062871			½			★				★	½			★★★
Third Street and 1st Ave E	City of Duluth	46.789903,-92.1000533			½			★				★	½			★★★
Third Street and 3rd Ave E	City of Duluth	46.7917896,-92.0975662			½			★				★	½			★★★
Second Street and 6th Ave E	City of Duluth	46.7938881,-92.0929127			½	½		★					★			★★★
Second Street and 5th Ave E	City of Duluth	46.7931931,-92.094169	½		½	½		★					½			★★★
USTH 53 (Miller Trunk Hwy) & Miller Hill Mall Ent	City of Duluth	46.806671,-92.16072		½	½	★										★★

Safety Emphasis Area 4

Urban Intersections
Bike Ped Crashes

Road Name	Lat/Long	Municipality	Number of Pedestrian Crashes	Mainline AADT	Traffic Control	Posted Speed Limit of Major Roadway	Number of Thru Lanes on Major Roadway	Presence of Bicycle Facilities on the Major Roadway	Length of Pedestrian Exposure on Major Roadway	Presence of Sidewalk on the Major Roadway	Presence of Lighting	Presence of On-Street Parking on Major Roadway	Presence of Pedestrian Generator	Presence of MTU Bus Stop	Disadvantaged Neighborhood	Total Stars
Tower Ave, N 28th Ave, N 28th St, Tower Ave	46.706202,-92.104034	City of Superior	★	★	★	★	★	★	★				½	½	★	★★★★★★★★★
N 1st Ave E, S 1st Ave E, E Superior St, E Superior St	46.787872,-92.09695	City of Duluth	★	★	★	½		★	★			★	½	½	★	★★★★★★★★½
Tower Ave, N 21st St, N 21st St, Tower Ave	46.71342,-92.104006	City of Superior	★	★	★	★	★	½	★				½	½	★	★★★★★★★★½
S Lake Ave, W Superior St, N Lake Ave, E Superior St	46.786944,-92.098145	City of Duluth	★	★	★	½		★	★			★	½	½	★	★★★★★★★★½
N 2nd Ave W, W 2nd St	46.786435,-92.102837	City of Duluth	★	½	★	½	★	★	★			★	½		★	★★★★★★★½
Tower Ave, Tower Ave, N 16th St	46.719309,-92.103964	City of Superior	★	★		★	★	½	★			★	½	½	★	★★★★★★★★½
E Superior St, S 3rd Ave E, N 3rd Ave E	46.789807,-92.094437	City of Duluth	★	★	★	½		★	½			★	½	½	★	★★★★★★★★
E 2nd St - Hwy 53/2, 39th Ave E	46.68907,-92.024958	City of Superior		★	★	★	★	★	★				½	½	★	★★★★★★★★
N 6th Ave E, E 4th St, N 6th Ave E	46.795355,-92.095123	City of Duluth	★	½	★	½	★	★	★				½	½	★	★★★★★★★★
Tower Ave, N 31st St	46.702589,-92.10406	City of Superior		★	★	★	★	★	★				½	½	★	★★★★★★★★
Tower Ave, N 20th St	46.714713,-92.103983	City of Superior		★		★	★	★	★			★	½	½	★	★★★★★★★★
Tower Ave, N 18th St	46.717022,-92.10396	City of Superior		★		★	★	★	★			★	½	½	★	★★★★★★★★
N 4th Ave W, S 4th Ave W, W Superior St	46.783113,-92.103174	City of Duluth	★	½	★	½		★	½			★	½	½	★	★★★★★★★½
N 24th Ave W, N 24th Ave W, W 3rd St, W 3rd St	46.766138,-92.131292	City of Duluth	★	½	★	½		½	★			★	½	½	★	★★★★★★★½
S 5th Ave W, N 5th Ave W, W Superior St, W Superior St	46.782185,-92.104402	City of Duluth		★	★	½		★	★			★	½	½	★	★★★★★★★½
E 2nd St, N 1st Ave E, N 1st Ave E	46.789237,-92.099117	City of Duluth		½	★	½	★	★	★			★	½		★	★★★★★★★½
Belknap St, Lamborn Ave, Grand Ave, Belknap St	46.72062,-92.09344	City of Superior		★	★	½	★		★			★	½	½	★	★★★★★★★½
Ogden Ave, Belknap St, Belknap St, Ogden Ave	46.720645,-92.102379	City of Superior		★	★	½	★		★			★	½	½	★	★★★★★★★½
N Lake Ave, W 1st St, E 1st St	46.787635,-92.099302	City of Duluth		★	★	½	★	★	★				½	½	★	★★★★★★★½
E Superior St, N 4th Ave E	46.790771,-92.093213	City of Duluth	★	★		½		★	★			★	½	½	★	★★★★★★★½
Woodland Ave, Summit St	46.817772,-92.077898	City of Duluth		★	★	½	★	★	★				½	½	★	★★★★★★★½
N Lake Ave, E 2nd St, W 2nd St, N Lake Ave	46.788296,-92.100372	City of Duluth		★	★	½		★	★			★	½	½	★	★★★★★★★½
E Central Entrance, S Arlington Ave	46.800418,-92.132132	City of Duluth		★	★	½	★	★	★				½	½	★	★★★★★★★½
Tower Ave, N 17th St	46.718164,-92.103965	City of Superior		★		★	★	★	★			★	½		★	★★★★★★★½
Tower Ave, N 19th St	46.715859,-92.103961	City of Superior		★		★	★	★	★			★	½		★	★★★★★★★½
Highway 53, Grand Ave, Grand Ave	46.733759,-92.093319	City of Superior		★		★	★	★	★	★	½				★	★★★★★★★½
Tower Ave, Tower Ave, N 37th St, N 37th St	46.695387,-92.10411	City of Superior		★	★	★	★	★	★					½	★	★★★★★★★½
E 9th St, N Central Entrance, N 6th Ave E	46.798692,-92.100577	City of Duluth		★	★	½	★	★	★				½	½	★	★★★★★★★½
Belknap St, Hammond Ave	46.720626,-92.097883	City of Superior		★	★	½	★		★			★	½	½	★	★★★★★★★½
E Superior St, S 2nd Ave E, N 2nd Ave E, E Superior St	46.788881,-92.095628	City of Duluth		★	★	½		★	½			★	½	½	★	★★★★★★★★
N 6th Ave W, S 6th Ave W, W Superior St	46.781205,-92.105671	City of Duluth		★	★	½		★	½			★	½	½	★	★★★★★★★★
W Superior St, S 1st Ave W, W Superior St, N 1st Ave W	46.78597,-92.09938	City of Duluth		½	★	½		★	★			★	½	½	★	★★★★★★★★
N 5th Ave E, E 2nd St	46.793089,-92.094084	City of Duluth	★	½	★	½		★	½			★	½		★	★★★★★★★★
Maple Grove Rd, Burning Tree Rd, Burning Tree Rd	46.807567,-92.169205	City of Duluth		★	★	★	★	★	★				½	½		★★★★★★★★
E 2nd St, N 3rd Ave E	46.791129,-92.096598	City of Duluth		½	★	½		★	★			★	½	½	★	★★★★★★★★
W 2nd St, N 3rd Ave W	46.785453,-92.104074	City of Duluth		½	★	½	★	★	★			★			★	★★★★★★★★
W 2nd St, N 4th Ave W, N 4th Ave W	46.784465,-92.105373	City of Duluth		½	★	½	★	★	★			★			★	★★★★★★★★
N 1st Ave W, W 2nd St, N 1st Ave W	46.787326,-92.101633	City of Duluth			★	½	★	★	★			★	½		★	★★★★★★★★
W 1st St, S 46th Ave W, N 46th Ave W, Mike Colalillo Dr	46.744573,-92.157187	City of Duluth		½	★	½	★	★	★	½				½	★	★★★★★★★★
Grand Ave, Grand Ave, N 40th Ave W, N 40th Ave W	46.751662,-92.15132	City of Duluth		★	★	½		½	★			★	½	½	★	★★★★★★★★
E 4th St, N 5th Ave E	46.794438,-92.09629	City of Duluth		½	★	½		★	★			★	½	½	★	★★★★★★★★
N 59th Ave W, Grand Ave, S 59th Ave W, Grand Ave	46.736998,-92.171989	City of Duluth		★	★	½		½	★			★	½	½	★	★★★★★★★★
US 53, US 53, S Arlington Ave	46.782563,-92.138722	City of Duluth		★	★	★	★	★	★						★	★★★★★★★★
Ramsey St, Grand Ave	46.739014,-92.169151	City of Duluth		★	★	½		½	★			★	½	½	★	★★★★★★★★
E Central Entrance, Rice Lake Rd, N Central Entrance, Mesaba Ave	46.795862,-92.107036	City of Duluth		★	★	½	★	★	★				½		★	★★★★★★★★
Central Ave, Ramsey St, Ramsey St	46.73891,-92.166567	City of Duluth		½	★	½		★	★			★	½	½	★	★★★★★★★★
E St Marie St, Woodland Ave, W Saint Marie St	46.822148,-92.074099	City of Duluth		★	★	½	★	★	★				½		★	★★★★★★★★
Woodland Ave, Clover St	46.815825,-92.078254	City of Duluth		★	★	½	★	★	★				½		★	★★★★★★★★
N 6th Ave E, E 3rd St, N 6th Ave E, N 6th Ave E, E 3rd St	46.79468,-92.094027	City of Duluth		★	★	½	★	½	★				½	½	★	★★★★★★★★
N Cental Ave, Grand Ave, Central Ave, Grand Ave	46.740858,-92.166553	City of Duluth		★	★	½		½	★			★	½	½	★	★★★★★★★★
US 53, Cottonwood Ave/Loberg Ave	46.805561,-92.156889	City of Duluth		★	★	★	★	½	★	★			½			★★★★★★★★
E 3rd St, E 3rd St, N 3rd Ave E	46.791815,-92.097719	City of Duluth	★	½	★	½		★	½			★	½		★	★★★★★★★★
Haines Rd, Arrowhead Rd, Haines Rd, Arrowhead Rd	46.822086,-92.174837	City of Hermantown		★	★	★	★	★	★	½				½		★★★★★★★★
W Central Entrance, Mall Dr	46.802217,-92.148685	City of Duluth		★	★	★	★	½	★	★				½		★★★★★★★★
N 6th Ave E, E 6th St	46.7967,-92.097284	City of Duluth	★	★		½	★	★	★					½	★	★★★★★★★★
Grand Ave, N 6th St	46.731369,-92.093355	City of Superior	★				★	★	★			★	½	½	★	★★★★★★★★
Winter St, Hammond Ave, Winter St	46.727879,-92.097828	City of Superior	★	★	★	½		½	★			★			★	★★★★★★★★
N 27th Ave W, W Superior St, W Superior St	46.761256,-92.13176	City of Duluth	★	½	★	½			★			★	½	½	★	★★★★★★★★
E Central Entrance, Pecan Ave	46.799475,-92.116465	City of Duluth	★	★	★	½	★		★					½	★	★★★★★★★½

Safety Emphasis Area 4

Urban Intersections
Bike Ped Crashes

Road Name	Lat/Long	Municipality	Number of Pedestrian Crashes	Mainline AADT	Traffic Control	Posted Speed Limit of Major Roadway	Number of Thru Lanes on Major Roadway	Presence of Bicycle Facilities on the Major Roadway	Length of Pedestrian Exposure on Major Roadway	Presence of Sidewalk on the Major Roadway	Presence of Lighting	Presence of On-Street Parking on Major Roadway	Presence of Pedestrian Generator	Presence of MTU Bus Stop	Disadvantaged Neighborhood	Total Stars
Miller Trunk Hwy, W Central Entrance, US 53 (Trinity Rd), Joshua Ave	46.804276,-92.153697	City of Duluth		★	★	★	★	★	★	★						★★★★★★★
E Central Entrance, Blackman Ave	46.800081,-92.121644	City of Duluth	★	★		↾	★	★	★					↾	★	★★★★★★★
Arrowhead Rd, Arrowhead Rd, Rice Lake Rd	46.822047,-92.126829	City of Duluth		★	★	★	★		★					↾	★	★★★★★★ ↾
Railroad St, S Lake Ave, Canal Park Dr	46.784937,-92.095199	City of Duluth		★	★	↾			★			★	↾	↾	★	★★★★★★ ↾
E Superior St, E Superior St, N 12th Ave E, S 12th Ave E	46.798389,-92.083292	City of Duluth		↾	★	↾		↾	★			★	↾	↾	★	★★★★★★ ↾
Mesaba Ave, Mesaba Ave, W 1st St, W 1st St	46.780927,-92.108057	City of Duluth		★	★	↾	★	↾	★				↾		★	★★★★★★ ↾
US 53 (Trinity Rd), Mall Dr	46.801647,-92.154711	City of Duluth		★	★	★	★	↾	★	↾				↾		★★★★★★ ↾
Maple Grove Rd, Maple Grove Rd, Mall Dr, Mall Dr	46.80756,-92.165403	City of Duluth		★	★	★	★	★	★				↾			★★★★★★ ↾
Midway Rd, Midway Rd, Highway 53, Highway 53	46.853005,-92.280425	Canosia Township			★	★	★	★	★	★			↾			★★★★★★ ↾
W Superior St, N 40th Ave W, W Superior St	46.749569,-92.148236	City of Duluth		↾		↾	★	★	★	↾			↾	↾	★	★★★★★★ ↾
Tower Ave, Tower Ave, Belknap St, Belknap St	46.720642,-92.103942	City of Superior		★	★		★		★			★	↾		★	★★★★★★ ↾
E 2nd St, N 2nd Ave E, N 2nd Ave E	46.790189,-92.097857	City of Duluth		↾	★	↾		★	★			★	↾		★	★★★★★★ ↾
W 3rd St, N Lake Ave, E 3rd St	46.788962,-92.101451	City of Duluth		↾	★	↾		★	★			★	↾		★	★★★★★★ ↾
Grand Ave, 88th Ave W	46.697264,-92.217955	City of Duluth		★	★	★	★		★					↾	★	★★★★★★ ↾
Bristol St, Central Ave, Central Ave	46.737641,-92.166577	City of Duluth		★	★	↾		↾	★			★	↾		★	★★★★★★ ↾
Belknap St, Highway 53, E 2nd St - Hwy 53/2, Marina Dr	46.722237,-92.068388	City of Superior		★	★	★	★	★	★				↾			★★★★★★ ↾
Highway 53, N 5th St	46.73254,-92.085315	City of Superior		★		★	★	★		★	↾				★	★★★★★★ ↾
US 53, Maple Grove Rd	46.807792,-92.163401	City of Duluth		★	★	★	★	↾	★	★						★★★★★★ ↾
Tower Ave, Tower Ave, N 34th St, N 34th St	46.698911,-92.104079	City of Superior		★		★	★	★	★					↾	★	★★★★★★ ↾
US 53, Maple Burning Tree Rd	46.81089,-92.168446	City of Duluth		★	★	★	★	↾	★	★						★★★★★★ ↾
Belknap St, Hughitt Ave	46.720639,-92.099447	City of Superior		★		↾	★		★			★	↾	↾	★	★★★★★★ ↾
Tower Ave, N 40th St	46.6917,-92.104146	City of Superior		★		★	★	★	★				↾		★	★★★★★★ ↾
W Central Entrance, Basswood Ave	46.800474,-92.135306	City of Duluth		★	★	↾	★	★	★				↾	↾		★★★★★★ ↾
Tower Ave, N 23rd St	46.710983,-92.104012	City of Superior		★		★	★	★	★					↾	★	★★★★★★ ↾
Woodland Ave, Woodland Ave, E Oxford St	46.833266,-92.072396	City of Duluth		★		↾	★	★	★			★	↾	↾		★★★★★★ ↾
E 2nd St - Hwy 53/2, E 2nd St - Hwy 53/2, E 3rd St	46.67769,-92.01047	City of Superior		★		★	★	★	★				↾		★	★★★★★★ ↾
Hammond Ave, N 7th St	46.730219,-92.097852	City of Superior		★		↾	★	↾	★			★	↾		★	★★★★★★ ↾
N Central Entrance, E 10th St	46.798724,-92.102459	City of Duluth		★		↾	★	★	★				↾	↾	★	★★★★★★ ↾
Belknap St, Catlin Ave, Catlin Ave	46.720595,-92.087471	City of Superior	★	★	★	↾	★		★				↾	↾		★★★★★★ ↾
Hammond Ave, N 6th St	46.731377,-92.097843	City of Superior		★		↾	★	★	★				↾	↾	★	★★★★★★ ↾
Belknap St, Baxter Ave	46.72062,-92.0949	City of Superior		★		↾	★		★			★	↾		★	★★★★★★
Buchanan St, S Lake Ave, S Lake Ave	46.781644,-92.094673	City of Duluth		↾	★	↾		↾	↾			★	↾	↾	★	★★★★★★
E 3rd St, N 10th Ave E	46.798515,-92.088994	City of Duluth		↾	★	↾		★	↾			★	↾		★	★★★★★★
E 3rd St, N 5th Ave E, N 5th Ave E	46.793754,-92.095175	City of Duluth		↾	★	↾		★	↾			★		↾	★	★★★★★★
N 10th Ave E, E 2nd St	46.797841,-92.087933	City of Duluth		↾	★	↾		★	↾			★	↾		★	★★★★★★
N 2nd Ave W, S 2nd Ave W, W Superior St, W Superior St	46.785013,-92.100571	City of Duluth		↾	★	↾		★	↾			★	↾		★	★★★★★★
S 5th Ave W, W Michigan St	46.781829,-92.103839	City of Duluth			★	↾		★	↾			★	↾	↾	★	★★★★★★
N 2nd Ave W, N 2nd Ave W, W 4th St	46.787749,-92.104994	City of Duluth	★			↾		★	↾			★	↾	↾	★	★★★★★★
Grand Ave, Carlton St, W 3rd St	46.756961,-92.143747	City of Duluth		★	★	↾		↾	★			★			★	★★★★★★
Grand Ave, N 44th Ave W	46.747847,-92.156585	City of Duluth		★	★	↾		↾	★			★	↾	↾		★★★★★★
Grand Ave, N 46th Ave W, N 46th Ave W, Grand Ave	46.746006,-92.159307	City of Duluth		★	★	↾		↾	★			★	↾	↾		★★★★★★
London Rd, London Rd, N 40th Ave E	46.822264,-92.042335	City of Duluth		★	★	↾		↾	★			★			★	★★★★★★
E Superior St, N 14th Ave E, S 14th Ave E, E Superior St	46.800315,-92.08077	City of Duluth	★	↾		↾		↾	★			★	↾		★	★★★★★★
Kenwood Ave, E Cleveland St	46.821227,-92.100404	City of Duluth		↾	★	↾	★	★	★				↾	↾		★★★★★★
Kenwood Ave, Buffalo St	46.820326,-92.10042	City of Duluth		↾		↾	★	★	★				↾	↾	★	★★★★★★
Burning Tree Rd, Burning Tree Rd, Mall Dr, Mall Dr	46.810185,-92.169104	City of Duluth		★		↾	★	★	★		★		↾			★★★★★★
N 6th Ave E, E 7th St	46.797353,-92.098371	City of Duluth		★		↾	★	★	★					↾	★	★★★★★★
Tower Ave, Henry Cohen Dr	46.684543,-92.104201	City of Superior		★		★	★	★	★						★	★★★★★★
Tower Ave, N 22nd St	46.712125,-92.10401	City of Superior		★		★	★	★	★						★	★★★★★★
Tower Ave, N 24th St	46.709338,-92.104025	City of Superior		★		★	★	★	★				↾	↾		★★★★★★
Maple Grove Rd, Maple Grove Rd, Loberg Ave	46.807639,-92.180156	City of Hermantown		↾	★	★	★	★	★				↾			★★★★★★
S 27th Ave W, S 27th Ave W, W Michigan St, W Michigan St	46.76083,-92.131093	City of Duluth	★		★	↾		★	★				↾		★	★★★★★★
W 1st St, N 4th Ave W, W 1st St	46.783809,-92.104298	City of Duluth			★	↾		★	★			★	↾		★	★★★★★★
E 4th St, N 2nd Ave E, E 4th St	46.791563,-92.100057	City of Duluth		↾		↾		★	★			★	↾	↾	★	★★★★★★
N Lake Ave, E 4th St, W 4th St, N Lake Ave	46.789637,-92.102546	City of Duluth		↾		↾		★	★			★	↾	↾	★	★★★★★★
Cody St, N Central Ave, N Cental Ave	46.741492,-92.166548	City of Duluth	★			↾		★	★			★	↾		★	★★★★★★
Haines Rd, Maple Grove Rd, Haines Rd, Maple Grove Rd	46.807578,-92.174751	City of Duluth		★	★	★		★	★				↾	↾		★★★★★★
Belknap St, Banks Ave, Banks Ave, Belknap St	46.720655,-92.105459	City of Superior		★	★	↾	★		★				↾		★	★★★★★★

Safety Emphasis Area 4

Urban Intersections
Bike Ped Crashes

Road Name	Lat/Long	Municipality	Number of Pedestrian Crashes	Mainline AADT	Traffic Control	Posted Speed Limit of Major Roadway	Number of Thru Lanes on Major Roadway	Presence of Bicycle Facilities on the Major Roadway	Length of Pedestrian Exposure on Major Roadway	Presence of Sidewalk on the Major Roadway	Presence of Lighting	Presence of On-Street Parking on Major Roadway	Presence of Pedestrian Generator	Presence of MTU Bus Stop	Disadvantaged Neighborhood	Total Stars
Belknap St, Cumming Ave	46.720625,-92.096374	City of Superior		★		½	★		★			★	½		★	★★★★★★
Belknap St, John Ave	46.720644,-92.100932	City of Superior		★		½	★		★			★	½		★	★★★★★★
Highway 2, Belknap St, Belknap St, Garfield Ave	46.721396,-92.118521	City of Superior		★		★	★		★	★					★	★★★★★★
E Superior St, 45th Ave E, 45th Ave E	46.827174,-92.032997	City of Duluth		½	★	½			★			★	½	½	★	★★★★★★
E Superior St, E Superior St, N 10th Ave E, S 10th Ave E	46.796472,-92.085797	City of Duluth		½	★	½			★			★	½	½	★	★★★★★★
Woodland Ave, W Griggs Pl	46.81856,-92.07744	City of Duluth		★		½	★	★			★		½		★	★★★★★★
Highway 53, E St	46.725675,-92.073523	City of Superior		★		★	★	★		½			½		★	★★★★★★
Rice Lake Rd, Rice Lake Rd, E Skyline Pkwy	46.796809,-92.107038	City of Duluth		★		★	★	★			½		½		★	★★★★★★
Mike Colalillo Dr, Recycle Wy	46.740288,-92.15881	City of Duluth		½		½		★		★	★	★			★	★★★★★★
Highway 53, Highway 53	46.73406,-92.095644	City of Superior		★	★	★		★		★					★	★★★★★★
Railroad St, Railroad St, S Lake Ave	46.784771,-92.096756	City of Duluth	★	½	★	½	★		★						★	★★★★★★
W Superior St, 23rd Ave W	46.765056,-92.126794	City of Duluth	★	½		½			★			★	½	½	★	★★★★★★
E 4th St, N 9th Ave E	46.798222,-92.091383	City of Duluth	★	★		½			★			★	½		★	★★★★★★
N 3rd Ave W, S 3rd Ave W, W Superior St, W Superior St	46.784078,-92.101847	City of Duluth		½	★	½		★	½			★	½		★	★★★★★★
Hammond Ave, N 5th St, Hammond Ave, N 5th St	46.732539,-92.097857	City of Superior		★		½	★	★	★				½		★	★★★★★★
W Central Entrance, Anderson Rd/ W Myrtle St	46.800619,-92.143463	City of Duluth		★	★	½	★	★	★					½		★★★★★★
E 1st St, N 3rd Ave E, N 3rd Ave E, E 1st St	46.790504,-92.095572	City of Duluth		½	★	½		★	½			★			★	★★★★★½
W Saint Marie St, Oakland Cir/Maplewood Ct	46.822084,-92.085887	City of Duluth		½		½		★	★			★	½		★	★★★★★½
E 4th St, N 7th Ave E	46.796306,-92.09388	City of Duluth		★		½			★			★	½	½	★	★★★★★½
Grand Ave, Raleigh St	46.731259,-92.180054	City of Duluth		★	★	★	★		★				½			★★★★★½
W 3rd St, N 4th Ave W	46.785125,-92.106431	City of Duluth		½	★	½		★	½			★			★	★★★★★½
N 6th Ave E, E 2nd St, N 6th Ave E, E 2nd St	46.793954,-92.092953	City of Duluth		★	★	½		★	½				½		★	★★★★★½
E 3rd St, N 1st Ave E, N 1st Ave E, E 3rd St	46.789905,-92.100219	City of Duluth			★	½		★	½			★	½		★	★★★★★½
W 3rd St, N 2nd Ave W, W 3rd St	46.787078,-92.103882	City of Duluth		½		½		★	½		★	★			★	★★★★★½
W Saint Marie St, Midway Ave	46.822077,-92.080762	City of Duluth		½		½		★	½			★	½	½	★	★★★★★½
E 3rd St, N 12th Ave E	46.800394,-92.086536	City of Duluth	★			½		★	½			★	½		★	★★★★★½
Anderson Rd, Anderson Rd	46.793178,-92.156278	City of Duluth		½	★	★	★	½	★					½		★★★★★½
E Superior St, N Hawthorne Rd, E Superior St	46.816544,-92.059179	City of Duluth		½	★	½		½	★			★	½	½		★★★★★½
W 3rd St, N 27th Ave W	46.763253,-92.135024	City of Duluth		½		½		½	★			★	½	½	★	★★★★★½
Grand Ave, N 43rd Ave W	46.748793,-92.155256	City of Duluth		★		½		½	★			★	½		★	★★★★★½
Grand Ave, N 45th Ave W	46.746608,-92.158329	City of Duluth		★		½		½	★			★	½		★	★★★★★½
Hammond Ave, Broadway St, Hammond Ave	46.726591,-92.097838	City of Superior		★		½		½	★			★	½		★	★★★★★½
London Rd, 47th Ave E	46.826823,-92.029168	City of Duluth		★		½		½	★		½	★			★	★★★★★½
London Rd, N 43rd Ave E	46.822379,-92.03671	City of Duluth		★		½		½	★		½	★			★	★★★★★½
Kenwood Ave, W College St	46.816581,-92.100431	City of Duluth		½	★	½	★	★	★					½		★★★★★½
7th St, Mesaba Ave, E 7th St	46.790937,-92.106782	City of Duluth		★	★	½	★	★	★							★★★★★½
Woodland Ave, E Arrowhead Rd, Woodland Ave, W Arrowhead Rd	46.825804,-92.071322	City of Duluth		★	★	½	★	★	★							★★★★★½
Woodland Ave, Snively Rd, Woodland Ave	46.827407,-92.070655	City of Duluth		★	★	½	★	★	★							★★★★★½
Belknap St, E 5th St, E 5th St, Belknap St	46.72148,-92.073535	City of Superior		½		½	★	★	★				½		★	★★★★★½
N 6th Ave E, E 5th St	46.796014,46.802025, -92.086410	City of Duluth		★		½	★	★	★				½	½		★★★★★½
N 6th Ave E, E 8th St	46.798004,-92.09946	City of Duluth		★		½	★	★	★						★	★★★★★½
W Arrowhead Rd, Warren Ave	46.822159,-92.098943	City of Duluth		★		½	★	★	★				½	½		★★★★★½
N 27th Ave W, W 1st St	46.761927,-92.132858	City of Duluth				½	★	★	★			★			★	★★★★★½
N 27th Ave W, W 2nd St	46.762596,-92.133952	City of Duluth				½	★	★	★			★			★	★★★★★½
E 2nd St - Hwy 53/2, E 2nd St - Hwy 53/2, 23rd Ave E	46.705584,-92.046012	City of Superior		★		★	★	★	★				½			★★★★★½
Tower Ave, N 26th St	46.707767,-92.104036	City of Superior		★		★	★	★	★				½			★★★★★½
N 3rd St, Hughitt Ave	46.735177,-92.099363	City of Superior				★	★	★	★				½		★	★★★★★½
Market St, Haines Rd, Haines Rd, Mall Dr	46.81295,-92.174797	City of Hermantown		½	★	★	★	★	★							★★★★★½
Grand Ave, N 7th St	46.730213,-92.093353	City of Superior					★	★	★			★	½		★	★★★★★½
Grand Ave, N 8th St	46.729077,-92.093373	City of Superior					★	★	★			★	½		★	★★★★★½
Arrowhead Rd, Kenwood Ave, W Arrowhead Rd, Kenwood Ave	46.822097,-92.100401	City of Duluth		★	★	½		★	★				½	½		★★★★★½
Canal Park Dr, Buchanan St	46.781876,-92.093661	City of Duluth		½		½		★	★			★	½		★	★★★★★½
E 7th St, N 1st St E	46.792616,-92.10459	City of Duluth		½		½		★	★		½	★			★	★★★★★½
E 9th St, N 7th Ave E	46.799651,-92.099315	City of Duluth		½		½		★	★			★		½	★	★★★★★½
E 9th St, N 9th Ave E	46.801565,-92.096819	City of Duluth		½		½		★	★			★		½	★	★★★★★½
Piedmont Ave, W 1st St, W 1st St	46.771,-92.120956	City of Duluth		½		½		★	★		½	★			★	★★★★★½
Ramsey St, N 53rd Ave W	46.738946,-92.163784	City of Duluth				½		★	★			★	½	½	★	★★★★★½

Safety Emphasis Area 4

Urban Intersections
Bike Ped Crashes

Road Name	Lat/Long	Municipality	Number of Pedestrian Crashes	Mainline AADT	Traffic Control	Posted Speed Limit of Major Roadway	Number of Thru Lanes on Major Roadway	Presence of Bicycle Facilities on the Major Roadway	Length of Pedestrian Exposure on Major Roadway	Presence of Sidewalk on the Major Roadway	Presence of Lighting	Presence of On-Street Parking on Major Roadway	Presence of Pedestrian Generator	Presence of MTU Bus Stop	Disadvantaged Neighborhood	Total Stars
Ramsey St, N 57th Ave W	46.738695,-92.168484	City of Duluth				½		★	★			★	½	½	★	★★★★★½
TH23/Grand Ave, S 63rd Ave W	46.733143,-92.177404	City of Duluth		★		★	★		★					½	★	★★★★★½
Rice Lake Rd, Arrowhead Rd, Arrowhead Rd, Arlington Ave	46.822063,-92.132099	City of Duluth		★	★	★	★		★				½			★★★★★½
Garfield Ave, Piedmont Ave, W Superior St, W Superior St	46.771445,-92.11841	City of Duluth		½	★	½			★			★	½		★	★★★★★½
E 4th St, N 8th Ave E	46.79727,-92.092626	City of Duluth		★		½			★			★	½	½	★	★★★★★½
N 10th Ave E, E 4th St, N 10th Ave E	46.799191,-92.090112	City of Duluth		★		½			★			★	½	½	★	★★★★★½
Winter St, Winter St, Tower Ave, Tower Ave	46.727901,-92.103878	City of Superior	★	½	★				★			★			★	★★★★★½
Trinty Rd, US 53, Piedmont Ave	46.775146,-92.143113	City of Duluth		★	★	★	★	½							★	★★★★★½
Highway 53, Catlin Ave	46.733377,-92.087412	City of Superior		★		★	★	½		★					★	★★★★★½
W 1st St, N 43rd Ave W	46.747365,-92.153283	City of Duluth		½		½	★	★		★				½	★	★★★★★½
Woodland Ave, Elizabeth St	46.819427,-92.076662	City of Duluth		★		½	★	★					½	½	★	★★★★★½
Woodland Ave, Norton St/Mount Royal Shopping Cir	46.821233,-92.074807	City of Duluth		★		½	★	★					½	½	★	★★★★★½
E 2nd St, N 7th Ave E	46.794976,-92.091673	City of Duluth		½		½		★			★	★	½		★	★★★★★½
Mike Colalillo Dr, W Superior St	46.742049,-92.158201	City of Duluth		½		½		★		★		★		½	★	★★★★★½
Broadway St, Broadway St, Ogden Ave, Ogden Ave	46.726606,-92.102351	City of Superior	★					★	★			★	½		★	★★★★★½
Ogden Ave, N 11th St	46.725412,-92.102379	City of Superior	★					★	★			★	½		★	★★★★★½
Broadway St, Broadway St, Tower Ave, Tower Ave	46.726615,-92.103889	City of Superior	★	½					★			★	½	½	★	★★★★★½
E Superior St, N 13th Ave E	46.799335,-92.082031	City of Duluth		½		½		½	★			★	½	½	★	★★★★★½
Woodland Ave, Woodland Ave, E Kent Rd, E 8th St	46.813916,-92.078275	City of Duluth		★	★	½	★	★	★							★★★★★½
E 1st St, N 9th Ave E	46.796183,-92.088098	City of Duluth				½		★	★			★	½		★	★★★★★½
E 4th St, N Hawthorne Rd	46.818569,-92.06428	City of Duluth				½		★	★		★	★	½			★★★★★½
W 4th St, N 1st Ave W	46.788679,-92.103788	City of Duluth				½		★	★			★	½		★	★★★★★½
E Central Entrance, E 13th St	46.797601,-92.109866	City of Duluth		★		½	★	★						½	★	★★★★★½
E 4th St, N 4th Ave E	46.793465,-92.097548	City of Duluth		½		½		★	½			★	½		★	★★★★★½
W Superior St, 26th Ave W	46.762194,-92.130514	City of Duluth		½		½			★			★	½	½	★	★★★★★½
S Lake Ave, Morse St	46.780572,-92.093976	City of Duluth		½		½		½	½			★	½	½	★	★★★★★½
S Lake Ave, Sutphin St	46.784198,-92.096431	City of Duluth		½		½		½	½			★	½	½	★	★★★★★½
Mesaba Ave, W 2nd St	46.782265,-92.108159	City of Duluth		★	★	½		★	½						★	★★★★★½
E 2nd St, N 4th Ave E, E 2nd St	46.792123,-92.095348	City of Duluth		½		½		★	½			★	½		★	★★★★★½
E 3rd St, N 7th Ave E	46.795634,-92.092782	City of Duluth		½		½		★	½			★	½		★	★★★★★½
E 7th St, N Lake Ave, E 7th St	46.79164,-92.105799	City of Duluth		½		½		★	½			★		½	★	★★★★★½
E 9th St, N 11th Ave E	46.803465,-92.094328	City of Duluth		½		½		★	½			★		½	★	★★★★★½
E Superior St, N 9th Ave E	46.795533,-92.087041	City of Duluth		½		½		★	½			★		½	★	★★★★★½
W Saint Marie St, Oakland Ave/Kirby Dr	46.822078,-92.083674	City of Duluth		½		½		★	½			★	½		★	★★★★★½
W 1st St, N 23rd Ave W	46.76572,-92.127881	City of Duluth	★			½		★	½			★			★	★★★★★½
N 10th Ave W, 4th St	46.780113,-92.115073	City of Duluth				½		★	½		½	★		½	★	★★★★★½
N 19st Ave W, W 1st St	46.76956,-92.122861	City of Duluth				½		★	½			★	½	½	★	★★★★★½
W College St, Fay Ave	46.81492,-92.080347	City of Duluth				½		★	½			★	½	½	★	★★★★★½
Mesaba Ave, W 3rd St	46.783742,-92.108271	City of Duluth		★	★	½	★	½	★							★★★★★½
Highway 2, Highway 2	46.743918,-92.224251	City of Proctor		½	★	½		½	★			★	½			★★★★★½
Hammond Ave, N 14th St	46.721948,-92.097918	City of Superior		½		½		½	★			★	½		★	★★★★★½
Piedmont Ave, Chambersburg Ave, Chambersburg Ave, Piedmont Ave	46.781529,-92.158568	City of Duluth		½		½		½	★		½	★	½	½		★★★★★½
Hammond Ave, N 8th St	46.729072,-92.097854	City of Superior		★		½		½	★			★			★	★★★★★½
Kenwood Ave, Artavia St	46.817622,-92.10045	City of Duluth		½		½	★	★	★						★	★★★★★½
N 21st St, Hill Ave, Hill Ave, N 21st St	46.713289,-92.076982	City of Superior		½		½	★	★	★				½	½		★★★★★½
N 59th Ave W, N 59th Ave W, Cody St, Cody St	46.741309,-92.171944	City of Duluth				½	★	★	★					½	★	★★★★★½
S 5th Ave W, S 5th Ave W, Harbor Dr	46.780278,-92.100843	City of Duluth				½	★	★	★				½		★	★★★★★½
Grand Ave, Winter St	46.727873,-92.093381	City of Superior					★	★	★			★			★	★★★★★½
S 21st Ave E, S 21st Ave E, London Rd, London Rd	46.804654,-92.069151	City of Duluth		★	★	½		★	★				½			★★★★★½
E 4th St, N 3rd Ave E, E 4th St	46.792491,-92.098828	City of Duluth		½		½		★	★			★			★	★★★★★½
E 9th St, N 10th Ave E	46.802489,-92.095619	City of Duluth		½		½		★	★			★			★	★★★★★½
E 9th St, N 12th Ave E	46.804428,-92.093084	City of Duluth		½		½		★	★			★	½	½		★★★★★½
E 9th St, N 13th Ave E	46.805381,-92.091834	City of Duluth		½		½		★	★			★	½	½		★★★★★½
N 1st St E, E 4th St, N 1st Ave E	46.790576,-92.10133	City of Duluth		½		½		★	★			★			★	★★★★★½
N 40th Ave W, W Eighth St	46.755102,-92.156499	City of Duluth		½		½		★	★			★			★	★★★★★½
W 3rd St, N 3rd Ave W	46.786104,-92.105142	City of Duluth		½		½		★	★			★			★	★★★★★½
E 1st St, N 7th Ave E	46.794289,-92.090599	City of Duluth				½		★	★			★	½		★	★★★★★½

Safety Emphasis Area 4

Urban Intersections
Bike Ped Crashes

Road Name	Lat/Long	Municipality	Number of Pedestrian Crashes	Mainline AADT	Traffic Control	Posted Speed Limit of Major Roadway	Number of Thru Lanes on Major Roadway	Presence of Bicycle Facilities on the Major Roadway	Length of Pedestrian Exposure on Major Roadway	Presence of Sidewalk on the Major Roadway	Presence of Lighting	Presence of On-Street Parking on Major Roadway	Presence of Pedestrian Generator	Presence of MTU Bus Stop	Disadvantaged Neighborhood	Total Stars
E 1st St, N 8th Ave E	46.795233,-92.089355	City of Duluth				½		★	★			★	½		★	★★★★★½
E 3rd St, N 4th Ave E	46.792813,-92.096418	City of Duluth				½		★	★			★	½		★	★★★★★½
N 46th Ave W, W 4th St	46.746638,-92.160269	City of Duluth				½		★	★			★	½		★	★★★★★½
N 4th Ave W, W 4th St, N 4th Ave W	46.78581,-92.10751	City of Duluth				½		★	★			★		½	★	★★★★★½
N 5th Ave W, W 1st St	46.782879,-92.10547	City of Duluth				½		★	★			★	½		★	★★★★★½
Ramsey St, N 51st Ave W	46.738909,-92.16119	City of Duluth				½		★	★			★		½	★	★★★★★½
Ramsey St, N 54th Ave W	46.738947,-92.165137	City of Duluth				½		★	★			★	½		★	★★★★★½
W 4th St, N 3rd Ave W	46.786766,-92.10627	City of Duluth				½		★	★			★	½		★	★★★★★½
London Rd, S 26th Ave E, London Rd	46.808921,-92.06139	City of Duluth		★	★	½	★		★				½			★★★★★½
Railroad St, Railroad St, Harbor Dr	46.783758,-92.098405	City of Duluth		½		½	★		★	½			½		★	★★★★★½
Belknap St, Clough Ave	46.720605,-92.0909	City of Superior		★		½	★		★				½		★	★★★★★½
Belknap St, Weeks Ave	46.720613,-92.091963	City of Superior		★		½	★		★				½		★	★★★★★½
E 2nd St - Hwy 53/2, E 2nd St - Hwy 53/2, 18th Ave E	46.710717,-92.052552	City of Superior		★	★	★	★		★							★★★★★½
Tower Ave, Tower Ave, 61st St	46.665781,-92.104338	City of Superior		★	★	½			★			★	½			★★★★★½
London Rd, S 12th Ave E, London Rd	46.797725,-92.082174	City of Duluth	★	½		½			★			★			★	★★★★★½
E 4th St, N 12th Ave E	46.801087,-92.087656	City of Duluth		½		½			★			★	½	½	★	★★★★★½
E 4th St, N 14th Ave E	46.802992,-92.085181	City of Duluth		½		½			★			★	½	½	★	★★★★★½
Garfield Ave, Garfield Ave, Railroad St	46.768204,-92.11568	City of Duluth		½	★	½	★	★							★	★★★★★½
Garfield Ave, Helberg Dr	46.763321,-92.11191	City of Duluth		½	★	½	★	★							★	★★★★★½
Kenwood Ave, Niagara St	46.818515,-92.100437	City of Duluth		½		½	★	★					½	½	★	★★★★★½
N 40th Ave W, W 2nd St	46.75096,-92.150256	City of Duluth		½		½	★	★			★				★	★★★★★½
W Superior St/W 1st St, N 42nd Ave W	46.748315,-92.151774	City of Duluth		½		½	★	★		★					★	★★★★★½
Tower Ave, N 45th St	46.685588,-92.104197	City of Superior		★		★	★	★							★	★★★★★½
Joshua Ave, Frontage Rd	46.804839,-92.153277	City of Duluth				★	★	★		★	★					★★★★★½
S 3rd Ave W, W Michigan St	46.783747,-92.101337	City of Duluth			★	½		★				★	½		★	★★★★★½
S 4th Ave W, W Michigan St	46.782743,-92.102601	City of Duluth	★			½		★				★	½		★	★★★★★½
N 59th Ave W, Roosevelt St	46.736405,-92.171976	City of Duluth				½		★			★	★	½		★	★★★★★½
N 28th St, Hill Ave	46.70617,-92.077003	City of Superior		½	★	★	★							½	★	★★★★★½
N 21st Ave W, W 1st St, W 1st St, N 21st Ave W	46.767626,-92.125386	City of Duluth	★			½		★	½			★			★	★★★★★½
4th St, TH 194/Mesaba Ave	46.785267,-92.10836	City of Duluth	★	★		½	★	½	★							★★★★★½
Tower Ave, N 8th St	46.7291,-92.103871	City of Superior	★	½					★			★	½		★	★★★★★½
Banks Ave, N 28th St, N 28th St	46.706216,-92.105571	City of Superior	★	½				★				★	½		★	★★★★★½
E 1st St, N 14th Ave E	46.800991,-92.081891	City of Duluth		½		½		½	½			★	½		★	★★★★½
E 1st St, N 10th Ave E, E 1st St	46.797107,-92.086882	City of Duluth			★	½		★	½				½		★	★★★★½
Hammond Ave, N 12th St, N 12th St	46.724251,-92.097855	City of Superior		½		½		½	★			★			★	★★★★½
E 1st St, E 1st St, N 12th Ave E	46.799049,-92.084379	City of Duluth				½		½	★			★	½		★	★★★★½
N 46th Ave W, W 6th St	46.747997,-92.162349	City of Duluth				½		★	★			★			★	★★★★½
N 5th St, Grand Ave, N 5th St	46.732518,-92.093324	City of Superior						★	★			★	½		★	★★★★½
London Rd, S 13th Ave E	46.798499,-92.080666	City of Duluth		½		½			★			★	½		★	★★★★½
N 28th Ave, N 28th Ave, Hammond Ave, Hammond Ave	46.706204,-92.097973	City of Superior		½	★	★			★						★	★★★★½
N 12th St, N 12th St, Tower Ave, Tower Ave	46.724274,-92.103911	City of Superior		½					★			★	½	½	★	★★★★½
Tower Ave, N 14th St, Tower Ave	46.721963,-92.103936	City of Superior		½					★			★	½	½	★	★★★★½
E 2nd St, N 9th Ave E	46.796874,-92.089187	City of Duluth		½		½		★				★	½		★	★★★★½
E 2nd St, N 14th Ave E	46.801641,-92.08296	City of Duluth				½		★	½			★	½		★	★★★★½
E Superior St, N 19th Ave E	46.805058,-92.07458	City of Duluth				½		½	★			★	½		★	★★★★½
London Rd, 45th Ave E	46.82422,-92.032798	City of Duluth		★		½		½	½			★			★	★★★★½
E Superior St, E Superior St, N 40th Ave E	46.82627,-92.042322	City of Duluth		½	★	½		★	½				½	½		★★★★½
N 21st Ave E, E 2nd St	46.808337,-92.074346	City of Duluth		★	★	½		★	½					½		★★★★½
N 21st Ave E, E Superior St, S 21st Ave E, E Superior St	46.806973,-92.072026	City of Duluth		★	★	½		★	½					½		★★★★½
E 3rd St, N 2nd Ave E	46.790871,-92.098933	City of Duluth		½		½		★	½			★			★	★★★★½
E 3rd St, N 8th Ave E	46.796586,-92.09152	City of Duluth		½		½		★	½			★			★	★★★★½
E 3rd St, N 9th Ave E	46.797545,-92.090281	City of Duluth		½		½		★	½			★			★	★★★★½
W College St, Snelling Ave	46.81492,-92.084658	City of Duluth	★			½		★	½			★	½			★★★★½
E 1st St, N 4th Ave E	46.791476,-92.094326	City of Duluth				½		★	½			★	½		★	★★★★½
E 2nd St, E 2nd St, N 12th Ave E	46.799738,-92.085468	City of Duluth				½		★	½			★	½		★	★★★★½
E 3rd St, N 14th Ave E	46.802304,-92.084029	City of Duluth				½		★	½			★	½		★	★★★★½
E 3rd St, N 14th Ave E	46.802278,-92.084063	City of Duluth				½		★	½			★	½		★	★★★★½

Safety Emphasis Area 4

Urban Intersections
Bike Ped Crashes

Road Name	Lat/Long	Municipality	Number of Pedestrian Crashes	Mainline AADT	Traffic Control	Posted Speed Limit of Major Roadway	Number of Thru Lanes on Major Roadway	Presence of Bicycle Facilities on the Major Roadway	Length of Pedestrian Exposure on Major Roadway	Presence of Sidewalk on the Major Roadway	Presence of Lighting	Presence of On-Street Parking on Major Roadway	Presence of Pedestrian Generator	Presence of MTU Bus Stop	Disadvantaged Neighborhood	Total Stars
N 1st Ave E, E 1st St, E 1st St	46.788585,-92.098036	City of Duluth				½		★	½			★	½		★	★★★★½
N 1st Ave W, W 1st St	46.786681,-92.10053	City of Duluth				½		★	½			★	½		★	★★★★½
N 2nd Ave E, E 1st St	46.789549,-92.096808	City of Duluth				½		★	½			★	½		★	★★★★½
Ramsey St, N 52nd Ave W	46.738942,-92.162462	City of Duluth				½		★	½			★		½	★	★★★★½
W 1st St, N 22nd Ave W	46.766673,-92.126645	City of Duluth				½		★	½			★	½		★	★★★★½
W 1st St, N 2nd Ave W, W 1st St	46.785753,-92.101771	City of Duluth				½		★	½			★	½		★	★★★★½
W 1st St, N 3rd Ave W	46.78482,-92.103016	City of Duluth				½		★	½			★	½		★	★★★★½
W 3rd St, N 1st Ave W	46.788012,-92.102688	City of Duluth				½		★	½			★	½		★	★★★★½
Catlin Ave, N 6th St	46.731354,-92.087434	City of Superior						★	½			★	½	½	★	★★★★½
N 12th St, N 12th St, Catlin Ave, Catlin Ave	46.724205,-92.087463	City of Superior						★	½			★	½	½	★	★★★★½
N 21st Ave W, S 21st Ave W, W Superior St, W Superior St	46.766949,-92.124254	City of Duluth		½		½			½			★	½	½	★	★★★★½
W Arrowhead Rd, Dodge Ave	46.822174,-92.097707	City of Duluth		★		½	★	½	★				½			★★★★½
Grand Ave, Broadway St	46.726586,-92.093381	City of Superior					★	½	★			★			★	★★★★½
Grand Ave, E McCuen St, Grand Ave	46.657238,-92.226382	#N/A		½		½		½	★			★	½	½		★★★★½
Hammond Ave, N 11th St	46.725407,-92.097878	City of Superior		½		½		½	★			★			★	★★★★½
Hammond Ave, N 13th St	46.723104,-92.097902	City of Superior		½		½		½	★			★			★	★★★★½
Grand Ave, N 41st Ave W	46.750689,-92.152604	City of Duluth		★		½		½	★			★	½			★★★★½
Haines Rd, Haines Rd, Piedmont Ave, Hermantown Rd	46.789289,-92.174826	City of Duluth		½	★	★		½	★				½			★★★★½
Haines Rd, Haines Rd, Anderson Rd	46.793058,-92.174832	City of Duluth		★	★	★		½	★							★★★★½
Maple Grove Rd, Maple Grove Rd, Ugstad Rd, Ugstad Rd	46.807621,-92.238336	City of Hermantown		½		★		½	★			★	½			★★★★½
Hill Ave, N 24th St	46.709703,-92.077011	City of Superior		½		½	★	★	★					½		★★★★½
Mesaba Ave, Mesaba Ave, N 4th Ave W	46.786139,-92.108175	City of Duluth		★		½	★	★	★							★★★★½
Skyline Pkwy, TH 194/Mesaba Ave, E 9th St, Mesaba Ave	46.793681,-92.10707	City of Duluth		★		½	★	★	★							★★★★½
N 21st Ave E, E 4th St, E 4th St	46.809642,-92.076468	City of Duluth		★	★	½		★	★							★★★★½
W Arrowhead Rd, Carver Ave/Hartley Rd	46.825861,-92.07944	City of Duluth		★	★	½		★	★							★★★★½
E 8th St/E 9th St, N 15th Ave E/Chester Park Dr	46.807095,-92.088084	City of Duluth		½		½		★	★			★		½		★★★★½
N 40th Ave W, W Michigan St, N 40th Ave W	46.748896,-92.147232	City of Duluth		½		½		★	★				½		★	★★★★½
Ogden Ave, Ogden Ave, N 21st St	46.713407,-92.102445	City of Superior		½		½		★	★				½		★	★★★★½
W Superior St, 39th Ave W	46.750527,-92.14683	City of Duluth		½		½		★	★				½		★	★★★★½
23rd Ave E, E 5th St	46.703738,-92.049035	City of Superior				½		★	★			★	½	½		★★★★½
Crosley Ave, 47th Ave E	46.841267,-92.029455	City of Duluth				½		★	★	★		★				★★★★½
N 19th Ave E, E 8th St, N 19th Ave E	46.810418,-92.083267	City of Duluth				½		★	★			★	½	½		★★★★½
N 46th Ave W, W 5th St	46.747316,-92.16132	City of Duluth				½		★	★			★			★	★★★★½
N 59th Ave W, Nicollet St	46.735124,-92.171989	City of Duluth				½		★	★			★			★	★★★★½
W 1st St, N 25th Ave W	46.763818,-92.130363	City of Duluth				½		★	★			★			★	★★★★½
W 1st St, N 26th Ave W	46.762861,-92.131604	City of Duluth				½		★	★			★			★	★★★★½
W Michigan St, S 29th Ave W	46.758964,-92.133612	City of Duluth				½		★	★	½			½		★	★★★★½
Broadway St, Banks Ave	46.726615,-92.105425	City of Superior						★	★			★	½		★	★★★★½
Broadway St, Hughitt Ave	46.726605,-92.099412	City of Superior						★	★			★		½	★	★★★★½
Grand Ave, Lamborn Ave	46.720238,-92.093426	City of Superior						★	★		½	★			★	★★★★½
N 12th St, N 12th St, Ogden Ave, Ogden Ave	46.724269,-92.102369	City of Superior						★	★			★	½		★	★★★★½
N 13th St, Ogden Ave, Ogden Ave	46.723106,-92.102378	City of Superior						★	★			★	½		★	★★★★½
N 16th St, Banks Ave	46.719298,-92.105459	City of Superior						★	★			★	½		★	★★★★½
N 3rd St, Tower Ave	46.735183,-92.103796	City of Superior						★	★			★	½		★	★★★★½
Belknap St, Cedar Ave	46.720576,-92.078679	City of Superior		½		½	★		★				½		★	★★★★½
Belknap St, Pine Ave	46.720592,-92.081264	City of Superior		½		½	★		★				½		★	★★★★½
Belknap St, Fisher Ave	46.720597,-92.089026	City of Superior		★		½	★		★				½	½		★★★★½
N 28th St, Weeks Ave	46.706174,-92.092074	City of Superior		½		★	★		★						★	★★★★½
E 4th St, N 13th Ave E	46.802025,-92.08641	City of Duluth		½		½			★			★	½		★	★★★★½
London Rd, S 14th Ave E, London Rd	46.799193,-92.079391	City of Duluth		½		½			★			★	½		★	★★★★½
N 24th Ave W, S 24th Ave W, W Superior St, W Superior St	46.764095,-92.128014	City of Duluth		½		½			★			★	½		★	★★★★½
W Superior St, 28th Ave W	46.760298,-92.133003	City of Duluth		½		½			★			★	½		★	★★★★½
N 28th Ave, N 28th Ave, Catlin Ave	46.706176,-92.08762	City of Superior		½	★	★			★						★	★★★★½
Rice Lake Rd, Pecan Ave	46.805201,-92.112551	City of Duluth		½		★			★	★					★	★★★★½
Hammond Ave, N 19th St	46.715849,-92.097957	City of Superior		½					★		½	★	½		★	★★★★½
Hammond Ave, N 19th St	46.716099,-92.097949	City of Superior		½					★		½	★	½		★	★★★★½
Haines Rd, W SKyline Pkwy, Haines Rd	46.758685,-92.163991	City of Duluth		½		½	★	½			★				★	★★★★½

Safety Emphasis Area 4

Urban Intersections
Bike Ped Crashes

Road Name	Lat/Long	Municipality	Number of Pedestrian Crashes	Mainline AADT	Traffic Control	Posted Speed Limit of Major Roadway	Number of Thru Lanes on Major Roadway	Presence of Bicycle Facilities on the Major Roadway	Length of Pedestrian Exposure on Major Roadway	Presence of Sidewalk on the Major Roadway	Presence of Lighting	Presence of On-Street Parking on Major Roadway	Presence of Pedestrian Generator	Presence of MTU Bus Stop	Disadvantaged Neighborhood	Total Stars
Midway Rd, Helm Rd, Midway Rd	46.872755,-92.280443	Canosia Township				★		½		★	★	★				★★★★½
Kenwood Ave, E Skyline Pkwy, E Skyline Pkwy	46.805533,-92.099896	City of Duluth		½		½	★	★						½	★	★★★★½
W Michigan St, S 39th Ave W	46.749852,-92.145812	City of Duluth		½		½	★	★		½					★	★★★★½
E Central Entrance, Harding Ave	46.800383,-92.126644	City of Duluth		★		½	★	★							★	★★★★½
E Central Entrance, Myrtle Pl	46.800389,-92.13095	City of Duluth		★		½	★	★							★	★★★★½
E Central Entrance, Stroll Ave	46.800364,-92.124258	City of Duluth		★		½	★	★							★	★★★★½
N Central Entrance, N 4th Ave E	46.797682,-92.1045	City of Duluth		★		½	★	★							★	★★★★½
W Central Entrance, S Robin Ave	46.800527,-92.142686	City of Duluth		★		½	★	★					½	½		★★★★½
Mountain Shadow Dr, Mall Dr	46.805877,-92.165195	City of Duluth				½	★	★			★		½	½		★★★★½
W College St, Kirby Dr/N 20th Ave E	46.814922,-92.08849	City of Duluth				½	★	★				★	½	½		★★★★½
E 2nd St - Hwy 53/2, 31st Ave E, E 2nd St - Hwy 53/2	46.697325,-92.035494	City of Superior		★		★	★	★					½			★★★★½
Arrowhead Rd, Arrowhead Rd, Swan Lake Rd	46.822025,-92.149924	City of Duluth		★		★	★	★			½					★★★★½
E 2nd St, N 8th Ave E	46.795913,-92.090431	City of Duluth		½		½		★				★	½		★	★★★★½
E 9th St, E 8th St	46.806895,-92.089599	City of Duluth		½		½		★			½	★			★	★★★★½
E 9th St, N 8th Ave E	46.800617,-92.098062	City of Duluth		½		½		★				★	½		★	★★★★½
Mike Colalillo Dr, Wadena St	46.740018,46.738909, -92.161190	City of Duluth		½		½		★		★		★		½		★★★★½
W Saint Marie St, Bayview Ave	46.822048,-92.081102	City of Duluth		½		½		★				★	½		★	★★★★½
W Saint Marie St, University Dr	46.822048,-92.081102	City of Duluth		½		½		★				★	½		★	★★★★½
S 27th Ave W, Helm St	46.759632,-92.129105	City of Duluth		★		½		★					½	½	★	★★★★½
Junction Ave, E Niagara St	46.818527,-92.090513	City of Duluth				½		★				★	½	½	★	★★★★½
N 11th Ave E, E Skyline Pkwy/Denney Dr	46.805744,-92.099063	City of Duluth				½		★		★	★				★	★★★★½
W Michigan St, S 23rd Ave W	46.764663,-92.126162	City of Duluth				½		★			½	★	½		★	★★★★½
W Superior St, 33rd Ave W	46.755575,-92.139147	City of Duluth				½				★	★	★			★	★★★★½
Grand Ave, N 42nd Ave W	46.749734,-92.153957	City of Duluth		★		½		½				★	½	½		★★★★
Glenwood St, Crosley Ave	46.840389,-92.031668	City of Duluth		½		½		½	½			★	½	½		★★★★
E 3rd St, N 11th Ave E	46.799438,-92.087786	City of Duluth				½		★	½			★			★	★★★★
N 1st St E, E 9th St	46.793911,-92.106758	City of Duluth				½		★	½			★			★	★★★★
N 6th Ave W, N 6th Ave W, W 1st St	46.781907,-92.106778	City of Duluth				½		★	½			★			★	★★★★
S 14th Ave E, Jefferson St	46.799906,-92.080173	City of Duluth				½		★	½			★			★	★★★★
W Michigan St, S 1st Ave W, S 1st Ave W, W Michigan St	46.78568,-92.098897	City of Duluth				½		★	½			★			★	★★★★
London Rd, S 36th Ave E, London Rd	46.818586,-92.048526	City of Duluth		★		★		★	½		½					★★★★
Banks Ave, N 14th St, Banks Ave	46.721954,-92.105461	City of Superior						★	½			★	½		★	★★★★
N 12th St, Clough Ave	46.724226,-92.090433	City of Superior						★	½			★	½		★	★★★★
N 13th St, Banks Ave, Banks Ave	46.723113,-92.105454	City of Superior						★	½			★	½		★	★★★★
N 5th St, Catlin Ave, Catlin Ave	46.7325,-92.087422	City of Superior						★	½	½		★			★	★★★★
N 5th St, Cumming Ave	46.732535,-92.096281	City of Superior						★	½			★	½		★	★★★★
N 5th St, Fisher Ave	46.732508,-92.08891	City of Superior						★	½			★	½		★	★★★★
Weeks Ave, Grand Ave/N 16th St	46.719263,-92.091954	City of Superior						★	½			★	½		★	★★★★
Weeks Ave, N 19th St	46.71606,-92.091997	City of Superior						★	½			★	½		★	★★★★
E 4th St, N 11th Ave E	46.800126,-92.088898	City of Duluth		½		½			½			★	½		★	★★★★
Glenwood St, Glenwood St, N 43rd Ave E	46.840383,-92.037093	City of Duluth		½		½			½	½		★	½	½		★★★★
Loberg Ave, Loberg Ave, Market St	46.813059,-92.180037	City of Hermantown		½	★	½		½	★					½		★★★★
Decker Rd, Piedmont Ave, Piedmont Ave	46.784905,-92.163959	City of Duluth		½		½		½	★			★		½		★★★★
E Superior St, E Superior St, S 26th Ave E	46.811732,-92.065909	City of Duluth		½		½		½	★			★		½		★★★★
E Superior St, S 36th Ave E, N 36th Ave E, E Superior St	46.821286,-92.052868	City of Duluth		½		½		½	★			★		½		★★★★
Woodland Ave, Woodland Ave	46.810829,-92.078289	City of Duluth		★		½		½	★			★				★★★★
5th St, 5th St, N 2nd Ave, N 2nd Ave	46.747001,-92.222351	City of Proctor				½		½	★			★	½	½		★★★★
N 21st Ave W, W 3rd St	46.768974,-92.127573	City of Duluth				½		½	★			★			★	★★★★
Haines Rd, Haines Rd, Morris Thomas Rd, Morris Thomas Rd	46.778579,-92.174773	City of Duluth		½		★		½	★			★				★★★★
Maple Grove Rd, Maple Grove Rd, Lavaque Rd, Lavaque Rd	46.807638,-92.217105	City of Hermantown		½		★		½	★			★				★★★★
Grand Ave, N 13th St	46.72307,-92.093419	City of Superior						½	★			★	½		★	★★★★
Grand Ave, N 14th St	46.721942,-92.09343	City of Superior						½	★			★	½		★	★★★★
Winter St, Banks Ave	46.727905,-92.105413	City of Superior						½	★			★		½	★	★★★★
Winter St, Winter St, Ogden Ave	46.727896,-92.102343	City of Superior						½	★			★	½		★	★★★★
E 9th St, N 14th Ave E	46.806329,-92.090604	City of Duluth		½		½		★	★			★				★★★★
E St Marie St, E St Marie St, Wallace Ave, Wallace Ave	46.822117,-92.069733	City of Duluth		½		½		★	★						★	★★★★
N 40th Ave W, Oneota St, Oneota St	46.748163,-92.146141	City of Duluth		½		½		★	★						★	★★★★

Safety Emphasis Area 4

Urban Intersections
Bike Ped Crashes

Road Name	Lat/Long	Municipality	Number of Pedestrian Crashes	Mainline AADT	Traffic Control	Posted Speed Limit of Major Roadway	Number of Thru Lanes on Major Roadway	Presence of Bicycle Facilities on the Major Roadway	Length of Pedestrian Exposure on Major Roadway	Presence of Sidewalk on the Major Roadway	Presence of Lighting	Presence of On-Street Parking on Major Roadway	Presence of Pedestrian Generator	Presence of MTU Bus Stop	Disadvantaged Neighborhood	Total Stars
24th Ave E, E 5th St, E 5th St	46.702711,-92.047734	City of Superior				½		★	★			★	½			★★★★
E 8th St, N 17th Ave E	46.808525,-92.085759	City of Duluth				½		★	★			★		½		★★★★
W College St, University Dr/Lawn St	46.814926,-92.086086	City of Duluth				½		★	★			★	½			★★★★
W Michigan St, Carlton St, Carlton St, W Superior St	46.756997,-92.137297	City of Duluth				½		★	★	½					★	★★★★
Highland Ave, Vinland St, W SKyline Pkwy, Getchell Rd	46.750383,-92.187843	City of Duluth		½		★		★	★	½						★★★★
N 21st St, Banks Ave, Banks Ave, N 21st St	46.713417,-92.105519	City of Superior		½				★	★		½				★	★★★★
Broadway St, John Ave	46.726613,-92.100878	City of Superior						★	★			★			★	★★★★
Catlin Ave, Faxon St	46.711549,-92.087598	City of Superior						★	★			★	½	½		★★★★
Hammond Ave, N 34th St	46.698866,-92.098094	City of Superior						★	★			★			★	★★★★
N 11th St, Banks Ave, Banks Ave	46.725426,-92.105435	City of Superior						★	★			★			★	★★★★
Ogden Ave, N 14th St	46.721976,-92.102387	City of Superior						★	★			★			★	★★★★
Winter St, Baxter Ave	46.727878,-92.094846	City of Superior						★	★			★			★	★★★★
Winter St, Clough Ave	46.727865,-92.090415	City of Superior						★	★			★			★	★★★★
Winter St, Cumming Ave	46.727883,-92.096313	City of Superior						★	★			★			★	★★★★
Winter St, Hughitt Ave	46.727894,-92.099395	City of Superior						★	★			★			★	★★★★
Winter St, John Ave	46.727896,-92.100868	City of Superior						★	★			★			★	★★★★
Winter St, Weeks Ave	46.727871,-92.091893	City of Superior						★	★			★			★	★★★★
Belknap St, Hill Ave	46.720615,-92.077228	City of Superior		½	★	½	★		★							★★★★
E 2nd St - Hwy 53/2, Marina Dr, E 2nd St - Hwy 53/2	46.718679,-92.063054	City of Superior		★		★	★		★							★★★★
Junction Ave, W College St, W College St, N 19th Ave E	46.814943,-92.090594	City of Duluth		½	★	½			★				½	½		★★★★
W Superior St, 22nd Ave W	46.765886,-92.125705	City of Duluth		½		½			★			★			★	★★★★
W Superior St, 29th Ave W	46.759334,-92.134264	City of Duluth		½		½			★			★			★	★★★★
Tower Ave, N 58th St, Tower Ave	46.669482,-92.104311	City of Superior		★		½			★			★	½			★★★★
N 19st Ave W, S 19st Ave W, W Superior St	46.768848,-92.121764	City of Duluth				½			★			★	½		★	★★★★
Railroad St, S 5th Ave W	46.780668,-92.102358	City of Duluth				½			★	★			½		★	★★★★
Maple Grove Rd, Maple Grove Rd, Stebner Rd, Stebner Rd	46.807653,-92.195884	City of Hermantown		½	★	★			★				½			★★★★
Rice Lake Rd, Rice Lake Rd, E 13th St	46.799962,-92.107071	City of Duluth		★		★			★	½	½					★★★★
N 11th St, Tower Ave, Tower Ave	46.725427,-92.103906	City of Superior		½					★			★	½		★	★★★★
N 13th St, N 13th St, Tower Ave, Tower Ave	46.723112,-92.103924	City of Superior		½					★			★	½		★	★★★★
Tower Ave, N 4th St	46.733845,-92.103842	City of Superior		½					★			★	½		★	★★★★
Tower Ave, N 6th St	46.731414,-92.103864	City of Superior		½					★			★	½		★	★★★★
Tower Ave, N 7th St	46.730245,-92.103874	City of Superior		½					★			★	½		★	★★★★
Martin Rd, Martin Rd, Arnold Rd, Arnold Rd	46.865513,-92.090258	City of Duluth		½		★		½		★		★				★★★★
Kenwood Ave, Benedictine Dr	46.81483,-92.100493	City of Duluth		½		½	★	★							★	★★★★
W Central Entrance, Oregon Ave	46.800465,-92.13407	City of Duluth		★		½	★	★					½			★★★★
Woodland Ave, W College St	46.814879,-92.07827	City of Duluth		★		½	★	★						½		★★★★
E Superior St, N 8th Ave E	46.794623,-92.088431	City of Duluth		½		½		★					½	½	★	★★★★
Mike Colalillo Dr, Ramsey St	46.738724,-92.160878	City of Duluth		½		½		★				★			★	★★★★
W Michigan St, W Michigan St, W Superior St	46.75082,-92.144494	City of Duluth		½		½		★		★					★	★★★★
Carver Ave, Halsey St	46.824358,-92.079348	City of Duluth				½		★			★	★		½		★★★★
E 2nd St, N 11th Ave E	46.798777,-92.086721	City of Duluth				½		★				★	½		★	★★★★
E Michigan St, S 1st Ave E, E Michigan St	46.787572,-92.096417	City of Duluth				½		★				★	½		★	★★★★
E Michigan St, S 2nd Ave E, E Michigan St	46.788566,-92.095023	City of Duluth				½		★				★	½		★	★★★★
S 24th Ave W, W Michigan St, W Michigan St	46.763685,-92.127383	City of Duluth				½		★				★		½	★	★★★★
S 3rd Ave E, E Michigan St	46.789507,-92.093859	City of Duluth				½		★				★	½		★	★★★★
N 28th St, Spartan Rd	46.706074,-92.083263	City of Superior		½		★		★					½		★	★★★★
Henry Cohen Dr, N 45th St	46.685698,-92.105911	City of Superior						★		★	★				★	★★★★
W Michigan St, W Superior St, W Michigan St	46.773974,-92.113991	City of Duluth		½		½	★				½		½		★	★★★★
E Superior St, 47th Ave E, 47th Ave E	46.82925,-92.029228	City of Duluth		½		½						★	½	½	★	★★★★
34th Ave E, E Superior St	46.819385,-92.0554	City of Duluth	★	½		½		½				★		½		★★★★
60th Ave E, 60th Ave E, E Superior St, E Superior St	46.838428,-92.009233	City of Duluth		½		½		½	½			★		½		★★★½
N 16th St, Ogden Ave, Ogden Ave	46.71931,-92.102397	City of Superior						★				★	½		★	★★★½
N 5th St, Baxter Ave	46.73253,-92.094814	City of Superior						★	½			★			★	★★★½
Hammond Ave, Lincoln St	46.71431,-92.097966	City of Superior		½					★			★			★	★★★½
Glenwood St, 47th Ave E, 47th Ave E	46.840387,-92.029286	City of Duluth		½		½		½	½			★		½		★★★½
N 2nd Ave, N 2nd Ave, 2nd St, 2nd St	46.743923,-92.22235	City of Proctor				½		½	½			★	½	½		★★★½
W Skyline Pkwy, N 27th Ave W	46.770619,-92.147025	City of Duluth				½		½	½	★		★				★★★½

Safety Emphasis Area 4

Urban Intersections
Bike Ped Crashes

Road Name	Lat/Long	Municipality	Number of Pedestrian Crashes	Mainline AADT	Traffic Control	Posted Speed Limit of Major Roadway	Number of Thru Lanes on Major Roadway	Presence of Bicycle Facilities on the Major Roadway	Length of Pedestrian Exposure on Major Roadway	Presence of Sidewalk on the Major Roadway	Presence of Lighting	Presence of On-Street Parking on Major Roadway	Presence of Pedestrian Generator	Presence of MTU Bus Stop	Disadvantaged Neighborhood	Total Stars
E Superior St, N 24th Ave E	46.809858,-92.068378	City of Duluth		½		½		★	½			★				★★★½
E 8th St, N 20th Ave E	46.811369,-92.082045	City of Duluth				½		★	½			★	½			★★★½
MN-23, Oldenberg Pkwy	46.660836,-92.279964	City of Duluth				½		★	½	★	½					★★★½
N 10th Ave E, E 5th St	46.799835,-92.091219	City of Duluth				½		★	½				½		★	★★★½
N 19th Ave E, W Kent Rd	46.812863,-92.087213	City of Duluth				½		★	½			★		½		★★★½
Raleigh St, S 59th Ave W, S 59th Ave W, Raleigh St	46.731217,-92.172038	City of Duluth				½		★	½			★	½			★★★½
N 12th St, Banks Ave, Banks Ave	46.724275,-92.105443	City of Superior						★	½			★			★	★★★½
N 12th St, Weeks Ave	46.724226,-92.091932	City of Superior						★	½			★			★	★★★½
N 5th St, Clough Ave	46.732515,-92.090391	City of Superior						★	½			★			★	★★★½
N 5th St, Weeks Ave	46.732517,-92.091858	City of Superior						★	½			★			★	★★★½
Calvary Rd, Woodland Ave, Woodland Ave	46.850796,-92.081401	City of Duluth		½		½			½			★	½	½		★★★½
E Superior St, N 43rd Ave E, N 43rd Ave E	46.82629,-92.036653	City of Duluth		½		½		½	★			★				★★★½
Highland Ave, Highland Ave, N 59th Ave W	46.748367,-92.171957	City of Duluth		½		½		½	★			★				★★★½
Highway 2, Highway 2, N 2nd Ave	46.741341,-92.222349	City of Proctor		½		½		½	★	★						★★★½
4th St, N Ugstad Rd	46.745836,-92.238026	City of Proctor				½		½	★	½		★				★★★½
Boundary Ave, Boundary Ave, 2nd St	46.743942,-92.217122	City of Duluth				½		½	★			★		½		★★★½
Grand Ave, N 11th St	46.72538,-92.0934	City of Superior						½	★			★			★	★★★½
N 12th St, N 12th St, Grand Ave	46.724254,-92.093392	City of Superior						½	★			★			★	★★★½
W Saint Marie St, Carver Ave, W Saint Marie St	46.82214,-92.079322	City of Duluth		½		½		★	★				½			★★★½
N 21st Ave E, E 1st St	46.807646,-92.073203	City of Duluth		★		½		★	★							★★★½
N 21st Ave E, E 3rd St	46.80895,-92.075328	City of Duluth		★		½		★	★							★★★½
E 4th St, 34th Ave E	46.822017,-92.059719	City of Duluth				½		★	★			★				★★★½
N 24th Ave W, N 24th Ave W, W 1st St, W 1st St	46.764774,-92.129108	City of Duluth				½		★	★						★	★★★½
N 59th Ave W, N 59th Ave W, W Eighth St	46.744014,-92.171927	City of Duluth				½		★	★			★				★★★½
S 37 1/2 Ave W, Oneota St	46.750561,-92.142716	City of Duluth				½		★	★						★	★★★½
W Eighth St, N 57th Ave W	46.74594,-92.169237	City of Duluth				½		★	★			★				★★★½
W Eighth St, N Central Ave, W Eighth St, N Central Ave	46.747898,-92.166502	City of Duluth				½		★	★			★				★★★½
N 21st St, Oakes Ave	46.713441,-92.107007	City of Superior		½				★	★						★	★★★½
Catlin Ave, Lincoln St	46.714276,-92.087583	City of Superior						★	★			★	½			★★★½
Belknap St, Elm Ave	46.720569,-92.079969	City of Superior		½		½	★		★				½			★★★½
18th Ave E, E 5th St, 18th Ave E, E 5th St	46.708909,-92.055623	City of Superior		½	★		★		★							★★★½
N 19th Ave E, E 4th St, N 19th Ave E, E 4th St	46.807745,-92.078886	City of Duluth		½		½			★			★	½			★★★½
Hammond Ave, Harrison St	46.718802,-92.097933	City of Superior		½					★			★			★	★★★½
Hammond Ave, N 16th St	46.71929,-92.097927	City of Superior		½					★			★			★	★★★½
Hammond Ave, N 16th St	46.719677,-92.097917	City of Superior		½					★			★			★	★★★½
Hammond Ave, N 17th St	46.717899,-92.097949	City of Superior		½					★			★			★	★★★½
Hammond Ave, N 17th St	46.718148,-92.097947	City of Superior		½					★			★			★	★★★½
Hammond Ave, N 18th St	46.717004,-92.097939	City of Superior		½					★			★			★	★★★½
Hammond Ave, N 20th St	46.714699,-92.097961	City of Superior		½					★			★			★	★★★½
Hammond Ave, N 20th St	46.715216,-92.097956	City of Superior		½					★			★			★	★★★½
N 5th St, Tower Ave	46.732549,-92.103835	City of Superior		½					★			★			★	★★★½
E Skyline Pkwy, E Skyline Pkwy, E 13th St	46.801564,-92.104711	City of Duluth		½		½		½				★			★	★★★½
W Arrowhead Rd, Brainerd Ave	46.823766,-92.093496	City of Duluth		★		½		½						½	★	★★★½
Martin Rd, Woodland Ave	46.865482,-92.077029	City of Duluth	★			★		½		★						★★★½
Midway Rd, Midway Rd, Martin Rd	46.865502,-92.28041	Canosia Township				★		½		★		★				★★★½
Kenwood Ave, Acre St	46.824112,-92.100408	City of Duluth		½		½	★	★			½					★★★½
Kenwood Ave, Lyons St	46.816863,-92.100433	City of Duluth		½		½	★	★			½					★★★½
Kenwood Ave, St Benedict St	46.823132,-92.100425	City of Duluth		½		½	★	★					½			★★★½
Kenwood Ave, Toledo St	46.819406,-92.100434	City of Duluth		½		½	★	★						½		★★★½
S 37 1/2 Ave W, W Michigan St, W Michigan St	46.751256,-92.143861	City of Duluth		½		½		★			½				★	★★★½
W 2nd St, N 6th Ave W	46.782538,-92.107837	City of Duluth		½		½		★					½		★	★★★½
W Redwing St, Maxwell Ave	46.849954,-92.095393	City of Duluth		½		½		★		½		★				★★★½
Burning Tree Rd, Mountain Shadow Dr	46.804684,-92.16828	City of Duluth				½		★			★		½	½		★★★½
Cirrus Dr, Airport Rd	46.837487,-92.205139	City of Duluth				½		★		★	★					★★★½
E 2nd St, N 13th Ave E	46.80069,-92.084221	City of Duluth				½		★				★			★	★★★½
E 3rd St, N 13th Ave E	46.801343,-92.0853	City of Duluth				½		★				★			★	★★★½
N 11th Ave E, E 11th St	46.804784,-92.096484	City of Duluth				½		★					½	½	★	★★★½

Safety Emphasis Area 4

Urban Intersections
Bike Ped Crashes

Road Name	Lat/Long	Municipality	Number of Pedestrian Crashes	Mainline AADT	Traffic Control	Posted Speed Limit of Major Roadway	Number of Thru Lanes on Major Roadway	Presence of Bicycle Facilities on the Major Roadway	Length of Pedestrian Exposure on Major Roadway	Presence of Sidewalk on the Major Roadway	Presence of Lighting	Presence of On-Street Parking on Major Roadway	Presence of Pedestrian Generator	Presence of MTU Bus Stop	Disadvantaged Neighborhood	Total Stars
Old Howard Mill Rd, N 36th Ave E	46.824795,-92.059324	City of Duluth				½		★		★		★				★★★½
S 2nd Ave W, W Michigan St	46.784736,-92.100132	City of Duluth				½		★				★			★	★★★½
W Michigan St, S 26th Ave W	46.761796,-92.129896	City of Duluth				½		★				★			★	★★★½
W Michigan St/Carlton St, W Michigan St	46.757034,-92.136115	City of Duluth				½		★		★					★	★★★½
Banks Ave, N 23rd St	46.710988,-92.105535	City of Superior						★				★	½		★	★★★½
Henry Cohen Dr, N 40th St, Henry Cohen Dr	46.691699,-92.10506	City of Superior						★		★				½	★	★★★½
N 12th St, Fisher Ave	46.724224,-92.088981	City of Superior						★				★	½		★	★★★½
N 12th St, Hughitt Ave	46.724253,-92.099431	City of Superior						★				★	½		★	★★★½
N 5th St, Hughitt Ave	46.732544,-92.09935	City of Superior						★				★	½		★	★★★½
Weeks Ave, Harrison St	46.718781,-92.091964	City of Superior						★				★	½		★	★★★½
N 28th St, Cumming Ave	46.706206,-92.096486	City of Superior		½		★	★								★	★★★½
N 28th St, Lamborn Ave	46.706199,-92.094648	City of Superior		½		★	★								★	★★★½
W Superior St, 25th Ave W	46.763148,-92.129277	City of Duluth		½		½						★	½		★	★★★½
Grand Ave, Grand Ave, Becks Rd	46.676557,-92.226504	City of Duluth		½		★					½			½	★	★★★½
Rice Lake Rd, Hickory St/Chinook Dr	46.809416,-92.11947	City of Duluth		½		★				★					★	★★★½
60th Ave E, London Rd	46.836542,-92.008037	City of Duluth		★		½		★	½							★★★
E 2nd St, N 19th Ave E, E 2nd St	46.806405,-92.076744	City of Duluth				½		★	½						★	★★★
E 8th St, Garden St	46.812875,-92.080111	City of Duluth				½		★	½			★				★★★
E 8th St, N 16th Ave E	46.80755,-92.087034	City of Duluth				½		★	½			★				★★★
E 8th St, N 18th Ave E	46.809461,-92.084532	City of Duluth				½		★	½			★				★★★
N 24th Ave W, W 2nd St	46.765423,-92.130187	City of Duluth				½		★	½						★	★★★
N Central Ave, Highland Ave	46.748381,-92.166496	City of Duluth				½		★	½			★				★★★
W Eighth St, W Eighth St, N 46th Ave W	46.749381,-92.164445	City of Duluth				½		★	½			★				★★★
N 21st St, Hughitt Ave	46.713413,-92.09949	City of Superior		½				★	½						★	★★★
N 21st St, John Ave	46.713417,-92.10097	City of Superior		½				★	½						★	★★★
Catlin Ave, Broadway St	46.726564,-92.08748	City of Superior						★	½					½	★	★★★
Hammond Ave, N 29th St	46.704859,-92.098039	City of Superior						★	½			★	½			★★★
Weeks Ave, N 18th St	46.716967,-92.091964	City of Superior						★	½			★	½			★★★
Boundary Ave, 5th St, Vinland St	46.747005,-92.217093	City of Duluth				½		½	★			★				★★★
E Superior St, N 52nd Ave E	46.834349,-92.019842	City of Duluth				½		½	★			★				★★★
Highland Ave, N 57th Ave W	46.748396,-92.169206	City of Duluth				½		½	★			★				★★★
Stebner Rd, W Arrowhead Rd, Stebner Rd, W Arrowhead Rd	46.822092,-92.195835	City of Hermantown		½		★		½	★							★★★
N 28th St, Hughitt Ave	46.706196,-92.099557	City of Superior		½		½		★	★							★★★
N 21st St, E 5th St, E 5th St	46.713365,-92.061309	City of Superior						★	★				½	½		★★★
Catlin Ave, N 22nd St	46.712473,-92.087591	City of Superior						★	★			★				★★★
Hammond Ave, Hammond Ave	46.697325,-92.098092	City of Superior						★	★						★	★★★
N 21st St, Catlin Ave	46.713367,-92.087566	City of Superior						★	★				½	½		★★★
Woodland Ave, W Redwing St	46.850022,-92.081848	City of Duluth		½		½			★				½	½		★★★
Tower Ave, N 56th St, Tower Ave	46.672224,-92.104293	City of Superior		★		½			★				½			★★★
Mall Dr, Decker Rd	46.80551,-92.163808	City of Duluth				½			★	½			½	½		★★★
Glenwood St, Glenwood St	46.840388,-92.019893	City of Duluth		½		½		½				★		½		★★★
W Arrowhead Rd, Valhalla Dr	46.824901,-92.09159	City of Duluth		★		½		½			½			½		★★★
E Calvary Rd, Arnold Rd, Calvary Rd	46.854539,-92.090157	City of Duluth				½		½		½		★		½		★★★
Martin Rd, Jean Duluth Rd, Jean Duluth Rd	46.861737,-92.047945	City of Duluth		½		★		½		★						★★★
Martin Rd, Martin Rd, Howard Gnesen Rd, Howard Gnesen Rd	46.865504,-92.111107	City of Rice Lake		½		★		½		★						★★★
Cody St, Cody St, S 63rd Ave W	46.741188,-92.177673	City of Duluth				½	★	★						½		★★★
Hill Ave, N 25th St E	46.708789,-92.077007	City of Superior				½	★	★						½		★★★
Hill Ave, N 26th St/Grand Ave	46.707908,-92.077008	City of Superior				½	★	★						½		★★★
Belknap St, Wyoming Ave	46.720719,-92.12442	City of Superior		½			★	★					½			★★★
Carver Ave, Brookline St	46.823928,-92.079319	City of Duluth				½		★				★		½		★★★
E 1st St, N 19th Ave E	46.805754,-92.075682	City of Duluth				½		★					½		★	★★★
E 3rd St, N 19th Ave E, E 3rd St	46.807056,-92.077812	City of Duluth				½		★					½		★	★★★
Howard Gnesen Rd, Linzie Rd	46.826133,-92.103736	City of Duluth				½		★		★	½					★★★
W Superior St, 34th Ave W	46.75457,-92.14047	City of Duluth				½		★		½					★	★★★
N 3rd St, Cumming Ave	46.735236,-92.096279	City of Superior				★		★							★	★★★
N 21st St, 12th Ave E	46.713275,-92.064342	City of Superior	★					★			½			½		★★★
Banks Ave, N 17th St	46.718178,-92.105481	City of Superior						★				★			★	★★★

Safety Emphasis Area 4

Urban Intersections
Bike Ped Crashes

Road Name	Lat/Long	Municipality	Number of Pedestrian Crashes	Mainline AADT	Traffic Control	Posted Speed Limit of Major Roadway	Number of Thru Lanes on Major Roadway	Presence of Bicycle Facilities on the Major Roadway	Length of Pedestrian Exposure on Major Roadway	Presence of Sidewalk on the Major Roadway	Presence of Lighting	Presence of On-Street Parking on Major Roadway	Presence of Pedestrian Generator	Presence of MTU Bus Stop	Disadvantaged Neighborhood	Total Stars
Banks Ave, N 18th St	46.717028,-92.10549	City of Superior						★				★			★	★★★
Banks Ave, N 19th St	46.715861,-92.105494	City of Superior						★				★			★	★★★
Banks Ave, N 20th St	46.714723,-92.105508	City of Superior						★				★			★	★★★
Banks Ave, N 22nd St	46.712138,-92.105526	City of Superior						★				★			★	★★★
Banks Ave, N 24th St	46.709349,-92.105556	City of Superior						★				★			★	★★★
Catlin Ave, N 19th St	46.71606,-92.087533	City of Superior						★				★	↾	↾		★★★
Henry Cohen Rd, N 31st St	46.702604,-92.104784	City of Superior						★		★					★	★★★
N 12th St, Baxter Ave	46.724236,-92.094882	City of Superior						★				★			★	★★★
N 12th St, Birch Ave	46.724212,-92.08619	City of Superior						★				★			★	★★★
N 12th St, Cumming Ave	46.724242,-92.096353	City of Superior						★				★			★	★★★
N 12th St, John Ave	46.724261,-92.100916	City of Superior						★				★			★	★★★
N 34th St, Henry Cohen Rd, Henry Cohen Rd	46.698922,-92.105519	City of Superior						★		★					★	★★★
N 37th St, Henry Cohen Dr, Henry Cohen Rd	46.695397,-92.105073	City of Superior						★		★					★	★★★
N 5th St, John Ave	46.732554,-92.100844	City of Superior						★				★			★	★★★
N 5th St, Ogden Ave	46.732556,-92.102308	City of Superior						★				★			★	★★★
Ogden Ave, N 17th St	46.718158,-92.102409	City of Superior						★				★			★	★★★
Ogden Ave, N 18th St	46.717011,-92.102418	City of Superior						★				★			★	★★★
Ogden Ave, N 19th St	46.715852,-92.102431	City of Superior						★				★			★	★★★
Ogden Ave, N 20th St	46.714713,-92.102437	City of Superior						★				★			★	★★★
Ogden Ave, N 22nd St	46.712128,-92.102464	City of Superior						★				★			★	★★★
Ogden Ave, N 23rd St	46.71098,-92.102469	City of Superior						★				★			★	★★★
W College St, Missouri Ave	46.814981,-92.094513	City of Duluth		↾		↾						★	↾	↾		★★★
W Superior St, 30 1/2 Ave W	46.757872,-92.136195	City of Duluth		↾		↾						★			★	★★★
W Superior St, 30th Ave W	46.758404,-92.135496	City of Duluth		↾		↾						★			★	★★★
S 6th Ave W, W Michigan St	46.780861,-92.10514	City of Duluth				↾						★	↾		★	★★★
N 3rd St, N 3rd St, Tower Ave	46.735002,-92.103369	City of Superior		↾								★	↾		★	★★★
E Arrowhead Rd, Wallace Ave	46.825806,-92.07075	City of Duluth	★	↾		↾		★								★★★
N 28th St, John Ave	46.706202,-92.101025	City of Superior	★	↾		↾		★								★★★
N 10th Ave E, E 6th St	46.800494,-92.092283	City of Duluth				↾		★							★	★★ ↾
60th Ave E, Glenwood St	46.840383,-92.010504	City of Duluth				↾		↾	↾			★				★★ ↾
N 21st St, N 21st St, Wyoming Ave, Wyoming Ave	46.7135,-92.12445	City of Superior		↾				★	↾		↾					★★ ↾
N 21st St, E 6th St	46.71327,-92.063404	City of Superior						★	↾		★					★★ ↾
N 21st St, E 6th St	46.713264,-92.062773	City of Superior						★	↾		★					★★ ↾
N 21st St, Linden Ln	46.713282,-92.069983	City of Superior						★	↾		↾			↾		★★ ↾
Weeks Ave, N 20th St	46.715188,-92.091994	City of Superior						★	↾			★				★★ ↾
E 4th St, E 4th St, N 24th Ave E	46.812539,-92.072696	City of Duluth				↾			↾			★	↾			★★ ↾
W Arrowhead Rd, Ugstad Rd, Ugstad Rd, W Arrowhead Rd	46.822072,-92.238437	City of Hermantown				★		↾	★							★★ ↾
N Hawthorne Rd, Vermillion Rd	46.819914,-92.068833	City of Duluth				↾		★	★							★★ ↾
N 21st St, Raspberry Ave	46.713289,-92.071818	City of Superior						★	★					↾		★★ ↾
N 28th St/18th Ave E, E 10th St	46.706007,-92.060829	City of Superior		↾			★		★							★★ ↾
Anderson Rd, Anderson Rd, Decker Rd, Decker Rd	46.793114,-92.163896	City of Duluth		↾		↾			★					↾		★★ ↾
Woodland Ave, Woodland Ave, Anoka St	46.84388,-92.083375	City of Duluth		↾		↾			★					↾		★★ ↾
N 21st St, Hammond Ave	46.713411,-92.097937	City of Superior		↾					★			★				★★ ↾
Highway 2, 5th St	46.746895,-92.225959	City of Proctor		↾		↾		↾		★						★★ ↾
Wallace Ave, Bruce St	46.823312,-92.070681	City of Duluth		↾		↾		↾				★				★★ ↾
W Arrowhead Rd, Woodhaven Ln	46.825874,-92.081388	City of Duluth		★		↾		↾						↾		★★ ↾
E Oxford St, Livingston Ave	46.833906,-92.063739	City of Duluth				↾		↾				★		↾		★★ ↾
Haines Rd, Airport Rd	46.836555,-92.174829	City of Hermantown		↾		★		↾		↾						★★ ↾
Midway Rd, Old Miller Trunk Hwy	46.853476,-92.280423	Canosia Township				★		↾		↾			↾			★★ ↾
Central Ave, Waseca Industrial Rd, Raleigh St	46.731242,-92.166565	City of Duluth		↾		↾		★					↾			★★ ↾
Howard Gnesen Rd/Kenwood Ave, Kenwood Dr	46.825019,-92.100825	City of Duluth		↾		↾		★			↾					★★ ↾
N 28th Ave, Ogden Ave	46.706202,-92.102414	City of Superior		↾		↾		★			↾					★★ ↾
Burning Tree Rd, Matterhorn Dr	46.805594,-92.169012	City of Duluth				↾		★			★					★★ ↾
Carlton St, Truck Center Dr	46.756986,-92.140954	City of Duluth				↾		★							★	★★ ↾
Carver Ave, Maryland St	46.825257,-92.079354	City of Duluth				↾		★				★				★★ ↾
E 8th St, Grandview Ave	46.807915,-92.086583	City of Duluth				↾		★				★				★★ ↾
E 8th St, W Kent Rd	46.81377,-92.078926	City of Duluth				↾		★				★				★★ ↾

Safety Emphasis Area 4

Urban Intersections
Bike Ped Crashes

Road Name	Lat/Long	Municipality	Number of Pedestrian Crashes	Mainline AADT	Traffic Control	Posted Speed Limit of Major Roadway	Number of Thru Lanes on Major Roadway	Presence of Bicycle Facilities on the Major Roadway	Length of Pedestrian Exposure on Major Roadway	Presence of Sidewalk on the Major Roadway	Presence of Lighting	Presence of On-Street Parking on Major Roadway	Presence of Pedestrian Generator	Presence of MTU Bus Stop	Disadvantaged Neighborhood	Total Stars
E Skyline Pkwy, Chester Pkwy	46.810811,-92.091904	City of Duluth				½		★		★						★★½
Howard Gnesen Rd, MacFarlane Rd	46.829369,-92.108993	City of Duluth				½		★		★						★★½
Howard Gnesen Rd, Old Howard Gnesen Rd	46.829006,-92.108464	City of Duluth				½		★		★						★★½
Maple Grove Rd, Swan Lake Rd, Swan Lake Rd	46.807602,-92.136961	City of Duluth				½		★		★						★★½
Maxwell Ave, Anoka St	46.843897,-92.095288	City of Duluth				½		★				★				★★½
N 10th Ave E, E 7th St	46.801182,-92.093389	City of Duluth				½		★							★	★★½
N 10th Ave E, E 8th St	46.801845,-92.094478	City of Duluth				½		★							★	★★½
N 19th Ave E, Lawn St	46.81346,-92.088173	City of Duluth				½		★				★				★★½
N Ugstad Rd, Stark Rd	46.748929,-92.237999	City of Proctor				½		★		★						★★½
W Kent Rd, Grandview Ave	46.812503,-92.087809	City of Duluth				½		★				★				★★½
Catlin Ave, N 20th St	46.715192,-92.08758	City of Superior						★				★	½			★★½
Catlin Ave, N 23rd St	46.710636,-92.087603	City of Superior						★				★	½			★★½
Catlin Ave, N 8th St	46.729043,-92.087461	City of Superior						★						½	★	★★½
Catlin Ave, Spartan Rd	46.708308,-92.087624	City of Superior						★				★	½			★★½
Hammond Ave, N 33rd St	46.700249,-92.098073	City of Superior						★				★	½			★★½
Weeks Ave, N 17th St	46.717884,-92.091964	City of Superior						★				★	½			★★½
W College St, Brainerd Ave	46.814984,-92.091881	City of Duluth		½		½								½	★	★★½
S 21st Ave W, W Michigan St, Lower Michigan St	46.766155,-92.12337	City of Duluth				½					½		½		★	★★½
Rice Lake Rd, Howtz St	46.807484,-92.115186	City of Duluth		½		★				★						★★½
Ogden Ave, N 24th St	46.709329,-92.10246	City of Superior						★				★				★★
W Kent Rd/E Skyline Pkwy, Chester Park Dr	46.812558,-92.088854	City of Duluth				½		★	★							★★
Hill Ave, Hayes A Court	46.720358,-92.077236	City of Superior						★	★							★★
N 21st St, 10th Ave E	46.713283,-92.068441	City of Superior						★	★							★★
N 21st St, Aspen Ln	46.713282,-92.068238	City of Superior						★	★							★★
E 4th St, Wallace Ave, E 4th St	46.815914,-92.068276	City of Duluth				½			★				½			★★
Piedmont Ave, Morris Thomas Rd	46.778747,-92.153965	City of Duluth		½		½		½						½		★★
Livingston Ave, Glenwood St	46.83666,-92.063721	City of Duluth				½		½				★				★★
Vinland St, W Skyline Pkwy, Vinland St	46.749946,-92.188685	City of Duluth				½		½		½	½					★★
Maple Grove Rd, Joshua Ave, Maple Grove Rd	46.807606,-92.15321	City of Duluth				½		★		½						★★
W SKyline Pkwy, N 24th Ave W	46.773455,-92.142903	City of Duluth				½		★						½		★★
Banks Ave, N 26th St	46.707775,-92.105551	City of Superior						★				★				★★
Belknap St, Susquehanna Ave	46.72072,-92.125787	City of Superior						★				★				★★
Catlin Ave, N 11th St	46.725387,-92.087492	City of Superior						★							★	★★
Catlin Ave, N 13th St	46.723062,-92.087507	City of Superior						★							★	★★
Catlin Ave, N 14th St	46.721917,-92.087516	City of Superior						★							★	★★
Catlin Ave, Winter St	46.727851,-92.087472	City of Superior						★							★	★★
Hammond Ave, N 31st St	46.702571,-92.098062	City of Superior						★				★				★★
Hammond Ave, N 32nd St	46.701421,-92.098062	City of Superior						★				★				★★
Hill Ave, E 8th St	46.719905,-92.077219	City of Superior						★			★					★★
N 21st St, Bardon Ave	46.713278,-92.067029	City of Superior						★			½			½		★★
N 21st St, E 9th St	46.713284,-92.069545	City of Superior						★			½			½		★★
N 34th St, Frontage Rd	46.698847,-92.10331	City of Superior						★							★	★★
N 37th St, Frontage Rd	46.695393,-92.103126	City of Superior						★							★	★★
Ogden Ave, N 26th St	46.707772,-92.102487	City of Superior						★				★				★★
Weeks Ave, Lincoln St	46.714273,-92.092	City of Superior						★				★				★★
Anderson Rd, Anderson Rd, Chambersburg Ave	46.793171,-92.158623	City of Duluth		½		½				½				½		★★
Hammond Ave, Faxon St	46.711597,-92.097981	City of Superior										★			★	★★
Hammond Ave, N 22nd St	46.712115,-92.097981	City of Superior										★			★	★★
Hammond Ave, N 22nd St	46.712488,-92.097966	City of Superior										★			★	★★
Hammond Ave, N 23rd St	46.710694,-92.097989	City of Superior										★			★	★★
Hammond Ave, N 23rd St	46.710969,-92.097985	City of Superior										★			★	★★
Hammond Ave, N 25th St	46.708875,-92.098	City of Superior									★	★				★★
N 21st St, Clough Ave	46.713385,-92.090528	City of Superior						★	½							★½
N 21st St, Fisher Ave	46.713375,-92.089056	City of Superior						★	½							★½
N 21st St, Lamborn Ave	46.713392,-92.093473	City of Superior						★	½							★½
N 21st St, Weeks Ave, N 21st St	46.713378,-92.091999	City of Superior						★	½							★½
W Arrowhead Rd, Lavaque Rd, W Arrowhead Rd, Lavaque Rd	46.822086,-92.21719	City of Hermantown				★		½								★½

Safety Emphasis Area 4

Urban Intersections
Bike Ped Crashes

Road Name	Lat/Long	Municipality	Number of Pedestrian Crashes	Mainline AADT	Traffic Control	Posted Speed Limit of Major Roadway	Number of Thru Lanes on Major Roadway	Presence of Bicycle Facilities on the Major Roadway	Length of Pedestrian Exposure on Major Roadway	Presence of Sidewalk on the Major Roadway	Presence of Lighting	Presence of On-Street Parking on Major Roadway	Presence of Pedestrian Generator	Presence of MTU Bus Stop	Disadvantaged Neighborhood	Total Stars
N 11th Ave E, E 10th St	46.804135,-92.095408	City of Duluth				½		★								★½
Wallace Ave, E 5th St	46.81678,-92.069051	City of Duluth				½		★								★½
Wallace Ave, E 6th St	46.817706,-92.069755	City of Duluth				½		★								★½
Wallace Ave, E 7th St	46.818663,-92.070483	City of Duluth				½		★								★½
Wallace Ave, N Hawthorne Rd/E 8th St	46.819712,-92.07019	City of Duluth				½		★								★½
Catlin Ave, N 16th St	46.719632,-92.087539	City of Superior						★					½			★½
Hill Ave, 2nd Ave E	46.718784,-92.07718	City of Superior						★			½					★½
N 21st St, 13th Ave E	46.71327,-92.062309	City of Superior						★			½					★½
N 21st St, 9th Ave E	46.713286,-92.070431	City of Superior						★			½					★½
N 21st St, E 7th St	46.713277,-92.065456	City of Superior						★						½		★½
N 21st St, E 7th St	46.713275,-92.064587	City of Superior						★						½		★½
N 21st St, E 8th St	46.713283,-92.067492	City of Superior						★						½		★½
N 21st St, E 8th St	46.713278,-92.066327	City of Superior						★						½		★½
N 28th St, Bardon Ave	46.706125,-92.066418	City of Superior		½		★										★½
N 28th St, Oakes Ave	46.706223,-92.107051	City of Superior		½											★	★½
2nd St, 5th St	46.743892,-92.228173	City of Proctor				½		½								★
Hill Ave, 3rd Ave E	46.717372,-92.077135	City of Superior						★								★
Hill Ave, Court B	46.719905,-92.077219	City of Superior						★								★
Hill Ave, Court C	46.71862,-92.077178	City of Superior						★								★
Hill Ave, Court D	46.717904,-92.077153	City of Superior						★								★
Hill Ave, Court E	46.717172,-92.077129	City of Superior						★								★
Hill Ave, E 9th St	46.718473,-92.07716	City of Superior						★								★
Hill Ave, Juniper Ave	46.716856,-92.07712	City of Superior						★								★
Hill Ave, Laurel Ave	46.715999,-92.077087	City of Superior						★								★
Hill Ave, Maple Ave	46.715083,-92.077059	City of Superior						★								★
Hill Ave, Norwood Ave	46.714195,-92.077033	City of Superior						★								★
N 21st St, Baxter Ave	46.713397,-92.094961	City of Superior						★								★
N 21st St, Cumming Ave	46.713403,-92.096426	City of Superior						★								★
N 21st St, Gates Ave	46.713292,-92.07441	City of Superior						★								★
W College St, Mississippi Ave	46.814983,-92.093196	City of Duluth		½		½										★
Hammond Ave, N 24th St	46.709311,-92.098003	City of Superior										★				★
Hammond Ave, N 24th St	46.7098,-92.097996	City of Superior										★				★
Hammond Ave, N 26th St	46.707735,-92.098011	City of Superior										★				★
Hammond Ave, N 27th St	46.70708,-92.098016	City of Superior										★				★
Vermillion Rd, E St Marie St	46.821982,-92.068843	City of Duluth				½										½

Attachment 2: Recommended Safety Projects Prioritized by Risk

Safety Emphasis Area 1 (Segments)

Rural Two-Lane Undivided Roads
With AADT Less Than 5,000
(Roads on the Functional Classification System)

Road Name	State	County	Municipality	Speed Limit (mph)	Number of KAB Crashes	Length (miles)	AADT	Total Stars	Edgeline and/or Centerline Marking Improvement	Shoulder Rumble Strips	Centerline Rumble Strips	Provide 3 ft Shoulder	Widen Shoulder to 3 ft	Safety Edge	Improve Side Slopes	Clear Zone Maintenance	Install Barrier to Delineate Fixed Object	Install Barrier for Non-Recoverable Slopes	See Curves Recommendations (# Of Curves in Segment)	Project Cost Estimate (No Overlap with Curves)	Project Cost Estimate (Including Costs for Curves)
S Chicago Ave	Wisconsin	Douglas	Village of Oliver	45	3	1.3	2300	★★★★★½	X	X	X	X		X		X or	X or		3	$ 472,000	$ 747,000
Ryan Rd	Minnesota	Saint Louis	Duluth Township	50	0	0.3	364	★★★★★	X	X	X	X		X		X or	X or		1	$ 151,000	$ 169,000
CTH A	Wisconsin	Douglas	Superior Township	40	0	1.3	730	★★★★½	X		X					X or	X or		2	$ 154,000	$ 274,000
CTH K	Wisconsin	Douglas	Parkland Township	55	1	1.8	1200	★★★★½	X	X	X		X	X					0	$ 556,000	$ 556,000
Becks Rd	Minnesota	Saint Louis	Midway Township	55	1	1.1	670	★★★★½	X	X	X		X	X		X		X	2	$ 417,000	$ 581,000
Lester River Rd	Minnesota	Saint Louis	Lakewood Township	45	0	3.6	2000	★★★★½	X		X						X		7	$ 788,000	$ 1,036,000
CTH 8	Minnesota	Saint Louis	Grand Lake Township	30	0	0.8	120	★★★★	Segment Not Evaluated - Gravel Road										N/A	$ -	$ -
Swan Lake Rd	Minnesota	Saint Louis	City of Duluth	30	0	1.2	3000	★★★★	X							X or	X or		2	$ 125,000	$ 130,000
Occidental Blvd	Minnesota	Saint Louis	City of Duluth	30	0	0.4	348	★★★★	X								X		2	$ 129,000	$ 136,000
CTH A	Wisconsin	Douglas	Superior Township	55	0	0.7	970	★★★★	X		X						X		1	$ 142,000	$ 183,000
Saginaw Rd	Minnesota	Saint Louis	Solway Township	55	0	0.4	225	★★★★	X	X	X	X		X					2	$ 177,000	$ 185,000
CTH U	Wisconsin	Douglas	Lakeside Township	30	0	0.9	90	★★★★	X						X or			X or	5	$ 214,000	$ 462,000
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	40	0	0.7	1450	★★★★	X	X	X	X		X			X	X	3	$ 460,000	$ 475,000
Ryan Rd	Minnesota	Saint Louis	Duluth Township	55	0	0.2	364	★★★★	X	X	X	X		X					2	$ 89,000	$ 480,000
Hermantown Rd	Minnesota	Saint Louis	City of Hermantown	55	0	1.0	2800	★★★★	X	X	X	X		X		X or	X or		2	$ 549,000	$ 573,000
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	45	1	1.4	348	★★★★	X								X	X	16	$ 537,000	$ 617,000
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	30	3	1.7	1580	★★★★	X							X or	X or	X	6	$ 710,000	$ 758,000
CTH C	Wisconsin	Douglas	Parkland Township	30	1	4.0	1000	★★★★	X	X	X		X	X					0	$ 1,211,000	$ 1,211,000
W Skyline	Minnesota	Saint Louis	Midway Township	30	0	0.5	680	★★★½	Segment Not Evaluated - Gravel Road										N/A	$ -	$ 5,000
Lavaque Rd	Minnesota	Saint Louis	City of Hermantown	45	2	0.7	3500	★★★½	X	X	X								N/A	$ 48,000	$ 48,000
Schultz Rd	Minnesota	Saint Louis	City of Rice Lake	55	0	1.0	115	★★★½	X		X								0	$ 59,000	$ 59,000
Morris Thomas Rd	Minnesota	Saint Louis	City of Hermantown	55	1	1.7	2200	★★★½	X	X	X								N/A	$ 111,000	$ 111,000
Schultz Rd	Minnesota	Saint Louis	City of Rice Lake	55	0	2.0	170	★★★½	X		X								0	$ 116,000	$ 116,000
Swan Lake Rd	Minnesota	Saint Louis	City of Hermantown	55	0	0.7	1400	★★★½	X	X	X	X		X		X or	X or		1	$ 325,000	$ 404,000
CTH E	Wisconsin	Douglas	Parkland Township	55	0	1.0	2000	★★★½	X	X	X	X		X		X	X		0	$ 459,000	$ 459,000
CTH K	Wisconsin	Douglas	Parkland Township	55	1	2.5	850	★★★½	X	X	X		X	X					0	$ 753,000	$ 753,000
W Skyline Pkwy	Minnesota	Saint Louis	City of Proctor	30	0	1.8	680	★★★½	X								X	X	11	$ 793,000	$ 852,000
CTH D	Wisconsin	Douglas	Lakeside Township	55	0	2.5	1400	★★★½	X	X	X		X	X		X or	X or		N/A	$ 850,000	$ 850,000
W Calvary Rd	Minnesota	Saint Louis	City of Rice Lake	55	1	2.0	1650	★★★½	X	X	X	X		X		X or	X or		N/A	$ 923,000	$ 923,000
CTH C	Wisconsin	Douglas	Parkland Township	55	0	2.7	750	★★★½	X	X	X	X		X		X	X		N/A	$ 1,334,000	$ 1,334,000
CTH W	Wisconsin	Douglas	Superior Township	30	0	3.7	270	★★★½	X	X	X	X		X		X or	X or		N/A	$ 1,590,000	$ 1,719,000

Safety Emphasis Area 1 (Curves)

Rural Two-Lane Undivided Roads

With AADT Less Than 5,000

(Roads on the Functional Classification System)

Road Name	State	County	Municipality	Lat/Long	Speed Limit (mph)	Curve Advisory Speed (mph)	Length (miles)	AADT	Total Stars	Curve Overlaps with a Tier 1 Segment?	Curve Overlaps with a Tier 2 Segment?	Edgeline and/or Centerline Marking Improvement	High Friction Surface Treatment	Re-evaluate Curve Signing	Install Chevrons	Install Night Arrows	Upgrade to Fluorescent Signs	Install In-lane Curve Warning Pavement Markings	Shoulder Rumble Strips	Centerline Rumble Strips	Provide 3 ft Shoulder	Widen Shoulder to 3 ft	Safety Edge	Improve Side Slopes	Clear Zone Maintenance	Install Barrier to Delineate Fixed Object	Install Barrier for Non-Recoverable Slopes	Install Flashing Beacons with Warning 'Stop Ahead' Signs	Realign Intersection to Correct Visual Trap	Reconstruct Triangle Intersection	Project Cost Estimate (No Overlap with Segments)	Project Cost Estimate (Assumes Standalone Projects for Each Curve)
CTH C	Wisconsin	Douglas	Superior Township	46°35'25.04"N, 92° 7'58.90"W	55	15	3.7	430	★★★★	N	N	X	X	X	X			X	X		X		X							X	$ 214,000	$ 214,000
TH 39/E McCuen St	Minnesota	Saint Louis	City of Duluth	46°39'22.28"N, 92°12'30.51"W	35	25	0.6	2300	★★★	N	N	X				X	X														$ 7,000	$ 7,000
CTH 8	Minnesota	Saint Louis	Grand Lake Township	46°55'24.22"N, 92°24'46.07"W	55	No Posting	0.8	120	★★★	N	N	Dirt/gravel road																X			$ 18,000	$ 18,000
Ryan Rd	Minnesota	Saint Louis	Duluth Township	46°57'22.91"N, 91°53'59.42"W	55	30	1.3	380	★★★	N	N	X		X		X	X	X	X	X		X	X							X	$ 100,000	$ 100,000
W Tischer Rd	Minnesota	Saint Louis	Lakewood Township	46°52'49.13"N, 92° 0'19.37"W	40	20	2.0	870	★★★	N	N	X		X	X		X	X	X		X		X	X or			X or		X		$ 274,000	$ 274,000
Ryan Rd	Minnesota	Saint Louis	Duluth Township	46°54'11.29"N, 91°54'12.54"W	55	15	0.3	364	★★★	Y	N	X		X		X	X	X			X		X		X or	X or			X		$ 251,000	$ 278,039
Occidental Blvd	Minnesota	Saint Louis	City of Duluth	46°50'38.96"N, 92° 0'37.28"W	30	20	0.4	348	★★★	Y	N	X			X		X														$ 3,000	$ 4,423
CTH W	Wisconsin	Douglas	Superior Township	46°33'7.90"N, 92°14'49.97"W	55	No Posting	3.7	270	★★★	N	N	Dirt/gravel road		X	X	X															$ 5,000	$ 5,000
Maple Grove Rd	Minnesota	Saint Louis	Solway Township	46°48'27.56"N, 92°20'0.41"W	50	25	1.1	1466	★★★	N	N	X		X		X	X	X	X		X		X		X						$ 38,000	$ 38,000
E Shilhon Rd	Minnesota	Saint Louis	Duluth Township	46°57'22.89"N, 91°52'43.28"W	55	25	1.0	380	★★★	N	N	X		X		X	X	X	X		X		X			X					$ 91,000	$ 91,000
Ryan Rd	Minnesota	Saint Louis	Duluth Township	46°54'3.49"N, 91°54'2.98"W	55	No Posting	0.2	364	★★★	Y	N	X	X	X	X	X			X	X	X		X				X				$ 140,000	$ 167,328
Becks Rd	Minnesota	Saint Louis	Midway Township	46°42'15.72"N, 92°17'31.69"W	50	40	1.1	670	★★★	Y	N	X	X	X		X	X		X	X	X	X	X			X		X			$ 141,000	$ 184,183
Industrial Rd	Minnesota	Saint Louis	Grand Lake Township	46°53'37.03"N, 92°21'56.59"W	50	No Posting	0.1	1000	★★★	N	N	X	X	X	X	X			X	X	X		X					X			$ 185,000	$ 185,000
Munger Shaw Rd	Minnesota	Saint Louis	Grand Lake Township	46°54'46.80"N, 92°20'38.89"W	45	No Posting	3.4	1050	★★★	N	N	X		X		X	X			X									X		$ 240,000	$ 240,000
CTH C	Wisconsin	Douglas	Superior Township	46°34'48.28"N, 92°12'6.64"W	55	20	3.2	430	★★★	N	N	X		X	X		X	X	X		X		X						X		$ 260,000	$ 260,000
CTH W	Wisconsin	Douglas	Superior Township	46°33'14.72"N, 92°14'41.78"W	55	No Posting	3.7	270	★★☆	N	N	Dirt/gravel road		X	X	X															$ 5,000	$ 5,000
N 58th St	Wisconsin	Douglas	City of Superior	46°40'11.71"N, 92° 4'37.88"W	30	15	1.0	2000	★★☆	N	N	X		X		X	X														$ 7,000	$ 7,000
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°43'30.81"N, 92°13'1.44"W	30	15	0.2	4150	★★☆	N	N	X		X	X		X														$ 8,000	$ 8,000
Occidental Blvd	Minnesota	Saint Louis	City of Duluth	46°50'29.15"N, 92° 0'36.58"W	30	20	0.4	348	★★☆	Y	N	X			X																$ 2,000	$ 6,999
CTH W	Wisconsin	Douglas	Superior Township	46°32'43.85"N, 92°14'38.17"W	55	25	3.7	270	★★☆	N	N	Dirt/gravel road		X	X	X									X						$ 14,000	$ 14,000
N 58th St	Wisconsin	Douglas	City of Superior	46°40'9.80"N, 92° 4'40.55"W	30	15	1.0	2000	★★☆	N	N	X		X	X		X									X					$ 21,000	$ 21,000
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°48'43.37"N, 92° 5'26.53"W	30	15	0.7	1450	★★☆	Y	N	X		X	X	X											X				$ 5,000	$ 33,132
S Chicago Ave	Wisconsin	Douglas	Village of Oliver	46°38'42.53"N, 92°11'32.99"W	55	25	1.3	2300	★★☆	N	Y	X		X	X	X		X		X							X				$ 35,000	$ 40,824
Becks Rd	Minnesota	Saint Louis	Midway Township	46°41'56.24"N, 92°16'47.16"W	50	No Posting	1.1	670	★★☆	Y	N	X		X	X	X			X	X		X	X					X			$ 23,000	$ 41,695
Maple Grove Rd	Minnesota	Saint Louis	Solway Township	46°48'28.32"N, 92°20'19.68"W	50	25	1.1	1466	★★☆	N	N	X		X	X	X	X	X	X		X		X		X						$ 46,000	$ 46,000
42nd Ave	Wisconsin	Douglas	Superior Township	46°39'29.00"N, 92° 3'59.28"W	55	35	0.5	970	★★☆	Y	N	X		X	X		X		X	X		X	X	X							$ 41,000	$ 46,926
Maple Grove Rd	Minnesota	Saint Louis	Solway Township	46°48'34.09"N, 92°20'15.47"W	50	25	1.1	1466	★★☆	N	N	X		X	X	X	X	X	X	X	X		X		X						$ 47,000	$ 47,000
H 210/Oldenberg Pkwy	Minnesota	Saint Louis	City of Duluth	46°40'21.35"N, 92°17'27.23"W	40	25	2.0	2000	★★☆	N	N	X		X	X	X			X	X	X		X		X or	X or					$ 51,000	$ 51,000
CTH A	Wisconsin	Douglas	Douglas Township	46°29'38.66"N, 92° 4'20.00"W	55	35	3.3	930	★★☆	N	N	X		X	X		X		X	X		X	X		X or	X or					$ 53,000	$ 53,000
CTH U	Wisconsin	Douglas	Douglas Township	46°37'56.39"N, 91°54'41.08"W	55	No Posting	0.9	90	★★☆	Y	N	X		X	X	X			X		X	X	X				X				$ 38,000	$ 55,337
St. Louis River Rd	Minnesota	Saint Louis	Midway Township	46°45'50.88"N, 92°14'59.42"W	45	No Posting	1.5	531	★★☆	N	N	X		X	X	X			X	X		X					X	X			$ 59,000	$ 59,000
CTH U	Wisconsin	Douglas	Douglas Township	46°37'40.46"N, 91°54'21.35"W	55	No Posting	0.9	90	★★☆	Y	N	X		X	X	X			X		X	X	X				X				$ 41,000	$ 60,097
Korkki Rd	Minnesota	Saint Louis	Duluth Township	46°57'48.95"N, 91°52'43.39"W	55	25	2.0	380	★★☆	N	N	X		X	X	X	X	X	X		X	X	X	X or			X or				$ 78,000	$ 78,000
Swan Lake Rd	Minnesota	Saint Louis	City of Hermantown	46°49'49.50"N, 92°11'2.04"W	55	30	0.7	1400	★★☆	N	N	X		X	X	X		X		X						X	X				$ 79,000	$ 79,000
CTH A	Wisconsin	Douglas	Superior Township	46°37'49.02"N, 92° 3'58.80"W	55	20	1.3	730	★★☆	Y	N	X		X	X		X		X	X	X		X					X			$ 72,000	$ 80,443
CTH W	Wisconsin	Douglas	Superior Township	46°33'17.08"N, 92°14'27.44"W	55	No Posting	3.7	270	★★☆	N	N	X		X	X	X			X	X		X	X					X			$ 95,000	$ 95,000
CTH U	Wisconsin	Douglas	Douglas Township	46°37'55.53"N, 91°54'34.61"W	55	No Posting	0.9	90	★★☆	Y	N	X		X	X	X			X		X	X	X				X				$ 72,000	$ 107,618
Caribou Lake Rd	Minnesota	Saint Louis	Grand Lake Township	46°51'38.82"N, 92°19'21.75"W	55	No Posting	1.2	265	★★☆	N	N	X	X	X	X	X			X	X			X		X or	X or		X			$ 211,000	$ 211,000
S Chicago Ave	Wisconsin	Douglas	Village of Oliver	46°38'53.05"N, 92°11'52.46"W	55	25	1.3	2300	★★☆	N	Y	X		X	X	X		X		X	X		X		X or	X or		X		X	$ 233,000	$ 238,568
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°42'53.93"N, 92°13'10.82"W	30	No Posting	1.8	680	★★	N	Y	X		X	X	X													X		$ 5,000	$ 7,731
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'34.37"N, 92°11'26.72"W	30	No Posting	2.1	620	★★	Curve Not Evaluated																						
N Tischer Rd	Minnesota	Saint Louis	Lakewood Township	46°56'17.27"N, 92° 0'20.56"W	40	No Posting	0.4	1250	★★	Curve Not Evaluated																						
Hermantown Rd	Minnesota	Saint Louis	City of Hermantown	46°47'22.30"N, 92°10'31.24"W	40	No Posting	1.0	2800	★★	Y	N	X		X														X			$ 19,000	$ 21,313
Minnesota Ave	Minnesota	Saint Louis	City of Duluth	46°43'50.54"N, 92° 3'19.92"W	30	No Posting	1.0	1850	★★	Curve Not Evaluated																						
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°46'43.40"N, 92° 7'15.66"W	30	No Posting	1.7	1580	★★	Y	N	X		X	X	X											X				$ 5,000	$ 25,536
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°46'41.36"N, 92° 7'16.51"W	30	No Posting	1.7	1580	★★	Y	N	X		X	X	X											X				$ 5,000	$ 27,208
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	46°51'14.71"N, 92° 0'38.94"W	30	No Posting	1.4	348	★★	Y	N	X		X	X	X										X					$ 5,000	$ 27,660
Lester River Rd	Minnesota	Saint Louis	Lakewood Township	46°52'39.58"N, 91°59'15.54"W	45	No Posting	3.6	2000	★★	Y	N	X		X	X	X			X	X	X		X			X					$ 24,000	$ 41,424
Minnesota Ave	Minnesota	Saint Louis	City of Duluth	46°43'41.96"N, 92° 3'8.90"W	30	No Posting	1.0	1850	★★	N	N	X		X	X	X											X				$ 43,000	$ 43,000
Lester River Rd	Minnesota	Saint Louis	Lakewood Township	46°52'20.41"N, 91°59'19.06"W	45	No Posting	3.6	2000	★★	Y	N	X		X	X	X			X	X	X		X			X					$ 26,000	$ 45,921
CTH A	Wisconsin	Douglas	Superior Township	46°38'3.17"N, 92° 4'3.44"W	55	20	1.3	730	★★	Y	N	X		X	X	X		X	X	X	X		X	X or			X or				$ 48,000	$ 52,393
Lester River Rd	Minnesota	Saint Louis	City of Duluth	46°50'29.00"N, 92° 0'20.38"W	45	No Posting	3.6	2000	★★	Y	N	X		X					X	X	X		X					X			$ 48,000	$ 52,809
Observation Rd	Minnesota	Saint Louis	City of Duluth	46°47'12.19"N, 92° 7'19.38"W	40	35	1.1	1100	★★	Y	N	X		X	X	X			X	X	X										$5,000	$83,341
CTH U	Wisconsin	Douglas	Lakeside Township	46°37'59.53"N, 91°54'46.40"W	55	20	0.9	90	★★	Y	N	X		X	X		X	X	X		X	X	X				X				$ 68,000	$ 100,500
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°43'52.49"N, 92°12'11.39"W	30	No Posting	2.4	1240	★★	Curve Not Evaluated																						
CTH B	Wisconsin	Douglas	Superior Township	46°31'58.46"N, 92° 9'3.79"W	45	35	5.8	530	★★	Curve Not Evaluated																						
Port Terminal Dr	Minnesota	Saint Louis	City of Duluth	46°45'10.57"N, 92° 5'56.58"W	30	25	0.6	1900	★★	Curve Not Evaluated																						
Maple Grove Rd	Minnesota	Saint Louis	Solway Township	46°48'32.48"N, 92°20'8.32"W	50	25	1.1	1466	★★	Curve Not Evaluated																						
CTH B	Wisconsin	Douglas	Superior Township	46°32'11.47"N, 92° 8'39.41"W	45	30	5.8	530	★★	Curve Not Evaluated																						
CTH A	Wisconsin	Douglas	Superior Township	46°30'12.34"N, 92° 4'1.10"W	55	35	3.3	930	★★	Curve Not Evaluated																						
CTH C	Wisconsin	Douglas	Superior Township	46°36'17.12"N, 92° 7'27.52"W	55	35	3.7	430	★★	Curve Not Evaluated																						
CTH C	Wisconsin	Douglas	Superior Township	46°34'48.80"N, 92°12'12.50"W	55	20	3.2	430	★★	Curve Not Evaluated																						
OLD HWY 2	Minnesota	Saint Louis	City of Hermantown	46°46'42.97"N, 92°16'30.08"W	55	No Posting	0.3	760	★★	Curve Not Evaluated																						
CTH C/W	Wisconsin	Douglas	Superior Township	46°35'40.31"N, 92°17'12.23"W	55	No Posting	3.4	230	★★	Curve Not Evaluated																						
CTH 61	Minnesota	Saint Louis	City of Duluth	46°50'31.61"N, 91°59'46.82"W	50	No Posting	0.4	2900	★★	Curve Not Evaluated																						
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°43'57.20"N, 92°12'7.26"W	30	No Posting	2.4	1240	★★	Curve Not Evaluated																						
Skyline Pkwy	Minnesota	Saint Louis	Midway Township	46°41'30.48"N, 92°15'40.08"W	30	No Posting	3.5	680	★★	Curve Not Evaluated																						
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°41'27.34"N, 92°14'30.52"W	30	No Posting	3.5	680	★★	Curve Not Evaluated																						
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°41'15.10"N, 92°14'19.14"W	30	No Posting	3.5	680	★★	Curve Not Evaluated																						
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°41'16.48"N, 92°14'12.40"W	30	No Posting	3.5	680	★★	Curve Not Evaluated																						
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°41'12.42"N, 92°14'7.36"W	30	No Posting	3.5	680	★★	Curve Not Evaluated																						
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°41'2.00"N, 92°14'6.74"W	30	No Posting	3.5	680	★★	Curve Not Evaluated																						
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°41'5.31"N, 92°13'56.91"W	30	No Posting	3.5	680	★★	Curve Not Evaluated																						
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°41'4.98"N, 92°13'54.56"W	30	No Posting	3.5	680	★★	Curve Not Evaluated																						
Skyline Pkwy	Wisconsin	Douglas	City of Duluth	46°41'7.81"N, 92°13'53.75"W	30	No Posting	3.5	680	★★	Curve Not Evaluated																						
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°41'6.80"N, 92°14'1.09"W	30	No Posting	3.5	680	★★	Curve Not Evaluated																						
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°41'9.88"N, 92°13'54.45"W	30	No Posting	3.5	680	★★	Curve Not Evaluated																						
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°41'13.85"N, 92°13'52.33"W	30	No Posting	3.5	680	★★	Curve Not Evaluated																						
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°41'23.86"N, 92°13'51.53"W	30	No Posting	3.5	680	★★	Curve Not Evaluated																						
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°41'52.23"N, 92°13'49.58"W	30	No Posting	3.5	680	★★	Curve Not Evaluated																						
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°42'7.28"N, 92°13'43.49"W	30	No Posting	3.5	680	★★	Curve Not Evaluated																						
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°42'10.83"N, 92°13'22.03"W	30	No Posting	3.5	680	★★	Curve Not Evaluated																						
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°42'13.59"N, 92°14'0.06"W	30	No Posting	3.5	680	★★	Curve Not Evaluated																						
Minnesota Ave	Minnesota	Saint Louis	City of Duluth	46°43'46.35"N, 92° 3'0.70"W	30	No Posting	1.0	1850	★★	Curve Not Evaluated																						

Safety Emphasis Area 1 (Curves)

Rural Two-Lane Undivided Roads

With AADT Less Than 5,000

(Roads on the Functional Classification System)

Road Name	State	County	Municipality	Lat/Long	Speed Limit (mph)	Curve Advisory Speed (mph)	Length (miles)	AADT	Total Stars	Curve Overlaps with a Tier 1 Segment?	Curve Overlaps with a Tier 2 Segment?	Edgeline and/or Centerline Marking Improvement	High Friction Surface Treatment	Re-evaluate Curve Signing	Install Chevrons	Install Night Arrows	Upgrade to Fluorescent Signs	Install In-lane Curve Warning Pavement Markings	Shoulder Rumble Strips	Centerline Rumble Strips	Provide 3 ft Shoulder	Widen Shoulder to 3 ft	Safety Edge	Improve Side Slopes	Clear Zone Maintenance	Install Barrier to Delineate Fixed Object	Install Barrier for Non-Recoverable Slopes	Install Flashing Beacons with Warning 'Stop Ahead' Signs	Realign Intersection to Correct Visual Trap	Reconstruct Triangle Intersection	Project Cost Estimate (No Overlap with Segments)	Project Cost Estimate (Assumes Standalone Projects for Each Curve)
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'8.36"N, 92°10'28.15"W	30	No Posting	2.1	620	★★	Curve Not Evaluated																						
Howard Gnesen Rd	Minnesota	Saint Louis	City of Duluth	46°49'41.87"N, 92° 6'22.84"W	30	No Posting	2.4	4250	★★	Curve Not Evaluated																						
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'9.47"N, 92°11'12.63"W	30	No Posting	2.1	620	★★	Curve Not Evaluated																						
McQuade Rd	Minnesota	Saint Louis	Lakewood Township	46°53'10.57"N, 91°55'14.48"W	30	No Posting	0.4	345	★★	Curve Not Evaluated																						
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°41'36.74"N, 92°15'14.06"W	30	No Posting	3.5	680	★★	Curve Not Evaluated																						
CTH W	Wisconsin	Douglas	Superior Township	46°33'35.00"N, 92°14'30.95"W	55	No Posting	3.7	270	★★	N	Y	Dirt/gravel road		X	X	X														$ 5,000	$ 5,000
CTH W	Wisconsin	Douglas	Superior Township	46°32'50.16"N, 92°14'45.21"W	55	No Posting	3.7	270	★★	N	Y	Dirt/gravel road		X	X	X														$ 5,000	$ 5,000
H 210/Oldenberg Pkwy	Minnesota	Saint Louis	City of Duluth	46°40'17.34"N, 92°16'59.43"W	40	No Posting	2.0	2000	★★	Curve Not Evaluated																						
W Skyline	Minnesota	Saint Louis	Midway Township	46°41'30.87"N, 92°16'17.07"W	30	No Posting	0.5	680	★★	N	Y	Dirt/gravel road		X	X	X														$ 5,000	$ 5,000
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	46°51'31.91"N, 92° 0'49.93"W	30	No Posting	1.4	348	★★	Y	N	X		X	X	X														$ 5,000	$ 6,871
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	46°50'54.58"N, 92° 0'37.47"W	30	No Posting	1.4	348	★★	Y	N	X		X	X	X														$ 5,000	$ 6,914
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	46°51'37.43"N, 92° 0'50.40"W	30	No Posting	1.4	348	★★	Y	N	X		X	X	X														$ 5,000	$ 7,131
W Skyline Pkwy	Minnesota	Saint Louis	City of Proctor	46°43'23.51"N, 92°13'11.14"W	30	No Posting	1.8	680	★★	N	Y	X		X	X	X														$ 5,000	$ 8,697
W Skyline Pkwy	Minnesota	Saint Louis	City of Proctor	46°43'22.99"N, 92°13'17.74"W	30	No Posting	1.8	680	★★	N	Y	X		X	X	X														$ 5,000	$ 9,326
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	46°50'48.29"N, 92° 0'31.15"W	30	No Posting	1.4	348	★★	Y	N	X		X	X	X														$ 5,000	$ 9,850
Swan Lake Rd	Minnesota	Saint Louis	City of Duluth	46°49'14.32"N, 92° 8'59.53"W	30	No Posting	1.2	3000	★★	Y	N	X		X	X	X														$ 5,000	$ 10,311
W Skyline Pkwy	Minnesota	Saint Louis	City of Proctor	46°43'17.59"N, 92°13'10.82"W	30	No Posting	1.8	680	★★	N	Y	X		X	X	X									X					$ 9,000	$ 12,360
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	46°51'37.71"N, 92° 0'53.23"W	30	No Posting	1.4	348	★★	Y	N	X		X	X	X										X				$ 5,000	$ 12,586
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	46°51'38.94"N, 92° 0'53.12"W	30	No Posting	1.4	348	★★	Y	N	X		X	X	X										X				$ 5,000	$ 13,300
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	46°50'39.74"N, 92° 0'36.34"W	30	No Posting	1.4	348	★★	Y	N	X		X	X	X										X				$ 5,000	$ 14,549
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°42'57.02"N, 92°13'20.75"W	30	No Posting	1.8	680	★★	N	Y	X		X	X	X														$ 5,000	$ 14,927
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	46°51'33.51"N, 92° 0'49.84"W	30	No Posting	1.4	348	★★	Y	N	X		X	X	X										X				$ 5,000	$ 15,270
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	46°51'34.99"N, 92° 0'51.90"W	30	No Posting	1.4	348	★★	Y	N	X		X	X	X										X				$ 5,000	$ 19,205
Ryan Rd	Minnesota	Saint Louis	Duluth Township	46°54'1.71"N, 91°53'51.94"W	30	No Posting	0.3	364	★★	Y	N	X																X		$ 18,000	$ 20,351
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	46°51'2.51"N, 92° 0'43.88"W	30	No Posting	1.4	348	★★	Y	N	X		X	X	X										X				$ 5,000	$ 22,320
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	46°51'28.76"N, 92° 0'46.21"W	30	No Posting	1.4	348	★★	Y	N	X		X	X	X										X				$ 5,000	$ 22,893
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°48'30.26"N, 92° 5'37.26"W	30	No Posting	0.7	1450	★★	Y	N	X		X	X	X											X			$ 5,000	$ 23,081
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	46°51'16.37"N, 92° 0'45.02"W	30	No Posting	1.4	348	★★	Y	N	X		X	X	X										X				$ 5,000	$ 23,534
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	46°51'22.24"N, 92° 0'48.34"W	30	No Posting	1.4	348	★★	Y	N	X		X	X	X										X				$ 5,000	$ 25,501
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°46'43.44"N, 92° 7'23.31"W	30	No Posting	1.7	1580	★★	Y	N	X		X	X	X												X		$ 23,000	$ 25,790
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	46°50'55.05"N, 92° 0'41.71"W	30	No Posting	1.4	348	★★	Y	N	X		X	X	X										X				$ 5,000	$ 27,937
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°48'20.68"N, 92° 5'50.85"W	30	No Posting	0.7	1450	★★	Y	N	X		X	X	X											X			$ 5,000	$ 28,605
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°43'10.53"N, 92°13'11.58"W	30	No Posting	1.8	680	★★	N	Y	X		X	X	X											X			$ 5,000	$ 32,279
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	46°50'44.50"N, 92° 0'37.97"W	30	No Posting	1.4	348	★★	Y	N	X		X	X	X										X				$ 5,000	$ 33,863
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°42'21.20"N, 92°13'21.94"W	30	No Posting	1.8	680	★★	N	Y	X		X	X	X										X				$ 5,000	$ 35,859
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°43'13.88"N, 92°13'6.31"W	30	No Posting	1.8	680	★★	N	Y	X		X	X	X											X			$ 5,000	$ 47,214
Observation Rd	Minnesota	Saint Louis	City of Duluth	46°46'58.99"N, 92° 7'21.01"W	40	No Posting	1.1	1100	★★	Y	N	X		X	X	X				X				X or			X or	X		$51,000	$57,115
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°42'1.05"N, 92°13'38.55"W	30	No Posting	3.5	680	★★	N	Y	X		X	X	X										X				$ 5,000	$ 49,618
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°46'24.45"N, 92° 7'38.55"W	30	No Posting	1.7	1580	★★	Y	N	X		X	X	X											X			$ 5,000	$ 54,203
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°42'12.21"N, 92°13'17.02"W	30	No Posting	1.8	680	★★	N	Y	X		X	X	X										X				$ 5,000	$ 62,941
CTH E	Wisconsin	Douglas	Parkland Township	46°38'38.57"N, 91°59'46.42"W	45	40	1.1	1200	★★	Y	N	X		X	X		X		X	X	X		X					X		$262,000	$342,974
Swan Lake Rd	Minnesota	Saint Louis	City of Duluth	46°48'14.84"N, 92° 8'11.60"W	30	No Posting	0.3	3000	★★	Curve Not Evaluated																						
TH 39/E McCuen St	Minnesota	Saint Louis	City of Duluth	46°39'26.35"N, 92°13'0.23"W	35	30	0.6	2300	★★	Curve Not Evaluated																						
CTH B	Wisconsin	Douglas	Superior Township	46°31'57.26"N, 92°12'11.99"W	45	35	5.8	530	★★	Curve Not Evaluated																						
CTH B	Wisconsin	Douglas	Superior Township	46°32'11.19"N, 92° 7'49.45"W	45	35	5.8	530	★★	Curve Not Evaluated																						
CTH B	Wisconsin	Douglas	Superior Township	46°32'8.73"N, 92° 7'44.30"W	45	35	5.8	530	★★	Curve Not Evaluated																						
Helberg Dr	Minnesota	Saint Louis	City of Duluth	46°45'50.07"N, 92° 6'37.48"W	30	20	0.7	830	★★	Curve Not Evaluated																						
WIS 35	Wisconsin	Douglas	Superior Township	46°31'57.27"N, 92° 7'21.87"W	55	35	4.3	4400	★★	Curve Not Evaluated																						
H 210/Oldenberg Pkwy	Minnesota	Saint Louis	City of Duluth	46°40'18.63"N, 92°17'11.96"W	40	30	2.0	2000	★★	Curve Not Evaluated																						
Lismore Rd	Minnesota	Saint Louis	Lakewood Township	46°55'51.74"N, 92° 0'20.61"W	50	40	2.0	1600	★★	Curve Not Evaluated																						
CTH 61	Minnesota	Saint Louis	City of Duluth	46°50'35.13"N, 91°59'44.54"W	50	No Posting	0.4	2900	★★	Curve Not Evaluated																						
Stebner Rd	Minnesota	Saint Louis	City of Duluth	46°49'57.31"N, 92°11'40.95"W	55	No Posting	0.5	2350	★★	Curve Not Evaluated																						
CTH 61	Minnesota	Saint Louis	Lakewood Township	46°52'50.20"N, 91°55'20.60"W	50	No Posting	2.5	2900	★★	Curve Not Evaluated																						
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°44'45.00"N, 92°11'27.45"W	30	No Posting	2.4	1240	★★	Curve Not Evaluated																						
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°41'42.89"N, 92°15'26.11"W	30	No Posting	3.5	680	★★	Curve Not Evaluated																						
Industrial Rd	Minnesota	Saint Louis	Grand Lake Township	46°53'40.33"N, 92°22'4.15"W	50	No Posting	3.0	1100	★★	Curve Not Evaluated																						
Munger Shaw Rd	Minnesota	Saint Louis	Grand Lake Township	46°59'15.88"N, 92°19'46.91"W	55	No Posting	4.7	680	★★	Curve Not Evaluated																						
Howard Gnesen Rd	Minnesota	Saint Louis	City of Duluth	46°50'26.50"N, 92° 6'23.05"W	30	No Posting	2.4	4250	★★	Curve Not Evaluated																						
Howard Gnesen Rd	Minnesota	Saint Louis	City of Duluth	46°49'46.66"N, 92° 6'40.46"W	30	No Posting	2.4	4250	★★	Curve Not Evaluated																						
Saginaw Rd	Minnesota	Saint Louis	Solway Township	46°51'4.46"N, 92°25'35.71"W	40	No Posting	0.4	225	★★	Y	N	X		X		X	X		X	X	X		X							$ 4,000	$ 64,305
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°44'56.20"N, 92°11'9.49"W	30	No Posting	2.4	1240	★★	Curve Not Evaluated																						
S Chicago Ave	Wisconsin	Douglas	Village of Oliver	46°38'45.85"N, 92°11'45.41"W	55	25	1.3	2300	★★	N	Y	X			X	X		X	X	X	X		X							$ 7,000	$ 72,841
H 210/Oldenberg Pkwy	Minnesota	Saint Louis	City of Duluth	46°40'18.23"N, 92°17'25.92"W	40	No Posting	2.0	2000	★★	Curve Not Evaluated																						
H 210/Oldenberg Pkwy	Minnesota	Saint Louis	City of Duluth	46°40'8.05"N, 92°16'59.29"W	40	No Posting	2.0	2000	★★	Curve Not Evaluated																						
H 210/Oldenberg Pkwy	Minnesota	Saint Louis	City of Duluth	46°40'5.56"N, 92°16'55.72"W	40	No Posting	2.0	2000	★★	Curve Not Evaluated																						
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°50'48.33"N, 92° 1'55.93"W	30	No Posting	1.9	348	★★	Curve Not Evaluated																						
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°50'49.35"N, 92° 1'52.94"W	30	No Posting	1.9	348	★★	Curve Not Evaluated																						
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°50'53.13"N, 92° 1'52.14"W	30	No Posting	1.9	348	★★	Curve Not Evaluated																						
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°50'54.64"N, 92° 1'49.80"W	30	No Posting	1.9	348	★★	Curve Not Evaluated																						
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°50'58.50"N, 92° 1'47.31"W	30	No Posting	1.9	348	★★	Curve Not Evaluated																						
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°50'58.61"N, 92° 1'40.72"W	30	No Posting	1.9	348	★★	Curve Not Evaluated																						
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°51'5.88"N, 92° 1'32.16"W	30	No Posting	1.9	348	★★	Curve Not Evaluated																						
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°51'8.77"N, 92° 1'29.98"W	30	No Posting	1.9	348	★★	Curve Not Evaluated																						
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°51'29.03"N, 92° 1'2.71"W	30	No Posting	1.9	348	★★	Curve Not Evaluated																						
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°51'32.29"N, 92° 1'3.17"W	30	No Posting	1.9	348	★★	Curve Not Evaluated																						
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°51'36.42"N, 92° 0'58.02"W	30	No Posting	1.9	348	★★	Curve Not Evaluated																						
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°51'40.21"N, 92° 0'59.25"W	30	No Posting	1.9	348	★★	Curve Not Evaluated																						
McQuade Rd	Minnesota	Saint Louis	Lakewood Township	46°53'18.54"N, 91°55'14.80"W	30	No Posting	0.2	345	★★	Curve Not Evaluated																						
McQuade Rd	Minnesota	Saint Louis	Lakewood Township	46°52'55.59"N, 91°55'14.39"W	30	No Posting	0.4	345	★★	Curve Not Evaluated																						
Helberg Dr	Minnesota	Saint Louis	City of Duluth	92° 6'33.22"W, 92° 6'26.05"W	30	No Posting	0.7	830	★★	Curve Not Evaluated																						
E 3rd St	Wisconsin	Douglas	City of Superior	46°40'39.14"N, 92° 0'38.61"W	35	No Posting	0.4	2000	★★	Curve Not Evaluated																						
E 3rd St	Wisconsin	Douglas	City of Superior	46°40'12.54"N, 92° 0'10.67"W	35	No Posting	0.3	2000	★★	Curve Not Evaluated																						
Marina Dr	Wisconsin	Douglas	City of Superior	46°43'8.86"N, 92° 3'45.92"W	25	No Posting	0.1	510	★★	Curve Not Evaluated																						

Safety Emphasis Area 1 (Curves)

Rural Two-Lane Undivided Roads

With AADT Less Than 5,000

(Roads on the Functional Classification System)

Road Name	State	County	Municipality	Lat/Long	Speed Limit (mph)	Curve Advisory Speed (mph)	Length (miles)	AADT	Total Stars	Curve Overlaps with a Tier 1 Segment?	Curve Overlaps with a Tier 2 Segment?	Edgeline and/or Centerline Marking Improvement	High Friction Surface Treatment	Re-evaluate Curve Signing	Install Chevrons	Install Night Arrows	Upgrade to Fluorescent Signs	Install In-lane Curve Warning Pavement Markings	Shoulder Rumble Strips	Centerline Rumble Strips	Provide 3 ft Shoulder	Widen Shoulder to 3 ft	Safety Edge	Improve Side Slopes	Clear Zone Maintenance	Install Barrier to Delineate Fixed Object	Install Barrier for Non-Recoverable Slopes	Install Flashing Beacons with Warning 'Stop Ahead' Signs	Realign Intersection to Correct Visual Trap	Reconstruct Triangle Intersection	Project Cost Estimate (No Overlap with Segments)	Project Cost Estimate (Assumes Standalone Projects for Each Curve)
N 12th St	Wisconsin	Douglas	City of Superior	46°43'27.00"N, 92° 4'38.78"W	25	No Posting	0.1	1100	★★	Curve Not Evaluated																						
Marina Dr	Wisconsin	Douglas	City of Superior	46°43'22.20"N, 92° 4'2.82"W	25	No Posting	0.3	560	★★	Curve Not Evaluated																						
Garfield Ave	Wisconsin	Douglas	City of Superior	46°43'20.90"N, 92° 7'2.07"W	25	No Posting	0.5	2100	★★	Curve Not Evaluated																						
Marina Dr	Wisconsin	Douglas	City of Superior	46°43'19.33"N, 92° 3'41.90"W	25	No Posting	0.6	510	★★	Curve Not Evaluated																						
Marina Dr	Wisconsin	Douglas	City of Superior	46°43'10.93"N, 92° 3'31.32"W	25	No Posting	0.6	510	★★	Curve Not Evaluated																						
Marina Dr	Wisconsin	Douglas	City of Superior	46°43'10.32"N, 92° 3'23.85"W	25	No Posting	0.6	510	★★	Curve Not Evaluated																						
WIS 35	Wisconsin	Douglas	Superior Township	46°32'5.89"N, 92° 7'19.04"W	55	No Posting	4.3	4400	★	Curve Not Evaluated																						
MN 23	Minnesota	Saint Louis	City of Duluth	46°39'35.30"N, 92°16'13.98"W	30	No Posting	0.1	2000	★	Curve Not Evaluated																						
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'38.65"N, 92° 9'46.48"W	30	No Posting	1.2	1975	★	Curve Not Evaluated																						
Swan Lake Rd	Minnesota	Saint Louis	City of Duluth	46°48'49.96"N, 92° 8'39.11"W	30	No Posting	1.2	3000	★	Y	N	Urban Curve																		$ -	$ -
MN 23	Minnesota	Saint Louis	City of Duluth	46°39'39.24"N, 92°16'50.42"W	30	No Posting	0.1	1650	★	Curve Not Evaluated																						
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'47.15"N, 92° 9'36.87"W	30	No Posting	1.2	1975	★	Curve Not Evaluated																						
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'46.07"N, 92° 9'20.48"W	30	No Posting	1.2	1975	★	Curve Not Evaluated																						
CTH 73	Minnesota	Saint Louis	Midway Township	46°42'17.77"N, 92°17'31.48"W	30	No Posting	1.2	510	★	Curve Not Evaluated																						
Hermantown Rd	Minnesota	Saint Louis	City of Hermantown	46°47'22.55"N, 92°10'44.21"W	40	No Posting	1.0	2800	★	Y	N	X		X	X	X				X					X or		X or				$ 5,000	$ 9,563
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°46'27.20"N, 92° 7'25.88"W	30	No Posting	1.7	1580	★	Y	N	X		X	X	X											X				$ 5,000	$ 19,671
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°43'5.93"N, 92°13'12.19"W	30	No Posting	1.8	680	★	N	Y	X		X	X	X											X				$ 5,000	$ 28,407
Lester River Rd	Minnesota	Saint Louis	Lakewood Township	46°52'26.14"N, 91°59'19.72"W	45	No Posting	3.6	2000	★	Y	N	X		X	X	X			X	X	X		X			X					$ 20,000	$ 33,392
CTH U	Wisconsin	Douglas	Lakeside Township	46°37'41.57"N, 91°54'24.91"W	55	No Posting	0.9	90	★	Y	N	X		X	X	X			X		X		X			X					$ 29,000	$ 50,947
Observation Rd	Minnesota	Saint Louis	City of Duluth	46°47'9.32"N, 92° 8'2.30"W	40	No Posting	1.1	1100	★	Y	N	X		X	X	X			X	X	X				X or	X or		X			$23,000	$68,123
Saginaw Rd	Minnesota	Saint Louis	Solway Township	46°50'55.58"N, 92°25'26.71"W	40	No Posting	0.4	225	★	Y	N	X		X		X	X		X	X	X		X								$ 4,000	$ 65,650
Lester River Rd	Minnesota	Saint Louis	City of Duluth	46°50'48.98"N, 92° 0'9.51"W	45	No Posting	3.6	2000	★	Y	N	X		X	X	X			X	X	X		X			X					$ 42,000	$ 76,711
Lester River Rd	Minnesota	Saint Louis	City of Duluth	46°51'23.60"N, 91°59'57.11"W	45	No Posting	3.6	2000	★	Y	N	X		X	X	X			X	X	X		X			X					$ 42,000	$ 76,782
Swan Lake Rd	Minnesota	Saint Louis	City of Duluth	46°48'24.11"N, 92° 8'10.86"W	30	No Posting	0.3	3000	★	Curve Not Evaluated																						
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°44'27.71"N, 92°11'41.00"W	30	No Posting	2.4	1240	★	Curve Not Evaluated																						
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°44'30.28"N, 92°11'34.91"W	30	No Posting	2.4	1240	★	Curve Not Evaluated																						
TH 39/E McCuen St	Minnesota	Saint Louis	City of Duluth	46°39'28.35"N, 92°12'51.73"W	35	No Posting	0.6	2300	★	Curve Not Evaluated																						
MN 23	Minnesota	Saint Louis	City of Duluth	46°39'10.70"N, 92°13'35.26"W	50	No Posting	2.2	2000	★	Curve Not Evaluated																						
H 210/Oldenberg Pkw	Minnesota	Saint Louis	City of Duluth	46°40'21.86"N, 92°17'53.56"W	40	No Posting	2.0	2000	★	Curve Not Evaluated																						
H 210/Oldenberg Pkw	Minnesota	Saint Louis	City of Duluth	46°40'27.79"N, 92°17'39.10"W	40	No Posting	2.0	2000	★	Curve Not Evaluated																						
N Cloquet Rd	Minnesota	Saint Louis	Midway Township	46°43'32.24"N, 92°14'58.75"W	35	No Posting	1.9	680	★	Curve Not Evaluated																						
Bergstrom Rd	Minnesota	Saint Louis	Grand Lake Township	46°55'23.69"N, 92°23'10.28"W	55	No Posting	2.9	215	★	Curve Not Evaluated																						
Hermantown Rd	Minnesota	Saint Louis	City of Hermantown	46°47'19.17"N, 92°13'11.89"W	40	No Posting	1.2	750	★	Curve Not Evaluated																						
Hermantown Rd	Minnesota	Saint Louis	City of Hermantown	46°47'6.54"N, 92°12'47.89"W	40	No Posting	1.1	1300	★	Curve Not Evaluated																						
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°50'13.98"N, 92° 2'43.46"W	30	No Posting	0.4	348	★	Curve Not Evaluated																						
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°50'19.23"N, 92° 2'39.88"W	30	No Posting	0.4	348	★	Curve Not Evaluated																						
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°50'38.92"N, 92° 2'20.46"W	30	No Posting	1.9	348	★	Curve Not Evaluated																						
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°51'4.14"N, 92° 1'35.43"W	30	No Posting	1.9	348	★	Curve Not Evaluated																						
Old North Shore Rd	Minnesota	Saint Louis	Duluth Township	46°54'15.67"N, 91°53'59.03"W	35	35	0.3	364	★	Curve Not Evaluated																						
Howard Gnesen Rd	Minnesota	Saint Louis	City of Duluth	46°50'30.43"N, 92° 6'39.99"W	30	No Posting	2.4	4250	★	Curve Not Evaluated																						
Lester River Rd	Minnesota	Saint Louis	Lakewood Township	46°52'50.82"N, 91°59'3.15"W	45	No Posting	3.6	2000	★	Y	N	X		X	X	X			X	X	X		X			X					$ 46,000	$ 84,695
Port Terminal Dr	Minnesota	Saint Louis	City of Duluth	46°45'8.15"N, 92° 6'10.74"W	30	No Posting	0.6	1900	★	Curve Not Evaluated																						
Minnesota Ave	Minnesota	Saint Louis	City of Duluth	46°43'57.04"N, 92° 3'11.79"W	30	No Posting	1.0	1850	★	Curve Not Evaluated																						
Minnesota Ave	Minnesota	Saint Louis	City of Duluth	46°43'41.76"N, 92° 2'52.54"W	30	No Posting	1.0	1850	★	Curve Not Evaluated																						
42nd Ave	Wisconsin	Douglas	City of Superior	46°40'14.75"N, 92° 2'46.64"W	35	No Posting	1.3	800	★	Curve Not Evaluated																						
E 3rd St	Wisconsin	Douglas	City of Superior	46°40'33.47"N, 92° 0'36.35"W	35	No Posting	0.4	2000	★	Curve Not Evaluated																						
Munger Shaw Rd	Minnesota	Saint Louis	Grand Lake Township	46°52'40.76"N, 92°20'36.96"W	45	No Posting	3.4	1050	★	Curve Not Evaluated																						
Munger Shaw Rd	Minnesota	Saint Louis	Grand Lake Township	46°54'40.85"N, 92°20'18.83"W	45	No Posting	3.4	1050	★	Curve Not Evaluated																						
CTH 61	Minnesota	Saint Louis	City of Duluth	46°52'50.16"N, 91°55'29.81"W	50	No Posting	2.5	2900	★	Curve Not Evaluated																						
Lismore Rd	Minnesota	Saint Louis	Lakewood Township	46°56'17.25"N, 92° 0'20.12"W	55	No Posting	2.0	1250	★	Curve Not Evaluated																						
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'2.16"N, 92°11'5.74"W	30	No Posting	2.1	620	★	Curve Not Evaluated																						
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'9.64"N, 92°11'16.63"W	30	No Posting	2.1	620	★	Curve Not Evaluated																						
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'12.57"N, 92°11'15.58"W	30	No Posting	2.1	620	★	Curve Not Evaluated																						
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'8.34"N, 92°11'9.07"W	30	No Posting	2.1	620	★	Curve Not Evaluated																						
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'6.42"N, 92°11'7.01"W	30	No Posting	2.1	620	★	Curve Not Evaluated																						
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'35.05"N, 92° 9'48.23"W	30	No Posting	1.2	1975	★	Curve Not Evaluated																						
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'37.37"N, 92° 9'40.14"W	30	No Posting	1.2	1975	★	Curve Not Evaluated																						
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'41.12"N, 92° 9'33.96"W	30	No Posting	1.2	1975	★	Curve Not Evaluated																						
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'44.59"N, 92° 9'27.63"W	30	No Posting	1.2	1975	★	Curve Not Evaluated																						
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'44.49"N, 92° 9'23.06"W	30	No Posting	1.2	1975	★	Curve Not Evaluated																						
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'56.52"N, 92° 9'2.67"W	30	No Posting	1.2	1975	★	Curve Not Evaluated																						
W Skyline Pkwy	Minnesota	Saint Louis	City of Proctor	46°43'33.38"N, 92°13'16.73"W	30	No Posting	0.2	4150	★	Curve Not Evaluated																						
Woodland Ave	Minnesota	Saint Louis	City of Duluth	46°51'44.29"N, 92° 4'26.58"W	30	No Posting	0.5	1724	★	Curve Not Evaluated																						
Helberg Dr	Minnesota	Saint Louis	City of Duluth	46°45'25.17"N, 92° 6'10.34"W	30	No Posting	0.7	830	★	Curve Not Evaluated																						
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°47'18.34"N, 92° 6'36.95"W	30	No Posting	0.2	1580	★	Curve Not Evaluated																						
Woodland Ave	Minnesota	Saint Louis	City of Duluth	46°51'41.05"N, 92° 4'34.83"W	30	No Posting	0.5	1724	★	Curve Not Evaluated																						
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°46'27.18"N, 92° 7'29.74"W	30	No Posting	1.7	1580	★	Y	N	X		X	X	X			X	X		X	X			X	X				$ 5,000	$ 66,171

Safety Emphasis Area 2

Urban Intersections - Side Road Stop Control
Angle Crashes

Road Name	Lat/Long	Municipality	Traffic Control	Total Stars	Number of Angle KAB Crashes	Conduct a Traffic Study	Remove Vegetation or Obstructions to Improve Stop Sign Visibility	Restrict Parking Near the Intersection	Install Retroreflective Strips on Stop Sign Posts	Install Flashing Beacons with Warning 'Stop Ahead' Signs	Install Left Turn Lanes	Reduce Lane Widths and Install Left Turn Lanes	Complete a Road Diet Evaluation	Consider Installing Right Turn Lanes	Remove Obstructions to Increase Intersection Sight Distance	Install Pedestrian Curb Extensions	Extend Median Through Crosswalk	Install High-Visibility Crosswalk	Left Turn Calming	Reduce Lane Widths and Install Median	Install Raised Crosswalk	Install Raised Intersection	Install Stop Bar Pavement Markings on Side Road Approaches	Evaluate Suitability of Existing Lighting System	Install Intersection Lighting	Project Cost Estimate
E 2nd St - Hwy 53/2, E 2nd St - Hwy 53/2, E 3rd St	46.67769,-92.01047	City of Superior	2-Way Stop	★★★★★½	1	X				X				X	X			X		X	X or	X or	X	X		$ 3,725,000
Midway Rd, Old Miller Trunk Hwy	46.853476,-92.280423	Canosia Township	2-Way Stop	★★★★★	1	X			X						X				X				X		X	$ 160,000
E 2nd St - Hwy 53/2, 31st Ave E, E 2nd St - Hwy 53/2	46.697325,-92.035494	City of Superior	2-Way Stop	★★★★★	1	X								X				X		X			X	X		$ 3,562,000
Railroad St, Railroad St, Harbor Dr	46.783758,-92.098405	City of Duluth	2-Way Stop	★★★★½	0				X	X				X							X			X		$ 472,000
Rice Lake Rd, Rice Lake Rd, E Skyline Pkwy	46.796809,-92.107038	City of Duluth	1-Way Stop	★★★★½	0	X			X												X		X	X		$ 484,000
TH23/Grand Ave, S 63rd Ave W	46.733143,-92.177404	City of Duluth	2-Way Stop	★★★★½	0			X	X					X					X or	X or	X or	X or	X	X		$ 1,131,000
Highway 53, E St	46.725675,-92.073523	City of Superior	2-Way Stop	★★★★½	0						X		X	X									X	X	X	$ 1,931,000
E 2nd St - Hwy 53/2, E 2nd St - Hwy 53/2, 23rd Ave E	46.705584,-92.046012	City of Superior	2-Way Stop	★★★★	0										X		X	X		X	X or	X or		X		$ 322,000
Hammond Ave, Broadway St, Hammond Ave	46.726591,-92.097838	City of Superior	2-Way Stop	★★★★	1	X		X	X							X		X	X or	X or	X or	X or		X		$ 501,000
Tower Ave, Tower Ave, N 34th St, N 34th St	46.698911,-92.104079	City of Superior	2-Way Stop	★★★★	0				X					X		X		X			X or	X or		X		$ 648,000
E 2nd St - Hwy 53/2, Marina Dr, E 2nd St - Hwy 53/2	46.718679,-92.063054	City of Superior	2-Way Stop	★★★★	0		X		X	X				X	X		X	X			X or	X		X		$ 693,000
Tower Ave, Tower Ave, N 16th St	46.719309,-92.103964	City of Superior	2-Way Stop	★★★★	0	X			X							X		X		X	X or	X or		X		$ 727,000
Belknap St, E 5th St, E 5th St, Belknap St	46.72148,-92.073535	City of Superior	2-Way Stop	★★★★	0				X	X				X						X				X		$ 1,025,000
Tower Ave, N 40th St	46.6917,-92.104146	City of Superior	2-Way Stop	★★★★	0									X		X	X	X			X or	X or		X		$ 1,185,000
Skyline Pkwy, TH 194/Mesaba Ave, E 9th St, Mesaba Ave	46.793681,-92.10707	City of Duluth	2-Way Stop	★★★★	0		X		X		X			X									X	X		$ 1,213,000
4th St, TH 194/Mesaba Ave	46.785267,-92.10836	City of Duluth	2-Way Stop	★★★★	0		X	X	X		X			X	X								X	X		$ 1,215,000
E Superior St, N 14th Ave E, S 14th Ave E, E Superior St	46.800315,-92.08077	City of Duluth	2-Way Stop	★★★★	1	X		X	X					X	X	X		X	X		X or	X or			X	$ 2,629,000
E Superior St, 47th Ave E, 47th Ave E	46.82925,-92.029228	City of Duluth	2-Way Stop	★★★★	0	X		X	X					X					X		X or	X or		X		$ 3,482,000
W Michigan St, W Superior St, W Michigan St	46.773974,-92.113991	City of Duluth	1-Way Stop	★★★½	0				X															X		$ 4,000
Woodland Ave, W Redwing St	46.850022,-92.081848	City of Duluth	2-Way Stop	★★★½	0				X						X			X	X or	X or				X		$ 238,000
Highway 53, Catlin Ave	46.733377,-92.087412	City of Superior	1-Way Stop	★★★½	0			X	X				X					X	X or	X or			X	X		$ 308,000
Tower Ave, N 58th St, Tower Ave	46.669482,-92.104311	City of Superior	2-Way Stop	★★★½	0			X	X									X	X or	X or	X or	X or		X		$ 353,000
Woodland Ave, Woodland Ave	46.810829,-92.078289	City of Duluth	2-Way Stop	★★★½	0		X		X						X			X	X or	X or	X or	X or		X		$ 365,000
Highway 53, Grand Ave, Grand Ave	46.733759,-92.093319	City of Superior	2-Way Stop	★★★½	0			X	X				X							X			X	X		$ 413,000
N 6th Ave E, E 7th St	46.797353,-92.098371	City of Duluth	2-Way Stop	★★★½	0				X				X						X or	X or	X or	X or	X	X		$ 629,000
Tower Ave, N 56th St, Tower Ave	46.672224,-92.104293	City of Superior	2-Way Stop	★★★½	0				X					X	X	X		X	X or	X or	X or	X		X		$ 858,000
N 12th St, N 12th St, Tower Ave, Tower Ave	46.724274,-92.103911	City of Superior	2-Way Stop	★★★½	1	X			X																	$ 1,549,000
N 21st Ave E, E 1st St	46.807646,-92.073203	City of Duluth	2-Way Stop	★★★½	1	X		X	X							X		X	X or	X or			X			$ 1,880,000
Highland Ave, Vinland St, W SKyline Pkwy, Getchell Rd	46.750383,-92.187843	City of Duluth	2-Way Stop	★★★½	1	X			X	X																$ 2,567,000
Crosley Ave, 47th Ave E	46.841267,-92.029455	City of Duluth	2-Way Stop	★★★½	1	X		X	X		X		X										X			$ 2,653,000
Tower Ave, Henry Cohen Dr	46.684543,-92.104201	City of Superior	2-Way Stop	★★★½	0	X			X					X	X	X		X		X				X		$ 3,680,000
N 59th Ave W, N 59th Ave W, Cody St, Cody St	46.741309,-92.171944	City of Duluth	2-Way Stop	★★★½	3	X		X	X		X			X		X	X	X						X		$ 4,416,000
TH 23/Commonwealth Ave, TH 39/E McCuen St.	46.657238,-92.226382	City of Duluth	2-Way Stop	★★★	0				X						X								X	X		$ 13,000
Haines Rd, W SKyline Pkwy, Haines Rd	46.758685,-92.163991	City of Duluth	1-Way Stop	★★★	0		X		X			X													X	$ 41,000
London Rd, S 14th Ave E, London Rd	46.799193,-92.079391	City of Duluth	2-Way Stop	★★★	0				X							X		X						X		$ 116,000
E Skyline Pkwy, E Skyline Pkwy, E 13th St	46.801564,-92.104711	City of Duluth	1-Way Stop	★★★	0				X			X			X			X	X or	X or			X	X		$ 136,000
E 4th St, N 12th Ave E	46.801087,-92.087656	City of Duluth	2-Way Stop	★★★	0			X	X						X			X	X		X or	X or	X	X		$ 167,000
Highway 2, Highway 2, N 2nd Ave	46.741341,-92.222349	City of Proctor	2-Way Stop	★★★	0		X	X	X			X								X			X	X		$ 224,000
W 4th St, N 3rd Ave W	46.786766,-92.10627	City of Duluth	2-Way Stop	★★★	0			X	X						X	X		X	X		X or	X or	X	X		$ 267,000
Hammond Ave, N 5th St, Hammond Ave, N 5th St	46.732539,-92.097857	City of Superior	1-Way Stop	★★★	0				X								X	X			X or	X or	X	X		$ 288,000
E 4th St, N 4th Ave E	46.793465,-92.097548	City of Duluth	2-Way Stop	★★★	0	X	X or		X	X or						X		X	X		X or	X or	X	X		$ 711,000
Highway 53, N 5th St	46.73254,-92.085315	City of Superior	1-Way Stop	★★★	0		X		X				X	X										X		$ 711,000
Glenwood St, Glenwood St, N 43rd Ave E	46.840383,-92.037093	City of Duluth	2-Way Stop	★★★	0				X		X		X					X	X or	X or			X	X		$ 823,000
N 24th Ave W, S 24th Ave W, W Superior St, W Superior St	46.764095,-92.128014	City of Duluth	2-Way Stop	★★★	0			X	X					X		X		X	X or	X or	X or	X or	X	X		$ 1,255,000
E 9th St, 11th Ave E	46.803465,-92.094328	City of Duluth	2-Way Stop	★★★	1	X			X									X					X	X		$ 1,566,000
Rice Lake Rd, Rice Lake Rd, E 13th St	46.799962,-92.107071	City of Duluth	1-Way Stop	★★★	1	X			X																X	$ 1,575,000
N 3rd St, N 3rd St	46.735177,-92.099363	City of Superior	2-Way Stop	★★★	0	X			X		X													X		$ 1,952,000
E 2nd St, N 14th Ave E	46.801641,-92.08296	City of Duluth	2-Way Stop	★★★	1	X		X	X			X	X			X								X		$ 1,961,000
N 1st St E, E 4th St, N 1st Ave E	46.790576,-92.10133	City of Duluth	2-Way Stop	★★★	1	X		X	X			X	X			X		X	X or	X or	X or	X or		X		$ 2,197,000
Broadway St, Broadway St, Ogden Ave, Ogden Ave	46.726606,-92.102351	City of Superior	2-Way Stop	★★★	2	X		X	X					X	X	X		X	X or	X or	X or	X or		X		$ 2,789,000

Safety Emphasis Area 3

Signalized Intersections Along Multi-Lane Arterials

Signalized Intersection Name	Municipality	Intersection Location (Lat/Long)	Total Stars	Conduct Traffic Study	Install Median at Intersection	Reduce Lane Widths and Install Median	Realign Intersection to <20 Deg. Skew	Install FYA Signal Indications	Consider Changing Left Turn Phasing to Prot/Perm or Prot Only	Install Left Turn Lanes	Complete Road Diet Evaluation to Install Left Turn Lanes	Complete Road Diet Evaluation to Install Left Turn Lanes and Medians	Improve Channelized Right Turn Lane Geometry	Improve Left Turn Lane Offset	Add "Prepare to Stop When Flashing Beacons	Install Enforcement Confirmation Lights	Update Corridor Signal Timing to Favor Slower Progression Speeds	Verify & Update Pedestrian Clearance Intervals	Install High-Visibility Crosswalks	Install LPI	Install Pedestrian Countdown Timer Signal Indications	Evaluate Suitability of Existing Lighting System	Install Lighting	Install Retroreflective Signal Head Backplates	Install Traffic Signal Indications Over Each Lane for Mainline	Project Cost Estimate
MNTH 23 (Grand Ave) & MSAS 108, MUN 153 (Raleigh St)	City of Duluth	46.731269,-92.180057	★★★★★★★★★★			X	X		X		X							X		X		X		X		$ 1,840,000
Arrowhead Road and Arlington Ave	City of Duluth	46.8222412,-92.1323428	★★★★★★★★			X or			X						X or	X or		X		X		X				$ 240,000
First Street and 46th Ave W	City of Duluth	46.744615,-92.1568984	★★★★★★★★			X or		X	X			X or			X or	X or		X		X	X	X		X	X	$ 637,000
18th Ave E & E 5th St	City of Superior	46.708897,-92.055627	★★★★★★★★			X or		X	X	X or		X or						X	X	X	X	X		X	X	$ 883,000
MNTH 23 (Grand Ave) & River West Dr/Warkwick St	City of Duluth	46.714344,-92.203656	★★★★★★★★			X or			X			X or						X		X		X				$ 929,000
USTH 53 (Miller Trunk Hwy) & CSAH 91 (Haines Rd)	City of Hermantown	46.814785,-92.174789	★★★★★★★★				X		X				X	X			X	X		X		X		X		$ 1,309,000
USTH 53 (Miller Trunk Hwy) & MSAS 104, CSAH 32 (W Arrowhead Rd)	City of Hermantown	46.822112,-92.18676	★★★★★★★★	X				X	X				X	X			X	X	X	X		X		X	X	$ 3,153,000
USTH 53 (Miller Trunk Hwy) & CSAH 13 (Midway Rd)	Canosia Township	46.852995,-92.280403	★★★★★★★ ½										X		X or	X or		X	X	X		X		X		$ 118,000
USH 2/USH 53 (E 2nd) & 22nd Ave E	City of Superior	46.706586,-92.047341	★★★★★★★ ½			X			X									X	X	X		X		X		$ 232,000
CSAH 9 (4th St) at 6th Ave E	City of Duluth	46.795357,-92.09511	★★★★★★★ ½			X or		X	X			X or					X	X		X		X		X	X	$ 501,000
Superior Street and 27th Ave W	City of Duluth	46.7613776,-92.1317979	★★★★★★★ ½			X or		X	X			X or					X	X		X	X	X		X	X	$ 512,000
USTH 53 (Trinity Rd) & CSAH 90 (Arlington Ave)	City of Duluth	46.78255,-92.138753	★★★★★★★ ½			X		X	X					X	X or	X or		X		X		X		X		$ 513,000
USTH 53 (Trinity Rd) & MSAS 198 (Anderson Rd)	City of Duluth	46.793185,-92.156289	★★★★★★★ ½			X		X	X					X	X or	X or		X	X	X		X		X		$ 525,000
MNTH 23 (Grand Ave) & MUN 172 (72nd Ave W)	City of Duluth	46.725327,-92.188433	★★★★★★★ ½			X or			X			X or						X		X		X		X		$ 933,000
USH 53 (2nd St) & USH 2 (Belknap St)	City of Superior	46.722281,-92.068439	★★★★★★★ ½	X										X				X		X		X				$ 2,897,000
STH 35 (Tower Ave) & N 28th St	City of Superior	46.706188,-92.104047	★★★★★★★ ½	X				X	X					X				X	X	X	X	X		X	X	$ 3,095,000
STH 35 (Tower Ave) & N 21st St	City of Superior	46.713416,-92.103969	★★★★★★★ ½	X				X	X					X				X	X	X	X	X		X	X	$ 3,095,000
USTH 53 (Miller Trunk Hwy) & CSAH 48 (Lavaque Bypass Rd), MSAS 101 (Ugstad Rd	City of Hermantown	46.83658,-92.238403	★★★★★★★						X					X	X or	X or	X	X		X		X				$ 273,000
MNTH 23 (Grand Ave) & MSAS 101 (88th Ave W)	City of Duluth	46.697136,-92.218051	★★★★★★★			X or			X			X or						X		X		X		X		$ 933,000
USTH 53 (Miller Trunk Hwy) & CSAH 17, MSAS 103 (Stebner Rd)	City of Hermantown	46.827651,-92.195789	★★★★★★★				X	X					X				X	X		X		X		X		$ 1,094,000
College Street and Kenwood Ave	City of Duluth	46.8167053,-92.1003188	★★★★★★★	X				X	X									X	X	X	X	X		X	X	$ 2,843,000
TH 194 (Central Ent) & MSAS 198, M 535 (Anderson Rd)	City of Duluth	46.800664,-92.143421	★★★★★★★	X		X		X	X					X	X or	X or	X	X	X	X		X		X	X	$ 3,293,000
USTH 53 & CSAH 54 (Piedmont Ave)	City of Duluth	46.775111,-92.143167	★★★★★★ ½					X	X						X or	X or		X		X		X		X	X	$ 194,000
TH 194 (Central Ent) & MSAS 182 (Pecan Ave)	City of Duluth	46.799477,-92.116405	★★★★★★ ½						X				X	X			X	X		X		X		X	X	$ 464,000
Summit Street and Woodland Ave	City of Duluth	46.817781,-92.077889	★★★★★★ ½			X or		X	X			X or						X	X	X		X		X		$ 500,000
TH 194 (Mesaba Ave) & MSAS 127 (W 7th St)	City of Duluth	46.790914,-92.106795	★★★★★★ ½					X	X				X	X			X	X		X		X		X	X	$ 575,000
TH 194 & CSAH 4 (Rice Lake Rd) & MSAS 192 (Central Ent)	City of Duluth	46.795888,-92.107092	★★★★★★ ½			X		X	X				X		X or	X or	X	X		X		X		X	X	$ 562,000
Arrowhead Road and Rice Lake Road (CSAH 4)	City of Duluth	46.822098,-92.12661	★★★★★★ ½	X		X			X				X					X		X		X				$ 2,939,000
TH 194 (Central Ent) & MSAS 205, M 494 (Basswood Ave)	City of Duluth	46.80047,-92.135306	★★★★★★ ½	X		X		X	X								X	X	X	X		X		X	X	$ 3,041,000
Michigan Street and 27th Ave W	City of Duluth	46.760847,-92.131133	★★★★★★ ½	X		X or		X	X			X or					X	X	X	X	X	X		X	X	$ 3,184,000
US 2 at CSAH 14 (Boundary Ave)	City of Duluth	46.738127,-92.217107	★★★★★★	X												X						X		X		$ 58,000
Grand Ave and 46th Ave W	City of Duluth	46.7460826,-92.1592956	★★★★★★			X		X	X									X	X	X	X	X		X		$ 280,000
STH 35 (Tower Ave) & N 31st St	City of Superior	46.70253,-92.104136	★★★★★★					X	X					X				X	X	X	X	X		X	X	$ 447,000
STH 35 (Tower Ave) & N 37th St	City of Superior	46.695397,-92.104127	★★★★★★					X	X					X				X	X	X	X	X		X	X	$ 447,000
Clover Street and Woodland Ave	City of Duluth	46.8157372,-92.0780403	★★★★★★			X or		X	X			X or					X	X	X	X	X	X		X	X	$ 520,000
TH 194 (Mesaba Ave) & MSAS 126 (W 3rd St)	City of Duluth	46.783745,-92.108303	★★★★★★					X	X	X							X	X		X		X		X		$ 855,000
USTH 53 (Miller Trunk Hwy) & MSAS 107 (Loberg Ave)	City of Hermantown	46.81906,-92.181777	★★★★★★	X									X				X					X		X		$ 2,735,000
TH 194 (Central Ent) & CSAH 90 (Arlington Ave)	City of Duluth	46.800452,-92.13214	★★★★★★	X		X		X	X								X	X		X		X		X	X	$ 3,029,000
Railroad Street and Canal Park Dr	City of Duluth	46.7850637,-92.0950474	★★★★★ ½													X						X		X		$ 10,000
CSAH 9 (Woodland Ave) at W Arrowhead Rd	City of Duluth	46.825768,-92.071347	★★★★★ ½			X			X				X		X or	X or	X	X		X		X				$ 390,000
USH 2/USH 53 (E 2nd) & 18th Ave E	City of Superior	46.71075,-92.052616	★★★★★ ½							X				X					X	X	X	X		X		$ 659,000
TH 53 & MSAS 108 (Cirrus Dr), M166 (Sugar Maple Dr)	City of Hermantown	46.833594,-92.205486	★★★★★ ½	X													X	X	X	X		X		X		$ 2,675,000
USH 2/USH 53 (E 2nd) & 39th Ave E	City of Superior	46.689033,-92.025013	★★★★★ ½	X		X			X									X	X	X		X		X		$ 2,892,000
USTH 53 (Trinity Rd) & MSAS 209, MUN 1414 (Mall Drive)	City of Duluth	46.801655,-92.154729	★★★★★ ½	X				X	X					X			X	X		X		X		X		$ 2,936,000
USTH 53 (Trinity Rd) & USTH 194 (Central Ent)	City of Duluth	46.804291,-92.153721	★★★★★ ½	X									X				X	X		X		X		X		$ 2,963,000

Safety Emphasis Area 4

Urban Intersections
Bike Ped Crashes

Road Name	Lat/Long	Municipality	Total Stars	High-Severity Crash History (Read Comment)	Conduct a Traffic Study	Install Sidewalk	Install Pedestrian Curb Extensions	Install Median	Reduce Lane Width and Install Median	Install High-Visibility Crosswalks	Left Turn Calming	Extend Median Through Crosswalk	Evaluate Suitability of Existing Lighting System	Install Intersection Lighting	Leading Pedestrian Interval	Install Pedestrian Countdown Timer Signal Indications	Verify/Update Pedestrian Crossing Times	Install RRFB	Install Pedestrian Hybrid Beacon	Install Raised Crosswalk	Install Raised Intersection	Install Bicycle Signal Heads	Bike Box (Two-Stage Turn)	Install Flexible Delineator Posts	Mark Bike Lanes Through Intersection	Use Green Pavement for Bike Lanes	Install Bike Lanes	Reduce Lane Width and Install Bike Lanes	Complete Road Diet Evaluation	Consider Bike Path or Multi-Use Path	Evaluate for Transit Improvements at Nearby Bus Stops	Project Cost Estimate
Tower Ave, N 28th Ave, N 28th St, Tower Ave	46.706202,-92.104034	City of Superior	★★★★★★★★	2	X					X			X		X	X	X													X	$ 2,725,000
N 1st Ave E, S 1st Ave E, E Superior St, E Superior St	46.787872,-92.09695	City of Duluth	★★★★★★★★ ↾	1							X		X		X		X													X	$ 54,000
Tower Ave, N 21st St, N 21st St, Tower Ave	46.71342,-92.104006	City of Superior	★★★★★★★★ ↾	1						X		X	X		X	X	X													X	$ 215,000
S Lake Ave, W Superior St, N Lake Ave, E Superior St	46.786944,-92.098145	City of Duluth	★★★★★★★★ ↾	3	X		X			X	X		X		X	X	X							X					X	X	$ 476,000
N 2nd Ave W, W 2nd St	46.786435,-92.102837	City of Duluth	★★★★★★★★ ↾	1	X					X			X		X	X	X					X	X	X	X	X		X or	X or			$ 612,000
Tower Ave, Tower Ave, N 16th St	46.719309,-92.103964	City of Superior	★★★★★★★★ ↾	1	X		X		X	X			X					X		X or	X or										X	$ 808,000
E Superior St, S 3rd Ave E, N 3rd Ave E	46.789807,-92.094437	City of Duluth	★★★★★★★★	1	X						X		X		X		X														X	$ 54,000
E 2nd St - Hwy 53/2, 39th Ave E	46.68907,-92.024958	City of Superior	★★★★★★★★	0					X	X			X		X		X														X	$ 273,000
N 6th Ave E, E 4th St, N 6th Ave E	46.795355,-92.095123	City of Duluth	★★★★★★★★	1	X				X				X		X		X													X	X	$ 393,000
Tower Ave, N 31st St	46.702589,-92.10406	City of Superior	★★★★★★★★	0						X			X		X	X	X														X	X	$ 502,000
Tower Ave, N 20th St	46.714713,-92.103983	City of Superior	★★★★★★★★	0			X	X		X		X	X					X and/or	X or	X and/or	X and/or										X	$ 564,000
Tower Ave, N 18th St	46.717022,-92.10396	City of Superior	★★★★★★★★	0	X		X	X		X			X					X and/or	X or	X and/or	X and/or										X	$ 981,000
N 4th Ave W, S 4th Ave W, W Superior St	46.783113,-92.103174	City of Duluth	★★★★★★★ ↾	1							X		X		X		X														X	$ 54,000
N 24th Ave W, N 24th Ave W, W 3rd St, W 3rd St	46.766138,-92.131292	City of Duluth	★★★★★★★ ↾	1	X					X	X		X		X	X	X														X	$ 85,000
S 5th Ave W, N 5th Ave W, W Superior St, W Superior St	46.782185,-92.104402	City of Duluth	★★★★★★★ ↾	0							X	X	X		X		X														X	$ 184,000
E 2nd St, N 1st Ave E, N 1st Ave E	46.789237,-92.099117	City of Duluth	★★★★★★★ ↾	0						X			X		X	X	X					X	X	X	X	X		X or	X or			$ 224,000
Belknap St, Lamborn Ave, Grand Ave, Belknap St	46.72062,-92.09344	City of Superior	★★★★★★★ ↾	0							X		X		X		X					X	X	X	X	X		X or	X or		X	$ 251,000
Ogden Ave, Belknap St, Belknap St, Ogden Ave	46.720645,-92.102379	City of Superior	★★★★★★★ ↾	0							X		X		X		X					X	X	X	X	X		X or	X or		X	$ 251,000
N Lake Ave, W 1st St, E 1st St	46.787635,-92.099302	City of Duluth	★★★★★★★ ↾	0						X	X		X		X	X	X												X		X	$ 325,000
E Superior St, N 4th Ave E	46.790771,-92.093213	City of Duluth	★★★★★★★ ↾	1	X		X			X	X		X					X and/or	X or	X and/or	X and/or										X	$ 405,000
Woodland Ave, Summit St	46.817772,-92.077898	City of Duluth	★★★★★★★ ↾	0					X	X			X		X		X												X		X	$ 453,000
N Lake Ave, E 2nd St, W 2nd St, N Lake Ave	46.788296,-92.100372	City of Duluth	★★★★★★★ ↾	0					X	X			X		X	X	X					X	X	X	X	X		X or	X or		X	$ 473,000
E Central Entrance, S Arlington Ave	46.800418,-92.132132	City of Duluth	★★★★★★★ ↾	0					X or		X or		X		X		X													X	X	$ 489,000
Tower Ave, N 17th St	46.718164,-92.103965	City of Superior	★★★★★★★ ↾	0			X	X		X			X					X and/or	X or	X and/or	X and/or											$ 553,000
Tower Ave, N 19th St	46.715859,-92.103961	City of Superior	★★★★★★★ ↾	0			X	X		X			X					X and/or	X or	X and/or	X and/or											$ 553,000
Highway 53, Grand Ave, Grand Ave	46.733759,-92.093319	City of Superior	★★★★★★★ ↾	0		X	X	X		X			X					X and/or	X or	X and/or	X and/or											$ 620,000
Tower Ave, Tower Ave, N 37th St, N 37th St	46.695387,-92.10411	City of Superior	★★★★★★★ ↾	0						X		X	X		X	X	X													X	X	$ 640,000
E 9th St, N Central Entrance, N 6th Ave E	46.798692,-92.100577	City of Duluth	★★★★★★★ ↾	0	X				X	X			X		X		X														X	$ 845,000
Belknap St, Hammond Ave	46.720626,-92.097883	City of Superior	★★★★★★★ ↾	0	X						X		X		X		X					X	X	X	X	X		X or	X or		X	$ 2,903,000
E Superior St, S 2nd Ave E, N 2nd Ave E, E Superior St	46.788881,-92.095628	City of Duluth	★★★★★★★	0						X			X		X		X														X	$ 54,000
N 6th Ave W, S 6th Ave W, W Superior St	46.781205,-92.105671	City of Duluth	★★★★★★★	0						X			X		X		X														X	$ 54,000
W Superior St, S 1st Ave W, W Superior St, N 1st Ave W	46.78597,-92.09938	City of Duluth	★★★★★★★	0						X			X		X		X														X	$ 54,000
N 5th Ave E, E 2nd St	46.793089,-92.094084	City of Duluth	★★★★★★★	1	X								X		X		X														X	$ 94,000
Maple Grove Rd, Burning Tree Rd, Burning Tree Rd	46.807567,-92.169205	City of Duluth	★★★★★★★	0								X	X		X		X														X	$ 184,000
E 2nd St, N 3rd Ave E	46.791129,-92.096598	City of Duluth	★★★★★★★	0						X			X																	X	X	$ 217,000
W 2nd St, N 3rd Ave W	46.785453,-92.104074	City of Duluth	★★★★★★★	0						X			X		X	X	X					X	X	X	X	X		X or	X or			$ 224,000
W 2nd St, N 4th Ave W, N 4th Ave W	46.784465,-92.105373	City of Duluth	★★★★★★★	0						X			X		X	X	X					X	X	X	X	X		X or	X or			$ 224,000
N 1st Ave W, W 2nd St, N 1st Ave W	46.787326,-92.101633	City of Duluth	★★★★★★★	0						X			X		X	X	X					X	X	X	X	X		X or	X or			$ 224,000
W 1st St, S 46th Ave W, N 46th Ave W, Mike Colalillo Dr	46.744573,-92.157187	City of Duluth	★★★★★★★	0					X				X		X	X	X														X	$ 256,000
Grand Ave, Grand Ave, N 40th Ave W, N 40th Ave W	46.751662,-92.15132	City of Duluth	★★★★★★★	0				X or		X	X or		X		X	X	X														X	$ 273,000
E 4th St, N 5th Ave E	46.794438,-92.09629	City of Duluth	★★★★★★★	0					X or	X	X or		X		X	X	X														X	$ 280,000
N 59th Ave W, Grand Ave, S 59th Ave W, Grand Ave	46.736998,-92.171989	City of Duluth	★★★★★★★	0					X	X		X	X		X	X	X					X	X	X	X	X	X	X			X	$ 294,000
US 53, US 53, S Arlington Ave	46.782563,-92.138722	City of Duluth	★★★★★★★	0		X			X				X		X		X															$ 297,000
Ramsey St, Grand Ave	46.739014,-92.169151	City of Duluth	★★★★★★★	0					X	X			X		X	X	X					X	X	X	X	X	X				X	$ 323,000
E Central Entrance, Rice Lake Rd, N Central Entrance, Mesaba Ave	46.795862,-92.107036	City of Duluth	★★★★★★★	0					X			X	X		X		X															$ 353,000
Central Ave, Ramsey St, Ramsey St	46.73891,-92.166567	City of Duluth	★★★★★★★	0					X or	X	X or		X		X	X	X												X	X	X	$ 400,000
E St Marie St, Woodland Ave, W Saint Marie St	46.822148,-92.074099	City of Duluth	★★★★★★★	0					X	X			X		X	X	X													X		$ 420,000
Woodland Ave, Clover St	46.815825,-92.078254	City of Duluth	★★★★★★★	0					X	X			X		X	X	X													X		$ 420,000
N 6th Ave E, E 3rd St, N 6th Ave E, N 6th Ave E, E 3rd St	46.79468,-92.094027	City of Duluth	★★★★★★★	0					X	X			X		X	X	X													X	X	$ 424,000
N Cental Ave, Grand Ave, Central Ave, Grand Ave	46.740858,-92.166553	City of Duluth	★★★★★★★	0					X	X			X		X		X					X	X				X		X	X	X	$ 442,000
US 53, Cottonwood Ave/Loberg Ave	46.805561,-92.156889	City of Duluth	★★★★★★★	0		X				X		X	X		X		X					X	X	X	X	X		X or		X or		$ 453,000
E 3rd St, E 3rd St, N 3rd Ave E	46.791815,-92.097719	City of Duluth	★★★★★★★	1	X		X						X											X		X						$ 516,000
Haines Rd, Arrowhead Rd, Haines Rd, Arrowhead Rd	46.822086,-92.174837	City of Hermantown	★★★★★★★	0		X			X	X			X		X	X	X														X	$ 533,000
W Central Entrance, Mall Dr	46.802217,-92.148685	City of Duluth	★★★★★★★	0		X			X				X		X		X													X	X	$ 565,000
N 6th Ave E, E 6th St	46.7967,-92.097284	City of Duluth	★★★★★★★	1	X		X						X																	X	X	$ 675,000
Grand Ave, N 6th St	46.731369,-92.093355	City of Superior	★★★★★★★	1	X		X		X or		X or		X					X and/or	X or	X and/or	X and/or										X	$ 978,000
Winter St, Hammond Ave, Winter St	46.727879,-92.097828	City of Superior	★★★★★★★	2	X	X			X	X			X		X		X															$ 1,808,000
N 27th Ave W, W Superior St, W Superior St	46.761256,-92.13176	City of Duluth	★★★★★★★	1	X				X or		X or		X		X	X	X					X	X	X	X	X					X	$ 1,841,000
E Central Entrance, Pecan Ave	46.799475,-92.116465	City of Duluth	★★★★★★★	1	X							X	X		X	X	X													X	X	$ 3,004,000
Miller Trunk Hwy, W Central Entrance, US 53 (Trinity Rd), Joshua Ave	46.804276,-92.153697	City of Duluth	★★★★★★★	0	X	X						X	X		X		X													X		$ 3,040,000
E Central Entrance, Blackman Ave	46.800081,-92.121644	City of Duluth	★★★★★★★	1	X				X	X				X				X and/or	X or	X and/or	X and/or									X	X	$ 3,404,000
Arrowhead Rd, Arrowhead Rd, Rice Lake Rd	46.822047,-92.126829	City of Duluth	★★★★★★ ↾	0									X																		X	$ 43,000
Railroad St, S Lake Ave, Canal Park Dr	46.784937,-92.095199	City of Duluth	★★★★★★ ↾	0									X		X		X														X	$ 46,000
E Superior St, E Superior St, N 12th Ave E, S 12th Ave E	46.798389,-92.083292	City of Duluth	★★★★★★ ↾	0							X		X		X		X														X	$ 54,000
Mesaba Ave, Mesaba Ave, W 1st St, W 1st St	46.780927,-92.108057	City of Duluth	★★★★★★ ↾	0						X			X		X		X														X	$ 70,000
US 53 (Trinity Rd), Mall Dr	46.801647,-92.154711	City of Duluth	★★★★★★ ↾	0						X			X		X		X														X	$ 70,000
Maple Grove Rd, Maple Grove Rd, Mall Dr, Mall Dr	46.80756,-92.165403	City of Duluth	★★★★★★ ↾	0		X				X			X		X		X														X	$ 87,000
Midway Rd, Midway Rd, Highway 53, Highway 53	46.853005,-92.280425	Canosia Township	★★★★★★ ↾	0		X				X			X																		X	$ 100,000
W Superior St, N 40th Ave W, W Superior St	46.749569,-92.148236	City of Duluth	★★★★★★ ↾	0						X				X																X	X	$ 150,000
Tower Ave, Tower Ave, Belknap St, Belknap St	46.720642,-92.103942	City of Superior	★★★★★★ ↾	0							X		X		X		X					X	X	X	X	X		X or	X or			$ 211,000
E 2nd St, N 2nd Ave E, N 2nd Ave E	46.790189,-92.097857	City of Duluth	★★★★★★ ↾	0						X			X		X	X	X					X	X	X	X	X		X or	X or			$ 224,000
W 3rd St, N Lake Ave, E 3rd St	46.788962,-92.101451	City of Duluth	★★★★★★ ↾	0					X	X			X		X	X	X															$ 240,000
Grand Ave, 88th Ave W	46.697264,-92.217955	City of Duluth	★★★★★★ ↾	0					X		X		X		X		X														X	$ 257,000
Bristol St, Central Ave, Central Ave	46.737641,-92.166577	City of Duluth	★★★★★★ ↾	0			X						X															X	X		X	$ 263,000
Belknap St, Highway 53, E 2nd St - Hwy 53/2, Marina Dr	46.722237,-92.068388	City of Superior	★★★★★★ ↾	0		X				X		X	X		X		X															$ 264,000
Highway 53, N 5th St	46.73254,-92.085315	City of Superior	★★★★★★ ↾	0									X					X and/or	X or	X and/or	X and/or										X	$ 273,000
US 53, Maple Grove Rd	46.807792,-92.163401	City of Duluth	★★★★★★ ↾	0		X							X		X		X													X		$ 323,000
Tower Ave, Tower Ave, N 34th St, N 34th St	46.698911,-92.104079	City of Superior	★★★★★★ ↾	0		X				X			X					X and/or	X or	X and/or	X and/or										X	$ 380,000
US 53, Maple Burning Tree Rd	46.81089,-92.168446	City of Duluth	★★★★★★ ↾	0		X				X		X	X		X		X													X		$ 416,000
Belknap St, Hughitt Ave	46.720639,-92.099447	City of Superior	★★★★★★ ↾	0							X		X					X and/or	X or	X and/or	X and/or	X	X	X	X	X		X or	X or		X	$ 478,000
Tower Ave, N 40th St	46.6917,-92.104146	City of Superior	★★★★★★ ↾	0		X				X		X	X					X and/or	X or	X and/or	X and/or											$ 478,000
W Central Entrance, Basswood Ave	46.800474,-92.135306	City of Duluth	★★★★★★ ↾	0					X or		X or		X		X		X														X	X	$ 489,000
Tower Ave, N 23rd St	46.710983,-92.104012	City of Superior	★★★★★★ ↾	0					X	X			X					X and/or	X or	X and/or	X and/or											X	$ 500,000
Woodland Ave, Woodland Ave, E Oxford St	46.833266,-92.072396	City of Duluth	★★★★★★ ↾	0					X or	X	X or		X					X and/or	X or	X and/or	X and/or											X	$ 506,000
E 2nd St - Hwy 53/2, E 2nd St - Hwy 53/2, E 3rd St	46.67769,-92.01047	City of Superior	★★★★★★ ↾	0		X			X	X			X					X and/or	X or	X and/or	X and/or												$ 548,000
Hammond Ave, N 7th St	46.730219,-92.097852	City of Superior	★★★★★★ ↾	0			X		X	X			X					X and/or	X or	X and/or	X and/or												$ 560,000
N Central Entrance, E 10th St	46.798724,-92.102459	City of Duluth	★★★★★★ ↾	0	X				X	X			X					X and/or	X or	X and/or	X and/or										X		$ 1,072,000
Belknap St, Catlin Ave, Catlin Ave	46.720595,-92.087471	City of Superior	★★★★★★ ↾	2	X						X		X		X		X					X	X	X	X	X		X or	X or		X	$ 1,799,000
Hammond Ave, N 6th St	46.731377,-92.097843	City of Superior	★★★★★★ ↾	0	X		X		X	X			X					X and/or	X or	X and/or	X and/or										X		$ 2,148,000

Attachment 3: Recommended Safety Projects Prioritized by Cost per Weighted Risk

Safety Emphasis Area 1 (Segments)

Rural Two-Lane Undivided Roads

With AADT Less Than 5,000

(Roads on the Functional Classification System)

Road Name	State	County	Municipality	Speed Limit (mph)	Number of KAB Crashes	Length (miles)	AADT	Total Stars	Edgeline and/or Centerline Marking Improvement	Shoulder Rumble Strips	Centerline Rumble Strips	Provide 3 ft Shoulder	Widen Shoulder to 3 ft	Safety Edge	Improve Side Slopes	Clear Zone Maintenance	Install Barrier to Delineate Fixed Object	Install Barrier for Non-Recoverable Slopes	See Curves Recommendations (# Of Curves in Segment)	Project Cost Estimate (No Overlap with Curves)	Project Cost Estimate (Including Costs for Curves)	Weighted Risk Factor	Segment: Prioritization ($ per Weighted Risk Factor)	Segment + Curve: Prioritization ($ per Weighted Risk Factor)
Lavaque Rd	Minnesota	Saint Louis	City of Hermantown	45	2	0.7	3500	★★★½	X	X	X								N/A	$ 48,000	$ 48,000	7	$ 6,857	$ 6,857
Schultz Rd	Minnesota	Saint Louis	City of Rice Lake	55	0	1.0	115	★★★½	X		X								0	$ 59,000	$ 59,000	7	$ 8,429	$ 8,429
Morris Thomas Rd	Minnesota	Saint Louis	City of Hermantown	55	1	1.7	2200	★★★½	X	X	X								N/A	$ 111,000	$ 111,000	7	$ 15,857	$ 15,857
Swan Lake Rd	Minnesota	Saint Louis	City of Duluth	30	0	1.2	3000	★★★★	X							X or	X or		2	$ 125,000	$ 130,000	8	$ 15,625	$ 16,250
Schultz Rd	Minnesota	Saint Louis	City of Rice Lake	55	0	2.0	170	★★★½	X		X								0	$ 116,000	$ 116,000	7	$ 16,571	$ 16,571
Ryan Rd	Minnesota	Saint Louis	Duluth Township	50	0	0.3	364	★★★★★	X	X	X	X		X		X or	X or		1	$ 151,000	$ 169,000	10	$ 15,100	$ 16,900
Occidental Blvd	Minnesota	Saint Louis	City of Duluth	30	0	0.4	348	★★★★	X								X		2	$ 129,000	$ 136,000	8	$ 16,125	$ 17,000
CTH A	Wisconsin	Douglas	Superior Township	55	0	0.7	970	★★★★	X		X						X		1	$ 142,000	$ 183,000	8	$ 17,750	$ 22,875
Saginaw Rd	Minnesota	Saint Louis	Solway Township	55	0	0.4	225	★★★★	X	X	X	X		X					2	$ 177,000	$ 185,000	8	$ 22,125	$ 23,125
CTH A	Wisconsin	Douglas	Superior Township	40	0	1.3	730	★★★★½	X		X					X or	X or		2	$ 154,000	$ 274,000	9	$ 17,111	$ 30,444
Swan Lake Rd	Minnesota	Saint Louis	City of Hermantown	55	0	0.7	1400	★★★½	X	X	X	X		X		X or	X or		1	$ 320,000	$ 404,000	7	$ 45,714	$ 57,714
CTH U	Wisconsin	Douglas	Lakeside Township	30	0	0.9	90	★★★★	X						X or			X or	5	$ 214,000	$ 462,000	8	$ 26,750	$ 57,750
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	40	0	0.7	1450	★★★★	X	X	X	X		X			X	X	3	$ 460,000	$ 475,000	8	$ 57,500	$ 59,375
Ryan Rd	Minnesota	Saint Louis	Duluth Township	55	0	0.2	364	★★★★	X	X	X	X		X					2	$ 89,000	$ 480,000	8	$ 11,125	$ 60,000
CTH K	Wisconsin	Douglas	Parkland Township	55	1	1.8	1200	★★★★½	X	X	X		X	X					0	$ 556,000	$ 556,000	9	$ 61,778	$ 61,778
Becks Rd	Minnesota	Saint Louis	Midway Township	55	1	1.1	670	★★★★½	X	X	X		X	X		X		X	2	$ 417,000	$ 581,000	9	$ 46,333	$ 64,556
CTH E	Wisconsin	Douglas	Parkland Township	55	0	1.0	2000	★★★½	X	X	X	X		X		X	X		0	$ 459,000	$ 459,000	7	$ 65,571	$ 65,571
S Chicago Ave	Wisconsin	Douglas	Village of Oliver	45	3	1.3	2300	★★★★★½	X	X	X	X		X		X or	X or		3	$ 472,000	$ 747,000	11	$ 42,909	$ 67,909
Hermantown Rd	Minnesota	Saint Louis	City of Hermantown	55	0	1.0	2800	★★★★	X	X	X	X		X		X or	X or		2	$ 549,000	$ 573,000	8	$ 68,625	$ 71,625
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	45	1	1.4	348	★★★★	X								X	X	16	$ 537,000	$ 617,000	8	$ 67,125	$ 77,125
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	30	3	1.7	1580	★★★★	X							X or	X or	X	6	$ 710,000	$ 758,000	8	$ 88,750	$ 94,750
Lester River Rd	Minnesota	Saint Louis	Lakewood Township	45	0	3.6	2000	★★★★½	X		X						X		7	$ 788,000	$ 1,036,000	10	$ 78,800	$ 103,600
CTH K	Wisconsin	Douglas	Parkland Township	55	1	2.5	850	★★★½	X	X	X		X	X					0	$ 753,000	$ 753,000	7	$ 107,571	$ 107,571
CTH D	Wisconsin	Douglas	Lakeside Township	55	0	2.5	1400	★★★½	X	X	X		X	X		X or	X or		N/A	$ 840,000	$ 850,000	7	$ 120,000	$ 121,429
W Skyline Pkwy	Minnesota	Saint Louis	City of Proctor	30	0	1.8	680	★★★½	X								X	X	11	$ 793,000	$ 852,000	7	$ 113,286	$ 121,714
W Calvary Rd	Minnesota	Saint Louis	City of Rice Lake	55	1	2.0	1650	★★★½	X	X	X	X		X		X or	X or		N/A	$ 984,000	$ 923,000	7	$ 140,571	$ 131,857
CTH C	Wisconsin	Douglas	Parkland Township	30	1	4.0	1000	★★★★	X	X	X		X	X					0	$ 1,211,000	$ 1,211,000	8	$ 151,375	$ 151,375
CTH C	Wisconsin	Douglas	Parkland Township	55	0	2.7	750	★★★½	X	X	X	X		X		X	X		N/A	$ 1,334,000	$ 1,334,000	7	$ 190,571	$ 190,571
CTH W	Wisconsin	Douglas	Superior Township	30	0	3.7	270	★★★½	X	X	X	X		X		X or	X or		N/A	$ 1,590,000	$ 1,719,000	7	$ 227,143	$ 245,571
CTH 8	Minnesota	Saint Louis	Grand Lake Township	30	0	0.8	120	★★★★	Segment Not Evaluated - Gravel Road										N/A	$ -	$ -	8	$ -	$ -
W Skyline	Minnesota	Saint Louis	Midway Township	30	0	0.5	680	★★★½	Segment Not Evaluated - Gravel Road										N/A	$ -	$ 5,000	7	$ -	$ 714

Safety Emphasis Area 1 (Curves)

Rural Two-Lane Undivided Roads

With AADT Less Than 5,000

(Roads on the Functional Classification System)

Road Name	State	County	Municipality	Lat/Long	Speed Limit (mph)	Curve Advisory Speed (mph)	Length (miles)	AADT	Total Stars	Curve Overlaps with a Tier 1 Segment?	Curve Overlaps with a Tier 2 Segment?	Edgeline and/or Centerline Marking Improvement	High Friction Surface Treatment	Re-evaluate Curve Signing	Install Chevrons	Install Night Arrows	Upgrade to Fluorescent Signs	Install In-lane Curve Warning Pavement Markings	Shoulder Rumble Strips	Centerline Rumble Strips	Provide 3 ft Shoulder	Widen Shoulder to 3 ft	Safety Edge	Improve Side Slopes	Clear Zone Maintenance	Install Barrier to Delineate Fixed Object	Install Barrier for Non-Recoverable Slopes	Install Flashing Beacons with Warning 'Stop Ahead' Signs	Realign Intersection to Correct Visual Trap	Reconstruct Triangle Intersection	Project Cost Estimate (No Overlap with Segments)	Project Cost Estimate (Assumes Standalone Projects for Each Curve)	Risk Prioritization Weight	Curve Cost Prioritization ($/Risk Weight)
Swan Lake Rd	Minnesota	Saint Louis	City of Duluth	46°48'49.96"N, 92° 8'39.11"W	30	No Posting	1.2	3000	★	Y	N	Urban Curve																			$ -	$ -	2.5	$ -
Occidental Blvd	Minnesota	Saint Louis	City of Duluth	46°50'38.96"N, 92° 0'37.28"W	30	20	0.4	348	★★★	Y	N	X			X		X														$ 3,000	$ 4,423	7.5	$ 590
CTH W	Wisconsin	Douglas	Superior Township	46°33'7.90"N, 92°14'49.97"W	55	No Posting	3.7	270	★★★	N	N	Dirt/gravel road		X	X	X															$ 5,000	$ 5,000	7.5	$ 667
TH 39/E McCuen St	Minnesota	Saint Louis	City of Duluth	46°39'22.28"N, 92°12'30.51"W	35	25	0.6	2300	★★★ ↾	N	N	X				X	X														$ 7,000	$ 7,000	8.75	$ 800
CTH W	Wisconsin	Douglas	Superior Township	46°33'14.72"N, 92°14'41.78"W	55	No Posting	3.7	270	★★ ↾	N	N	Dirt/gravel road		X	X	X															$ 5,000	$ 5,000	6.25	$ 800
N 58th St	Wisconsin	Douglas	City of Superior	46°40'11.71"N, 92° 4'37.88"W	30	15	1.0	2000	★★ ↾	N	N	X		X		X	X														$ 7,000	$ 7,000	6.25	$ 1,120
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°43'30.81"N, 92°13'1.44"W	30	15	0.2	4150	★★ ↾	N	N	X		X	X		X														$ 8,000	$ 8,000	6.25	$ 1,280
CTH W	Wisconsin	Douglas	Superior Township	46°33'35.00"N, 92°14'30.95"W	55	No Posting	3.7	270	★ ↾	N	Y	Dirt/gravel road		X	X	X															$ 5,000	$ 5,000	3.75	$ 1,333
CTH W	Wisconsin	Douglas	Superior Township	46°32'50.16"N, 92°14'45.21"W	55	No Posting	3.7	270	★ ↾	N	Y	Dirt/gravel road		X	X	X															$ 5,000	$ 5,000	3.75	$ 1,333
W Skyline	Minnesota	Saint Louis	Midway Township	46°41'30.87"N, 92°16'17.07"W	30	No Posting	0.5	680	★ ↾	N	Y	Dirt/gravel road		X	X	X															$ 5,000	$ 5,000	3.75	$ 1,333
Occidental Blvd	Minnesota	Saint Louis	City of Duluth	46°50'29.15"N, 92° 0'36.58"W	30	20	0.4	348	★★ ↾	Y	N	X			X	Douglas															$ 4,000	$ 8,999	6.25	$ 1,440
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°42'53.93"N, 92°13'10.82"W	30	No Posting	1.8	680	★★	N	Y	X		X	X	X															$ 5,000	$ 7,731	5	$ 1,546
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	46°51'31.91"N, 92° 0'49.93"W	30	No Posting	1.4	348	★ ↾	Y	N	X		X	X	X															$ 5,000	$ 6,871	3.75	$ 1,832
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	46°50'54.58"N, 92° 0'37.47"W	30	No Posting	1.4	348	★ ↾	Y	N	X		X	X	X															$ 5,000	$ 6,914	3.75	$ 1,844
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	46°51'37.43"N, 92° 0'50.40"W	30	No Posting	1.4	348	★ ↾	Y	N	X		X	X	X															$ 5,000	$ 7,131	3.75	$ 1,902
CTH 8	Minnesota	Saint Louis	Grand Lake Township	46°55'24.22"N, 92°24'46.07"W	55	No Posting	0.8	120	★★★ ↾	N	N	Dirt/gravel road																X			$ 18,000	$ 18,000	8.75	$ 2,057
CTH W	Wisconsin	Douglas	Superior Township	46°32'43.85"N, 92°14'38.17"W	55	25	3.7	270	★★ ↾	N	N	Dirt/gravel road		X	X	X									X						$ 14,000	$ 14,000	6.25	$ 2,240
W Skyline Pkwy	Minnesota	Saint Louis	City of Proctor	46°43'23.51"N, 92°13'11.14"W	30	No Posting	1.8	680	★ ↾	N	Y	X		X	X	X															$ 5,000	$ 8,697	3.75	$ 2,319
W Skyline Pkwy	Minnesota	Saint Louis	City of Proctor	46°43'22.99"N, 92°13'17.74"W	30	No Posting	1.8	680	★ ↾	N	Y	X		X	X	X															$ 5,000	$ 9,326	3.75	$ 2,487
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	46°50'48.29"N, 92° 0'31.15"W	30	No Posting	1.4	348	★ ↾	Y	N	X		X	X	X															$ 5,000	$ 9,850	3.75	$ 2,627
Swan Lake Rd	Minnesota	Saint Louis	City of Duluth	46°49'14.32"N, 92° 8'59.53"W	30	No Posting	1.2	3000	★ ↾	Y	N	X		X	X	X															$ 5,000	$ 10,311	3.75	$ 2,750
W Skyline Pkwy	Minnesota	Saint Louis	City of Proctor	46°43'17.59"N, 92°13'10.82"W	30	No Posting	1.8	680	★ ↾	N	Y	X		X	X	X									X						$ 9,000	$ 12,360	3.75	$ 3,296
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	46°51'37.71"N, 92° 0'53.23"W	30	No Posting	1.4	348	★ ↾	Y	N	X		X	X	X										X					$ 5,000	$ 12,586	3.75	$ 3,356
N 58th St	Wisconsin	Douglas	City of Superior	46°40'9.80"N, 92° 4'40.55"W	30	15	1.0	2000	★★ ↾	N	N	X		X	X		X									X					$ 21,000	$ 21,000	6.25	$ 3,360
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	46°51'38.94"N, 92° 0'53.12"W	30	No Posting	1.4	348	★ ↾	Y	N	X		X	X	X										X					$ 5,000	$ 13,300	3.75	$ 3,547
Hermantown Rd	Minnesota	Saint Louis	City of Hermantown	46°47'22.55"N, 92°10'44.21"W	40	No Posting	1.0	2800	★ ↾	Y	N	X		X	X	X				X					X or		X or				$ 5,000	$ 9,563	2.5	$ 3,825
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	46°50'39.74"N, 92° 0'36.34"W	30	No Posting	1.4	348	★ ↾	Y	N	X		X	X	X										X					$ 5,000	$ 14,549	3.75	$ 3,880
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°42'57.02"N, 92°13'20.75"W	30	No Posting	1.8	680	★ ↾	N	Y	X		X	X	X															$ 5,000	$ 14,927	3.75	$ 3,980
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	46°51'33.51"N, 92° 0'49.84"W	30	No Posting	1.4	348	★ ↾	Y	N	X		X	X	X										X					$ 5,000	$ 15,270	3.75	$ 4,072
Hermantown Rd	Minnesota	Saint Louis	City of Hermantown	46°47'22.30"N, 92°10'31.24"W	40	No Posting	1.0	2800	★★	Y	N	X		X														X			$ 19,000	$ 21,313	5	$ 4,263
Maple Grove Rd	Minnesota	Saint Louis	Solway Township	46°48'27.56"N, 92°20'0.41"W	50	25	1.1	1466	★★★	N	N	X		X	X	X	X	X	X		X		X		X						$ 38,000	$ 38,000	7.5	$ 5,067
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°46'43.40"N, 92° 7'15.66"W	30	No Posting	1.7	1580	★★	Y	N	X		X	X	X											X				$ 5,000	$ 25,536	5	$ 5,107
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	46°51'34.99"N, 92° 0'51.90"W	30	No Posting	1.4	348	★ ↾	Y	N	X		X	X	X										X					$ 5,000	$ 19,205	3.75	$ 5,121
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°48'43.37"N, 92° 5'26.53"W	30	15	0.7	1450	★★ ↾	Y	N	X		X	X	X											X				$ 5,000	$ 33,132	6.25	$ 5,301
Ryan Rd	Minnesota	Saint Louis	Duluth Township	46°54'1.71"N, 91°53'51.94"W	30	No Posting	0.3	364	★ ↾	Y	N	X																X			$ 18,000	$ 20,351	3.75	$ 5,427
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°46'41.36"N, 92° 7'16.51"W	30	No Posting	1.7	1580	★★	Y	N	X		X	X	X											X				$ 5,000	$ 27,208	5	$ 5,442
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	46°51'14.71"N, 92° 0'38.94"W	30	No Posting	1.4	348	★★	Y	N	X		X	X	X										X					$ 5,000	$ 27,660	5	$ 5,532
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	46°51'2.51"N, 92° 0'43.88"W	30	No Posting	1.4	348	★ ↾	Y	N	X		X	X	X										X					$ 5,000	$ 22,320	3.75	$ 5,952
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	46°51'28.76"N, 92° 0'46.21"W	30	No Posting	1.4	348	★ ↾	Y	N	X		X	X	X										X					$ 5,000	$ 22,893	3.75	$ 6,105
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°48'30.26"N, 92° 5'37.26"W	30	No Posting	0.7	1450	★ ↾	Y	N	X		X	X	X											X				$ 5,000	$ 23,081	3.75	$ 6,155
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'34.37"N, 92°11'26.72"W	30	No Posting	2.1	620	★★	Curve Not Evaluated																								
N Tischer Rd	Minnesota	Saint Louis	Lakewood Township	46°56'17.27"N, 92° 0'20.56"W	40	No Posting	0.4	1250	★★	Curve Not Evaluated																								
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	46°51'16.37"N, 92° 0'45.02"W	30	No Posting	1.4	348	★ ↾	Y	N	X		X	X	X										X					$ 5,000	$ 23,534	3.75	$ 6,276
Minnesota Ave	Minnesota	Saint Louis	City of Duluth	46°43'50.54"N, 92° 3'19.92"W	30	No Posting	1.0	1850	★★	Curve Not Evaluated																								
S Chicago Ave	Wisconsin	Douglas	Village of Oliver	46°38'42.53"N, 92°11'32.99"W	55	25	1.3	2300	★★ ↾	N	Y	X		X	X	X		X		X							X				$ 35,000	$ 40,824	6.25	$ 6,532
Becks Rd	Minnesota	Saint Louis	Midway Township	46°41'56.24"N, 92°16'47.16"W	50	No Posting	1.1	670	★★ ↾	Y	N	X		X	X	X			X	X		X	X				X			$ 23,000	$ 41,695	6.25	$ 6,671
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	46°51'22.24"N, 92° 0'48.34"W	30	No Posting	1.4	348	★ ↾	Y	N	X		X	X	X										X					$ 5,000	$ 25,501	3.75	$ 6,800
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°46'43.44"N, 92° 7'23.31"W	30	No Posting	1.7	1580	★ ↾	Y	N	X		X	X	X											X				$ 23,000	$ 25,790	3.75	$ 6,877
Maple Grove Rd	Minnesota	Saint Louis	Solway Township	46°48'28.32"N, 92°20'19.68"W	50	25	1.1	1466	★★ ↾	N	N	X		X		X	X	X	X		X		X		X						$ 46,000	$ 46,000	6.25	$ 7,360
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	46°50'55.05"N, 92° 0'41.71"W	30	No Posting	1.4	348	★ ↾	Y	N	X		X	X	X										X					$ 5,000	$ 27,937	3.75	$ 7,450
42nd Ave	Wisconsin	Douglas	Superior Township	46°39'29.00"N, 92° 3'59.28"W	55	35	0.5	970	★★ ↾	Y	N	X		X	X		X			X	X		X	X	X						$ 41,000	$ 46,926	6.25	$ 7,508
Maple Grove Rd	Minnesota	Saint Louis	Solway Township	46°48'34.09"N, 92°20'15.47"W	50	25	1.1	1466	★★ ↾	N	N	X		X		X	X	X	X	X	X		X		X						$ 47,000	$ 47,000	6.25	$ 7,520
Observation Rd	Minnesota	Saint Louis	City of Duluth	46°47'12.19"N, 92° 7'19.38"W	40	35	1.1	1100	★★	Y	N	X		X	X	X				X	X	X									$5,000	$83,341	5	$16,668
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°48'20.68"N, 92° 5'50.85"W	30	No Posting	0.7	1450	★ ↾	Y	N	X		X	X	X											X				$ 5,000	$ 28,605	3.75	$ 7,628
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°43'52.49"N, 92°12'11.39"W	30	No Posting	2.4	1240	★★	Curve Not Evaluated																								
CTH B	Wisconsin	Douglas	Superior Township	46°31'58.46"N, 92° 9'3.79"W	45	35	5.8	530	★★	Curve Not Evaluated																								
Port Terminal Dr	Minnesota	Saint Louis	City of Duluth	46°45'10.57"N, 92° 5'56.58"W	30	25	0.6	1900	★★	Curve Not Evaluated																								
Maple Grove Rd	Minnesota	Saint Louis	Solway Township	46°48'32.48"N, 92°20'8.32"W	50	25	1.1	1466	★★	Curve Not Evaluated																								
CTH B	Wisconsin	Douglas	Superior Township	46°32'11.47"N, 92° 8'39.41"W	45	30	5.8	530	★★	Curve Not Evaluated																								
CTH A	Wisconsin	Douglas	Superior Township	46°30'12.34"N, 92° 4'1.10"W	55	35	3.3	930	★★	Curve Not Evaluated																								
CTH C	Wisconsin	Douglas	Superior Township	46°36'17.12"N, 92° 7'27.52"W	55	35	3.7	430	★★	Curve Not Evaluated																								
CTH C	Wisconsin	Douglas	Superior Township	46°34'48.80"N, 92°12'12.50"W	55	20	3.2	430	★★	Curve Not Evaluated																								
OLD HWY 2	Minnesota	Saint Louis	City of Hermantown	46°46'42.97"N, 92°16'30.08"W	55	No Posting	0.3	760	★★	Curve Not Evaluated																								
CTH C/W	Wisconsin	Douglas	Superior Township	46°35'40.31"N, 92°17'12.23"W	55	No Posting	3.4	230	★★	Curve Not Evaluated																								
CTH 61	Minnesota	Saint Louis	City of Duluth	46°50'31.61"N, 91°59'46.82"W	50	No Posting	0.4	2900	★★	Curve Not Evaluated																								
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°43'57.20"N, 92°12'7.26"W	30	No Posting	2.4	1240	★★	Curve Not Evaluated																								
Skyline Pkwy	Minnesota	Saint Louis	Midway Township	46°41'30.48"N, 92°15'40.08"W	30	No Posting	3.5	680	★★	Curve Not Evaluated																								
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°41'27.34"N, 92°14'30.52"W	30	No Posting	3.5	680	★★	Curve Not Evaluated																								
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°41'15.10"N, 92°14'19.14"W	30	No Posting	3.5	680	★★	Curve Not Evaluated																								
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°41'16.48"N, 92°14'12.40"W	30	No Posting	3.5	680	★★	Curve Not Evaluated																								
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°41'12.42"N, 92°14'7.36"W	30	No Posting	3.5	680	★★	Curve Not Evaluated																								
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°41'2.00"N, 92°14'6.74"W	30	No Posting	3.5	680	★★	Curve Not Evaluated																								
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°41'5.31"N, 92°13'56.91"W	30	No Posting	3.5	680	★★	Curve Not Evaluated																								
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°41'4.98"N, 92°13'54.56"W	30	No Posting	3.5	680	★★	Curve Not Evaluated																								
Skyline Pkwy	Wisconsin	Douglas	City of Duluth	46°41'7.81"N, 92°13'53.75"W	30	No Posting	3.5	680	★★	Curve Not Evaluated																								
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°41'6.80"N, 92°14'1.09"W	30	No Posting	3.5	680	★★	Curve Not Evaluated																								
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°41'9.88"N, 92°13'54.45"W	30	No Posting	3.5	680	★★	Curve Not Evaluated																								
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°41'13.85"N, 92°13'52.33"W	30	No Posting	3.5	680	★★	Curve Not Evaluated																								
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°41'23.86"N, 92°13'51.53"W	30	No Posting	3.5	680	★★	Curve Not Evaluated																								
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°41'52.23"N, 92°13'49.58"W	30	No Posting	3.5	680	★★	Curve Not Evaluated																								
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°42'7.28"N, 92°13'43.49"W	30	No Posting	3.5	680	★★	Curve Not Evaluated																								
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°42'10.83"N, 92°13'22.03"W	30	No Posting	3.5	680	★★	Curve Not Evaluated																								
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°42'13.59"N, 92°14'0.06"W	30	No Posting	3.5	680	★★	Curve Not Evaluated																								
Minnesota Ave	Minnesota	Saint Louis	City of Duluth	46°43'46.35"N, 92° 3'0.70"W	30	No Posting	1.0	1850	★★	Curve Not Evaluated																								
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'8.36"N, 92°10'28.15"W	30	No Posting	2.1	620	★ ↾	Curve Not Evaluated																								
Howard Gnesen Rd	Minnesota	Saint Louis	City of Duluth	46°49'41.87"N, 92° 6'22.84"W	30	No Posting	2.4	4250	★ ↾	Curve Not Evaluated																								
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'9.47"N, 92°11'12.63"W	30	No Posting	2.1	620	★ ↾	Curve Not Evaluated																								
McQuade Rd	Minnesota	Saint Louis	Lakewood Township	46°53'10.57"N, 91°55'14.48"W	30	No Posting	0.4	345	★ ↾	Curve Not Evaluated																								
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°41'36.74"N, 92°15'14.06"W	30	No Posting	3.5	680	★ ↾	Curve Not Evaluated																								

Safety Emphasis Area 1 (Curves)

Rural Two-Lane Undivided Roads
With AADT Less Than 5,000
(Roads on the Functional Classification System)

Road Name	State	County	Municipality	Lat/Long	Speed Limit (mph)	Curve Advisory Speed (mph)	Length (miles)	AADT	Total Stars	Curve Overlaps with a Tier 1 Segment?	Curve Overlaps with a Tier 2 Segment?	Edgeline and/or Centerline Marking Improvement	High Friction Surface Treatment	Re-evaluate Curve Signing	Install Chevrons	Install Night Arrows	Upgrade to Fluorescent Signs	Install In-lane Curve Warning Pavement Markings	Shoulder Rumble Strips	Centerline Rumble Strips	Provide 3 ft Shoulder	Widen Shoulder to 3 ft	Safety Edge	Improve Side Slopes	Clear Zone Maintenance	Install Barrier to Delineate Fixed Object	Install Barrier for Non-Recoverable Slopes	Install Flashing Beacons with Warning 'Stop Ahead' Signs	Realign Intersection to Correct Visual Trap	Reconstruct Triangle Intersection	Project Cost Estimate (No Overlap with Segments)	Project Cost Estimate (Assumes Standalone Projects for Each Curve)	Risk Prioritization Weight	Curve Cost Prioritization ($/Risk Weight)
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°46'27.20"N, 92° 7'25.88"W	30	No Posting	1.7	1580	★	Y	N	X		X	X	X										X				$ 5,000	$ 19,671	2.5	$ 7,868
H 210/Oldenberg Pkwy	Minnesota	Saint Louis	City of Duluth	46°40'21.35"N, 92°17'27.23"W	40	25	2.0	2000	★★	N	N	X		X	X	X			X	X	X		X		X or	X or				$ 51,000	$ 51,000	6.25	$ 8,160
H 210/Oldenberg Pkwy	Minnesota	Saint Louis	City of Duluth	46°40'17.34"N, 92°16'59.43"W	40	No Posting	2.0	2000	★	Curve Not Evaluated																								
Lester River Rd	Minnesota	Saint Louis	Lakewood Township	46°52'39.58"N, 91°59'15.54"W	45	No Posting	3.6	2000	★★	Y	N	X		X	X	X			X	X	X	X				X					$ 24,000	$ 41,424	5	$ 8,285
CTH A	Wisconsin	Douglas	Douglas Township	46°29'38.66"N, 92° 4'20.00"W	55	35	3.3	930	★★	N	N	X		X	X		X		X	X		X	X		X or	X or					$ 53,000	$ 53,000	6.25	$ 8,480
Minnesota Ave	Minnesota	Saint Louis	City of Duluth	46°43'41.96"N, 92° 3'8.90"W	30	No Posting	1.0	1850	★★	N	N	X		X	X	X											X				$ 43,000	$ 43,000	5	$ 8,600
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°43'10.53"N, 92°13'11.58"W	30	No Posting	1.8	680	★	N	Y	X		X	X												X				$ 5,000	$ 32,279	3.75	$ 8,608
CTH U	Wisconsin	Douglas	Douglas Township	46°32'56.39"N, 91°54'41.08"W	55	No Posting	0.9	90	★★	Y	N	X		X	X	X			X		X	X	X				X				$ 38,000	$ 55,337	6.25	$ 8,854
Seven Bridges Rd	Minnesota	Saint Louis	City of Duluth	46°50'44.50"N, 92° 0'37.97"W	30	No Posting	1.4	348	★	Y	N	X		X	X	X											X				$ 5,000	$ 33,863	3.75	$ 9,030
Lester River Rd	Minnesota	Saint Louis	Lakewood Township	46°52'20.41"N, 91°59'19.06"W	45	No Posting	3.6	2000	★★	Y	N	X		X	X	X			X	X	X		X				X				$ 26,000	$ 45,921	5	$ 9,184
St. Louis River Rd	Minnesota	Saint Louis	Midway Township	46°45'50.88"N, 92°14'59.42"W	45	No Posting	1.5	531	★★	N	N	X		X	X	X			X	X		X					X	X			$ 59,000	$ 59,000	6.25	$ 9,440
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°42'21.20"N, 92°13'21.94"W	30	No Posting	1.8	680	★	N	Y	X		X	X												X				$ 5,000	$ 35,859	3.75	$ 9,562
CTH U	Wisconsin	Douglas	Douglas Township	46°37'40.46"N, 91°54'21.35"W	55	No Posting	0.9	90	★★	Y	N	X		X	X	X			X		X	X	X				X				$ 41,000	$ 60,097	6.25	$ 9,616
CTH A	Wisconsin	Douglas	Superior Township	46°38'3.17"N, 92° 4'3.44"W	55	20	1.3	730	★★	Y	N	X		X	X	X		X	X	X	X		X	X or			X or				$ 48,000	$ 52,393	5	$ 10,479
Lester River Rd	Minnesota	Saint Louis	City of Duluth	46°50'29.00"N, 92° 0'20.38"W	45	No Posting	3.6	2000	★★	Y	N	X		X					X	X	X		X					X			$ 48,000	$ 52,809	5	$ 10,562
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°43'5.93"N, 92°13'12.19"W	30	No Posting	1.8	680	★	N	Y	X		X	X	X											X				$ 5,000	$ 28,407	2.5	$ 11,363
Ryan Rd	Minnesota	Saint Louis	Duluth Township	46°57'22.91"N, 91°53'59.42"W	55	30	1.3	380	★★★	N	N	X		X		X	X	X	X	X		X	X						X		$ 100,000	$ 100,000	8.75	$ 11,429
E Shillhon Rd	Minnesota	Saint Louis	Duluth Township	46°57'22.89"N, 91°52'43.28"W	55	25	1.0	380	★★★	N	N	X		X		X	X	X	X		X		X			X					$ 91,000	$ 91,000	7.5	$ 12,133
Korkki Rd	Minnesota	Saint Louis	Duluth Township	46°57'48.95"N, 91°52'43.39"W	55	25	2.0	380	★★	N	N	X		X		X	X	X	X			X	X	X or			X or				$ 78,000	$ 78,000	6.25	$ 12,480
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°43'13.88"N, 92°13'6.31"W	30	No Posting	1.8	680	★	N	Y	X		X	X												X				$ 5,000	$ 47,214	3.75	$ 12,590
Swan Lake Rd	Minnesota	Saint Louis	City of Hermantown	46°49'49.50"N, 92°11'2.04"W	55	30	0.7	1400	★★	N	N	X		X	X	X		X		X						X	X				$ 79,000	$ 79,000	6.25	$ 12,640
CTH A	Wisconsin	Douglas	Superior Township	46°37'49.02"N, 92° 3'58.80"W	55	20	1.3	730	★★	Y	N	X		X	X		X		X	X	X		X					X			$ 72,000	$ 80,443	6.25	$ 12,871
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°42'1.05"N, 92°13'38.55"W	30	No Posting	3.5	680	★	N	Y	X		X	X	X											X				$ 5,000	$ 49,618	3.75	$ 13,231
Lester River Rd	Minnesota	Saint Louis	Lakewood Township	46°52'26.14"N, 91°59'19.72"W	45	No Posting	3.6	2000	★	Y	N	X		X	X	X			X	X	X		X				X				$ 20,000	$ 33,392	2.5	$ 13,357
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°46'24.45"N, 92° 7'38.55"W	30	No Posting	1.7	1580	★	Y	N	X		X	X	X											X				$ 5,000	$ 54,203	3.75	$ 14,454
CTH W	Wisconsin	Douglas	Superior Township	46°33'17.08"N, 92°14'27.44"W	55	No Posting	3.7	270	★★	N	N	X		X		X			X	X		X	X				X				$ 95,000	$ 95,000	6.25	$ 15,200
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°42'12.21"N, 92°13'17.02"W	30	No Posting	1.8	680	★	N	Y	X		X	X	X											X				$ 5,000	$ 62,941	3.75	$ 16,784
Saginaw Rd	Minnesota	Saint Louis	Solway Township	46°51'4.46"N, 92°25'35.71"W	40	No Posting	0.4	225	★	Y	N	X		X	X				X	X	X		X								$ 4,000	$ 64,305	3.75	$ 17,148
CTH U	Wisconsin	Douglas	Douglas Township	46°37'55.53"N, 91°54'34.61"W	55	No Posting	0.9	90	★★	Y	N	X		X	X	X			X		X	X	X				X				$ 72,000	$ 107,618	6.25	$ 17,219
S Chicago Ave	Wisconsin	Douglas	Village of Oliver	46°38'45.85"N, 92°11'45.41"W	55	25	1.3	2300	★	N	Y	X		X	X			X	X	X	X		X								$ 7,000	$ 72,841	3.75	$ 19,424
CTH U	Wisconsin	Douglas	Lakeside Township	46°37'59.53"N, 91°54'46.40"W	55	20	0.9	90	★★	Y	N	X		X	X	X		X	X	X	X	X	X				X				$ 68,000	$ 100,500	5	$ 20,100
Observation Rd	Minnesota	Saint Louis	City of Duluth	46°46'58.99"N, 92° 7'21.01"W	40	No Posting	1.1	1100	★	Y	N	X		X	X	X				X				X or			X or	X			$51,000	$57,115	3.75	$15,231
CTH U	Wisconsin	Douglas	Lakeside Township	46°37'41.57"N, 91°54'24.91"W	55	No Posting	0.9	90	★	Y	N	X		X	X	X			X		X		X				X				$ 29,000	$ 50,947	2.5	$ 20,379
CTH C	Wisconsin	Douglas	Superior Township	46°35'25.04"N, 92° 7'58.90"W	55	15	3.7	430	★★★★	N	N	X	X	X	X		X	X	X		X		X							X	$ 214,000	$ 214,000	10	$ 21,400
Ryan Rd	Minnesota	Saint Louis	Duluth Township	46°54'3.49"N, 91°54'2.98"W	55	No Posting	0.2	364	★★★	Y	N	X	X	X	X	X			X	X	X		X					X			$ 140,000	$ 167,328	7.5	$ 22,310
CTH E	Wisconsin	Douglas	Parkland Township	46°38'38.57"N, 91°59'46.42"W	45	40	1.1	1200	★	Y	N	X		X	X		X		X	X	X		X			X			X		$262,000	$342,974	3.75	$91,460
Swan Lake Rd	Minnesota	Saint Louis	City of Duluth	46°48'14.84"N, 92° 8'11.60"W	30	No Posting	0.3	3000	★	Curve Not Evaluated																								
TH 39/E McCuen St	Minnesota	Saint Louis	City of Duluth	46°39'26.35"N, 92°13'0.23"W	35	30	0.6	2300	★	Curve Not Evaluated																								
CTH B	Wisconsin	Douglas	Superior Township	46°31'57.26"N, 92°12'11.99"W	45	35	5.8	530	★	Curve Not Evaluated																								
CTH B	Wisconsin	Douglas	Superior Township	46°32'11.19"N, 92° 7'49.45"W	45	35	5.8	530	★	Curve Not Evaluated																								
CTH B	Wisconsin	Douglas	Superior Township	46°32'8.73"N, 92° 7'44.30"W	45	35	5.8	530	★	Curve Not Evaluated																								
Helberg Dr	Minnesota	Saint Louis	City of Duluth	46°45'50.07"N, 92° 6'37.48"W	30	20	0.7	830	★	Curve Not Evaluated																								
WIS 35	Wisconsin	Douglas	Superior Township	46°31'57.27"N, 92° 7'21.87"W	55	35	4.3	4400	★	Curve Not Evaluated																								
H 210/Oldenberg Pkwy	Minnesota	Saint Louis	City of Duluth	46°40'18.63"N, 92°17'11.96"W	40	30	2.0	2000	★	Curve Not Evaluated																								
Lismore Rd	Minnesota	Saint Louis	Lakewood Township	46°55'51.74"N, 92° 0'20.61"W	50	40	2.0	1600	★	Curve Not Evaluated																								
CTH 61	Minnesota	Saint Louis	City of Duluth	46°50'35.13"N, 91°59'44.54"W	50	No Posting	0.4	2900	★	Curve Not Evaluated																								
Stebner Rd	Minnesota	Saint Louis	City of Duluth	46°49'57.31"N, 92°11'40.95"W	55	No Posting	0.5	2350	★	Curve Not Evaluated																								
CTH 61	Minnesota	Saint Louis	Lakewood Township	46°52'50.20"N, 91°55'20.60"W	50	No Posting	2.5	2900	★	Curve Not Evaluated																								
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°44'45.00"N, 92°11'27.45"W	30	No Posting	2.4	1240	★	Curve Not Evaluated																								
Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°41'42.89"N, 92°15'26.11"W	30	No Posting	3.5	680	★	Curve Not Evaluated																								
Industrial Rd	Minnesota	Saint Louis	Grand Lake Township	46°53'40.33"N, 92°22'4.15"W	50	No Posting	3.0	1100	★	Curve Not Evaluated																								
Munger Shaw Rd	Minnesota	Saint Louis	Grand Lake Township	46°59'15.88"N, 92°19'46.91"W	55	No Posting	4.7	680	★	Curve Not Evaluated																								
Howard Gnesen Rd	Minnesota	Saint Louis	City of Duluth	46°50'26.50"N, 92° 6'23.05"W	30	No Posting	2.4	4250	★	Curve Not Evaluated																								
Howard Gnesen Rd	Minnesota	Saint Louis	City of Duluth	46°49'46.66"N, 92° 6'40.46"W	30	No Posting	2.4	4250	★	Curve Not Evaluated																								
Becks Rd	Minnesota	Saint Louis	Midway Township	46°42'15.72"N, 92°17'31.69"W	50	40	1.1	670	★★★	Y	N	X	X	X		X	X		X	X		X	X		X					$ 141,000	$ 184,183	7.5	$ 24,558
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°44'56.20"N, 92°11'9.49"W	30	No Posting	2.4	1240	★	Curve Not Evaluated																								
Industrial Rd	Minnesota	Saint Louis	Grand Lake Township	46°53'37.03"N, 92°21'56.59"W	50	No Posting	0.1	1000	★★★	N	N	X	X	X	X	X			X	X	X		X				X			$ 185,000	$ 185,000	7.5	$ 24,667
H 210/Oldenberg Pkwy	Minnesota	Saint Louis	City of Duluth	46°40'18.23"N, 92°17'25.92"W	40	No Posting	2.0	2000	★	Curve Not Evaluated																								
H 210/Oldenberg Pkwy	Minnesota	Saint Louis	City of Duluth	46°40'8.05"N, 92°16'59.29"W	40	No Posting	2.0	2000	★	Curve Not Evaluated																								
H 210/Oldenberg Pkwy	Minnesota	Saint Louis	City of Duluth	46°40'5.56"N, 92°16'55.72"W	40	No Posting	2.0	2000	★	Curve Not Evaluated																								
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°50'48.33"N, 92° 1'55.93"W	30	No Posting	1.9	348	★	Curve Not Evaluated																								
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°50'49.35"N, 92° 1'52.94"W	30	No Posting	1.9	348	★	Curve Not Evaluated																								
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°50'53.13"N, 92° 1'52.14"W	30	No Posting	1.9	348	★	Curve Not Evaluated																								
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°50'54.64"N, 92° 1'49.80"W	30	No Posting	1.9	348	★	Curve Not Evaluated																								
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°50'58.50"N, 92° 1'47.31"W	30	No Posting	1.9	348	★	Curve Not Evaluated																								
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°50'58.61"N, 92° 1'40.72"W	30	No Posting	1.9	348	★	Curve Not Evaluated																								
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°51'5.88"N, 92° 1'32.16"W	30	No Posting	1.9	348	★	Curve Not Evaluated																								
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°51'8.77"N, 92° 1'29.98"W	30	No Posting	1.9	348	★	Curve Not Evaluated																								
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°51'29.03"N, 92° 1'2.71"W	30	No Posting	1.9	348	★	Curve Not Evaluated																								
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°51'32.29"N, 92° 1'3.17"W	30	No Posting	1.9	348	★	Curve Not Evaluated																								
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°51'36.42"N, 92° 0'58.02"W	30	No Posting	1.9	348	★	Curve Not Evaluated																								
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°51'40.21"N, 92° 0'59.25"W	30	No Posting	1.9	348	★	Curve Not Evaluated																								
McQuade Rd	Minnesota	Saint Louis	Lakewood Township	46°53'18.54"N, 91°55'14.80"W	30	No Posting	0.2	345	★	Curve Not Evaluated																								
McQuade Rd	Minnesota	Saint Louis	Lakewood Township	46°52'55.59"N, 91°55'14.39"W	30	No Posting	0.4	345	★	Curve Not Evaluated																								
Helberg Dr	Minnesota	Saint Louis	City of Duluth	92° 6'33.22"W, 92° 6'26.05"W	30	No Posting	0.7	830	★	Curve Not Evaluated																								
E 3rd St	Wisconsin	Douglas	City of Superior	46°40'39.14"N, 92° 0'38.61"W	35	No Posting	0.4	2000	★	Curve Not Evaluated																								
E 3rd St	Wisconsin	Douglas	City of Superior	46°40'12.54"N, 92° 0'10.67"W	35	No Posting	0.3	2000	★	Curve Not Evaluated																								
Marina Dr	Wisconsin	Douglas	City of Superior	46°43'8.86"N, 92° 3'45.92"W	25	No Posting	0.1	510	★	Curve Not Evaluated																								
N 12th St	Wisconsin	Douglas	City of Superior	46°43'27.00"N, 92° 4'38.78"W	25	No Posting	0.1	1100	★	Curve Not Evaluated																								
Marina Dr	Wisconsin	Douglas	City of Superior	46°43'22.20"N, 92° 4'2.82"W	25	No Posting	0.3	560	★	Curve Not Evaluated																								
Garfield Ave	Wisconsin	Douglas	City of Superior	46°43'20.90"N, 92° 7'2.07"W	25	No Posting	0.5	2100	★	Curve Not Evaluated																								
Marina Dr	Wisconsin	Douglas	City of Superior	46°43'19.33"N, 92° 3'41.90"W	25	No Posting	0.6	510	★	Curve Not Evaluated																								
Marina Dr	Wisconsin	Douglas	City of Superior	46°43'10.93"N, 92° 3'31.32"W	25	No Posting	0.6	510	★	Curve Not Evaluated																								
Marina Dr	Wisconsin	Douglas	City of Superior	46°43'10.32"N, 92° 3'23.85"W	25	No Posting	0.6	510	★	Curve Not Evaluated																								
WIS 35	Wisconsin	Douglas	Superior Township	46°32'5.89"N, 92° 7'19.04"W	55	No Posting	4.3	4400	★	Curve Not Evaluated																								
MN 23	Minnesota	Saint Louis	City of Duluth	46°39'35.30"N, 92°16'13.98"W	30	No Posting	0.1	2000	★	Curve Not Evaluated																								
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'38.65"N, 92° 9'46.48"W	30	No Posting	1.2	1975	★	Curve Not Evaluated																								
Saginaw Rd	Minnesota	Saint Louis	Solway Township	46°50'55.58"N, 92°25'26.71"W	40	No Posting	0.4	225	★	Y	N	X		X		X	X		X	X	X		X								$ 4,000	$ 65,650	2.5	$ 26,260

Safety Emphasis Area 1 (Curves)

Rural Two-Lane Undivided Roads

With AADT Less Than 5,000

(Roads on the Functional Classification System)

Road Name	State	County	Municipality	Lat/Long	Speed Limit (mph)	Curve Advisory Speed (mph)	Length (miles)	AADT	Total Stars	Curve Overlaps with a Tier 1 Segment?	Curve Overlaps with a Tier 2 Segment?	Edgeline and/or Centerline Marking Improvement	High Friction Surface Treatment	Re-evaluate Curve Signing	Install Chevrons	Install Night Arrows	Upgrade to Fluorescent Signs	Install In-lane Curve Warning Pavement Markings	Shoulder Rumble Strips	Centerline Rumble Strips	Provide 3 ft Shoulder	Widen Shoulder to 3 ft	Safety Edge	Improve Side Slopes	Clear Zone Maintenance	Install Barrier to Delineate Fixed Object	Install Barrier for Non-Recoverable Slopes	Install Flashing Beacons with Warning 'Stop Ahead' Signs	Realign Intersection to Correct Visual Trap	Reconstruct Triangle Intersection	Project Cost Estimate (No Overlap with Segments)	Project Cost Estimate (Assumes Standalone Projects for Each Curve)	Risk Prioritization Weight	Curve Cost Prioritization ($/Risk Weight)
MN 23	Minnesota	Saint Louis	City of Duluth	46°39'39.24"N, 92°16'50.42"W	30	No Posting	0.1	1650	★	Curve Not Evaluated																								
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'47.15"N, 92° 9'36.87"W	30	No Posting	1.2	1975	★	Curve Not Evaluated																								
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'46.07"N, 92° 9'20.48"W	30	No Posting	1.2	1975	★	Curve Not Evaluated																								
CTH 73	Minnesota	Saint Louis	Midway Township	46°42'17.77"N, 92°17'31.48"W	30	No Posting	1.2	510	★	Curve Not Evaluated																								
W Tischer Rd	Minnesota	Saint Louis	Lakewood Township	46°52'49.13"N, 92° 0'19.37"W	40	20	2.0	870	★★★ ↾	N	N	X		X	X		X	X	X		X	X	X or			X or		X		$ 274,000	$ 274,000	10	$ 27,400
Lester River Rd	Minnesota	Saint Louis	City of Duluth	46°50'48.98"N, 92° 0'9.51"W	45	No Posting	3.6	2000	★	Y	N	X		X	X	X			X	X	X	X			X					$ 42,000	$ 76,711	2.5	$ 30,684
Lester River Rd	Minnesota	Saint Louis	City of Duluth	46°51'23.60"N, 91°59'57.11"W	45	No Posting	3.6	2000	★	Y	N	X		X	X	X			X	X	X	X			X					$ 42,000	$ 76,782	2.5	$ 30,713
Ryan Rd	Minnesota	Saint Louis	Duluth Township	46°54'11.29"N, 91°54'12.54"W	55	15	0.3	364	★★★ ↾	Y	N	X		X		X	X	X			X	X			X or	X or			X		$ 251,000	$ 278,039	8.75	$ 31,776
Munger Shaw Rd	Minnesota	Saint Louis	Grand Lake Township	46°54'46.80"N, 92°20'38.89"W	45	No Posting	3.4	1050	★★★	N	N	X		X		X	X			X									X		$ 240,000	$ 240,000	7.5	$ 32,000
Observation Rd	Minnesota	Saint Louis	City of Duluth	46°47'9.32"N, 92° 8'2.30"W	40	No Posting	1.1	1100	★	Y	N	X		X	X	X			X	X	X					X or	X or		X		$23,000	$68,123	2.5	$27,249
Caribou Lake Rd	Minnesota	Saint Louis	Grand Lake Township	46°51'38.82"N, 92°19'21.75"W	55	No Posting	1.2	265	★★ ↾	N	N	X	X	X	X	X			X	X	X	X			X or	X or		X		$ 211,000	$ 211,000	6.25	$ 33,760
Lester River Rd	Minnesota	Saint Louis	Lakewood Township	46°52'50.82"N, 91°59'3.15"W	45	No Posting	3.6	2000	★	Y	N	X		X	X	X			X	X	X					X					$ 46,000	$ 84,695	2.5	$ 33,878
CTH C	Wisconsin	Douglas	Superior Township	46°34'48.28"N, 92°12'6.64"W	55	20	3.2	430	★★★	N	N	X		X	X		X	X	X		X	X							X		$ 260,000	$ 260,000	7.5	$ 34,667
Swan Lake Rd	Minnesota	Saint Louis	City of Duluth	46°48'24.11"N, 92° 8'10.86"W	30	No Posting	0.3	3000	★	Curve Not Evaluated																								
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°44'27.71"N, 92°11'41.00"W	30	No Posting	2.4	1240	★	Curve Not Evaluated																								
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°44'30.28"N, 92°11'34.91"W	30	No Posting	2.4	1240	★	Curve Not Evaluated																								
TH 39/E McCuen St	Minnesota	Saint Louis	City of Duluth	46°39'28.35"N, 92°12'51.73"W	35	No Posting	0.6	2300	★	Curve Not Evaluated																								
MN 23	Minnesota	Saint Louis	City of Duluth	46°39'10.70"N, 92°13'35.76"W	50	No Posting	2.2	2000	★	Curve Not Evaluated																								
TH 210/Oldenberg Pkwy	Minnesota	Saint Louis	City of Duluth	46°40'21.86"N, 92°17'53.56"W	40	No Posting	2.0	2000	★	Curve Not Evaluated																								
TH 210/Oldenberg Pkwy	Minnesota	Saint Louis	City of Duluth	46°40'27.79"N, 92°17'39.10"W	40	No Posting	2.0	2000	★	Curve Not Evaluated																								
N Cloquet Rd	Minnesota	Saint Louis	Midway Township	46°43'32.24"N, 92°14'58.75"W	35	No Posting	1.9	680	★	Curve Not Evaluated																								
Bergstrom Rd	Minnesota	Saint Louis	Grand Lake Township	46°55'23.69"N, 92°23'10.28"W	55	No Posting	2.9	215	★	Curve Not Evaluated																								
Hermantown Rd	Minnesota	Saint Louis	City of Hermantown	46°47'19.17"N, 92°13'11.89"W	40	No Posting	1.2	750	★	Curve Not Evaluated																								
Hermantown Rd	Minnesota	Saint Louis	City of Hermantown	46°47'6.54"N, 92°12'47.89"W	40	No Posting	1.1	1300	★	Curve Not Evaluated																								
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°50'13.98"N, 92° 2'43.46"W	30	No Posting	0.4	348	★	Curve Not Evaluated																								
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°50'19.23"N, 92° 2'39.88"W	30	No Posting	0.4	348	★	Curve Not Evaluated																								
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°50'38.92"N, 92° 2'20.46"W	30	No Posting	1.9	348	★	Curve Not Evaluated																								
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°51'4.14"N, 92° 1'35.43"W	30	No Posting	1.9	348	★	Curve Not Evaluated																								
Old North Shore Rd	Minnesota	Saint Louis	Duluth Township	46°54'15.67"N, 91°53'59.03"W	35	35	0.3	364	★	Curve Not Evaluated																								
Howard Gnesen Rd	Minnesota	Saint Louis	City of Duluth	46°50'30.43"N, 92° 6'39.99"W	30	No Posting	2.4	4250	★	Curve Not Evaluated																								
S Chicago Ave	Wisconsin	Douglas	Village of Oliver	46°38'53.05"N, 92°11'52.46"W	55	25	1.3	2300	★★ ↾	N	Y	X		X	X	X		X		X									X		$ 233,000	$ 238,568	6.25	$ 38,171
Port Terminal Dr	Minnesota	Saint Louis	City of Duluth	46°45'8.15"N, 92° 6'10.74"W	30	No Posting	0.6	1900	★	Curve Not Evaluated																								
Minnesota Ave	Minnesota	Saint Louis	City of Duluth	46°43'57.04"N, 92° 3'11.79"W	30	No Posting	1.0	1850	★	Curve Not Evaluated																								
Minnesota Ave	Minnesota	Saint Louis	City of Duluth	46°43'41.76"N, 92° 2'52.54"W	30	No Posting	1.0	1850	★	Curve Not Evaluated																								
42nd Ave	Wisconsin	Douglas	City of Superior	46°40'14.75"N, 92° 2'46.64"W	35	No Posting	1.3	800	★	Curve Not Evaluated																								
E 3rd St	Wisconsin	Douglas	City of Superior	46°40'33.47"N, 92° 0'36.35"W	35	No Posting	0.4	2000	★	Curve Not Evaluated																								
Munger Shaw Rd	Minnesota	Saint Louis	Grand Lake Township	46°52'40.76"N, 92°20'36.96"W	45	No Posting	3.4	1050	★	Curve Not Evaluated																								
Munger Shaw Rd	Minnesota	Saint Louis	Grand Lake Township	46°54'40.85"N, 92°20'18.83"W	45	No Posting	3.4	1050	★	Curve Not Evaluated																								
CTH 61	Minnesota	Saint Louis	City of Duluth	46°52'50.16"N, 91°55'29.81"W	50	No Posting	2.5	2900	★	Curve Not Evaluated																								
Lismore Rd	Minnesota	Saint Louis	Lakewood Township	46°56'17.25"N, 92° 0'20.12"W	55	No Posting	2.0	1250	★	Curve Not Evaluated																								
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'2.16"N, 92°11'5.74"W	30	No Posting	2.1	620	★	Curve Not Evaluated																								
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'9.64"N, 92°11'16.63"W	30	No Posting	2.1	620	★	Curve Not Evaluated																								
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'12.57"N, 92°11'15.58"W	30	No Posting	2.1	620	★	Curve Not Evaluated																								
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'8.34"N, 92°11'9.07"W	30	No Posting	2.1	620	★	Curve Not Evaluated																								
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'6.42"N, 92°11'7.01"W	30	No Posting	2.1	620	★	Curve Not Evaluated																								
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'35.05"N, 92° 9'48.23"W	30	No Posting	1.2	1975	★	Curve Not Evaluated																								
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'37.37"N, 92° 9'40.14"W	30	No Posting	1.2	1975	★	Curve Not Evaluated																								
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'41.12"N, 92° 9'33.96"W	30	No Posting	1.2	1975	★	Curve Not Evaluated																								
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'44.59"N, 92° 9'27.63"W	30	No Posting	1.2	1975	★	Curve Not Evaluated																								
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'44.49"N, 92° 9'23.06"W	30	No Posting	1.2	1975	★	Curve Not Evaluated																								
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'56.52"N, 92° 9'2.67"W	30	No Posting	1.2	1975	★	Curve Not Evaluated																								
W Skyline Pkwy	Minnesota	Saint Louis	City of Proctor	46°43'33.38"N, 92°13'16.73"W	30	No Posting	0.2	4150	★	Curve Not Evaluated																								
Woodland Ave	Minnesota	Saint Louis	City of Duluth	46°51'44.29"N, 92° 4'26.58"W	30	No Posting	0.5	1724	★	Curve Not Evaluated																								
Helberg Dr	Minnesota	Saint Louis	City of Duluth	46°45'25.17"N, 92° 6'10.34"W	30	No Posting	0.7	830	★	Curve Not Evaluated																								
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°47'18.34"N, 92° 6'36.95"W	30	No Posting	0.2	1580	★	Curve Not Evaluated																								
Woodland Ave	Minnesota	Saint Louis	City of Duluth	46°51'41.05"N, 92° 4'34.83"W	30	No Posting	0.5	1724	★	Curve Not Evaluated																								
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°46'27.18"N, 92° 7'29.74"W	30	No Posting	1.7	1580	↾	Y	N	X		X	X	X			X	X		X	X			X	X				$ 5,000	$ 66,171	1.25	$ 52,936
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'13.59"N, 92°10'21.96"W	30	No Posting	2.1	620	↾	Curve Not Evaluated																								
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'15.77"N, 92°10'16.33"W	30	No Posting	2.1	620	↾	Curve Not Evaluated																								
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°45'23.44"N, 92° 9'52.73"W	30	No Posting	2.1	620	↾	Curve Not Evaluated																								
W Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°46'7.78"N, 92° 8'57.49"W	30	No Posting	1.2	1975	↾	Curve Not Evaluated																								
CTH 73	Minnesota	Saint Louis	Midway Township	46°42'26.55"N, 92°17'29.94"W	30	No Posting	1.2	510	↾	Curve Not Evaluated																								
Bergstrom Rd	Minnesota	Saint Louis	Grand Lake Township	46°54'38.83"N, 92°23'10.86"W	55	No Posting	2.9	215	↾	Curve Not Evaluated																								
CTH 61	Minnesota	Saint Louis	Lakewood Township	46°52'25.97"N, 91°56'9.29"W	50	No Posting	2.5	2900	↾	Curve Not Evaluated																								
WIS 35	Wisconsin	Douglas	Superior Township	46°32'10.77"N, 92° 7'12.85"W	55	No Posting	4.3	4400	↾	Curve Not Evaluated																								
MN 23	Minnesota	Saint Louis	City of Duluth	46°39'39.23"N, 92°15'59.22"W	50	No Posting	2.2	2000	↾	Curve Not Evaluated																								
E Skyline Pkwy	Minnesota	Saint Louis	City of Duluth	46°50'45.49"N, 92° 1'59.97"W	30	No Posting	1.9	348	↾	Curve Not Evaluated																								
Helberg Dr	Minnesota	Saint Louis	City of Duluth	46°45'44.67"N, 92° 6'33.22"W	30	No Posting	0.7	830	↾	Curve Not Evaluated																								
42nd Ave	Wisconsin	Douglas	City of Superior	46°40'9.89"N, 92° 2'51.26"W	35	No Posting	1.3	800	↾	Curve Not Evaluated																								
Woodlawn Rd	Wisconsin	Douglas	City of Superior	46°40'3.31"N, 92° 3'59.08"W	30	No Posting	0.6	1400	↾	Curve Not Evaluated																								

Safety Emphasis Area 2

Urban Intersections - Side Road Stop Control
Angle Crashes

Road Name	Lat/Long	Municipality	Traffic Control	Total Stars	Number of Angle KAB Crashes	Conduct a Traffic Study	Remove Vegetation or Obstructions to Improve Stop Sign Visibility	Restrict Parking Near the Intersection	Install Retroreflective Strips on Stop Sign Posts	Install Flashing Beacons with Warning 'Stop Ahead' Signs	Install Left Turn Lanes	Reduce Lane Widths and Install Left Turn Lanes	Complete a Road Diet Evaluation	Consider Installing Right Turn Lanes	Remove Obstructions to Increase Intersection Sight Distance	Install Pedestrian Curb Extensions	Extend Median Through Crosswalk	Install High-Visibility Crosswalk	Left Turn Calming	Reduce Lane Widths and Install Median	Install Raised Crosswalk	Install Raised Intersection	Install Stop Bar Pavement Markings on Side Road Approaches	Evaluate Suitability of Existing Lighting System	Install Intersection Lighting	Project Cost Estimate	Weighted Risk Factor	Prioritization ($ per Weighted Risk Factor)
W Michigan St, W Superior St, W Michigan St	46.773974,-92.113991	City of Duluth	1-Way Stop	★★★ ↓	0				X															X		$ 4,000	6.36	$ 629
TH 23/Commonwealth Ave, TH 39/E McCuen St.	46.657238,-92.226382	City of Duluth	2-Way Stop	★★★	0				X						X								X	X		$ 13,000	5.45	$ 2,383
Haines Rd, W SKyline Pkwy, Haines Rd	46.758685,-92.163991	City of Duluth	1-Way Stop	★★★	0		X		X			X													X	$ 41,000	5.45	$ 7,517
Midway Rd, Old Miller Trunk Hwy	46.853476,-92.280423	Canosia Township	2-Way Stop	★★★★★	1	X			X						X				X				X		X	$ 160,000	9.09	$ 17,600
London Rd, S 14th Ave E, London Rd	46.799193,-92.079391	City of Duluth	2-Way Stop	★★★	0				X							X		X						X		$ 116,000	5.45	$ 21,267
E Skyline Pkwy, E Skyline Pkwy, E 13th St	46.801564,-92.104711	City of Duluth	1-Way Stop	★★★	0				X			X			X			X	X or	X or			X	X		$ 136,000	5.45	$ 24,933
E 4th St, N 12th Ave E	46.801087,-92.087656	City of Duluth	2-Way Stop	★★★	0			X	X						X			X	X		X or	X or	X	X		$ 167,000	5.45	$ 30,617
Woodland Ave, W Redwing St	46.850022,-92.081848	City of Duluth	2-Way Stop	★★★ ↓	0				X						X			X	X or	X or				X		$ 238,000	6.36	$ 37,400
Highway 2, Highway 2, N 2nd Ave	46.741341,-92.222349	City of Proctor	2-Way Stop	★★★	0		X	X	X			X								X			X	X		$ 224,000	5.45	$ 41,067
E 2nd St - Hwy 53/2, E 2nd St - Hwy 53/2, 23rd Ave E	46.705584,-92.046012	City of Superior	2-Way Stop	★★★★	0										X		X	X		X	X or	X or		X		$ 322,000	7.27	$ 44,275
Highway 53, Catlin Ave	46.733377,-92.087412	City of Superior	1-Way Stop	★★★ ↓	0			X	X				X											X		$ 308,000	6.36	$ 48,400
W 4th St, N 3rd Ave W	46.786766,-92.10627	City of Duluth	2-Way Stop	★★★	0			X	X						X	X		X	X		X or	X or	X	X		$ 267,000	5.45	$ 48,950
Hammond Ave, N 5th St, Hammond Ave, N 5th St	46.732539,-92.097857	City of Superior	1-Way Stop	★★★	0				X								X	X			X or	X or	X	X		$ 288,000	5.45	$ 52,800
Tower Ave, N 58th St, Tower Ave	46.669482,-92.104311	City of Superior	2-Way Stop	★★★ ↓	0			X	X									X	X or	X or	X or	X or		X		$ 353,000	6.36	$ 55,471
Woodland Ave, Woodland Ave	46.810829,-92.078289	City of Duluth	2-Way Stop	★★★ ↓	0		X		X						X			X	X or	X or	X or	X or		X		$ 365,000	6.36	$ 57,357
Railroad St, Railroad St, Harbor Dr	46.783758,-92.098405	City of Duluth	2-Way Stop	★★★★ ↓	0				X	X				X							X			X		$ 472,000	8.18	$ 57,689
Rice Lake Rd, Rice Lake Rd, E Skyline Pkwy	46.796809,-92.107038	City of Duluth	1-Way Stop	★★★★ ↓	0	X			X												X		X	X		$ 484,000	8.18	$ 59,156
Highway 53, Grand Ave, Grand Ave	46.733759,-92.093319	City of Superior	2-Way Stop	★★★ ↓	0			X	X				X							X			X	X		$ 413,000	6.36	$ 64,900
Hammond Ave, Broadway St, Hammond Ave	46.726591,-92.097838	City of Superior	2-Way Stop	★★★★	1	X		X	X							X		X	X or	X or	X or	X or		X		$ 501,000	7.27	$ 68,888
Tower Ave, Tower Ave, N 34th St, N 34th St	46.698911,-92.104079	City of Superior	2-Way Stop	★★★★	0				X					X		X		X			X or	X or		X		$ 648,000	7.27	$ 89,100
E 2nd St - Hwy 53/2, Marina Dr, E 2nd St - Hwy 53/2	46.718679,-92.063054	City of Superior	2-Way Stop	★★★★	0		X		X	X				X	X		X	X			X or	X		X		$ 693,000	7.27	$ 95,288
N 6th Ave E, E 7th St	46.797353,-92.098371	City of Duluth	2-Way Stop	★★★ ↓	0				X				X						X or	X or	X or	X or	X	X		$ 629,000	6.36	$ 98,843
Tower Ave, Tower Ave, N 16th St	46.719309,-92.103964	City of Superior	2-Way Stop	★★★★	0	X			X							X		X		X	X or	X or		X		$ 727,000	7.27	$ 99,963
TH23/Grand Ave, S 63rd Ave W	46.733143,-92.177404	City of Duluth	2-Way Stop	★★★★ ↓	0			X	X					X					X or	X or	X or	X or	X	X		$ 1,131,000	10	$ 113,100
E 4th St, N 4th Ave E	46.793465,-92.097548	City of Duluth	2-Way Stop	★★★	0	X	X or		X	X or						X		X	X		X or	X or	X	X		$ 711,000	5.45	$ 130,350
Highway 53, N 5th St	46.73254,-92.085315	City of Superior	1-Way Stop	★★★	0		X		X				X	X										X		$ 711,000	5.45	$ 130,350
Tower Ave, N 56th St, Tower Ave	46.672224,-92.104293	City of Superior	2-Way Stop	★★★ ↓	0				X					X	X	X		X	X or	X or	X or	X		X		$ 858,000	6.36	$ 134,829
Belknap St, E 5th St, E 5th St, Belknap St	46.72148,-92.073535	City of Superior	2-Way Stop	★★★★	0				X	X				X						X				X		$ 1,025,000	7.27	$ 140,938
Glenwood St, Glenwood St, N 43rd Ave E	46.840383,-92.037093	City of Duluth	2-Way Stop	★★★	0				X		X		X					X	X or	X or			X	X		$ 823,000	5.45	$ 150,883
Tower Ave, N 40th St	46.6917,-92.104146	City of Superior	2-Way Stop	★★★★	0									X		X	X	X			X or	X or		X		$ 1,185,000	7.27	$ 162,938
Skyline Pkwy, TH 194/Mesaba Ave, E 9th St, Mesaba Ave	46.793681,-92.10707	City of Duluth	2-Way Stop	★★★★	0		X		X		X			X									X	X		$ 1,213,000	7.27	$ 166,788
4th St, TH 194/Mesaba Ave	46.785267,-92.10836	City of Duluth	2-Way Stop	★★★★	0		X	X	X		X			X	X								X	X		$ 1,215,000	7.27	$ 167,063
Highway 53, E St	46.725675,-92.073523	City of Superior	2-Way Stop	★★★★ ↓	0						X		X	X									X	X	X	$ 1,931,000	10	$ 193,100
N 24th Ave W, S 24th Ave W, W Superior St, W Superior St	46.764095,-92.128014	City of Duluth	2-Way Stop	★★★	0			X	X					X		X		X	X or	X or	X or	X or	X	X		$ 1,255,000	5.45	$ 230,083
N 12th St, N 12th St, Tower Ave, Tower Ave	46.724274,-92.103911	City of Superior	2-Way Stop	★★★ ↓	1	X			X																	$ 1,549,000	6.36	$ 243,414
E 9th St, 11th Ave E	46.803465,-92.094328	City of Duluth	2-Way Stop	★★★	1	X			X									X					X	X		$ 1,566,000	5.45	$ 287,100
Rice Lake Rd, Rice Lake Rd, E 13th St	46.799962,-92.107071	City of Duluth	1-Way Stop	★★★	1	X			X																X	$ 1,575,000	5.45	$ 288,750
N 21st Ave E, E 1st St	46.807646,-92.073203	City of Duluth	2-Way Stop	★★★ ↓	1	X		X	X							X		X	X or	X or			X			$ 1,880,000	6.36	$ 295,429
N 3rd St, N 3rd St	46.735177,-92.099363	City of Superior	2-Way Stop	★★★	0	X					X													X		$ 1,952,000	5.45	$ 357,867
E 2nd St, N 14th Ave E	46.801641,-92.08296	City of Duluth	2-Way Stop	★★★	1	X		X	X			X	X			X								X		$ 1,961,000	5.45	$ 359,517
E Superior St, N 14th Ave E, S 14th Ave E, E Superior St	46.800315,-92.08077	City of Duluth	2-Way Stop	★★★★	1	X		X	X					X	X	X		X	X		X or	X or			X	$ 2,629,000	7.27	$ 361,488
E 2nd St - Hwy 53/2, E 2nd St - Hwy 53/2, E 3rd St	46.67769,-92.01047	City of Superior	2-Way Stop	★★★★★ ↓	1	X				X				X	X			X		X	X or	X or	X	X		$ 3,725,000	10	$ 372,500
E 2nd St - Hwy 53/2, 31st Ave E, E 2nd St - Hwy 53/2	46.697325,-92.035494	City of Superior	2-Way Stop	★★★★★	1	X								X				X		X			X	X		$ 3,562,000	9.09	$ 391,820
N 1st St E, E 4th St, N 1st Ave E	46.790576,-92.10133	City of Duluth	2-Way Stop	★★★	1	X		X	X			X	X			X		X	X or	X or	X or	X or		X		$ 2,197,000	5.45	$ 402,783
Highland Ave, Vinland St, W SKyline Pkwy, Getchell Rd	46.750383,-92.187843	City of Duluth	2-Way Stop	★★★ ↓	1	X			X	X																$ 2,567,000	6.36	$ 403,386
Crosley Ave, 47th Ave E	46.841267,-92.029455	City of Duluth	2-Way Stop	★★★ ↓	1	X		X	X		X		X										X			$ 2,653,000	6.36	$ 416,900
E Superior St, 47th Ave E, 47th Ave E	46.82925,-92.029228	City of Duluth	2-Way Stop	★★★★	0	X		X	X					X					X		X or	X or		X		$ 3,482,000	7.27	$ 478,775
Broadway St, Broadway St, Ogden Ave, Ogden Ave	46.726606,-92.102351	City of Superior	2-Way Stop	★★★	2	X		X	X					X	X	X		X	X or	X or	X or	X or		X		$ 2,789,000	5.45	$ 511,317
Tower Ave, Henry Cohen Dr	46.684543,-92.104201	City of Superior	2-Way Stop	★★★★ ↓	0	X			X					X	X	X		X		X				X		$ 3,680,000	6.36	$ 578,286
N 59th Ave W, N 59th Ave W, Cody St, Cody St	46.741309,-92.171944	City of Duluth	2-Way Stop	★★★★ ↓	3	X		X	X		X			X		X	X	X						X		$ 4,416,000	6.36	$ 693,943

Safety Emphasis Area 3

Signalized Intersections Along Multi-Lane Arterials

Signalized Intersection Name	Municipality	Intersection Location (Lat/Long)	Total Stars	Conduct Traffic Study	Install Median at Intersection	Reduce Lane Widths and Install Median	Realign Intersection to <20 Deg. Skew	Install FYA Signal Indications	Consider Changing Left Turn Phasing to Prot/Perm or Prot Only	Install Left Turn Lanes	Complete Road Diet Evaluation to Install Left Turn Lanes	Complete Road Diet Evaluation to Install Left Turn Lanes and Medians	Improve Channelized Right Turn Lane Geometry	Improve Left Turn Lane Offset	Add "Prepare to Stop When Flashing Beacons	Install Enforcement Confirmation Lights	Update Corridor Signal Timing to Favor Slower Progression Speeds	Verify & Update Pedestrian Clearance Intervals	Install High-Visibility Crosswalks	Install LPI	Install Pedestrian Countdown Timer Signal Indications	Evaluate Suitability of Existing Lighting System	Install Lighting	Install Retroreflective Signal Head Backplates	Install Traffic Signal Indications Over Each Lane for Mainline	Project Cost Estimate	Weighted Risk Factor	Prioritization ($ per Weighted Risk Factor)
Railroad Street and Canal Park Dr	City of Duluth	46.7850637,-92.0950474	★★★★★ ↾													X					X		X		$ 10,000	6.1	$ 1,636
US 2 at CSAH 14 (Boundary Ave)	City of Duluth	46.738127,-92.217107	★★★★★★	X												X					X		X		$ 58,000	6.7	$ 8,700
USTH 53 (Miller Trunk Hwy) & CSAH 13 (Midway Rd)	Canosia Township	46.852995,-92.280403	★★★★★★★ ↾										X		X or	X or		X	X	X		X		X		$ 118,000	8.3	$ 14,160
USTH 53 & CSAH 54 (Piedmont Ave)	City of Duluth	46.775111,-92.143167	★★★★★★ ↾					X	X						X or	X or		X		X		X		X	X	$ 194,000	7.2	$ 26,862
Arrowhead Road and Arlington Ave	City of Duluth	46.8222412,-92.1323428	★★★★★★★★			X or			X						X or	X or		X		X		X				$ 240,000	8.9	$ 27,000
USH 2/USH 53 (E 2nd) & 22nd Ave E	City of Superior	46.706586,-92.047341	★★★★★★★ ↾			X			X									X	X	X		X		X		$ 232,000	8.3	$ 27,840
USTH 53 (Miller Trunk Hwy) & CSAH 48 (Lavaque Bypass Rd), MSAS 101 (Ugstad Rd	City of Hermantown	46.83658,-92.238403	★★★★★★★						X					X	X or	X or	X	X		X		X				$ 273,000	7.8	$ 35,100
Grand Ave and 46th Ave W	City of Duluth	46.7460826,-92.1592956	★★★★★★			X		X	X									X	X	X	X	X		X		$ 280,000	6.7	$ 42,000
CSAH 9 (4th St) at 6th Ave E	City of Duluth	46.795357,-92.09511	★★★★★★★ ↾			X or		X	X			X or					X	X		X		X		X	X	$ 501,000	8.3	$ 60,120
Superior Street and 27th Ave W	City of Duluth	46.7613776,-92.1317979	★★★★★★★ ↾			X or		X	X			X or					X	X		X	X	X		X	X	$ 512,000	8.3	$ 61,440
USTH 53 (Trinity Rd) & CSAH 90 (Arlington Ave)	City of Duluth	46.78255,-92.138753	★★★★★★★ ↾			X		X	X					X	X or	X or		X		X		X		X		$ 513,000	8.3	$ 61,560
USTH 53 (Trinity Rd) & MSAS 198 (Anderson Rd)	City of Duluth	46.793185,-92.156289	★★★★★★★ ↾			X		X	X					X	X or	X or		X	X	X		X		X		$ 525,000	8.3	$ 63,000
CSAH 9 (Woodland Ave) at W Arrowhead Rd	City of Duluth	46.825768,-92.071347	★★★★★ ↾			X			X				X		X or	X or	X	X		X		X				$ 390,000	6.1	$ 63,818
TH 194 (Central Ent) & MSAS 182 (Pecan Ave)	City of Duluth	46.799477,-92.116405	★★★★★★ ↾						X				X	X			X	X		X		X		X	X	$ 464,000	7.2	$ 64,246
STH 35 (Tower Ave) & N 31st St	City of Superior	46.70253,-92.104136	★★★★★★					X	X					X				X	X	X	X	X		X	X	$ 447,000	6.7	$ 67,050
STH 35 (Tower Ave) & N 37th St	City of Superior	46.695397,-92.104127	★★★★★★					X	X					X				X	X	X	X	X		X	X	$ 447,000	6.7	$ 67,050
Summit Street and Woodland Ave	City of Duluth	46.817781,-92.077889	★★★★★★ ↾			X or		X	X			X or						X	X	X		X		X		$ 500,000	7.2	$ 69,231
First Street and 46th Ave W	City of Duluth	46.744615,-92.1568984	★★★★★★★★			X or		X	X			X or			X or	X or		X		X	X	X		X	X	$ 637,000	8.9	$ 71,663
Clover Street and Woodland Ave	City of Duluth	46.8157372,-92.0780403	★★★★★★			X or		X	X			X or					X	X	X	X	X	X		X		$ 520,000	6.7	$ 78,000
TH 194 (Mesaba Ave) & MSAS 127 (W 7th St)	City of Duluth	46.790914,-92.106795	★★★★★★ ↾					X	X				X	X			X	X		X		X		X	X	$ 575,000	7.2	$ 79,615
18th Ave E & E 5th St	City of Superior	46.708897,-92.055627	★★★★★★★★			X or		X	X	X or		X or						X	X	X	X	X		X	X	$ 883,000	8.9	$ 99,338
MNTH 23 (Grand Ave) & River West Dr/Warkwick St	City of Duluth	46.714344,-92.203656	★★★★★★★★			X or			X			X or						X		X		X				$ 929,000	8.9	$ 104,513
USH 2/USH 53 (E 2nd) & 18th Ave E	City of Superior	46.71075,-92.052616	★★★★★ ↾							X				X				X	X	X		X		X		$ 659,000	6.1	$ 107,836
MNTH 23 (Grand Ave) & MUN 172 (72nd Ave W)	City of Duluth	46.725327,-92.188433	★★★★★★★ ↾			X or			X			X or						X		X		X		X		$ 933,000	8.3	$ 111,960
MNTH 23 (Grand Ave) & MSAS 101 (88th Ave W)	City of Duluth	46.697136,-92.218051	★★★★★★★			X or			X			X or						X		X		X		X		$ 933,000	7.8	$ 119,957
TH 194 (Mesaba Ave) & MSAS 126 (W 3rd St)	City of Duluth	46.783745,-92.108303	★★★★★★					X	X	X							X	X		X		X		X		$ 855,000	6.7	$ 128,250
USTH 53 (Miller Trunk Hwy) & CSAH 17, MSAS 103 (Stebner Rd)	City of Hermantown	46.827651,-92.195789	★★★★★★★				X	X					X				X	X		X		X		X		$ 1,094,000	7.8	$ 140,657
USTH 53 (Miller Trunk Hwy) & CSAH 91 (Haines Rd)	City of Hermantown	46.814785,-92.174789	★★★★★★★★				X		X				X	X			X	X		X		X		X		$ 1,309,000	8.9	$ 147,263
MNTH 23 (Grand Ave) & MSAS 108, MUN 153 (Raleigh St)	City of Duluth	46.731269,-92.180057	★★★★★★★★★★			X	X		X		X							X		X		X		X		$ 1,840,000	10	$ 184,000
TH 194 & CSAH 4 (Rice Lake Rd) & MSAS 192 (Central Ent)	City of Duluth	46.795888,-92.107092	★★★★★★ ↾			X		X	X					X		X or	X or	X		X		X		X	X	$ 562,000	7.2	$ 77,815
USH 53 (2nd St) & USH 2 (Belknap St)	City of Superior	46.722281,-92.068439	★★★★★★★ ↾	X										X						X		X				$ 2,897,000	8.3	$ 347,640
USTH 53 (Miller Trunk Hwy) & MSAS 104, CSAH 32 (W Arrowhead Rd)	City of Hermantown	46.822112,-92.18676	★★★★★★★★	X				X	X					X	X			X	X	X		X		X	X	$ 3,153,000	8.9	$ 354,713
College Street and Kenwood Ave	City of Duluth	46.8167053,-92.1003188	★★★★★★★	X				X	X										X	X	X	X	X		X	X	$ 2,843,000	7.8	$ 365,529
STH 35 (Tower Ave) & N 28th St	City of Superior	46.706188,-92.104047	★★★★★★★ ↾	X				X	X					X					X	X	X	X	X		X	X	$ 3,095,000	8.3	$ 371,400
STH 35 (Tower Ave) & N 21st St	City of Superior	46.713416,-92.103969	★★★★★★★ ↾	X				X	X					X					X	X	X	X	X		X	X	$ 3,095,000	8.3	$ 371,400
Arrowhead Road and Rice Lake Road (CSAH 4)	City of Duluth	46.822098,-92.12661	★★★★★★ ↾	X		X			X					X					X		X		X				$ 2,939,000	7.2	$ 406,938
USTH 53 (Miller Trunk Hwy) & MSAS 107 (Loberg Ave)	City of Hermantown	46.81906,-92.181777	★★★★★★	X										X				X					X		X		$ 2,735,000	6.7	$ 410,250
TH 194 (Central Ent) & MSAS 205, M 494 (Basswood Ave)	City of Duluth	46.80047,-92.135306	★★★★★★ ↾	X		X		X	X									X	X	X	X	X		X	X	$ 3,041,000	7.2	$ 421,062
TH 194 (Central Ent) & MSAS 198, M 535 (Anderson Rd)	City of Duluth	46.800664,-92.143421	★★★★★★★	X		X		X	X					X	X or	X or		X	X	X	X	X		X	X	$ 3,293,000	7.8	$ 423,386
TH 53 & MSAS 108 (Cirrus Dr), M166 (Sugar Maple Dr)	City of Hermantown	46.833594,-92.205486	★★★★★ ↾	X														X	X	X	X	X		X		$ 2,675,000	6.1	$ 437,727
Michigan Street and 27th Ave W	City of Duluth	46.760847,-92.131133	★★★★★★ ↾	X		X or		X	X			X or						X	X	X	X	X	X	X	X	$ 3,184,000	7.2	$ 440,862
TH 194 (Central Ent) & CSAH 90 (Arlington Ave)	City of Duluth	46.800452,-92.13214	★★★★★★	X		X		X	X									X	X		X	X	X		X	X	$ 3,029,000	6.7	$ 454,350
USH 2/USH 53 (E 2nd) & 39th Ave E	City of Superior	46.689033,-92.025013	★★★★★★ ↾	X		X			X									X	X	X	X	X		X		$ 2,892,000	6.1	$ 473,236
USTH 53 (Trinity Rd) & MSAS 209, MUN 1414 (Mall Drive)	City of Duluth	46.801655,-92.154729	★★★★★★ ↾	X				X	X					X				X	X		X		X		X		$ 2,936,000	6.1	$ 480,436
USTH 53 (Trinity Rd) & USTH 194 (Central Ent)	City of Duluth	46.804291,-92.153721	★★★★★★ ↾	X									X					X	X		X		X		X		$ 2,963,000	6.1	$ 484,855

Safety Emphasis Area 4

Urban Intersections
Bike Ped Crashes

Road Name	Lat/Long	Municipality	Total Stars	High-Severity Crash History (Read Comment)	Conduct a Traffic Study	Install Sidewalk	Install Pedestrian Curb Extensions	Install Median	Reduce Lane Width and Install Median	Install High-Visibility Crosswalks	Left Turn Calming	Extend Median Through Crosswalk	Evaluate Suitability of Existing Lighting System	Install Intersection Lighting	Leading Pedestrian Interval	Install Pedestrian Countdown Timer Signal Indications	Verify/Update Pedestrian Crossing Times	Install RRFB	Install Pedestrian Hybrid Beacon	Install Raised Crosswalk	Install Raised Intersection	Install Bicycle Signal Heads	Bike Box (Two-Stage Turn)	Install Flexible Delineator Posts	Mark Bike Lanes Through Intersection	Use Green Pavement for Bike Lanes	Install Bike Lanes	Reduce Lane Width and Install Bike Lanes	Complete Road Diet Evaluation	Consider Bike Path or Multi-Use Path	Evaluate for Transit Improvements at Nearby Bus Stops	Project Cost Estimate	Weighted Risk Factor	Prioritization ($ per Weighted Risk Factor)
N 1st Ave E, S 1st Ave E, E Superior St, E Superior St	46.787872,-92.09695	City of Duluth	★★★★★★★★½	1							X		X		X		X													X	$ 54,000	9.4	$ 5,718
Arrowhead Rd, Arrowhead Rd, Rice Lake Rd	46.822047,-92.126829	City of Duluth	★★★★★★½	0									X																	X	$ 43,000	7.2	$ 5,954
E Superior St, S 3rd Ave E, N 3rd Ave E	46.788807,-92.094437	City of Duluth	★★★★★★★★	1	X						X		X		X		X													X	$ 54,000	8.9	$ 6,075
Railroad St, S Lake Ave, Canal Park Dr	46.784937,-92.095199	City of Duluth	★★★★★★½	0									X		X		X													X	$ 46,000	7.2	$ 6,369
N 4th Ave W, S 4th Ave W, W Superior St	46.783113,-92.103174	City of Duluth	★★★★★★★½	1							X		X		X		X													X	$ 54,000	8.3	$ 6,480
E Superior St, S 2nd Ave E, N 2nd Ave E, E Superior St	46.788881,-92.095628	City of Duluth	★★★★★★★	0							X		X		X		X													X	$ 54,000	7.8	$ 6,943
N 6th Ave W, S 6th Ave W, W Superior St	46.781205,-92.105671	City of Duluth	★★★★★★★	0							X		X		X		X													X	$ 54,000	7.8	$ 6,943
W Superior St, S 1st Ave W, W Superior St, N 1st Ave W	46.78597,-92.09938	City of Duluth	★★★★★★★	0							X		X		X		X													X	$ 54,000	7.8	$ 6,943
E Superior St, E Superior St, N 12th Ave E, S 12th Ave E	46.798389,-92.083292	City of Duluth	★★★★★★½	0							X		X		X		X													X	$ 54,000	7.2	$ 7,477
Mesaba Ave, Mesaba Ave, W 1st St, W 1st St	46.780927,-92.108057	City of Duluth	★★★★★★½	0						X			X		X		X													X	$ 70,000	7.2	$ 9,692
US 53 (Trinity Rd), Mall Dr	46.801647,-92.154711	City of Duluth	★★★★★★½	0						X			X		X		X													X	$ 70,000	7.2	$ 9,692
N 24th Ave W, N 24th Ave W, W 3rd St, W 3rd St	46.766138,-92.131292	City of Duluth	★★★★★★★½	1	X					X	X		X		X	X	X													X	$ 85,000	8.3	$ 10,200
Maple Grove Rd, Maple Grove Rd, Mall Dr, Mall Dr	46.80756,-92.165403	City of Duluth	★★★★★★½	0		X				X			X		X		X													X	$ 87,000	7.2	$ 12,046
N 5th Ave E, E 2nd St	46.793089,-92.094084	City of Duluth	★★★★★★★	1	X								X		X		X													X	$ 94,000	7.8	$ 12,086
Midway Rd, Midway Rd, Highway 53, Highway 53	46.853005,-92.280425	Canosia Township	★★★★★★½	0		X				X			X																	X	$ 100,000	7.2	$ 13,846
W Superior St, N 40th Ave W, W Superior St	46.749569,-92.148236	City of Duluth	★★★★★★½	0						X				X															X		X	$ 150,000	7.2	$ 20,769
S 5th Ave W, N 5th Ave W, W Superior St, W Superior St	46.782185,-92.104402	City of Duluth	★★★★★★★½	0							X	X	X		X		X													X	$ 184,000	8.3	$ 22,080
Tower Ave, N 21st St, N 21st St, Tower Ave	46.71342,-92.10006	City of Superior	★★★★★★★★½	1						X		X	X		X	X	X													X	$ 215,000	9.4	$ 22,765
Maple Grove Rd, Burning Tree Rd, Burning Tree Rd	46.807567,-92.169205	City of Duluth	★★★★★★★	0								X	X		X		X													X	$ 184,000	7.8	$ 23,657
E 2nd St, N 1st Ave E, N 1st Ave E	46.789237,-92.099117	City of Duluth	★★★★★★★½	0						X			X		X	X	X					X	X	X	X			X or	X or			$ 224,000	8.3	$ 26,880
E 2nd St, N 3rd Ave E	46.791129,-92.096598	City of Duluth	★★★★★★★	0						X			X																X		X	$ 217,000	7.8	$ 27,900
W 2nd St, N 3rd Ave W	46.785453,-92.104074	City of Duluth	★★★★★★★	0						X			X		X	X	X					X	X	X	X	X		X or	X or			$ 224,000	7.8	$ 28,800
W 2nd St, N 4th Ave W, N 4th Ave W	46.784465,-92.105373	City of Duluth	★★★★★★★	0						X			X		X	X	X					X	X	X	X	X		X or	X or			$ 224,000	7.8	$ 28,800
N 1st Ave W, W 2nd St, N 1st Ave W	46.787326,-92.101633	City of Duluth	★★★★★★★	0						X			X		X	X	X					X	X	X	X	X		X or	X or			$ 224,000	7.8	$ 28,800
Tower Ave, Tower Ave, Belknap St, Belknap St	46.72064,-92.103942	City of Superior	★★★★★★★½	0							X		X		X		X					X	X	X	X	X		X or	X or			$ 211,000	7.2	$ 29,215
Ogden Ave, Belknap St, Belknap St, Ogden Ave	46.720645,-92.102379	City of Superior	★★★★★★★½	0							X		X		X		X					X	X	X	X	X		X or	X or		X	$ 251,000	8.3	$ 30,120
Belknap St, Lamborn Ave, Grand Ave, Belknap St	46.72062,-92.09344	City of Superior	★★★★★★★½	0							X		X		X		X					X	X	X	X	X		X or	X or		X	$ 251,000	8.3	$ 30,120
E 2nd St - Hwy 53/2, 39th Ave E	46.68907,-92.024958	City of Superior	★★★★★★★★½	0					X	X			X		X		X													X	$ 273,000	8.9	$ 30,713
E 2nd St, N 2nd Ave E, N 2nd Ave E	46.790189,-92.097857	City of Duluth	★★★★★★½	0						X			X		X	X	X					X	X	X	X	X		X or	X or			$ 224,000	7.2	$ 31,015
W 1st St, S 46th Ave W, N 46th Ave W, Mike Colalillo Dr	46.744573,-92.157187	City of Duluth	★★★★★★★	0					X				X		X	X	X													X	$ 256,000	7.8	$ 32,914
W 3rd St, N Lake Ave, E 3rd St	46.788962,-92.101451	City of Duluth	★★★★★★½	0					X	X			X		X	X	X														$ 240,000	7.2	$ 33,231
Grand Ave, Grand Ave, N 40th Ave W, N 40th Ave W	46.751662,-92.15132	City of Duluth	★★★★★★★	0				X or		X	X or		X		X	X	X													X	$ 273,000	7.8	$ 35,100
Grand Ave, 88th Ave W	46.697264,-92.217955	City of Duluth	★★★★★★½	0					X		X		X		X		X													X	$ 257,000	7.2	$ 35,585
E 4th St, N 5th Ave E	46.794438,-92.09629	City of Duluth	★★★★★★★	0					X or	X	X or		X		X	X	X													X	$ 280,000	7.8	$ 36,000
Bristol St, Central Ave, Central Ave	46.737641,-92.166577	City of Duluth	★★★★★★½	0			X						X															X	X	X	$ 263,000	7.2	$ 36,415
Belknap St, Highway 53, E 2nd St - Hwy 53/2, Marina Dr	46.722237,-92.068388	City of Superior	★★★★★★½	0		X				X		X	X		X		X													X	$ 264,000	7.2	$ 36,554
Highway 53, N 5th St	46.73254,-92.085315	City of Superior	★★★★★★½	0									X					X and/or	X or	X and/or	X and/or									X	$ 273,000	7.2	$ 37,800
N 59th Ave W, Grand Ave, S 59th Ave W, Grand Ave	46.736998,-92.171989	City of Duluth	★★★★★★★	0					X	X		X	X		X	X	X					X	X	X	X	X	X			X	$ 294,000	7.8	$ 37,800
US 53, US 53, S Arlington Ave	46.782563,-92.138722	City of Duluth	★★★★★★★	0		X			X				X		X		X														$ 297,000	7.8	$ 38,186
N Lake Ave, W 1st St, E 1st St	46.787635,-92.099302	City of Duluth	★★★★★★½	0						X	X		X		X	X	X												X		X	$ 325,000	8.3	$ 39,000
Ramsey St, Grand Ave	46.739014,-92.169151	City of Duluth	★★★★★★★	0					X	X			X		X	X	X					X	X	X	X	X	X				X	$ 323,000	7.8	$ 41,529
N 6th Ave E, E 4th St, N 6th Ave E	46.795355,-92.095123	City of Duluth	★★★★★★★★	1	X				X				X		X		X												X		X	$ 393,000	8.9	$ 44,213
US 53, Maple Grove Rd	46.807792,-92.163401	City of Duluth	★★★★★★½	0		X							X		X		X													X	$ 323,000	7.2	$ 44,723
E Central Entrance, Rice Lake Rd, N Central Entrance, Mesaba Ave	46.795862,-92.107036	City of Duluth	★★★★★★★	0					X			X	X		X		X														$ 353,000	7.8	$ 45,386
E Superior St, N 4th Ave E	46.790771,-92.093213	City of Duluth	★★★★★★★½	1	X		X			X	X		X					X and/or	X or	X and/or	X and/or									X	$ 405,000	8.3	$ 48,600
Tower Ave, N 31st St	46.702589,-92.10406	City of Superior	★★★★★★★★	0						X			X		X	X	X													X	X	$ 502,000	10	$ 50,200
S Lake Ave, W Superior St, N Lake Ave, E Superior St	46.786944,-92.098145	City of Duluth	★★★★★★★½	3	X		X			X	X		X		X	X	X						X						X	X	$ 476,000	9.4	$ 50,400
Central Ave, Ramsey St, Ramsey St	46.73891,-92.166567	City of Duluth	★★★★★★½	0					X or	X	X or		X		X	X	X											X	X	X	X	$ 400,000	7.8	$ 51,429
Tower Ave, Tower Ave, N 34th St, N 34th St	46.698911,-92.104079	City of Superior	★★★★★★½	0		X				X			X					X and/or	X or	X and/or	X and/or									X	$ 380,000	7.2	$ 52,615
E St Marie St, Woodland Ave, W Saint Marie St	46.822148,-92.074099	City of Duluth	★★★★★★★	0					X	X			X		X	X	X												X			$ 420,000	7.8	$ 54,000
Woodland Ave, Clover St	46.815825,-92.078254	City of Duluth	★★★★★★★	0					X	X			X		X	X	X												X			$ 420,000	7.8	$ 54,000
Woodland Ave, Summit St	46.817772,-92.077898	City of Duluth	★★★★★★★½	0					X	X			X		X		X												X		X	$ 453,000	8.3	$ 54,360
N 6th Ave E, E 3rd St, N 6th Ave E, N 6th Ave E, E 3rd St	46.79468,-92.094027	City of Duluth	★★★★★★★	0					X	X			X		X	X	X												X		X	$ 424,000	7.8	$ 54,514
N Lake Ave, E 2nd St, W 2nd St, N Lake Ave	46.788296,-92.100372	City of Duluth	★★★★★★★½	0					X	X			X		X	X	X					X	X	X	X	X		X or	X or		X	$ 473,000	8.3	$ 56,760
N Central Ave, Grand Ave, Central Ave, Grand Ave	46.740858,-92.166553	City of Duluth	★★★★★★★	0					X	X			X		X		X					X	X	X	X	X	X	X	X		X	$ 442,000	7.8	$ 56,829
US 53, Maple Burning Tree Rd	46.81089,-92.168446	City of Duluth	★★★★★★½	0		X				X		X	X		X		X													X		$ 416,000	7.2	$ 57,600
US 53, Cottonwood Ave/Loberg Ave	46.805561,-92.156889	City of Duluth	★★★★★★★	0		X				X		X	X		X		X					X	X	X	X	X		X or		X or		$ 453,000	7.8	$ 58,243
E Central Entrance, S Arlington Ave	46.800418,-92.132132	City of Duluth	★★★★★★★½	0					X or		X or		X		X		X													X	X	$ 489,000	8.3	$ 58,680
Tower Ave, N 20th St	46.714713,-92.103983	City of Superior	★★★★★★★★	0			X	X		X		X	X					X and/or	X or	X and/or	X and/or										X	$ 564,000	8.9	$ 63,450
N 2nd Ave W, W 2nd St	46.786435,-92.102837	City of Duluth	★★★★★★★★½	1	X					X			X		X	X	X					X	X	X	X	X		X or	X or			$ 612,000	9.4	$ 64,800
Belknap St, Hughitt Ave	46.720639,-92.099447	City of Superior	★★★★★★½	0							X		X					X and/or	X or	X and/or	X and/or	X	X	X	X	X		X or	X or		X	$ 478,000	7.2	$ 66,185
Tower Ave, N 40th St	46.6917,-92.104146	City of Superior	★★★★★★½	0		X				X		X	X					X and/or	X or	X and/or	X and/or											$ 478,000	7.2	$ 66,185
E 3rd St, E 3rd St, N 3rd Ave E	46.791815,-92.097719	City of Duluth	★★★★★★★	1	X		X						X											X		X						$ 516,000	7.8	$ 66,343
Tower Ave, N 17th St	46.718164,-92.103965	City of Superior	★★★★★★★½	0			X	X		X			X					X and/or	X or	X and/or	X and/or											$ 553,000	8.3	$ 66,360
Tower Ave, N 19th St	46.715859,-92.103961	City of Superior	★★★★★★★½	0			X	X		X			X					X and/or	X or	X and/or	X and/or											$ 553,000	8.3	$ 66,360
W Central Entrance, Basswood Ave	46.800474,-92.135306	City of Duluth	★★★★★★½	0					X or		X or		X		X		X													X	X	$ 489,000	7.2	$ 67,708
Haines Rd, Arrowhead Rd, Haines Rd, Arrowhead Rd	46.822086,-92.174837	City of Hermantown	★★★★★★★	0		X			X	X			X		X	X	X													X	$ 533,000	7.8	$ 68,529
Tower Ave, N 23rd St	46.710983,-92.104012	City of Superior	★★★★★★½	0					X	X			X					X and/or	X or	X and/or	X and/or										X	$ 500,000	7.2	$ 69,231
Woodland Ave, Woodland Ave, E Oxford St	46.833266,-92.072396	City of Duluth	★★★★★★½	0					X or	X	X or		X					X and/or	X or	X and/or	X and/or										X	$ 506,000	7.2	$ 70,062
W Central Entrance, Mall Dr	46.802217,-92.148685	City of Duluth	★★★★★★★	0		X			X				X		X		X													X	X	$ 565,000	7.8	$ 72,643
Highway 53, Grand Ave, Grand Ave	46.731759,-92.093319	City of Superior	★★★★★★★½	0		X	X	X		X			X					X and/or	X or	X and/or	X and/or											$ 620,000	8.3	$ 74,400
E 2nd St - Hwy 53/2, E 2nd St - Hwy 53/2, E 3rd St	46.67769,-92.01047	City of Superior	★★★★★★½	0		X			X	X			X					X and/or	X or	X and/or	X and/or											$ 548,000	7.2	$ 75,877
Tower Ave, Tower Ave, N 37th St, N 37th St	46.695387,-92.10411	City of Superior	★★★★★★★½	0						X		X	X		X	X	X													X	X	$ 640,000	8.3	$ 76,800
Hammond Ave, N 7th St	46.730219,-92.097852	City of Superior	★★★★★★½	0			X		X	X			X					X and/or	X or	X and/or	X and/or											$ 560,000	7.2	$ 77,538
Tower Ave, Tower Ave, N 16th St	46.719309,-92.103964	City of Superior	★★★★★★★★½	1	X		X		X	X			X					X		X or	X or										X	$ 808,000	9.4	$ 85,553
N 6th Ave E, E 6th St	46.7967,-92.097284	City of Duluth	★★★★★★★	1	X		X						X																X	X	$ 675,000	7.8	$ 86,786
E 9th St, N Central Entrance, N 6th Ave E	46.798692,-92.100577	City of Duluth	★★★★★★★½	0	X				X	X			X		X		X												X	X	$ 845,000	8.3	$ 101,400
Tower Ave, N 18th St	46.717022,-92.10396	City of Superior	★★★★★★★★	0	X		X	X		X			X					X and/or	X or	X and/or	X and/or											$ 981,000	8.9	$ 110,363
Grand Ave, N 6th St	46.731369,-92.093355	City of Duluth	★★★★★★★	1	X		X		X or		X or		X					X and/or	X or	X and/or	X and/or										X	$ 978,000	7.8	$ 125,743
N Central Entrance, E 10th St	46.798724,-92.102459	City of Duluth	★★★★★★½	0	X				X	X			X					X and/or	X or	X and/or	X and/or									X	X	$ 1,072,000	7.2	$ 148,431
Winter St, Hammond Ave, Winter St	46.727879,-92.097828	City of Superior	★★★★★★★	2	X	X			X	X			X		X																	$ 1,808,000	7.8	$ 232,457
N 27th Ave W, W Superior St, W Superior St	46.761256,-92.13176	City of Duluth	★★★★★★★	1	X				X or		X or		X		X	X	X					X	X	X	X	X					X	$ 1,841,000	7.8	$ 236,700
Belknap St, Catlin Ave, Catlin Ave	46.720595,-92.087471	City of Superior	★★★★★★½	2	X						X		X		X		X					X	X	X	X	X		X or	X or		X	$ 1,799,000	7.2	$ 249,092
Tower Ave, N 28th Ave, N 28th St, Tower Ave	46.706202,-92.104034	City of Superior	★★★★★★★★★	2	X					X			X		X	X	X															$ 2,725,000	10	$ 272,500
Hammond Ave, N 6th St	46.731377,-92.097843	City of Superior	★★★★★★½	0	X		X		X	X			X					X and/or	X or	X and/or	X and/or										X	$ 2,148,000	7.2	$ 297,415
Belknap St, Hammond Ave	46.720626,-92.097883	City of Superior	★★★★★★★½	0	X						X		X		X		X					X	X	X	X	X		X or	X or		X	$ 2,903,000	8.3	$ 348,360
E Central Entrance, Pecan Ave	46.799475,-92.116465	City of Duluth	★★★★★★★	1	X							X	X		X	X	X													X	X	$ 3,004,000	7.8	$ 386,229
Miller Trunk Hwy, W Central Entrance, US 53 (Trinity Rd), Joshua Ave	46.804276,-92.153697	City of Duluth	★★★★★★★	0	X	X						X	X		X		X													X		$ 3,040,000	7.8	$ 390,857
E Central Entrance, Blackman Ave	46.800081,-92.121644	City of Duluth	★★★★★★★	1	X				X	X				X				X and/or	X or	X and/or	X and/or									X	X	$ 3,404,000	7.8	$ 437,657